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## PERFORMANCE SUMMARY

June 1986

The following summary describes the significant operational activities for the month of June. In support of this summary, a chronological log of significant events is included in this report.

The units remained in an administrative shutdown the entire month due to design control review, configuration control updating and resolution of significant employee concerns. Outage related maintenance and modifications are being performed. Unit 1 has been off-line 312 days. Unit 2 has been off-line 313 days.

### SIGNIFICANT OPERATIONAL EVENTS

#### Unit 1

<u>Date</u>	<u>Time</u>	<u>Event</u>
06/01/86	0001C	The reactor was in mode 5. The administrative shutdown due to design control review, configuration control updating and resolution of significant employee concerns continues.
06/30/86	2400C	The reactor was in mode 5. The administrative shutdown due to design control review, configuration control updating and resolution of significant employee concerns continues.

#### Unit 2

<u>Date</u>	<u>Time</u>	<u>Event</u>
06/01/86	0001C	The reactor was in mode 5. The administrative shutdown due to design control review, configuration control updating and resolution of significant employee concerns continues.
06/30/86	2400C	The reactor was in mode 5. The administrative shutdown due to design control review, configuration control updating and resolution of significant employee concerns continues.

## FUEL PERFORMANCE

### Unit 1

The core average fuel exposure accumulated during June was 0 MWD/MTU with the total accumulated core average fuel exposure of 0 MWD/MTU.

### Unit 2

The core average fuel exposure accumulated during June was 0 MWD/MTU with the total accumulated core average fuel exposure of 8097.51 MWD/MTU.

## SPENT FUEL PIT STORAGE CAPABILITIES

The total storage capability in the spent fuel pit (SFP) is 1,386. However, there are five cell locations which are incapable of storing spent fuel. Four locations (A10, A11, A24, A25,) are unavailable due to a suction strainer conflict and one location (A16) is unavailable due to an instrumentation conflict. Presently, there is a total of 348 spent fuel bundles stored in the SFP. Thus, the remaining storage capacity is 1,033.

## PORVs AND SAFETY VALVES SUMMARY

No PORVs or safety valves were challenged in June 1986.

## LICENSEE EVENT REPORT(S)

The following licensee event reports (LERs) were reported to the Nuclear Regulatory Commission in June 1986.

### LER

### Description of Event

1-86022

Two containment ventilation isolations (CVIs) occurred May 15, 1986 at 0140 CST (Unit 1) and at 0356 CST (Unit 2) respectively. The first event was caused by electromagnetic interference generated by relay vibration on the radiation monitor 1-RM-90-131 while placing containment purge in operation.

The second event occurred on unit 2 while performing maintenance and trying to prevent a similar event as described above from transpiring. It was decided to remove power from radiation monitor 2-RM-90-106 to avoid a CVI. Personnel were unaware that the power loss would initiate the system to the safe position and actuate a CVI.

A design change request will be initiated to modify the radiation monitoring system and special instructions will be issued for future reference.

LICENSEE EVENT REPORT(S)  
(continued)

LER

Description of Event

- 1-86023      The Technical Review Committee discovered that the radioactive liquid effluent monitoring instrumentation channel calibration had not been performed per surveillance requirement (SR) 4.3.2.9.C.5.a, which is required once every 18 months. A procedure for the calibration of a flow indicator on the condensate demineralizer line was never instituted. However, a rotometer cannot be calibrated and if found inaccurate must be discarded. A channel check was performed to verify operability as required. "Calibration of Compliance Instruments", (SI-198), will ensure in the future that the TVA test facilities will verify the accuracy of all rotometers that will be installed.
- 1-86024      On May 25, 1986, the hourly firewatch required by technical specification 3.7.12 was not fully completed between the hours of 1300 and 1400 CDT.
- 2-86002      A containment ventilation isolation (CVI) occurred due to a cognitive personnel error while performing Surveillance Instruction (SI)-166.29 "Control Air Check Test During Cold Shutdown". This was the result of a low flow condition to the upper containment radiation monitor (2-RM-90-112) when the monitor's containment isolation valves were allowed to drift partially closed during the test. Arching of the low flow switch initiated a spike causing a high radiation signal. During the writing of the test procedure there was failure to anticipate the potential of a CVI. A revision to the procedure will be submitted to advise personnel that such potential effects exist during performance of this test.
- 2-86003      Two CVIs occurred due to spurious spikes on radiation monitors. RM-90-106B spiked due to a loose wire on the flow switch. RM-90-112 spiked due to welding noise (EMI).

SPECIAL REPORT(S)

The following special report was submitted to the NRC in June 1986.

Report #

Description

- 86-06      On June 17, 1986, at 1414 CST, all of the plant fire pumps were removed from service for 37 minutes. The pumps were removed from service to allow for the replacement of three hypochlorite valves (O-VLV-50-552, 523, and 521) that are located on one-inch lines close to the pumps. The replacement of the subject valves was due to excessive leakage. These valves are used to chlorinate the fire protection system in the control of Asiatic clams.



SPECIAL REPORT(S) (continued)

Report #

Description

86-06      The fire detection system was operable during the entire activity. Upon detection of a fire, the pumps could have been started manually and the fire suppression system pressurized. Before removing the pumps from service, communications were established between the main control room and the work area in accordance with plant procedures. The maintenance activity complied with technical specifications and plant procedures. Physical Security Instruction 13, "FIRE," was followed during the event.

OFFSITE DOSE CALCULATION MANUAL CHANGES

Offsite dose calculation manual changes were finalized April 14, 1986. A copy of the changes is found in section V.

OPERATIONAL SUMMARY

OPERATING STATISTICS  
(NRC REPORTS)

# OPERATING DATA REPORT

DOCKET NO. 50-327  
DATE JULY 3, 1986  
COMPLETED BY D.C. DUPREE  
TELEPHONE (615) 870-6544

## OPERATING STATUS

1. UNIT NAME: SEQUOYAH NUCLEAR PLANT, UNIT 1
2. REPORT PERIOD: JUNE 1986
3. LICENSED THERMAL POWER (MWT): 3411.0
4. NAMEPLATE RATING (GROSS MWE): 1220.6
5. DESIGN ELECTRICAL RATING (NET MWE): 1148.0
6. MAXIMUM DEPENDABLE CAPACITY (GROSS MWE): 1183.0
7. MAXIMUM DEPENDABLE CAPACITY (NET MWE): 1148.0
8. IF CHANGES OCCUR IN CAPACITY RATINGS (ITEMS NUMBERS 3 THROUGH 7) SINCE LAST REPORT, GIVE REASONS: \_\_\_\_\_
9. POWER LEVEL TO WHICH RESTRICTED, IF ANY (NET MWE): \_\_\_\_\_
10. REASONS FOR RESTRICTIONS, IF ANY: \_\_\_\_\_

NOTES:

	THIS MONTH	YR.-TO-DATE	CUMULATIVE
11. HOURS IN REPORTING PERIOD	720.00	4343.00	43824.00
12. NUMBER OF HOURS REACTOR WAS CRITICAL	0.00	0.00	24444.91
13. REACTOR RESERVE SHUTDOWN HOURS	0.00	0.00	0.00
14. HOURS GENERATOR ON-LINE	0.00	0.00	20871.13
15. UNIT RESERVE SHUTDOWN HOURS	0.00	0.00	0.00
16. GROSS THERMAL ENERGY GENERATED (MWH)	0.00	0.00	77060971.91
17. GROSS ELECTRICAL ENERGY GEN. (MWH)	0.00	0.00	25976386.00
18. NET ELECTRICAL ENERGY GENERATED (MWH)	-3045.00	-20381.00	24922356.00
19. UNIT SERVICE FACTOR	0.00	0.00	54.47
20. UNIT AVAILABILITY FACTOR	0.00	0.00	54.47
21. UNIT CAPACITY FACTOR (USING MDC NET)	0.00	0.00	49.54
22. UNIT CAPACITY FACTOR (USING DER NET)	0.00	0.00	49.54
23. UNIT FORCED OUTAGE RATE	100.00	100.00	28.85
24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):			

25. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: \_\_\_\_\_  
STARTUP IS UNDETERMINED AT THIS TIME PENDING DESIGN CONTROL REVIEW, CONFIGURATION CONTROL UPDATING, AND RESOLUTION OF SIGNIFICANT EMPLOYEE CONCERNS.

NOTE THAT THE THE YR.-TO-DATE AND CUMULATIVE VALUES HAVE BEEN UPDATED.

SEQUOYAH NUCLEAR PLANT  
AVERAGE DAILY POWER LEVEL

DOCKET NO. : 50-327

UNIT : ONE

DATE : JULY 3, 1986

COMPLETED BY : D. C. DUPREE

TELEPHONE : (615) 870-6544

MONTH: JUNE 1986

DAY	AVERAGE DAILY POWER LEVEL (MWe Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe Net)
01	0	16	0
02	0	17	0
03	0	18	0
04	0	19	0
05	0	20	0
06	0	21	0
07	0	22	0
08	0	23	0
09	0	24	0
10	0	25	0
11	0	26	0
12	0	27	0
13	0	28	0
14	0	29	0
15	0	30	0

## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-327

UNIT NAME Sequoyah One

DATE July 5, 1986

COMPLETED BY D. C. Dupree

TELEPHONE (615)870-6544

REPORT MONTH JUNE 1986

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
7	851220	F	720	F	9				Design Control, Configuration Updating, and Employee Concerns.

<sup>1</sup>F: Forced  
S: Scheduled

<sup>2</sup>Reason:  
A-Equipment Failure (Explain)  
B-Maintenance or Test  
C-Refueling  
D-Regulatory Restriction  
E-Operator Training & License Examination  
F-Administrative  
G-Operational Error (Explain)  
H-Other (Explain)

<sup>3</sup>Method:  
1-Manual  
2-Manual Scram.  
3-Automatic Scram.  
4-Cont. of Existing  
Outage  
5-Reduction  
9-Other

<sup>4</sup>Exhibit G-Instructions  
for Preparation of Data  
Entry Sheets for Licensee  
Event Report (LER) File  
(NUREG-0161)

<sup>5</sup>Exhibit I-Same Source



# OPERATING DATA REPORT

DOCKET NO. 50-328  
DATE JULY 3, 1986  
COMPLETED BY D.C. DUPREE  
TELEPHONE (615)870-6544

## OPERATING STATUS

1. UNIT NAME: SEQUOYAH NUCLEAR PLANT, UNIT 2
2. REPORT PERIOD: JUNE 1986
3. LICENSED THERMAL POWER(MWT): 3411.0
4. NAMEPLATE RATING (GROSS MWE): 1220.6
5. DESIGN ELECTRICAL RATING (NET MWE): 1148.0
6. MAXIMUM DEPENDABLE CAPACITY (GROSS MWE): 1183.0
7. MAXIMUM DEPENDABLE CAPACITY (NET MWE): 1148.0
8. IF CHANGES OCCUR IN CAPACITY RATINGS (ITEMS NUMBERS 3 THROUGH 7) SINCE LAST REPORT, GIVE REASONS: \_\_\_\_\_
9. POWER LEVEL TO WHICH RESTRICTED, IF ANY (NET MWE): \_\_\_\_\_
10. REASONS FOR RESTRICTIONS, IF ANY: \_\_\_\_\_

	THIS MONTH	YR.-TO-DATE	CUMULATIVE
11. HOURS IN REPORTING PERIOD	720.00	4343.00	35784.00
12. NUMBER OF HOURS REACTOR WAS CRITICAL	0.00	0.00	21984.54
13. REACTOR RESERVE SHUTDOWN HOURS	0.00	0.00	0.00
14. HOURS GENERATOR ON-LINE	0.00	0.00	21494.42
15. UNIT RESERVE SHUTDOWN HOURS	0.00	0.00	0.00
16. GROSS THERMAL ENERGY GENERATED (MWH)	0.00	0.00	69127977.22
17. GROSS ELECTRICAL ENERGY GEN. (MWH)	0.00	0.00	23536780.00
18. NET ELECTRICAL ENERGY GENERATED (MWH)	-5586.00	-28770.00	22603187.60
19. UNIT SERVICE FACTOR	0.00	0.00	60.07
20. UNIT AVAILABILITY FACTOR	0.00	0.00	60.07
21. UNIT CAPACITY FACTOR (USING MDC NET)	0.00	0.00	55.02
22. UNIT CAPACITY FACTOR (USING DER NET)	0.00	0.00	55.02
23. UNIT FORCED OUTAGE RATE	100.00	100.00	30.43
24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH)			

25. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:  
THE RESTART OF UNIT-2 HAS BEEN SCHEDULED FOR JANUARY 1987.

NOTE THAT THE THE YR.-TO-DATE AND CUMULATIVE VALUES HAVE BEEN UPDATED.

SEQUOYAH NUCLEAR PLANT  
AVERAGE DAILY POWER LEVEL

DOCKET NO. : 50-328

UNIT : TWO

DATE : JULY 3, 1986

COMPLETED BY : D. C. DUPREE

TELEPHONE : (615) 870-6544

MONTH: JUNE 1986

DAY	AVERAGE DAILY POWER LEVEL (MWe Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe Net)
01	0	16	0
02	0	17	0
03	0	18	0
04	0	19	0
05	0	20	0
06	0	21	0
07	0	22	0
08	0	23	0
09	0	24	0
10	0	25	0
11	0	26	0
12	0	27	0
13	0	28	0
14	0	29	0
15	0	30	0

## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-328

UNIT NAME Sequoyah Two

DATE July 5, 1986

COMPLETED BY D. C. Dupree

TELEPHONE (615)870-6544

REPORT MONTH JUNE 1986

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
7	850821	F	720	F	4				Design Control, Configuration Updating, and Employee Concerns.

