BFN

The evaluation of this concern at BFN identified no specific safety-related deficiencies regarding Target Rock Valves. However, it was reported that the adjustment of the reed switches for these valves had been difficult, and no procedure was found to exist at BFN for the adjustment of these reed switches. Also, it was found that there is no capability at BFN to retrieve maintenance history without specific document numbers and previous maintenance history cannot be searched for trending history. These deficiencies regarding lack of maintenance procedures and inadequate maintenance history retrieval capability were identified to BFN line management in CATD 30303-BFN-01. BFN has responded as follows:

"FSV-84-8A, 8B, 8C, 8D are Target Rock valves equipped with magnetic reed switches. The reed switches close to make up a circuit to an indicating light to show whether the valve is open or closed.

An Electrical Maintenance (EM) procedure for adjusting the reed switches does not exist. Maintenance is usually performed via a maintenance request (MR) that the unit operator initiates which simply states the position indicator lights for the valve are not working properly. Adjusting the reed switches can be a tedious trial and error process. In the past it was considered to be within the skill of the craftsman, but now it is believed that a written instruction would be advantageous. Therefore, per EM assignment No. 5952, a new procedure will be written for the adjustment of magnetic reed switches on Target Rock valves. The due date for assignment 5952 is March 30, 1987.

The problem with the equipment history is that the MR tracking program has only been in effect about four years. Prior to that, history records were incomplete or non-existent. Equipment history is being maintained now; however, previous history cannot be recreated.

Planning and Scheduling and Document Control are two separate organizations and they each maintain records in the way that meets their respective needs and objectives. When trouble reports (TRs) were used, history records were not properly maintained and trending was not done. At the present time trending is done on a systematic basis by the Preventive Maintenance Section."

The Target Rock Valves concern was not evaluated at BLN because of the plant's early stages of construction. However, upon receipt and review of this report, BLN plant management should provide preventive measures as appropriate to guard against the occurrence of this concern.

6.1.3 Element 303.04 - Calibration of Ice Condenser Load Cells

CATD 30304-WBN-01 was sent to the DNE Licensing Section notifying them of the discrepancy between the WBN FSAR and Technical Specifications on minimum ice weight. WBN has responded as follows:

"Proposed changes to the WBN FSAR have been prepared by Westinghouse and has been submitted to TVA by WAT D 7136. These changes will bring the FSAR and Tech Spec into agreement. The proposed changes will be issued to Watts Bar Site Licensing by November 28, 1986. This change should be incorporated in the WBN FSAR by June 1, 1987."

6.1.4 Element 303.05 - Reliability, Design, and Maintenance of Radiation Monitoring Equipment

WBN

CATD 30305-WBN-01 noted that DNC draft procedures for housekeeping at TVA nuclear plants under construction contain no provision for inspecting instrument protective coverings after the instrument installation process is complete. WBN DNC personnel have responded as follows:

"DNC, Instrumentation Procedure QCP-3.06-9 provides the requirements for the inspection and documentation of instrument installation. The requirement to provide covers or protective barriers for instruments as stated in instruction QCI 1.36 (since moved to QCI-1.06) is contained in inspection procedure QCP-1.36 (R10, section 7.4.20).

Since QCP-3.06-9 documents a permanent installation, it does not need a reference to the temporary covers required by QCI-1.06 or documented by QCP-1.36. To insure covers are installed in a timely manner, IEU will revise the unit SOP to instruct RE to notify PMU when instruments that require covers are installed."

The CATD number 30305-WBN-02 was not used.

30305-WBN-03

CATD 30305-WBN was sent to WBN indicating that certain plant areas had been inspected for housekeeping about every three months and that not all housekeeping logs were available in Document Control. These conditions were noted as apparent violations of the QAM which specifies that plant areas be inspected at least once per month and that records be maintained. WBN line management responded as follows:

COMPLETED 2-3-88

"AI 1.8 Revision 11 dated January 16, 1987:

Paragraph 4.2: The performance of housekeeping inspection may vary from section to section but shall not be less than once a month. The supervisor responsible for an area shall ensure that the inspections are done for his entire area of responsibility.

Paragraph 4.5: Records which result from the implementation of this instruction shall be maintained as quality assurance records in accordance with AI-4.1.

AI-4.1 Revision 15 requires housekeeping inspection reports be maintained until superceded and housekeeping log reports be retained 1 year.

The revision to AI-1.8 clarifies inspection frequencies and no further corrective action is required."

SQN

CATD 30305-SQN-01 was sent to SQN line management requesting status of revisions to SIs to denote Technical Specification versus non-Technical Specification required monitors. SQN has responded as follows:

COMPLETED 7-8-87

"SI's associated with radiation monitors will be revised to clearly distinguish between Non Tech Spec and Tech Spec monitors."

CATD 30305-SQN-02 was issued requesting technical position on upgrading PING monitors to improve accuracy and reliability. SQN has responded as follows:

COMPLETED 8-87

"Factory representative from Eberline for monitor will be represented to assist in correcting inherent problem with PING monitor control room control terminal and also provide IM with class on troubleshooting techniques and system description."

CATD number 30305-SQN-03 was not used.

CATD 30305-SQN-04 was issued to SQN line management to track the closure of CAQR No. SQN 890178 Revision 0 regarding shields on Amphenol connectors.

BLN

CATD number 30305-BLN-01 was not used.

CATD 30305-BLN-02 was issued noting that DNC draft procedures for housekeeping at TVA nuclear plants under construction contain no provision for inspecting instrument protective coverings after the instrument installation process is complete. BLN DNC personnel have responded as follows:

"BLN has an effective program for providing protective covers on instrument panels and installed equipment in general. A review of BNP-QCP-1.3 Preventive maintenance, confirms that instrument panels consistently require a protective cover. The site housekeeping procedures BNP-QCP-10.27, requires the Construction Superintendent(s) to ensure that:

(a) installed equipment is adequately protected from adjacent construction activities such as welding, cutting, scaffolding, drilling, or other construction activity to prevent permanent equipment from being damaged by construction activity.

(b) special attention is given to the protection of electrical equipment that has wire mesh or other types of openings in the tops for ventilation purposes, and makes provisions to shield these openings while still maintaining proper ventilation.

(c) adequate protection is provided for any mechanical equipment exposed to the elements or adjacent construction activities."

6.2 Corrective Action at Subcategory Level

A CATD to address the subcategory level finding presented in section 4 was not issued for this report. Response to element-level CATDs seemed to indicate that adequate maintenance trending and maintenance history programs were now either under development or in use at WBN, SQN, and BFN.

No subcategory level CATD's are being sent to TVA corporate management to address the findings of this subcategory report as presented in Section 5.0 of this report because the NMRG report and Nuclear Performance Plan specifically target these findings.

7.0 ATTACHMENTS

Attachment A - Subcategory Summary Table

Attachment B - Listing of Concerns by Issue

Attachment C - Checklist for Root Cause Analysis

Attachment D - Summary of Symptoms and Root Causes

Attachment E - Graph of Symptoms versus Root Cause

Attachment F - Bar Charts of Symptoms

Attachment G - Bar Charts of Root Causes

Attachment H - CATDs

Attachment I - List of Evaluators by Element/Plant

ATTACHMENT A

SUBCATEGORY SUMMARY TABLE

REFERENCE - ECPS131J-ECPS131C
FREQUENCY - REQUEST
ONP - ISSS - RNM

TENNESSEE VALLEY AUTHORITY
OFFICE OF NUCLEAR POWER
EMPLOYEE CONCERN PROGRAM SYSTEM (ECPS)
LIST OF EMPLOYEE CONCERN INFORMATION

