

CONTAINMENT SPRAY SYSTEM
ELECTRICAL ALIGNMENT - UNIT 2

DATE 2-17-85

TIME 2040

1.0 PREREQUISITES

INITIALS

1.1 Prior to use of an uncontrolled (pink) copy of this Station Document to perform work, verify it is current by checking a controlled copy and any TCNs or by use of the method described in S0123-VI-0.9.

1.1.1 List any applicable TCNs or write N/A.

10-4

1.2 On-shift SRO Operations Supervisor approval obtained.
(SRO Ops. Supv. Initials)

JSB

NOTE: (1) Ensure heaters are covered prior to energizing.

2.0 PROCEDURE

STEP	COMPONENT	DESCRIPTION/LOCATION	REQUIRED STATUS	INITIALS 1st/2nd
2.1	2RL071-2F DS746 SW601	2HV-9381, N ₂ Supply to 2T-105 & 2PSHL-0345	CLOSED	<u>JSB/101</u>
2.2	2RL071-3F DS403 SW14A	2HV-9399, Chem Spray Chem. Add. to 2P-012	CLOSED	<u>JSB/101</u>
2.3	2RL071-3F SW 510	2FT-0318, 2P-020 Disch.	CLOSED	<u>JSB/101</u>
2.4	2RL071-4F DS410 SW505	2FV-0318, 2P-020 Disch. Vlv.	CLOSED	<u>JSB/101</u>
2.5	2RL071-5F DS402 SW151	2LCL-0348-1 to 2HV-9399	CLOSED	<u>JSB/101</u>
2.6	2RL071-3R DS410 SW408	2FV-0328, 2P-021 Disch. Vlv.	CLOSED	<u>JSB/101</u>
2.7	2RL071-3R SW410	2FT-0328, 2P-021 Disch.	CLOSED	<u>JSB/101</u>
2.8	2RL071-5R DS404 SW86	2HV-9398, Chem. Spray Chem. Add. to 2P-013	CLOSED	<u>JSB/101</u>

2.0 PROCEDURE (Continued)

STEP	COMPONENT	DESCRIPTION/LOCATION	REQUIRED STATUS	INITIALS 1st/2nd
2.9	2RL071-5R DS402 SW92	2LCL-0349-2, Chem. Spray and Iodine Rmvl.	CLOSED	<u>gdi/12/12</u>
2.10	2RL-073- DS817	2HV-9367, Position Indication	CLOSED	<u>gdi/12/12</u>
2.11	2RL-073- DS818	2HV-9368, Position Indication	CLOSED	<u>gdi/12/12</u>
2.12	2BY-19	2P-020, Chem. Add. Pump	CLOSED	<u>gdi/12/12</u>
2.13	2/3BQ-05	2L-270 Heat Tracing CNTMT Spray Chem. Add. Sys.	CLOSED	<u>gdi/12/12</u>
2.14	2BY-40A	CNTMT Spray Pump 2P-012 Motor Heater	ON	<u>gdi/12/12</u>
* 2.15	2BE-29	2HV-9367 CNTMT Pen. Isol Train A	CLOSED	<u>gdi/12/12</u>
2.16	2BE-38	2HV-8150 SDC HX E-003 Outlet Valve	LOCKED OPEN	<u>1 1</u> closed
2.17	2A04-03	CNTMT Spray Pump 2P-012	RACKED IN DC ON DISCONN SW ON CHG SPRINGS ENERGIZED	<u>1 1</u> closed RODC SB 2-38044
2.18	2BZ-19	2P-021 Chem. Add. Pump	CLOSED	<u>gdi/12/12</u>
2.19	2BZ-05	2L-271 Heat Tracing CNTMT Spray Chem. Add. System	CLOSED	<u>gdi/12/12</u>
2.20	2BZ-38A	CNTMT Spray Pump 2P-013 Motor Heater	ON	<u>gdi/12/12</u>
2.21	2BZ-35	2HV-8151 SDC HX 2E-004 Outlet Valve	LOCKED OPEN	<u>1 1</u> closed
* 2.22	2BJ-25	2HV-9368 CNTMT Pen. Isol. Train B	CLOSED	<u>gdi/12/12</u>

