

- (2) The batteries were clean and appeared to be in excellent condition. Intercell connectors were free of corrosion; vent caps were in place on all cells. Batteries were installed in accordance with approved drawings.
- (3) There were two cells jumpered out in each 60-cell battery, effectively making each one a 58-cell battery.

b. Battery Maintenance and Surveillance Program

The inspector reviewed the latest revision of the battery maintenance and surveillance procedures for San Onofre Units 2 and 3:

<u>Procedure No.</u>	<u>Title</u>
S023 - I - 2.12	"Weekly Inspection of Batteries"
S023 - I - 2.13	"Quarterly Inspection of Batteries"
S023 - I - 2.14	"Refueling Interval Inspection of Batteries"
S023 - I - 2.15	"Refueling Interval Battery Service Test"
S023 - I - 2.16	"Battery Performance Test"

The procedures satisfied the requirements of Technical Specifications, NUREG-1.129 "Maintenance, Testing and Replacement of Large Lead Storage Batteries for Nuclear Power Plants", IEEE Standard 450-1980 "IEEE Recommended Practice for Maintenance, Testing and Replacement of Large Lead Storage Batteries for Generating Stations and Substations", and the manufacturer's technical instructions.

Based on this review, the inspector verified that an adequate surveillance program exists for the San Onofre Units 2 and 3 batteries

c. Surveillance Activity

The inspector reviewed the schedule and records of all surveillance activity on the San Onofre Units 2 and 3 batteries since the batteries were placed in service. The record showed that surveillances were performed in a satisfactory manner within the prescribed intervals. One surveillance discrepancy was identified. The 18-month surveillance procedure (S023-I-2.15) was not conducted on Unit 2 batteries 2B007 and 2B008 from the time the batteries were placed in service (February 1982) until it was accomplished during the current refueling outage. Therefore, for approximately one year the operability of these batteries was not demonstrated with respect to their ability to carry rated vital loads during an emergency. The exact durations of these failures to demonstrate operability were:

- o Battery 2B007, from 12/6/83 to 12/20/84
- o Battery 2B008, from 12/7/83 to 2/27/85

VIOLATION

- (2) The batteries were clean and appeared to be in excellent condition. Intercell connectors were free of corrosion; vent caps were in place on all cells. Batteries were installed in accordance with approved drawings.
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VIOLATION

UNIT 3

SATURDAY

DATE 12-1-84

TIME

MIDNIGHT STATUS

MODE 1 2 3 Rx Power 0 MWe 0 EFPD 200.3 ESI 0

ESFAS STATUS: ("X" OOS systems)

SIAS A B CIAS A B CPIS A B RAS A B

CCAS A B CSAS A B FHS X X TGIS A B

CRIS A B EFAS X X EMERG PWR A B

CPC/CEACs: A B X D #1 #2 ("X" OOS systems)

RCP STATUS: P001 ON P002 ON P003 ON P004 ON

RCS STATUS: Tc 540 Pressure 2250

PZR PRESS CONTROL: Spray Valves, A A B A

PZR LEVEL CONTROL: Letdown Vlvs, A 005 B A

Backpress Reg Vlvs, A 005 B A

Chrgng Pumps, P190 ON P191 ON P192 A

COLSS: Power Margin 87 DNBR 005 LPD 005 ASI 005 AZ Tilt 005

REACTIVITY CONTROL: Rod Pos A @ 150" RCS Boron Conc 900 BORON METER

STM GEN STATUS: E088 Level 65 Blwdn 50 E089 Level 65 Blwdn 50

MAIN FW PPs/TURBINES: KUJ5/P063 005 K006/K062 005

SBCS VLVS: HV8423 005 HV8424 005 HV8425 005 HV8426 005

CONDENSATE PUMPS: P050 OFF P051 ON P052 OFF P053 ON

HTR DRN PUMPS: P058 OFF P059 OFF

CONDENSER VACUUM: 1.5 W/ AE or P054

TURBINE STATUS: L.O. Pumps OK Seal Oil Pumps OK

Stator Wtr Pumps OFF ETG ON (status)

TPCW PUMPS: P119 ON P120 ON other unit X-TIED

CIRC WTR PUMPS: P115 005 P116 ON P117 005 P118 ON

SALT WTR PUMPS: P112 ON P113 ON P114 005 P307 005

CCW PUMPS: P024 ON P026 ON P025 A TRN A/B

NC Loop on TRN A or B, L/D Hx on TRN A or B

COMPUTERS STATUS: CFMS ON QSPDS ON TMS ON

SURVEILLANCES IN PROGRESS/DUE:

COMMENTS:

3P140 OPERABILITY TEST PENDING
CONDSTE LONG PATH RECIRC IN PROGRESS
WARMING STEAM LEADS IN PROGRESS
CCW X-TIED A/C TO U-2 S/F HX.
HPS1 3P-018 OOS.

