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NOTEGRAM

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FORM EG&G-460A
(Rev. 05-84)

Date May 2, 1985

To Joel D. Page

From C. B. Ransom/H. C. Rockhold CBR

Org. Mechanical Engineering Branch

Org. NRC Licensing Support Section

Address NRC-DE

Address EG&G Idaho, Inc.

TRIP REPORT FOR THE PUMP AND VALVE INSERVICE TESTING PROGRAM WORKING MEETING FOR THE WASHINGTON PUBLIC POWER SUPPLY SYSTEM NUCLEAR PLANT NO. 2

On April 16 and 17, 1985 a working meeting was held at the NRC offices in Bethesda, Maryland with Washington Public Power Supply System, NRC, and EG&G Idaho, Inc. representatives to discuss the questions resulting from the review of the Washington Nuclear Plant No. 2 (WNP-2) pump and valve inservice testing (IST) program. Attached is a list of the meeting attendees, the questions that served as an agenda for the meeting, and the responses to those questions as taken from the meeting minutes. The utility representatives were given a brief introduction outlining the agenda and the methods used for the documentation of questions and responses. This was followed by detailed discussions concerning specific pumps and valves in the WNP-2 IST program.

Of the 57 questions and comments discussed at this working meeting, 12 remain as open items to be resolved at a later date. These open items are identified in this trip report. There are several additional items where the licensee has agreed to make corrections or changes to their IST program as indicated in the responses to the questions.

jm

Attachment:
As Stated

cc: R. J. Bosnak, NRC-DE
J. [redacted], NRC-DL
F. C. Cherny, NRC-DE
R. E. Lyon
P. E. MacDonald
C. F. Obenchain
C. B. Ransom File
H. C. Rockhold File

ATTENDANCE LIST

INSERVICE TESTING PROGRAM WORKING MEETING

PLANT: WNP-2 DATES: April 16 and 17, 1985

Name	Representing
John Bradfute	NRC-DL
Joel Page	NRC-DE
Herb Rockhold	EG&G Idaho, Inc.
Clair Ransom	EG&G Idaho, Inc.
Pat Powell	WPPSS
Tom Hoyle	WPPSS
Mark Reis	WPPSS
Mac Conserriere	WPPSS
Rich Wolfgramm	WPPSS
Robert Kirkwood	NRC-DE

MEETING MINUTES

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

NUCLEAR PLANT NO. 2

APRIL 16 AND 17, 1985

1. VALVE TESTING PROGRAM

A. General Questions and Comments

1. The current NRC position is that rapid-acting valves are identified as those valves with a limiting value of full-stroke time of 2 seconds or less, and the requirements of IWV 3417(a) need not be applied to these valves. However, these valves must be verified to stroke in less than 2 seconds or the corrective actions of IWV-3417(b) must be met. WNP-2 relief request No. RV-1 is affected by this NRC staff position.

   Response:

   The licensee agrees that rapid-acting valves are valves whose limiting value of full-stroke time is 2 seconds or less and they have modified relief request RV-1 to reflect this position. This position also affects relief requests RV-10 and RV-12. Valves affected by these relief requests do not have position indicators and operation cannot be determined by listening to or physically observing the valves, therefore stroke times cannot be measured. The affected valves are being stroke tested and verified to operate. No change is required for relief requests RV-10 and RV-12 in the revised IST program.

2. The limiting value of full stroke time should be provided in the WNP-2 IST program for all active power operated valves included in the IST program.

   Response:

   The limiting values of full-stroke time are included in the surveillance procedures. Since these times may be affected by maintenance and design changes, incorporating them into the IST program could result in frequent changes to the IST program to keep it current. The licensee will provide these values to the NRC in a separate transmittal, but will not include them in the WNP-2 IST program.

3. Simple check valves should be categorized "C" instead of "B-C", since category "B" applies only to valves that can be mechanically operated.