FSAR

SAN ONOFRE NUCLEAR GENERATING STATION
UNITS 2 AND 3

OPERATING INSTRUCTION S023-3-2.9
REVISION 10 PAGE 3 OF 3
CHECK-OFF LIST 3
ATTACHMENT 8.3
TCN 10-4

2.0 PROCEDURE (Continued)

STEP	COMPONENT	DESCRIPTION/LOCATION	REQUIRED STATUS	INITIALS 1st/2nd
2.23	2A0604	CNTMT Spray Pump 2P-013	RACKED IN DC ON DISCONN SW ON CHG SPRINGS ENERGIZED	<u>1 1</u> ²⁵ ₁₂₋₉₆
2.24	2BI-02	2E-134 Chem. Storage Tank 2T-105 Htr. & 2TIC-0345	(1) CLOSED	<u>BP/12/12</u>
2.25	2BI-29	2E-164 Chem. Storage Tank 2T-105 Htr. & 2TIC-0346	(1) CLOSED	<u>BP/12/12</u>
2.26	2HS-0345	2T-105 Heater Local Switch	(1) AUTO	<u>BP/12/12</u>
2.27	2HS-0346	2T-105 Heater Local Switch	(1) AUTO	<u>BP/12/12</u>
2.28	BQ-Q03322	Panel 2L-270 Stripheaters	CLOSED	<u>BP/12/12</u>
2.29	2BZ-Q04130	Panel 2L-271 Stripheaters	CLOSED	<u>BP/12/12</u>

NOTE: (1) Ensure heaters are covered prior to energizing.

PERFORMED BY: [Signature] ^{BP}
Operator Initials

DATE/TIME 2-17-85 / 2130

VERIFIED BY: [Signature] ^{BP}
Operator Initials

DATE/TIME 2-17-85 / 2130

2/18/85 0055

NOTE: SRO Ops. Supv. shall not sign "Reviewed By" until all comments in relation to this Check-Off List have been resolved, i.e., TCNs written, etc.

REVIEWED BY: _____
SRO Ops. Supervisor

File Disposition: File per S023-0-28.

Comments: _____

MEMORANDUM FOR FILE

March 6, 1985

SUBJECT: Potential Items of Noncompliance Discussed on
March 5, 1985
San Onofre Nuclear Generating Station, Units 2 and 3

On March 5, 1985, an NRC inspection team conducted an exit interview. The exit interview was chaired by Mr. Joe Callan. As a consequence of a number of comments concerning potential items of noncompliance identified during the exit interview, I undertook to review several items personally. This memorandum summarizes the results of that review as of March 6.

1. Allegation of Shutdown Cooling System Misalignment, Unit 2

The NRC team persisted in the statement that a misalignment exists in the Unit 2 shutdown cooling system, despite my strong objections to this characterization during the exit interview. They maintained that, whereas there was no question of system inoperability associated with this misalignment, it nevertheless existed because circuit breakers 2BE29 and 2BJ25 had been closed in advance of going off shutdown cooling.

These breakers supply electrical power to the motor-operated containment isolation valves for the Containment Spray System. Normal alignment for shutdown cooling operation is for the breakers to be open. They had been closed as part of the initial realignment of plant systems required for increasing modes during the return to service. However, even though the closure had been documented, because it had been done in Mode 5, when still on shutdown cooling, the NRC perceived it had been done out of sequence and thereby represented improper status control and procedural noncompliance. (Note: Manual block valves are closed elsewhere in the Containment Spray System such that providing power to the containment isolation valves in no way created any change, or potential change, in either the Shutdown Cooling System or in the Containment Spray System.)