<sup>1</sup>F: Forced  
S: Scheduled

<sup>2</sup>Reason:  
A-Equipment Failure (Explain)  
B-Maintenance or Test  
C-Refueling  
D-Regulatory Restriction  
E-Operator Training & License Examination  
F-Administrative  
G-Operational Error (Explain)  
H-Other (Explain)

<sup>3</sup>Method:  
1-Manual  
2-Manual Scram.  
3-Automatic Scram.  
4-Cont. of Existing  
Outage  
5-Reduction  
9-Other

<sup>4</sup>Exhibit G-Instructions  
for Preparation of Data  
Entry Sheets for Licensee  
Event Report (LER) File  
(NUREG-0161)

<sup>5</sup>Exhibit I-Same Source

OPERATING STATISTICS  
(TVA REPORTS)

## UNIT OUTAGE AND AVAILABILITY

Sequoyah

Nuclear Plant

Licensed Reactor Power 3411 MW(th)

Unit No. Two

Generator Rating 1220.5 MW(e)

Design Gross Electrical Rating 1183 MW

Month/Year June 1986

Period Hours 720

															Period Hours		720								
Day	Time Unit Available						Time Not Available								Unit				OUTAGE CAUSE	METHOD OF SHUTTING DOWN REACTOR	UNIT STATUS DURING OUTAGE	CORRECTIVE ACTION TAKEN TO PREVENT REPETITION			
	Total		Gen.		Not Used		Turbine		Gen.		Reactor		Unit		Time Out		Time In								
	Hrs	Min	Hrs	Min	Hrs	Min	Hrs	Min	Hrs	Min	Hrs	Min	Hrs	Min	Hrs	Min	Hrs	Min							
1	00	00	00	00			24	00	24	00	24	00	24	00											
2	00	00	00	00			24	00	24	00	24	00	24	00											
3	00	00	00	00			24	00	24	00	24	00	24	00											
4	00	00	00	00			24	00	24	00	24	00	24	00											
5	00	00	00	00			24	00	24	00	24	00	24	00											
6	00	00	00	00			24	00	24	00	24	00	24	00											
7	00	00	00	00			24	00	24	00	24	00	24	00											
8	00	00	00	00			24	00	24	00	24	00	24	00											
9	00	00	00	00			24	00	24	00	24	00	24	00											
10	00	00	00	00			24	00	24	00	24	00	24	00											
11	00	00	00	00			24	00	24	00	24	00	24	00											
12	00	00	00	00			24	00	24	00	24	00	24	00											
13	00	00	00	00			24	00	24	00	24	00	24	00											
14	00	00	00	00			24	00	24	00	24	00	24	00											
15	00	00	00	00			24	00	24	00	24	00	24	00											
16	00	00	00	00			24	00	24	00	24	00	24	00											
17	00	00	00	00			24	00	24	00	24	00	24	00											
18	00	00	00	00			24	00	24	00	24	00	24	00											
19	00	00	00	00			24	00	24	00	24	00	24	00											
20	00	00	00	00			24	00	24	00	24	00	24	00											
21	00	00	00	00			24	00	24	00	24	00	24	00											
22	00	00	00	00			24	00	24	00	24	00	24	00											
23	00	00	00	00			24	00	24	00	24	00	24	00											
24	00	00	00	00			24	00	24	00	24	00	24	00											
25	00	00	00	00			24	00	24	00	24	00	24	00											
26	00	00	00	00			24	00	24	00	24	00	24	00											
27	00	00	00	00			24	00	24	00	24	00	24	00											
28	00	00	00	00			24	00	24	00	24	00	24	00											
29	00	00	00	00			24	00	24	00	24	00	24	00											
30	00	00	00	00			24	00	24	00	24	00	24	00											
31																									
Total	00	00	00	00			720	00	720	00	720	00	720	00											

## UNIT OUTAGE AND AVAILABILITY

Sequoyah Nuclear Plant

Unit No. One

Licensed Reactor Power 3411 MW(th)

Generator Rating 1220.5 MW(e)

Design Gross Electrical Rating 1183 MW

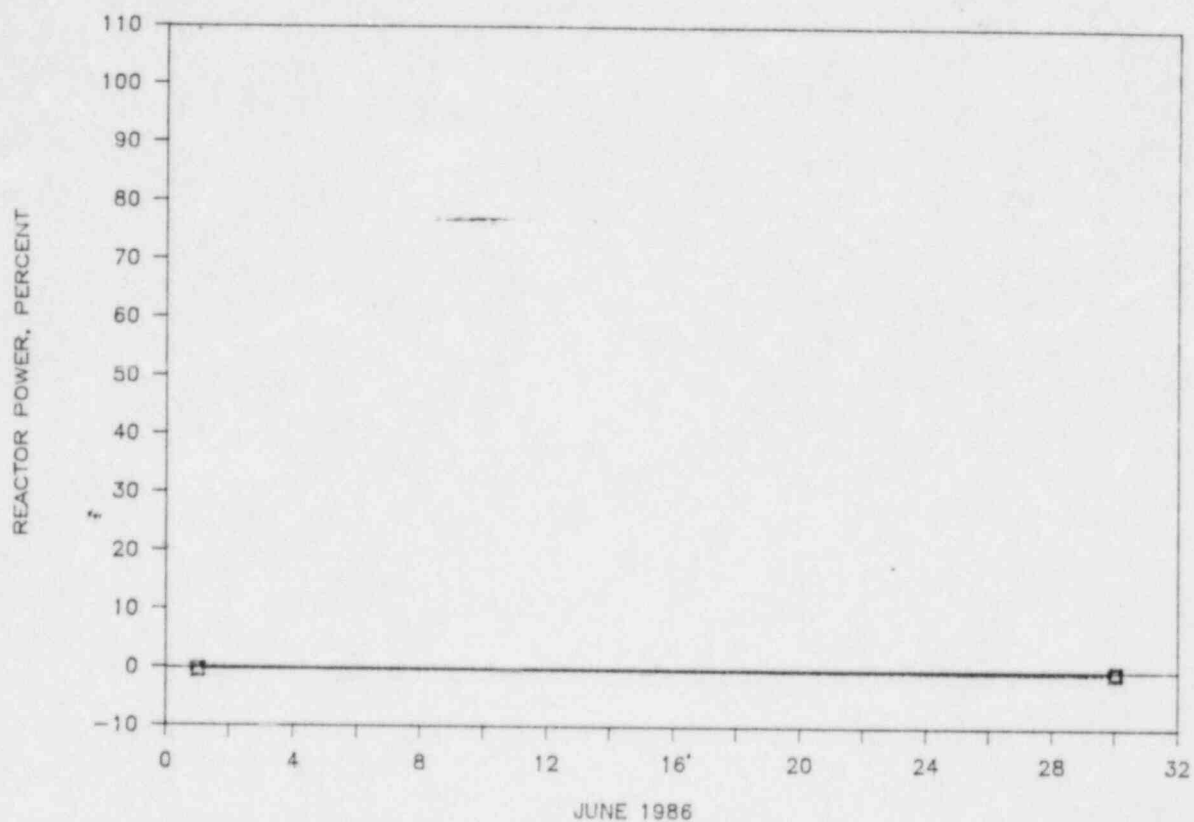
Month/Year June 1986

Period Hours 720

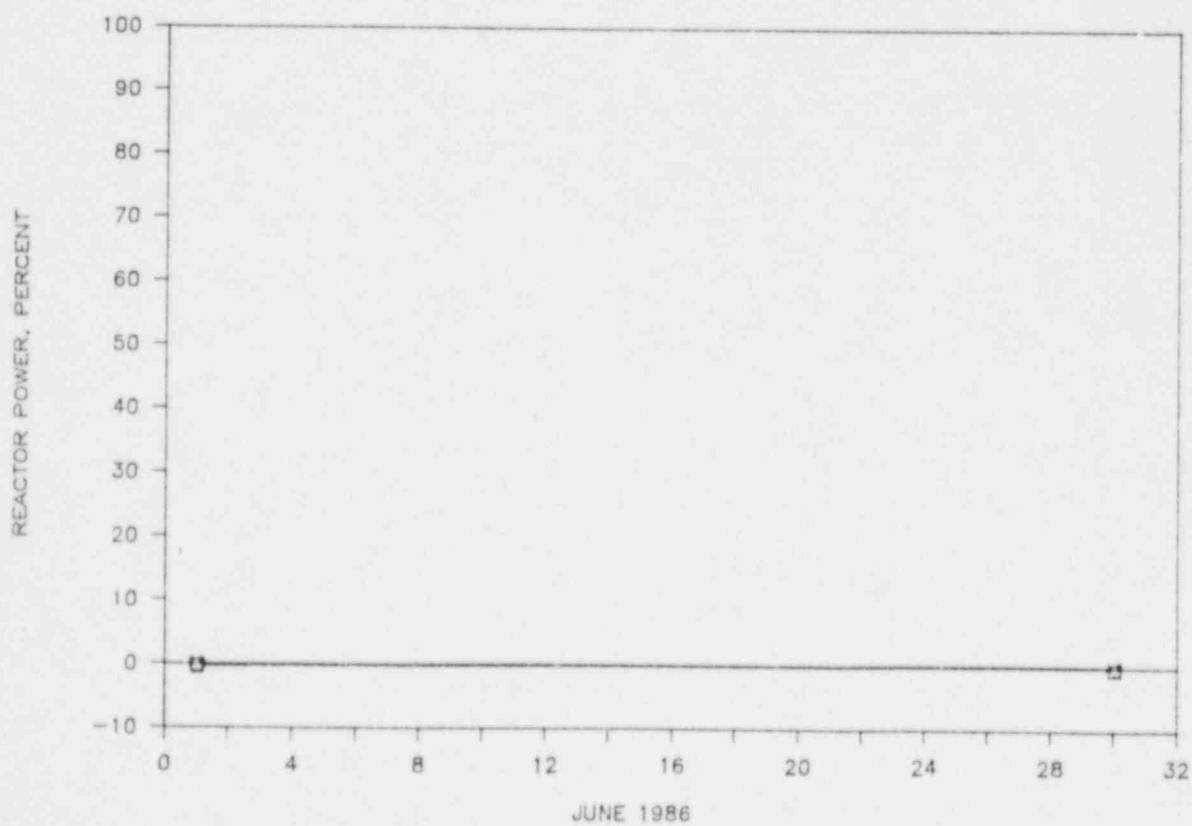
Time Unit Available										Time Not Available										Unit				OUTAGE CAUSE	METHOD OF SHUTTING DOWN REACTOR	UNIT STATUS DURING OUTAGE	CORRECTIVE ACTION TAKEN TO PREVENT REPETITION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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### SEQ. JYAH ONE REACTOR HISTOGRAM



### SEQUOYAH TWO REACTOR HISTOGRAM



SUMMARY OF MAINTENANCE ACTIVITIES

MAINTENANCE SUMMARY  
(ELECTRICAL)

COMP

MR.COMP U FUNC SYS ADDRESS, DATE.... DESCRIPTION..... CORRECTIVE ACTION.....

B105193	1	GENB 082	0001B 01/31/86	1-GENB-082-0001B-B, [*NPRD*], 1BB D/G BARELY PASSES SI 7 TS 3.8.1.2 CRITERIA OF REACHING 60HZ+OR-1.2 IN 10 SEC. LAST TEST TOOK 9.9 SEC. INVESTIGATE & IMPROVE START TIME TO PREVENT FUTURE FAILURES OF SURVEILLANCE TESTS	1-GENB-82-1B-B IDLE SPEED SETTING WAS SET TOO LOW TO MEET TEST CRITERIA, ADJUSTED PNEUMATIC BOOSTER AND IDLE SPEED SETTING PER THE VENDOR INSTR ALSO ADJUSTED MINIMUM-MAX EXCITATION CURRENT LEVEL POINT PER VENDORS MANUAL MR B105193
B105202	1	ZS 063 0071	2 02/11/86	1-ZS-063-0071 2-A, [*NPRD*], #10CFR50.49*, CLOSED LIGHT SOCKET WILL NOT GIVE INDICATION OF CLOSED POSITION SUSPECT PROBLEM WITH LIGHT SOCKET	1-ZS-63-71 2-A LIMIT SWITCH MOUNTING BRACKET WAS BENT PREVENTING LIMITS FROM MAKING UP, STRAIGHTENED LIMIT SWITCH MOUNTING BRACKET AND CHECKED FOR PROPER LIGHT INDICATION, MR B105202
B105470	1	GENB 082	0001A 01/31/86	1-GENB-082-0001A-A, [*NPRD*], INVESTIGATE VOLT, & FREQ NOT WITHIN TECH SPEC LIMITS DURING INITIAL START F/AMBIENT CONDITIONS >10 SECS PERIODICALLY	1-GENB-82-1A-A EXCITATION CONTROL TIME DELAY TRIP CURRENT LEVEL WAS OUT OF ADJUSTMENT, ADJUSTED THE MINIMUM-MAX EXCITATION CONTROL TIME DELAY TRIP CURRENT LEVEL TO MINIM SET POINT PER VALIDATED INSTRUCTION MANUAL MR B105470
B105492	2	BCTA 202	CJ /2 01/22/86	2-BCTA-202-CJ /2-, [*NPRD*], COIL BURNED IN BKR WOULD NOT TRIP	2-BCTA-202-CJ/2 TRIP COIL HAD BURNED PREVENTING BREAKER FROM TRIPPING, REPLACED TRIP COIL AND CHECKED FOR PROPER OPERATION, MR B105492
B111744	1	GENB 082	0001A 02/05/86	1-GENB-082-0001A-A, HS-82-165 CONTACT APPEAR TO MAKE UP INTERMITTANTL.	0-HS-82-165-A ROTARY SWITCH WAS BAD DUE TO AGE OR CYCLIC FATIGUE, REPLACED ROTARY SWITCH AND CHECKED FOR PROPER OPERATION MR B111744
B111745	2	GENB 082	0002A 02/05/86	2-GENB-082-0002A-A, HAND SWITCH 82-195 CONTACTS APPEAR TO MAKE UP INTERMITTANTLY	0-HS-82-225-A ROTARY SWITCH WAS BAD DUE TO AGE AND CYCLIC FATIGUE, REPLACED ROTARY SWITCH AND CHECKED FOR PROPER OPERATION MR B11745
B113221	2	GENB 082	0002B 02/18/86	2-GENB-082-0002B-B, [*NPRD*], ENG 1 IMMERSION HTR CONTACTOR CONTACTS ARE BURNED AND PITTED, DG 721	2-GENB-82-2B-B IMMERSION HEATER CONTACTOR CONT ACTS WERE BURNED AND PITTED DUE TO AGE, REPLACED CONTACTS IN HEATER CONTROLLER CONTACTOR, MR B113221
B113222	2	GENB 082	0002B 02/18/86	2-GENB-082-0002B-B, [*NPRD*], ENG 2 IMMERSION HTR CONTACTOR CONTACTS ARE BURNED AND PITTED, DG EL 721	2-GENB-82-2B-B IMMERSION HEATER CONTACTOR CONT ACTS WERE BURNED AND PITTED DUE TO AGE, OR NORMAL WEAR, REPLACED CONTACTS IN HEATER CONTROLLER CONTACTOR MR B113222
B115938	1	HS 030	0451C 06/09/86	1-HS-030-0451C-A, WHEN YOU GO TO START POSITION WITH HS IT WILL NOT START FAN WHEN YOU GO TO STOP POSITION WITH HS IT WILL NOT STOP FAN INVEST AND REPAIR AS NEEDED	CONTACT IN SWITCH WAS BROKEN, DISASSEMBLED AND REPLACED ROTOR CAM B115938
B118255	1	XS 063	0334C 05/27/86	1-XS-068-0334C-B, HANDSW BLACK GRIP IS BROKEN, REPLACE HS	POSSIBLY, SWITCH HANDLE BROKE FROM WEAR, REPLACED SWITCH HANDLE MR B118255
B121188	0	MTRB 078	0020 05/28/86	0-MTRB-078-0020-, [*NPRD*], REPAIR RUPP	PUMP MOTOR 'B' WAS BAD, REF MR B117263

