



**SMUD**

SACRAMENTO MUNICIPAL UTILITY DISTRICT □ 6201 S Street, Box 15830, Sacramento, California 95813; (916) 452-3211

December 10, 1979

Mr. Robert W. Reid, Chief  
Operating Reactors Branch #4  
Division of Operating Reactors  
U. S. Nuclear Regulatory Commission  
Washington D. C. 20555

Re: Rancho Seco Nuclear Generating Station  
ISI/IST Program. Reid letter to Mattimoe,  
dated 10/17/79.

Dear Mr. Reid:

Per the request in your letter of October 17, 1979, please find enclosed formal documentation of our discussions with staff on October 3 and 4, 1979, regarding modifications to our ISI/IST Program. Question numbers correspond to those submitted to us on September 21, 1979, by Mr. Dan Garner and included as Enclosure 2. The actual meeting notes have been included as Enclosure 3.

Licensee open items have been resolved and are documented in this letter. If you have any questions, please feel free to contact Mr. Bill Garrett of my staff at Rancho Seco.

Respectfully submitted,

*J. J. Mattimoe*

J. J. Mattimoe,  
Assistant General Manager  
and Chief Engineer

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Enclosures

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## VALVE TESTING PROGRAM

### A. MAKE UP/HIGH PRESSURE INJECTION

1. Question: Does any normal makeup flow exist through valves SIM036 (M521/G5) and SIM037 (M521/G2)?

Discussion: Normal RCS makeup flow of approximately 60 gpm exists through these valves during normal power operation.

SIM036 and SIM037 are partial stroke exercised (closed - then open) quarterly during full stroke exercising of SFV23604, Pressurizer Level Control Iso (M521/F6). No verification of stroking of SIM036 or SIM037 is made due to inaccessibility of the valves during power operation.

These valves cannot be full stroke exercised open (the safety features position) during power operation because the only available flow path to utilize for testing is connected to the RCS. Design flow of 500 gpm cannot be achieved by the centrifugal type Make Up/High Pressure Injection Pumps when pumping into the RCS during power operation.

These valves cannot be full stroke exercised during Cold Shutdown because power to the Make Up/High Pressure Injection Pumps and Safety Features Valves must remain racked out to provide low temperature over pressure protection.

These valves will be full stroke exercised during Refueling Outages.

SIM049, SIM050, SIM047, SIM041, SIM040 and HV23801 (M521/J2/J2/J5/F2/F5,J5, respectively) cannot be full stroke exercised during power operation because the only available flow path to utilize for testing is connected to the RCS. Design flow of 500 gpm cannot be achieved by the centrifugal type Make Up/High Pressure Injection Pumps when pumping into the RCS during power operation.

These valves cannot be full stroke exercised during Cold Shutdown because power to the Make Up/High Pressure Injection Pumps and Safety Features Valves must be racked out to provide low temperature over pressure protection.

These valves will be full stroke exercised during Refueling Outages.

Request for Relief Number PVI will be revised to reflect the above comments and resubmitted.

2. Question: What is the safety related function of valves SFV22005 (M521/B2), SFV22006 (M521/C2) and SFV22023 (M521/B1)?

Discussion: The valves listed above close on safety features actuation to provide RCS isolation.

SFV22005 and SFV22006 will be full stroke exercised quarterly (no program change or relief required).

SFV22023 (M521/B5), SFV22009 (M521/B6) and SFV22025 (M521/B1) cannot be full stroke exercised quarterly because our ability to maintain pressurizer level control would be compromised if any of the valves failed to reopen after being stroked closed during power operation.

These valves will be full stroke exercised at Cold Shutdown. A new request for relief will be submitted for these valves and the Valve Testing Program changed accordingly.

3. Comment: All valves listed in the program as Category B/E should be recategorized E.

Discussion: Valves currently listed as Category B/E in the Valve Testing Program will be recategorized E except where otherwise noted in this letter.

4. Question: Are SIM078 (M521/I9), SIM079 (M521/G9) and SIM081 (M521/F9) safety related?

Discussion: The valves listed are located in recirculation lines and are necessary to be open for protection of the Make Up/High Pressure Injection Pumps. These valves are not safety related as recirculation is not necessary during high pressure injection. (Note the SFV23645 (M521/D7) and SFV23646 (M521/E7) close on safety features actuation.

SIM078, SIM079, and SIM081 will be removed from the Valve Testing Program.

5. Question: How are check valves SIM045 (M521/J8), SIM058 (M521/G8) and SIM002 (M521/H8) full stroke tested quarterly?

Discussion: These valves are not full stroke tested quarterly because during power operation, the only available flow path to utilize for testing is connected to the RCS. Design flow of 500 gpm cannot be achieved by the centrifugal Make Up/High Pressure Injection Pumps when pumping into the RCS during power operation.

These valves cannot be full stroke exercised during Cold Shutdown because power to the Make Up/High Pressure Injection Pumps and Safety Features Valves must be racked out to provide low temperature over pressure protection.

These valves will be partial stroke exercised quarterly and full stroke exercised at refueling outages. A Request for Relief to this effect will be submitted.

6. Question: Why will the consequences listed in Relief Request PV4 occur?

Discussion: These valves, listed in PV4, are required to be open during power operation for normal operation of the Seal Return System. Reactor Coolant Pump operation with no seal return may cause an imbalance of stage pressures and subsequently loss of stage flow. This would result in degradation of sealing capability.

Relief Request PV4 will be rewritten and submitted to reflect the statements outlined above.

7. Question: What is the flow path utilized to full stroke exercise SIM052 (M521/F10), BWS044 (M521/G11), BWS019 (M521/I10) and SIM043 (M521/J11)?

Discussion: The flow path utilized for testing these valves is through the MU/HPI Pumps to the RCS or Make Up Tank. Exercising these valves during power operation would cause highly concentrated Boric acid to be injected into the RCS through the Pressurizer Level Control Valve and RCP seals. This would cause unwanted changes in RCS Boron concentration and could result in power transients.

These valves cannot be full stroke exercised during Cold Shutdown because power to the Make Up/High Pressure Injection Pumps and Safety Features Valves must remain racked out to provide cold over pressure protection.

These valves will be full stroke exercised during refueling outages. PV5 will be revised to reflect the preceding comments and resubmitted.

8. Question: Is PLS044 (M521/G12) safety related?

Discussion: PLS044 is not safety related. It is used for backflow/pressure prevention and as a maintenance valve. This valve will be removed from the program.

### B. DECAY HEAT/CORE FLOOD

1. Comment: IF DHS015 (M522/D7) is Category A/C/E, a leak test must be performed.

Discussion: An Appendix J Leakage Test is performed on this valve.

2. Question: How are valves RCS001 (M522/D7), RCS002 (M522/D9), CFS001 (M522/D7) and CFS002 (M522/D9) full stroke exercised?

Discussion: These valves are incorrectly listed in the Valve Testing Program Tabulation as Category A/C. They should be Category C only. In addition, these valves are listed as being full stroke exercised during each Cold Shutdown. The valves are partial stroked only at Cold Shutdown and Refueling.



## B.2 Discussion (Continued)

Consideration of verification of disc movement will be made during Refueling Outages by the method shown in Enclosure 1.

It should be noted that this was a "License Open Item" following the ISI/IST review meeting.

3. Question: Can Valve HV26011 (M522/E10) be exercised during power operation without over pressurizing the low pressure Decay Heat System?

Discussion: Isolation between the Decay Heat System and the RCS (SIM050, M521/J2), the Pressurizer (DHS059, M522/E10) and the High Pressure Injection Pumps (HV23802 and SFV23810, M521/J4 and J5) currently exists. However, since there is the possibility that leakage by or failure of the valves listed above can occur, HV26011 will be full stroke exercised only during Cold Shutdowns and Refueling Outages.

