

TENNESSEE VALLEY AUTHORITY

OFFICE OF NUCLEAR POWER
SEQUOYAH NUCLEAR PLANT

MONTHLY OPERATING REPORT
TO THE
NUCLEAR REGULATORY COMMISSION
FEBRUARY 1988

UNIT 1

DOCKET NUMBER 50-327

LICENSE NUMBER DPR-77

UNIT 2

DOCKET NUMBER 50-328

LICENSE NUMBER DPR-79

Submitted by:

S. J. Smith
S. J. Smith, Plant Manager

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OPERATIONAL SUMMARY

PERFORMANCE SUMMARY

February 1988

The following summary describes the significant operational activities for the month of February. 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 921 days. Unit 2 has been off line 922 days. Preparations are underway for unit 2 alignment and power operation.

SIGNIFICANT OPERATIONAL EVENTS

Unit 1

<u>Date</u>	<u>Time</u>	<u>Event</u>
02/01/88	0001E	The reactor was in mode 5. The administrative shutdown due to design control review, configuration control updating, and resolution of significant employee concerns continues.
02/29/88	2400E	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>
02/01/88	0001E	The reactor was in mode 5. The administrative shutdown due to design control review, configuration control updating, and resolution of significant employee concerns continues. Preparations are underway for power operation. RCS at 189 degrees, 360 psi.

Unit 2

<u>Date</u>	<u>Time</u>	<u>Event</u>
02/06/88	0904E	Began heatup.
	1706E	Mode 4.
	1740E	RCS at 206 degrees.
02/07/88	2141E	Received a main steam isolation while attempting to open the main steam isolation valves (MSIVs).
	2355E	Main feedwater isolation occurred when loop No. 4 MSIV was opened.
02/08/88	1600E	RCS at 249 degrees, 470 psi.
02/10/88	0228E	A main steam isolation occurred while performing maintenance on the turbine impulse pressure setpoints.
02/17/88	1616E	Received a cold overpressurization mitigation actuation on pressure-operated relief valve 2-PCV-68-334 from loops No. 3 and No. 4 while attempting to perform an incore thermocouple and resistance temperature device calibration.
02/18/88	0117E	RCS at 320 degrees, 520 psi.
02/21/88	0230E	FCV-68-340 (PORV) opened momentarily while fuses were being replaced.
02/27/88	1310E	Entered mode 3.
	1540E	RCS at 398 degrees, 696 psi.
	2055E	Began heatup to 525 degrees.
02/28/88	1708E	RCS at 530 degrees, 1600 psi.
	1737E	Main steam isolation occurred during maintenance on loops No. 1 and No. 3.
02/29/88	2400E	RCS at 530 degrees, 1800 psi.

FUEL PERFORMANCE

Unit 1

The core average fuel exposure accumulated during February 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 February 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

A "COMS/COPS" actuation occurred while performing maintenance on loops No. 3 and No. 4. This action initiated PORV 2-PCV-68-334 on February 17, 1988.

FCV-68-240 opened momentarily during the replacement of fuses on February 21, 1988.

No safety valves were challenged in February 1988.

SPECIAL REPORTS

The following special reports were submitted to NRC in February 1988.

- 88-02 On January 29, 1988, a fire barrier breaching permit for fire door A-72 exceeded the seven-day limit required by TS LCO 3.7.12. Door A-72 is to the unit 2 B-train CS and RHR heat exchanger room located on elevation 690 of the auxiliary building. This breach was used to facilitate maintenance being performed in the area. A firewatch has been established and will be maintained until the completion of all activities.
- 88-03 On January 22, 1988, DNE issued a CAQR that identified that the suspended cement plaster ceiling in the control building, elevation 732, rooms C-5, -6, -7, and -8, may not provide the 1-1/2 hour fire protection required by the FSAR, section 9.5.1.3. An evaluation was performed; however, the evaluation and any action to verify the ceiling was not performed within seven days. A firewatch was established and will be maintained until the evaluation is complete.

This event was determined on February 4, 1988.

- 87-17 This revision provided the conclusions of an investigation and a
Rev 1 status of corrective actions concerning liquid releases from the condensate & mineralizer waste system directly to the cooling tower blowdown line while effluents exceeded the 31-day total body projected limit.

LICENSEE EVENT REPORT(S)

The following licensee event reports (LERs) were transmitted to the Nuclear Regulatory Commission in February 1988.

<u>LER</u>	<u>Description of Event</u>
1-88003	<p>On January 4, 1988, at approximately 1425 EST, an inadvertent ABI occurred that actuated equipment common to both units during calibration of RM-90-101A (particulate channel) computer log point, which required ramping the output voltage of this channel up through the high radiation setpoint. Since a high radiation signal will initiate an ABI, the RM block switch was pulled to block the channel signal. After the operator noted that all associated equipment actuated as designed, an immediate investigation ensued. No high radiation signals were found on the recorder chart for the other two channels of RM-90-101, nor for RM-90-102 or -103, confirming that no high radiation condition existed. The other initiating sources of an ABI were investigated, but evidence indicated that none of these signals were the cause. Additional troubleshooting was conducted in an effort to simulate the previous occurrence; however, an ABI was not produced until the block switch was almost completely pushed in to the unblocked position. This testing confirmed that the event was not caused by a faulty block switch or the block switch being inadvertently bumped. All known sources of this ABI actuation were investigated; however, a cause could not be determined. No additional corrective action is planned at this time.</p>
1-88004	<p>On January 11, 1988, at approximately 1500 EST, an assessment was initiated to determine the consequences of class 1E cables identified as not being adequately protected from cable insulation auto-ignition temperatures. It had previously been noted during surveillance testing that GE 50-amp type TED breaker had a high rate of failure. The test criteria were reviewed and this resulted in the discovery of two different time-current trip characteristic curves for GE 50-amp type TED circuit breakers. This discovery resulted in a review of the 10 CFR 50, Appendix R, cable and penetration calculations. The calculation review discovered that all the GE 50-amp type TED breakers were assumed to have the same characteristic curve. The calculation was then revised using both curves, as applicable, resulting in the discovery of 24 breakers that did not adequately protect the No. 8 AWG and No. 10 AWG cables from auto-ignition temperatures. The breakers allowing the cables to be susceptible to auto-ignition conditions were installed in unit 1 and unit 2.</p> <p>As immediate corrective action, the breakers identified as being inadequate for auto-ignition protection and which occupied a common enclosure with cables that are part of a shutdown path were replaced. The surveillance test procedures were revised to ensure use of the correct breaker characteristic curves.</p> <p>To address the root cause, a review will be conducted to identify programmatic deficiencies in the transfer of vendor supplied technical information to the implementing design engineer.</p>

Description of Event

LER

1-88005 On January 16, 1988, at approximately 1700 EST, it was discovered that the turbine building sump release line radiation monitor was inappropriately declared operable on January 15, 1988, at 1400 EST, and the TS action statement was exited. At the time of the discovery, units 1 and 2 were in mode 5.

The turbine building sump release line RM was declared inoperable on January 5, 1988, to clean the sample line. The applicable TS action statement was entered and grab samples were required to be taken for total gamma analysis at least once every 12 hours.

On January 11, 1988, a second job was started to repair the RM after it failed its surveillance test. The job was completed and functionally tested satisfactory on January 15. The UO subsequently declared the RM operable and exited the TS action statement.

On January 16, an AUO was dispatched to investigate the cause of an instrument malfunction alarm on the RM. He reported the RM valves were tagged shut due to an HO in support of the sample line cleaning job. The UO realized at that time that the RM was inoperable with this HO in effect and the TS action statement was reentered.

Incorrectly declaring this RM operable resulted in a failure to take grab samples for 25-1/2 hours. The cause of this event is attributed to a cognizant operator error in not properly returning the RM to service in accordance with approved procedures. As corrective action, the procedure used to maintain cognizance of operation status will be covered in week one of the 1988 Operator Requalification Training.

1-88006 On January 27, 1988, at 1005 EST, an inadvertent CVI occurred when an Instrument Maintenance technician, working a WR to resolve a problem identified by surveillance testing on the shield building exhaust system (2-RM-90-100B), mistakenly removed the wrong monitor from service (2-RM-90-106, containment building).

The primary cause of the CVI can be attributed to inattention to detail by the IM. A contributing factor to this event is the ambiguous method of labeling on the RM panel. Personnel have been counseled on this event and the importance of correctly performing work activities and independently verifying that the equipment to be serviced is correct before removal from service. Corrective action to be taken as a result of this review includes relabeling and demarcation of changes to more clearly identify specific radiation monitor modules.

- 1-88007 On January 24, 1988, at 1800 EST, a tour of the refueling floor and discussions with test personnel revealed that the ABSCE was not being maintained within the configuration set during the implementation of TS SR testing, used to determine ABGTS operability.

When TS SR testing was done to ensure the ABGTS can maintain the required negative pressure in the ABSCE, the blast doors (BDs) to unit 1 and unit 2 reactor buildings (RBs) were closed and the containment purge system (CPS) was secured. Opening the BDs will encompass the RB in the ABSCE boundary. When a unit is in mode 5 or mode 6, it is normal to have the BDs open for that unit, and it was possible that the CPS could be in operation. Increasing the ABSCE boundary potentially causes more leakage into the ABSCE. Considering the additional potential leakage, there was no assurance that ABGTS would be able to satisfy TS SR with the increased ABSCE boundary or when the CPS is operating.

The cause of this condition is the lack of adequate controls to ensure the ABSCE boundary is maintained within the condition set by SR testing and an inappropriate design assumption made during plant construction on how breaches would be controlled. As short-term corrective actions, the BDs were closed before unit 2 entered mode 4 on February 6, 1988, the procedures governing ABSCE breaches were revised, and the unit 1 CPS was tagged out of service. Following subsequent leak testing of the unit 1 annulus, the unit 1 BD was reopened. As long-term corrective actions, a programmatic review of the procedures controlling ABSCE breaches will be conducted, and a design change will be implemented to isolate containment purge on an ABI.

- 1-88008 On January 30, 1988, at approximately 1600 EST, it was discovered that the train "B" ERCW effluent line RM was inappropriately declared operable, and the TS action statement was prematurely exited on the previous shift.

The RM was declared operable at approximately 0300 EST on January 30, 1988, without completing the required postmaintenance test. When both channels of the RM are inoperable, the applicable TS action statement requires grab samples to be taken and analyzed for radioactivity at least once every 12 hours. Compliance with this requirement had been maintained until the RM was inappropriately declared operable. It had not been completely tested following maintenance at 1600 EST, and samples were resumed until completion of the test. Approximately 15-1/2 hours had transpired between grab samples.

This event was caused partly by personnel declaring the RM operable without reviewing the associated work request to ensure the test was complete, and partly by not reviewing the test requirements before signing verification that the test was complete. As corrective actions, the TS action statement was reentered and personnel involved were counseled.

- 1-88009 On February 4, 1988, it was determined that SI-137.2, "Reactor Coolant System Water Inventory," did not adequately address the TS requirement for calculating the primary to secondary leak rate in mode 1 when the plant was operating at less than 100 percent power or in modes 2, 3, and 4. LCO 3.4.6.2.c requires that the primary to secondary leak rate be limited to 1 gpm for all S/Gs, and 500 gallons per day for any one S/G. Additional investigation revealed that the full power S/G water volume incorporated into the SI-137.2 mathematical model was also incorrect. A modification that occurred before original startup changed the S/G volume, but the mathematical model was not revised. Because of the incorrect water volume, SI-137.2 underestimated the full power leak rate by approximately 28 percent.

The event was caused by an inadequate instruction for measuring the primary to secondary leak rate. TSs have specific limitations on the primary to secondary leak rate during plant operation in modes 1 through 4. SI-137.2 should have had provisions for measuring the subject leakage during all modes of TS applicability. The cause of the incorrect S/G water volume has been attributed to an inadequate change control process. This prevented the FSAR from being revised to the correct S/G volume value. SI-137.2 has been revised to correct the subject deficiency. Also, the design change control and plant modification procedures have been revised to prevent recurrence of this type of event.

- 1-88501 On January 5, 1988, two similar security events occurred relating to unauthorized individuals in a protected area.

Event One: At approximately 0130 EST, a QA employee on a visitors badge was observed by an NSS officer approaching the entrance to the auxiliary building on elevation 690, which is a protected area (escorted access). The visitor was stopped and placed under control. The escort, a DNE employee, had entered the auxiliary building a few minutes earlier, leaving the visitor outside the auxiliary building unescorted. The NSS officer located the escort and both individuals were escorted out of the protected area. NSS supervisors questioned both individuals, obtained statements, and instructed them in the proper visitor/escort procedures.

Event Two: At approximately 0340 EST, a plant laborer who previously had authorized escorted access to the protected area, requested her protected area visitor badge. The badge had expired at midnight the night before; however, neither the security clerk, who is supposed to check for expired badges at the beginning of each shift, nor the visitor noticed the date on the badge indicated that it had expired. Upon receiving the badge, the visitor under escort key-carded into the protected area entrance card reader, received a red light (indicating stop), and continued into the protected area. The NSS officer stationed at that card reader stated a green light was shown on his monitor. An alarm annunciated in the Central Alarm Station (CAS)/Secondary Alarm

Description of Event

LER

1-88501 Station (SAS) from the protected area entrance card reader that the
(cont.) visitor had just traveled through. An NSS officer was immediately dispatched to the area and found the unauthorized visitor and escort in the area under the control of the NSS officer stationed at that post. The visitor and escort were removed from the protected area. The visitor was counseled by NSS supervisors on badging and key-carding procedures.

These events are applicable to both units, as the entrance area where the events took place is common to units 1 and 2.

1-87039 This revision provided details concerning design errors in the CREVS
Rev. 2 that resulted in a violation of the single failure criteria. It also updated information not included in previous LERs related to recent testing of the CREVs and corrective action.

1-87039 This report provided additional information relating to a dose
Rev. 3 analysis performed to estimate the potential increase in radiological exposure to main control room personnel if a design basis accident had occurred before the corrective actions described therein were implemented.