R,COMP U FUNC SYS ADDRESS, DATE,,, DESCRIPTION,,,,, CORRECTIVE ACTION,,,,,

MTR B WITH PARTS FROM RWPP MTR A FEF WR FOR WORK ON PUMP, REMOVED MOTOR SHAFT  
B121176 AND ROTOR AND REPLACED WITH THE SHAFT  
FROM O-MTRB-78-19 AND CHECKED FOR PROPER  
OPERATION, WR B121188

1 records listed.

MAINTENANCE SUMMARY  
(INSTRUMENTATION)



# INSTRUMENT MAINTENANCE MONTHLY REPORT FOR JUNE 1986

## UNIT 1

During performance of SI-102, fuel oil pressure indicators, PI-18-68/2 and PI-18-83/2, were determined to be inoperable because of clogged snubbers (PRO 1-86-131). The snubbers were replaced and the instruments were returned to service.

## UNIT 2

PRO-2-86-044 was initiated when EMI from steam generator U-tube welding caused a containment vent isolation signal to be generated from radiation monitor loop 2-R-90-112.

During channel calibration testing of steam generator level loop L-3-93, LT-3-93 was found outside the desired tolerance. An evaluation of all loop component "as found" values revealed that the technical specifications allowable value for LS-3-93-B was not satisfied. PRO-2-86-045 was initiated and the loop was recalibrated.

During performance of SI-484, instrument mechanics discovered a partial loss of fill fluid in the train A upper plenum sense line for the Reactor Vessel Level Instrumentation System. Work is currently underway to determine cause and necessary corrective action.

Prepared special maintenance instruction SMI-2-90-1 to perform noble gas calibration for the shield building postaccident radiation monitors.

## COMMON

Completed Instrument Maintenance Section's responsibilities for replacement of parts on the units 1 and 2 hydrogen analyzers to maintain environmental qualification.

Initiated PRO-1-86-145 to evaluate possible problems with the main feedwater control valves not meeting the required technical specification response times for feedwater isolation.

Completed review of preliminary setpoint methodology report. Coordination with Westinghouse to resolve comments and correct problem areas is currently underway.

Completed Workplan 12056 to correct drawing discrepancies (as described in Discrepancy Report No. SQ-DR-86-03-082R) with time delay relay settings for control room isolation signal.

Initiated program to verify the technical adequacy of all surveillance instructions required by technical specifications. The problem involves a technical review, revision, and reperformance (as required) of each instruction, and is scheduled for completion before startup.

NR2	U	FUNC	SYS	ACROSS	DATE	DESCRIPTION	CORRECTIVE ACTION
E124605	1	099			06/30/86	1--099--RECORD THE SSPS OUTPUT VOLT IN THE SW GEAR COMPARTMENT FOR TRIP CHANNELS A AND B FOR THE REACT TRIP AND BYPASS REACT TRIP EXES	RECORD VOLT. NR 6124605
E124606	2	099			06/30/86	2--099--RECORD THE SSPS OUTPUT VOLT IN THE SW GEAR COMPARTMENT FOR TRIP CHANNELS A AND B FOR THE REACT TRIP AND BYPASS REACT TRIP EXES	RECORD VOLT. NR 6124606
E131909	1	001			06/06/11/86	1-P-002-200-SW DEFECTIVE REPLACE AND CALIB PER SI 170.2	DEFECTIVE. REPLACED
E132371	1	062			06/30/86	1-P1-063-62-VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN. VERIFY MOUNTING. NO REPORTABLE. NR 6132371

4 records listed

MR. HIST. U	TIME	SY. NO.	DATE	DESCRIPTION	CORRECTIVE ACTION
E102684	1 LIE	003	104 06/03/86	1-LIE-003-156-A, CAPNORML, INDICATOR PLESSSED HIGH WILL NOT DRIVE	DEFECTIVE FEEDBACK POTENTIOMETER REPLACED FEEDBACK POTENTIOMETER RECALIBRATED CONTROLLER AND RETURNED TO SERVICE MR E102684
E113029	0 RM	090	1226 06/04/86	0-RM-090-122A-1, LOW FLOW SW SHOWS FLOW W/NO FLOW THROUGH NOW REPAIR OR REPLACE AS REC.	DIRTY FLOW SWITCH CLEANED FLOW SWITCH MR E113029
E110688	0 RM	090	090 06/04/86	0-RM-090-S/H326-20-, REPAIR HIGH VOLTAGE	DEFECTIVE A2031 REPLACED A203
E120569	1 PC	001	06/11/86	1-PC-001-SPARE-, FUNCTIONALLY TEST AND RETURN TO POWER STORES	MORE. FUNCTIONALLY TEST RETURN TO POWER STORES MR E120569
E124738	1 LR	004	06/12/86	1-LR-003-43PUL-K, RED PEN MISSING. SIM GER #1 LVL RECORDER	PEN FELL OFF, OUT OF CALIBRATION REPAIRED RECALIBRATED MR E124738
E131166	0 RM	090	1334 06/02/86	0-RM-090-133A-A, CHECK CALIBRATION ON MONITOR RED TRIP LIGHT CHIRPS ON EVERY FEW MINUTES	HI BACKGROUND RADIATION CHANGED SET POINT MR E131166
E131992	2 FR	002	06/12/86	2-FR-002-35-, EXAMINED THE PEN STICKS PLEASE INVEST AND REPAIR	DIRTY DRIVE GEARS CLEAN AND LUBRICATED THE DRIVE GEARS AND RETURNED TO SERVICE MR E131992
E131964	2 PS	004	1604 06/14/86	2-PS-003-160A-B, REPLACE EXISTING 1/4" PIPE TO 1/4" NALL SWAGLOCK TUBING ADAPTER W/COMPATIBLE SHORT PARKER EQUIV AND REPLACE SWAGLOCK FEMALE NUTS ON SENCE LINE FROM ABOVE FITTING DOWN TO SH PARKER 'TEE'	UNKNOWN. INSTALL TUBING CORRECTLY MR E131964 NOT WPROS REPORTABLE
E131965	2 PS	004	1606 06/14/86	2-PS-003-136E-B, REPLACE 1/4" SWAGLOCK CAP ON TEST "TEE" FITTING W 1/4" SH PARKER EQUIVALENT	UNKNOWN. INSTALL CORRECT CAP MR E131965 NOT WPROS REPORTABLE
E131966	2 PS	003	1606 06/14/86	2-PS-003-1606-B, REPLACE EXISTING 1/4" PIPE TO 1/4" NALL SWAGLOCK TUBING FITTING W/COMPATIBLE SHORT PARKER EQUIVALENT DISCOVERED DURING PERF OF SI 207	UNKNOWN. INSTALL CORRECT FITTINGS MR E131966 NOT WPROS REPORTABLE
E132368	1 FI	003	1002 06/05/86	1-FI-003-1036-E, VERIFY MOUNTING FOR SNI-0-317-26	UNKNOWN. TORQUED BOLTS NOT WPROS REPORTABLE MR E132368

11 records listed.

NR	COMP	U	FUNC	SYS	ADDRESS	DATE	DESCRIPTION	CORRECTIVE ACTION
E100055	2	FR	013			06/22/86	2-TR-050--CONTROLLER DOES NOT APPEAR TO OUT OF CALIBRATION. RECALIBRATED AND INCREASE THE SAMPLE VELOCITY TO MATCH THE STACK VELOCITY	E100055
E100463	1	PS	003			1218 06/17/86	1-PS-003-1218--VERIFY MOUNTING PER TWA	UNKNOWN VERIFIED MOUNTING NR E100463
E102677	2	PA	005			0863 478600-65	478600 293 DET 6293	
						147 06/27/86	2-PS-003-147--UNKNOWN, INSTALL PROTECTIVE SHIELD IN POWER SUPPLY	NO TYPE OF SHIELDING ON THE UNDERSIDE OF THE POWER SUPPLY. INSTALLED PROTECTIVE SHIELD. NOT NRPS REPORTABLE
E102678	2	PA	003			153 06/26/86	2-PA-003-153--INSTALL PROTECTIVE SHIELD IN POWER SUPPLY	UNKNOWN. INSTALL PROTECTIVE SHIELD NR E102678 NOT NRPS REPORTABLE
E102679	2	PA	003			163 06/27/86	2-PA-002-163--UNKNOWN, INSTALL PROTECTIVE SHIELD IN POWER SUPPLY	NO PROTECTIVE SHIELDING ON THE UNDERSIDE OF THE POWER SUPPLY. INSTALLED PROTECTIVE SHIELDING. NO NRPS REPORTABLE
E102680	2	PA	003			170 06/26/86	2-PA-003-170--INSTALL PROTECTIVE SHIELD IN POWER SUPPLY	UNKNOWN. INSTALL PROTECTIVE SHIELD. NOT NRPS REPORTABLE NR E102680
E102695	1	POS	043			0200 06/05/86	1-POS-043-0200-A-UNKNOWN, REPLACE POS TO START NEW QUALIFIED LIFE FOR THE DEVICE	END OF QUALIFIED LIFE REPLACED PRESSURE SWITCH NR E102695
E104117	1	LI	003			06/06/86	1-11-003--INITIATE APPLICABLE PORTIONS OF SI 604.1 TO BACKFILL LESS OF S/G LVL INDICENTATION.	SENSING LINES HEDED BACKFILLING BACKFILLED SENSING LINES NOT NRPS REPORTABLE NR E104117
E115562	1	TE	068			230 06/06/86	1-TE-068-230--UNKNOWN, INSTRUMENT WAS TORQUED ON NR 8301670 WHICH USED TORQUE WRENCH E84039. THIS DATE DOES NOT CLICK WHEN TORRE VLV IS REACHED	UNKNOWN. RETORQUED NOT NRPS REPORTABLE NR E115562
E112697	2	CHR	313			453 06/23/86	2-CHR-313-453--MI* COND WORK START-CONPR AND AND OPERATING. RM AT PRESENT IS 100 DEG F. AUX 6LD APPROX 759' RDNF	2-PS-313-805 OUT OF CALIBRATION. RECALIBRATED SWITCH NR E112697
E120556	1	LT	003			34 06/24/86	1-LT-003-34--UNKNOWN, REPLACE MISSING HIGH AND LOW SIDE DRAIN VALVE HANDLES.	UNKNOWN. REPLACED HANDLES. NOT NRPS REPORTABLE NR E120556
E120561	0	PC	001			73 06/05/86	0-PC-001-73--HIGH AND LB LIMITS DO NOT HAVE PROPER AFFECT ON CONTROLLER	DEFECTIVE Q7 AND Q8 TRANSISTORS AND Q7 DIODE. REPLACE TRANSISTORS AND DIODE RECALIBRATED AND RETURNED E120561
E120563	1	PA	066			69 06/05/86	1-PA-068-69--REPLACE EXISTING A/C CABLE WITH LOCKING TYPE A/C CABLE PLUG	DESIGN OF THE EQUIPMENT MODIFY RECEPTACLE TO ACCEPT A LOCKING TYPE PLUG NOT NRPS REPORTABLE NR E120563
E120568	1	PT	001			72 06/17/86	1-PT-001-72--REMOVE WATER FROM XNTR TERMOLOCK AND SEAL CONDUIT TO PREVENT TRANSMITTER REITERMINATE BRUNCH WIRE	UNKNOWN SEAL CONDUIT DRY BUT TRANSMITTER REITERMINATE BRUNCH WIRE

CMP

MR. COMP U FUNC SVT ADDRESS DATE DESCRIPTION CORRECTIVE ACTION

WATER FROM ENTERING TERM BLOCK

CALIBRATE MR 6120568 NOT REPORTABLE

6120574 1 FM 001 21F 06/19/86 1-FM-001-21F-1-ARMED-1-MODULE WOULD NOT CALIBRATE PER MFG INSTRUCTIONS DURING PERFORMANCE FOR WP10045

6120572 1 NM 091 0003 06/23/86 1-NM-092-5003-P6 PERMISSIVE RESET VLV OUT OF TOLERANCE ON SI 93.2

6120593 2 FS 030 242 06/25/86 2-FS-030-242-SM WAS FWD OUT OF TOLERANCE DURING SI 244.2 INI 30 P6 112

6120621 0 PS 062 240 06/26/86 0-PS-062-240-COMPR WON'T OPEN IN AUTO POSITION AIR PRESS IN MAIN TRK WAS DOWN TO 180 PSI FWD ON SI 102