CATEGORY: OP PLANT OPER. SUPPORT SUBCATEGORY: 303 INSTRUMENTATION AND RADIATION MONITORING

CONCERN NUMBER	CAT	SUB CAT	PLT LOC	GENERIC APPL B F	B L	S Q	M B	QTC/NSRS INVESTIGATION REPORT	P S R	CONCERN DESCRIPTION	REFERENCE SECTION CATEGORY - OP SUBCATEGORY - 303 Section/Issue
CHL-85-001	OP	303	SQN	N	N	N	N K-FORM		NS	WHY ARE THE AIR MONITOR FLOW CONTROL S FOR 2-RE-90-100 NOT LISTED AS EITH ER TECH SPEC OR COMPLIANCE INSTRUMEN TS?	3.5 303.05-3
IN -85-142-006 T50092	OP	303	WBN	N	N	Y	N REPORT	I-85-327-WBN	NS	RWST IN UNIT 1 NARROW RANGE 1-LT-63-46 & 1-LT-63-49 READING WERE 6% OFF INST ENG (NAME KNOWN) DIRECTED INSTR UMENTATION MECHANIC TO ADJUST TO ZER O. THIS WOULD MAKE READING MATCH TH E CONTROL ROOM. SIMILIAR ON SIS ACC UMULATORS 1-4, ELEV 716. TWO TRANSM ITTERS ON EACH ACCUMULATOR. THIS PR ACTICE CAUSES FALSE READINGS IN CONT ROL ROOM.	3.2 303.02-2
IN -85-281-003 T50059	OP	303	WBN	N	N	Y	N K-FORM	I-85-208-WBN	SS	THE TWO LEVEL TRANSMITTER ON EACH OF THE COLD-LEG ACCUMULATORS WILL NOT READ THE SAME LEVEL DUE TO DIFFERENC E IN ELEVATION. TRANSMITTERS HAVE B EEN CALIBRATED AS PER SCALING DATA S HEET. WHEN PUT IN SERVICE TRANSMITT ERS WILL READ A 5% DIFFERENCE IN LEV EL. WHEN THE ENGINEERS WERE TOLD AB OUT THE PROBLEM THEY SAID DON'T WORR Y ABOUT IT ADJUST ONE UNTIL BOTH LEV EL INDICATORS READ THE SAME. (UNIT 1)	3.2 303.02-1
IN -85-640-002 T50062	OP	303	WBN	N	N	N	N K-FORM		NS	ICE CONDENSER LOAD CELL AND DIGITAL READOUT WERE CALIBRATED TO (PLUS/MIN US) 1 LB. BY VENDOR WITH A 95% CONFI DENCE LEVEL THAT NET ICE WEIGHT RESU LTS ARE (PLUS/MINUS) 1 LB.. TVA IS UNWILLING TO SPEND THE MONEY REQUIRE D TO RETURN LOAD CELL TO VENDOR FOR CALIBRATION. (NO ADDITIONAL INFORMA TION IS AVAILAON IS AVAILABLE).	3.4 303.04-1

CONCERNS ARE GROUPED BY FIRST 3 DIGITS OF SUBCATEGORY NUMBER.

REFERENCE - ECPS131J-ECPS131C
FREQUENCY - REQUEST
ONP - ISSS - RHM

TENNESSEE VALLEY AUTHORITY
OFFICE OF NUCLEAR POWER
EMPLOYEE CONCERN PROGRAM SYSTEM (ECPS)
LIST OF EMPLOYEE CONCERN INFORMATION

CATEGORY: OP PLANT OPER. SUPPORT SUBCATEGORY: 303 INSTRUMENTATION AND RADIATION MONITORING

CONCERN NUMBER	CAT	SUB CAT	PLT LOC	GENERIC APPL B F	B L	S Q	W B	QTC/NSRS INVESTIGATION REPORT	P S R	CONCERN DESCRIPTION	REFERENCE SECTION CATEGORY - OP SUBCATEGORY - 303 Section/Issue
IN -85-640-003 T50062	OP	303	WBN	N K-FORM	N	N	N		NS	ICE CONDENSER LOAD CELL TEST WEIGHT IS LABELED 1780 LB. (PLUS/MINUS) .13 (OR SOME DECIMAL). WEIGHT WAS WEIGHED AGAINST LOAD CELL AND RESULTS EQUALLED 1784 LB.. TVA CENTRAL LAB IS INCAPABLE OF CALIBRATING TO LESS THAN (PLUS/MINUS) 6 LB. TEST WEIGHT IS THEREFORE LABELLED INCORRECTLY. (NO ADDITIONAL INFORMATION IS AVAILABLE)	3.4 303.04-2
IN -85-802-001 T50071	OP	303	WBN	Y REPORT	N	Y	Y	I-85-286-WBN		BOTH UNITS 1 & 2, PROBLEM EXISTS WITH TARGET ROCK VALVES INSTALLED IN BOTH SAMPLING SYSTEM AND MAIN STEAM SYSTEM. TARGET ROCK VALVES IMPROPERLY ANNUCIATE PART OF THE TIME AND READ SWITCHES ON VALVES REQUIRE CONSTANT ADJUSTMENT. VALVES IN SAMPLING SYSTEM LOCATED IN 3/8" STAINLESS STEEL LINES IN ANNULUS AND PRIMARY CONTAINMENT AREAS. VALVES IN MAIN STEAM SYSTEM LOCATED ON EITHER 2" OR 3" STAINLESS STEEL LINES IN SOUTH VALVE ROOM. C/I DID NOT SPECIFY LINE NUMBERS OR VALVE SERIAL OR MARK NUMBERS	3.3 303.03-1
IN -85-841-001 T50084	OP	303	WBN	Y REPORT	N	Y	Y		NS	"OLD" PLANT INSTRUMENTATION (PROCURED 10-12 YEARS AGO) IS OFTEN NO LONGER MANUFACTURED/SPARE PARTS ARE DIFFICULT OR NOT POSSIBLE TO OBTAIN. PURCHASE REQUISITIONS FOR UNOBTAINABLE PARTS ARE CANCELLED, YET COGNIZANT MANAGEMENT (DEPARTMENT KNOWN) HAVE INSTITUTED NO ALTERNATIVES MEASURES TO OBTAIN SUBSTITUTIONS OF PARTS/REPLACEMENT ITEMS. THIS HAS THE POTENTIAL TO ADVERSELY IMPACT PLANT OPERATIONS. CI POSTULATED THIS CONCERN TO BOTH UNITS 1 & 2. MANAGEMENT (NAME KNOWN) IS AWA	3.1 303.01-1

CONCERNS ARE GROUPED BY FIRST 3 DIGITS OF SUBCATEGORY NUMBER.

REFERENCE - ECPS131J-ECPS131C
FREQUENCY - REQUEST
ONP - ISSS - RHM

TENNESSEE VALLEY AUTHORITY
OFFICE OF NUCLEAR POWER
EMPLOYEE CONCERN PROGRAM SYSTEM (ECPS)
LIST OF EMPLOYEE CONCERN INFORMATION

PAGE - 2
RUN TIME - 1
RUN DATE - 1

CATEGORY: OP PLANT OPER. SUPPORT SUBCATEGORY: 303 INSTRUMENTATION AND RADIATION MONITORING

CONCERN NUMBER	CAT	SUB CAT	PLT LOC	GENERIC APPL B F	B L	S Q	W B	QTC/NSRS INVESTIGATION REPORT	P S R	CONCERN DESCRIPTION	REFERENCE SECTIC CATEGORY - OF SUBCATEGORY - 3(Section/Issue
IN -85-973-001 T50156	OP	303	WBN	N K-FORM	N	N	Y		NS	STEAM GENERATOR LEVEL INDICATORS DO NOT ACCURATELY SHOW THE FILL LEVEL O F THE STEAM GENERATORS. DURING A FL USH THAT INCLUDED UNIT 1 STEAM GENER ATORS, THE SHIFT ENGINEER STATED THA T THE STEAM GENERATOR (NUMBER NOT KN OWN)HAS FULL OF WATER. INSTRUMENTS IN ACCUMULATOR ROOM 84 (716' ELEV.) SHOULD THIS NOT BE THE CASE, AND THE LOCAL INSTRUMENT'S ACCURACY WAS CON FIRMED VIA NITROGEN FLOW. IF THE S HIFT ENGINEER'S INSTRUMENTS HAD BEEN OFF THIS MUCH (ESTABLISHED 40' OF W ATER ERROR) DURING OPERATIONS, T	3.3 303.03-3
IN -86-079-001 T50117	OP	303	WBN					IN-86-079-001		"OUTDATED" INSTRUMENTATION INSTALLED IN BOTH UNITS 1 & 2 CREATES UNNECES SARILY HIGH EXPENDITURES AND DELAYS DUE TO PROBLEMS WITH OBTAINING SPARE PARTS. NEWER MODEL INSTRUMENTATION WOULD BE LESS EXPENSIVE TO MAINTAIN , AND WOULD PERFORM THE REQUIRED FUN CTIONS WITH A GREATER DEGREE OF ACCU RACY AND RELIABILITY. DETAILS KNOWN TO QTC, WITHELD DUE TO CONFIDENTIAL ITY. NUCLEAR POWER CONCERN. VARIOU S SYSTEMS; INCLUDING PRESSURE TRANSM ITTERS/FIELD MONITORING. TIME FRAME - CURRENT. CI HAS NO FURTHER I	3.1 303.01-1
				K-FORM							
IN -86-079-002 T50117	OP	303	WBN	N K-FORM	N	Y	Y		NS	QUESTIONABLE ADEQUACY OF SAFETY RELA TED EQUIPMENT ACCURACY, AND QUESTION ABLE CALIBRATION PROCEDURES FOR THIS EQUIPMENT. DETAILS KNOWN TO QTC, W ITHELD DUE TO CONFIDENTIALITY. NUCL EAR POWER CONCERN; UNITS 1 & 2; SYST EM WITHELD; TIME FRAME - CURRENT. C I HAS NO FURTHER INFORMATION NO FOLL OWUP REQUIRED.	3.3 303.03-2

CONCERNS ARE GROUPED BY FIRST 3 DIGITS OF SUBCATEGORY NUMBER.

