



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION II
 101 MARIETTA STREET, N.W., SUITE 2900
 ATLANTA, GEORGIA 30323-0199

Report Nos.: 50-259/93-32, 50-260/93-32, and 50-296/93-32

Licensee: Tennessee Valley Authority
 6N 38A Lookout Place
 1101 Market Street
 Chattanooga, TN 37402-2801

Docket Nos.: 50-259, 50-260,
 and 50-296

License Nos.: DPR-33, DPR-52,
 and DPR-68

Facility Name: Browns Ferry Units 1, 2, and 3

Inspection at Browns Ferry Site near Decatur, Alabama

Inspection Conducted: August 21 - September 17, 1993

Inspector:

Paul J. Kellogg
 C. A. Patterson, Senior Resident Inspector

9/28/93
 Date Signed

Accompanied by: J. Munday, Resident Inspector
 R. Musser, Resident Inspector
 G. Schnebli, Resident Inspector

Approved by:

Paul J. Kellogg
 Paul J. Kellogg, Chief,
 Reactor Projects, Section 4A
 Division of Reactor Projects

9/28/93
 Date Signed

SUMMARY

Scope:

This routine resident inspection included maintenance observation, operational safety verification, measuring and test equipment, employee concerns program, Unit 3 restart activities, reportable occurrences, and action on previous inspection findings.

One hour of backshift coverage was routinely worked during the work week. Deep backshift inspections were conducted on September 6 and September 9, 1993.



Results:

The licensee's commitment in the final safety analysis report to monitor corrosion of the spent fuel storage racks was reviewed, paragraph 3. The commitment is being met and the program is adequate for tracking changes in the boral.

Temporary Instruction 2500/28, "Employee Concerns Program," was completed, paragraph 5. The program provides an adequate means to allow employees to come forward with concerns without fear of retribution.

An inspector followup was identified concerning the hydrogen/oxygen analyzer warmup period, paragraph 2. The vendor manual specifies a warmup period but this was not incorporated into the system startup.

REPORT DETAILS

1. Persons Contacted

Licensee Employees:

O. Zeringue, Vice President
*J. Scalice, Plant Manager
J. Rupert, Engineering and Modifications Manager
*T. Shriver, Licensing and Quality Assurance Manager
D. Nye, Recovery Manager
*R. Moll, Acting Operations Manager
*J. Maddox, Engineering Manager
*M. Bajestani, Technical Support Manager
*A. Sorrell, Chemistry and Radiological Controls Manager
C. Crane, Maintenance Manager
*P. Salas, Licensing Manager
*R. Wells, Compliance Manager
J. Corey, Radiological Control Manager
J. Brazell, Site Security Manager

Other licensee employees or contractors contacted included licensed reactor operators, auxiliary operators, craftsmen, technicians, and public safety officers; and quality assurance, design, and engineering personnel.

NRC Personnel:

P. Kellogg, Section Chief
*C. Patterson, Senior Resident Inspector
J. Munday, Resident Inspector
*R. Musser, Resident Inspector
G. Schnebli, Resident Inspector

*Attended exit interview

Acronyms and initialisms used throughout this report are listed in the last paragraph.

2. Maintenance Observation (62703)

Plant maintenance activities were observed and/or reviewed for selected safety-related systems and components to ascertain that they were conducted in accordance with requirements. The following items were considered during these reviews: LCOs maintained, use of approved procedures, functional testing and/or calibrations were performed prior to returning components or systems to service, QC records maintained, activities accomplished by qualified personnel, use of properly



certified parts and materials, proper use of clearance procedures, and implementation of radiological controls as required.