KEY

A = AUTO

M = MANUAL

S = STANDBY

ON, OFF, OOS

TIME

0100 OPENED MISV 3HV-8205

0110 OPENED MISV 3HV-8204

0110 RECEIVED RCS ANALYSIS

H = 6.35

O₂ = 10 µg/g

Li = 1.2 ppm

NONAN = 906 ppm

0130 STARTED AFW 3P-140 FOR OPERABILITY TEST

0200 COMPLETED PLACING SIMULATED SIGNALS
 IN CHANNELS B, C, D S/G PRI. SIDE ΔP'S
 EACH CHANNEL MOMENTARILY BYPASSED

0210 STOPPED AFW 3P-140 AFTER
 COMPLETING SURV: 5023-3-3.16.2
 AFW FLOW TEST

0300 COMPLETED PLANT STARTUP FROM COLD
 SHUTDOWN TO HOT STANDARD PER 5023-5-1.3
 COMPLETED MAIN STEAM LEADS WARMUP
 PER 5023-2-9

0300 CLOSED PER STEAM SINCE SAMPLE ISO VALVES
 DUE TO LEAK @ PC-078 BOURDON TUBE.
 STOPPING PER DEGAS. 531208MU ISO CLOSED

0330 REMOVED SIMULATED SIGNALS IN
 CHL B, C, D S/G PRI. SIDE ΔP'S
 BYPASSES NORMAL AFTER REMOVAL

0350 WITHDREW SD BANK B

0400 WITHDREW PL GROUPS 1 & 2

UNIT 3

GENERATING STATION LOG

No 908590

TIME

SATURDAY

DATE 12-1-81

0445 ALIGNED BLOWDOWN $\frac{1}{4}$ TO BPS TO OUTFALL
 STOPPED CONDENSE SLIPSTREAM THRU BPS
 OVERBOARDED HOTWELLS, 100% \rightarrow 40%

0445 STARTED RCS DILUTION 950 ppm \rightarrow 656 ppm

0500 CEA 34 SLIPPED TO 90" DURING EXERCISE.

0535 COMPLETED SURV:

0535 ONCE A DAY PER 5023-3-3.26

0700 ONCE A SHIFT PER 5023-3-3.25

0600 ACTUAL SDIVL PER 5023-3-3.29

0640 PLACED BPS OUTLET TO HOTWELLS.

0705 WITHDRAW CEA 34 AFTER TIMER CARD REPLACED

0720 COMPLETED CEA MONTHLY AVAILABILITY TEST
 PER 5023-3-3.5

0730 Boards, Charts, and Alarms checked, OK procedure verified current
 Shipman, Turner, Sidland, McNeill, Nelson

0739 R. Eaker (detached) has approval to replace insulation
 on 20" pipes in 2000 room

0750 Started Aux feedwater 3P-140 for 1st test
 Sidland

0818 Started Condensate pump 3P-CSC
 Nelson

0830 Stopped aux feedwater 3P-140 for 1st test
 Sidland

UNIT 3

SATURDAY

DATE 12-1-84

TIME

MIDNIGHT STATUS

MODE 1 2 3 Rx Power 0 MWe 0 EFPD 200.3 ESI 0

ESFAS STATUS: ("X" OOS systems)

SIAS A B CIAS A B CPIS A B RAS A B

CCAS A B CSAS A B FHIS X X TGIS A B

CRIS A B EFAS X X EMERG PWR A B

CPC/CEACs: A B X D #1 #2 ("X" OOS systems)