1-87040 This revision provided details concerning the reactor shield
Rev. 1 building mechanical penetration seals not qualified to ensure compliance with the design basis due to design deficiencies.

1-87041 This revision provided details concerning the reactor shield
Rev. 1 building mechanical penetration seals not being qualified to ensure compliance with the design basis due to design deficiencies.

1-87061 This revision provided additional information relating to previously
Rev. 1 reported 10 CFR 50 Appendix R deficiencies; to update the corrective actions taken by TVA, and to clarify the administrative and engineering controls that are in place to prevent recurrence of this event.

1-87070 This revision provided details of an investigation resulting
Rev. 1 from a D/G voltage regulator that had a slow response during surveillance testing.

1-87070 This revision updates the schedule of the corrective action
Rev. 2 resulting from a diesel generator voltage regulator that had a slowed voltage response during surveillance testing.

1-87074 This revision provided details concerning operating procedures
Rev. 1 that do not adequately address ECCS requirements in mode 4, contrary to the requirements of TSs.

1-87078 This report provided additional information on completed corrective
Rev. 1 actions concerning an inadequate procedure for reactor coolant system chemical addition that resulted in noncompliance with a TS action statement.

Description of Event

LER

- 1-88001 This revision included an additional deficiency found in the SI Rev. 1 scheduling computer program and additional corrective actions.
- 2-88001 On January 12, 1988, TVA received a letter from Stone & Webster Engineering Company which revealed that the lower support frame of the CS heat exchangers 2A and 2B could be overstressed during a design basis seismic event. The letter also revealed that due to close proximity of the RHR heat exchangers to the CS heat exchangers, there existed a potential for physical interaction between the two components during an event. TSs require both RHR loops operable during mode 5; however, the CS heat exchangers are not required operable during mode 5. The root cause of this condition was determined to be that design input control procedures did not exist during initial design to ensure vendor interface review in the generation of maximum design loads of the support frame. Further evaluations of the CS heat exchangers potential interaction with the RHR heat exchangers have concluded that there would be no physical interaction with the RHR heat exchangers. Thus, the RHR heat exchangers would not be damaged as a result of the potential failure of the CS heat exchanger lower supports during a design basis seismic event. A CAQR was issued in March 1987, and modifications to the lower support frame of CS heat exchangers 2A and 2B were completed on January 19, 1988. Preparations for modifications to unit 1 CS heat exchangers lower support frame are currently in process. Modifications will be complete before unit 1 enters mode 4.
- 2-88002 On January 18, 1988, a postperformance review of an IMI revealed that it incorrectly measured the response time of the two valves that open the CCPs suction line to the RWST. During a subsequent search of SQN records, it was discovered that an October 1984 response time measurement was inadequate to verify compliance with the SQN TS for one of the two valves. This event was caused by an inadequate review of a design change that was implemented to modify approximately 65 of the SQN Westinghouse Type W-2 handswitches. This modification connected the red and green valve status lights in series with the neutral (auto) switch contacts to provide plant operators with an immediate visual indication of electrical continuity when the handswitch was in the neutral position. Since the subject IMI obtained the response time of the CCP suction valves by measuring the voltage drop across the green status lights, any change to the electrical wiring configuration of the valve status lights could affect the response time measurement. However, because this modification was not adequately reviewed for its potential effect on SQN procedures, no permanent changes were made to the IMI; thus the October 1984 performance was incorrect. As an immediate corrective action, a permanent change to the IMI to properly measure the valves' response time has been made. In addition, all IMIs used for response time testing of ESF-actuated equipment were reviewed for similar deficiencies. To prevent recurrence of this event, TVA has consolidated the design change control and plant modification processes through the issuance of new nuclear engineering procedures and a revised administrative instruction.

LER

Description of Event

- 2-88003 This LER was submitted as a voluntary report to inform NRC of the degradation found during an inspection of the unit 2 ice condenser.

On January 19, 1988, an inspection of the unit 2 ice condenser revealed that accumulation of ice or frost in the flow passages represented a degraded condition. TS 3.6.5.1 indicates that more than one restricted flow passage per ice condenser bay (there are 24 bays in the ice condenser) is evidence of abnormal degradation of the ice condenser. An SMI was written to determine the extent of degradation in order to justify that SQN met the intent of TS 3.6.5.1. Westinghouse had previously completed a computer analysis which concluded that with 15 percent of the ice condenser flow passages blocked, the containment pressure would be within design limits. The SMI was written with an acceptance criteria of less than 15 percent total flow passage blockage. The SMI was performed, acceptance criteria was met, and the ice condenser was determined to meet the requirements of TS 3.6.5.1.

The cause of the increased ice/frost accumulation has not been determined. Upon completion of an investigation, this LER will be revised to detail the results and corrective action for this condition.

- 2-88004 On January 27, 1988, at approximately 1743 EST, an emergency start of all four emergency D/Gs occurred during surveillance testing.

Performance of the SI required the transfer of the 2A-A 6900V shutdown board from the alternate feeder breaker to the normal feeder breaker from the control room. While attempting to perform this evolution, the normal feeder breaker failed to close while the alternate feeder breaker was open. With both feeder breakers open, the 2A-A 6900V shutdown boards deenergized, resulting in a blackout condition. The UO recognized the blackout condition and immediately closed the alternate feeder breaker before load shedding occurred.

The immediate cause of this event was due to the normal feeder breaker failing to close. The normal feeder breaker did not close because the applicable lockout relay had been damaged. The damage was determined to be caused by a large rolling scaffold assembly found in the area. The lockout relay has been inspected and tested and has been determined to be operable until a replacement relay can be procured and installed. The scaffolding assembly has been removed from the 6900V shutdown board rooms to prevent further damage. To prevent recurrence, rolling scaffolding that can impact installed plant equipment will be equipped with bumpers that will preclude equipment damage when it is necessary to use one in the shutdown board rooms.

- 2-88501 This is a safeguards event.

Description of Event

LER

- 2-87008 This revision provided information relating to a CVI caused by EMI.
Rev. 2
- 2-87009 This revision provided additional information relating to two CVIs
Rev. 1 resulting from EMI.
- 2-87010 This revised LER provided additional information relating to two
Rev. 1 CVIs caused by EMI.

ABBREVIATIONS

1.	ABGTS	-	Auxiliary Building Gas Treatment System
2.	ABSCE	-	Auxiliary Building Secondary Containment Enclosure
3.	ABI	-	Auxiliary Building Isolation
4.	AFW	-	Auxiliary Feedwater
5.	AOI	-	Abnormal Operating Instruction
6.	AUO	-	Assistant Unit Operator
7.	BAT	-	Boric Acid Storage Tank
8.	BIT	-	Boron Injection Tank
9.	CAQR	-	Condition Adverse To Quality Report
10.	CCP	-	Centrifugal Charging Pump
11.	CCW	-	Component Cooling Water
12.	CRI	-	Control Room Isolation
13.	CREVS	-	Control Room Emergency Ventilation System
14.	CSS(CS)	-	Containment Spray System
15.	CVI	-	Containment Ventilation Isolation
16.	D/G(s)	-	Diesel Generator(s)
17.	DCR	-	Design Change Request
18.	DNE	-	Division of Nuclear Engineering
19.	ECCS	-	Emergency Core Cooling System
20.	ECN	-	Engineering Change Notice
21.	EGTS	-	Emergency Gas Treatment System
22.	EMI	-	Electromagnetic Interference
23.	EQ	-	Environmentally Qualified/Environmental Qualification
24.	ERCW	-	Essential Raw Cooling Water
25.	ESF	-	Engineered Safety Feature
26.	FCV	-	Flow Control Valve
27.	FSAR	-	Final Safety Analysis Report
28.	GOI	-	General Operating Instruction
29.	HO	-	Hold Order
30.	IMI	-	Instrument Maintenance Instruction
31.	LCO	-	Limiting Condition for Operation
32.	LO...	-	Loss Of Coolant Accident
33.	MCR	-	Main Control Room
34.	NSS	-	Nuclear Safety Service
35.	NSSS	-	Nuclear Steam Supply System
35.	PORC	-	Plant Operation Review Committee
37.	PRO	-	Potential Reportable Occurrence
38.	RCS	-	Reactor Coolant System
39.	RHR	-	Residual Heat Removal
40.	RM	-	Radiation Monitor (RAD Monitor/RAD MON)
41.	RWST	-	Refueling Water Storage Tank
42.	SCR	-	Significant Condition Report
43.	S/G(s)	-	Steam Generator(s)
44.	SI	-	Surveillance Instruction/or Safety Injection
45.	SMI	-	Special Maintenance Instruction
46.	SOI	-	System Operating Instruction
47.	SQN	-	Sequoyah Nuclear Plant
48.	SR	-	Surveillance Requirement
49.	SSPS	-	Solid State Protection System
50.	TACF	-	Temporary Alteration Control Form
51.	TI	-	Technical Instruction
52.	TS(s)	-	Technical Specification(s)
53.	UO	-	Unit Operator
54.	WP	-	Workplan
55.	WR	-	Work Request

OFFSITE DOSE CALCULATION MANUAL CHANGES

No changes were made to the Sequoyah Offsite Dose Calculation Manual (CDCM) in February 1988.

Correction: A change (revision 18) to the Offsite Dose Calculation Manual was made in January 1988. A copy of that revision is found in section IV of this report.

OPERATING STATISTICS
(NRC REPORTS)

DOCKET NO. 50-327
DATE MARCH 8, 1988
COMPLETED BY D.C. DUPREE
TELEPHONE (615)870-6722

OPERATING STATUS

1. UNIT NAME: SEQUOYAH NUCLEAR PLANT, UNIT 1
2. REPORT PERIOD: FEBRUARY 1988
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	696.00	1440.00	58441.00
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	23781.13
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)	-9853.00	-14586.00	24839737.00
19. UNIT SERVICE FACTOR	0.00	0.00	40.69
20. UNIT AVAILABILITY FACTOR	0.00	0.00	40.69
21. UNIT CAPACITY FACTOR(USING MDC NET)	0.00	0.00	37.02
22. UNIT CAPACITY FACTOR(USING DER NET)	0.00	0.00	37.02
23. UNIT FORCED OUTAGE RATE	100.00	100.00	51.95
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 : MARCH 05, 1988
COMPLETED BY : D.C.DUPREE
TELEPHONE : (615)870-6722

MONTH: FEBRUARY 1988

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		

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-327

UNIT NAME Sequoyah One

DATE March 2, 1988

COMPLETED BY D. C. Dupree

TELEPHONE (615) 870-6722

REPORT MONTH FEBRUARY 1988

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
1	880101	F	696	F	4				Design Control, Configuration Updating, and Employee Concerns.

¹F: Forced
S: Scheduled

²Reason:
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)

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

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

⁵Exhibit I-Same Source

DOCKET NO. 50-328
DATE MARCH 8, 1988
COMPLETED BY D.C. DUPREE
TELEPHONE (615) 870-6722

OPERATING STATUS

1. UNIT NAME: SEQUOYAH NUCLEAR PLANT, UNIT 2
2. REPORT PERIOD: FEBRUARY 1988
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	696.00	1440.00	50401.00
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	21494.22
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)	-13176.00	-20594.00	22487551.60
19. UNIT SERVICE FACTOR	0.00	0.00	42.65
20. UNIT AVAILABILITY FACTOR	0.00	0.00	42.65
21. UNIT CAPACITY FACTOR (USING MDC NET)	0.00	0.00	38.87
22. UNIT CAPACITY FACTOR (USING DER NET)	0.00	0.00	38.87
23. UNIT FORCED OUTAGE RATE	100.00	100.00	52.76
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 IS MARCH 1988.			

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 : MARCH 05, 1988
COMPLETED BY : D.C. DUPREE
TELEPHONE : (615) 870-6722

MONTH: FEBRUARY 1988

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		

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH FEBRUARY 1988DOCKET NO. 50-328UNIT NAME Sequoyah TwoDATE March 2, 1988COMPLETED BY D. C. DupreeTELEPHONE (615) 870-6722

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
1	880101	F	696	F	4				Design Control, Configuration Updating, and Employee Concerns.

¹F: Forced
S: Scheduled

²Reason:
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)

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

⁴Exhibit G-Instructions
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Event Report (LER) File
(NUREG-0161)

⁵Exhibit I-Same Source

OPERATING STATISTICS
(TVA REPORTS)

NUCLEAR PLANT OPERATING STATISTICS

SEQUOYAH NUCLEAR

Plant

Period Hours 696Month FEBRUARY 19 88

	Item No.	Unit No.	UNIT ONE	UNIT TWO	PLANT	
Generation	1	Average Hourly Gross Load, kW	0	0	0	
	2	Maximum Hour Net Generation, MWh	0	0	0	
	3	Core Thermal Energy Gen, GWD (t) ²	0	0	0	
	4	Steam Gen. Thermal Energy Gen., GWD (t) ²	0	0	0	
	5	Gross Electrical Gen., MWh	0	0	0	
	6	Station Use, MWh	9,853	13,176	23,029	
	7	Net Electrical Gen., MWh	-9,853	-13,176	-23,029	
	8	Station Use, Percent	N/A	N/A	N/A	
	9	Accum. Core Avg. Exposure, MWD/Ton ¹	0	0	0	
	10	CTEG This Month, 10 ⁶ BTU	0	0	0	
	11	SGTEG This Month, 10 ⁶ BTU	0	0	0	
	12					
Factors & Use	13	Hours Reactor Was Critical	0.0	0.0	0.0	
	14	Unit Use, Hours-Min.	0:00	0:00	0:00	
	15	Capacity Factor, Percent	0.0	0.0	0.0	
	16	Turbine Avail. Factor, Percent	0.0	0.0	0.0	
	17	Generator Avail. Factor, Percent	0.0	0.0	0.0	
	18	Turbogen. Avail. Factor, Percent	0.0	0.0	0.0	
	19	Reactor Avail. Factor, Percent	0.0	0.0	0.0	
	20	Unit Avail. Factor, Percent	0.0	0.0	0.0	
	21	Turbine Startups	0	0	0	
	22	Reactor Cold Startups	0	0	0	
	23					
Efficiency	24	Gross Heat Rate, Btu/kWh	N/A	N/A	N/A	
	25	Net Heat Rate, Btu/kWh	N/A	N/A	N/A	
	26					
	27					
Temp & Press	28	Throttle Pressure, psig	N/A	N/A	N/A	
	29	Throttle Temperature, °F	N/A	N/A	N/A	
	30	Exhaust Pressure, InHg Abs.	N/A	N/A	N/A	
	31	Intake Water Temp., °F	N/A	N/A	N/A	
	32					
Flows	33	Main Feedwater, M lb/hr	N/A	N/A	N/A	
	34					
	35					
	36					
Misc.	37	Full Power Capacity, EFPD	404.86	363.65	768.51	
	38	Accum. Cycle Full Power Days, EFPD	0.0	210.8416	210.8416	
	39	Oil Fired for Generation, Gallons			2,310	
	40	Oil Heating Value, Btu/Gal.			138,000	
	41	Diesel Generation, MWh			35	
	42					
Station Data		Max. Hour Net Gen.		Max. Day Net Gen.		Load Factor, %
		MWh	Time	Date	MWh	
	43	N/A	N/A	N/A	N/A	N/A
Remarks:	1 For BFNP this value is MWD/STU and for SQNP and WBNP this value is MWD/MTU.					
	2(t) indicates Thermal Energy.					