Work documents were reviewed to determine the status of outstanding jobs and to assure that priority was assigned to safety-related equipment maintenance which might affect plant safety. The inspectors observed the following maintenance activities during this reporting period:

a. RWCU Maintenance

On August 23, 1993, the inspector observed the performance of portions of 2-SI-4.2.A.39(A), PCIS RWCU Areas Channel A1 High Temperature Instrument Channels Calibration. While testing the High Gross Failure function of the 2-TIS-69-838A, relay 16A-K60A did not de-energize as expected when a trip signal was generated. The Trip status LED located on the analog trip unit illuminated which served to verify that the trip signal level was reached. The SI was stopped, Operations informed, and WO 93-10869-00 written to troubleshoot and repair. Operations initiated LCO 2-93-188-3.2.A due to the inoperable channel. While troubleshooting, maintenance attempted to duplicate the malfunction but could not. The analog trip unit and the relay responded properly each time. The system engineer was consulted and the decision was made to replace the analog trip circuit card. Following replacement, the appropriate portions of the SI were reperformed satisfactorily and the LCO was exited. The inspector questioned the engineer how the malfunction was determined to be with the analog trip card and not the relay. He stated that the analog trip card inputs to a 24v relay which in turn inputs to the 16A-K60A relay. Voltage readings were taken on the 24v relay and found it was still energized with the trip signal generated. This indicated that the analog trip card was not operating properly. The inspector had no further concerns with this activity.

b. Hydrogen/Oxygen Analyzer

While troubleshooting a problem with the 2B H₂/O₂ monitor, maintenance determined that PCV 76-103D was not operating properly and it was replaced with a new valve from power stores. When this did not correct the problem, a valve from the Unit 1 H₂/O₂ system was installed and operated properly. The inspector questioned maintenance personnel about why the new valve did not work. Initially it was thought that the valve procured from power stores was the wrong model. The inspector located the remaining valves in power stores and found that they appeared to be the same type valve as the one removed from Unit 1 which worked. The licensee then questioned the valve manufacturer and was told that the valves TVA had procured were the correct model for the system. The licensee then contacted the system vendor and after much discussion determined that the valve used in the system was a modified version of the valve in power stores. It was determined that after the system vendor bought the valves from the valve



manufacturer, they modified the valve for the needed function. This consisted of removing a small internal spring. However, the vendor manual for the valve, which came from the valve manufacturer, was not revised to reflect this modification. The licensee had previously ordered replacement valves from the valve manufacturer using component model numbers from the vendor manual. Neither the vendor nor the licensee were aware that the valve needed modifying when it arrived with the spring installed. Therefore, when an attempt was made to use the valve in the system, it did not work.

Following identification of this problem, the maintenance programs manager issued a memorandum directing all maintenance personnel to issue PERs or warranty claims anytime parts fail to perform as expected. In addition, the licensee revised the valve vendor manual to reflect the correct valve configuration and has requested the system vendor to provide documentation to this effect.

In addition, the inspector questioned the licensee's practice of not incorporating a warm up period into the startup of the H2/O2 analyzers. The inspector questioned several licensed operators about the amount of warm up time needed before the system was considered accurate and they indicated that a warm up period was not required. The system engineer was also questioned and he indicated that he didn't believe a warm up period was needed. The inspector reviewed the vendor manual which stated that a warm up period of at least eight, preferably twenty-four, hours was needed prior to calibrating; however, no mention of warm up time prior to use was made. The vendor offered no further information when contacted by the inspector. The system engineer is reviewing this issue. This will be tracked as IFI 260/93-32-01, H2/O2 warmup.

No violations or deviations were identified in the Maintenance Observation area.

3. Operational Safety Verification (71707)

The NRC inspectors followed the overall plant status and any significant safety matters related to plant operations. Daily discussions were held with plant management and various members of the plant operating staff. The inspectors made routine visits to the control rooms. Inspection observations included instrument readings, setpoints and recordings, status of operating systems, status and alignments of emergency standby systems, verification of onsite and offsite power supplies, emergency power sources available for automatic operation, the purpose of temporary tags on equipment controls and switches, annunciator alarm status, adherence to procedures, adherence to LCOs, nuclear instruments operability, temporary alterations in effect, daily journals and logs, stack monitor recorder traces, and control room manning. This inspection activity also included numerous informal discussions with operators and supervisors.