March 6, 1985

Of particular concern was, not only the adamant stand taken by the NRC, but also their statements to the effect that this was continued evidence of poor procedural compliance and lack of "crisp" operating practices required to avoid the sort of errors we have experienced previously at San Onofre. I responded during the exit interview that they were very much mistaken about this; that our programs provided for very methodical and deliberate realignment of systems, and that the "crisp" practices they advocated were contrary to the interests of safety and deliberate control of status. I further indicated that procedures cannot provide for every conceivable option required to operate the plant, that we had just completed a long discussion with the Region concerning what constituted a procedure change, and this was not a change, deviation or otherwise a noncompliance with verbatim procedure policies.

The pertinent facts are these:

- o Procedure S023-5-1.3 controls startup from cold shutdown
- o Alignment of the Unit 2 Containment Spray System is controlled by:
 - Vents, drains and instrumentation: Attachment 2 to S023-3-2.9
 - Electrical: Attachment 3 to S023-3-2.9
 - Main process mechanical: S023-5-1.3, which includes use of Attachment 1 to S023-3-2.9
- o Implementation of each of these checklists is controlled in the body of the startup procedure. The vents, drains and instrumentation checklist is required for entry into Mode 4. (Refer to Step 6.3.) The electrical checklist may be initiated prior to entry into Mode 4 and must be completed prior to entry into Mode 3. (Refer to Step 6.3 and Step 6.24.4.2, respectively.) The main process mechanical checklist is part of the transfer from Shutdown Cooling to normal Containment Spray System alignment. (Refer to Step 6.19.6.)

Therefore initiation of the electrical alignment while in Mode 5 before going off shutdown cooling is in accordance with the procedure. As this is so, and since no functional inoperability is thereby created, it is beyond reason that the condition noted should be characterized either as noncompliance or misalignment.

March 6, 1985

2. Position of Valve 3HV-4705 During Surveillance on Unit 3

This valve is remotely operated during automatic actuation of the Auxiliary Feedwater (AFW) System. It is shown in the FSAR as normally closed, but it can be opened remotely from the Control Room.

The NRC inspectors identified that, for a period in 1984, the surveillance procedure checklist used to routinely verify that AFW System valves are properly aligned during operation in Modes 1-3 provided that 3HV-4705 be open. (Note: Because of the functioning of this valve under EFAS conditions, it would appear that whether the valve is open or closed has no safety significance. The system requires opening the valve when the system is in use normally, so its being open is not likely to be viewed as an abnormal condition by operators.)

For two months, then, operators signed off the surveillance procedure verifying the valve to be open. The next time the procedure was implemented, the operators questioned the designated normal position of the valve, (it is indicated by a "dot" on the control board) and it was recognized that a clerical error three months earlier had changed the checklist to call for the valve to be open, whereas previously it was closed. The error was in the process of being corrected when the NRC arrived for this inspection. As there was no safety significance or violation involved in this clerical error, no report of the occurrence was made.

The NRC inspection team insisted that the operators must have signed the valve as being open when, in fact, it was closed. If true, this would be a very serious error by the operators. During the exit interview, I questioned on what basis they had arrived at this conclusion. At this, Mr. Callan clarified that they were not sure the operators had falsely checked a closed valve as open, but that, one way or another, I had to agree that there was a "problem" since the Technical Specifications require us to check that the valves are in their "normal" positions and that position for 3HV-4705 was closed, as shown in the FSAR. He further opined that he believed the operators had erred.

I indicated that I did not agree there was a problem, that I had every reason to believe that, for the period this clerical error existed, the valve had been checked open, and, finally, since it appeared acceptable for this to be the normal position for the valve, I saw no basis for this to be an item of noncompliance. (Subsequent discussion with the two operators involved in the surveillances affirms my belief that the valve was open, as verified.)

March 6, 1985

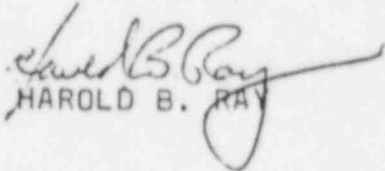
3. Procedural Nomenclature

An area of concern, relative to our procedures, was identified because they use the terminology for circuit breakers of "open/close" whereas the components themselves use "off/on." I indicated that we consider this difference to be well within the skill level of qualified plant operators and that we do not plan to make a change.