Response:

The licensee will modify the WNP-2 IST program to reflect this position.

4. What plant conditions could preclude quarterly testing of valves identified to be tested during "ALL" plant operating modes as defined on page 4-6 of the WNP-2 IST program?

Response:

Testing of valves designated as "ALL" means that surveillance is permitted during all operating modes and, therefore, will be normally conducted on a quarterly basis. The only times when testing would not be conducted quarterly are when the systems are out of service for maintenance or due to plant conditions (e.g. RCIC during an extended shutdown).

5. The NRC has concluded that the applicable leak test procedures and requirements for containment isolation valves are determined by 10CFR50, Appendix J. Relief from Paragraphs IWV-3421 through -3425 for containment isolation valves presents no safety problem since the intent of IWV-3421 through -3425 is met by Appendix J requirements, however, the licensee shall comply with Paragraphs IWV-3426 and -3427. This NRC position affects WNP-2 relief request No. RV-4.

Response:

The licensee has set target leakage rates for individual containment isolation valves and has proposed to perform a technical evaluation to determine whether repairs should be made whenever a valves

measured leakage is 120% of the assigned target value. Relief request RV-4 will be modified to expand on the licensee's proposed alternate testing; this remains an OPEN ITEM for the licensee.

6. Provide clarification of the Code requirements for which relief is being requested in relief request No. RV-5. Is relief being requested from all of paragraph IWV-3427 or just for IWV-3427(b)?

Response:

The licensee will modify relief request RV-5 to request relief only from sub-section IWV-3427(b) of the Code instead of both sub-sections IWV-3427(a) and (b).

7. Review any function important to safety for the excess flow check valves utilized by WNP-2 to determine if they should be included in the IST program and be categorized A-C.

Response:

The licensee performs periodic testing of these valves as required by the Technical Specifications. The licensee will include the excess flow check valves in their IST Program and will request relief from the stroking and leak testing requirements of the Code and will explain their proposed alternate testing.

8. All valves that are Appendix J leak tested to verify their containment isolation function should be included in the WNP-2 IST program and be categorized A, A-C, A passive, or A-C passive as applicable.

Response:

The licensee will verify that all process line valves that receive an Appendix J Type C leak-rate test are included in the WNP-2 IST program as category A, A-C, A passive, or A-C passive valves as applicable.

9. What cooling systems are used to cool the reactor control room in order to meet the control room habitability requirements? Are the applicable system pumps and valves included in the WNP-2 IST program?

Response:

The licensee has included the applicable pumps and valves in the emergency chilled water system supply to the control room in their IST program and will test these components in accordance with the Code unless specific relief is requested and granted.

10. Is credit taken at WNP-2 for a post accident sampling system? If so, all of the appropriate system valves should be included in the IST program.

Response:

The post accident sampling system containment isolation valves have been added to the IST program and are tested in accordance with the Code unless specific relief is requested and granted. It is an OPEN ITEM for the NRC to determine if operability of the post accident sampling system is important to safety.

11. Provide the P&IDs that show the neutron monitoring system at WNP-2 (specifically the traversing in-core probe system ball and shear valves).

Response:

The licensee does not have a P&ID that shows the TIP system, but drawing M-604 does show part of the system and was provided. The TIP system ball valves are Appendix J Type C leak tested, however, the licensee has elected not to include them in the IST program since they are in a non-Code class system. This is an OPEN ITEM for the NRC.

B. Reactor Core Isolation Cooling System

1. How does opening RCIC-V-13 during power operation result in tripping the main turbine generator (refer to note 1.k on page 4-43).

Response:

Turbine trip occurs when RCIC-V-13 is open in conjunction with RCIC-V-45 since this combination could result in moisture in the head area and excessive moisture carry-over to the main turbine. It should be further noted that RCIC-V-13 is identified as a high-low pressure boundary valve in the Technical Specifications (intersystem LOCA concerns). The licensee will rewrite note 1.k to include the intersystem LOCA concern for not exercising RCIC-V-13 during power operations.