General plant tours were conducted. Portions of the turbine buildings, each reactor building, and general plant areas were visited. Observations included valve position and system alignment, snubber and hanger conditions, containment isolation alignments, instrument readings, housekeeping, power supply and breaker alignments, radiation and contaminated area controls, tag controls on equipment, work activities in progress, and radiological protection controls. Informal discussions were held with selected plant personnel in their functional areas during these tours.

a. Unit Status

Unit 2 operated at power this report period without any significant problems. At the end of the period the unit had been on-line for 106 continuous days.

b. Spent Fuel Storage Racks - Neutron Absorption

The inspector reviewed the licensee's program to monitor the fuel storage racks. The licensee committed in FSAR section 10.3.6 to install corrosion test specimens in the Unit 3 SFP. These will be periodically removed and examined to check the long-term behavior of the rack materials. The licensee implements this program by procedure TI-116, High Density Fuel Storage System Surveillance Program. The racks are made up of stainless-steel container tubes. Each tube wall has a core of Boral. The Boral core is made up of boron carbide in aluminum.

The inspector reviewed TI-116, Q-DCN 19607A dated September 16, 1992, and Q-DCN 26199A dated September 1, 1993. The Q-DCNs are the results of the metallurgical evaluations of the boral neutron absorber plate coupons. These evaluations have been performed annually since 1987 with the exception of the 1990 inspection, which was delayed until March 1991 due to the requirement that secondary containment be operable for the coupon removal from the spent fuel storage pod. The coupons were installed in 1983 and have been inspected since 1987 to evaluate blistering caused by gas generation in the aluminum-boron carbide clad.

The metallurgical evaluation in the Q-DCNs contained the results of the TI-116 and comparison of the data taken to previous inspections. The acceptance criteria for TI-116 is based upon nine questions covering the various phases of the procedure. The inspector reviewed the results of TI-116 performed on August 3, 1993. The corrosion of the stainless steel and boral plates was measured. Local attack, pitting, and blistering were also examined. All of this data was compared to previous years data.

Some general corrosion was found but when extrapolated to the component's design lifetime of 40 years did not exceed design values. Some visible blistering of several boral plates was

identified in 1992. No new blisters were found in 1993. The existing blisters showed little growth. This was thought to be an indication that the blistering process was self-limiting. The licensee concluded that the blistering process was not accelerating at a rate which would be considered detrimental to the storage racks.

The inspector concluded that the licensee is committed to and conducting a monitoring program as required by the FSAR. The yearly inspections are adequate, based on the inspectors review, for tracking physical changes in the boron coupons.

c. Potential Flow Path from the CST to the Torus

The inspectors reviewed a concern for applicability at Browns Ferry regarding a potential flow path from the condensate storage tank to the torus through the high pressure coolant injection minimum flow line. In order for this condition to exist, the HPCI system would have to be not capable of operating (i.e. the auxiliary oil pump hand switch in the pull-to-lock position) and receive an initiation signal. When a HPCI initiation signal is generated, the minimum flow valve automatically opens creating a gravity drain flow path from the CST to the torus.

This matter was reviewed by the inspectors and by the licensee's system engineers for HPCI and RCIC. A review of the HPCI system indicated that this scenario was applicable to Browns Ferry. If the HPCI system was out of service and an initiation signal was received, the HPCI pump minimum flow valve, 2-FCV-73-30 (Unit 2), would open resulting in a drain path flow from the CST to the torus. Due to minimum flow line being orificed, the licensee estimates that the flow rate from the CST to the torus would be approximately 30-40 gpm. Because the flow rate through this drain path is relatively small when compared to the volumes of the CST and torus and the fact that the HPCI suction automatically swaps to the torus on high torus level (this would stop the flow from the CST to the torus through the minimum flow valve), the significance of this matter is relatively minor. In response to this matter, the licensee added a precaution and limitation to the HPCI system operating procedure alerting operators of this scenario. A review of the RCIC system indicated that if the RCIC was disabled (i.e. turbine tripped), the minimum flow valve would not open when an initiation signal was received. Therefore, this concern is not applicable to the Browns Ferry RCIC system.