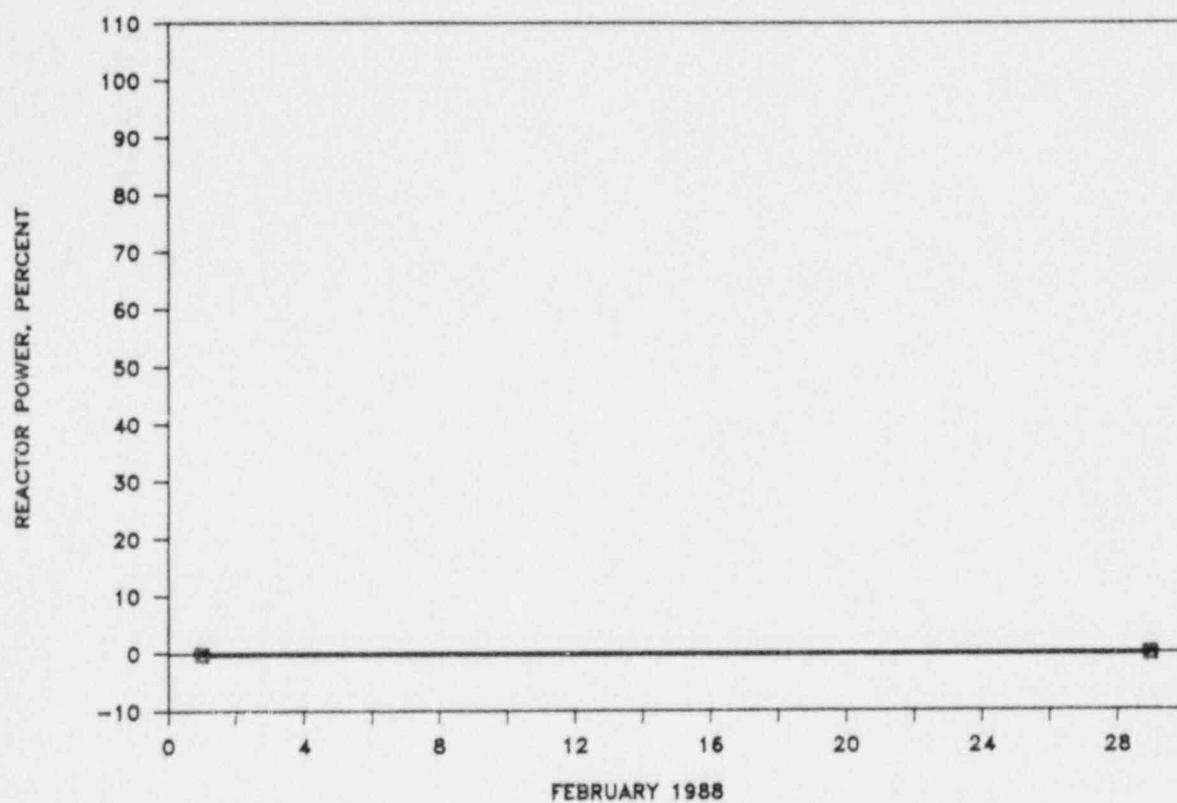
Date Submitted

MAR 14 1988

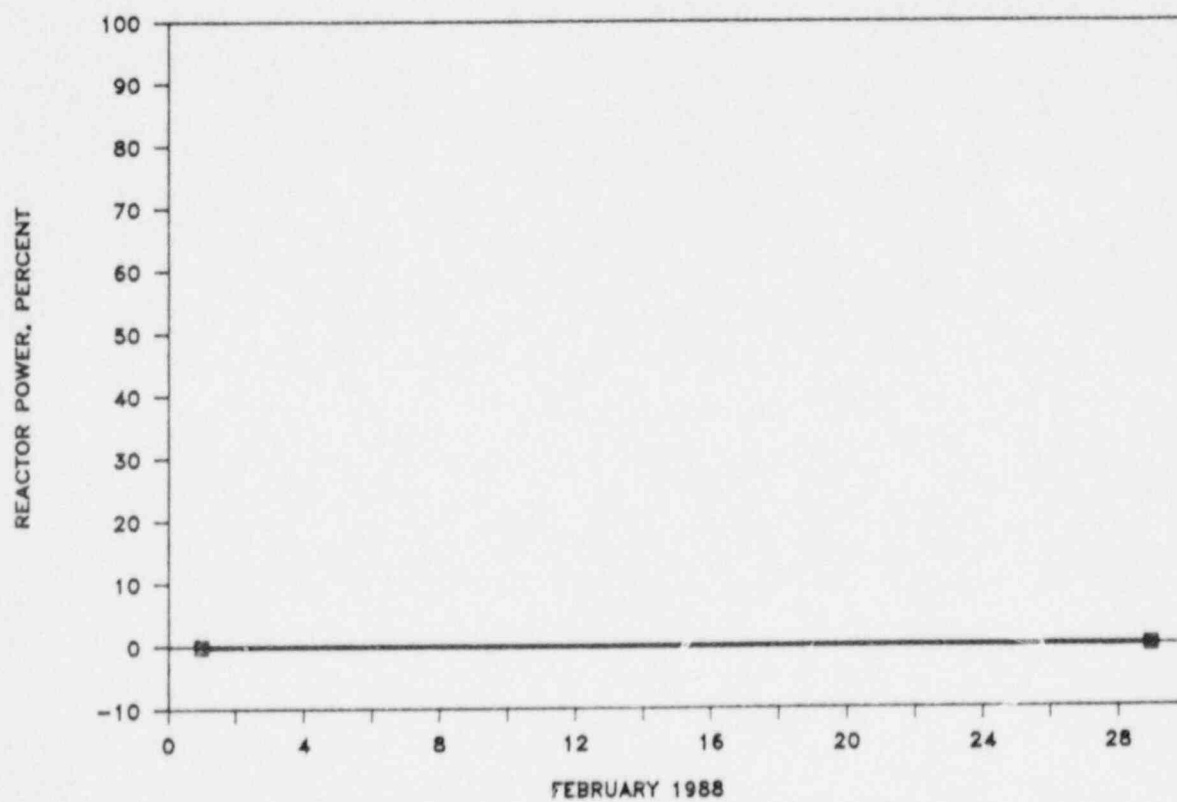
Date Revised

Plant Superintendent

SEQUOYAH ONE REACTOR HISTOGRAM



SEQUOYAH TWO REACTOR HISTOGRAM



UNIT OUTAGE AND AVAILABILITY

SEQUOYAH

Nuclear Plant

Licensed Reactor Power 3,411 MW(th)

Unit No. ONE

Generator Rating 1220.6 MW(e)

Month/Year FEBRUARY 1988

Design Gross Electrical Rating 1,183 MW

Period Hours 696

Period Hours																						
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					Design Control, Configuration Updating, and Employee Concerns	N/A	Mode 5	
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																						
31																						
Total	00	00	00	00			696	00	696	00	696	00	696	00								

UNIT OUTAGE AND AVAILABILITY

SEQUOYAH

Nuclear Plant

Licensed Reactor Power 3,411 MW(th)Unit No. TWOGenerator Rating 1220.6 MW(e)Month/Year FEBRUARY 1988Design Gross Electrical Rating 1,183 MWPeriod Hours 696

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	2	00	00	00	00			24	00	24	00	24	00	24	00					Design Control, Configuration Updating, and Employee Concerns	N/A	Mode 5	
3	4	00	00	00	00			24	00	24	00	24	00	24	00								
5	6	00	00	00	00			24	00	24	00	24	00	24	00								
7	8	00	00	00	00			24	00	24	00	24	00	24	00							Mode 4	
9	10	00	00	00	00			24	00	24	00	24	00	24	00								
11	12	00	00	00	00			24	00	24	00	24	00	24	00								
13	14	00	00	00	00			24	00	24	00	24	00	24	00								
15	16	00	00	00	00			24	00	24	00	24	00	24	00								
17	18	00	00	00	00			24	00	24	00	24	00	24	00								
19	20	00	00	00	00			24	00	24	00	24	00	24	00								
21	22	00	00	00	00			24	00	24	00	24	00	24	00								
23	24	00	00	00	00			24	00	24	00	24	00	24	00								
25	26	00	00	00	00			24	00	24	00	24	00	24	00								
27	28	00	00	00	00			24	00	24	00	24	00	24	00							Mode 3	
29	30	00	00	00	00			24	00	24	00	24	00	24	00								
31																							
Total		00	00	00	00			696	00	696	00	696	00	696	00								

SUMMARY OF MAINTENANCE ACTIVITIES

MAINTENANCE SUMMARY
(ELECTRICAL)

ELECTRICAL MAINTENANCE MONTHLY SUMMARY

COMP

NR2.... U FUNC SYS ADDRESS. DATE.... DESCRIPTION..... CORRECTIVE ACTION.....

B275436	2 TSU 067	0085	11/08/87	2-TSU-067-0085-A, [CHPRD], VALVE WILL NOT FUNCTION PROPERLY. INVESTIGATE AND REPAIR	REPLACED THE CLOSE LIMIT SWITCH (2-2S-067-0085-1A) AND ADJUSTED THE LIMIT SWITCH ARM FOR PROPER LIGHT INDICATION WR B275436
B276251	1 GENB 082	0001	07/27/87	1-GENB-082-0001-A, INVEST THE ROOT CAUSE OF THE FOLLOWING RELAYS OPERATION THAT TRIPPED THE D/G 59N 50 AND 87	"B" PHASE SATURABLE REACTOR TRANSFORMER (T52) HAD A GROUND. "A" PHASE SATURABLE TRANSFORMER (T51) AND "C" PHASE SATURABLE TRANSFORMER (T53) FAILED THE MNT. INSTRUCTION 10.39 LEAKAGE CURRENT TEST. (T51 AT 13 KILOVOLTS AND T53 AT 11 KILOVOLTS). REPLACED SATURABLE REACTOR TRANSFORMERS T51, T52, AND T53. RETESTED TRANSFORMERS AND RETERMINATED CABLES. WR B-276251.
B276344	1 GENB 082	00018	09/01/87	1-GENB-082-00018-B, [CHPRD], THIS ALARM COMES IN WHEN D/G IS IDLING.	ADJUSTED TANDEN EXCITER POTENTIOMETER TO EQUALIZE VOLTAGE. MANUALLY LIFTED THE ACTUATOR LEVER UP TO CLEAR DIFFERENCE ALARM. RETURNED LEVER TO IDLE POSITION PROPER INDICATION WR B276344
B276599	2 INVB 250	RP	12/05/87	2-INVB-250-RP-E, [CHPRD], PER SI-3 THE LIMIT SHOULD BE BETWEEN 60.6 HZ & 59.3 HZ; INVESTIGATE & REPAIR.	CALIBRATED FREQUENCY TO 60HZ AND REINSTALLED METER WR B276599
B279674	2 ZS 001 0181	1	01/31/88	2-ZS-001-0181 1-A, [CHPRD], VLV SHOWING RED AND GREEN LIGHT WHEN OPENED AND CLOSED.	ACTUATOR WAS OUT OF ADJUSTMENT DUE TO LOOSE STEM NUT. STEM ROTATION PROBLEM GENERIC TO THIS TYPE MASONILAM VALVE. TURNED ACTUATOR ON VALVE TO ALIGN WITH LIMIT SWITCH OPERATOR ARM. WR B292232 WAS WRITTEN TO TIGHTEN STEM NUT ON VALVE TO PREVENT STEM FROM TURN
B281311	0 BGS 250	KH	11/24/87	0-BGS-250-KH-G, [CHPRD], THE ANNUNCIATOR 2-XA-55-1026 IS INHISTED. INVESTIGATE AND INPUTS FROM THE BATTERY BOARD. DETERMINED AND ISOLATE CAUSE OF ALARM	GROUND INDICATOR METER LAMP WAS BAD DUE TO NORMAL WEAR. REPLACED INDICATING LAMP IN GROUND METER AND CALIBRATED THE GROUND INDICATING SWITCH. REINSTALLED THE METER AND RELAY AND CHECKED FOR PROPER INDICATION. WR B281311.
B284646	1 ENG 082	161	01/22/88	1-ENG-082-161-, ADJUST THE FRICTION BRAKE TO SLOW THE ENGINE START TO 900 RPM/ADJUST BRAKE FOR O.S. AMP MOTOR OPERATION	ADJUSTED THE MOTOR BRAKE SETTING TO 65 SECONDS. LEFT THE SET POINT AT APPROXIMATELY 9.65 SECONDS 10 SECONDS CURRENT DRAWING LESS THAN OR EQUAL TO 2 AMPS
B284649	1 ENG 082	0001A1	01/04/88	1-ENG-082-0001A1-, [CHPRD], ADJUST THE FRICTION BRAKE TO SLOW THE ENGINE START TO 900 RPM	ERRATIC START TIME DUE TO SPEED SETTING MOTOR BRAKE BEING OUT OF ADJUSTMENT. ADJUSTED BRAKE ON THE SPEED SETTING MOTOR TO ALLOW 0-945 RPM RANGE IN 10.36 SECONDS. WR B284649.
B286494	2 EXRC 202 KE	1301	02/12/88	2-EXRC-202-KE / 1301-A, [CHPRD], C PHASE OVERCURRENT RELAY PICKED UP-86-718 RELAY	THE 86-818 RELAY THRU BOLTS (THOSE FROM FRONT TO BACK) WERE LOOSE AND POSSIBLY,

ELECTRICAL MAINTENANCE MONTHLY SUMMARY

COMP

NR2.... U FUNC SYS ADDRESS. DATE... DESCRIPTION..... CORRECTIVE ACTION.....