4. Question: Are valves HV26106 (M522/F13) and HV26105 (M522/F13) tested in the direction required by Appendix J?

Discussion: Yes. Blank flanges with valves are placed in the Emergency Sump and the valves are tested in the "correct" direction. No change is required in the program originally submitted.

5. Question: How are check valves DHS003 (M522/J9), DHS004 (M522/I10), DHS007 (M522/H8) and DHS008 (M522/H9) full stroke tested quarterly?

Discussion: The valves listed are Decay Heat Pump Suction (DHS003 and DHS004) and Discharge (DHS007 and DHS008) Check Valves. The Decay Heat Pumps are full flow tested quarterly by SP 203.05A ("A" Loop) and SP 203.05B ("B" Loop), Quarterly Decay Heat Removal Pump P-261A(B) Surveillance and Inservice Test. DHS007 and DHS008 are full stroke exercised during the pump tests and no change is required in the program originally submitted. DHS003 and DHS004 will be tested as outlined in B.6 below.

6. Question: How are Check Valves BWS003 (M522/G4) and BWS004 (M522/G4) full stroke exercised?

Discussion: BWS003, BWS004, DHS003, and DHS004 are not full stroke exercised quarterly. In the accident condition, these valves must pass a total of 4500 gpm (3000 gpm to Decay Heat and 1500 gpm to Reactor Building Spray). This flow cannot be achieved during power operation. The valves cannot be fully stroked during Cold Shutdown, because the Borated Water Storage Tank is isolated and because

## B.6 Discussion (Continued)

Decay Heat Suction Valves from the Reactor Vessel are open and must remain open to provide decay heat removal.

Therefore, a Request for Relief will be submitted to allow partial stroke testing quarterly with full stroke testing at refueling.

It should be noted that this was a "License Open Item" following the ISI/IST Review.

7. Question: What are the safety functions of DHS057 (M522/I8) and DHS058 (M522/I8)?

Discussion: DHS057 and DHS058 provide backflow prevention from the Decay Heat System to the Spent Fuel Cooling System. They are contained in lines which cross tie the Decay Heat System with the Spent Fuel Cooling System for the purpose of providing spent fuel cooling with the Decay Heat System should the Spent Fuel Cooling System be inoperable. The valves must open to provide this function.

Therefore, DHS057 and DHS058 will be full stroke tested quarterly. It should be noted that this contrasts with the meeting notes which stated that these valves will be removed from the IST Program.

8. Question: What is the safety related function of HV20003 (M522/D13)?

Discussion: HV20003 provides a means of recirculation of Reactor Coolant following a RCS cold leg break to prevent Boron precipitation during long term cooling. Exercising HV20003 without closing DHS461 (M522/E13), which is inaccessible during power operation, would introduce voids to Decay Heat Pump suction piping. These voids would cause water hammering and pump cavitation which could result in significant pipe, pipe support, and pump damage. This clarification will be added to Relief Request PV10. No changes to the Valve Testing Requirements Table are necessary.

9. Question: What are the safety functions of DHS 038 (M522/E9) and DHS039 (M522/E7)?

Discussion: These valves provide containment isolation. Accordingly, a Seat Leakage Test (SLIJ) will be performed on the valves during Local Leak Rate Testing required by SP 205.02, Local Component Leak Rate Surveillance Testing, for Penetrations 27 (DHS039) and 28 (DHS038). It should be noted that this conflicts with the meeting notes.

## B. 9 Discussion (Continued)

Further, to maintain consistency in the program, the philosophy of categorizing any valve which provides a containment isolation function as an "A" valve will be introduced with SLTJ Tests specified per SP 205.01, Reactor Building Integrated Leakage Rate Test, and SP 205.02, Local Component Leak Rate Surveillance Testing. A generic Relief Request will be submitted per staff's suggestion.

10. Question: What are the safety related functions of the valves listed below? Should they be categorized A/E?

CFS003 (M522/C3)  
CFS004 (M522/C3)  
CFS005 (M522/A4)  
CFS006 (M522/A4)  
CFS009 (M522/B4)  
CFS010 (M522/B4)  
CFS011 (M522/B4)  
CFS012 (M522/B4)

Discussion: All valves listed provide a containment isolation function and will be recategorized A/E with SLTJ Testing specified as outlined in Item B.9 above. A Request for Relief from quarterly exercising these manual passive valves will be submitted.

11. Question: What are the safety related functions of HV26513 (M522/D6) and HV26514 (M522/D10)?

Discussion: HV26513 and HV26514 are normally open valves whose power is racked out. Operating Procedure B.2, Plant Heatup and Startup, verifies the valves open and the power racked out. Position indication is displayed in the Control Room continuously.

These valves are not safety related and need not be included in the IST Program. No program change is required.

## C SPENT FUEL COOLING

1. Question: Do SFC500 (M523/D7) and SFC501 (M523/D7) perform a containment isolation function?

Discussion: No. These valves will not be included in the IST Program. No program change is required.

## D. CONTAINMENT BUILDING SPRAY

1. Request: Provide more detailed information on how CBS009 (M524/D7) and CBS010 (M524/D8) are full stroke exercised.

Discussion: CBS009 and CBS010 cannot be full stroke tested. No stroking can be performed quarterly because entry to areas inaccessible during power operation in the Containment Building would be required. Precautions

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## D.1 Discussion (Continued)

required to be taken to preclude spraying down the Containment Building are too involved to be performed during a normal Cold Shutdown. These valves will be partial stroke exercised during Refueling. PV11 will be rewritten with the clarifications from above.

2. Question: What alternate tests have been considered for satisfying the exercising requirements for the valves listed below?

CBS021 (M524/H6)  
CBS022 (M524/H9)  
CBS027 (M524/H6)  
CBS028 (M524/H9)  
HV29015 (M524/H6)  
HV29016 (M524/H9)

Discussion: This item was left as a "Licensee Open Item" following the meeting. Full stroke testing these valves is not possible due to introduction of NaOH solution to the Decay Heat System. Consideration is being given to partial draining the Reactor Building Spray Additive Tanks through the listed valves and CBS043 (M524/H6) and CBS044 (M524/H9) and monitoring level instrumentation for flow verification.

3. Question: What is the safety related function of CBS031 (M524/I9) and CBS032 (M524/I9)?

Discussion: These valves provide isolation between redundant lines which provide NaOH to Decay Heat Pump suction for post accident pH adjustment and as such are safety related valves and will be added to the IST Program. In addition, the valves listed below will be added to the Program.

CBS029 (M524/H7)  
CBS033 (M524/I10)  
CBS035 (M522/I10)  
CBS030 (M524/H9)  
CBS034 (M524/H10)  
CBS036 (M522/J8)

Relief will be requested for stroking CBS035 and CBS036.

4. Comment: CBS504 (M524/G12) and CBS505 (M524/G5) will require relief from quarterly stroking as they are Category C Check Valves.

Discussion: PV13 will be rewritten to request relief as outlined above.

## E. MAIN STEAM/FEEDWATER/AUXILIARY FEEDWATER

1. Question: Should PV20564 (M530/J7) and PV20566 (M530/I7) be categorized "B" rather than "C"?

Discussion: Yes. Valve Testing Requirement will be changed. No relief is required.

2. Question: Why are PV20562A, B and C (M530/J8 and I9) categorized B/C rather than B?

Discussion: The valves listed above were incorrectly shown as Category B/C. Valve Testing Requirements will be changed to show them as Category B only. No program relief is required.