CATEGORY: OP PLANT OPER. SUPPORT SUBCATEGORY: 303 INSTRUMENTATION AND RADIATION MONITORING

CONCERN NUMBER	CAT	SUB CAT	PLT LOC	GENERIC APPL B B S W F L Q B	QTC/NSRS INVESTIGATION REPORT	P S R	CONCERN DESCRIPTION	REFERENCE SECTION CATEGORY - OP SUBCATEGORY - 303 Section/Issue
SQP-86-003-N04	OP	303	SQN	N N N N K-FORM		NS	NRC IDENTIFIED THE FOLLOWING CONCERN WHICH PERTAINS TO SQP-86-003-001 FROM REVIEW OF QTC FILE. "CI STATES MORE CABLES (IN ADDITION TO THE RADIATION MONITOR CABLE CITED IN SQP-86-003-001) MAY HAVE A SIMILAR PROBLEM IN PENETRATION 023. INTEGRITY OF ALL CONNECTORS AND ASSOCIATED HEAT SHRINK IS IN QUESTION. THIS CONCERN REFERS TO CABLES IN ADDITION TO THE RADIATION MONITOR CABLE CITED IN SQP-86-003-001.	3.5 303.05-1
SQP-86-003-N05	OP	303	SQN	N N N N K-FORM		NS	NRC IDENTIFIED THE FOLLOWING CONCERN FROM REVIEW OF QTC FILE. "SQP-86-003-001 IS POTENTIALLY REPORTABLE."	3.5 303.05-1
SQP-86-003-001 T50246	OP	303	SQN	N N N N K-FORM	I-86-205-SQN	SS	THE RADIATION MONITOR CABLE IS NOT INSTALLED PROPERLY. PENETRATION 23, LOWER CONTAINMENT, UNIT 02, MODIFICATIONS. (NAMES/DETAILS KNOWN TO QTC AND WITHHELD TO MAINTAIN CONFIDENTIALITY). NO FURTHER INFORMATION MAY BE RELEASED. NUCLEAR POWER CONCERN. CI HAS NO FURTHER INFORMATION.	3.5 303.05-1
NI -85-039-002 T50210	OP	303	WBN	N N N Y K-FORM		NS	RADIATION MONITORS AT WATTS BAR HAVE NOT BEEN MAINTAINED NOR WERE THEY OPERABLE, UNTIL MIDDLE OF 1984. NUCLEAR POWER CONCERN. CI HAS NO FURTHER INFORMATION.	3.5 303.05-5
XX -85-044-001 T50153	OP	303	BFN	N N Y N REPORT	I-85-557-BFN	NS	AT BROWN'S FERRY THERE WAS AN ACCIDENT OF RADIATION RELEASE ON THE REACTOR REFUEL FLOOR ON 6/26/85. CONCERN IS THAT CONTINUOUS AIR MONITORS (CAMS) DID NOT FUNCTION PROPERLY AND DID NOT REGISTER RADIATION LEVELS ACCURATELY. CAM'S ARE OBSOLETE AND SHOULD BE REPLACED BY MODERN INSTRUMENTS SUCH AS PARTICULATE IODINE NOBLE GAS (PING'S). CI HAS NO FURTHER INFORMATION. NO FOLLOW UP REQUIRED.	3.5 303.05-4

CONCERNS ARE GROUPED BY FIRST 3 DIGITS OF SUBCATEGORY NUMBER.

CATEGORY: OP PLANT OPER. SUPPORT SUBCATEGORY: 303 INSTRUMENTATION AND RADIATION MONITORING

CONCERN NUMBER	CAT	SUB CAT	PLT LOC	GENERIC APPL B F	B L	S Q	W B	QTC/NSRS INVESTIGATION REPORT	P S R	CONCERN DESCRIPTION	REFERENCE SECTION CATEGORY - OP SUBCATEGORY - 303 Section/Issue
XX -85-051-001 T50153	OP	303	SQN	N K-FORM	N	Y	N	I-85-613-SQN	SS	SEQUOYAH: THE RADIATION MONITOR (1-RM-90-104) HAS NOT BEEN MAINTAINED AND IS NOT ALWAYS OPERABLE. ANY FURTHER INFORMATION WOULD COMPROMISE CONFIDENTIALITY. NUC. POWER DEPT. CONCERN. FOLLOW UP NOT REQUIRED.	J.7, 303.05-2

16 CONCERNS FOR CATEGORY OP SUBCATEGORY 303

CONCERNS ARE GROUPED BY FIRST 3 DIGITS OF SUBCATEGORY NUMBER.

ATTACHMENT B

INSTRUMENTATION AND RADIATION MONITORING

List of Concerns by Element/Issue

The Instrumentation and Radiation Monitoring Subcategory (30300) is comprised of 16 concerns combined into five elements that address a total of 13 issues.

Element 303.01 - Difficulty in Obtaining Obsolete Equipment

Issue 303.01-1 Difficulty in Obtaining Obsolete Equipment

IN-85-841-001
IN-86-079-001

Element 303.02 - Location of Cold Leg Accumulator (CLA) and Refueling Water Storage Tank (RWST) Level Transmitters

Issue 303.02-1 Inaccuracies in Safety Injection System (SIS) CLA Level Instrumentation at WBN

IN-85-281-003

Issue 303.02-2 Inaccuracies in Narrow Range Level Instruments for WBN Unit 1 RWST

IN-85-142-006

Element 303.03 - Accuracy of Safety-Related Instruments

Issue 303.03-1 Target Rock Valve Reed Switches Inaccurate

IN-85-802-001

Issue 303.03-2 Radiation Monitors Inaccurate

IN-86-079-002

Issue 303.03-3 Local and Remote Level Indicators Differ

IN-85-973-001

Element 303.04 - Calibration of Ice Condenser Load Cells

Issue 303.04-1 TVA Unable and Unwilling to Calibrate Ice Condenser Load Cell Properly

IN-85-640-002

Issue 303.04-2 Ice Condenser Load Cell Test Weight Incorrectly Labeled

IN-85-640-003

ATTACHMENT B

INSTRUMENTATION AND RADIATION MONITORING

List of Concerns by Element/Issue
(CON'T)

Element 303.05 - Reliability, Design, and Maintenance of Radiation Monitoring Equipment

Issue 303.05-1 Improper Installation of Radiation Monitor Cables

SQP-86-003-001
SQP-86-003-N04
SQP-86-003-N05

Issue 303.05-2 Maintenance and Operability of Radiation Monitor

XX-85-051-001

Issue 303.05-3 Air Monitor Flow Controls Not Listed as Technical Specification or Compliance Instruments | R2

CWL-85-001

Issue 303.05-4 Improper Operation of Continuous Air Monitors (CAMs)

XX-85-044-001

Issue 303.05-5 Radiation Monitors Not Operable and Not Maintained

WI-85-039-002

Attachment C
Checklist for Root Cause Analysis

1. Procedure lacks specifics to perform task.
2. Personnel lack sufficient training in the applicability/use of procedure.
3. Lack of understanding regulatory requirements or commitments.
4. Lack of adequate system, process, or administrative controls to ensure commitments are reflected in procedures or processes.
5. Inadequate communication within functional group.
6. Inadequate communication between functional groups.
7. Management Assumed Risk.
8. Procedures incomplete or failed to incorporate all technical requirements.
9. Error in judgment by qualified individual.
10. Unqualified individual performing the task.
11. Insufficient time to perform task.
12. Inadequate prerequisites defined to ensure satisfactory completion of task.
13. Personnel performed task knowingly in violation of procedure/process.
14. Personnel error in following procedures.
15. Failed to identify root cause of previous deficiencies.
16. Failed to take appropriate action to preclude reoccurrence.
17. Inadequate process to detect adverse trends.
18. Inadequate acceptance criteria defined to ensure satisfactory task completion.
19. Management attentiveness to trends.
20. Lack of accessibility to documentation.
21. Inadequate controls for review of results to ensure compliance with commitments.
22. Timeliness of changes to commitments or changes to licensing/regulatory requirements.
23. Isolated incident.
24. Random error.
25. Other - i.e., equipment related failure.

ATTACHMENT D

SUMMARY OF SYMPTOMS AND ROOT CAUSES

Element 303.01 was investigated specifically for WBN and generically at SQN and BFN. No specific deficiencies were found in any of these investigations, and no symptoms for root cause analysis were tested.