		DID NOT TRIP-HANDLE IS BENT. INVESTIGATE RELAY AND DETERMINE WHY RELAY DID NOT OPERATE.	THE CONTACTS WERE DIRTY. NO SPECIFIC CAUSE COULD BE DETERMINED. PERFORMED MAINTENANCE ON 86-818 RELAY. TIGHTENED BOLTS, CHECKED CONTACT RESISTANCE AND CLEANED CONTACTS. RETURNED BREAKER TO SERVICE AND TRANSFERRED FROM ALTERNATE TO NORMAL FEEDER. WR B-285694.
B285860 0 CHGB 250	WK 11/02/87 0-CHGB-250-0K-S, [CHAPROX], BATTERY CHARGE FAILED SI 303 AT 150 AMPS VOLTAGE DROP BELOW 125VDC PROBLEM IN CURRENT LIMITING DEVICE		THE VOLTAGE DROPPED BELOW 125V DC WHEN THE CURRENT WENT FROM 147 AMPS TO 150 AMPS. THE CURRENT LIMITER CONTROLS WERE OUT OF ADJUSTMENT. CLEANED AND LUBRICATED THE FLOAT POTENTIOMETER RESISTOR #3 ON THE AMPLIFIER BOARD. ADJUSTED LIMIT AND BOOSTED TRANSFORMER POTENTIOMETER. VERIFIED PROPER OPERATION OF CHARGER. WR B285860.
B28597 1 GENB 082	0001A 11/12/87 1-GENB-082-0001A-A, [CHAPROX], WIX DURING PERFORMANCE OF SI 26.2A, THE ELECTRIC GOVERNOR ON 1A-A D/G FAILED.		SPEED SETTING POTENTIOMETER WAS DEFECTIVE, POSSIBLY DUE TO BURNED/PITTED CONTACTS. REPLACED POTENTIOMETER WITH ONE TAKEN FROM THE 5TH DIESEL GENERATOR ON WR B285304. SET BASE SPEED AND VERIFIED 0 TO FULL LOAD TIME WAS LESS THAN 60 SECONDS. WR B28597.
B289919 1 MVDP 067	04910 10/19/87 1-MVDP-067-04910-A, [CHAPROX], WIX ULV DOES NOT OPEN WHEN "THROTTLE" PUSH-BUTTON IS DEPRESSED.		THE CONTROL FUSES WERE BLOWN POSSIBLY DUE TO EXCESSIVE OPERATION OR FORCE OF THE PUSHBUTTON. AN OPERATOR REPLACED THE FUSES AND CHECKED FOR PROPER OPERATION. REFERENCE WR B289921 FOR SAME TYPE OF FAILURE ON 1-MVDP-67-491A-A. WR B289919.
B289921 1 MVDP 067	0491A 10/19/87 1-MVDP-067-0491A-A, [CHAPROX], WIX THE ULV DOES NOT OPEN WHEN "THROTTLE" PB IS DEPRESSED.		THE CONTROL FUSES WERE BLOWN POSSIBLY DUE TO EXCESSIVE OPERATION OR FORCE OF THE PUSHBUTTON. AN OPERATOR REPLACED THE FUSES AND CHECKED FOR PROPER OPERATION OF VALVE. REFERENCE WR B289919 FOR SAME TYPE OF FAILURE ON 1-MVDP-67-4910-A. WR B289921.
B292386 2 MVDP 072	0041 01/21/88 2-MVDP-072-0041-B, [CHAPROX], W10CFR30.49X, VALVE FAILED TO OPERATE DURING PERFORMANCE OF SI-166.6.		
B293642 0 BCTB 201	OM /40 12/06/87 0-BCTB-201-OM /40-, [CHAPROX], [REFAKER] FAILED SI 275.1 STEP 7.3.2.1 PRIMARY EJECTION TEST FOR LONG DELAY TIME (OM#1) REPLACE AMPTECTOR		BREAKER AMPTECTOR FAILED THE PRIMARY INJECTION TEST FOR LONG DELAY TIME. REPLACED AMPTECTOR AND PERFORMED SI-275.1 ON THE BREAKER. WR B-293642.
B294320 2 FCV 061	0192 01/06/88 2-FCV-061-0192-, [CHAPROX], W10CFR30.49X, VA LUE LOCAL/REMOTE STROKE TIMES DIFFERED BY MORE THAN 2 SEC. RWP. SER'D.		LOCAL AND REMOTE STROKE TIMES DIFFERED BY MORE THAN 2 SECONDS. THE LIMIT SWITCH ACTUATOR WAS OUT OF ADJUSTMENT DUE TO NORMAL OPERATION. ADJUSTED LIMIT SWITCH

ELECTRICAL MAINTENANCE MONTHLY SUMMARY

COMP

MP2.... U FUNC SYS ADDRESS. DATE.... DESCRIPTION..... CORRECTIVE ACTION.....

ACTUATOR AND STROKE TESTED VALVE. WR
B-296320.

ELECTRICAL MAINTENANCE MONTHLY SUMMARY

COMP

MR2....	U FUNC SYS ADDRESS.	DATE....	DESCRIPTION.....	CORRECTIVE ACTION.....
B251500	1 GENB 082	0001A 10/29/87	1-GENB-082-0001A-A, CXXPRD*, REPLACE ACTUATOR ON ENGINE 1 AND 2	REPLACED ENGINE 1A2 GOVERNOR ACTUATOR. REINSTALLED LINKAGE AND OIL LINES AND REPLACED OIL IN THE ACTUATOR. PERFORMED SPECIAL MAINTENANCE IN SITUATION (SMI) 0-82-6 WR B251500
B285427	0 LS 018	VARIOUS 11/19/87	0-LS-018-VARIOUS-, CXXPRD*, HI LEVEL ALARM (0-LS-18-63B11) IS OPERATING BEFORE THE LEVEL SWITCH (0-LS-18-62B11) WHICH SHUTS DOWN THE PRIMARY PUMP.. THEREFORE WE ARE RECEIVING NUISANCE ALARMS AD DOES NOT MEET INSTRU TAB SET POINT REQUIREMENTS. THIS PROBLEM VERIFIED BY PERFORMANCE OF SMI-0-18-1.	0-LS-018-006B/1-A. THE LEVEL SWITCH HAD INITIALLY BEEN INSTALLED AT AN INCORRECT ELEVATION. REPLACED LEVEL SWITCH AND REPERFORMED SMI-0-18-1. WR B-285427.
B292053	2 GENB 082	0002A 01/20/88	2-GENB-082-0002A-A, CXXPRD*, TP1 RELAY FAILED TO MEET SI-102 E/SA TIME ACCEPTANCE STEP 6.25 REPAIR AS NECESSARY. DM #1 FOR SI 102 E/SA	RELAY PICKUP TIME WAS 5.6 SECONDS. SPECIFIED TOLERANCE SHOULD HAVE BEEN 4.5 TO 5.5 SECONDS. CALIBRATED TIME DELAY RELAY. LEFT TIME DELAY SET AT 4.8 SECONDS. VERIFIED READINGS WERE WITHIN TOLERANCE. WR B-292053.
B293023	2 MVDP 067	0491D 01/21/88	2-MVDP-067-0491D-A, CXXPRD*, BP2*, 2A-A STRAINER FLUSHOUT VALVE WILL NOT OPEN WHEN ITS IN 'ON' OR OPEN POSITION. PLEASE INVESTIGATE & REPAIR.	THE STARTING CAPACITOR WAS BAD POSSIBLY DUE TO AGE. REPLACED THE STARTING CAPACITOR AND CYCLED THE FLUSHOUT AND BACKWASH VALVES. WR B293023.

MAINTENANCE SUMMARY
(INSTRUMENTATION)

INSTRUMENT MAINTENANCE MONTHLY SUMMARY

COMP

MR2.... U FUNC SYS ADDRESS. DATE... DESCRIPTION..... CORRECTIVE ACTION.....

B279953	1 FI	067	0136	02/05/88	1-FI-067-0136-, [XMPD], #10CFR50.49, ERC W FLOW INDICATING 3000 GPM. - WITH BOTH THE INLET, & OUTLET VALVE ISOLATED.	RECALIBRATED TO DESIRED TOLERANCE AND RETURNED TO SERVICE. WR# B279684
B285697	2 FT	072	0034	02/01/88	2-FT-072-0034-A, [XMPD], #10CFR50.49, 2- FI-72-34 INDICATES 1000 GPM WITH NO FLOW. CONTAINMENT SPRAY REQUIRED OPERABLE FOR MODE 4.	CAUSE OF FAILURE: THE INDICATOR WAS OUT OF TOLERANCE LOW ON BOTH THE LOW AND HIGH ENDS OF THE RANGE. THIS MAY HAVE BEEN DUE TO AGING OR NORMAL CYCLING. CORRECTIVE ACTION: THE INDICATOR WAS RECALIBRATED TO DESIRED TOLERANCE AND RETURNED TO SERVICE. WR# B285697
B290949	2 LT	063	0177	12/28/87	2-LT-063-0177-E, [XMPD], #10CFR50.49, WH ILE PERFORMING PM-1653-063 FOUND TRANSMITTER TEST POINT VALVE TO BE OUT OF TOLERANCE. RECAL	THE TRANSMITTER WAS FOUND BELOW DESIRED TOLERANCE THROUGHOUT THE ENTIRE RANGE. THIS MAY HAVE BEEN DUE TO EQUIPMENT DRIFT. THE TRANSMITTER WAS RECALIBRATED. PERFORMED PRESSURE TEST AND RESPONSE TIME TESTING. VERIFIED CAPILLARY FILL ACCEPTABLE AND RETURNED TO SERVICE. WR# B-290949.
B293906	2 FT	068	VARIOUS	01/12/88	2-FT-068-VARIOUS-F, [XMPD], BOTH LOOPS FAILED PMT REQUIRED OF MI-19.1.11. TRANSMITTERS ALSO NEED NEEDLE VALVE IN BLEED PARTS REPLACED 2-FT-68-71B & 71D	2-FT-068-00710-F AND 0071B-E/THE TRANSMITTER WAS FOUND TO BE OUT OF TOLERANCE LOW THROUGHOUT THE ENTIRE RANGE. THIS MAY HAVE BEEN DUE TO NORMAL CYCLING. THE TRANSMITTER WAS RECALIBRATED AND RETURNED TO SERVICE. WR# B-293906.
B298595	2 LT	063	VARIOUS	01/22/88	2-LT-063-VARIOUS-, [XMPD], RWST LT-63-46, 49 DO NOT READ THE SAME.	

INSTRUMENT MAINTENANCE MONTHLY SUMMARY

COMP

MR2.... U FUNC SYS ADDRESS. DATE.... DESCRIPTION..... CORRECTIVE ACTION.....

B249232 2 LT 063	0179 09/23/87 2-LT-063-0179-G, [X10CFR50.44M, XNPRD], RE PLACE THE OIL IN THE CAPILLARY FILLED SYSTEM USE ONLY WESTINGHOUSE PROCESSED OIL.	REPLACED, AND CALIBRATED PER SI-75. VERIFIED OPERATION AND RETURNED TO SERVICE. WR# B247928 THE TRANSMITTER AND BELLWS BOTH WERE FOUND TO BE DEFECTIVE. THIS MAY HAVE BEEN DUE TO EQUIPMENT AGE AND NORMAL WEAR. THE TRANSMITTER AND BELLWS WERE BOTH REPLACED, OIL ADDED, AND FILL CAPS WELDED. THE TRANSMITTER WAS CALIBRATED AND QUANTIFIED MAINTENANCE PERFORMED. THE TRANSMITTER WAS RETURNED TO SERVICE AND POST MAINTENANCE TESTING PERFORMED. WR# B-249232.
B257461 2 PM 068	03348 01/14/88 2-PM-068-03348-E, [XNPRD], READS "10.30MA" OUT PUT WITH "10.00 MA" INPUT (NOTE: LOW LIMIT LOCKUP IS ADJUSTED OUT OF THE WAY)	SOME OF THE MODIFIER TRANSISTORS WERE FOUND TO BE DEFECTIVE. THIS WAS PROBABLY DUE TO NORMAL WEAR. THE TRANSISTORS WERE REPLACED IN THE MODIFIER AND CALIBRATED. THE MODIFIER WAS RETURNED TO SERVICE AND A POST MAINTENANCE TESTING PERFORMED. WR# B-257461.
B264020 2 FT 072	0034 01/21/88 2-FT-072-0034-A, CMP2X, XNPRD, X10CFR50.49 X7.2-FI-72-34 SHOWS 800 GPM WITH NO FLOW PRESENT.	THE MODIFIER WAS FOUND TO BE OUT OF TOLERANCE HIGH IN THE LOW RANGE. THIS WOULD CAUSE THE INDICATOR TO READ INCORRECTLY. THIS MAY HAVE BEEN DUE TO AGING OR NORMAL CYCLING. THE TRANSMITTER WAS EQUALIZED AND THE MODIFIER WAS RECALIBRATED AND WAS RETURNED TO SERVICE. WR# B-264020.
B267209 2 FR 003	0090 02/18/88 2-FR-003-0090-, THE BLUE PEN DOES NOT RIDE DOWN ON THE PAPER AS IT SHOULD	
B279655 2 LT 063	0060 01/29/88 2-LT-063-0060-, [XNPRD], 2-LI-63-82 READING 6% HIGHER THEN 2-LI 63-60 AND ALARM ON HIGH LEVEL CAME IN AT 92% (ALARM STP + 98.%) INVESTIGATE LEVEL DISCREPENCY & ALARM SETTING AND REPAIR AS NECESSARY.	
B279684 2 PI 063	62 02/01/88 2-PI-063-62-, [XNPRD], CALIBRATE 14 ACC. PRESS IND.	CAUSE OF FAILURE: THE TRANSMITTER WAS OUT OF TOLERANCE HIGH THROUGHOUT THE ENTIRE RANGE. THIS MAY HAVE BEEN DUE TO AGING OR NORMAL CYCLING. CORRECTIVE ACTION: THE TRANSMITTER WAS