3. Question: Why can't TV1, 2, 3 and 4 (M530/D5 and F5) be "tripped" for timing during Cold Shutdown?

Discussion: TV1, 2, 3 and 4 will be full stroke exercised (slowly) quarterly. A Trip Test will be performed during Startup following Cold Shutdowns. Timing will be performed during the Trip Test only. A maximum time acceptance criteria will be determined. PV14 will be rewritten to incorporate the above comments.

4. Request: Review the safety related function of the valves listed below to determine if they should be included in the IST Program.

MSS007 (M530/H7)  
MSS008 (M530/I7)  
MSS009 (M530/G7)  
MSS010 (M530/J7)  
MSS013 (M530/H7)  
MSS014 (M530/H7)  
MSS015 (M530/J7)  
MSS016 (M530/I7)  
MSS017 (M530/J10)

Discussion: All valves listed are maintenance valves whose position is verified in Operating Procedure B.2, Plant Heatup and Startup, prior to power operation. These valves will not be included in the IST Program. No program change is necessary.

5. Question: Is FWS120 (M532/B4) locked in the open position?

Discussion: Yes. FWS119 (M532/G4) is also locked open. Both will be categorized as "E" valves and tested accordingly.

6. Request: Provide a more technical basis for PV16 and PV17. Discuss more fully the adverse effects of exercising the valves listed during power operation.

Discussion: Full stroke exercising the valves listed would secure feedwater flow to each steam generator, which would cause a reactor trip. The valves will be full stroke tested during Cold Shutdowns. PV16 and PV17 will be rewritten to reflect the above comments. No change in testing requirements is necessary.

7. Question: What is the safety related function of FWS080 (M532/J7)?

Discussion: FWS080 has no safety function. HV20611 (M532/J6) satisfies Criteria 57 of 10CFR50 for Containment Isolation. FWS080 will be removed from the program. It should be noted that this resolution differs from that of the IST Program Review.

## E.7 Discussion (Continued)

In addition, FWS101 (M532/F6) and FWS102 (M532/F7) will be added to the IST Program as Category A/E valves. SLTJ Tests per Sp 205.01, Reactor Building Integrated Leakage Test, will be specified. Relief from exercising these manual passive valves will be requested.

8. Question: How are FWS047 (M533/F4) and FWS048 (M533/G4) full stroke tested quarterly?

Discussion: These valves were incorrectly listed in the Valve Testing Requirements as being stroked quarterly. These valves will be full stroke exercised on a Cold Shutdown frequency and will be added to Relief Request PV15.

## F. MAIN CONDENSATE AND MAKEUP

1. Question: How are MCM059 (M536/I2) and MCM060 (M536/I2) full stroke exercised quarterly?

Discussion: These valves are part stroke exercised during quarterly testing of Auxiliary Feedwater Pumps P318 and P319 in a low flow recirculation mode. They will be full stroke tested during Cold Shutdown when full flow OTSG Injection Tests are conducted.

## G. AUXILIARY STEAM

1. Request: Review the safety related function of ASC048 (M537/H13) and ASC049 (M537/H13) to determine if they should be categorized A/E and A/C respectively.

Discussion: ASC048 will be categorized A/E and relief requested from exercising since it is a manual passive locked closed valve. ASC049 will be categorized A/C/E and relief requested from exercising since it is a manual passive locked closed stop check valve. Both valves will have an SLTJ type test specified per Sp 205.01, Reactor Building Integrated Leakage Rate Test.

## H. COMPONENT COOLING WATER

1. Comment: Containment Building Isolation Valves must be categorized A or A/C as applicable.

Discussion: The valves listed below will be categorized as shown below.

### Category A:

SFV46014 (M543/F10)  
SFV46203 (M543/F10)  
SFV46204 (M543/F10)  
SFV46906 (M543/C13)  
SFV46907 (M543/B13)  
SFV46908 (M543/C13)

### Category A/C:

CCW036 (M543/E10)  
CCW194 (M543/B13)

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## H.1 Discussion (Continued)

SLTJ tests will be specified per SP205.01, Reactor Building Integrated Leakage Rate Test. PV18 requests relief from quarterly exercising and contains sufficient support information.

### I. NUCLEAR SERVICE RAW WATER/NUCLEAR SERVICE COOLING WATER

1. Question: Should valves NRW001 (M544/I9), NRW003 (M544/G10) and NSW086 (M545/G7) be categorized E rather than B?

Discussion: NRW001 and NRW003 will be categorized E.

NSW086 will be categorized E and maintained in the program.

2. Question: What are the safety functions of NRW041 (M544/C4) and NRW042 (M544/C9)?

Discussion: NRW041 and NRW042 provide the capability to conserve water in the spray ponds by alternately running in the spray and by-pass modes. This function would be required in the event the ability to make up to the spray ponds has been lost.

These valves will be added to the IST Program as Category B valves. No relief for testing requirements is necessary.

### J. HEATING AND VENTILATION

1. Question: Would failure of the valves listed below in a nonconservative position during power operation place the plant in an unsafe condition?

SFV53504 (M551/E10)  
SFV53503 (M551/E11)  
SFV53603 (M551/F10)  
SFV53604 (M551/F11)

Discussion: Failure of a single valve on a penetration will not place the plant in an unsafe condition because the redundant penetration isolation valve will provide containment integrity. When this is considered in light of the fact that these valves are normally closed and would therefore be passive components during an accident condition, the staff suggestion that relief be requested from quarterly exercise and timing seems reasonable.

However, we have the ability to purge during power operation. To accomplish this, both valves on each penetration must be open. During an accident condition, the valves would be required to stroke closed to provide containment integrity and therefore are active components.

For purposes of testing, these valves will be considered active components and contrary to staff's suggestion, no relief from exercise/timing requirements will be requested.

2. Question: Are HGS013 (M551/I12) and HGS012 (M551/I12) safety related?

Discussion: These valves provide isolation of the Containment Building from the ILRT Test Cart and, as such, are manual, passive, normally closed containment isolation valves. Therefore, they will be categorized A/E with relief requested from leakage testing and stroking requirements.

3. Question: Should the valves listed below be included in the IST Program?

HGS004 (M551/G11)  
HGS005 (M551/G11)  
HGS010 (M551/F11)  
HGS011 (M551/F11)

Discussion: Operating Procedure A.56, Hydrogen Purge System, stipulates that manual valves HGS005 and HGS010 be normally open during post accident hydrogen purging as protection against drawing a vacuum on the Containment Building (in which case check valves HGS004 and HGS011 would open). A.56 also allows operation of the Hydrogen Purge System with HGS005 and HGS010 closed during periods when accurate monitoring of exhaust radiation level is desired (with monitoring of containment pressure to assure a vacuum is not drawn). Therefore, these valves are not functionally safety related and will not be stroked. HGS005 and HGS010 will be categorized as A valves and a Request for Relief will be submitted for stroking requirements. SLIJ Tests will be specified per SP205.01, Reactor Building Integrated Leakage Rate Test.

#### K. RADWASTE SYSTEM

1. Question: Are leak tests performed on SFV60003 (M560/I2) or SFV66308 (M561/B1)?

Discussion: These valves are leakage tested in accordance with requirements of SP205.02, Local Component Leak Rate Surveillance Test. Valve testing requirements will be amended.

#### L. CHEMICAL ADDITION AND SAMPLING

1. Question: Is SFV20092 listed in the IST Program actually SFV70002 (M570/C3) as shown on P&ID M570?

Discussion: Yes. The Valve Testing Requirements Table will be corrected.