For Element 303.02, the potential for negative findings at the subcategory level was exhibited by the following symptoms: (a) recurring instrument failure, and (b) lack of QA controls for vendor performance. The first symptom appeared in the evaluation for both WBN and SQN. The second symptom appeared only in the evaluation for WBN. As these symptoms were tested for root cause, the appropriate root causes and applicable plant sites were judged to be as follows:

a. Inadequate communication between functional groups (ONP, QA at WBN)

b. Failure to identify root cause of previous deficiencies (WBN, SQN)

c. Failure to take appropriate action to preclude recurrence (WBN, SQN)

d. Inadequate process to detect adverse trends (WBN,SQN)

e. Management attentiveness to trends (WBN, SQN)

f. Inadequate acceptance criteria defined to ensure satisfactory task completion (WBN)

g. Inadequate controls for review of results to ensure compliance with commitments (WBN)

For Element 303.03 the potential for negative findings at the subcategory level was exhibited by the following symptoms: (a) recurring instrument failure, (b) lack of controls to govern maintenance activities (Target Rock Valves), (c) configuration control inadequate (Target Rock Valves), and (d) maintenance history retrieval inadequate. The first symptom appeared only in the evaluation for WBN. The second symptom appeared in the generic evaluation for both SQN and BFN. The third and fourth symptoms appeared only in the generic evaluation for BFN. As these symptoms were tested for root cause, the appropriate root causes and applicable plant sites were judged to be as follows:

a. Lack of adequate system, process, or administrative controls to ensure commitments are reflected in procedures and processes (BFN)

b. Inadequate communication between functional groups (plant operators, EMS at WBN)

c. Procedures incomplete or failed to incorporate all technical requirements (SQN)

d. Failure to identify root cause of previous deficiencies (WBN)

ATTACHMENT D

SUMMARY OF SYMPTOMS AND ROOT CAUSES
(CON'T)

e. Failure to take appropriate action to preclude recurrence (WBN)

f. Inadequate process to detect adverse trends (WBN, BFN)

g. Lack of accessibility to documentation (BFN)

For Element 303.04 the symptom identified was inadequate configuration control of the FSAR with respect to Technical Specifications. The testing of this symptom pointed to the following root causes for WBN:

a. Lack of understanding regulatory requirements or commitments

b. Lack of adequate system, process, or administrative controls to ensure commitments are reflected in procedures or processes

c. Inadequate controls for review of results to ensure compliance with commitments

For Element 303.05 inadequate housekeeping affecting instruments was identified as the symptom. The testing of this symptom revealed the following root causes for WBN:

a. Lack of understanding regulatory requirements or commitments

b. Lack of adequate system, process, or administrative controls to ensure commitments are reflected in procedures or processes

The analysis of the symptoms and root causes for these elements is depicted graphically in Attachments D, E, and F. Attachment D is a plot of each element's symptoms versus the root causes pointed out by the symptom. Root cause numbers on the horizontal axis correspond to the 25 items on the "Checklist for Root Cause Analysis" found in Attachment C.

Attachment E contains bar graphs showing the number of times each of the symptoms identified for the subcategory occurs for the various plants. Symptom numbers on the horizontal axis in this attachment correspond to the symptoms as listed in Attachment D. Attachment F contains bar graphs showing the number of times each root cause appears in the subcategory for the various plants.

Several observations can be made in studying these attachments. First, the "recurring instrument failure" symptom is the only symptom appearing in more than one element. Second, from Attachment E it can be seen that the only two symptoms occurring more than once among the three plants evaluated are: (a) "recurring instrument failure" (three occurrences), and (b) "lack of controls to govern maintenance activities (Target Rock Valves)" (two occurrences). Third, there are two root causes that appear more frequently than the others, as shown in Attachment F. These two root causes and their applicable plant

ATTACHMENT D

SUMMARY OF SYMPTOMS AND ROOT CAUSES
(CON'T)

sites are: (a) lack of adequate system, process, or administrative controls to ensure commitments are reflected in procedures or processes (WBN, BFN) and (b) inadequate process to detect adverse trends (WBN, SQN, BFN). The latter root cause was the only one which appeared at least once at each of the three plants evaluated for this subcategory. Also, six other root causes appear more than once among the three plants evaluated. These root causes and their applicable plant sites are as follows:

a. Lack of understanding regulatory requirements or commitments (WBN)

b. Inadequate communication between functional groups (WBN)

c. Failure to identify root cause of previous deficiencies (WBN, SQN)

d. Failure to take appropriate action to preclude recurrence (WBN, SQN)

e. Management attentiveness to trends (WBN, SQN)

f. Inadequate controls for review of results to ensure compliance with commitments (WBN)

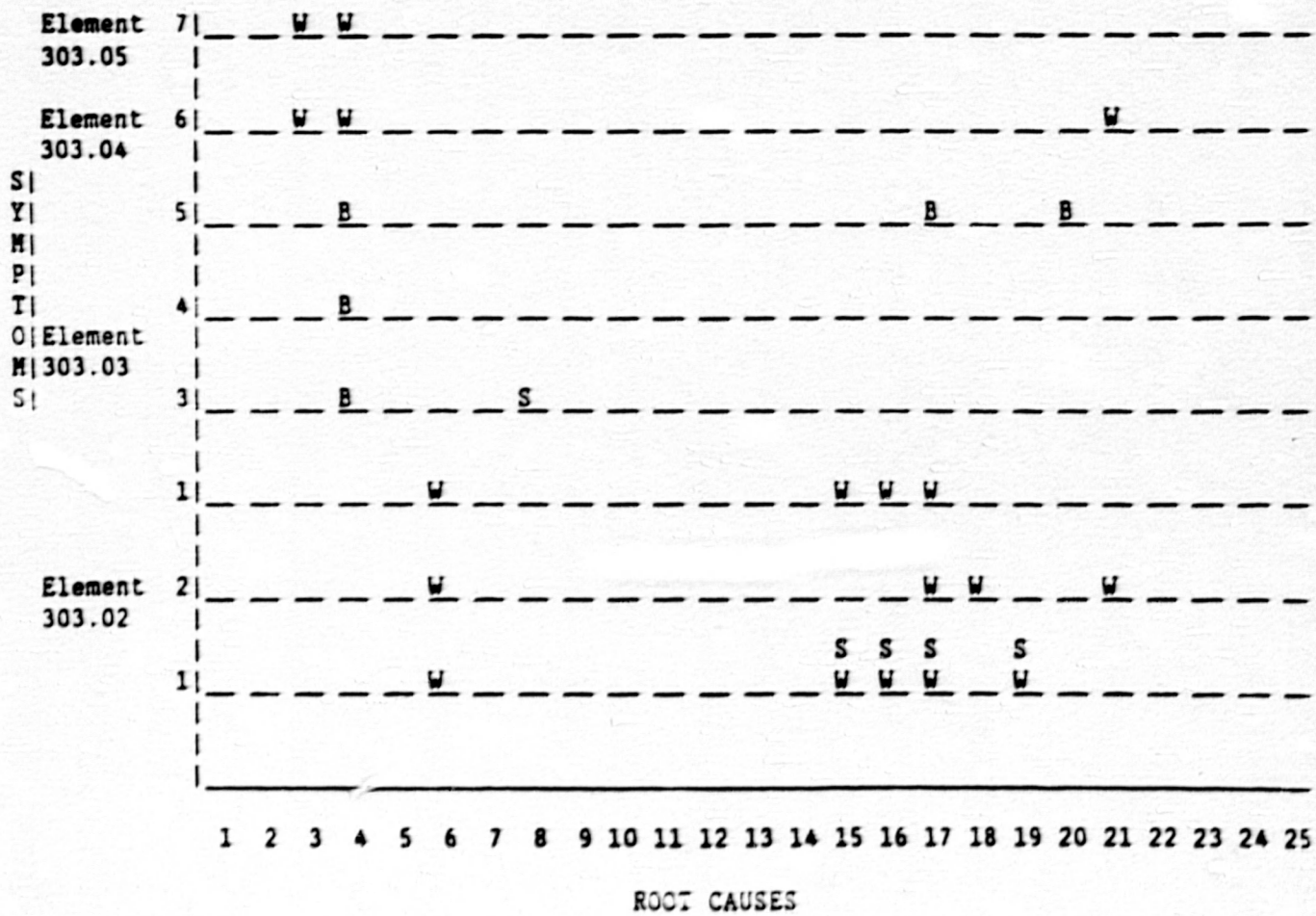
ATTACHMENT E

SYMPTOMS VS ROOT CAUSES

SUBCATEGORY 303

Symptoms

1. Recurring Instrument Failure
2. Lack of QA for Vendor Performance
3. Lack of controls to govern maintenance activities (Target Rock Valves)
4. Configuration Control Inadequate (Target Rock Valves)
5. Maintenance History Retrieval Inadequate
6. Inadequate Configuration Control (FSAR, Tech Specs)
7. Inadequate Housekeeping Affecting Instruments