INSTRUMENT MAINTENANCE MONTHLY SUMMARY

COMP

MR2....	U FUNC SYS ADDRESS.	DATE....	DESCRIPTION.....	CORRECTIVE ACTION.....
0226385	2 LT 063	0178 10/01/87	2-LT-063-0178-F, C&HPRD, #10CFR50.49M, RE PLACE THE FILL FLUID IN THE CAPILIARY SYSTEM USE THE WESTINGHOUSE APPROVED PROCESS REF. SMI-2-63-5	THE TRANSMITTER SENSOR BELLWS WAS FOUND TO BE DEFECTIVE. THIS MAY HAVE BEEN DUE TO NORMAL MECHANICAL WEAR. A NEW SENSOR BELLWS WAS INSTALLED, FILLED WITH APPROVED OIL AND PRECALIBRATED. WELDED FILL CAPS AND PERFORMED CALIBRATION OF TRANSMITTER. PERFORMED RESPONSE TIME TEST. RETURNED BISTABLE TEST SWITCH TO NORMAL. WR# B-226385.
0245131	2 LCV 003	0156A 01/06/88	2-LCV-003-0156A-, C&HPRD, #10CFR50.49M, LCV-3-156 A WILL SUDDENLY CLOSE ~ 1/4"-38" FROM FULL OPEN CAUSING THE FLOW TO DROP FROM ~ 250 GPM TO 150GPM.	THE VALVE POSITIONER MALFUNCTIONED AND WAS DETERMINED THAT IT NEEDED TO BE REPLACED. THIS MAY HAVE BEEN DUE TO NORMAL OR CYCLING WEAR. THE POSITIONER WAS REPLACED AND CALIBRATED. THE VALVE WAS OBSERVED WITH PUMP 2A-A RUNNING. THE INSTRUMENTATION SECTION CHECKED WITH OPERATIONS AND FOUND THAT THEY HAD COMPLETED SURVEILLANCE INSTRUCTION SI-166.6 SUCCESSFULLY AND SIGNED THE WORK REQUEST OFF AS COMPLETED. WR# B-245131.
0247200	2 TM 068	0002E 01/28/88	2-TM-068-0002E-D, C&HPRD, #10CFR50.49M, DURING PERFORMANCE OF SI-90.12 OVERPOWER DELTA T BISTABLE WAS FOUND OUT OF TOLERANCE	
0247355	2 TE 068	0056B 02/01/88	2-TE-068-0056B-F, C&HPRD, #10CFR50.49M, S HIELD IS SHORTED TO CABINET GROUND	IT WAS DETERMINED THAT THE RTD CABLE HAD BEEN CRUSHED CAUSING SHIELD TO BE SHORTED TO GROUND.-THE RTD SHIELD LEAD WAS LIFTED AND MEASURED FROM RTD INNER SHIELD TO GROUND. INSTALLED RAYCHEM ON SHIELD WIRE TERMINAL. RTD WAS TESTED TO VERIFY PROPER OPERATION.
0247927	2 LCV 003	0171 01/21/88	2-LCV-003-0171-B, C&HPRD, #10CFR50.49M, DURING PERFORMANCE OF RT 611B FOUND VALVE TIME RESPONSE TOO LONG.	
0247928	2 LCV 003	0172 01/25/88	2-LCV-003-0172-A, C&HPRD, #10CFR50.49M, DURING PERFORMANCE OF RT611B, VALVE WOULD NOT RESPOND TO TEST SIGNAL. POSSIBLE LIMIT SWITCH PROBLEM.	CAUSE OF FAILURE: THE CONTROLLER WAS FOUND TO HAVE A DEFECTIVE SERVO MOTOR AND ALGORITHM BOARD. THIS MAY HAVE BEEN DUE TO AGING OR NORMAL CYCLING. CORRECTIVE ACTION: THE CONTROLLER'S SERVO MOTOR, ALGORITHM BOARD, AND CABLE ASSEMBLY WERE

INSTRUMENT MAINTENANCE MONTHLY SUMMARY

COMP

MR2.... U FUNC SYS ADDRESS. DATE.... DESCRIPTION..... CORRECTIVE ACTION.....

B247184 2 LT 063 0179 12/15/87 2-LT-063-0179-6, CNXPRDX, #10CFR50.49#J, DU THE TRANSMITTER WAS FOUND OUT OF
RING PERFORMANCE OF PM #1653-063, TEST TOLERANCE LOW AND BORDER LINE LOW
POINT READING WAS OUT OF TOLER. RWP THROUGHOUT THE ENTIRE RANGE. THIS WAS
REQ'D. PROBABLY DUE TO NORMAL WEAR. THE
TRANSMITTER WAS RECALIBRATED AND
RETURNED TO SERVICE. MR# B-247184.-

INSTRUMENT MAINTENANCE MONTHLY REPORT FOR FEBRUARY 1988

COMMON

1. Completed corrective actions for CAQR SQP871408 concerning the preparation of calibration procedures for monitor tank pressure gauges used as compliance instruments.
2. Completed corrective actions for CAQR SQP880080 concerning the failure to initiate a PRO when compliance instrument O-TS-30-156 was found out of calibration.
3. Completed corrective actions for CAQR SQQ871603 concerning the failure to perform a quarterly calibration of portal monitors.

UNIT 2

1. Completed corrective actions for CAQR SQP880121 concerning the replacement of missing covers from the millivolt-to-current modules associated with the RCS hot leg temperature instrumentation.
2. Completed corrective actions for CAQR SQP880091 concerning administrative errors associated with the performance of Special Test Instruction (STI) 108.
3. Completed WP 0066A-01 to revise the diesel generator temperature recorders to provide alarms in both the main and backup control rooms. This work was authorized by DCN X00066A and allowed the closure of SAL 1031.
4. Prepared and completed WP 00150-01 to extend the range of the reactor coolant pump thermal barrier differential pressure transmitters. This work was authorized by DCN X00150C.
5. Provided technical support to the Reactor Engineering Group for performance of SI-488, RCS RTD cross-calibration. During performance of the SI, abnormal lead resistances were measured on several RTDs. One wide range RTD is currently out of service. The problem also occurred on two narrow range RTDs, but was corrected by either switching to the associated spare RTD or by switching to spare lead wires. It is suspected that the problems are caused by bad electrical penetration splices. Further investigation will continue.
6. During the recent heatup from mode 5 to mode 4 on unit 2, the pressurizer loop seal low temperature alarm did not clear as expected. Instrument Maintenance and DNE entered the pressurizer enclosure and determined that the alarms should be in due to the loop seal temperature and because two of the temperature switches were defective. The defective switches were replaced and the magnitude of the current to the heat trace verified to be correct. A Thermon representative verified that the heat trace rating was adequate to obtain the needed heat transfer to the loop seals. It was then determined to trend the heatup of the loop seals as the unit heats up to determine if the alarms will clear. If the alarms do not clear prior to mode 2, an evaluation will have to be made to determine the action required. To date the loops have heated up as the unit heated up, but not enough to clear the alarms. DNE and the Systems Engineering Section are continuing the investigation.

INSTRUMENT MAINTENANCE MONTHLY REPORT FOR FEBRUARY 1988

UNIT 2

7. While Operations was attempting to maintain a constant temperature with the main steam cooldown valves, it was identified that the valves were not fully open when they should have been receiving a full open (25 percent full steam dump) signal from the controller. WR-B257426 was performed to check the calibration of the output indicators of the flow controllers, the stroke of a sample of the eight steam dump valves, and the outputs of the regulators that supply air to the various instruments that control the steam dump/cooldown valves. WR-B263562 was then performed to verify the stroke of the cooldown valves and the operation of the pneumatic controllers that control the four banks of steam dump/cooldown valves. The WR revealed three items of concern.
- A. 2-FCV-1-103D was inoperable since it had no output while the valves were being stroked. The controller was repaired on a WR.
 - B. The stroke for 2-FCV-1-103 was shorter than the 1-3/4 inch desired for full stroke. The stroke was checked on a WR and no problem was found. The problem was then found to be that 2-FCV-1-303 was leaking, thereby not allowing the cooldown valve to receive its full pressure. WR-B256432 was written to replace the controller and correct the stroke problem on the cooldown valve.
 - C. The stroke of the other two cooldown valves (2-FCV-1-107, and -111) was found to be within tolerance for the 25 percent full steam dump signal. However, when the signal was increased (which would normally start opening the second bank of valves), the valves stroked another 7/16 inches.

The extra stroke on the valves is the reason for the valves being identified as not stroking fully open at a 25 percent full dump signal. To prevent confusion in the future, Operations was notified of the overstroke on February 26, 1988, such that a training letter could be issued. Also, WR-B257439 was submitted to fabricate tags/scales for the valves that show the calibrated stroke of the valves (1-3/4 inch) and give an explanation of the extra stroke movement.

MAINTENANCE SUMMARY
(MECHANICAL)

MECHANICAL MAINTENANCE MONTHLY SUMMARY

COMP

MR2....	U FUNC SYS	ADDRESS.	DATE....	DESCRIPTION.....	CORRECTIVE ACTION.....
B215798	2 FCV	043	0250 01/29/88	2-FCV-043-0250-A, [XHPD], 10CFR50.49, VALVE FAILED SI-158.1 LOCAL LEAK RATE TEST. REFERENCE LEAK RATE IS 0.0225 SCFH AND VALVE LEAKED 0.1057 SCFH. RWP REQUIRED.	VALVE NOT SEATING PROPERLY DUE TO BEING DIRTY. REMOVED VALVE FROM LINE, INSTALLED TUBE CAPS ON BOTH SIDES OF TUBING, REMOVED BOWMET SEAL WELD MACHINED VALVE DISC, LAPPED SEAT AND REINSTALLED VALVE. WR# B-215798.
B234139	2 LCV	003	0156 02/06/88	2-LCV-003-0156-A, [XHPD], VALVE DID NOT MEET STROKE TIME PER SI-166	VALVE STEM NEEDED LUBRICATING CAUSED BY BEING DIRTY. DISASSEMBLED VALVE, CLEANED STEM, CAGE AND STUFFING BOX. REINSTALLED STEM AND LUBRICATED, CAGE AND REPACKED. REINSTALLED BOWMET AND TORQUED. REINSTALLED AIR LINES AND LIMIT SWITCHES.
B234144	2 FCV	030	0014 01/29/88	2-FCV-030-0014-A, [XHP2], VALVE FAILED SI 166.1 FOR VALVE STROKE TIME.	VALVE SEEMED TO BE STUCK ON SEAT, DUE TO ACTUATOR SETTINGS. REMOVED ACTUATOR FROM VALVE, VERIFIED ACTUATOR OPERATED SMOOTHLY THROUGH ENTIRE STROKE. REINSTALLED ACTUATOR ON VALVE AND ADJUSTED OPERATOR STOPS. RETURNED TO SERVICE. WR 234144
B239424	1 ULV	067	0582C 01/20/88	1-ULV-067-0582C-A, [XHPD], RELIEF ULV LEAKING THROUGH	RUST AND SCALE ON SEATING SURFACE CAUSED BY EXPOSURE TO RAW WATER. DISASSEMBLED VALVE, CLEANED SEATING SURFACES, LAPPED SEAT, REASSEMBLED AND REINSTALLED VALVE AND CHECKED RELIEF PRESSURE. WR# B-239424.
B247453	2 PMP	062	0108 02/16/88	2-PMP-062-0108-A, [XHPD], 10CFR50.49, A-A CHARGING PUMP SPEED CHANGES OUTBOARD SIDE OIL LEAK AND OIL SMOKE AND ROOM FULL OF OIL VAPOR SUPPORT BAD SEAL AND OR BEARING ON SPEED CHARGER.	THE OIL PUMP PACKING GLAND BOLTS HAD BACKED OUT OF GLAND ALLOWING THE PUMP TO LOOSE SUCTION AND THE SPEED INCREASER BEARING TO GO BAD. - REPLACED SPEED INCREASER, REMOVED SPEED INCREASER LUBE OIL COOLER HEAD AND INSTALLED ON THE NEW SPEED INCREASER LUBE OIL COOLER. PACKED WITH GREASE.
B271795	1 ULV	082	0543-182 02/22/88	1-ULV-082-0543-182-B, [XHP2], VALVE BODY IS LEAKING AIR CAUSING EXCESSIVE STARTS OF AIR COMPRESSOR.	VALVE WORN OUT. -INSTALLED NEW VALVE.
B271796	1 ULV	082	0521-181 02/22/88	1-ULV-082-0521-181-B, [XHP2], VALVE BODY IS LEAKING AIR.	VALVE WORN OUT. -INSTALLED NEW VALVE.
B285235	1 FCV	062	0009 02/22/88	1-FCV-062-0009-, [XHPD], THERE APPEARS TO BE AN AIR LEAK FROM 1-FCV-62-A. THE	DIAPHRAGM BAD. -INSTALLED NEW DIAPHRAGM.