2. Should valve RCIC-V-13 be leak tested per Section XI and Appendix J to verify both its pressure boundary isolation function and its containment isolation function while valve RCIC-V-19 receives only an Appendix J leak test?

Response:

There was a typographical error in the valve table. RCIC-V-19 is not a high-low pressure boundary valve. It will be leak tested per Appendix J requirements. RCIC-V-13 will be leak tested as required by Technical Specifications.

3. How is check valve RCIC-V-30 full-stroke exercised during the quarterly valve testing?

Response:

The RCIC system testing is performed primarily by taking a suction from and discharging to the CST. RCIC-V-30 is shown to partial-stroke

open quarterly by taking a suction from the suppression pool and discharging through the 2" minimum flow line to the suppression pool. The test flow path does not permit full-stroke exercising this valve with flow, therefore RCIC-V-30 is not verified to full-stroke exercise. This is an OPEN ITEM for the NRC to determine if the RCIC system performs a function important to safety. If it is determined that RCIC is not important to safety, the licensee will include and test RCIC components at its option. If, however, the system does perform a function important to safety, the licensee will determine an alternate means and frequency to full-stroke exercise RCIC-V-30.

4. Review the safety function of valve RCIC-V-64 to determine if it should be included in the IST program and be categorized A passive.

   Response:

   RCIC-V-64 will be included and categorized A passive. This valve is identified in Technial Specifications and the FSAR as a containment isolation valve and is scheduled for leakage rate testing.

5. How are valves RCIC-V-65 and 66 full-stroke exercised during the cold shutdown valve testing?

   Response:

   The air operators are used to full-stroke exercise these valves. These valves have both actuator demand and disc positon indication.

6. How is check valve RCIC-V-086 full-stroke exercised open quarterly during power operation?

   Response:

   The suppression pool suction MOV is opened and CST suction MOV is closed. With RCIC shutdown, it is demonstrated that the water leg pump can maintain system pressure using flow through RCIC-V-086. This verifies that RCIC-V-086 opens sufficiently to perform its required function.

7. Do valves RCIC-V-111 and 112 perform a function important to safety in the closed position? If so, how are these valves verified closed during the quarterly valve testing?

Response:

These valves do perform a function important to safety in the closed position and the two valves are currently verified closed as a pair by feeling the line between RCIC-V-112 and containment while the turbine is running to determine that steam is not present in the line. The licensee will modify their testing procedure to verify individual valve closure on a refueling outage frequency. A relief request will be provided for these valves.

8. Review any function important to safety for the following valves to determine if they should be included in the WNP-2 IST program.

Valve	P&ID Coordinates
RCIC-V-25	D-9
RCIC-V-26	D-9
RCIC-V-54	E-9
RCIC-V-61	C-13

Response:

Valves RCIC-V-25, 26, and 54 do not perform any function important to safety and will not be included in the IST program. If it is determined that the RCIC system performs a function important to safety (see the response to question B.3), valve RCIC-V-61 would also be important to safety and would be included in the WNP-2 IST program. However, if RCIC does not perform a function important to safety, RCIC-V-61 will not be included in the IST program.

C. Low Pressure Core Spray System

1. Does the test flow path permit design accident flow to pass through check valve LPCS-V-3 during the quarterly valve test?

Response:

Yes, the test flow path is sized for full system flow which permits a full-stroke exercise of LPCS-V-3.

2. Does the air operator on LPCS-V-6 fully open the valve disc during cold shutdown testing of the valve? If not, how is this valve full-stroke exercised?

Response:

Yes, the air operator does full-stroke exercise this valve. Note.5 was added to explain that this valve will not be stroke timed and relief request RV-9 was added since this valve can only be exercised when the containment is de-inerted.