2. Question: Are the valves below safety related and as such should they be included in the IST Program?

BWS038 (M570/J6)  
BWS039 (M570/I6)  
BWS035 (M570/I8)  
BWS036 (M570/J9)

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Discussion: All valves listed above, except BWS040 and BWS054, are normally closed maintenance valves and as such will not be included in the IST Program. VWS040 and BWS054 are safety related and will be included in the IST Program. In addition, BWS041 (M570/J5) and BWS045 (M322/G12) will be added. Relief will be requested from stroking BWS045.

#### M. SERVICE AIR

1. Question: Should SAS052 (M590/E13) and SAS054 (M590/E13) be categorized A/E and leak tested?

Discussion: These valves will be categorized A/E with an SLTJ type test specified per SP 205.01, Reactor Building Integrated Leakage Test. Relief will be requested from exercising these manual, passive, locked closed valves.

#### N. NITROGEN GAS

1. Comment: NGS011 (M591/G12) must be exercised quarterly or relief must be requested.

Discussion: Relief from stroking this normally closed passive check valve will be requested.

2. Question: Should NGS017 (M591/H11) be categorized A/E and tested accordingly?

Discussion: NGS017 will be categorized A/E and relief will be requested from stroking this manual, passive valve. A SLTJ test per SP 205.01, Reactor Building Integrated Leakage Test will be specified.

3. Question: Should NGS018 (M591/I12) be included in the IST Program?

Discussion: NGS018 will be categorized A/C and included in the IST Program. Relief will be requested from stroking this normally closed passive check valve and an SLTJ leakage test will be specified per SP 205.01, Reactor Building Integrated Leakage Test.

#### P. DEMINERALIZED WATER

1. Question: Should DMW024 (M593/C10) be categorized A/E and tested accordingly?

Discussion: DMW024 will be categorized A/E. Relief will be requested from stroking this manual, passive, locked closed valve. A SLTJ leakage test per SP 205.01, Reactor Building Integrated Leakage Test, will be specified.

2. Question: Should DMW025 (M593/C10) be categorized A/C and tested accordingly?

Discussion: DMW025 will be added to the IST Program as a Category A/C Valve. Relief from stroking will be requested for this passive, normally closed check valve and a SLTJ leakage test per SP 205.01, Reactor Building Integrated Leakage Test, will be specified.

Q. MISCELLANEOUS

1. Question: Should any components of the Emergency Diesel Generator Air Starting or Fuel Transfer Systems be included in the IST Program?

Discussion: No. The Emergency Diesel Generators and associated sub-systems are tested monthly per Technical Specification requirements. These components will not be included in the IST Program, therefore, no program change is required.

2. Question: Is SFC019 (M523/H6) safety related?

Discussion: No. Alternative cooling and makeup sources to the Spent Fuel Pool are available from the Decay Heat System and Borated Water Storage Tank. No program change is required.

3. A definition of when and how much valve testing is to be done at Cold Shutdown will be provided per staff's suggestion.
4. A Request for Relief from IWV3410(g) will be submitted per staff's suggestion.

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### PUMP TESTING PROGRAM

1. Question: Can the pumps listed in PV20 be tested in a fixed resistance system?  
  
Discussion: All pumps listed are tested in fixed resistance systems. PV20 will be withdrawn as no relief is required.
2. Question: PV17 does not apply to the Auxiliary Feedwater Pump. Should this Relief Request be PV19?  
  
Discussion: Yes. PV19 is the correct request; however, it is unnecessary and will be withdrawn.
3. Question: Is inlet pressure for the Nuclear Service Raw Water Pumps (P472A and B, M544/E3 and E7) measured?  
  
Discussion: Yes, inlet pressure is measured and recorded.
4. Question: Can the Auxiliary Feedwater Pumps be tested in a fixed resistance system and PV22 withdrawn?  
  
Discussion: Yes, the pumps will be tested in a fixed resistance system and PV22 will be withdrawn.
5. Request: Provide more detailed information regarding measurement of flow rate for the Nuclear Service Raw Water Pumps.  
  
Discussion: A more detailed explanation of the alternate method for measurement of Nuclear Service Raw Water Pumps will be provided in the Alternate Test section of Relief Request PV23.
6. Comment: ASME Section XI states that pumps must be tested monthly.  
  
Discussion: Relief Request PV24 has been submitted to allow quarterly testing. This is an open item for NRC.
7. Comment: Eductors are utilized to draw NaOH into Reactor Building spray.  
  
Discussion: The question of whether to test these eductors as pumps per Section XI was raised by staff and left as an open item for NRC resolution.

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## NONDESTRUCTIVE EXAMINATION PROGRAM

### A. CLASS I COMPONENTS

1. Question: Why aren't the reactor inlet, outlet, and sa nozzle to safe end welds listed in the exami as dissimilar metal welds?

Discussion: Reactor inlet and outlet nozzle to pipe weld steel to carbon steel welds and are, therefo in the dissimilar metal weld category. Reac jection dissimilar metal welds are included section of the program under Section B4.1. change is necessary.

2. Question: Why are Reactor Vessel Closure Nuts given a ation?

Discussion: The 1971 Edition of Section XI with Addenda Summer 1973 was utilized during the first 40 That edition specifies a volumetric and visu examination for nuts under Item 1.8. No pro necessary.

3. Request: Explain more fully the reason for no examina in Relief Request NDE1.

Discussion: NDE1 will be rewritten to state that all acce of the weld will be examined during the firs Should any recordable indications be noted, examined manually during the second period. percent of the weld will be examined from th during the third period.

4. Request: Provide radiation levels and the estimated p in NDE4 and NDE5.

Discussion: Radiation levels, examination times and man for various areas (estimated from OD contact ings) are listed below.

<u>Component</u>	<u>Rad Lvl(R/hr)</u>	<u>Exam Time</u>
Reactor Vessel	15	6
Reactor Head	15	3
Core Flood Nozzles	10	3
Stm. Gen. Head	15	1
Pressurizer	15	0.5

NDE4 and NDE5 will be resubmitted with the a included.

5. Question: Is a surface examination of the pump ID poss a volumetric examination?

Discussion: No. Radiation levels are estimated to be on the order of 15 R/hr or greater. The examination would take at least four hours and would, therefore, result in at least 60 Man Rem of exposure. No program change is necessary.

B. CLASS II COMPONENTS

1. Question: What systems were exempted from volumetric examination pursuant to IWC1220 (b) and (c) of Section XI?

Discussion: Containment Building Spray and Core Flood Discharge were excluded as allowed in IWC1220 (b) and (c) respectively. It is understood that for these systems, the normal examination requirements of Section XI will be required as augmented exams by the Safety Evaluation Report (SER)

C. PRESSURE TESTS

1. Request: Provide more information with regard to Relief Requests NDE10, NDE11 and NDE12.

Discussion: Tests are to be performed at pressures lower than those required because it is not possible to provide isolation.

NDE10 - All Class 2 and 3 piping within pump isolation valves for those pumps listed in the IST Program will be visually examined during normal operation.

NDE11 - RCP Seal Injection piping will be visually examined during normal system operation.

NDE12 - Auxiliary Feedwater Pump and Turbine Driver seal and bearing cooling piping will be visually examined during normal system operation.

Inspection schedules will be as noted in NDE10, NDE11 and NDE12. No program change is necessary.