4. Other Items

The NRC inspection team identified a number of other items of potential noncompliance that require further investigation. Several involve testing the station battery.

One item involves a change to the Technical Specifications adding venting of AFW System piping as part of the monthly surveillance test. The inspection team thought we had performed this surveillance in September and October, 1984, but failed to perform it at Unit 3 in November, December and January. We clarified that, whereas the change was issued by NRR in September, it was not received at San Onofre and incorporated into procedures until November. Thereafter, due to a breakdown in implementation of the revised procedure, this added venting requirement was missed at Unit 3 until it was identified during this inspection. The other AFW system surveillance requirements continued to be performed, as required.


HAROLD B. RAY

HBR:jkb/1561m

cc: L. T. Papay
Kenneth P. Baskin
Site Management
COM

3/07/85
Date

85-33
Number

MAINTENANCE SECTION ERROR INVESTIGATION

I. Description of Problem

☒ Procedural Violation
☐ Equipment Failure
☒ Personnel Error
☒ Other-Missed Surveillance

II. Persons Contacted

Date/Time

Ryan Seitz	3/05/85
John Cole	3/05/85
Richard Stempien	3/05/85

III. References

SO23-I-2.15 - Surveillance Procedure
2PE448 - Battery Discharge Test
DCP410E - Design change, altered IE batteries from
60 cells to 58 cells

IV. Investigation Narrative/Cause

The refueling interval battery surveillance test, SO23-I-2.15, that is required to be performed every eighteen months, was not completed on batteries 2D1 and 2D2. The fact that this test was not performed during the required interval of 8/83 to 2/84 was discovered March 5, 1985. This problem occurrence was two fold in nature.

1. During the time frame when this surveillance should have been completed (8/83 - 2/84), DCP 410E (jumpering out of battery cells) was being performed by the project. The retest for DCP 410E was test procedure 2PE448. This procedure accomplished everything that the Station surveillance procedure required on the batteries. With this understanding, the battery portion of the Station Maintenance Surveillance was to be satisfied by the satisfactory completion of DCP 410E retests. The

2/6/82 - Initial test
8/6/83 - 18 mo due
12/6/83 - +25% (drop dead date)

1/83 - Maint thought sum done
7/84 - 18mo due per SOMMS
11/84 - +25%

10/84 - SO2 to Mode 5
Guideline No. 104
Attachment 1
Pg 2 of 2

Maintenance Surveillance also requires testing of the battery chargers. This portion of SO23-I-2.15 remained scheduled for July, 1984. DCP 410E was completed on six of the eight batteries between 3/83 and 6/83. Batteries 2D1 and 2D2 were completed 1/84 to 2/84. All retests were completed satisfactorily. The retest requirements for the final two batteries (2D1 and 2D2) were changed such that the discharge test was not accomplished. Therefore, the Station Maintenance surveillance requirements could not be satisfied by the retest of DCP 410E. The fact that the retest was changed for batteries 2D1 and 2D2 was not evident to Station Maintenance Planning.

2. During the spring of 1983 the SOMMS system was being brought on line for use in scheduling and tracking of corrective, preventive and surveillance maintenance orders. The source for the surveillance data load was old records from M.O.S.S. (Maintenance Order Scheduling System). This system was not a maintenance order system as we know it today. It could only print out sheets (Maintenance Orders) that called for an entire procedure to be performed at a set interval. If a procedure called out by a M.O.S.S. Maintenance Order was not performed in it's entirety, that would not be evident from a review of the Maintenance Order. (NOTE: The present Maintenance system, SOMMS, shows a detailed breakdown of procedure use). In fact, a group of Maintenance Orders from M.O.S.S. appear to show SO23-I-2.15 completed satisfactory in January 1983, with all of the appropriate signatures. An in depth review of the data however, shows that only the battery charger portion of SO23-I-2.15 was completed at this time and the battery discharge portion of the procedure was not performed. This date (January, 1983) was input into SOMMS for surveillance Baseline data as the satisfactory completion date of SO23-I-2.15. Therefore, the SOMMS system rescheduled the battery surveillance to be performed in July 1984, and these surveillances were accomplished.