3. Do valves LPCS-V-33 and 34 perform any function important to safety in the closed position? If so, how is check valve LPCS-V-33 verified closed quarterly?

Response:

LPCS-V-33 and 34 are the water leg pump discharge check and stop check valves, respectively. Closure of both valves as a pair is routinely verified by monitoring the water leg pump discharge pressure indicator when the main LPCS pump is operating and verifying that the pressure is well below LPCS discharge pressure. This remains an OPEN ITEM for the licensee to determine a method to verify closure of LPCS-V-33.

D. High Pressure Core Spray System

1. Does the test flow path permit design accident flow to pass through check valves HPCS-V-2 and 24 during quarterly testing?

Response:

Yes, the test flow path is sized to permit full system flow.

2. How is valve HPCS-V-16 full-stroke exercised during quarterly valve testing?

Response:

The quarterly surveillance test switches the suction from the CST to the suppression pool and verifies full flow.

3. Does the air operator on HPCS-V-5 fully open the valve disc during cold shutdown testing of the valve? If not, how is this valve full-stroke exercised?

Response:

The air operator fully strokes the valve disc. Refer to note 6, relief request RV-9, and to the response to question C.2.

4. Do valves HPCS-V-6 and 7 perform any function important to safety in the closed position? If so, how is check valve HPCS-V-7 verified closed quarterly?

Response:

These valves are the HPCS water leg pump discharge check and stop check, respectively. Closure of these valves together as a pair is routinely verified by monitoring water leg pump discharge pressure indication while the main HPCS pump is running. This remains an OPEN ITEM for the licensee to determine a method to verify closure of HPCS-V-6.

5. Does valve HPCS-V-23 perform any function imprtant to safety in the open position?

Response:

HPCS-V-23 does not perform any function important to safety in the open position.

E. Residual Heat Removal System

1. Will the air operators on the following valves fully open the valves? If not, how are these valves full-stroke exercised?

RHR-V-41A, B, and C
RHR-V-50A and B
RHR-V-89

Response:

The air operators will full stroke these testable check valves. Additionally, RHR-V-50A and B are shown to fully open when their respective loops are used for shutdown cooling.

2. Do valves RHR-V-84A, 84B, 84C, 85A, 85B, and 85C perform any function important to safety in the closed position? If so, how are check valves RHR-V-84A, 84B, and 84C verified closed quarterly?

Response:

These are the water leg pump discharge check valves (84A,B,C) and stop check valves (85A,B,C) for their respective RHR loops. These valves are currently being tested closed in pairs on a quarterly basis. This remains an OPEN ITEM for the licensee to determine a method to verify closure of RHR-V-84A, B and C (refer to responses C.3 and D.4).

3. What is the safety function of the following valves?

RHR-V-101A and B
RHR-V-103A and B

Response:

Due to the deletion of the RHR steam condensing mode, these valves do not perform a function important to safety and they will be deleted from the WNP-2 IST program.

4. Review any safety function for the following valves to determine if they should be included in the IST program.

RHR-V-19	RHR to head spray check valve
RHR-V-105	Fuel Pool Cooling (FPC) to RHR
RHR-V-122A and B	Steam to RHR Hx in steam condensing mode

Response:

1) Head spray is not required to shutdown the reactor or to mitigate the consequences of an accident. RHR-V-19 is not a containment isolation valve and, therefore, does not perform any function important to safety.

2) RHR-V-105 is the FPC supplemental cooling system check valve to the RHR System. This mode is not required to shutdown the reactor or mitigate the consequences of an accident. The removable spool pieces are not normally installed.

3) RHR-V-122A and B are the steam condensing mode inlet check valves to the RHR HX's. They are not required to open due to the deletion of the steam condensing mode of RHR operation. Their closure is not significant since the upstream lines are closed off and are normally water solid.

These four valves will not be included in the WNP-2 IST program.

F. Service Water Systems

1. Why was note 3 referenced for valves HPCS-V-28, SW-V-1A, and SW-V-1B in the valve test tables when the valves were not specifically addressed by the note?