MECHANICAL MAINTENANCE MONTHLY SUMMARY

COMP

MR2.... U FUNC SYS ADDRESS. DATE.... DESCRIPTION..... CORRECTIVE ACTION.....

MR2	U	FUNC	SYS	ADDRESS	DATE	DESCRIPTION	CORRECTIVE ACTION
						VALVE AND REGULATOR ARE ENCLOSED IN A BOX-UNABLE TO DETERMINE EXACT LOCATION W/O ENTRY IN TO ENCLOSURE PLEASE INVESTIGATE AND REPAIR	
B285722	2	FCU	061	0122	02/01/88	2-FCU-061-0122-, [XHPROX], VALVE LEAKING AIR AROUND OPERATOR DIAPHRAGM.	DIAPHRAGM WORN OUT. INSTALLED NEW DIAPHRAGM AND RETURNED VALVE BACK TO SERVICE. WR# B-285722.
B292211	2	FSU	043	0307	02/01/88	2-FSU-043-0307-A, REMOVE COMPLETE VALVE FROM LINE FOR TROUBLESHOOTING REWORK AS NECESSARY. REINSTALL VALVE. RWP REQ'D.	INTERNAL VALVE CLEARANCE ARE NOT SUFFICIENT TO ALLOW FOR RELIABLE VALVE OPERATION. VALVE WOULD NOT STROKE. -OBTAINED NEW VALVE THAT WAS REMOVED WILL BE REWORKED ON WR#B-208150. INSTALLED FOUR REED SWITCHES FROM WATTS BAR AND INSTALLED. THE VALVE THAT WAS REMOVED WILL BE REWORKED ON WR#B208150. INSTALLED FOUR REED SWITCHES.
B292782	2	ULV	068	0538	02/04/88	2-ULV-068-0538-S, [XHPROX], VALVE 2-68-538 LEAKS W/NO PRESSURE	PACKING HAD BEEN ADJUSTED UNTIL THERE WAS NO MORE ADJUSTMENT LEFT. -REPACKED VALVE.
B295169	0	PMP	067	0460	01/28/88	0-PMP-067-0460-, [XHPROX], REPLACE LOWER HEAD PUMP SHAFT. LEAKING BETWEEN SLEEVE & SHAFT.	BAD PACKING BOX DUE TO EXPOSURE TO RAW WATER/REPLACED LOWER HEAD SHAFT AND PACKING BOX. RETURNED PUMP TO SERVICE. (WR#295169)
B298922	2	ULV	070	0676B	11/06/87	2-ULV-070-0676B-A, [XHPROX], REF SOER 86-003 REMOVE BONNET FOR INSPECTION.	DUE TO EXCESSIVE CLEARANCE IN THE HANGER AND DISK, THE DISK RUBBED THE SIDE OF THE VALVE BODY IN TWO LOCATIONS. REPLACED INTERNALS AND REINSTALLED BONNET. VERIFIED NO EXTERNAL LEAKAGE. WR# B-298922.

ELECTRICAL MAINTENANCE MONTHLY SUMMARY

COMP

NR2....	U	FUNC	SYS	ADDRESS	DATE	DESCRIPTION	CORRECTIVE ACTION
B202587	1	FSU	077	0016	03/18/87	1-FSU-077-0016-B, [XPRD], GOING FROM THE CLOSE TO OPEN POSITION BLOWS THE NORMAL CONTROL POWER FUSES BATT BD. II CKT. A24	SEAL-IN RELAY WAS SHORTED CAUSING THE NORMAL CONTROL POWER FUSES TO BLOW WHEN VALVE WENT FROM THE CLOSE TO THE OPEN POSITION. REPLACED THE SEAL-IN RELAY WR B202587.
B209063	2	FSU	001	0029A	09/18/87	2-FSU-001-0029A-A, [XPRD], 100CFR50.494, FOUND 80 HEG VOLT GROUND ON ULV	THE 'SNAP-LOCK' LIMIT SWITCHES (UNDER THE JUNCTION BOX HOUSING THE SOLENOID VALVES) WERE GROUNDED DUE TO WATER IN THE JUNCTION BOX (2-JBOX-991-0401). REPLACED LIMIT SWITCHES 2-ZS-001-0029A/1 AND 2-ZS-001-0029A/2. REPAIRED 2-ZS-001-0029A/3 AND 2-ZS-001-0029A/5 BY REPLACING THE BOOT AND RETAINING RINGS, CAM SPRINGS, WASHER, CAM RETAINING RING AND TOP AND BOTTOM GASKET KITS. REPAIRED 2-ZS-001-0029A/4 BY REPLACING THE BOOT AND RETAINING RING AND THE TOP AND BOTTOM GASKET KITS. ALSO REPLACED THE BOOT, CONTACT BLOCK KIT AND TOP AND BOTTOM GASKET KITS ON 2-ZS-001-0029A/6. WR B209063.
B209825	2	MUDP	074	0024	04/02/87	2-MUDP-074-0024-B, [XPRD], 100CFR50.494, GREASE BROKEN DOWN.	REPLACED TRIPPER ASSEMBLY HYPOID GEAR, TRIPPER CAM, LIMIT SWITCHES TORQUE SWITCH AND GASKET AND SEAL SET. REPLACED GREASE AND PERFORMED MOTOR OPERATOR VALVE ANALYSIS TEST. WR B209825
B228099	2	TSU	067	0094	10/11/87	2-TSU-067-0094-A, [XPRD], VALVE HAS AIR LEAK IN THE CLOSED POSITION. LEAK STOPS WHEN PLACED IN OPEN POSITION. DISCOVERED DURING FUNCTION TEST	THE SOLENOID VALVE COIL WAS OPEN. REPLACED THE SOLENOID VALVE. INSTALLED A C-FITTING AND SPLICED WIRES GOING TO VALVE. WR B228099.
B249099	1	OTE	070	0046	12/22/87	1-ECTB-070-0046-A, [XPRD], BREAKER FAILED L DELAY TIME STEP 7.3.1 OF SI258, ALSO FAILED (2) RETESTS OF SI258. REPLACE AMPTECTOR	BREAKER FAILED LONG DELAY TIME SURVEILLANCE CRITERIA. AMPTECTOR WAS DEFECTIVE. CAUSE UNKNOWN. REPLACED AMPTECTOR AND PERFORMED SI-258. WR B-249098
B251442	0	CHGB	250	0000	11/10/87	0-CHGB-250-00-F, [XPRD], CHARGER WOULD NOT MEET FLOAT V PER SI 100 TP 6.10 2 OF 4 150 FOR 3 RES ACROSS CAPACITORS INDICATED	150 OHM LOAD RESISTORS, ACROSS CAPACITORS, WERE BURNED OPEN. REPLACED RESISTORS 1, 3 & 5. TERMINATED RESISTORS 1 AND 3 AND ADJUSTED VOLTAGE OUTPUT OF CHARGER TO MEET SI-100 ACCEPTANCE CRITERIA. WR B-251442.
B261032	2	...	001	0007	01/17/88	2-ZS-001-0007/1-B, [XPRD], 100CFR50.494, ADJUST "OPEN" LIMIT SWITCH OR ACTUATOR SO THAT ACTUATOR STRIKES ROLLER ON LIMIT SWITCH ARM	THE LIMIT SWITCH ACTUATOR WAS BENT. CAUSE UNKNOWN. COULD POSSIBLY HAVE BEEN BENT DURING PREVIOUS MAINTENANCE. ADJUSTED THE LIMIT SWITCH ACTUATOR AND CHECKED FOR PROPER LIGHT INDICATION. WR B-261032.

MECHANICAL MAINTENANCE MONTHLY SUMMARY

COMP

MR2....	U FUNC SYS	ADDRESS.	DATE....	DESCRIPTION.....	CORRECTIVE ACTION.....
B215798	2 FCV	043	0250 01/29/88	2-FSV-043-0250-A, [CHNPRD], 10CFR50.49, VALVE FAILED SI-158.1 LOCAL LEAK RATE TEST. REFERENCE LEAK RATE IS 0.0225 SCFH AND VALVE LEAKED 0.1057 SCFH. RWP REQUIRED.	VALVE NOT SEATING PROPERLY DUE TO BEING DIRTY. REMOVED VALVE FROM LINE, INSTALLED TUBE CAPS ON BOTH SIDES OF TUBING, REMOVED BONNET SEAL WELD MACHINED VALVE DISC, LAPPED SEAT AND REINSTALLED VALVE. WR# B-215798.
B234138	2 LCV	003	0156 02/06/88	2-LCV-003-0156-A, [CHNPRD], VALVE DID NOT MEET STROKE TIME PER SI-166	VALVE STEM NEEDED LUBRICATING CAUSED BY BEING DIRTY. DISASSEMBLED VALVE, CLEANED STEM, GAGE AND STUFFING BOX. REINSTALLED STEM AND LUBRICATED, GAGE AND REPACKED. REINSTALLED BONNET AND TORQUED. REINSTALLED AIR LINES AND LIMIT SWITCHES.
B234144	2 FCV	030	0014 01/29/88	2-FCV-030-0014-A, [CHNPRD], VALVE FAILED SI-166.1 FOR VALVE STROKE TIME.	VALVE SEEMED TO BE STUCK ON SEAT, DUE TO ACTUATOR SETTINGS. REMOVED ACTUATOR FROM VALVE, VERIFIED ACTUATOR OPERATED SMOOTHLY THROUGH ENTIRE STROKE. REINSTALLED ACTUATOR ON VALVE AND ADJUSTED OPERATOR STOPS. RETURNED TO SERVICE. WR 234144
B239424	1 ULV	067	05820 01/20/88	1-ULV-067-05820-A, [CHNPRD], RELIEF VALVE LEAKING THROUGH	RUST AND SCALE ON SEATING SURFACE CAUSED BY EXPOSURE TO RAW WATER. DISASSEMBLED VALVE, CLEANED SEATING SURFACES, LAPPED SEAT. DISASSEMBLED AND REINSTALLED VALVE AND CHECKED RELIEF PRESSURE. WR# B-239424.
B247453	2 PIP	062	0108 02/16/88	2-PIP-062-0108-A, 2X10CFR50.49, [CHNPRD], 2 A-A CHARGING PUMP SPEED CHARGER OVERLOADED SIDE OIL LEAK AND OIL SMOKE AND NOISE FROM OF UTL VAPOR SUPPORT BAD SEAL AND OR BEARING ON SPEED CHARGER.	THE OIL PUMP PICKING GLAND BOLTS HAD BACKED OUT OF GLAND ALLOWING THE PUMP TO LOOSE SUCTION AND THE SPEED INCREASER BEARING TO GO BAD. - REPLACED SPEED INCREASER, REMOVED SPEED INCREASER LUBE OIL COOLER HEAD AND INSTALLED ON THE NEW SPEED INCREASER LUBE OIL COOLER. PACKED WITH GREASE.
0271795	1 ULV	082	0543-182 02/22/88	1-ULV-082-0543-182-B, [CHNPRD], VALVE BODY IS LEAKING AIR CAUSING EXCESSIVE STARTS OF AIR COMPRESSOR.	VALVE WORKING OUT - INSTALLED NEW VALVE.
0271796	1 ULV	082	0521-181 02/22/88	1-ULV-082-0521-181-B, [CHNPRD], VALVE BODY IS LEAKING AIR.	VALVE WORKING OUT - INSTALLED NEW VALVE.
0265235	1 FCV	042	0009 02/22/88	1-FCV-042-0009-A, [CHNPRD], THERE APPEARS TO BE AN AIR LEAK FROM 1-FCV-042-9. THE	DIAPHRAGM BAD. - INSTALLED NEW DIAPHRAGM.

MECHANICAL MAINTENANCE MONTHLY SUMMARY

COMP

MR2.... U FUNC SYS ADDRESS. DATE.... DESCRIPTION..... CORRECTIVE ACTION.....

VALUE AND REGULATOR ARE ENCLOSED IN A BOX-UNABLE TO DETERMINE EXACT LOCATION W/O ENTRY IN TO ENCLOSURE PLEASE INVESTIGATE AND REPAIR

8285722 2 FCU 061	0122 02/01/88	2-FCU-061-0122-, [XHPROD], VALVE LEAKING AIR AROUND OPERATOR DIAPHRAGM.	DIAPHRAGM WORN OUT. INSTALLED NEW DIAPHRAGM AND RETURNED VALVE BACK TO SERVICE. WR# B-285722.
8292211 2 FSU 043	0307 02/01/88	2-FSU-043-0307-A, REMOVE COMPLETE VALVE FROM LINE FOR TROUBLESHOOTING REMARK AS NECESSARY. REINSTALL VALVE. RWP REQ'D.	INTERNAL VALVE CLEARANCE ARE NOT SUFFICIENT TO ALLOW FOR RELIABLE VALVE OPERATION. VALVE WOULD NOT STROKE.-OBTAINED NEW VALVE THAT WAS REMOVED WILL BE REWORKED ON WR#B-208150. INSTALLED FOUR REED SWITCHES FROM WATTS BAR AND INSTALLED. THE VALVE THAT WAS REMOVED WILL BE REWORKED ON WR#B208150. INSTALLED FOUR REED SWITCHES.
8292782 2 ULV 068	0538 02/04/88	2-ULV-068-0538-S, [XHPROD], VALVE 2-68-538 LEAKS W/HO PRESSURE	PACKING HAD BEEN ADJUSTED UNTIL THERE WAS NO MORE ADJUSTMENT LEFT.-REPACKED VALVE.
8295169 0 PMP 067	0460 01/28/88	0-PMP-067-0460-, [XHPROD], REPLACE LOWER HEAD PUMP SHAFT. LEAKING BETWEEN SLEEVE & SHAFT.	BAD PACKING BOX DUE TO EXPOSURE TO RAW WATER/REPLACED LOWER HEAD SHAFT AND PACKING BOX. RETURNED PUMP TO SERVICE. (WR#8295169)
8298922 2 ULV 070	067 11/06/87	2-ULV-070-06768-A, [XHPROD], REF SDR 86-003 REMOVE BONNET FOR INSPECTION.	DUE TO EXCESSIVE CLEARANCE IN THE HANGER AND DISK, THE DISK RUBBED THE SIDE OF THE VALVE BODY IN TWO LOCATIONS. REPLACED INTERNALS AND REINSTALLED BONNET. VERIFIED NO EXTERNAL LEAKAGE. WR# B-298922.