V. Immediate Corrective Actions

SO2 → Mode 5 10/22/84

SO23-I-2.15 eighteen month battery surveillance was reviewed and verified to be presently satisfactory and in compliance with Technical Specifications.

VI. Recommended Supplementary Corrective Action

<u>Recommendation</u>	<u>Assigned To</u>	<u>Required Date</u>	<u>Completed Date</u>
Review all past Units 2/3 Maintenance surveillances annual frequency and greater to ensure compliance with all requirements.	H. W. Newton	6/01/85	

PREPARED BY

John C. Brimes

APPROVED BY

Robert A. Jones

VII. Corrective Action Verification

VERIFIED BY _____

DATE _____

CONTAINMENT SPRAY SYSTEM
ELECTRICAL ALIGNMENT - UNIT 2

DATE 2-17-85

TIME 2040

1.0 PREREQUISITES

INITIALS

1.1 Prior to use of an uncontrolled (pink) copy of this Station Document to perform work, verify it is current by checking a controlled copy and any TCNs or by use of the method described in SO123-VI-0.9.

1.1.1 List any applicable TCNs or write N/A.

10-4

1.2 On-shift SRO Operations Supervisor approval obtained.
(SRO Ops. Supv. Initials)

NOTE: (1) Ensure heaters are covered prior to energizing.

2.0 PROCEDURE

STEP	COMPONENT	DESCRIPTION/LOCATION	REQUIRED STATUS	INITIALS 1st/2nd
2.1	2RL071-2F DS746 SW601	2HV-9381, N ₂ Supply to 2T-105 & 2PSHL-0345	CLOSED	<u>psd/1st</u>
2.2	2RL071-3F DS403 SW14A	2HV-9399, Chem Spray Chem. Add. to 2P-012	CLOSED	<u>psd/1st</u>
2.3	2RL071-3F SW 510	2FT-0318, 2P-020 Disch.	CLOSED	<u>psd/1st</u>
2.4	2RL071-4F DS410 SW505	2FV-0318, 2P-020 Disch. Vlv.	CLOSED	<u>psd/1st</u>
2.5	2RL071-5F DS402 SW151	2LCL-0348-1 to 2HV-9399	CLOSED	<u>psd/1st</u>
2.6	2RL071-3R DS410 SW408	2FV-0328, 2P-021 Disch. Vlv.	CLOSED	<u>psd/1st</u>
2.7	2RL071-3R SW410	2FT-0328, 2P-021 Disch.	CLOSED	<u>psd/1st</u>
2.8	2RL071-5R DS404 SW86	2HV-9398, Chem. Spray Chem. Add. to 2P-013	CLOSED	<u>psd/1st</u>