Response:

The reference to note 3 for these valves is erroneous and it will be deleted.

2. What is the safety function of valves SW-V-69A, 69B, 70A, and 70B?

Response:

SW-V-69A, 69B, 70A and 70B are to be mechanically and electrically disabled closed to maintain circulating water chemistry and spray pond inventory. These valves are passive valves and will, therefore, be deleted from the WNP-2 IST program. Valves SW-V-12A and 12B will be disabled in the open position and as such will become passive valves and will be deleted from the IST program.

3. Review the function important to safety for valves SW-PVC-38A and 38B to determine if they should be included in the IST program as Category B valves.

Response:

Valves SW-PCV-38A and 38B do perform a function important to safety and have been added to the IST program as category B valves.

4. How are check valves SW-V-203 and 208 verified closed, their position important to safety, quarterly?

Response:

SW-V-203 and 208 are both verified to close during quarterly surveillance testing. This is accomplished by manipulating manual isolation valves and monitoring pressure instrumentation to provide backpressure on the check valves and a drain path for any backflow through the valves.

G. Reactor Closed Cooling System

1. What risks associated with non-safety grade equipment outweigh the benefits of performing the Section XI testing of safety grade valves quarterly (refer to note 1.d)?

Response:

Note 1.d will be modified to augment the justification and the last sentence of the note will be deleted.

2. What is the function important to safety of the following valves?

RCC-V-129	RCC to FPC Hx's
RCC-V-130	RCC from FPC Hx's
RCC-V-131	RCC from FPC Hx's
RCC-RV-34A	FPC-HX-1A Shell (Cooling Water) RV
RCC-RV-34B	FPC-HX-1B Shell (Cooling Water) RV

Response:

The Fuel Pool Cooling System is being upgraded to a safety related system. RCC-V-129, 130 and 131 may have to close to isolate the heat exchangers' non-safety related cooling water system (RCC) from the safety related cooling water supply (SW). RCC-RV-34A and B provide overpressure protection for ASME Section III, Code Class III heat exchangers.

H. Fuel Pool Cooling System

1. Is credit taken for the fuel pool cooling system at WNP-2? If so, what is the safety grade cooling water supply to the fuel pool heat exchangers?

Response:

The fuel pool cooling system is not currently safety related, however, credit will be taken for the FPC system when design changes are implemented and spent fuel is placed in the pool. Standby Service Water will be the safety grade cooling water system. Surveillance testing will commence when the system is put into service.

2. Review any function important to safety for check valves FPC-V-146A and B (P&ID coordinates J-10) and FPC-V-140 (coordinates C-9) to determine if they should be included in the IST program as Category C valves.

Response:

Valves FPC-V-127, 140, 146A and 146B have been included in the IST program and are being tested in accordance with the Code. FPC-V-149 has been added to the program as a category A passive valve.

3. P&ID M526 indicates that the actuators for the following valves are inoperable, how are these valves exercised quarterly as indicated in the IST program?

FPC-V-172	FPC-V-175	FPC-V-181A
FPC-V-173	FPC-V-184	FPC-V-181B

Response:

Note 5 of the valve table indicates that these valves are not currently in service and are not required until the first refueling outage (Spring 1986). Fuel pool cooling system upgrades are being implemented to make these valves fully operable. Surveillance testing will commence when the system is placed in service.

4. Does the condition described in note 3 affect the ability of the referenced valves to perform their function important to safety?

Response:

The vendor's hydrostatic test was not maintained for sufficient time to meet the ASME requirements, so these valves are not

safety grade but have been granted exemption by the State of Washington. All other code requirements for fabrication, installation and construction testing are satisfied. The affected valves are able to perform their function important to safety.

I. Control Rod Drive System

1. Review the function important to safety of the following hydraulic control unit valves to determine if they should be included in the IST program and be categorized as indicated.