6120622 0 FS 062 241 06/26/86 0-PS-062-241-COMPR WON'T OPER IN AUTO POSITION PRESS IN MAIN TRK WAS AT 230 PSI FWD ON SI 102

6120725 0 LS 062 30672 06/12/86 0-LS-067-SPARE-TEST SPARE SW FOR STATIC MORE. PERFORMED TEST MR 6120725

6120742 0 RM 090 134 06/24/86 0-RM-090-134-NO SIGNAL TO MAIN SIFT

6121309 1 RM 091 112 06/18/86 1-RM-090-112-MIX INSTRUMENT HALF MEN'T CLEER. BROKEN CONNECTION. RESOLVED CONNECTION. MR 6120742

6121841 2 HZ 043 200 06/26/86 2-HZ-043-200-1-K101FR50.49M3-REPLACE O-RINGS IN CELL END OF QUALIFIED LIFE. INSTALLED NEW O-RINGS

6121851 2 PS 003 173 06/20/86 2-P03-003-173-1-K101FR50.49M3-CORD THIS UNKNOWN. REPLACED HARNESS. NOT REPORTABLE MR 6121851

6121900 2 HE 063 1326 06/27/86 2-HE-063-133A-PERFORM SNI 0 63 1 TO TEST MANUAL SI HARDSW TO MEET ARC COMMITMENT CONTROL NO AGO 86 9195 001

6124167 1 AC 097 0001 06/25/86 1-AC-092-5001-D,SRM R-31 IS DRIFTING HIGH

6124191 1 TI 064 596 06/24/86 1-TI-068-393-1-ARMED-1-MIX INSTRUMENT HALF MEN'T CLEER. BROKEN CONNECTION. RESOLVED CONNECTION. MR 6120742

6124196 0 KR 099 206 06/24/86 0-KR-090-206-CHECK CALIB ON RECORDER SUSPECT RECORDER MAY BE OUT OF CALIB

6124243 1 PT 068 3110 06/24/86 1-PT-068-311C-1-ARMED-1-MIX INSTRUMENT HALF MEN'T CLEER. BROKEN CONNECTION. RESOLVED CONNECTION. MR 6120742



COMP

MR. COMP	U	FUNC	SYS	ADDRESS	DATE	DESCRIPTION	CORRECTIVE ACTION
						AI-19 PART IO ATT 7	
0124240	2	PI	060	311C	06/17/86	2-PI-060-311C-, PERFORM A FIELD VERIFICATION SO THE TRANSMITTER PER AI-19 PART IO ATT 7	OBTAIN NEW DATA AND UPDATE EGIS NOT NFRDS REPORTABLE WR 0124240
0125300	2	RE	090	100	06/27/86	2-RE-090-100-, IODINE FLOW ALARM PICKED UP AND IODINE FLOW IS FLUCTUATING BETWEEN 0 AND 6	IODINE FLOW SWITCH OUT OF CALIBRATION. CALIBRATED FLOW SWITCH PER SI 206.2
0125651	2	XI	092	5001	06/18/86	2-XI-092-5001-, WHILE PERFORMING SI 93.2 HIGH FLUX AT SHUTDOWN ALARM KA 55 40 8 AND EXHIBIT HORN DID NOT ACTUATE	TRAIN "A" SSPS OUT OF SERVICE NONE WR 0125651
0125736	0	RM	090	133A	06/27/86	0-RM-090-133A-, YELLOW LIGHT IS IN SI204	LOW BACKGROUND. SETPOINT TOO HIGH LOWERED SETPOINT
0125737	0	RM	090	140A	06/27/86	0-RM-090-140A-, YELLOW LIGHT IS IN SI 204	LOW BACKGROUND. SETPOINT TOO HIGH LOWERED SETPOINT
0130619	0		032	VARIOUS	06/19/86	0--032-VARIOUS -, CHECK FOR AND REPAIR LEAKS IN SENSOR LINE CONN UP TO AND INSIDE PNL 0 L 321	LOOSE FITTINGS TIGHTENED FITTINGS WR 0130619
0131167	0	PCV	026	15	06/13/86	0-PCV-026-15-, PRESSURE WAS 180 PSI AT DISCHARGE OF PUMPS WITH 1AA AND 100 FIRE PUMPS RUNNING SUSPECT PCV 26-15 NOT FUNCTIONING PROPERLY INVES AND REPAIR	DEFECTIVE POSITIONER. REPAIRED POSITIONER WR 0131167
0131176	2	RM	090	106	06/06/86	2-RM-090-106-B, CHECK RAD MON FOR CAUSE OF SPIKE THAT RESULTED IN CONT VERT ISOL NEEDED TO ANSWER PRD 2 86 043	LOOSE ELECTRICAL CONNECTION ON IODINE FLOW SWITCH TIGHTENED LOOSE CONNECTION WR 0131176
0131182	2	FI	072	34	06/26/86	2-FI-072-34-, CONT SPRAY PUMP 2A-R FLOW INDICATOR SHOWING APPROX 1000 GPM FLOW	FLOW TRANSMITTER SENSING LINES NEEDED BACKFILLING. BACKFILLED SENSING LINES
0131358	0	RR	090	103	06/24/86	0-RR-090-103-, BLUE PEN ON RECORDER IS NOT MOVING WHEN MONITOR IS SOURCE CHECKED	LOOSE CONNECTION ON RECORDER TIGHTENED CONNECTION WR 0131358
0131363	2	RM	090	112	06/17/86	2-RM-090-112-, PULL CUI RELAYS FOR 2 RM 90 112 A AND B REINSTL WHEN WR 122280 IS COMPLETE	NONE REINSTALLED WR 0131363
0131382	0	RM	090	122	06/20/86	0-RM-090-122-, MON LOW FLOW ALARM STICKS OCCASIONALLY	DIRTY SWITCH. CLEANED SWITCH WR 0131382
0131963	2	FIC	046	57	06/18/86	2-FIC-046-57-, CONTROLLER DOESN'T SWITCH MODES AUTO AND MANUAL WHEN SWITCHED IN CONTROL ROOM	CONTROLLER OUT OF CALIBRATION RECALIBRATED WR 0131963
0132250	1	FIC	046	0057	06/03/86	1-FIC-046-0057-S, OBTAIN NAME PLATE DATA FOR THE ABOVE LISTED DEVICE	UNKNOWN. UPDATE EGIS.
0132261	1	LIC	003	VARIOUS	06/03/86	1-LIC-003-VARIOUS-, OBTAIN NAME PLATE DATA FOR 1LIC-3-140 156 164 171 172 173	UNKNOWN. UPDATE EGIS. NOT NFRDS REPORTABLE.



COMP

MR. COMP	U	FUNC	SYS	ADDRESS	DATE	DESCRIPTION	CORRECTIVE ACTION
						174 175	
B132351	2	PT	001	5	06/06/86	2-PT-001-5-G, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN TORQUED BOLTS NOT NPROS REPORTABLE WR B132351
B132358	1	PT	001	30	06/06/86	1-PT-001-30-G, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN TORQUED BOLT NOT NPROS REPORTABLE WR B132358
B132361	1	FT	003	35A	06/06/86	1-FT-003-35A-D, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN TORQUED BOLTS NOT NPROS REPORTABLE WR B132361
B132362	1	FT	003	35B	06/06/86	1-FT-003-35B-E, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN TORQUED BOLTS NOT NPROS REPORTABLE WR B132362
B132363	1	FT	003	48A	06/06/86	1-FT-003-48A-D, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN TORQUE BOLT NOT NPROS REPORTABLE WR B132363
B132364	1	FT	003	48B	06/06/86	1-FT-003-48B-E, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN TORQUED BOLTS NOT NPROS REPORTABLE WR B132364
B132365	1	FT	003	90A	06/06/86	1-FT-003-90A -D, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN TORQUE BOLTS NOT NPROS REPORTABLE WR B132365
B132366	1	FT	003	90B	06/06/86	1-FT-003-90B-E, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN TORQUED BOLTS NOT NPROS REPORTABLE WR B132366
B132367	1	FT	003	103A	06/06/86	1-FT-003-103A-D, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN TORQUE BOLTS WR B132367 NOT NPROS REPORTABLE
B132532	1	FT	072	0013	06/26/86	1-FT-072-0013-B, PIS CALIBRATE FLOW INDICATOR 1-FI-72-13 FOR PERFORMANCE OF SI-37	NONE. VERIFIED CALIBRATION RETURNED TO SERVICE. NOT NPROS REPORTABLE WR B132532
B132751	2	PT	001	9A	06/02/86	2-PT-001-9A-D, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN, TORQUED BOLTS. NOT NPROS REPORTABLE.
B132752	2	PT	001	9B	06/02/86	2-PT-001-9B-E, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN, TORQUE BOLTS. NOT NPROS REPORTABLE
B132753	2	PT	001	12	06/06/86	2-PT-001-12-F, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN TORQUED BOLTS NOT NPROS REPORTABLE WR B132753
B132754	2	PT	001	20A	06/02/86	2-PT-001-20A-D, VERIFY MOUNTING PER SMI-0-316-26	UNKNOWN, TORQUED BOLT. NOT NPROS REPORTABLE.
B132755	2	PT	001	20B	06/02/86	2-PT-001-20B-E, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN, TORQUED BOLTS. NOT NPROS REPORTABLE
B132756	2	PT	001	23	06/06/86	2-PT-001-23-, VERIFY THE MOUNTING PER SMI-0-317-26	UNKNOWN TORQUED BOLTS NOT NPROS REPORTABLE WR B132756
B132757	2	PT	001	30	06/06/86	2-PT-001-30-G, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN TORQUED BOLTS NOT NPROS REPORTABLE WR B132757
B132758	2	PT	001	72	06/06/86	2-PT-001-72-E, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN TORQUED BOLTS NOT NPROS REPORTABLE WR B132758
B132759	2	PT	001	73	06/06/86	2-PT-001-73-D, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN TORQUED BOLTS NOT NPROS REPORTABLE WR B132759
B132769	2	PT	030	30C	06/06/86	2-PT-030-30C-, VERIFY MOUNTING PER	UNKNOWN TORQUED BOLTS WR B132769

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HR. COMP U FOMC SVT REPORTS DATE DESCRIPTION

CORRECTIVE ACTION

E132770	2 FT	063	61	06/03/86	2-PT-063-61-	VERIFY MOUNTING PER	SNI-0-317-26	UNKNOWN. TORQUED BOLTS. NOT MPROS
E132771	2 FT	063	62	06/03/86	2-PT-063-62-	VERIFY MOUNTING PER	SNI-0-317-26	REPORTABLE. WR E132770
E132772	2 FT	063	64	06/04/86	2-PT-063-86-	VERIFY MOUNTING PER	SNI-0-317-26	UNKNOWN. TORQUE BOLTS. NOT MPROS
E132773	2 FT	063	68	06/04/86	2-PT-063-88-	VERIFY MOUNTING PER	SNI-0-317-26	REPORTABLE. WR E132771
E132774	2 FT	063	106	06/06/86	2-PT-063-106-	VERIFY MOUNTING PER	SNI-0-317-26	UNKNOWN. TORQUED BOLTS. NOT MPROS
E132775	2 FT	063	108	06/06/86	2-PT-063-108-	VERIFY MOUNTING PER	SNI-0-317-26	REPORTABLE. WR E132774
E132776	2 FT	063	126	06/03/86	2-PT-063-126-	VERIFY MOUNTING PER	SNI-0-317-26	UNKNOWN. TORQUED BOLTS. NOT MPROS
E132777	2 FT	063	128	06/03/86	2-PT-063-128-	VERIFY MOUNTING PER	SNI-0-317-26	REPORTABLE. WR E132776
E132778	2 FT	063	68	06/04/86	2-PT-068-68-	VERIFY MOUNTING PER	SNI-0-317-26	UNKNOWN. TORQUE BOLTS. NOT MPROS
E132779	2 FT	063	68	06/04/86	2-PT-068-68-E	VERIFY MOUNTING PER	SNI-0-317-26	REPORTABLE. WR E132778
E132780	2 FT	063	68	06/04/86	2-PT-068-68-F	VERIFY MOUNTING PER	SNI-0-317-26	UNKNOWN. TORQUE BOLTS. NOT MPROS
E132781	2 FT	063	294	06/04/86	2-PT-068-294-D	VERIFY MOUNTING PER	SNI-0-317-26	REPORTABLE. WR E132780
E132782	2 FT	063	298	06/04/86	2-PT-068-298-E	RCS LOOP 2 COOLANT FLOW	SNI-0-317-26	UNKNOWN. TORQUED BOLTS. NOT MPROS
E132783	2 FT	063	298	06/04/86	2-PT-068-298-F	VERIFY MOUNTING PER	SNI-0-317-26	REPORTABLE. WR E132781
E132784	2 FT	063	406	06/04/86	2-PT-068-406-D	VERIFY MOUNTING PER	SNI-0-317-26	UNKNOWN. TORQUED BOLTS. NOT MPROS
E132785	2 FT	063	406	06/04/86	2-PT-068-406-E	VERIFY MOUNTING PER	SNI-0-317-26	REPORTABLE. WR E132784
E132786	2 FT	063	406	06/04/86	2-PT-068-406-F	VERIFY MOUNTING PER	SNI-0-317-26	UNKNOWN. TORQUED BOLTS. NOT MPROS
E132788	2 FT	063	68	06/16/86	2-PT-068-68-F	VERIFY MOUNTING PER	SNI-0-317-26	REPORTABLE. WR E132786
E132789	2 FT	063	716	06/02/86	2-PT-068-716-D	VERIFY MOUNTING PER	SNI-0-317-26	UNKNOWN. TORQUE MOUNTING BOLTS WR
E132790	2 FT	063	716	06/04/86	2-PT-068-716-E	VERIFY MOUNTING PER	SNI-0-317-26	E132788 NOT MPROS REPORTABLE
								UNKNOWN. TORQUED BOLTS. NOT MPROS
								REPORTABLE. WR E132789
								UNKNOWN. TORQUE BOLTS. NOT MPROS
								REPORTABLE. WR E132790