MECHANICAL MAINTENANCE MONTHLY REPORT FOR FEBRUARY 1988

COMMON

1. Completed repair on valve 12-713 in auxiliary boiler system.
2. Completed repair on link on CO₂ supply system.
3. Completed work on boric acid transfer system.
4. Completed repair on "A" auxiliary boiler.
5. Supported Operations in installation and removal of test flanges.
6. Supported Operations in completion of various SIs.

UNIT 2

1. Completed repair on AFW level control valve (LCV-3-173).
2. Completed insulation repair on S/G No. 4.
3. Completed replacement of HEPA filters in postaccident sampling system.
4. Completed SI-106, -107, and -108 on ice condenser.
5. Completed element replacement on terry turbine.
6. Completed repair on terry turbine governor valve.
7. Supported restart and test group in shim removal, STI-62.
8. Supported Operations in installation and removal of test flanges.
9. Supported Operations in completion of various SIs.
10. Completed modification on RHR manways.

OTHER

1. Continued closure of various CAQRs, CARs, DRs, etc.

MAINTENANCE SUMMARY
(MODIFICATIONS)

SUMMARY OF WORK COMPLETED

MODIFICATIONS - CURRENT STATUS

FEBRUARY 1988

Major Capital Projects:

PN7101: ECN 6388 - 500-kVA Switchyard Current Transformer Heaters

Workplan (WP) 12223 is in progress pending safe access to current transformers.

PN7102: ECN 5938 - Replace Feedwater Heaters 3 and 4

No work in progress at this time.

PN7105: ECN 5009 - Essential Raw Cooling Water (ERCW) Piping Changeout From Carbon Steel to Stainless Steel

Insulation of new stainless steel piping has been completed. No additional pipe replacement is scheduled in the near future.

PN7108: ECN 6720 - Crane Consistency Program

Unit 2 polar crane modification is complete. Postmodification testing (PMT) by Electrical Maintenance is not complete. Unit 1 polar crane work started on July 6, 1987 and is approximately 98 percent complete. Painting of blocks and limit switch weights remain. Auxiliary Building crane WP 12596 is in the approval cycle. Drawings have not been issued on the remaining cranes. WP 12596 is in nonwork status. Work is stopped pending resolution of budgetary problems.

PN7115: ECN 6719 - Volumetric Intrusion Detection System

ECN 6719 is still on hold. Security is dissatisfied with system operation. Security and DNE have not concluded discussions on resolution. Design is working on making the system functional. Lighting is not finished. Workplan change for drainage is being written. Field Change Request (FCR) 6645 for DNE changes is approved. Work is stopped pending resolution of budgetary problems.

PN7122: DCR 1373 Secondary Side

Steam Generator Preservation

ECN 5657 - Installation of Moisture Separator Reheater (MSR) Drain Valves

Work is essentially complete on all the ECNs. Some minor insulation installation activities are in progress as resources permit.

Major Capital Projects (cont.):

ECN 5712 - Evacuation Alarms - Auxiliary Building - WP 12663

Complete.

ECN 5841 - Hot Shop Fire Protection/Evacuation Alarm - WP 12637

All fieldwork for evacuation alarm complete. Awaiting Work Request (WR) B240406 to be worked to restart fans to do functional test on fire protection.

PN7123: ECNs 5938, 6305, 6571 - Replace Feedwater Heaters 1 and 2, Units 1 and 2 and Eroded Pipe

Modifications Group B is supporting PMT on heaters 1 and 2 on both units as requested. Insulation work on unit 1 continues.

PN7130: DCR 1156 - Post Accident Monitoring

This work has slipped to allow work to continue on priority unit 2 restart efforts. NRC commitment on NUREG 1.97 called for unit 1 completion by September 1987 (this has been moved to 1988) and unit 2 by U2C4. A request has been sent to the NRC to move the unit 2 completion date to U2C4.

PN7132: DCR 2348 - Sewage Treatment Facility and Civil Upgrade

New DCR for onsite sewage treatment facility upgrade. City of Soddy-Daisy will be responsible for interface work on site, lift station, and pipeline between Sequoyah Nuclear Plant and Highway 27.

PN7136: ECN 6259 - MSR Tube Bundle Replacement

Complete except for PMT and inservice leak test. Leak checks will be performed during system heatup.

PN7136: ECN 6808 External Conduit Sealing

Complete.

PN7161: ECN 5855 - Replacement of Doors A56 and A57

Installation of door A56 is complete. Security of A56 to be worked later. Work on door A57 and interlocks will begin later. Workplan 11654 is in work.

Major Capital Projects (cont.):

PN7181: DCR 1898 - ECNs 6832 and 6596 - Dry Active Waste (DAW) Building

Electrical interface work is complete. Workplan closure held for Instrument Maintenance and Electrical Maintenance checks and update of SOIs by Operations.

PN7199: Miscellaneous Activities Under \$100,000

This is for various work orders prepared for work under \$100,000 total site cost. This work is done as manpower resources are available that will not impact unit 2 restart effort.

Significant Items:

The following major significant items are under Operation and Maintenance Expense (O&M) and will continue to be until restart of unit 2.

1. Fuse Program Work

ECN 5880 - Work complete for class IE unit 1 and 2 and non-IE fuses associated with unit 2 restart. Remaining work is non-class IE unit 1 and non-class IE unit 2. WP is being written for non-IE checklist for unit 1.

ECN 6854 - Complete.

2. Cable Ampacity Program

Unit 1 is in progress and nearing completion.

Other Items:

ECN 5111 - Provide Permanent Power to Manholes 42-46

Electrical conduit and wiring installation for manholes 44-46 is complete according to WP 12262. Manholes 42 and 43 are being held for information from DNE on power cable routing and terminations. FCR 4572R1 was sent to DNE and was logged in, but it was not sent to the responsible engineer. Manholes 42-46 will be worked by FCR 4572R1. This item is not considered unit 2 restart by DNE, and they will not authorize the engineer to do the necessary work to obtain pull cards or drawings for manholes 42-46. FCR 4572R2 will be written to supersede 4572R1 for conduit and cable routing for manholes 42-46.

WP 12276 is 100 percent complete. Workplan closure in process.

ECN 5412 - ERCW Nuisance Alarms

WP 5412-01 - Fieldwork complete. Workplan in closure cycle.

ECN 5435 - Fire Doors

The installation of weather stripping continues as resources permit.

ECN 5503 - Evacuation Alarms O&PS/Fire Detection O&PS

WP 12482 is held for manpower (O&PS fire detection).

WP 12664 - Work is in progress and is approximately 95 percent complete. Remainder restrained by CAQR SQP 871616 (evacuation alarm O&PS).

ECN 5552 - Condensate Demineralizer Modifications and High Crud Filter

Upgrade to higher range instrumentation for condensate demineralizer system neutralization and nonreclaimable waste pumps. A mode 2 restart item.

WP 5552-01 - In work. Functional test in progress.

ECN 5599 - Conduit Supports for Fifth Vital Battery and Waste Disposal Area

Complete.

Other Items (cont.):

ECN 5609 - Air Compressors Makeup Water Treatment Plant

Installation and checkout is complete. Work is complete. WP 11987 is field complete. Obtaining all documentation for closure of workplan.

ECN 5609 - Evacuation Alarm/Fire Detection Valve 26-290

WP 12387 is in work and is 90 percent complete. Workplan change is needed to allow local testing of alarm horn.

ECN 5609 - Alteration to the Makeup Water Treatment Plant

WP 12576 - Work is in process and approximately 90 percent complete.

WP 12633 - Work is in process and approximately 50 percent complete. WP is being held for material on WP 12665 (Mechanical).

WP 12731 - WP is approved and being held for material procured on purchase requests 74262A and 74321A.

WP 12684 - WP in work, approximately 60 percent complete.

WP 12665 - WP is being worked, and is 20 percent complete.

WP 12682 - WP is being worked, and is 20 percent complete.

DCN 113 - WP 113-01 - Workplan in work. WP 113-02 - Workplan in work.

DCN 66A - WP 0066A-01 - Complete.

ECN 5626 - Containment Ladders, Unit 1

A workplan is being written to incorporate this ECN. Modifications needs additional design information to complete. DNE needs to issue all drawings listed on this ECN. Work has not begun because of this holdup.

STI - 105 - Complete.

ECN 5726 - CAQR SQP870478 - Reroute Sense Line Piping for Train Separation to Panels 2-L-58 and 2-L-68

Fieldwork is complete. In-service leak check will be performed during heatup.

Other Items (cont.):

ECN 5754 - ERCW Nuisance Alarms

WP 5754-01 - Fieldwork complete. Workplan in closure cycle.

ECN 5841 - Hot Shop Fire Detection

WP 12360 is 95 percent complete. Material ordered for PNL O-L-633.

ECN 5935 - Correct Power Block Lighting Deficiencies

WP 12437 has been approved and is in work. This is a nonrestart item. WP 12275 is being written. Modifications needs DNE to provide light mounting detail for raw water storage tanks and estimate design date after unit 2 restart. WP 5935-01 has been written to install security grills and gratings.

ECN 6005 - Replacement of AFW Steam Ejector

The workplan is complete except for the leak check to be done by SI-130.1 in mode 3.

ECN 6057 - Cable Tray Covers

This activity is in progress for the unit 2 restart.

ECN 6082 - Vent for Boric Acid Tank (BAT)

Installation of vent header and supports, vacuum relief valves for three boric acid tanks, and the new HEPA filter is in progress. Work is scheduled to be completed by mode 2 for unit 2.

ECN 6185 - Offsite Paging System

Functional tests of the remote mobile units remain to be completed.

ECN 6196 - Pressurizer Hangers and Valves

PMT is scheduled for unit 1 restart. Remaining unit 2 work is scheduled for U2C3 refueling outage.

ECN 6205 - Replacement of Instrument Loop Power Supply Fuses

Unit 2 and unit 0 work is complete except for spares. Fuses are not on order. United Engineering has not notified materials group about fuse type (100 milliamperes). WP 12447 has been turned in to Document Control for partial completion.

Other Items (cont.):

ECN 6357 - Essential Raw Cooling Water (ERCW) Roof Access and Rails for Security Equipment

WP 12238 is in work.

ECN 6380 - Replacement of Barton Pressure Transmitters

Unit 2 fieldwork is complete. Final closure awaiting instruction revision by Instrument Maintenance.

ECN 6388 - Hydrogen Monitors in Switchyard

Workplan 12223 - Craft support as needed for installation of hydrogen analyzers at 500-kV switchyard (50 percent work complete).

ECNs 6402 (Unit 1) and 6439 (Units 1 and 2) - Pressurizer Instrumentation Relocation

Inservice tests will be performed when the system is brought up to temperature and pressure.

ECN 6429 - Component Cooling Heat Exchanger B Replacement

DNE to procure piping, hanger, and PHE frame material. DNE to issue hanger drawings. Workplans are in work to fabricate and weld piping and fabricate and install new plate heat exchanger.

ECN 6437 - Replace FE-2-256 and 257

Complete.

ECN 6455 - Upgrade CU-3 Box Battery Packs

WP 12295 has been issued. Modifications are complete for all CU-3 boxes. Site Security still needs to perform some PMT before the workplan can be closed out.

ECNs 6491 and 6534 - Essential Raw Cooling Water (ERCW) Supports

All restart work is complete. A workplan to remove previously installed piping was approved and will be worked as resources permit.

ECN 6543 - Install Public Safety Access Portals and Modify Entrance Road

Work is being held pending the release of drawings from DNE.

Other Items (cont.):

ECN 6557 - Installation of CO₂ Abort Switches

Complete.

ECN 6601 - Removal of Unit 1 Emergency Gas Treatment System (EGTS)
Backdraft Dampers

PMT remains to be completed by the Mechanical Test Section. Fieldwork is complete.

ECN 6610 - Modify Air Return Fan Supports

Unit 1 work is incomplete.

ECN 6631 - Modify Snubbers

Unit 2 work is complete.

ECN 6689 - Relocation of Main Steam Power Operated Relief Valves (PORV)

All work is complete for unit 2. Work on unit 1 has started.

ECN 6698 - Repull 120-Volt Cables

Unit 2 is complete. Unit 1 is 90 percent complete and held by ECN 6742. This ECN should be completed prior to unit 1 restart.

ECN 6706 - 79-14 Support Enhancement/Lost Calculations

Repairs continue on unit 1 as resources allow. This project has been combined with the calculation regeneration project for unit 1 and work has started with one workplan being prepared and placed in the approval cycle. Unit 2 work is complete and workplans are being closed.

ECN 6739 - Alternate Analysis

Unit 1 work has started and 50 of 83 hangers are complete. Work has not started on the maintenance items.

ECN 6742 - Install Fuses in Radiation Monitor Power Supply Circuits

The workplan is complete for unit 2. Unit 1 is 50 percent complete. Instrument Maintenance cannot support until March 14, 1988. This ECN should be completed prior to unit 1 restart.

Other Items (cont.):

ECN 6761 - East Valve Room (EVR) Blowout Panels

Implementation of unit 1 work is progressing as resources are available. Unit 2 work is complete.

ECN 6784 - Documentation to Show Pipe Class Breaks

Final closure is awaiting a revision to AI-19 deleting requirements to mark shift supervisor drawings.

ECN 6808 - Conduit External Sealing

Complete.

ECN 6815 - Installation Power Circuit Breaker

Install 500-kV power circuit breaker and associated equipment for bay 1. Retire 161-kV PCB and associated equipment. A total of eight workplans will be required. Foundations and conduit are presently being installed by WP 12654. WP 12740 for lighting, drain pipe, and surface ground mat has completed the review cycle. WP 12739 for the structural steel installation has been written and approved. Completion of WP 12654 will probably be delayed somewhat by late delivery of anchor bolts and bad weather. An attempt is being made to make up for lost time. Workplan 6815-02 has been written and is in the review cycle. Workplan 6815-01 is now being written.