SAN ONOFRE NUCLEAR GENERATING STATION
UNITS 2 AND 3

OPERATING INSTRUCTION 5023-3-2.9
REVISION 10 PAGE 2 OF 3
CHECK-OFF LIST 3
ATTACHMENT 8.3
TCN 10-4

2.0 PROCEDURE (Continued)

STEP	COMPONENT	DESCRIPTION/LOCATION	REQUIRED STATUS	INITIALS 1st/2nd
2.9	2RL071-5R DS402 SW92	2LCL-0349-2, Chem. Spray and Iodine Rmvl.	CLOSED	<u>BD/12/12</u>
2.10	2RL-073- DS817	2HV-9367, Position Indication	CLOSED	<u>BD/12/12</u>
2.11	2RL-073- DS818	2HV-9368, Position Indication	CLOSED	<u>BD/12/12</u>
2.12	2BY-19	2P-020, Chem. Add. Pump	CLOSED	<u>BD/12/12</u>
2.13	2/3BQ-05	2L-270 Heat Tracing CNTMT Spray Chem. Add. Sys.	CLOSED	<u>BD/12/12</u>
2.14	2BY-40A	CNTMT Spray Pump 2P-012 Motor Heater	ON	<u>BD/12/12</u>
* 2.15	2BE-29	2HV-9367 CNTMT Pen. Isol Train A	CLOSED	<u>BD/12/12</u>
2.16	2BE-38	2HV-8150 SDC HX E-003 Outlet Valve	LOCKED OPEN	<u>1 1</u> closed
2.17	2A04-03	CNTMT Spray Pump 2P-012	RACKED IN DC ON DISCONN SW ON CHG SPRINGS ENERGIZED	<u>1 1</u> 2-38044
2.18	2BZ-19	2P-021 Chem. Add. Pump	CLOSED	<u>BD/12/12</u>
2.19	2BZ-05	2L-271 Heat Tracing CNTMT Spray Chem. Add. System	CLOSED	<u>BD/12/12</u>
2.20	2BZ-38A	CNTMT Spray Pump 2P-013 Motor Heater	ON	<u>BD/12/12</u>
2.21	2BZ-35	2HV-8151 SDC HX 2E-004 Outlet Valve	LOCKED OPEN	<u>1 1</u> closed
* 2.22	2BJ-25	2HV-9368 CNTMT Pen. Isol. Train B	CLOSED	<u>BD/12/12</u>

FSAR

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2.0 PROCEDURE (Continued)

STEP	COMPONENT	DESCRIPTION/LOCATION	REQUIRED STATUS	INITIALS 1st/2nd
2.23	2A0604	CNTMT Spray Pump 2P-013	RACKED IN DC ON DISCONN SW ON CHG SPRINGS ENERGIZED	<u>1 1</u> 2T DC 76
2.24	2BI-02	2E-134 Chem. Storage Tank 2T-105 Htr. & 2TIC-0345	(1) CLOSED	<u>AB/10/10</u>
2.25	2BI-29	2E-164 Chem. Storage Tank 2T-105 Htr. & 2TIC-0346	(1) CLOSED	<u>AB/10/10</u>
2.26	2HS-0345	2T-105 Heater Local Switch	(1) AUTO	<u>AB/10/10</u>
2.27	2HS-0346	2T-105 Heater Local Switch	(1) AUTO	<u>AB/10/10</u>
2.28	BQ-Q03322	Panel 2L-270 Stripheaters	CLOSED	<u>AB/10/10</u>
2.29	2BZ-Q04130	Panel 2L-271 Stripheaters	CLOSED	<u>AB/10/10</u>

NOTE: (1) Ensure heaters are covered prior to energizing.

PERFORMED BY: [Signature]
Operator Initials

DATE/TIME 2-17-85 / 2130

VERIFIED BY: [Signature]
Operator Initials

DATE/TIME 2-17-85 / 2130

NOTE: SRO Ops. Supv. shall not sign "Reviewed By" until all comments in relation to this Check-Off List have been resolved, i.e., TCNs written, etc.

REVIEWED BY: _____
SRO Ops. Supervisor

File Disposition: File per 5023-0-28.

Comments: _____

MEMORANDUM FOR FILE

March 6, 1985

SUBJECT: Potential Items of Noncompliance Discussed on
March 5, 1985
San Onofre Nuclear Generating Station, Units 2 and 3

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These breakers supply electrical power to the motor-operated containment isolation valves for the Containment Spray System. Normal alignment for shutdown cooling operation is for the breakers to be open. They had been closed as part of the initial realignment of plant systems required for increasing modes during the return to service. However, even though the closure had been documented, because it had been done in Mode 5, when still on shutdown cooling, the NRC perceived it had been done out of sequence and thereby represented improper status control and procedural noncompliance. (Note: Manual block valves are closed elsewhere in the Containment Spray System such that providing power to the containment isolation valves in no way created any change, or potential change, in either the Shutdown Cooling System or in the Containment Spray System.)