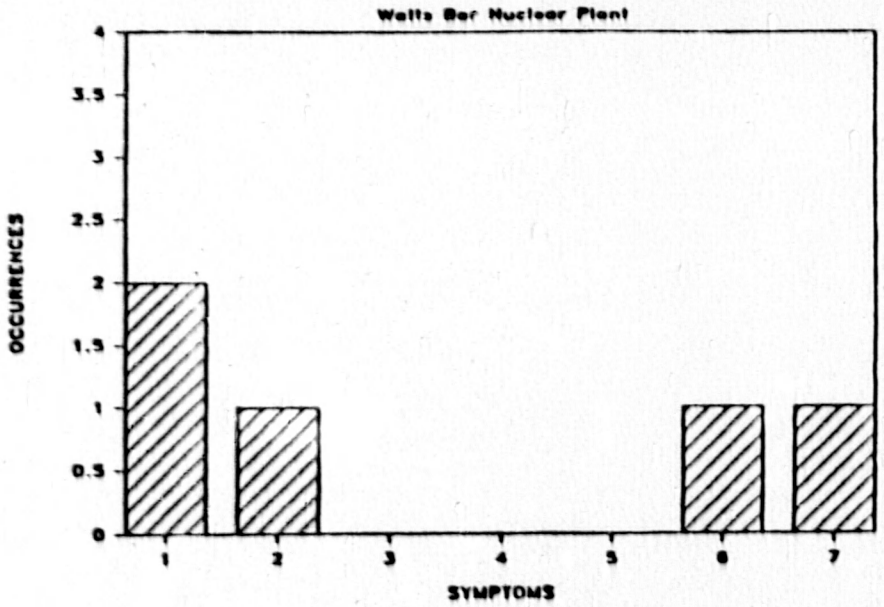


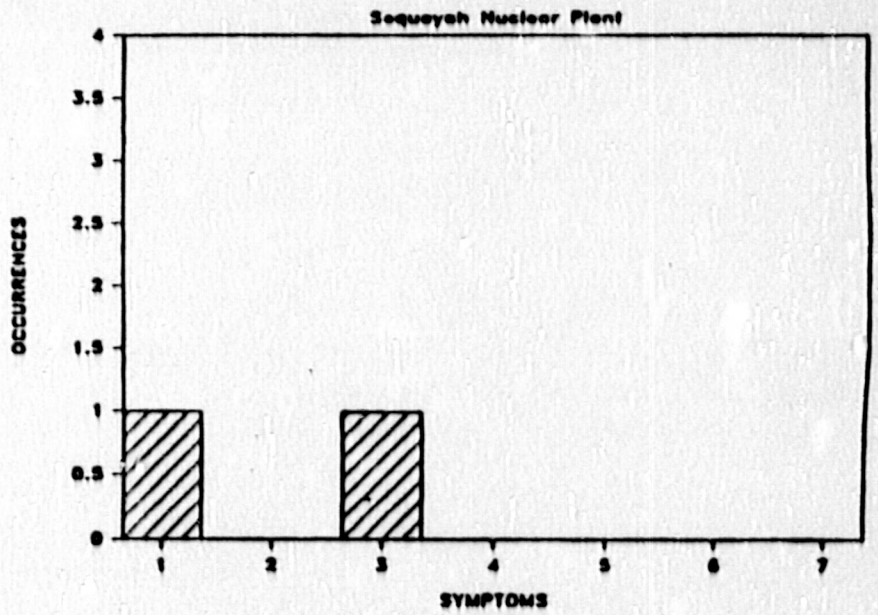
KEY
W = WBN
S = SQN
B = BFN

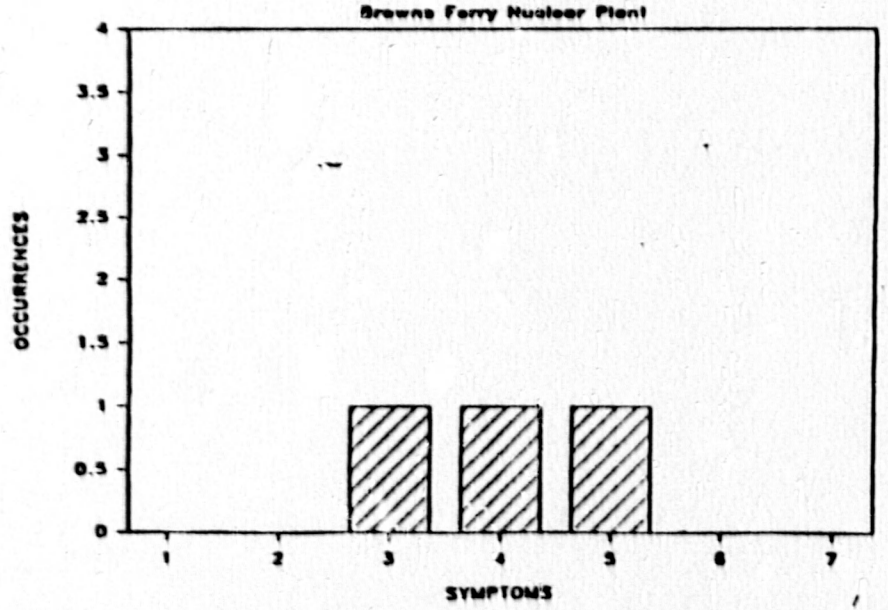
ATTACHMENT F

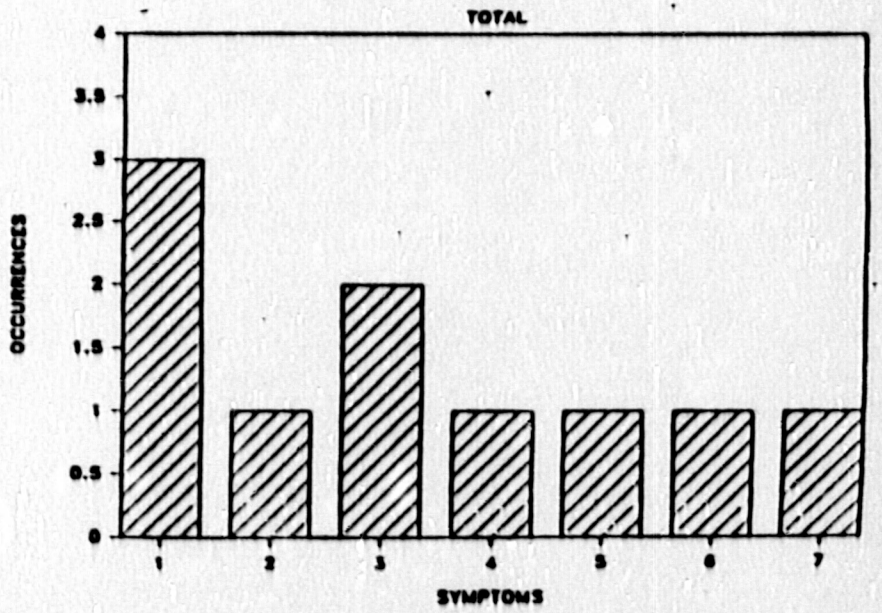
OCCURRENCES VS SYMPTOMS

SUBCAT 303





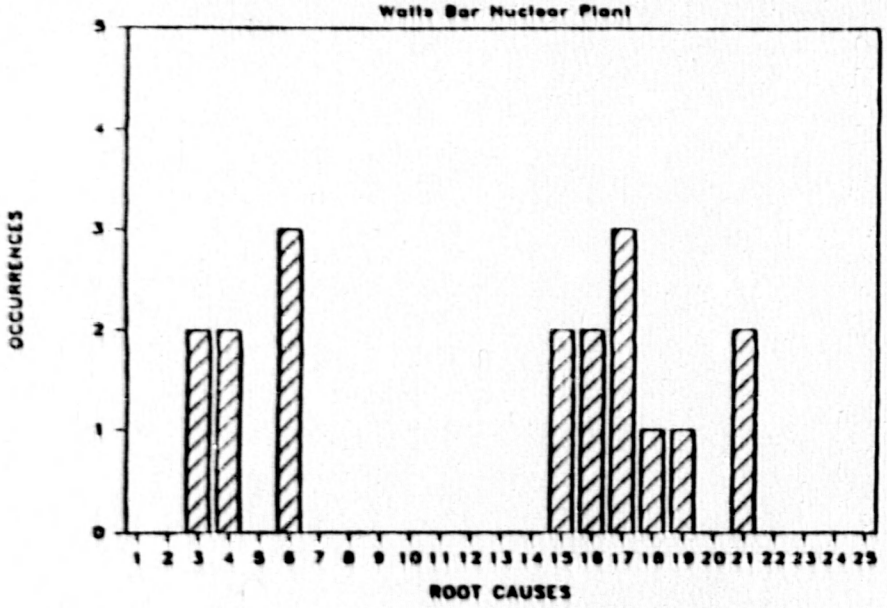


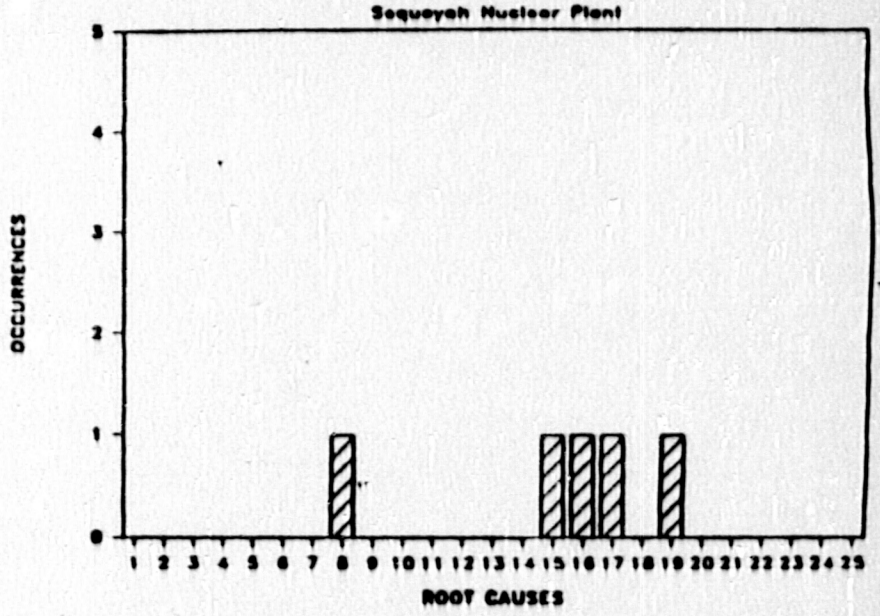


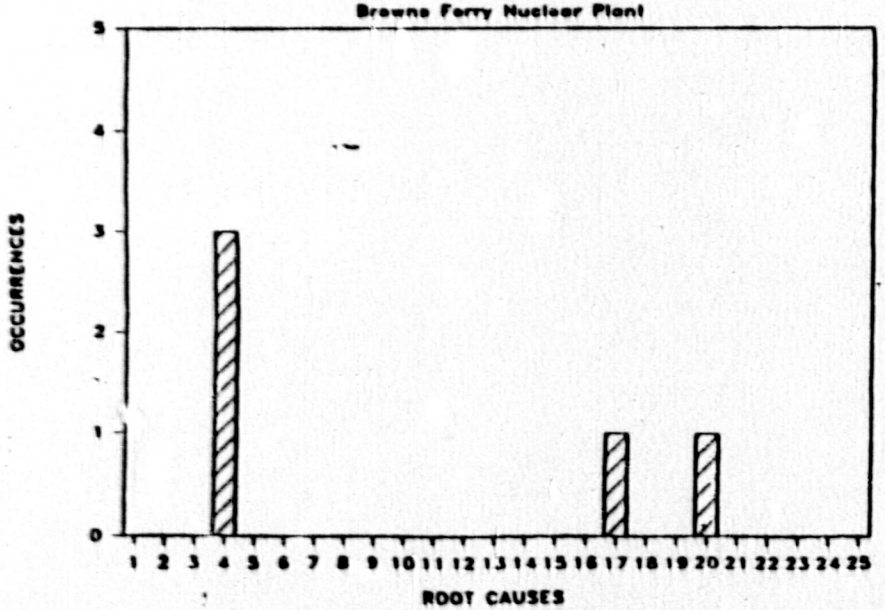
ATTACHMENT G

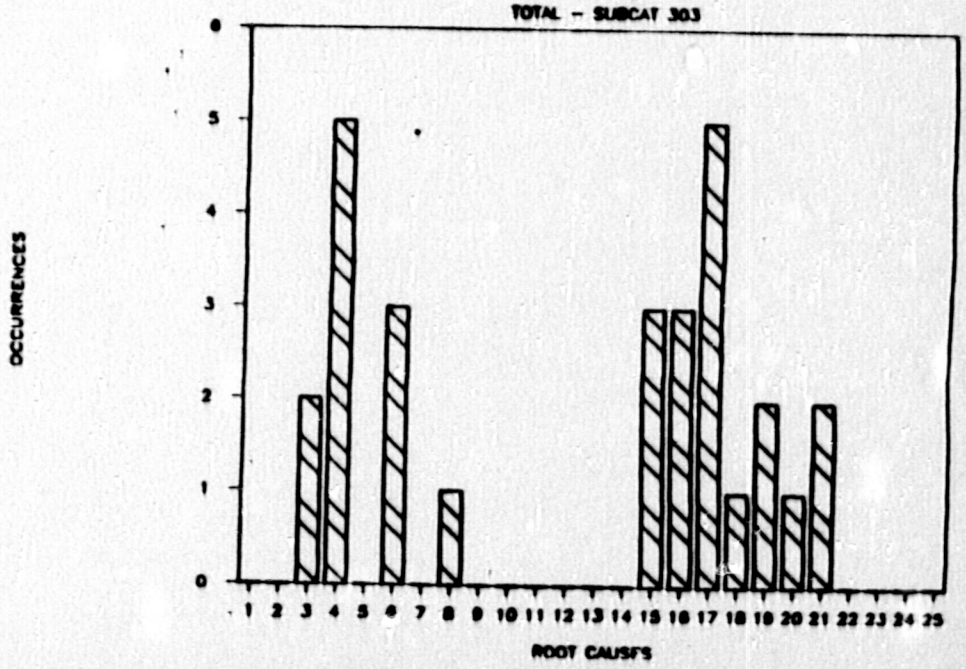
OCCURRENCES VS ROOT CAUSES

SUBCAT 303









ATTACHMENT H

Corrective Action Tracking Documents (CATDs)

CATD Number	Corrective Action Plan Approved
30302-SQN-01	Yes
30302-SQN-02	Yes
30302-WBN-01	Tracking only
30303-SQN-01	Yes
30303-SQN-02	Yes
30303-WBN-01	Yes
30303-BFN-01	Yes
30304-WBN-01	Yes
30305-SQN-01	Yes
30305-SQN-02	Yes
30305-SQN-03	Number Not Used
30305-SQN-04	Tracking Only
30305-WBN-01	Yes
30305-WBN-02	Number Not Used
30305-WBN-03	Yes
30305-BLN-01	Number Not Used
30305-BLN-02	Yes

ECSP Corrective Action Tracking Document (CATD)

INITIATION Applicable ECSP Report No: OP-30302-SQN

1. Immediate Corrective Action Required: ☒ Yes ☐ No
2. Stop Work Recommended: ☐ Yes ☒ No
3. CATD No. OP 30302-001-SQN 4. INITIATION DATE 9/26/86
5. RESPONSIBLE ORGANIZATION: SQN
6. PROBLEM DESCRIPTION: ☒ QR ☐ NQR SI-3 records only one narrow range level channel for verifying compliance with tech spec RWST volume requirements and the specific channel used is not designated during performance of the SI. Because of this condition, channel calibration out of tolerance reports cannot be evaluated for impact on SI results nor can an audit be performed to verify past compliance. Additionally, MRS reviewed during the evaluation did not specify the work instructions used for loop calibraction. These deficiencies are considered to represnet a PRO. ☐ ATTACHMENTS
7. PREPARED BY: NAME G. D. Gagdner DATE: 9/26/86
8. CONCURRENCE: CEG-H W. R. [signature] DATE: 9/29/86
9. APPROVAL: ECTG PROGRAM MGR. [signature] for DATE: [illegible]

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: PROPOSED CORRECTIVE ACTION IS PROVIDED BY MEMORANDUM (L44 861017 801) DATED OCT. 17, 1986