ECN 6860 - Control Room Bullet Resistivity - DCR 2268 - ECN 6860

WPs 12602, 12603, 12604, and 12605 are in closure cycle. ECN is complete except for miscellaneous touchup painting. The lockset for door C-37 malfunctioned and a CAQR has been initiated. Work is estimated to be completed by March 14, 1988.

ECN 6866 - Modification of Valve Room Doors

Complete.

ECN 6871 - External Conduit Sealing DGB/CB/ERCW

Complete.

ECN 7000 - Addition of Support to Main Steam Dump Header

Fieldwork is complete except for final inspections during mode 2 heatup when steam dump header reaches 500°F+.

Other Items (cont.):

ECN 7078 - Install Hangers - Main Steam Piping

Complete except for final inspections during heatup.

ECN 7190 - Replace Duct Detectors and Install Thermal Detectors

WP 7190-01 - Installation and checkout is complete. Workplan closure is in process.

DCN X00006A - Remove Hydrogen Analyzers Tubing

The workplan lacks PMT (SI-219).

DCN Z00018B - Install Needle Valve for Hydrogen Analyzers

The workplan lacks PMT (SI-219).

DCN 49 - Computer Room Air Conditioner

Awaiting instruction revision to close workplan.

DCN 70 - Hydrogen Analyzer Check Valves

The workplan lacks PMT (SI-219).

DCN 89 - Crane Wall Penetration

Additional penetrations were added by DNE and completed by Modifications.

Instrumentation Verification Program

For unit 2, there have been 953 discrepancies issued to MODS to date with 476 not required for restart. All discrepancies required for restart have been completed; 94 nonrestart discrepancies are open.

For unit 1, there have been 193 discrepancies issued to MODS to date with 30 not required for restart. Of 163 required for restart, 93 remain open and are being worked.

ECN 6596 - WP 12402 - Complete with the exception of five percent of paving to be completed spring 1988.

Other Items (cont.):

WP 12477 - Requires Instrument Maintenance calibration and checkout of area radiation monitor and air compressor.

WP 12612 - Complete. Closure in process. SOIs are complete. SI-743 is in the process of being updated by Electrical Maintenance.

OFFSITE DOSE CALCULATION MANUAL CHANGES

OFFSITE DOSE CALCULATION MANUAL CHANGES

REVISION NO. 18

SQN ODCM Change Description Form

Description of change:

Table 3.1 and Figure 3.6 need to be revised to reflect the environmental radiological monitoring requirements for SQN. Specifically, Rev. 17 of the SQN ODCM contains the environmental monitoring requirements for BFN not SQN. Further, monitoring locations 22 and 23 need to be deleted from Figure 3.6. These locations were, in a previous ODCM revision, deleted from Table 3.2 but inadvertently retained on Figure 3.6

Affected pages: 69 through 72, 85.

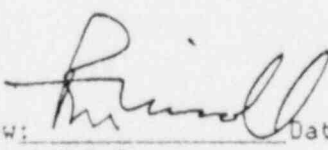
Justification for change:

The SQN ODCM must reflect the environmental radiological program for SQN.

Effects on setpoints and dose calculations:

This change will have no effect on effluent setpoints or dose calculations.

RARC Review:


RARC Chairman

Date:

1/5/88

TABLE 3.1 (Sheet 1 of 4)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

<u>Exposure Pathway and/or Sample</u>	<u>Sample Locations*</u>	<u>Sampling and Collection Frequency</u>	<u>Type and Frequency of Analysis</u>
1. AIRBORNE			
a. Particulates	4 samples from locations (in different sectors) at or near the site boundary (LM 2, 3, 4, and 5)	Continuous sampler operation with sample collection once per 7 days (more frequently if required by dust loading)	Analyze for gross beta radioactivity > 24 hours following filter change. Perform gamma isotopic analysis on each sample if gross beta > 10 times yearly mean of control sample. Composite at least once per 92 days (by location for gamma scan)
	4 samples from communities approximately 6-10 miles distance from the plant (PM 2, 3, 8, and 9)		
	3 samples from control locations greater than 10 miles from the plant (RM 1, 3, and 4)		
b. Radioiodine	Samples from same locations as Local (LM) and Remote (RM) air particulates	Continuous sampler operation with filter collection once per 7 days	^{131}I at least once per 7 days
c. Soil	Samples from same locations as air particulates	Once per 3 years	Gamma scan, ^{90}Sr , ^{90}Y once each 3 years
2. DIRECT RADIATION	2 or more dosimeters placed at 10 of the air particulate sampling stations (LM-3, LM-4, LM-5, PM-2, PM-3, PM-8, PM-9, RM-1, RM-3, and RM-4)	Once per 92 days	Gamma dose at least once per 92 days
	2 or more dosimeters placed at each of at least 30 other locations. (Figures 3.2 and 3.5)		

*Sample Locations are shown on Figures 3.1, 3.2, 3.3, 3.4, 3.5, and 3.6.

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TABLE 3.1 (Sheet 2 of 4)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

<u>Exposure Pathway and/or Sample</u>	<u>Sample Locations*</u>	<u>Sampling and Collection Frequency</u>	<u>Type and Frequency of Analysis</u>
3. WATERBORNE			
a. Surface (Figure 3.4)	TRM 497.0 TRM 483.4 TRM 473.2	Collected by automatic sequential-type sampler** with composite samples collected over a period of ≤ 32 days	Gamma scan of each composite sample. Composite for tritium analysis at least once per 92 days
b. Ground (Figure 3.2)	1 sample adjacent to plant (location W-6) 1 sample from ground water source upgradient	At least once per 92 days	Gross beta, gamma scan and tritium analysis at least once per 92 days
c. Drinking (Table 3.3) (Figure 3.4)	1 sample at the first potable surface water supply downstream from the plant (TRM 473.0) 1 sample at the next 2 downstream potable surface water suppliers (greater than 10 miles downstream) (TRM 470.5 and 466.3) 2 samples at control locations (TRM 497.0 and TRM 503.8)	Collected by automatic sequential-type sampler** with composite sample collected over a period of ≤ 31 days Grab sample once per 31 days Samples collected by automatic sequential- type sampler with composite sample collected over a period of ≤ 31 days	Gross beta and gamma scan of each composite sample. Composite for tritium, ^{90}Sr , ^{90}Sr at least once per 92 days
d. Sediment	TRM 496.3 TRM 483.4 TRM 480.8 TRM 472.6	At least once per 184 days	Gamma scan of each sample

*Sample locations are shown on Figures 3.1, 3.2, 3.3, 3.4, 3.5, and 3.6.

**Samples shall be collected by collecting an aliquot at intervals not exceeding 2 hours.

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TABLE 3.1 (Sheet 3 of 4)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

<u>Exposure Pathway and/or Sample</u>	<u>Sample Locations*</u>	<u>Sampling and Collection Frequency</u>	<u>Type and Frequency of Analysis</u>
e. Shoreline Sediment (Figure 3.4)	TRM 485 TRM 478 TRM 477	At least once per 184 days	Gamma scan of each sample
4. INGESTION			
a. Milk (Figure 3.6)	1 sample from milk producing animals in each of 1-3 areas indicated by the cow census where doses are calculated to be highest. If samples are not available from a milk animal location, doses to that area will be estimated by projecting the doses from concentrations detected in milk from other sectors or by sampling vegetation where milk is not available (Table 3.1, 4.d) At least 1 sample from a control location.	At least once per 15 days	Gamma isotopic and ^{137}I analysis of each sample. ^{89}Sr , ^{90}Sr once per quarter
b. Fish	1 sample each for Nickajack, Chickamauga, and Watts Bar Reservoirs	At least once per 184 days. One sample of each of the following species: Channel Catfish White Crappie Smallmouth Buffalo	Gamma scan on edible portion

*Sample Locations are shown on Figures 3.1, 3.2, 3.3, 3.4, 3.5, and 3.6.

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TABLE 3.1 (Sheet 4 of 4)

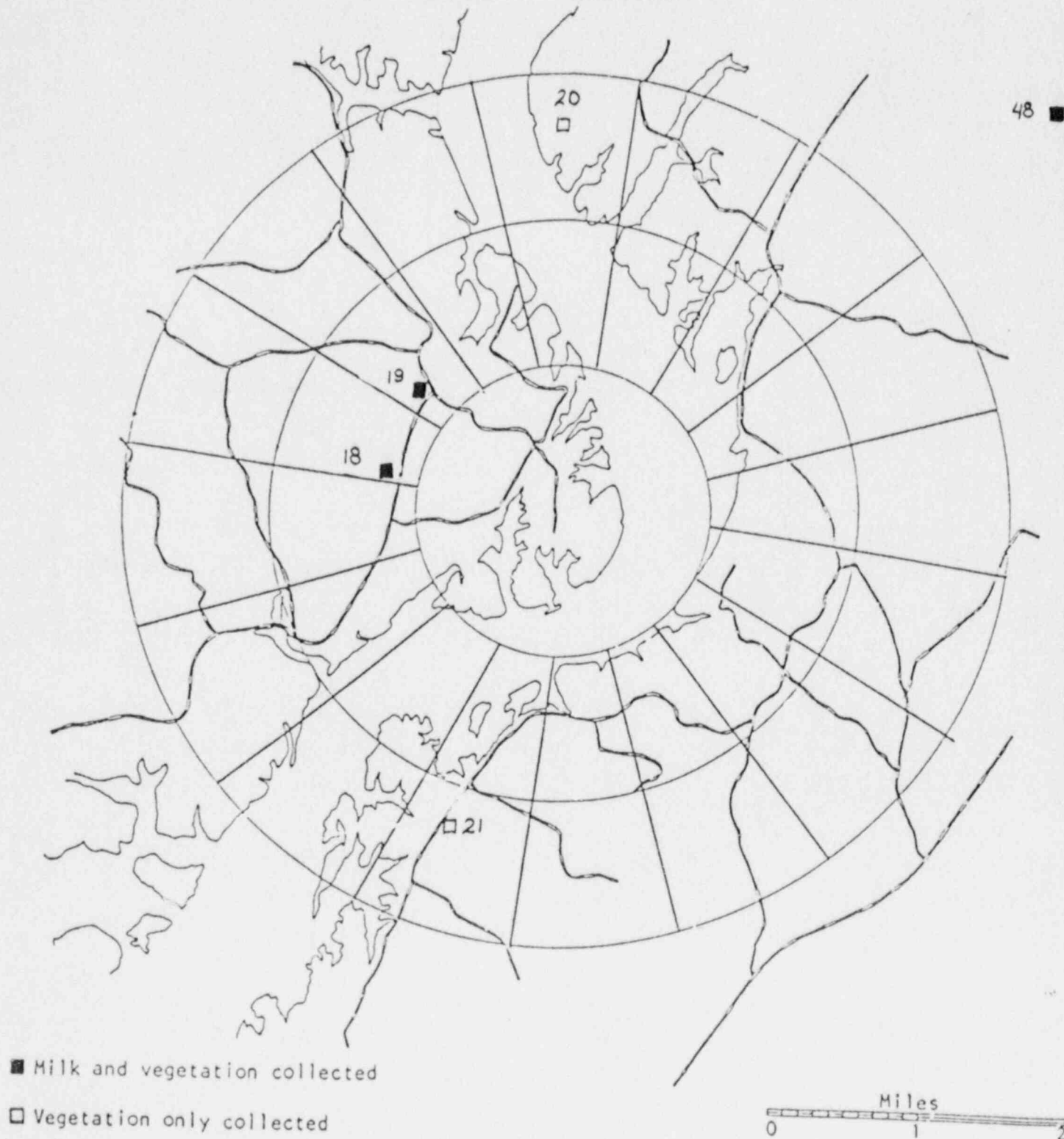
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

<u>Exposure Pathway and/or Sample</u>	<u>Sample Locations*</u>	<u>Sampling and Collection Frequency</u>	<u>Type and Frequency of Analysis</u>
c. Invertebrates (Asiatic Clams)	TRM 496.5 TRM 483.4 TRM 480.8	At least once per 184 days.	Gamma scan on edible portion
d. Food Products	1 sample each of principal food products grown at private gardens and/or farms in the immediate vicinity of the plant.	At least once per 365 days at time of harvest. The types of foods available for sampling will vary. Following is a list of typical foods which may be available: Cabbage and/or Lettuce Corn Green Beans Potatoes Tomatoes	Gamma scan on edible portion
e. Vegetation (Figure 3.6)	1 sample from up to three locations of milk-producing animals where a sample of milk is not available and at each air particulate station	At least once per 31 days	Gamma scan at least once per 31 days. ^{87}Sr and ^{90}Sr analysis and least once per 92 days

*Sample Locations are shown on Figures 3.1, 3.2, 3.3, 3.4, 3.5, and 3.6.

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Figure 3.6
MILK AND VEGETABLE SAMPLING LOCATIONS



Note: Vegetation is also collected
at each air monitoring station.
See Figure 3.1

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TENNESSEE VALLEY AUTHORITY

Sequoyah Nuclear Plant
P. O. Box 2000
Soddy-Daisy, Tennessee 37379

March 14, 1988

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

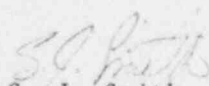
Gentlemen:

SEQUOYAH NUCLEAR PLANT - MONTHLY OPERATING REPORT - FEBRUARY 1988

Enclosed is the February 1988 Monthly Operating Report to NRC for Sequoyah Nuclear Plant.

Very truly yours,

TENNESSEE VALLEY AUTHORITY


S. J. Smith
Plant Manager

Enclosure

cc (Enclosure):

Director, Region II
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Office of Inspection and Enforcement
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Mr. K. M. Jenison, Resident NRC Inspector
O&PS-2, Sequoyah Nuclear Plant