d. HPCI System Walkdown

During this inspection period the inspector performed a walkdown of selected portions of the HPCI system. Items verified during this inspection included proper valve positioning and labelling, accuracy of drawings, physical condition of components, maintenance history, and procedural accuracy. All discrepancies

identified by the inspector during the system walkdown were minor in nature and were either dispositioned or verified to have already been identified by the licensee.

e. Secondary Containment Door Interlocks

As previously discussed in IR 50-259, 260, 296/93-18, the licensee experienced problems with the proper operation of the secondary containment door interlocks located between the U1/U2 reactor buildings and the turbine building. On two separate occasions, the inspector and an operations AVO observed the simultaneous opening of the reactor and turbine building doors. The licensee performed a thorough checkout of the interlocks and concluded that if personnel were attempting to enter the airlock at precisely the same time, interlock failure could occur and both doors would open. In response to these failures, the licensee intends to modify the interlocks as described in IR 93-18 prior to the start of the Unit 2 cycle 7 refueling outage scheduled for October 1994. Additionally, the licensee updated General Employee Training to include instructions on the proper operation of the interlocks to ensure secondary containment integrity. The inspectors will continue to monitor the licensee's efforts to ensure further momentary losses of secondary containment are prevented.

f. Radiological Surveys of Unit 2 Reactor Building

On September 9, 1993, the inspector performed an inspection of the radiological postings in the unit two reactor building. The inspector compared the posted radiation levels with a radiation measuring device. The comparison was favorable with one exception. The dose levels around an RHR pipe on the 565 foot elevation had increased slightly, approximately ten millirem per hour. The Radiological Control Group was informed of this and the area was surveyed and reposted. No other discrepancies were identified by the inspector.

No violations or deviations were identified in the Operational Safety Verification area.

4. Measuring and Test Equipment

On September 6, 1993, the inspector located a thermometer being used in the Unit 3 reactor building which was previously identified as being lost. The inspector discussed this with the M&TE coordinator and the discrepancy was resolved. All M&TE had recently been secured and labeled with a bar code to improve the program as part of the corrective action from previous violations. After the equipment was labeled it was entered into the computer and considered controlled. This thermometer was labeled but was not entered into the computer because it was overlooked. Therefore, it was considered lost. However, if the thermometer had been returned, the computer would have identified it as

lost and the discrepancy would have been resolved then. The inspector will continue to monitor the M&TE program.

5. Employee Concerns Program (TI 2500/028)

In accordance with the inspection requirements of Temporary Instruction 2500/028, "Employee Concerns Program," the inspectors reviewed the licensee's Concerns Resolution Program. The results of this inspection effort are included in Attachment A of this inspection report. The licensee's program provides an adequate vehicle to allow employees to come forward with their concerns without fear of retribution.

6. Unit 3 Restart Activities (30702, 37828, 61726, 62703, 71707)

The inspector reviewed and observed the licensee's activities involved with the Unit 3 restart. This included reviews of procedures, post-job activities, and completed field work; observation of pre-job field work, in-progress field work, and QA/QC activities; attendance at restart craft level, progress meetings, restart program meetings, and management meetings; and periodic discussions with both TVA and contractor personnel, skilled craftsmen, supervisors, managers, and executives.

A TVA/NRC management meeting was conducted on-site on September 7, 1993, to review the Unit 3 status. The recovery schedule is still in development and will be finalized after resources are allocated. Every restart issue and commitment closure has been tied to the schedule. Engineering work was nearing completion with 352 of 430 (82%) of design changes issued. Modification work was proceeding with 2392 of 5272 (42%) of the work plans written with 1014 work plans closed.