THIS ITEM COMPLETED DATE: 10-26-87

☒ ATTACHMENTS

11. PROPOSED BY: DIRECTOR/MGR: [signature] DATE: 10/26/86
12. CONCURRENCE: CEG-H: W. R. [signature] DATE: 11-5-86

SRP: ____ DATE: ____

____ DATE: ____

____ DATE: ____

____ DATE: ____

ECTG PROGRAM MGR: ____ DATE: ____

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE	TITLE	DATE

ECSP Corrective Action Tracking Document (CATD)

INITIATION Applicable ECSP Report No: 303.02 SQN Revision 1

1. Immediate Corrective Action Required: ☐ Yes ☒ No
2. Stop Work Recommended: ☐ Yes ☒ No
3. CATD No. 30302 SQN 02 4. INITIATION DATE 10/14/86
5. RESPONSIBLE ORGANIZATION: Operations SQN
6. PROBLEM DESCRIPTION: ☒ QR ☐ NQR Problems exist with the function and calibration of level transmitters for the refueling water storage tanks.

☐ ATTACHMENTS

7. PREPARED BY: NAME T. W. White DATE: 10/14/86
8. CONCURRENCE: CEG-H W. R. Seggie DATE: 10/14/86
9. APPROVAL: ECTG PROGRAM MGR. _____ DATE: _____

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: We accept your proposed corrective action as presented with the exception of the problem with SI-3. The SI-3 problem remains open and is being tracked via CATD 30302 SQN 01.

A-23-87

☐ ATTACHMENTS

11. PROPOSED BY: DIRECTOR/MGR: S53 860910 927 DATE: 10/14/86
12. CONCURRENCE: CEG-H: W. R. Seggie DATE: 10/15/86
SRP: _____ DATE: _____
DATE: _____
DATE: _____
DATE: _____
ECTG PROGRAM MGR: _____ DATE: _____

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE	TITLE	DATE

2077T

ECTG Corrective Action Tracking Document (CATD)

INITIATION Applicable ECTG Report No.: OP 303.02 Rev 1

1. Immediate Corrective Action Required: ☐ Yes ☒ No
2. Stop Work Recommended: ☐ Yes ☒ No
3. CATD No. 30302-WBN-01 4. INITIATION DATE 04/02/87
5. RESPONSIBLE ORGANIZATION: WBN Plant Manager, WBEP
6. PROBLEM DESCRIPTION: ☒ QR ☐ NQR DCR 633 for replacement of the cold leg accumulator level transmitters and DCR 678 for replacement of the refueling water storage tank level transmitters have not been implemented. Completion of these modifications is a requirement before fuel load (unit 1).