RCP STATUS: P001 ON P002 ON P003 ON P004 ON

RCS STATUS: Tc 540 Pressure 2250

PZR PRESS CONTROL: Spray Valves, A A B A

PZR LEVEL CONTROL: Letdown Vlvs, A 005 B A

Backpress Reg Vlvs, A 005 B A

Chrgng Pumps, P190 ON P191 ON P192 A

COLSS: Power Margin 87 DNBR 005 LPD 005 ASI 005 AZ Tilt 005

REACTIVITY CONTROL: Rod Pos A @ 150" RCS Boron Conc 900 BORONMETER

STM GEN STATUS: E088 Level 65 Blwdn 50 E089 Level 65 Blwdn 50

MAIN FW PPs/TURBINES: K005/P063 005 K006/K062 005

SBCS VLVS: HV8423 005 HV8424 005 HV8425 005 HV8426 005

CONDENSATE PUMPS: P050 OFF P051 ON P052 OFF P053 ON

HTR DRN PUMPS: P058 OFF P059 OFF

CONDENSER VACUUM: 1.5" W/ AE or P054

TURBINE STATUS: L.O. Pumps OK Seal Oil Pumps OK

Stator Wtr Pumps OFF ETG ON (status)

TPCW PUMPS: P119 ON P120 ON other unit X-TIED

CIRC WTR PUMPS: P115 005 P116 ON P117 005 P118 ON

SALT WTR PUMPS: P112 ON P113 ON P114 005 P307 005

CCW PUMPS: P024 ON P026 ON P025 A TRN A/B

NC Loop on TRN A or B, L/D Hx on TRN A or B

COMPUTERS STATUS: CFMS ON QSPDS ON PMS ON

SURVEILLANCES IN PROGRESS/DUE:

COMMENTS:

3P140 OPERABILITY TEST PENDING
CONDSTE LONG PATH RECIRC IN PROGRESS
WARMING STEAM LEADS IN PROGRESS
CCW XTIED NCL TO U-2 S/F HX.
HPSI 3P-018 OOS.

KEY	
A	= AUTO
M	= MANUAL
S	= STANDBY
ON, OFF, OOS	

0100 OPENED 1151V 3HV-8205

0110 OPENED 1151V 3HV-8204

0110 RECEIVED RCS ANALYSIS

pH = 6.35

O₂ = 10 µg

Li = 1.2 ppm

CO₂ = 906 ppm

0130 STARTED AFW 3P-140 FOR OPERABILITY TEST

0200 COMPLETED PLACING SIMULATED SIGNALS
 IN CHANNELS B, C, D S/G PRI-SIDE AP'S
 EACH CHANNEL MOMENTARILY BYPASSED

0210 STOPPED AFW 3P-140 AFTER
 COMPLETING SURV: 5023-3-3.16.2
 AFW FLOW TEST

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 SHUTDOWN TO HOT STANDBY PER 5023-5-1.3
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 PER 5023-2-9

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0330 REMOVED SIMULATED SIGNALS IN
 CH1 B, C, D S/G PRI-SIDE AP'S
 BYPASSES NORMAL AFTER REMOVAL

0350 WITHDREW SD BANK B

0400 WITHDREW PL GROUPS 1 & 2

UNIT 3

GENERATING STATION LOG

№ 908590

TIME

SATURDAY

DATE 12-1-81

- 0445 ALIGNED BLOWDOWN OF $\frac{1}{4}$ TO BPS TO OUTFALL
STOPPED CONDSTE SLIPSTREAM THRU BPS
OVERBOARDED HOTWELLS, 100% \rightarrow 40%
- 0445 STARTED RCS DILUTION 950 ppm \rightarrow 656 ppm
- 0500 CEA 34 SLIPPED TO 90" DURING EXERCISE.
- 0535 COMPLETED SURV:
ONCE A DAY PER 5023-3-3.26
ONCE A SHIFT PER 5023-3-3.25
0600 ACTUAL SDIWI PER 5023-3-3.29
- 0640 PLACED BPS OUTLET TO HOTWELLS.
- 0705 WITHDRAW CEA 34 AFTER TIMER CARD REPLACED
- 0720 COMPLETED CEA MONTHLY AVAILABILITY TEST
PER 5023-3-3.5.
- 0750 Boards, Charts, and Alarms checked, ck procedures verified current
Shipman, Turner, S. Dulard, McNeil, Nelson, etc.
- 0739 R. Baker (McNeil) has approval to replace insulation
on steam pipes & BPS steamways
- 0750 Started Aux feedwater 3K-140 for 1st unit
S. Dulard
- 0818 Started Condensate pump 3K-05C
Nelson
- 0830 Stopped aux feedwater 3K-140 for 1st unit
1st unit