7. Reportable Occurrences (92700)

The LERs listed below were reviewed to determine if the information provided met NRC requirements. The determinations included the verification of compliance with TS and regulatory requirements, and addressed the adequacy of the event description, the corrective actions taken, the existence of potential generic problems, compliance with reporting requirements, and the relative safety significance of each event. Additional in-plant reviews and discussions with plant personnel, as appropriate, were conducted.

a. (CLOSED) LER 260/93-02, Main Steam Isolation Valves Exceeding Allowable Leakage During Testing.

On January 31, 1993, during the performance of local leak rate testing, the MSIV's on main steam line "C" were found to have leakage in excess of the TS limit of 11.5 SCFH. Subsequent testing determined that the "C" inboard MSIV (2-FCV-1-37) was leaking greater than the allowable limit. The valve was disassembled and inspection showed rib guide wear on the bottom rib guide which caused the main poppet to tilt slightly as the



valve closed so that it did not contact the main seat properly to ensure a good seal. The valve was subsequently repaired and leak rate tested satisfactorily at 6.5903 SCFH. This valve was previously modified with the lower portion of the bottom rib built up and the larger stem with anti-rotation device installed, to prevent rotation and align the poppet center-line with the main seat center-line. This valve has been disassembled and inspected during the previous four refueling outages and this is the first time that noticeable wear has been identified. The licensee considers that there has been some wear occurring over the past several operating cycles which were not believed significant enough to warrant repair. During this cycle the slight wear caused bouncing of the poppet on the rib guide during operation. At this point, wear accelerated enough to cause the poppet to tilt as it moved in the closed direction which prevented adequate poppet to main seat contact. In addition to repairing 2-FCV-1-37, the licensee cycled and observed all other MSIVs for smooth operation even though they had passed their LLRT.

- b. (CLOSED) LER 260/93-04, High Pressure Condition resulted in Anticipated Trip Without Scram Signal that Tripped the Reactor Recirculation Pump and Initiated an Alternate Rod Insertion Signal.

The inspector reviewed the licensee's closure package for this LER. This event was previously reviewed in IR 93-28 when URI 260/93-18-01 was closed. The procedure revisions listed as commitments in the LER were reviewed at that time. Also, included in this closure package was the lessons learned from the event that was discussed with plant operators.

8. Action on Previous Inspection Findings (92701, 92702)

(CLOSED) IFI 260/90-33-06, RPS/ARI Diversity.

To comply with the ATWS rule, the ARI/RPT system is required to have components diverse from those of the RPS. The SER, dated January 22, 1989, reviewing compliance with 10 CFR 50.62 relating to ARI/RPT systems identified that the licensee's initial design utilized the same ATU's for both the reactor trip system and the ATWS system. In addition, the SER stated that if ATUs by a different manufacturer were used in the ARI and RPS systems, sufficient diversity would exist between the ATWS ARI system and the RPS. The licensee committed in their letter to the NRC dated November 29, 1990, to install diverse ATUs provided by a different manufacturer in the Unit 2 ARI system prior to the cycle 7 startup. This modification was completed during the previous refueling outage under DCN W 17258A in May 1993. The inspectors reviewed the documentation associated with this issue and consider this IFI closed for Unit 2 only.

9. Exit Interview (30703)

The inspection scope and findings were summarized on September 17, 1993, with those persons indicated in paragraph 1 above. The inspectors described the areas inspected and discussed in detail the inspection findings listed below. The licensee did not identify as proprietary any of the material provided to or reviewed by the inspectors during this inspection. Dissenting comments were not received from the licensee.

<u>Item Number</u>	<u>Description and Reference</u>
260/93-32-01	IFI, H2/02 Warmup, paragraph two.

Licensee management was informed that 2 LERs and 1 IFI were closed.