Valve	Category	P&ID M528 Coordinates
HCU-114 (185 valves)	C	C-2 Check vlv to scram hdr
HCU-115 (185 valves)	C	C-5 Charging wtr ck vlv
HCU-126 (185 valves)	B	C-4 Drive water AOV
HCU-127 (185 valves)	B	C-3 Withdraw AOV
HCU-138 (185 valves)	C	C-4 Cooling wtr ck vlv

Response:

Although these valves are not code class 1, 2, or 3 components, the importance of the CRD system to plant safety is recognized by the licensee. CRD hydraulic system operability is verified by complying with existing Technical Specifications. The Technical Specifications require:

1) Moving each operable rod at least once per 7 days.
2) Routinely verifying that scram times are within the specified limits, singly, in groups of 4, and on the average. At least 10% of the rods are scram tested each 120 days while at power.

It is an OPEN ITEM for the NRC to determine if these non-Code class valves must be included in the IST program since they do perform a function important to safety.

J. Main Steam System

1. Do the main steam relief valve downcomer vacuum breakers (MS-V-37 series and 38 series) perform any function important to safety in the closed position?

   Response:

   No. Failure of these valves to be closed during a safety/relief valve actuation would result in the equivalent of a small steam line break in the drywell. Such an occurrence is enveloped by WNP-2 design analysis. Steam escaping into the drywell is quenched via the downcomers.

2. When and how is operability of the actuator verified for the ADS valves (MS-RV-3D, 4A, 4B, 4C, 4D, 5B and 5C)?

   Response:

   WNP-2 Technical Specifications require that these operators be verified to exercise at least once per 18 months by manually opening the valves when reactor dome pressure is greater than or equal to 100 psig. Steam flow is verified by observing a change in turbine control or bypass valve position or by observing a change in measured steam flow. Relief request RV-13 has been added. The relief request will be augmented to specifically address why these valves cannot be exercised during power operation (i.e. power fluctuations could cause a plant trip) or cold shutdowns (i.e. need steam pressure available in order to exercise the valves).

K. Reactor Recirulation System

1. What risks associated with non-safety grade equipment are far greater than the benefits of performing Section XI testing of safety grade valves quarterly (refer to note 1.j)?

Response:

The licensee will rewrite note 1.j and will delete the last sentence.

L. Primary Containment Cooling and Purge System

1. Provide a more detailed technical justification for not meeting the corrective action requirements of IWV-3427 for the suppression chamber to drywell vacuum breaker valves (refer.to relief request No. RV-6).

Response:

These vacuum breakers are only part of the drywell - suppression chamber interface. The interface ensures that steam which is released into the drywell is routed through downcomers and quenched in the suppression pool. The entire interface is required to be tested at least every 18 months. (See question L.2). The vacuum breakers are tested as part of the interface leakage test.

Prior to the interface leakage test, each vacuum breaker seat is visually inspected for mechanical condition and cleanliness and each valve is tested using a torque wrench. During the test, all valves are closed, which is their normal position during power operation. WNP-2 Technical Specifications require that the valves be verified closed weekly. Each valve has redunant position indication to verify closure.

2. There is an apparent conflict between the frequency of performing the drywell to suppression chamber bypass leak test indicated in relief request no. RV-6 and WNP-2 Technical Specification 4.6.3.1.d.2. The relief request indicates that the test will be performed "at least once per 18 months", while the Technical Specifications permit the frequency to increase to 40 $\pm$ 10 months (see WNP-2 Technical Specification 4.6.1.2.a).

Response:

Technical Specifications require two bypass leak tests. The 1.5 psid test is required at least every 18 months (TS 4.6.2.1.d.1). A 5 psid test is required at the first refueling outage and thereafter on a schedule required by the Integrated Containment Leakage Rate Tests. There is no conflict between Technical Specifications and the relief request.