☐ ATTACHMENTS

7. PREPARED BY: NAME [signature] DATE: 04/02/87
8. CONCURRENCE: CEG-H [signature] DATE: 4/2/87
9. APPROVAL: ECTG PROGRAM MGR. [signature] for DATE: 4/2/87

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: Tracking only of DCR 633 and DCR 678

☐ ATTACHMENTS

11. PROPOSED BY: DIRECTOR/MGR: Tracking only DATE: _____
12. CONCURRENCE: CEG-H: _____ DATE: _____
ECTG PROGRAM MANAGER _____ DATE: _____

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE	TITLE	DATE

3820T

ECSP Corrective Action Tracking Document (CATD)

INITIATION Applicable ECSP Report No: 303.03 SQN Revision 1

1. Immediate Corrective Action Required: ☐ Yes ■ No
2. Stop Work Recommended: ☐ Yes ■ No
3. CATD No. 30303-SQN-01 4. INITIATION DATE 11-08-86
5. RESPONSIBLE ORGANIZATION: Electrical Maintenance
6. PROBLEM DESCRIPTION: ☐ QR ■ NQR

   Recommendation was made to provide written instructions on setting valve position indicator switches on Target Rock valves.

■ ATTACHMENTS

7. PREPARED BY: NAME T. W. White DATE: 10-11-08-86
8. CONCURRENCE: CEG-H [signature] DATE: 10-14-86
9. APPROVAL: ECTG PROGRAM MGR. [signature] for DATE: 4/7/87

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: Commitment has been made to prepare written instructions for setting valve position indication switches for Target Rock valves. To be accomplished by 02-01-87.

    CAP was [illegible] this CATD was [illegible] for completeness.

    COMPLETED DATE: [illegible]

☐ ATTACHMENTS

11. PROPOSED BY: DIRECTOR/MGR: S03 860922 804 DATE: 09/25/86
12. CONCURRENCE: CEG-H: [signature] DATE: 10/14/86
    SRP: DATE:
    DATE:
    DATE:
    DATE:
    ECTG PROGRAM MGR: DATE:

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE	TITLE	DATE

2048T

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION Applicable ECSP Report No: 303.03 SQN Revision 2

1. Immediate Corrective Action Required: ☐ Yes ■ No
2. Stop Work Recommended: ☐ Yes ■ No
3. CATD No. 303.03-SQN-02 4. INITIATION DATE 10-08-86
5. RESPONSIBLE ORGANIZATION: Operations 5-4-87
6. PROBLEM DESCRIPTION: ☑ QR ~~■~~ NQR Questionable adequacy of calibration procedures for radiation monitors.

☑ ATTACHMENTS

7. PREPARED BY: NAME T. W. White DATE: 10-08-86
8. CONCURRENCE: CEG-H W. R. Lagergren DATE: 10-14-86
9. APPROVAL: ECTG PROGRAM MGR. [signature] for DATE: 4/7/87

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: Radiation monitor calibration procedures are being reviewed using the SI checklist for guidance. This corrective action is to be completed prior to plant startup and will be tracked at SQN by P2 activity 200011950.

CAP was received [illegible] report review. This CATD was issued after the [illegible] for completeness.

CATD upgraded to QR to reflect Program requirement 5-4-87 No CAQR will be required since CAP indicates Retest and item being tracked at P2
WRL 5-4-87

☐ ATTACHMENTS

11. PROPOSED BY: DIRECTOR/MGR: S03 860922 804 DATE: 09/25/86
12. CONCURRENCE: CEG-H: W. R. Lagergren DATE: 10/14/86
SRP: ___ DATE: ___
___ DATE: ___
___ DATE: ___
___ DATE: ___
ECTG PROGRAM MGR: ___ DATE: ___

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE	TITLE	DATE

2052T

ECSP Corrective Action Tracking Document (CATD)

INITIATION Applicable ECSP Report No: OP 303.03

1. Immediate Corrective Action Required: ☐ Yes ☒ No
2. Stop Work Recommended: ☐ Yes ☒ No
3. CATD No. 30303-WBN-01 4. INITIATION DATE 10-28-86
5. RESPONSIBLE ORGANIZATION: WBN Plant Manager, Electrical Maintenance
6. PROBLEM DESCRIPTION: ☐ QR ☒ NQR The WBN response to NSRS report I-85-286-WBN stated WBN will review MI-57.30 to include vendor recommendations for Target Rock valve reed switch adjustment and that a maintenance trending program was being developed for WBN. Please provide the status of these corrective actions.

☐ ATTACHMENTS

7. PREPARED BY: NAME G. D. Gardner DATE: 10-28-86
8. CONCURRENCE: CEG-H per W.R. [signature] DATE: 11-10-86
9. APPROVAL: ECTG PROGRAM MGR. [signature] DATE: 11-10-86

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN:
SEE ATTACHED Endorsement TDG 861216 007

☐ ATTACHMENTS

11. PROPOSED BY: DIRECTOR/MGR: [signature] DATE: 12/17/86
12. CONCURRENCE: CEG-H: [signature] DATE: 2/6/87
SRP: DATE:
DATE:
DATE:
DATE:
ECTG PROGRAM MGR: DATE:

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE	TITLE	DATE

ECSP Corrective Action Tracking Document (CATD)

INITIATION Applicable ECSP Report No: OP 303.03

1. Immediate Corrective Action Required: ☐ Yes ☒ No
2. Stop Work Recommended: ☐ Yes ☒ No
3. CATD No. OP 30303-001-BFN 4. INITIATION DATE 9/23/86
5. RESPONSIBLE ORGANIZATION: BFN Electrical Maint., Document Control
6. PROBLEM DESCRIPTION: ☐ QR ☒ NQR According to cognizant maintenance personnel at BFN and based on the results of evaluations at other plants, Target Rock valve reed switch adjustment is sensitive and difficult. No procedures exist at BFN for their adjustment. There is an apparent problem with the equipment history archives at BFN. Planning and Scheduling maintains a searchable data base because Document Control could not retrieve maintenance request data without specific document numbers. The previous maint. history cannot be searched for TR history trending. ☐ ATTACHMENTS
7. PREPARED BY: NAME G. D. Gardner DATE: 9/23/86
8. CONCURRENCE: CEG-H W. R. Jagger DATE: 9/25/86
9. APPROVAL: ECTG PROGRAM MGR. ______ DATE: ______

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN:

See Memorandum R33 861128 827 | JTH 12/8/86

☐ ATTACHMENTS

11. PROPOSED BY: DIRECTOR/MGR: R33 861128 827 DATE: 11-28-86
12. CONCURRENCE: CEG-H: Thomas J Heath for WRJ DATE: 12-08-86
    SRP: ______ DATE: ______
    ______ DATE: ______
    ______ DATE: ______
    ______ DATE: ______
    ECTG PROGRAM MGR: ______ DATE: ______

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

______ SIGNATURE ______ TITLE ______ DATE

ECSP Corrective
Action Tracking Document
(CATD)

INITIATION

Applicable ECSP Report No: OP 303.04

1. Immediate Corrective Action Required: ☒ Yes ☐ No
2. Stop Work Recommended: ☐ Yes ☒ No
3. CATD No. OP 30304-001-WBN
4. INITIATION DATE 9-30-86
5. RESPONSIBLE ORGANIZATION: DNE Nuclear Licensing Section
6. PROBLEM DESCRIPTION: ☒ QR ☐ NQR Watts Bar Final Safety Analysis Report section 6.7 does not agree with the ice weight specified in the WBN Technical Specifications 3/4.6.5. This was previously identified to DNE by Immediate Action Notice 6-OP303 for which a response has not been received. This supersedes the previous notice.

7. PREPARED BY: NAME G. D. Gardner ☐ ATTACHMENTS
8. CONCURRENCE: CEG-H W. C. [signature] DATE: 9-30-86
9. APPROVAL: ECTG PROGRAM MGR. [signature] DATE: 10-2-86
DATE: 10/2/86

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN:
Proposed changes to the WBN FSAR have been prepared by Westinghouse and has been submitted to TVA by WAT D 7136 (B45860908601). These changes will bring the FSAR and Tech spec into agreement. The proposed changes will be issued to Watts Bar Site Licensing by November 28, 1986. This change should be incorporated in the WBN FSAR by June 1, 1986 7.
TFH per telecon T.C. Price

11. PROPOSED BY: DIRECTOR/MGR: B20 861119 001 ☐ ATTACHMENTS
12. CONCURRENCE: CEG-H: Thomas T. Huth DATE: 11/19/86
SRP: DATE: 11/25/86
DATE:
DATE:
DATE:
ECTG PROGRAM MGR: DATE:
DATE:

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE TITLE DATE

1584T

ECSP Corrective Action Tracking Document (CATD)

INITIATION **Applicable ECSP Report No:** 30305-SQN Revision 2

1. Immediate Corrective Action Required: ☐ Yes ☒ No
2. Stop Work Recommended: ☐ Yes ☒ No
3. CATD No. 30305 SQN 01
4. INITIATION DATE October 9, 1986
5. RESPONSIBLE ORGANIZATION: Operations
6. PROBLEM DESCRIPTION: ☐ QR ☒ NQR

Provide status of revision(s) to SI's to denote technical specification vs nontechnical specification required monitors.