10. Acronyms and Initialisms

ARI	Alternate Rod Injection
ATWS	Anticipated Transient Without Scram
ATU	Analog Trip Unit
AUO	Auxiliary Unit Operator
CFR	Code of Federal Regulations
CST	Condensate Storage Tank
FCV	Flow Control Valve
FSAR	Final Safety Analysis Report
GPM	Gallons Per Minute
HPCI	High Pressure Coolant Injection
IFI	Inspector Followup Item
IR	Inspection Report
LCO	Limiting Condition for Operation
LER	Licensee Event Report
LLRT	Local Leak Rate Test
MSIV	Main Steam Isolation Valve
M&TE	Measuring and Test Equipment
NRC	Nuclear Regulatory Commission
PCIS	Primary Containment Isolation System
PER	Problem Evaluation Report
QA	Quality Assurance
QC	Quality Control
RCIC	Reactor Core Isolation Cooling
RHR	Residual Heat Removal
RPT	Recirculation Pump Trip
RPS	Reactor Protection System
RWCU	Reactor Water Cleanup
SCFH	Standard Cubic Feet Per Hour
SER	Safety Evaluation Report
SFP	Spent Fuel Pool
SI	Surveillance Instruction
TI	Technical Instruction
TS	Technical Specification
URI	Unresolved Item
WO	Work Order



Attachment A

EMPLOYEE CONCERNS PROGRAMS

PLANT NAME: Browns Ferry LICENSEE: TVA DOCKET #: 50-259,260,296

NOTE: Please circle yes or no if applicable and add comments in the space provided.

A. PROGRAM:

1. Does the licensee have an employee concerns program?

(Yes or No/Comments)

Entitled "Concerns Resolution Program"

2. Has NRC inspected the program? Yes. Report #'s 86-40, 87-26, 87-30, 88-04, 90-05, and 93-18.

B. SCOPE: (Circle all that apply)

1. Is it for:

a. Technical? (Yes No/Comments)

b. Administrative? (Yes, No /Comments)

However, Intimidation and Harassment issues are referred to the TVA IG for investigation.

c. Personnel issues? (Yes, No /Comments)

Personnel issues are referred to the appropriate TVA organization.

2. Does it cover safety as well as non-safety issues?

(Yes or No/Comments)

All matters that could possibly affect the safe operation of the nuclear plant are followed up by the concerns resolution staff.

3. Is it designed for:

a. Nuclear safety? (Yes No/Comments)

b. Personal safety? (Yes No/Comments)

c. Personnel issues - including union grievances?

(Yes or No /Comments)

Personnel issues are referred to the appropriate TVA organization.

4. Does the program apply to all licensee employees?

(Yes or No/Comments)

5. Contractors?

(Yes or No/Comments)

6. Does the licensee require its contractors and their subs to have a similar program?

(Yes or No/Comments)

TVA requires contractors performing technical support activities to have their own program. Contractors directly supporting TVA staff personnel come under the purview of the TVA Concerns Resolution Program.

7. Does the licensee conduct an exit interview upon terminating employees asking if they have any safety concerns?

(Yes or No/Comments)

TVA employees as well as contractors providing direct support to the TVA staff are interviewed by the TVA concerns resolution staff prior to their departure. Contractors with concerns programs interview their employees.

C. INDEPENDENCE:

1. What is the title of the person in charge?

The entire TVA organizations Concerns Resolution Program is headed by the "Manager, Concerns Resolution Staff." This individual is located in Chattanooga, TN at the corporate office. The individual in charge of the Concerns Resolution Program on site has the title of "Concerns Resolution Staff Site Representative."

2. Who do they report to?

The site representative reports to the Manager, Concerns Resolution Staff, who in turn reports to the Vice President of Technical Support. The organization was set up for the Manager, Concerns Resolution Staff to report to the Senior Vice President of Nuclear Power. However, the senior VP position is currently vacant. In addition, the Manager, Concerns Resolution Staff can contact the President of the Generating Group to resolve employee concerns.

3. Are they independent of line management?

The individuals referenced in question C.2. above are independent of all line management at the site.