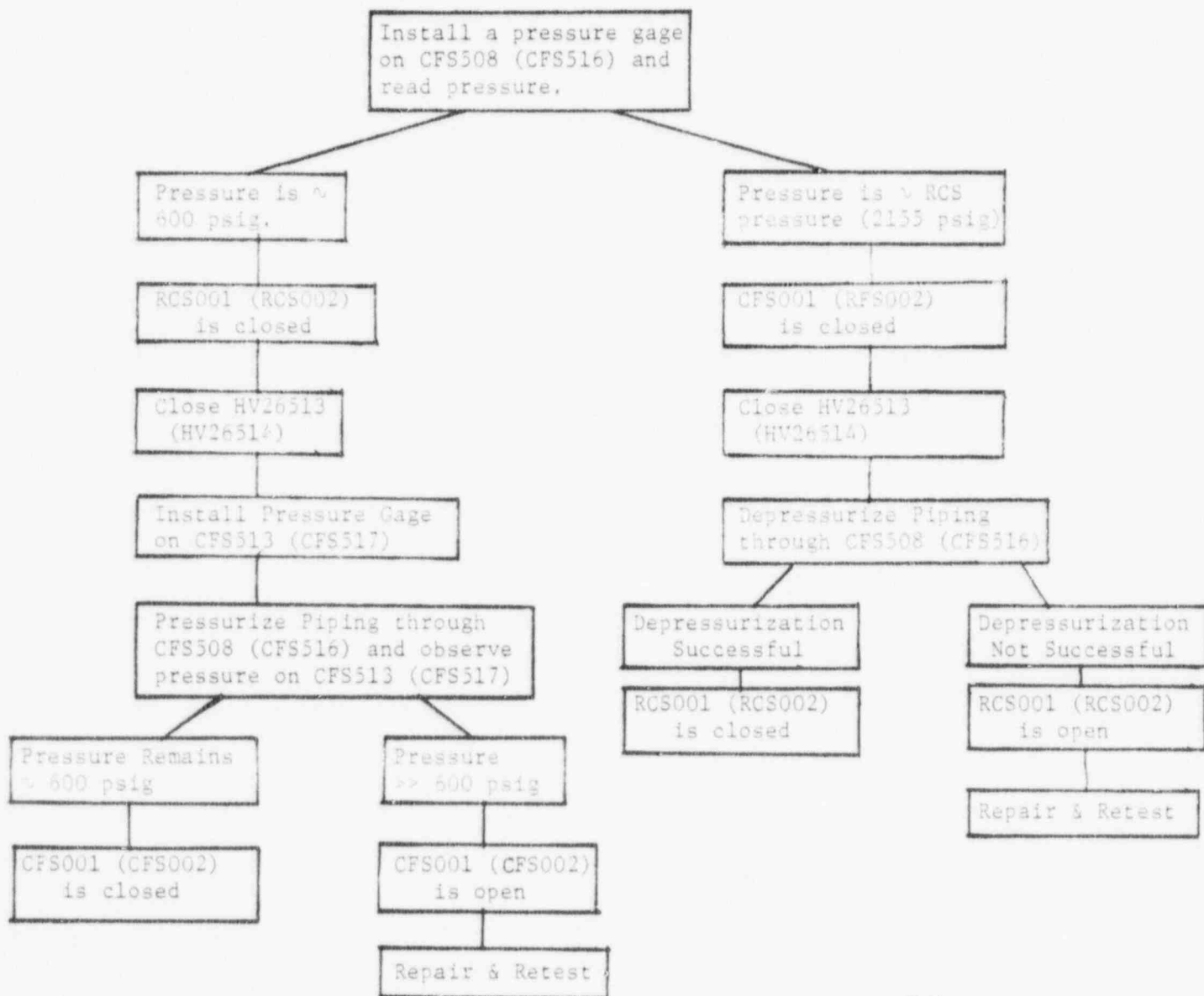
D. MISCELLANEOUS

It was noted by staff that a Relief Request should be submitted for the 20% DAC criteria of Section XI. In subsequent telephone conversations, staff has noted that this is unnecessary and no request will be submitted as noted in the meeting notes.

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ENCLOSURE 1: RCS001, RCS002, CFS001 and CFS002  
DISC MOVEMENT VERIFICATION

Note: This procedure is to be completed during Refueling Outages when the Reactor Coolant System is at its normal operating pressure.



90005078

## INSERVICE INSPECTION PROGRAM

PERIOD: OCTOBER 13, 1979 TO FEBRUARY 18, 1983

## REQUEST FOR ADDITIONAL INFORMATION

I. CLASS I COMPONENTS

1. Concerning Item BI.6 category B-F, why aren't the reactor inlet, outlet and safety injection nozzle-to-tube end welds listed in the examination program?
2. Why are closure nuts listed as receiving a visual inspection in addition to volumetric and surface examination when Table IWS-2600 requires a volumetric and surface examination when the nuts are removed.
3. Relief Request NDE 1: The proposed alternate examination requires:  
"During the first one-third interval, all accessible areas of the weld will be examined from the top or flange surface by utilizing a full 360° sweep of the vessel circumference. In addition, during the final one third interval, 100% of the weld will be examined from the vessel ID."  
Since you state that 60% of the flange-to-upper shell course is accessible from the mating surface, why aren't the examinations conducted as follows:  
1st One-third Period - 25% weld (Exam from mating surface)  
2nd One-third Period - 25% weld (Exam from mating surface - total weld 50%)  
3rd One-third Period - 50% weld (Exam from I.O.)

If inspections could be completed in this manner no request for relief would be necessary.

4. Relief Request NDE 4 & 5: Please, specify what radiation levels will be and include in relief request the estimated personnel exposure.
5. Relief Request NDE 7: Is a surface examination from I.O. of pump possible in lieu of volumetric examination for the pump casing welds?

II. CLASS II COMPONENTS

1. Please, identify those systems or portions of systems that were exempt from examination pursuant to IWS-1220 (b) and (c).

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90005079

III. PRESSURE TESTS

1. Relief Requests NDE 10, 11 and 12: The staff recognizes that there are non-isolable junctions among ASME Code Class 1, 2 and 3 components. The alternate leakage tests for the relief requests listed above should be conducted at the lower test pressure as required by Code. Please list the components and junctions referred to in Relief Requests 10 - 12 and their high/low design pressures.

90005080

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The following are comments and questions on the in-service testing submittals by Rancho Seco Nuclear Station Unit 1. These comments and questions are directed at Rancho Seco and are preparatory to a future working meeting to be arranged by the NRC with the licensee. NOTE: Section XI and Appendix J refer to the ASME code and 10 CFR 50 respectively.

#### PUMP TESTING PROGRAM - QUESTIONS AND COMMENTS

1. [X]P-3170 states pump differential pressure or flowrate must be measured for pumps in a fixed resistance system. Can the pumps listed in relief request PV20 be tested in a "fixed resistance" condition (i.e., recirc loop)?
2. Relief request PV 17 does not apply to the Auxiliary Feedwater pump (Dual Drive). Should this be PV 19?
3. Is inlet pressure (Pi) for the Nuclear Service Raw Water pumps measured or calculated?
4. Relief request PV 22 is not required since flowrate need not be measured if the pump test is performed with the auxiliary feed pumps running in a "fixed resistance" condition.
5. Provide more specific technical information on how the alternate test for measuring flowrate for the Nuclear Service Raw Water pumps provides adequate information for pump performance evaluation.
6. ASME Section XI states pumps must be tested monthly.

#### VALVE TESTING PROGRAM - QUESTIONS AND COMMENTS

##### A. Make-up/High Pressure Injection

1. Does any normal make-up flow exist through valves SIM005 and SIM007 during power operation?
2. What is the safety related function of valves SFV22005, SFV22006 and SFV22015?
3. All valves listed in the program as category B/E should be re-categorized E.
4. Review the functions of valves SIM070, SIM079 and SIM081 to determine if they are safety related.