7. PREPARED BY: NAME T. W. White ☐ ATTACHMENTS
8. CONCURRENCE: CEG-H W.R. [signature] DATE: 10-09-86
9. APPROVAL: ECTG PROGRAM MGR. [signature] DATE: 10-15-86 DATE: 10-17-86

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: SEE THE CAP TRANSMITTED BY MEMORANDUM S55 861209 500/S03 861124 SCI

THIS ITEM CORRECTED DATE 1-8-87

11. PROPOSED BY: DIRECTOR/MGR: [signature] ☐ ATTACHMENTS
12. CONCURRENCE: CEG-H: [signature] for WRL DATE: 11-25-86
SRP: DATE: 12/4/86
DATE:
DATE:
DATE:
ECTG PROGRAM MGR: DATE:
DATE:

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE TITLE DATE

ECSP Corrective Action Tracking Document (CATD)

INITIATION Applicable ECSP Report No: 303.05 SQW Revision 2

1. Immediate Corrective Action Required: ☐ Yes ■ No
2. Stop Work Recommended: ☐ Yes ■ No
3. CATD No. 30305 SQW 02
4. INITIATION DATE 10-09-86
5. RESPONSIBLE ORGANIZATION: Operations
6. PROBLEM DESCRIPTION: ■ NOR Provide position/determination on upgrading PING's to improve accuracy and reliability.

7. PREPARED BY: NAME I. W. White ☐ ATTACHMENTS DATE: 10-09-86
8. CONCURRENCE: CEG-H W.R. [illegible] DATE: 10-14-86
9. APPROVAL: ECTG PROGRAM MGR. [illegible] DATE: 10-17-86

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: SEE THAT CAP TRANSMITTED BY MEMORANDUM [illegible] 1-8-87

11. PROPOSED BY: DIRECTOR/MGR: [illegible] ☐ ATTACHMENTS DATE: 11-25-86
12. CONCURRENCE: CEG-H: [illegible] DATE: 12/3/86
SRP: DATE:
DATE:
DATE:
DATE:
ECTG PROGRAM MGR: DATE:
DATE:

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE TITLE DATE

2051T

ECSP Corrective Action Tracking Document (CATD)

INITIATION Applicable ECSP Report No.: 303.05-SQN-04

1. Immediate Corrective Action Required: ☐ Yes ☒ No
2. Stop Work Recommended: ☐ Yes ☒ No
3. CATD No. 30305-SQN-04 4. INITIATION DATE 3/11/87
5. RESPONSIBLE ORGANIZATION: SQN Modifications
6. PROBLEM DESCRIPTION: ☒ QR ☐ NQR During preparations for installation of amphenol connectors on penetrations involving shielded cable, problems with vendor instructions were noted. CAQR No. SQP 870178 Revision 0 was issued. This CATD is for the purpose of tracking the CAQR.

☐ ATTACHMENTS

7. PREPARED BY: NAME B. Meers, Jr. 3/11/87 DATE: 3/11/87
8. CONCURRENCE: CEG-H Thomas F. Hall for WRL DATE: 3/12/87
9. APPROVAL: ECTG PROGRAM MGR. [illegible] fs DATE: 4/7/87

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN:

FIELD WORK COMPLETED 1-8-87 DATE:

☐ ATTACHMENTS

11. PROPOSED BY: DIRECTOR/MGR: TRACKING ONLY DATE: 3/12/87
12. CONCURRENCE: CEG-H: Thomas F. Hall for WRL DATE: 3/12/87
SRP: _____ DATE: _____
_____ DATE: _____
_____ DATE: _____
_____ DATE: _____
ECTG PROGRAM MGR: _____ DATE: _____

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE	TITLE	DATE

4488T

ECSP Corrective Action Tracking Document (CATD)

INITIATION Applicable ECSP Report No.: 30305-WBN

1. Immediate Corrective Action Required: ☒ Yes ☐ No
2. Stop Work Recommended: ☐ Yes ☒ No
3. CATD No. 30305-WBN-01 (Duplicate) 4. INITIATION DATE 9-10-86
5. RESPONSIBLE ORGANIZATION: WBN DNC
6. PROBLEM DESCRIPTION: ☐ QR ☒ NQR During the evaluation of employee concern WI-85-039-002 a DNC draft procedure (QCP 3.06-9) was reviewed which does not provide nor reference the protective coverings for instruments required by QCI-1.36 to mitigate damage to equipment during construction.

☐ ATTACHMENTS

7. PREPARED BY: NAME G. D. Gardner DATE: 9/10/86
8. CONCURRENCE: CEG-H W. R. Lagergren DATE: 9/10/86
9. APPROVAL: ECTG PROGRAM MGR. [signature] for DATE: 3/20/87

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN:

THIS ITEM COMPLETED DATE 3-18-88

☐ ATTACHMENTS

11. PROPOSED BY: DIRECTOR/MGR: See Next Page [signature] DATE: 2/26/87
12. CONCURRENCE: CEG-H: [signature] DATE: 3-3-87

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE	TITLE	DATE

3783T

Action Tracking Document
(CATD)

INITIATION   Applicable ECSP Report No: OP 303.05

1. Immediate Corrective Action Required: ☒ Yes ☐ No
2. Stop Work Recommended: ☐ Yes ☒ No
3. CATD No. OP 303.05-003-WBN   4. INITIATION DATE 9-30-86
5. RESPONSIBLE ORGANIZATION: WBN Electrical Maintenance
6. PROBLEM DESCRIPTION: ☐ QR ☒ NQR The NQAM specifies that the plant superintendent shall divide the plant into sections and assign these sections to individuals responsible for performing inspections. The frequency of the checks are required to be not less than once a month. AI-1.8 specifies that housekeeping inspections be not less than twice a month and individual areas, as assigned, shall be inspected quarterly. These requirements are not very clear on what is intended. A review of completed Attachment 2 for AI-1.8 was conducted on the Instrument Maintenance and Electrical Maintenance Sections for 1985 and 1986. The records obtained from Document Control indicate that inspections were conducted once to twice a month, but that a specific area was only being inspected about every three months. Additionally, not all housekeeping logs were found in Document Control. This is an apparent violation of NQAM requirements which specify that plant areas be inspected at least once per month and that QA records be maintained. The WBN Site Director was informed of this by Immediate Action Notice 14-OP303 and has not yet responded. This CATD supersedes the previous notice.

☐ ATTACHMENTS

7. PREPARED BY: NAME G. D. Gardner   DATE: 9-30-86
8. CONCURRENCE: CEG-H [signature]   DATE: 10-6-86
9. APPROVAL: ECTG PROGRAM MGR: [signature]   DATE: 10/2/86

THIS ITEM COMPLETE
DATE: 2-12-88

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: SEE ATTACHED CAP

☐ ATTACHMENTS

11. PROPOSED BY: DIRECTOR/MGR: [signature]   DATE: 2/20/87
12. CONCURRENCE: CEG-H: ____   DATE: ____
SRP: ____   DATE: ____
____   DATE: ____
____   DATE: ____
____   DATE: ____
ECTG PROGRAM MGR: ____   DATE: ____

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

____ SIGNATURE   ____ TITLE   ____ DATE

ECSP Corrective Action Tracking Document (CATD)

INITIATION — Applicable ECSP Report NO:

1. Immediate Corrective Action Required: ☒ Yes ☐ No
2. Stop Work Recommended: ☐ Yes ☒ No
3. CATD No. OP-30305-002 4. INITIATION DATE 9-10-86
5. RESPONSIBLE ORGANIZATION: ELN DNC
6. PROBLEM DESCRIPTION: ☐ QR ☒ NQR

During the evaluation of employee Concern WI-85-039-002 at WBN a draft procedure (QCP 3.06-9) was reviewed regarding the requirements for instrument installation and rigging. This draft procedure provides no mechanism for providing or referencing the protective coverings required by the Housekeeping QCI-1.36 to mitigate damage during construction. The situation does exist at Bellefonte

☐ ATTACHMENTS

7. PREPARED BY: NAME G. D. Gardner DATE: 9/10/86
8. CONCURRENCE: CEG-H W. R. Saggs DATE: 9-10-86
9. APPROVAL: ECTG PROGRAM MGR. DATE:

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN:

THIS ITEM COMPLETED DATE 6-14-88

☐ ATTACHMENTS

11. PROPOSED BY: DIRECTOR/MGR: James P. Darling DATE: 3/31/87
12. CONCURRENCE: CEG-H: W R Saggs DATE: 4-6-87
SRP: DATE:
DATE:
DATE:
DATE:
ECTG PROGRAM MGR: DATE:

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE	TITLE	DATE

Attachment I

List of Evaluators by Element/Plant

Element 303.01

SQN	WBN	BFN	BLN
Gardner	Gardner	Gardner	N/A

Element 303.02

SQN	WBN	BFN	BLN
Gardner	Gardner Aycock	N/A	N/A

Element 303.03

SQN	WBN	BFN	BLN
Gardner	Gardner	Gardner	N/A

Element 303.04

SQN	WBN	BFN	BLN
N/A	Gardner	N/A	N/A

Element 303.05

SQN	WBN	BFN	BLN
Gardner Meers	Gardner	Gardner	N/A