4. Does the ECP use third party consultants?

Although no independent contractors are used, "third party consultants" from various organizations within TVA are used by the concerns resolution staff to investigate employee concerns.

5. How is a concern about a manager or vice president followed up?

Because of the independence of the Concerns Resolution Staff, concerns about a manager or vice president are generally handled in the same manner as other concerns. However, in addition these concerns are raised to the appropriate level of management within TVA and if applicable to the TVA Inspector General.

D. RESOURCES:

1. What is the size of staff devoted to this program?

The Concerns Resolution staff located at Browns Ferry consists of two individuals.

2. What are ECP staff qualifications (technical training, interviewing training, investigator training, other)?

The following is a list of qualifications for an individual on the ECP staff:

- B.S. degree in Engineering or other scientific discipline or its equivalent.
- Effective communications skills
- Training in interviewing and negotiations

In addition, experience is required in the utility/power plant field, preferably nuclear power. The site representative is required to have 10 years experience with the assistant positions requiring 7 years experience.

E. REFERRALS:

1. Who has followup on concerns (ECP staff, line management, other)?

The concerns resolution staff has the requirement to followup on concerns.

F. CONFIDENTIALITY:

1. Are the reports confidential?

(Yes or No/Comments)

2. Who is the identity of the allegor made known to

()?

(Circle, if other explain)

Allegers who request confidentiality can have their identity made known to the concerns resolution staff, TVA OGC, TVA OIG, and the NRC on a need to know basis. In addition to the organizations listed above, allegers who do not request confidentiality can have their identity made known to line management on a need to know basis.

3. Can employees be:
- Anonymous? (Yes No/Comments)
 - Report by phone? (Yes No/Comments)

G. FEEDBACK:

- Is feedback given to the allexer upon completion of the followup?
(Yes or No - If so, how?)
Feedback is given to allegers through followup meetings, telephone calls or through written correspondence.
- Does program reward good ideas?
No.
- Who, or at what level, makes the final decision of resolution?
The Concerns Resolution Site Representative makes the final decision of resolution regarding employee concerns with the concurrences of higher level management as required.
- Are the resolutions of anonymous concerns disseminated?
No.
- Are resolutions of valid concerns publicized (newsletter, bulletin board, all hands meeting, other)?
No.

H. EFFECTIVENESS:

- How does the licensee measure the effectiveness of the program?
The licensee measures the effectiveness of the program through:
-Trending of concerns
-Feedback received from allegers during exit interviews
-Results of internal audits and NRC inspections
- Are concerns:
 - Trended? (Yes or No/Comments)
 - Used? (Yes or No/Comments)



3. In the last three years how many concerns were raised? 95
Of the concerns raised, how many were closed? 78 What percentage were substantiated? Approximately 33 percent

4. How are followup techniques used to measure effectiveness (random survey, interviews, other)?

Exit interviews and random surveys performed by the Concerns Resolution Staff, the TVA OIG, and the NRC.

5. How frequently are internal audits of the ECP conducted and by whom?

Internal audits are conducted annually by the TVA OIG, TVA Quality Assurance, and the Concerns Resolution Staff review of the various contractor concerns programs.

I. ADMINISTRATION/TRAINING:

1. Is ECP prescribed by a procedure? (Yes or No/Comments)

Site Standard Practice 1.2, "Concerns Resolution."

2. How are employees, as well as contractors, made aware of this program (training, newsletter, bulletin board, other)?

Employees are made aware of these programs via General Employee Training, postings on bulletin boards in various locations throughout the plant, and through various internal memos and site bulletins.

ADDITIONAL COMMENTS: (Including characteristics which make the program especially effective or ineffective.)

A recent initiative to improve the concerns resolution file closure process at the various TVA sites began in May 1993. This process involves the periodic meeting of the site representatives (from Browns Ferry, Sequoyah, and Watts Bar) to discuss and perform a joint review of various concerns to ensure proper handling and dissemination.