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4. How are check valves SH2015, SH2016 and SH2017 full stroke tested quarterly?
5. Provide specific technical reasons why the consequences listed in relief request RV4 would occur.
6. Provide the flowpaths utilized for full stroke exercising the check valves in relief request RV5.
7. Review the functions of valve FLS004 to determine if it is safety related. If the valve is a category C/E valve and remains in the program then it also must be full stroke exercised quarterly.

Inter Heat/Cond Flood

1. If SH2015 are category A/C/E a leak test must be performed.
2. How are valves SH2001, SH2002, CF2001 and CF2002 full stroke exercised? If these valves are category A/C valves then a leak test must be performed.
3. Can valve HV2007 be exercised during power operation without over-pressurizing the low pressure tank system?
4. Are valves HV2003 and HV2006 leak test in the direction required by Appendix U?
5. How are check valves SH2003, SH2004, SH2007 and SH2008 full stroke exercised quarterly?
6. How are check valves SH2003 and SH2004 full stroke exercised?
7. What is the safety related function of check valves SH2007 and SH2008?
8. What is the safety related function of valve HV2003?
9. SH2009 is listed as a category A/E valve and therefore must be leak tested. Review the safety related function of SH2009 to determine if it should be recategorized A/E.
10. Review the safety related function of the following valves to determine if they should be recategorized A/E.

CF2003  
CF2004  
CF2005  
CF2006

CF2009  
CF2010  
CF2011  
CF2012

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11. Review the safety related function of the following valves to determine if they should be included in the IST program.

HY26513

Core Flood Tank Outlet 18V

HY26514

Core Flood Tank Outlet 18V

C. Spent Fuel Cooling

1. Do valves SF2500 and SF2501, fuel transfer tube valves, perform a containment isolation function?

D. Reactor Building Spray

1. Provide more detailed information on how CBS000 and CBS010 are full stroke exercised.
2. What alternate tests have been considered for satisfying the exercising requirements for the following valves?

CBS001

CBS003

CBS002

HY29015

CBS007

HY29016

3. What is the safety related function of valves CBS001 and CBS002?

E. Main Steam/Recirculation/Utility System

1. Should valves FV2004 and FV2005 be categorized B rather than C?
2. Why are valves FV2002A, 3 and 4 categorized B/C rather than C?
3. Provide more detailed information why valves FV-1, 2, 3 and 4 cannot be "tripped" for timing during cold shutdowns.
4. Review the safety related function of the following valves to determine if they should be included in the IST Program.

FSS007

FSS013

FSS008

FSS014

FSS009

FSS015

FSS010

FSS016

FSS017

- 5. Is valve FV2000 locked in the open position?
6. Provide a more technical basis for relief requests FV16 and FV17 discussing the adverse effects of exercising those valves during power operation.

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7. What is the safety related function of valve FMS000?

8. How are the auxiliary feed pump discharge check valves FMS047 and FMS048 full stroke exercised quarterly?

F. Main Condensate and Makeup

1. How are valves MCM059 and MCM060 full stroke exercised quarterly?

G. Auxiliary Steam

1. Review the safety related function of valves AS0040 and AS0049 to determine if they should be categorized A/E and A/C respectively.

H. Component Cooling Water

1. "Containment Building Isolation Valves" must be categorized A or A/C as applicable.

I. Nuclear Service Raw Water/Nuclear Service Cooling Water

1. Should valves NRM001, NRM003 and NCM005 be categorized E rather than B?

2. Review the safety related function of valves NRM001 and NRM002 to determine if they should be included in the IST Program.

J. Heating and Ventilation

1. Would failure of the following valves in a non-conservative position during power operation place the plant in an unsafe condition?

SFY60304  
SFY60305

SFY60306  
SFY60304

2. Review the safety related function of valves H6S016 and H6S012 to determine if they should be recategorized A/E.

3. Review the safety related function of the following valves to determine if they should be included in the IST Program.

H6S004  
H6S005

H6S010  
H6S017

K. Subsists System

1. Is a leak test performed on valves SFY60103 and SFY60102?

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L. Chemical Addition and Sampling

1. Is valve SFV20002 listed in the IST Program actually valve SFV70002 as indicated on P&ID M-5707
2. Review the safety related function of the following valves to determine if they should be included in the IST Program.

BWS003  
BWS009  
BWS005  
BWS006  
BWS040  
BWS064

M. Service Air

1. Review the safety related function of valves SWS052 and SWS064 to determine if they should be categorized A/E and leak tested.

N. Nitrogen Gas

1. Valve NSD011 must be full stroke exercised quarterly or relief must be requested.
2. Review the safety related function of valve NSD017 to determine if it should be categorized A/E and tested accordingly.
3. Review the safety related function of valve NSD018 to determine if it should be included in the IST Program.

P. Demineralized Water

1. Review the safety related function of valve DWS024 to determine if it should be categorized A/E.
2. Review the safety related function of valve DWS025 to determine if it should be included in the IST Program.

Q. Miscellaneous

1. Review the safety related function of the diesel generator starting air and diesel fuel transfer systems to determine if any of these pumps or valves should be included in the IST Program.

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90005085

ENCLOSURE 3

1ST MEETING WITH *RANCHO SECO* - 10/3/79 & 10/4/79

The team related the position relative to the ASME Code requirements 1WV-3520(a), (b), (b)(1) and (b)(2) (1974 Edition) for check valves. It was made clear that check valves are expected to be full stroked or if only limited operation is possible (and it has been demonstrated by the licensee and agreed to by the staff) during power operation, the check valve shall be partial stroked. Since disk position is not always observable, fluid flow test are acceptable ~~as~~ <sup>for</sup> demonstrat~~ing~~ <sup>ion</sup> that a valve has been exercised to the position required to fulfill its function, and it is considered full stroking when the flow used is at least that which is identified in the plant's safety analyses for the valve in question. Any less flow used will be considered as a partial stroke unless it can be demonstrated that the lesser flow will still place the valve disk in the same position (or in a more conservative position) as the flow in the plant's safety analysis. The licensee agreed with this understanding.

The Code states that, in the case of cold shutdowns, valve testing need not be performed more often than once every three months for Category A and B valves and once every nine months for Category C valves. It is our position that the code is inconsistent and that Category C valves should be tested on the same schedule as Category A and B valves. The licensee has agreed to modify his note on cold shutdown to read, "In the case of frequent cold shutdowns, valve testing will not be performed more often than once every three (3) months for Category A, B and C valves."

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The team noted that the licensee's T. S. may be in conflict with the NRC staff "Guidelines for Excluding Exercising (cycling) Test of Certain Valves During Plant Operation." The licensee has agreed to review their T. S. and to consider the need to propose T. S. Changes which would have the effect of precluding such testing. Further, the team noted that these guidelines pointed out that all valves, which when cycled, could subject a system to pressure in excess of their design pressures should not be tested during power operation. It is assumed for the purpose of a cycling test that one or more of the upstream (or downstream which ever is applicable) check valves has failed unless positive methods are available for determining the pressure or lack thereof on the high pressure side of the valved to be cycled. The licensee agreed to carefully review the application of these guidelines to their plant and implement these guidelines where possible. Any conflict will be identified by the licensee to NRC.

The team noted that NRC differentiates for valve and pump testing purposes between the cold shutdown mode and refueling mode. That is for testing purposes the refueling mode is not treated as just another planned cold shutdown.