3. Are the following valves Appendix J leak tested?

Valves	P&ID M543 Coordinates	Valves	P&ID M543 Coordinates
PI-VX-262	E-13	PI-VX-266	F-7
PI-VX-263	E-13	PI-VX-267	E-7
PI-VX-264	E-13	PI-VX-268	E-7
PI-VX-265	B-14	PI-VX-269	C-6

Response:

These valves are the inlet and discharge valves from the H_2/O_2 monitors (CMS-SR-13 and 14). These lines are considered instrument lines and, in accordance with the WNP-2 FSAR, are exempt from Appendix J, Type C, leakage testing. These instruments are expected to be on-line during and after accidents. Further, the H_2/O_2 monitors are open to containment during Appendix J, Type A, leak-rate tests.

M. Containment Atmosphere Control

1. Review any function important to safety for valves CAC-TCV-4A and B (P&ID M554 coordinates D-12 and D-4 respectively) to determine if they should be included in the IST program as category B valves.

Response:

These valves control the service water flow to the H_2 recombiner aftercooler. These valves modulate to control system temperature.

It is an OPEN ITEM for the licensee to investigate to determine if these valves have a required fail-safe position.

N. Containment Instrument Air System

1. Review the function important to safety for the following valves to determine if they should be categorized "C" instead of "A-C".

CIA-V-36M, N, P, R, S, U, and V
CIA-V-40M, N, P, R, S, U, and V

Response:

The leakage of these valves is important to safety and the licensee is leak rate testing the valves to verify their leak tight integerity.

O. Diesel Generator Systems

1. The current NRC position is that the emergency diesel generator and HPCS diesel generator air start systems perform a function important to safety and the appropriate system valves should be included in the IST program and be tested in accordance with the Code.

Response:

This is an OPEN ITEM for the NRC to determine what testing must be performed on the diesel generator air start system valves. These are non-Code class valves that are currently tested during the Technical Specification diesel generator surveillance testing.

2. PUMP TESTING PROGRAM

1. How is pump flowrate measured for the following pumps?

   Standby liquid control pumps SLC-P-1A and 1B
   Diesel fuel oil transfer pumps DO-P-1A, 1B and 2

   Response:

   The pump flow rate is calculated by measuring the change in tank level (test tank for SLC, Day tank for DO.) and dividing by the elapsed time.

2. How is pump discharge pressure measured on the following pumps?

   Standby liquid control pumps SLC-P-1A and 1B
   Diesel fuel oil transfer pump DO-P-2

   Response:

   SLC discharge pressure is measured at SLC-PI-3 (Dwg. M522 coordinates G-8). DO-P-2 discharge pressure is measured at DO-PI-16 (Dwg. M512, coordinates H-6).

3. ADDITIONAL QUESTIONS AND COMMENTS

1. The back-up scram solenoid valves (CRD-V-110A, 110B, and 111) are to be deleted from the IST program since the licensee does not want to include non-Code components in their program. The NRC position is that these valves do perform a function important to safety and should be included in the IST program. The licensee is presently testing these valves to their Technical Specifications Requirements. This is an OPEN ITEM for the NRC.

2. The licensee questions the applicability of the use of the phrase "important to safety" in connection with the WNP-2 plant. This phrase may not be appropriate and may need to be changed. This is an OPEN ITEM for the NRC.

3. The licensee provided the acceptance criteria for their proposed alternate testing for the RCIC pump (Refer to relief request RP-4) and they will modify RP-4 to include this information. The alert range will be a speed of 4250 rpm or greater and the action range greater than 4400 rpm.

4. The NRC agreed that the current method of measuring stroke times for CRD-V-10, 11, 180, and 181 as explained in relief request RV-14 is acceptable. In order to verify that both valves close during testing, the licensee has agreed to modify their test procedure to requrire a person to observe valve operation during the test.

5. The licensee will submit a revision to their IST program within 60 days of this meeting.