CORRECTIVE ACTION

MR. CAMP O FANC SYG 1007233. DATE	DESCRIPTION	CORRECTIVE ACTION
E132791 2 PT 060	710 06/04/86 2-PT-060-710-F, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN, TORQUE BOLTS, NOT NPROS
E132792 2 PT 060	301 06/03/86 2-PT-060-301-RC PRESSURIZER RELIEF	REPORTABLE, MR E132791
E132793 2 PT 060	3110 06/03/86 2-PT-060-3110-C, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN, TORQUE BOLTS, NOT NPROS
E132794 2 LT 060	3200 06/06/86 2-LT-060-3200-A, VERIFY MOUNTING PER SMI-0-317-26	REPORTABLE, MR E132793
E132795 2 LT 000	3260 06/06/86 2-LT-060-3260-C, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN, TORQUE BOLTS, NOT NPROS
E132796 2 PT 060	3300 06/06/86 2-PT-060-3300-C, VERIFY MOUNTING PER SMI-0-317-26	REPORTABLE, MR E132794
E132797 2 PT 060	3370 06/03/86 2-PT-060-3370-C, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN, TORQUE BOLTS, NOT NPROS
E132798 2 PT 060	3420 06/16/86 2-PT-060-3420-C, VERIFY MOUNTING PER SMI-0-317-26	REPORTABLE, MR E132795
E132951 1 PT 000	5 06/06/86 1-PT-001-5, VERIFY MOUNTING PER SMI-0-317-26	UNKNOWN, TORQUE BOLTS, NOT NPROS
E132952 1 PS 000	1210 06/17/86 1-PS-003-1210-B, VERIFY MOUNTING PER TVA DWG 47M600-85 47M600-293 DET 6 293	REPORTABLE, MR E132796
E132953 1 PS 000	1210 06/17/86 1-PS-003-1210-B, VERIFY MOUNTING PER TVA DWG 47M600-85 47M600-293 DET 6293	UNKNOWN, TORQUE BOLTS, NOT NPROS
E132954 1 PS 000	140 06/17/86 1-PS-003-140-E, VERIFY MOUNTING PER TVA DWG 47M600-228 47M600-86 DET M86	REPORTABLE, MR E132951
E132955 2 PS 000	140 06/17/86 2-PS-003-140-E, VERIFY MOUNTING PER TVA DWG 47M600-228 47M600-86 DET M86	UNKNOWN, VERIFIED MOUNTING, MR E132952
E132956 1 PS 000	150 06/17/86 1-PS-003-150-A, VERIFY MOUNTING PER TVA DWG 47M600-228 47M600-86 DET M86	UNKNOWN, VERIFIED INSTALLATION, MR E132953
E132957 2 PS 000	106 06/17/86 2-PS-003-106-A, VERIFY MOUNTING PER TVA DWG 47M600-228 47M600-86 DET M86	UNKNOWN, VERIFIED MOUNTING, NOT NPROS
E132958 1 PS 000	104 06/17/86 1-PS-003-104-A, VERIFY MOUNTING PER TVA DWG 47M600-228 47M600-86 DET M86	REPORTABLE, MR E132954
E132959 2 PS 000	104 06/17/86 2-PS-003-104-A, VERIFY MOUNTING PER TVA DWG 47M600-228 47M600-86 DET M86	UNKNOWN, VERIFY MOUNTING, MR E132955
E132960 1 PS 000	171 06/17/86 1-PS-003-171-B, VERIFY MOUNTING PER TVA DWG 47M600-228 47M600-86 DET M86	NOT NPROS, REPORTABLE
E132961 0 PS 000	171 06/17/86 0-PS-003-171-E, VERIFY MOUNTING PER TVA DWG 47M600-228 47M600-86 DET M86	UNKNOWN, VERIFIED MOUNTING, NOT NPROS

103 records listed.

MAINTENANCE SUMMARY  
(MECHANICAL)

MECHANICAL MAINTENANCE MONTHLY REPORT FOR JUNE 1986

COMMON

1. Continued work on ERCW pump "RA" to replace the upper pump shaft which had become too rough to allow the shaft sleeve O-Ring to seal. A special maintenance instruction was prepared for this work which is currently on hold pending receipt of a new shaft sleeve.
2. The shaft sleeve and packing ~~were~~ replaced on "PB" ERCW pump.
3. Finalized our maintenance instruction enhancement plan utilizing assistance from four Westinghouse engineers under a personal services contract.
4. The Plant Operating Review Committee approved a maintenance instruction revision adding the maintenance instruction writers guide as well as issuing seventeen new maintenance instructions.
5. Provided fire door training to responsible carpenters, foreman, planners, engineers, engineering aides, and engineering section supervisor on the new fire door, channel calibration of safety inspection system accumulation water level revision, and Physical Security Instruction 13 ("Fire") requirements.
6. Completed rebuilding the "B" turbine building sump pump.
7. Performed a preventive teardown, repair, and reassembly of miscellaneous Crane Chem-pumps to prolong their life.
8. Began investigation for a generic FCR on stress corrosion cracking of B6 bolting in POSI-SEAL Butterfly Valves due to a problem found on an ERCW pump discharge valve.
9. Completed the replacement of the seats on CO<sub>2</sub> pilot valves at the diesel generator building.
10. Replaced a head gasket on "BB" auxiliary control air compressor.
11. Completed the annual inspection of 1BB diesel generator.
12. Provided carpenter support for various walkdowns including unit one snubber nameplate data collection.
13. Replaced a failed rupture disc on "A" boric acid evaporator package.
14. Removed sixteen red rubber gaskets from miscellaneous locations inside containment for degradation evaluation.
15. Seals in the auxiliary building crane gear boxes were replaced.
16. Participated in this radiological emergency plan drill.
17. Completed Surveillance Instruction (SI-149) on damper inspections.

MECHANICAL MAINTENANCE MONTHLY REPORT FOR JUNE 1986

UNIT 1

1. Completed replacement of the boric acid system valves and piping which exhibited signs of stress corrosion cracking.
2. Replaced wire rope on the polar crane small hook.



MECHANICAL MAINTENANCE MONTHLY REPORT FOR JUNE 1986

UNIT 2

1. Began inspecting and repairing the long cycle valves (2-FCV-3-191, 192, 193, 194 and 2-VLV-3-568) due to leak through problems.
2. Reassembled the 2A component cooling water pump after replacing the shaft sleeves.
3. Continued repairing the failed containment isolation valves.
4. Completed workplan 11948 stelliteing the after terry-turbine steam trap internals due to erosion problems.
5. Reinforced the damaged insulation on the reactor head.
6. Completed post sludge-lancing inspections and closed up the steam generators.



COMP

MR. COMP U	FUNC	SYS	ADDRESS	DATE	DESCRIPTION	CORRECTIVE ACTION	
A546226	1	FCU	067	0067	06/02/86	1-FCU-067-0067-B, [X*PRD*], VLV FAILED TO OPEN WHEN THE O/G STARTED DURING PERFORM OF SI 9.2ND TIME THIS HAS HAPPENED IN THE PAST MONTH. VLV WON'T OPEN OR CLOSE FROM CONTROL RM	MATERIAL RESTRAINT TO DAN CHAPMAN 2/4/86
E114836	0	VLV	082	0528-1E2	06/13/86	0-VLV-082-0528-1E2-B, [X*PRD*], VLV DID NOT PASS SI 102 M/A STEP 6.4	WORN SAFETY VLV. INSTALLED NEW RELIEF VLV PERFORMED SI-102 AND RETURNED TO SERVICE
E114837	0	VLV	082	0534-1E2	06/13/86	0-VLV-082-0534-1E2-B, [X*PRD*], VLV DID NOT PASS SI 102/M/A STEP 6.4	WORN SAFETY VLV. INSTALLED NEW SAFETY VLV CHECKED PSI SETTING AND RETURNED TO SERVICE
E117381	2	VLV	032	0367	06/24/86	2-VLV-032-0367-, [X*PRD*], 2 VLV 32 387 FAILED SI 158.1 LEAK RATE TEST.	SEATS SCUFFED AND PLUG INSERT WORN. DISASSEMBLED VLV CLEANED INTERNALS AND LAPPED SEAT. INSTALLED NEW PLUG INSERT RAN SI 158.1 AND RETURNED TO SERVICE
E119388	0	VLV	082	0506-1E1	06/12/86	0-VLV-082-0506-1E1-B, [X*PRD*], 1E1 AIR TANK AND 1E1 SPARE TANK PRESS IND READ THE SAME PRESS. AS THE ALIGNED TANK DROPS IN PRESS THE SPARE TANK PRESS DROPS WITH IT. THE CHECK VLV SEPARATING THE TWO TANKS IS PROBABLY NOT CLOSING OR LEAKING BADLY	DIRTY INTERNALS. DIS ASSEMBLED VLV AND CLEANED INTERNALS RAN SI-7 AND RETURNED TO SERVICE
E125514	2	VLV	003	0568	06/24/86	2-VLV-003-0568-, [X*PRD*], VLV WON'T SEAT OFF	SEAT SCARED. DISASSEMBLED VLV, LAPPED SEAT PERFORMED FUNCTIONAL CHECK AND RETURNED TO SERVICE
E130960	0	VLV	082	0508-1E1	06/13/86	0-VLV-082-0508-1E1-B, [X*PRD*], VLV DID NOT PASS SI 102 M/A STEP 6.4	WORN VLV. INSTALLED NEW VLV PERFORMED FUNCTIONAL TEST AND RETURNED TO SERVICE
E132013	0	COMP	032	0086	06/20/86	0-CMP-032-0086-, AIR IS LEAKING AROUND SHAFT.	WORN INTERNALS. REBUILT COMPRESSOR

8 records listed.

MAINTENANCE SUMMARY  
(MODIFICATIONS)

SUMMARY OF WORK COMPLETED

MODIFICATIONS

JUNE 1986

NUREG 0588

ECN 6231 - Remove Interferences —

The removal of one support and the addition of three supports were completed; however, additional work is anticipated (see ECN 6681).

ECN 6552 - 0588 Solenoids

Functional testing was performed on one valve because of other work in progress on this valve by Maintenance.

ECN 6616 - Damper Fusible Link

Workplan preparation was completed, and it was placed in the approval cycle.

APPENDIX R

ECNs 5435, 6343, and 6344 - Fire Doors

The replacement and repair of the doors and doorframes (ECNs 6343 and 6344) were completed. The installation of weatherstripping continues as resources permit.

ECN 6235 - Reroute Various Cables

This work is complete.

ECN 6311 - Operator Extension on PORV

This work has been completed except for final cycling at startup.

ECN 6315 - Replace Fuses

This work is complete.

ECN 6319 - Fire Protection Piping

This work is complete.

ECN 6642 - Annulus Fire Protection and Sealing Containment Penetrations

This work is complete.

## OTHER ITEMS

### ECN 2783 - Installation of Fifth Diesel

Six electrical-related workplans for the fifth diesel installation have been placed in the workplan closing cycle.

### ECN 5009 - ERCW Piping Changeout From Carbon Steel to Stainless Steel

The workplan for the replacement of isolation valves remains in the approval cycle. Some insulation activities remain incomplete. DNE is revising the USQD. Based upon DNE's analysis, some additional hanger work may be required for the piping replaced on the upper compartment cooler lines inside containment.

### ECNs 5034, 5713, 5743, and 6064 - Various Platforms in Lower Containment

The first trolley was modified by the vendor and found acceptable. The remaining trollies are being prepared for shipment to the vendor for modification. Work will continue when the trollies are returned.

### ECN 5202 - Interface of Fifth Diesel With Other Diesels

This work is no longer scheduled for this time period.

### ECN 5620 - Add Instrumentation for Auxiliary Feedwater Pump

Work is on hold and is not scheduled for this time period.

### ECN 5657 - Installation of MSR Drain Valves

Reinsulation remains incomplete. Caps have been installed on the valve nipples.

### ECNs 5703 - Reinforcement of Block Walls

During the installation of the restraints, some mortar joints were broken. Efforts are underway to repair these joints before the restraints are installed.

### ECN 5724 - CVCS/RHR Supports

Three hangers and two notifications of indication remain incomplete.

### ECN 5914 - Improve Reliability of Steam Dump

This work is complete.

ECNs 5938, 6305, and 6571 - Replace Feedwater Heater and Eroded Pipe

Mechanical Modifications is supporting postmodification testing (PMT) on both units as requested. Insulation work on unit 1 continues. Installation of the monorail on unit 2 continues.

ECN 6057 - Cable Tray Covers

Approximately 240 out of 290 cable tray covers have been remanufactured or replaced.

ECN 6147 - Airlock Packing Nut

Final testing of the airlocks on unit 2 remains incomplete.

ECN 6185 - Offsite Paging System

Because additional versatility is needed, new EPROMs and crystals were ordered. Further work will be required.

ECN 6196 - Pressurizer Hangers and Valves

PMT is incomplete and scheduled for startup.

ECN 6204 - Electrical Penetration Overcurrent Protection

Fuse replacement and fuse block installation are complete. Electrical Modifications is awaiting a procedure change to place the circuits in service.

ECN 6259 - Moisture Separator Reheater Tube Bundle Replacement

Insulation activities are continuing. The decision was made to replace the unit 2 bundles, and work was begun. The moisture separator reheaters were stripped, and three high-pressure bundles were removed. Work is continuing.

ECN 6380 - Replacement of Barton Pressure Transmitters

Preliminary workplan preparation continues.

ECNs 6402 and 6439 - Pressurizer Instrumentation Relocation

All work is complete except seal welding fill tees. This will be completed after Instrument Maintenance completes fill and calibration. A unit 2 instrument was relocated to meet Appendix R separation criteria.

ECN 6417 - Install Alternate Seal Water for Pumps, CDWE

Electrical drawings remain to be issued.

ECNs 6491 and 6534 - ERCW Supports

Drawings were received, and the workplan was written and approved. All hangers for unit 2 (ECN 6534) have been completed. Three hangers remain for unit 1.