The team discussed the position for valve testing at cold shutdown condition. It was made clear that the intent is that valve testing commence as soon as possible into the cold shutdown but no later than 48 hours after the shutdown. And that valve testing continue until complete or plant startup to return to

90005087

power. Any testing not completed at one cold shutdown should be performed during subsequent cold shutdowns before the next refueling. All valves identified to be tested at cold shutdown are expected to be tested at refueling. The licensee understands this position and agreed to consider applying it in defining the licensee IST program.

The team noted that although we are only reviewing at this time Code Class 1, 2 and 3 safety related valves (those that mitigate the consequences of an accident and/or safely shutdown the reactor and to maintain the reactor in a shutdown condition), the team in this working session made it clear we are not taking the position that the other Code Class 1, 2 and 3 valves are not important and therefore, should not be tested. We noted for example that it is possible that I&E may identify valves other than those safety related valves discussed in our working session that should be included in the IST program. The licensee stated they understood. The team requested that if by testing a non-safety related valve it is necessary to isolate a safety system, the licensee should identify these instances. The licensee agreed to this action.

The following valves were identified as examples of valves that perform pressure isolation:

RCS 001, CFS 001  
RCS 002, CFS 002  
DHS 015, DHS 016  
HV 20001, HV 20002  
SIM - 050, SIM - 048  
SIM - 049, SIM - 047  
SIM - 041, SIM - 040

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The following signatures indicate that the parties reviewed the minutes taken in the course of this meeting and understand that they reflect the contents of the meeting.

Roncho Sea agrees to provide a revised IST submittal by

open

NRC: W. Jones

Date: 10/4/79

W. B. Gandy

Date: 10/4/79

90005089

VALUES • QUESTIONS AND COMMENTSA. MAKE-UP / HIGH PRESSURE INJECTION

1. SIM 036 & SIM 037 are partial stroke exercised quarterly.

These valves cannot be full stroke exercised open during power operation since design flow cannot be achieved by the centrifugal make-up pump when pumping into the TCS, the only available flowpath for testing these valves.

These valves cannot be full stroke exercised during cold shutdown since the HPSI pumps and safety features isolation valves must have power racked out for low temperature over pressure protection.

Valves will be full stroke exercised during refueling outages.

SIM 049, 50, 47, 41 and <sup>40</sup>~~36~~ cannot be exercised during power operation since thermal shocking of the injection nozzles would result. Cold shutdown exercising cannot be accomplished since power is racked out to the HPSI pumps and safety features valves. Full stroke exercising will be accomplished during refueling outages.

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2. SFV22023, SFV22009, SFV22025 cannot be full stroke exercised during power since loss of pressurizer level control would result. These valves will be full stroke exercised during cold shutdown.

SFV22005 and SFV22006 will be full stroke exercised quarterly. NO RELIEF REQUIRED

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3. Valves listed as category B/E will be change to "category E" except where otherwise noted in this paper.

4. SIM073, SIM079 and SIM081 will be removed from the IST program.

5. SIM045, SIM058 and SIM002 will be partial stroke exercised quarterly and full stroke exercised during refueling outages. See response to question #1 in these notes for basis.

in Relief request PVH  
6. Replace the phrase "place the plant in an unsafe condition" with a statement to the effect of "would cause TCP seal degradation and could cause seal failure and require plant shutdown."

7. Relief request PVS needs addition of statement for relief from cold shutdown exercising and basis is same as relief request PVI cold shutdown basis.

8. TLS044 will be removed from IST program

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90005091

## B. Decay Heat / Core Flood

1. A leak test is performed (a typo error in IST program). DHS015 and DHS016
2. PCS001, PCS002, CFS001 & CFS002 are Category C valves, not A/C.

\* LIC. OPEN ITEM - Partial stroke exercising will be performed during refueling outages. Method of verification of disc movement will be determined later.

3. HV26011 cannot be exercised during power operation since a failure of the check valve on the high pressure side of this valve would cause an over pressurization of the DHS system. This valve will be full stroke exercised during cold shutdowns and refueling outages.

4. Valves are leak rate tested in the direction required by code - NO CHANGE IN PROGRAM.

5. Full flow recirc tests are performed on the DHS pumps NO CHANGE IN PROGRAM.

\* <sup>LICENSEE</sup> 6. OPEN ITEM Full stroke exercising of BWS003 and BWS004 will be investigated further.

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7. DHS057 and DHS058 will be removed from the IST Program - NO SAFETY RELATED FUNCTION.

8. Valve HV20003 is safety related and will remain in the program.

Exercising HV20003 during power operation without first shutting DHS 461 would induce voids in the DHS pump suction piping which would cause water hammering and pump cavitation resulting in pump & system damage. Valve will be full stroke exercised during cold shutdowns.

9. DHS033 and DHS039 will be categorized E only.  
NO RELIEF REQUIRED

10. Valves listed will be categorized A/E. Relief from exercising those <sup>manual</sup> passive valves will be requested. Relief will be requested from individual local leak rate testing. Will be leak rate tested with the integrated leak rate tests.

11. HV26513 and HV26514 are normally open, power racked out valves which are not required to be included in the IST Program. Valve position and power racked out and verified by procedure # B2 verifies valves open and power off indication in Control Room continuously display valve position.

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90005093

C Spent Fuel Cooling

1. Valves do not perform a safety related function and will not be in IST Program.  
NO PROGRAM CHANGE REQUIRED.

D. Containment Building SPRAY

1. CBS009 and CBS010 cannot be full stroke exercised with existing piping configuration. The valves will be partial stroke exercised during refueling outages. This partial stroke test cannot be performed during power operation since the test requires entry into areas inside the reactor building that are inaccessible during power operation. This test is also beyond the scope of normal cold shutdown testing.

- \* 2. <sup>Licensee</sup> OPEN ITEM Values listed in relief request PV12 will be investigated further for method and frequency of valve exercising.

- \* 3. CBS031 and CBS032 <sup>Licensee</sup> OPEN ITEM to determine if these valves are safety related.

POOR ORIGINAL

90005094

4. CBS 504 and CBS 505 Category C check valves  
Valves will require relief from quarterly exercising  
PV13 will be rewritten

E. MAIN STEAM / Feedwater / Auxiliary Feedwater

1. Valves PV20564 and PV20566 will be category B. NO RELIEF REQUIRED.
2. PV20562 A, B and C are category B valves. NO RELIEF REQUIRED
3. TV 1, 2, 3 & 4 will be full stroke exercise slowly during power operation (quarterly) and a trip test will be performed during startup following cold shutdowns. The valves will be stroke timed during the trip test only since timing during the slow stroke would be meaningless. Licensee will determine stroke time acceptance criterion.
4. Valves listed will not be included in IST Program. Valve position is verified in procedure 62 which initiates operating procedure for valve lineup containing these valve
5. FWS119 and FWS120 are Category E valves. NO RELIEF REQUIRED
6. FULL STROKE EXERCISING THESE VALVES WOULD REQUIRE STOPPING FEED FLOW TO THE OTSG THEREBY CAUSING THE OTSG TO BLOW DRY CAUSING A REACTOR TRIP. VALVES WILL BE EXERCISED TO THE POSITION REQUIRED TO PERFORM THEIR SAFETY FUNCTION (SHUT) DURING COLD SHUTDOWNS. (NO CHANGE IN TESTING REQUIREMENTS)

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90005095

- (2)
7. Valve FWS080 will be categorized A/E and relief requested from the individual leakage requirement. Valve is leak tested with the integrated leak test. Relief from exercising passive manual valves also required. Valves FWS101 and FWS102 will be added to the program and are same as FWS080 and testing requirement are the same.
  8. FWS047 and FWS048 will be full stroke exercised during cold shutdown. These valves will be added to relief request PV15.