March 6, 1985

Of particular concern was, not only the adamant stand taken by the NRC, but also their statements to the effect that this was continued evidence of poor procedural compliance and lack of "crisp" operating practices required to avoid the sort of errors we have experienced previously at San Onofre. I responded during the exit interview that they were very much mistaken about this; that our programs provided for very methodical and deliberate realignment of systems, and that the "crisp" practices they advocated were contrary to the interests of safety and deliberate control of status. I further indicated that procedures cannot provide for every conceivable option required to operate the plant, that we had just completed a long discussion with the Region concerning what constituted a procedure change, and this was not a change, deviation or otherwise a noncompliance with verbatim procedure policies.

The pertinent facts are these:

- o Procedure S023-5-1.3 controls startup from cold shutdown
- o Alignment of the Unit 2 Containment Spray System is controlled by:
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 - Electrical: Attachment 3 to S023-3-2.9
 - Main process mechanical: S023-5-1.3, which includes use of Attachment 1 to S023-3-2.9
- o Implementation of each of these checklists is controlled in the body of the startup procedure. The vents, drains and instrumentation checklist is required for entry into Mode 4. (Refer to Step 6.3.) The electrical checklist may be initiated prior to entry into Mode 4 and must be completed prior to entry into Mode 3. (Refer to Step 6.3 and Step 6.24.4.2, respectively.) The main process mechanical checklist is part of the transfer from Shutdown Cooling to normal Containment Spray System alignment. (Refer to Step 6.19.6.)

Therefore initiation of the electrical alignment while in Mode 5 before going off shutdown cooling is in accordance with the procedure. As this is so, and since no functional inoperability is thereby created, it is beyond reason that the condition noted should be characterized either as noncompliance or misalignment.

March 6, 1985

2. Position of Valve 3HV-4705 During Surveillance on Unit 3

This valve is remotely operated during automatic actuation of the Auxiliary Feedwater (AFW) System. It is shown in the FSAR as normally closed, but it can be opened remotely from the Control Room.

The NRC inspectors identified that, for a period in 1984, the surveillance procedure checklist used to routinely verify that AFW System valves are properly aligned during operation in Modes 1-3 provided that 3HV-4705 be open. (Note: Because of the functioning of this valve under EFAS conditions, it would appear that whether the valve is open or closed has no safety significance. The system requires opening the valve when the system is in use normally, so its being open is not likely to be viewed as an abnormal condition by operators.)

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I indicated that I did not agree there was a problem, that I had every reason to believe that, for the period this clerical error existed, the valve had been checked open, and, finally, since it appeared acceptable for this to be the normal position for the valve, I saw no basis for this to be an item of noncompliance. (Subsequent discussion with the two operators involved in the surveillances affirms my belief that the valve was open, as verified.)

March 6, 1985

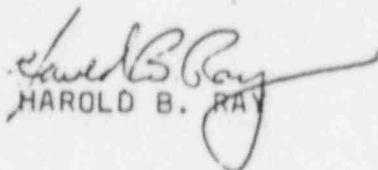
3. Procedural Nomenclature

An area of concern, relative to our procedures, was identified because they use the terminology for circuit breakers of "open/close" whereas the components themselves use "off/on." I indicated that we consider this difference to be well within the skill level of qualified plant operators and that we do not plan to make a change.

4. Other Items

The NRC inspection team identified a number of other items of potential noncompliance that require further investigation. Several involve testing the station battery.

One item involves a change to the Technical Specifications adding venting of AFW System piping as part of the monthly surveillance test. The inspection team thought we had performed this surveillance in September and October, 1984, but failed to perform it at Unit 3 in November, December and January. We clarified that, whereas the change was issued by NRR in September, it was not received at San Onofre and incorporated into procedures until November. Thereafter, due to a breakdown in implementation of the revised procedure, this added venting requirement was missed at Unit 3 until it was identified during this inspection. The other AFW system surveillance requirements continued to be performed, as required.