ECN 6513 - Support of HVAC Expansion Tank

The workplan was written, approved, and placed in work. Work is continuing.

ECN 6573 - Shutdown Board Alternate Feeder

The workplan is in the approval cycle.

ECN 6599 - Unit 2 Shield Building Anchor Problem

DNE continues to evaluate the action required for small conduit anchors.

ECN 6601 - Removal of EGTS Backdraft Dampers

PMT remains to be completed.

ECN 6606 - Additional Penetration Fuses

The workplan is in the approval cycle.

ECN 6610 - Modify Air Return Fan Supports

Work continues on the unit 2 fans.

ECNs 6631 and 6683 - Scrubber Replacements/Modifications

Preliminary workplan preparation was begun.

ECN 6636 - Replace Cable in Valve Room

The workplan is in writing.

ECN 6648 - Time-Delay CCS Pump

The workplan is in writing.

ECN 6661 - Upgrade of ERCW Piping

The workplan remains in the approval cycle.

ECN 6667 - Delete Torque Switch MOVs

The workplan is in the approval cycle.



ECN 6681 - Supports for ERCW to Upper Compartment Coolers (Annulus)

Preliminary work was started on support design and workplan verification. This is continuing (see ECN 6231).

ECN 6698 - Repull 120-Volt Cables

The workplan is in writing.

ECN 6701 - Modify Foxboro Recorder Latches

Preliminary workplan preparation was started.

Dry Active Waste Building (DCR 1898)

Steel erection of columns and ceiling beams for the building frame has been completed, along with longitudinal purlins. Final alignment has been made of the building frame, and corner fabrications are being installed in preparation for side insulation and sheeting. Major equipment that would create a handling problem once the roof is installed is being set.

Additional Office Buildings (DCR 2260)

Building A office area is complete with the exception of the reconfiguration of the cubicles in accordance with a design revision, installation of power poles to cubicles including electrical and communications, and minor paint touchup.

Electrical room power panels have been received and are in the process of being installed. Potable waterlines and sewer lines are complete. Restroom facilities and lunchroom area are complete pending light and carpet installation.

Building B final drywall plastering is in progress with an expected completion date of July 7, 1986, at which time painting and carpet and cubicle installation will begin.

Additional Office Buildings at Power Operations Training Center

The east building is complete and ready for carpet installation, which is scheduled for July 7, 1986. Although no cubicles are to be installed, power poles will be installed at various locations for electrical and communications. The location design will be issued July 7, 1986.

Final drywall plastering for the west building is in progress along with exterior fire door installation.

Burnout of the potable water system is scheduled for July 11, 1986. Septic tank and drain installation is nearing completion and is due for inspection on July 10, 1986.



### Welding Project

Support was provided to Welding Project personnel as requested.

### Walkdown Field Verification Support

SMI-0-317-27 - Concrete Edge Distance - Complete; DNE continues to evaluate the results.

SMI-0-317-24 - 79-14 Enhancement - 145 unit 2 supports have been inspected and are being evaluated. Approximately 1,100 unit 1 supports have been inspected and are being evaluated. Inspections continue. Approximately 60 additional supports will be added to unit 2. Fourteen unit 2 discrepancies have been identified as requiring fieldwork.

### Alternate Analysis Walkdown

Work is continuing.

### Unit 2 J-Tube Replacement

Work was completed as scheduled.

### SCR Resolution

Many man-hours were spent resolving SCRs.

MODIFICATIONS

<u>ECN</u>	<u>DCR</u>	<u>SYS</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
	19256	031	Replace exiting mallory capacitors in the FCO-31-475&476 with Maxwell Capacitors ITT #104857-AJ	1
L5265	D0741 S	031	Replace doors C-49 & C-50 per PT-522 Ref ECNs 5264 & 5347.	0
L5576	D1377 S	069	Add a double isolation valve on each vent line at the floor level on ele 734 (refueling floor). Connect the vent lines into the plant drain system pressurizer condensate reset.	2
L5591	D0837	317	Redesign control circuits to monitor neutral contracts on all W-2 spring return to center type switches or change to GE SBM switches.	2
L5667	D0674 S	063	Replace existing 1/2" S/S 6000 # socket weld cap with a 1/2" 6000 # threaded lap - SIS hot & cold leg and BIT injection flow orifices.	2
L5794	D1804 S	067	Replace retainer ring of Asim A-516 GR.70 with a retainer ring of 304 stainless steel for 6" 150 lb. Do SI-Seal Butterfly vlv dwg. #17W586-24 MK# SK-6874. Ref TACF 82-2168-6.	1
L5957	D1380	099	Replace the present SI reset timing relay, mfg. agastat - model 2412AE with an on delay/off delay relay. TDls (SSPS time delay).	1
L6209	F2588	363	Install a fire protection blanket around conduits and add pyrocrete to floor hatch for fire protection.	2

# MODIFICATIONS

<u>ECN</u>	<u>DCR</u>	<u>SYS</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
L6529	D0972	000	Seal class 1E devices at their conduit entry with a nuclear qualified seal and reduce the size of conduit opening on other devices with RTV sealant.	
L6549	D0972 S	000	Analyze junction boxes housing class 1E component located inside containment below postulated LOCA flood level and relocate if req.	1
L5169		077	Documentation to revise vlv marker tags to add tag numbers for PDIS 77-403,404, 405. QA chg #350 added unit 2 to WP 8432. Ref AC-449.	2
L6223	F2725 S	003	Repair leaking valves 1-3-524, -526 by injecting Fermonite into the bodies of 1-3-525, 527 filling valves and connecting pipe.	1
L6230	F2734 S	003	Cut and cap the six (6) drain lines involving the removal of valves 3-504,505, 506, 507, 520, 521, 522,523, 524, 525, 526 and 527. (FCR-2734 Cat D)	1
L6690	D2259 S	000	Bolt torque requirement for non high strength bolts in friction type connections for supports. No predecessor ECNs.	2
Not Req	D1967 S	001	Remove the tube lane blocking devices from the steam generators. The low-down pipe blocker assembly shall not be removed.	2

ENVIRONMENTAL QUALIFICATION  
(E.Q.) SUMMARY

Date: 7/1/86

SCR No.	Description	ECN	Engineer	Workplan No.	Estimated Date of Completion		Comments
					U-1	U-2	
EQP 8501	Disconnect 1- and 2-HS-62-61	6524	Peters	11901	C	C	U-2 QIR submitted.
EQP 8502	Replace penetrations 23 and 48	6490	Peters	11801, 11802, 11810, 11811	C	C	Complete QIR submitted.
EQP 8503	Relocate RE-90, 273, -274	6500	Peters	11810, 11811	C	N/A	Complete field verification sheets are in binder. No QIR needed.
EQP 8504	Splice methods not correct	N/A	Stockton	80 MRs	C	C	Complete QIR submitted.
EQP 8505	D. 1.3	N/A	N/A	N/A	N/A	N/A	
EQP 8506	Seal containment isolation valve	6514	Kimsey	11880	C	C	
EQP 8507	Rewire MOV	N/A	Rutledge	11866, 11853	C	C	
EQP 8508	JB weepholes (press)	6523	Alas	11893	C	C	Complete QIR submitted.
EQP 8508R2	JB weepholes	6709	Alas				
EQP 8509R1	Conduit seals	6529	Kimsey	11903, 11904	C	C	
EQP 8509R2	Conduit seals	6615	N/A		N/A	N/A	No field work remaining.
EQP 8510	Disconnect local handswitches	6527	Peters	11901	C	C	
EQP 8511	Submerged JB inside containment	6549	Peters	11901	C	N/A	

Date: 7/1/86

SCR No.	Description	ECN	Engineer	Workplan No.	Estimated Date of Completion		Comments
					U-1	U-2	
EQP 8512R2	Rewire JB	N/A	Amburn	11855, 11856	C	C	All boxes rewired.
EQP 8513	Weep holes (moisture)	6547	Alas	11898	C	C	Complete QIR submitted.
EQP 8513R2	Weep holes (moisture)	6565	Alas	11937	C	C	Complete QIR submitted.
EQP 8514	Motor insulation 74-1, -2	6540	Branham	11906	N/A	C	Complete QIR submitted.
EQP 8515	Replace 2-PDT-30-43	6554	Legg	11912	C	C	
EQP 8516	Replace 2-LT-3-174	N/A	Instrument Maint.	N/A	N/A	C	
EQP 8517	ABGTS humidity control	6578	Gonzalez		N/A	C	
EQP 8518	Submerged cables	6533	Various/6	Various	C	C	
EQP 8519	Tee drains	N/A	Electrical Maint.	N/A	C	C	Complete QIR submitted.
EQP 8520	Expired cables	6553	Gonzalez	11902	C	C	
EQP 8521	Delete TB and rework splices	6550	Stockton	11914, 11915	C	C	
EQP 8521R1	Delete TB and rework splices	6651					
EQP 8522	Rewire local panels	N/A	Stockton	11914, 11915	C	C	
EQP 8522R2	Rewire local panels	N/A	Instrument Maint.	12016	C	1/2	

Date: 7/1/86

SCR No.	Description	ECN	Engineer	Workplan No.	Estimated Date of Completion		# Comments
					U-1	U-2	
EQP 8523	Missing bolts and washers and misplaced brackets	N/A	Stockton	11914, 11915	C	C	
EQP 8524	Change setpoints	6551	Instrument Maint.	11916	C	C	
EQP 8525	Retermenate hydrogen recombiner	N/A (MR)	Electrical Maint.	N/A	C	C	Completed by Electrical Maint.
EQP 8526	Replace FSVs, U-1 1, U-2 11	6552	Mechanical Mods.	11897	C	C	
EQP 8527	Coat TB, U-1 3, U-2 8	N/A (MR)	Stockton	11914, 11915	C	C	
EQP 8528	Solder strain gauge Barton transmitters	IMI	Instrument Maint.	N/A	C	C	QIR submitted 1/24.
EQP 8529	PDT-30-42, -43	6554	Legg	11912	C	C	
EQP 8530	Gasket, Namco L/S	N/A (MR)	Electrical Maint.	N/A	C	C	
EQP 8531	Delete MOV heaters	6544	Rutledge	11866, 11853	C	C	
EQP 8532	Delete L/S 1-, 2-43-201, -202, -207, and -208	6630	Alas		N/A	N/A	No longer an issue.
EQP 8533	Delete dual voltage splice	N/A	Rutledge	11866, 11853	C	C	



Date: 7/1/86

SCR No.	Description	ECN	Engineer	Workplan No.	Estimated Date of Completion		*Comments
					U-1	U-2	
EQP 8534	Resplce valve positioner 3-174 and -175	N/A	Maxwell	MR	C	C	Complete QIR submitted.
EQP 8535	Replace limit switches, U-1 10, U-2 12	6556	Stockton	11927, U-2 11928, U-1	C	C	
EQP 8536	Valve room submergence Cap drains	6561 6632	Mechanical Mods.	11939	C C	C C	
EQP 8536R1	Valve room submergence	6612	Electrical Mods.		C	C	
EQP 8537	Rebuild or replace JB 3078	6579	Amburn		N/A	C	
EQP 8538	Replace capacitors FCO-31-475, -476	N/A	Maxwell	11977	N/A	C	
EQP 8539	Replace capacitors	N/A	Instrument Maint.		C	C	
EQP 8540	Replace pigtails to Target Rock solenoid valves	6649	Peters		7/15	7/15	Workplan in approval cycle.
EQP 8541	Delete Drakes	6582	Branham	11980	C	N/A	
EQP 8542	Replace unqualified cables	6680	Hall		7/30	N/A	Two cables will be replaced in accordance with a new issue.
EQP 8543	Replace JB wire	N/A	Amburn	11855, 11856	C	C	

Date: 7/1/86

SCR No.	Description	ECN	Engineer	Workplan No.	Estimated Date of Completion		Comments
					U-1	U-2	
EQP 8601	Replace 1-, 2-PT-1-2A, -27A; upgrade 2-PT-1-2B, -27B	6588	Eikins	12014	C	7/2	
EQP 8602	Reroute control cables for 1-, 2-FCV-70-87, -89	*****					No longer an issue.
EQP 8603	Replace portion of PP711B	6627	Kimsey		N/A	C	
EQP 8604	Cable IPL3241A not qualified	*****					No longer an issue.
EQP 8605	1-, 2-TS-74-43, -44, -45, -46 not qualified	6589	Branham		C	C	
EQP 8606	Undervoltage concern on feedwater isolation valve brakes	6611 6676	Rutledge		8/15	8/5	Holding for drawings
EQP 8607	Delete TB for 1-, 2-PT-1-2A, -27A	6626	Instrument Maint.	12014	C	7/2	Will work same time as EQP 8601.
EQP 8608	Enable/disable MOV brakes	6621 6622 6665 6686	Rutledge		6/30	6/30	Holding for ECN 6686.
EQP 8609	Replace cable 1V7973B	6618				N/A	EQP is reviewing ECN for technical correctness.
EQP 8611	JB has weephole in top	N/A	Amburn		N/A	C	

Date: 7/1/86

SCR No.	Description	ECN	Engineer	Workplan No.	Estimated Date of Completion		*Comments
					U-1	U-2	
N/A	Move surge suppression network for PORV	5773	Kimsey	11883	C	C	U-2 complete. On U-1, 1-PCV-68-340 in hold. Holding for maintenance to complete.
EEB 8523	Penetration overcurrent	6606	Legg		7/20	7/20	During closure process, it was found that 6 circuits had not been addressed by ECNs. ECN 6606 addresses this.
N/A	Work FCR to delete 1-, 2-PS-3-160A, -160B, -165A, and -165B	5883	Hall		C	C	Need SI-166.
N/A	Replace 1-FI-1-3A, -3B, -10A, -10B, -21A, -21B, -28A, -28B	6347	Instrument Maint.	N/A	C	N/A	Transmitters changed need response test.
NEB 8510	Relocate LT-68-320, PT-68-323, -320	6439	Carrasquillo Peters	Various	C	C	
	Remount 63-71, 68-308	6496	Legg	11865	C	C	
	Replace LS-65-4, -5	6504	Legg	11865	N/A	C	
MEB 8410R3	Replace LS-77-127	6525	Legg	11865	N/A	C	
	Delete brakes FCV-62-61	6521	Branham	11905	C	C	
EEB 8517	Replace pressure transmitter PDT-65-80, -82, -90, and -97	6488	Branham	11931	C	C	
EEB 8631	Raychem splice						

Date: 7/1/86

SCR No.	Description	ECN	Engineer	Workplan No.	Estimated Date of Completion		*Comments
					U-1	U-2	
EQP 8612	Replace zone switches	6669			N/A	C	
EQP 8614	Weepholes in JB	6652			C	C	
EQP 8615	Replace FT-72-13, -34						
EQP 8617	Junction box internal wiring						
EQP 8618	Relocate arc suppression network						
EQP 8619	Valve room submerged cables						
EQP 8620	Relocate steam generator level transmitters						

OFFSITE DOSE CALCULATION MANUAL CHANGES

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#### Description of Change

A typographical error in Table 3.2-1 "Maximum Values for the Lower Limits of Detection (LLD)" is to be corrected. The gross beta LLD value ( $1 \times 10^2$ ) for airborne particulate or gas should be  $1 \times 10^{-2}$ . No model changes are reflected in this change; therefore, no evaluations are necessary.