F. MAIN CONDENSATE AND MAKEUP

1. MCM059 and MCM060 are full stroke exercised quarterly during the pump tests.  
NO PROGRAM CHANGE REQUIRED

G. AUXILIARY STEAM

1. ASC043 will be categorized A/E and relief requested from exercising since it is a manual passive locked closed valve.

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ASC049 will be categorized A/C/E and relief requested from exercising since it is a manual passive locked closed stop check valve.

Both above valves will be leak tested with the integrated leak test and relief will be requested from the individual leak test requirements.

90005096



H. Component Cooling Water

1. Category A

SFV 46014

SFV 46203

SFV 46204

SFV 46906

SFV 46907

SFV 46908

Category A/c

CCW 036

ccw 194

Above valves will be categorized as noted.

Relief will be requested from the individual leak rate test but will be leak tested during the integrated leak testing.

Relief requested from exercising until cold shutdowns. Enough information is provided in relief request PV18 for this.

I. NUCLEAR SERVICE RAW WATER / NUCLEAR SERVICE COOLING WATER

1. NRW001 and NRW003 will be categorized

E. NO RELIEF REQUIRED

NSW036 will be categorized E NO RELIEF REQUIRED  
Licensee is evaluating for possible deletion from program

2. LICENSEE OPEN ITEM NRW041 & NRW042

Spray pond and Spray Bypass manual Valves  
Are valves safety related?

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90005097

(9)

J. HEATING & VENTILATION

1. Purge valves will be categorized A and relief from exercising will be requested from strutting and timing since valves are "passive".
2. HGS013 and HGS012 will be recategorized A/E Relief will be requested from exercising these manual passive valves.

Relief will be requested from individual leak test requirements and will be leak tested with the integrated leak tests.

- \*  
3. HGS004 and HGS011  
HGS005 and HGS010

OPEN ITEM  
LICENSEE

- SHOULD THESE VALVES BE IN PROGRAM

To determine if they are safety related.

K. RADWASTE

1. SFV60003 and SFV66303 will be leak test

L. Chemical Addition and Sampling

1. SFV20092 is actually SFV70002. 90005098
2. Valves listed will not be included in IST program  
NO CHANGE IN PROGRAM REQUIRED

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M. Service Air

1. Values SAS052 and SAS054 will be category A/E and relief requested from exercising passive valves and from local leak rate testing

N. Nitrogen Gas

1. SFU92520 and NSG011 - Relief request from exercising passive valves who's normal position is shut, safety position is shut and are not required to open during an accident.
2. NGSO17 will be categorized A/E and relief will be requested from exercising passive valve. LLRT Relief required.
3. NGSO18 will be included in IST Program as category A/C. Relief required from exercising passive stop check valve and LLRT requirements

P. Demineralized Water

1. DMW024 will be category A/E and relief required from exercising passive valve. LLRT Relief required.

90005099

2. DMW025 added to program as Category A/C

Relief required from exercising, timing and LLRT

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Q Miscellaneous

1. NO! Diesel Generator and associated equipment and systems are tested per Tech Specs monthly. None of these will be included in the IST Program.

NO PROGRAM CHANGE REQUIRED

LICENSEE OPEN ITEM

ARE THE SPENT FUEL POOL MAKEUP LINE VALVES  
SAFETY RELATED?

POOR ORIGINAL

90005100

## Pumps

1. Relief request PV20 will be deleted from the IST Program - Relief NOT Required.

2. Relief Request PV19 will be deleted from IST Program

3. P<sub>i</sub> is measured and recorded

4. Delete PV22 and test pumps via a fixed resistance system

5. A more detailed explanation of the alternate test of measuring flowrate for the Nuclear Service Raw Water Pumps will be provided in the "Alternate test" section of Relief Request PV 23.

\* 6. Relief will be requested from monthly pump testing to quarterly pump testing. This differs from the current NRC position for pump testing.

### OPEN ITEM FOR NRC

7. OPEN ITEM FOR NRC

ARE THE EDUCTORS IN THE CONTAINMENT BUILDING SPRAY SYSTEM CONSIDERED PUMPS AND REQUIRED TO BE TESTED PER SECTION XI.

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90005101

The team noted that a recent staff study of the Oscon plant isolation valves between the RCS and the DECAY Heat (LPI), and its contribution to the Event was completed.

The results indicated that the Oscon configuration presented a higher value contribution to the risk of core melt from a LOA outside containment than that previously found for the Surry plant. The team noted that the results of the study were applicable to the Nacocha Seco plant because this plant had the same configuration.

The team identified that the contribution may be reduced by some procedural change. In particular, opening the MOVs at start-up and keeping them open during power operation. The team requested that the licensee provide information to the Project Manager regarding the consequences for the Nacocha Seco plant to operate with the MOVs open.

The team noted that leak testing (some other method) of each of these valves provides the <sup>largest contribution to the</sup> contribution.

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90005102

NAMEASSOCPHONE

BILL GARRETT

SMUD

209-742-2751

Tom Taylor

BaHelle

509-375-2838

DONALD C Blachly

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VICTOR NERSES

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John McColligan

SMUD

916-452-3211

Jack H. Uhl

B&amp;W-151

804-384-5111

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90005103



Class I Components

1.) Why aren't the reactor inlet, outlet and safety injection nozzle-to-safe welds in programs?

ans: Reactor inlet and outlet nozzles aren't dissimilar metal welds are carbon to carbon welds.

HPCI injects into cold leg and are included in program.

2.) Why are closure nuts given a visual?

ans: First inspection period examinations were done to '71 - '73 addenda.

3.) The proposed examination doesn't allow any examination of weld during the 2<sup>nd</sup> period.

ans: Relief request will be rewritten to the effect that all accessible portions of weld will be examined during the first period, should any recordable indications shall be manually ~~EXAMINED DURING~~ <sup>2<sup>ND</sup></sup> examination period, examine 100% front I.D. during 3<sup>rd</sup> period (automated exam)

Cost for exam is \$125k giving 2<sup>nd</sup> period.

90005104

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Radiation exposures will given for manual examination.

Est MINIMUM TIME FOR 05% ON WELD



4.) What are radiation levels for the RA 4+5?

ans: Radiation levels for surface & visual  
of RV - \_\_\_\_\_ (to be given)

Visual exam for S.G. Radiation levels  
- 3-8 R/hr

Pressurizer radiation levels for visual exam  
- \_\_\_\_\_ (to be given)

5. Is a surface examination of pump I.D. possible?

ans: Surface preparation for a surface  
examination would create ~~a surface~~  
personnel exposure: which are excessive

Radiation levels are \_\_\_\_\_  
(to be given)

90005105

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## Class II Components

- 1.) What systems were exempted from IWC-1220 (b) and (c)

ans: IWC-1220 (b) - RBS - Reactor Building ~~System~~ Spray System -

IWC-1220 (c) - CFP S (Core Flood System)

- For these system the examination ~~and~~ requirements of IWC-1220 ~~and~~ will apply as EXEMPTED EXITS REQUIRED BY THE SER

90005106

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### Class III components

- 1.) Pressure Tests to be done @ low than code due to non-isable component; unit time.

NDE 6 Pumps - All pumps class 2 & 3 listed in the program. Test to be done @ system operating pressure than visual.

NDE 11 Piping - Seal Injection (RCP) will be leaked checked during normal operating pressure.

NDE 12 - Aux Feedwater Pumps & Turbine Drive  
seal water piping & bearing cooling piping -

Tested @ normal operating pressure

Attestation

90005107

POOR ORIGINAL

# Vessel Examinations & Piping Examinations

- Licensee will provide a relief request from the 20% DAC criteria.

90005108

POOR ORIGINAL