HAROLD B. RAY

HBR:jkb/1561m

cc: L. T. Papay
Kenneth P. Baskin
Site Management
CDM

3/07/85

Date

85-33

Number

MAINTENANCE SECTION ERROR INVESTIGATION

I. Description of Problem

- ☒ Procedural Violation
- ☐ Equipment Failure
- ☒ Personnel Error
- ☒ Other-Missed Surveillance

II. Persons Contacted

Date/Time

Ryan Seitz
John Cole
Richard Stempien

3/05/85
3/05/85
3/05/85

III. References

SO23-I-2.15 - Surveillance Procedure
2PE448 - Battery Discharge Test
DCP410E - Design change, altered IE batteries from
60 cells to 58 cells

IV. Investigation Narrative/Cause

The refueling interval battery surveillance test, SO23-I-2.15, that is required to be performed every eighteen months, was not completed on batteries 2D1 and 2D2. The fact that this test was not performed during the required interval of 8/83 to 2/84 was discovered March 5, 1985. This problem occurrence was two fold in nature.

1. During the time frame when this surveillance should have been completed (8/83 - 2/84), DCP 410E (jumping out of battery cells) was being performed by the project. The retest for DCP 410E was test procedure 2PE448. This procedure accomplished everything that the Station surveillance procedure required on the batteries. With this understanding, the battery portion of the Station Maintenance Surveillance was to be satisfied by the satisfactory completion of DCP 410E retests. The

2/6/82 - Initial test
8/6/83 - 18 mo due
12/6/83 - +25% (drop level date)

1/83 - Maint thought sum done
7/84 - 18mo due per SOMMS
11/84 - +25%

10/84 - SO2 to Mode 5
Guideline No. 104
Attachment 1
Pg 2 of 2

Maintenance Surveillance also requires testing of the battery chargers. This portion of SO23-I-2.15 remained scheduled for July, 1984. DCP 410E was completed on six of the eight batteries between 3/83 and 6/83. Batteries 2D1 and 2D2 were completed 1/84 to 2/84. All retests were completed satisfactorily. The retest requirements for the final two batteries (2D1 and 2D2) were changed such that the discharge test was not accomplished. Therefore, the Station Maintenance surveillance requirements could not be satisfied by the retest of DCP 410E. The fact that the retest was changed for batteries 2D1 and 2D2 was not evident to Station Maintenance Planning.

2. During the spring of 1983 the SOMMS system was being brought on line for use in scheduling and tracking of corrective, preventive and surveillance maintenance orders. The source for the surveillance data load was old records from M.O.S.S. (Maintenance Order Scheduling System). This system was not a maintenance order system as we know it today. It could only print out sheets (Maintenance Orders) that called for an entire procedure to be performed at a set interval. If a procedure called out by a M.O.S.S. Maintenance Order was not performed in it's entirety, that would not be evident from a review of the Maintenance Order. (NOTE: The present Maintenance system, SOMMS, shows a detailed breakdown of procedure use). In fact, a group of Maintenance Orders from M.O.S.S. appear to show SO23-I-2.15 completed satisfactory in January 1983, with all of the appropriate signatures. An in depth review of the data however, shows that only the battery charger portion of SO23-I-2.15 was completed at this time and the battery discharge portion of the procedure was not performed. This date (January, 1983) was input into SOMMS for surveillance Baseline data as the satisfactory completion date of SO23-I-2.15. Therefore, the SOMMS system rescheduled the battery surveillance to be performed in July 1984, and these surveillances were accomplished. ?

V. Immediate Corrective Actions

SO2 → Mode 5 10/22/84

SO23-I-2.15 eighteen month battery surveillance was reviewed and verified to be presently satisfactory and in compliance with Technical Specifications.

VI. Recommended Supplementary Corrective Action

<u>Recommendation</u>	<u>Assigned To</u>	<u>Required Date</u>	<u>Completed Date</u>
Review all past Units 2/3 Maintenance surveillances annual frequency and greater to ensure compliance with all requirements.	H. W. Newton	6/01/85	

PREPARED BY

John C. Brimes

APPROVED BY

Paul A. Jones

VII. Corrective Action Verification

VERIFIED BY _____

DATE _____