TABLE 3.2-1

MAXIMUM VALUES FOR THE LOWER LIMITS OF DETECTION (LLD)<sup>a,c</sup>

Analysis (pCi/l)	Water (pCi/l)	Airborne Particulate or Gas (pCi/m <sup>3</sup> )	Fish (pCi/kg,wet)	Milk (pCi/l)	Food Products (pCi/kg,wet)	Sediment (pCi/kg,dry)
gross beta	4	1 X 10 <sup>-2</sup>	N.A.	N.A.	N.A.	N.A.
H-3	2000	N.A.	N.A.	N.A.	N.A.	N.A.
Mn-54	15	N.A.	130	N.A.	N.A.	N.A.
Fe-59	30	N.A.	260	N.A.	N.A.	N.A.
Co-58,60	15	N.A.	130	N.A.	N.A.	N.A.
Zn-65	30	N.A.	260	N.A.	N.A.	N.A.
Zr-95	30	N.A.	N.A.	N.A.	N.A.	N.A.
Nb-95	15	N.A.	N.A.	N.A.	N.A.	N.A.
I-131	1 <sup>b</sup>	7 X 10 <sup>-2</sup>	N.A.	1	60	N.A.
Cs-134	15	5 X 10 <sup>-2</sup>	130	15	60	150
Cs-137	18	6 X 10 <sup>-2</sup>	150	18	80	180
Ba-140	60	N.A.	N.A.	60	N.A.	N.A.
La-140	15	N.A.	N.A.	15	N.A.	N.A.

#### Description of Change

Table 3.1-2 of the SQN ODCM is to be revised by deleting Farm SU, 3.3 miles SSE. This farm is to be deleted because milk samples are no longer available at this location. This change is also reflected in Figure 3.1-6.

#### Evaluation and Justification for Change

The change is necessary to accurately reflect the milk sampling program conducted at SQN.

#### Effect on the Accuracy and Reliability of Dose Calculations and Setpoint Determinations

This change has no effect on the accuracy or reliability of dose calculations or setpoint determinations.

SQN

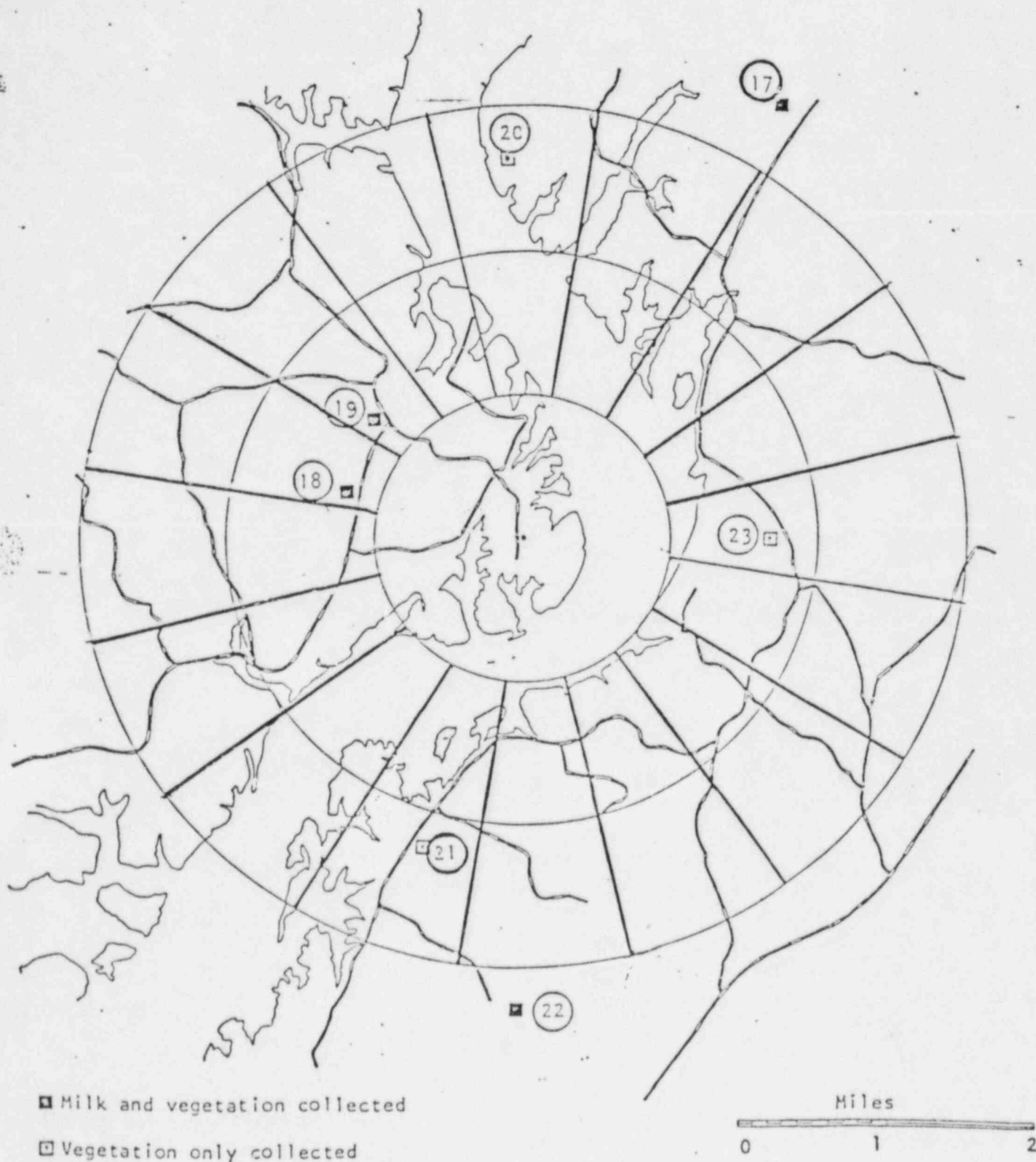
TABLE 3.1-2

ATMOSPHERIC AND TERRESTRIAL MONITORING STATION LOCATIONSSEQUOYAH NUCLEAR PLANT

<u>Reference Number</u>	<u>Sample Station</u>	<u>Location Approximate Distance and Direction from Plant</u>
2	LM-2 SQ	0.8 mile N
3	LM-3 SQ	1.3 miles SSW
4	LM-4 SQ	1.5 miles NE
5	LM-5 SQ	1.7 miles NNE
7	PM-2 SQ (Chester Frost Park)	3.8 miles SW
8	PM-3 SQ (Daisy)	5.6 miles W
9	PM-8 SQ (Harrison)	8.7 miles SSW
10	PM-9 SQ (Lakeside)	2.7 miles WSW
11	RM-1 SQ (Chattanooga, Riverside)	16.7 miles SW
12	RM-2 SQ	17.5 miles NNE
13	RM-3 (Cleveland)	11.3 miles ESE
14	RM-4 (Dunlap)	19.5 miles WNW
17	Farm M	3.5 miles NNE
18	Farm J	1.3 miles NW
19	Farm HW	1.3 miles W
20	Farm EM	2.5 miles N
21	Farm BR	2.3 miles SSW
22	Farm LE	3.5 miles S
23	Farm GO	1.7 miles E
25	Farm B (control)	43.0 miles NE
26	Farm C (control)	16.0 miles NE
27	Farm S (control)	12.0 miles NNE

Figure 3.1-6

MILK AND VEGETATION SAMPLING LOCATIONS



#### Description of Change

Figure 3.1-7 "Milk Sampling Locations" is to be deleted. The milk sampling locations are identified in Figure 3.1-6 with the vegetation sampling locations. All references to Figure 3.1-7 in the text of the ODCM have been changed to Figure 3.1-6. This deletion removes redundant information from the SQN ODCM and has no effect on the methodology or sampling program outlined in the manual.

#### Evaluation and Justification of Change

The change will remove redundant information concerning milk sampling locations.

#### Effect on the Accuracy and Reliability of Dose Calculations and Setpoint Determinations

"  
This change has no effect on the accuracy or reliability of dose calculations or setpoint determinations.



Figure 3.1-7  
Milk Sampling Locations

Figure 3.1-7 Deleted by  
Revision 14

#### Description of Change

The word "land" is to be inserted in the phrase ". . . nearest site boundary . . ." to clarify the location descriptor as ". . . nearest land site boundary . . ." on pages 2, 5, and 13. No model changes are reflected in this change; therefore, no evaluations are necessary.

7. Raw meteorological data consist of wind speed and direction measurements at 10m and temperature measurements at 9m and 46m.
8. Dose is to be evaluated at the offsite exposure point where maximum concentrations are expected to exist.
9. Potential maximum-exposure points considered are the nearest land site boundary points (Table 1.4) in each sector. | 14
10. A semi-infinite cloud model is used.
11. No credit is taken for shielding by residence.
12. Plume depletion and radioactive decay are considered.
13. Building wake effects on effluent dispersion are considered.
14. A sector-average dispersion equation is used.
15. The wind speed classes that are used are as follows:

<u>Number</u>	<u>Range (m/s)</u>	<u>Midpoint (m/s)</u>
1	<0.3	0.13
2	0.3-0.6	0.45
3	0.7-1.5	1.10
4	1.6-2.4	1.99
5	2.5-3.3	2.88
6	3.4-5.5	4.45
7	5.6-8.2	6.91
8	8.3-10.9	9.59
9	>10.9	10.95

16. The stability classes that will be used are the standard A through G classifications. The stability classes 1-7 will correspond to A=1, B=2, ..., G=7.
17. Terrain effects are not considered.
18. Environmental transfer data is consistent with NUREG/CR-1004.

#### Equations

To calculate the dose for any one of the 16 potential maximum-exposure points, the following equations are used.

For determining the air concentration of any radionuclide:

10. Potential maximum exposure points considered are the nearest land site boundary points (Table 1.4) in each sector. | 14
11. Terrain effects are not considered.
12. Building wake effects on effluent dispersion are considered.
13. Plume depletion and radioactive decay are considered for air-concentration calculations.
14. Radioactive decay is considered for ground-concentration calculations.
15. Deposition is calculated based on the curves given in Figure 1.2.
16. A milk cow obtains 100 percent of her food from pasture grass.
17. No credit is taken for shielding by residence.

#### Equations

To calculate the dose for any one of the potential maximum-exposure points, the following equations are used:

##### 1. Inhalation

Equation for calculating air concentration,  $X$ , is the same as in the Noble Gas Section, 1.1.1.A.

For determining the thyroid dose rate:

$$D_{THI} = 1 \times 10^{-6} \sum_i X_i DFI_i \quad (1.4) \quad | \quad 3$$

where:

$D_{THI}$  = thyroid dose rate due to inhalation, mrem/y.

$X_i$  = air concentration of radionuclide  $i$ ,  $\mu\text{Ci}/\text{m}^3$ .

$DFI_i$  = infant inhalation dose factor, mrem/yr per  $\mu\text{Ci}/\text{cm}^3$ , (Table 1.7). | 1

$1 \times 10^{-6}$  =  $\text{m}^3/\text{cm}^3$  conversion factor.

## Step 2

This methodology is to be used if the calculations in Step 1 yield doses that exceed 50 percent of the applicable limits.

| 13

Equations and assumptions for calculating doses to air from releases of noble gases are as follows:

### Assumptions

1. Doses to be calculated are gamma and beta air doses.
2. Dose is to be evaluated at the nearest land site boundary point in each sector.
3. Historical onsite meteorological data from the period 1972-1975 will be used.
4. All measured radionuclide releases are considered.
5. A semi-infinite cloud model is used.
6. Radioactive decay is considered.
7. Building wake effects on effluent dispersion are considered.
8. Dose factors are calculated using data from TVA's radionuclide library.

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### Equations

Equations for calculating air concentration,  $X$ , is the same as in Section 1.1.1, step 1, part A. Air concentrations are calculated for the site boundary in each sector.

For determining the gamma dose to air

$$D_{\gamma n} = t_m \sum_i X_{ni} DF_{\gamma i} \quad (1.16)$$

where:

$D_{\gamma n}$  = gamma dose to air for sector  $n$ , mrad.

$X_{ni}$  = air concentration of radionuclide  $i$  in sector  $n$ ,  $\mu\text{Ci}/\text{m}^3$

$DF_{\gamma i}$  = gamma-to-air dose factor for radionuclide  $i$ , mrad/hr per  $\mu\text{Ci}/\text{m}^3$  (Table 1.5).

$t_m$  = time period considered, yr

#### Description of Change

ODCM page 10 under Step 2 has been revised to include methodology for Release Mix specific setpoint determination.

#### Evlauation and Justification for Change

This addition is needed in the ODCM to illustrate how setpoints (gaseous) are determined for releases of a known nuclide mixture. Methodologies are given for determining setpoints from the RETS dose rate limits or from the 10 CFR 50.73 concentration limits for reporting.

#### Effect of Change on Release Rate Limits or Calculated Doses

These changes will not affect calculated doses. Changes in gaseous release rate limits calculations have been documented in the memorandum from E. A. Belvin to H. L. Abercrombie, dated October 30, 1985 (L61 851030 800).

### Step 2a (Initial Setpoints)

The dose rate limits of interest (Specification 3.11.2.1) are:

Total Body = 500 mrem/yr  
Skin = 3000 mrem/yr  
Maximum Organ = 1500 mrem/yr

For the determination of initial setpoints, the above limits are divided by the appropriate dose calculated in step 1 yielding,

$$\frac{\text{Dose limit}}{\text{Dose step 1}} = R$$

This ratio, R, represents how far above or below the guidelines this step 1 calculation was. Multiplying the original source term by R will give release rates that should correspond to the dose limits given above.

Appropriate release rate limits in  $\mu\text{Ci/sec}$  for each nuclide and release point will be provided to plant personnel for use in establishing monitor setpoints. The setpoint for each gaseous effluent monitor will be established using plant instructions.

The general equation used by plant personnel in establishing setpoints in cpm from release rate limits in  $\mu\text{Ci/sec}$  is as follows:

$$C = \frac{Q \times e \times s \times 60}{V \times 28320}$$

where:

C = monitor setpoint, cpm  
Q = release rate limit,  $\mu\text{Ci/sec}$   
e = detector efficiency,  $\text{cpm}/\mu\text{Ci/cc}$   
s = safety factor; 0.2 for systems without automatic isolation; 0.5 for systems with automatic isolation  
60 = sec/min  
28320 =  $\text{cc}/\text{ft}^3$   
V = flow rate past the detector, cfm

### Step 2b (Release Mix Specific Setpoints)

When release mixes are known, setpoints are based on the dose methodology given in Step 1, disregarding the design source term mix. Using a normalized source term ( $q_i$ ) for each nuclide, nuclide specific dose rates ( $D_i$ ) are determined independently for each nuclide using Step 1 methodology. Dividing the appropriate dose rate limit above by the nuclide specific dose rate,  $D_i$ , yields.

$$\frac{\text{Dose rate limit}}{D_i} = r_i$$

This ratio,  $r_i$  represents how far above or below the guidelines the nuclide specific dose rate ( $D_i$ ) is. Multiplying the normalized source term ( $q_i$ ) by  $r_i$  will give the maximum allowable release rate  $R_i$  for nuclide i.



$R_i$  for each nuclide is also calculated by an alternative methodology using the reporting requirements of 10 CFR 50.73 (2 times the 10 CFR 20 Appendix B, Table II air concentrations). Release rate limits,  $R_i$  for each nuclide are calculated using this methodology as given below:

$$\begin{aligned} R_i &= (2)(MPC_i)(5.12 \times 10^{-6})(10^{-6}) \\ &= 1.02 \times 10^{-11} MPC_i \end{aligned}$$

where

$MPC_i$  = the 10 CFR 20, Appendix B, Table II, air concentration,  $\mu\text{Ci/cc}$ .  
 $5.12 \times 10^{-6}$  = worst land site boundary X/Q,  $\text{s/m}^3$  (Table 1.4).  
 $10^{-6}$  = conversion factor,  $\text{m}^3/\text{cc}$ .

The release rate limit,  $R_i$ , for each nuclide will be the most restrictive one calculated using both methodologies.

For a known mixture of  $n$  nuclides the release rates must be such that:

$$\sum_{i=1}^n \frac{Q_i}{R_i} < 1$$

Appropriate release rate limits in  $\mu\text{Ci/s}$  for each nuclide and release point will be provided to plant personnel for use in establishing monitor setpoints. The setpoint in counts per minute for each gaseous effluent monitor will be established using plant instructions. The general equation used by plant personnel in establishing setpoints in cpm from release rate limits in  $\mu\text{Ci/sec}$  is the same as that used in Step 2a.

## 1.2 Monthly Dose Calculations

Dose calculations will be performed monthly to determine compliance with specifications 3.11.2.2 and 3.11.2.3. These specifications require that the dose rate in unrestricted areas due to gaseous effluents from each reactor at the site shall be limited to the following:

For noble gases,

1. During any calendar quarter, 5 mrad to air for gamma radiation and 10 mrad to air for beta radiation.
2. During any calendar year, 10 mrad to air for gamma radiation and 20 mrad to air for beta radiation.

For iodines and particulates,

1. During any calendar quarter, 7.5 mrem to any organ.
2. During any calendar year, 15 mrem to any organ.

H. L. Abercrombie, Site Director, NUC PR, Sequoyah Nuclear Plant  
E. A. Belvin, Manager, Radiological Health, 401 UBB-C

OCT 30 1985

SEQUOYAH NUCLEAR PLANT - GASEOUS RELEASE RATE LIMITS

- References:
1. Memorandum from G. F. Stone to H. J. Green, "Sequoyah Nuclear Plant - Revision of Acceptance Criteria for Sequoyah Nuclear Plant Gaseous Releases," dated March 11, 1981 (L00 810313 228)
  2. Memorandum from E. A. Belvin to H. J. Green, "Sequoyah Nuclear Plant Environmental Technical Specifications," dated November 1, 1982 (L00 821104 763)

Radiological Health Technical Assistance Section has revised the nuclide specific gaseous release rate limits for Sequoyah Nuclear Plant (SQN). These updated release rate limits (attached) are mix independent and are based on the dose rate limits given in Radiological Effluent Technical Specification (RETS) 3.11.2.1.

The revised release rate limits, which are the result of revisions to the Gaseous Effluent Licensing Code (GELC), are intended to supersede the limits given in reference 1. Gaseous release rate limits for initial trip/set-point determinations have been previously provided (reference 2) and are based on the GELC revisions.

A comparison of the revised release rate limits with those contained in reference 1 indicates that the limits for noble gases have not been significantly affected, except for the short-lived Kr-89 and Xe-137. Limits for these two nuclides decreased by about a factor of 3.5. Release rate limits for particulates are generally lower by a factor of 1 to 11. However, the revised limits for iodines are higher by a factor of 1 to 5.

In addition, mix independent release rate limits have been determined based on the reporting requirements of 10 CFR 50.73 (2 times the 10 CFR 20 Appendix B, Table II concentrations in unrestricted areas). These limits are also included in the attachments. In general, the 10 CFR 50.73 release rate limits for noble gases are more restrictive than the RETS limits by a factor of about 1 to 5.6, except for Xe-137. Its 10 CFR 50.73 limit is more restrictive by a factor of about 27. Further, the 10 CFR 50.73 limits for iodines and particulates are, in general, significantly less restrictive than the RETS limits. Exceptions are Br-84, Br-85, Rb-88, and Pr-144.

2

H. L. Abercrombie

SEQUOYAH NUCLEAR PLANT - GASEOUS RELEASE RATE LIMITS

It should be noted that the 10 CFR 50.73 release rate limits are not instantaneous limits as are the RETS limits. The 10 CFR 50.73 limits are limits for reportable events and are to be averaged over a one-hour time period.

If we can be of further assistance, please let me know. Any questions may be directed to Regis Nicoll at extension 2532, Chattanooga.

---

E. A. Belvin

RMN:LAS

Attachments

cc (Attachments):

NUC PR RIMS, 1520 CST2-C

Don Amos, NUC PR, Sequoyah

RARC Files (c/o B. M. Eiford, 401 UBB-C)

bc (Attachments):

C. E. Kent, 401 UBB-C

ATTACHMENT 1

SEQUOYAH NUCLEAR PLANT - NOBLE GAS RELEASE RATE LIMITS

<u>Nuclide</u>	<u>RETS</u> <u>Limit (μCi/s)</u>	<u>10CFR20</u> <u>MPC</u> <u>(μCi/cc)</u>	<u>10CFR50.73</u> <u>Limit*</u> <u>(μCi/s)</u>
Ar-41	1.3 (+4)		
Kr-85m	8.7 (+4)	4(-8)	1.6 (+4)
Kr-85	4.3 (+5)	1(-7)	3.9 (+4)
Kr-87	2.0 (+4)	3(-7)	1.2 (+5)
Kr-88	7.2 (+3)	2(-8)	7.8 (+3)
Kr-89	6.2 (+4)	2(-8)	7.8 (+3)
Xe-131m	9.0 (+5)	3(-8)	1.2 (+4)
Xe-133m	3.9 (+5)	4(-7)	1.6 (+5)
Xe-133	3.3 (+5)	3(-7)	1.2 (+5)
Xe-135m	4.1 (+4)	3(-7)	1.2 (+5)
Xe-135	5.2 (+4)	3(-8)	1.2 (+4)
Xe-137	3.2 (+5)	1(-7)	3.9 (+4)
Xe-138	2.1 (+4)	3(-8)	1.2 (+4)
		3(-8)	1.2 (+4)

\*Limit (μCi/s) =  $2 \times \text{MPC } (\mu\text{Ci/cc}) / [5.12 \times 10^{-6} \text{ s/m}^3] [10^{-6} \text{ m}^3/\text{cc}]$

Where  $5.12 \times 10^{-6} \text{ s/m}^3$  = worst site boundary X/Q listed in the SQN - ODCM.

ATTACHMENT 2

SEQUOYAH NUCLEAR PLANT - IODINE/PARTICULATE RELEASE RATE LIMITS

<u>Nuclide</u>	<u>RETS Limit (μCi/s)</u>	<u>10CFR20 MPC (μCi/cc)</u>	<u>10CFR50.73 Limit* (μCi/s)</u>
H-3	3.3 (+4)		
C-14	4.0 (+1)	2(-7)	
Na-24	1.1 (+3)	1(-7)	7.8 (+4)
Cr-51	1.4 (+3)	5(-9)	3.9 (+4)
Mn-54	1.1 (+1)	8(-8)	2.0 (+3)
Fe-59	1.4 (+1)	1(-9)	3.1 (+4)
Co-58	2.4 (+1)	2(-9)	3.9 (+2)
Co-60	1.7 (+0)	2(-9)	7.8 (+2)
Zn-65	2.9 (+0)	3(-10)	7.8 (+2)
Br-84	5.2 (+5)	2(-9)	1.2 (+2)
Br-85	9.1 (+7)	3(-8)	7.8 (+2)
Rb-88	3.5 (+5)	3(-8)	1.2 (+4)
Sr-89	4.7 (-1)	3(-8)	1.2 (+4)
Sr-90	8.3 (-3)	3(-10)	1.2 (+4)
Sr-91	1.1 (+3)	3(-11)	1.2 (+2)
Y-90	1.7 (+2)	9(-9)	1.2 (+1)
Y-91m	7.8 (+4)	3(-9)	3.5 (+3)
Y-91	5.7 (+0)	6(-7)	1.2 (+3)
Y-93	5.3 (+2)	1(-9)	2.3 (+5)
Zr-95	1.2 (+1)	5(-9)	3.9 (+2)
Nb-95	1.2 (+1)	1(-9)	2.0 (+3)
Mo-99	1.6 (+2)	3(-9)	3.9 (+2)
Tc-99m	3.6 (+4)	7(-9)	1.2 (+3)
Ru-106	3.2 (-1)	5(-7)	2.7 (+3)
Sb-124	7.7 (+0)	2(-10)	2.0 (+5)
Te-132	1.3 (+2)	7(-10)	7.8 (+1)
I-131	1.6 (-1)	4(-9)	2.7 (+2)
MI-131	1.2 (+1)	1(-10)	1.6 (+3)
I-132	1.1 (+3)	1(-10)	3.9 (+1)
MI-132	7.1 (+0)	3(-9)	3.9 (+1)
I-133	5.2 (+1)	3(-9)	1.2 (+3)
MI-133	5.4 (+3)	4(-10)	1.2 (+3)
I-134	5.0 (+3)	4(-10)	1.6 (+2)
MI-134	2.4 (+2)	6(-9)	1.6 (+2)
I-135	2.6 (+2)	6(-9)	2.3 (+3)
MI-135	3.7 (-1)	1(-9)	2.3 (+3)
Cs-134	1.6 (+1)	1(-9)	3.9 (+2)
Cs-136	3.6 (-1)	4(-10)	3.2 (+2)
Cs-137	4.3 (+1)	6(-9)	1.6 (+2)
Ba-140	2.7 (+2)	5(-10)	2.3 (+3)
La-140	3.6 (+1)	1(-9)	2.0 (+2)
Ce-141	9.9 (-1)	4(-9)	3.9 (+2)
Ce-144	6.3 (+1)	5(-9)	1.6 (+3)
Pr-143	7.6 (+4)	2(-10)	2.0 (+3)
Pr-144	8.1 (+2)	6(-9)	7.8 (+1)
Np-239		3(-8)	2.3 (+3)
		2(-8)	1.2 (+4)
			7.8 (+3)

\*Limit (μCi/s) = 2 x MPC (μCi/cc) / [5.12 x 10<sup>-6</sup> s/m<sup>3</sup>] [10<sup>-6</sup> m<sup>3</sup>/cc]

7  
TENNESSEE VALLEY AUTHORITY  
Sequoyah Nuclear Plant  
P. O. Box 2000  
Soddy-Daisy, Tennessee 37379

July 14, 1986

Nuclear Regulatory Commission  
Office of Management Information  
and Program Control  
Washington, DC 20555

Gentlemen:

SEQUOYAH NUCLEAR PLANT - MONTHLY OPERATING REPORT - JUNE 1986

Enclosed is the June 1986 Monthly Operating Report to NRC for Sequoyah Nuclear Plant.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*P. R. Wallace*

P. R. Wallace  
Plant Manager

Enclosure

cc (Enclosure):

Director, Region II  
Nuclear Regulatory Commission  
Office of Inspection and Enforcement  
Suite 3100  
101 Marietta Street  
Atlanta, Georgia 30323 (1 copy)

Director, Office of Inspection  
and Enforcement  
Nuclear Regulatory Commission  
Washington, DC 20555 (10 copies)

Mr. A. Rubio  
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O&PS-2, Sequoyah Nuclear Plant

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