

**TENNESSEE VALLEY AUTHORITY**

CHATTANOOGA, TENNESSEE 37401  
5N 105B Lookout Place

December 27, 1985

Mr. Harold E. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Denton:

In the Matter of the  
Tennessee Valley Authority )

- Docket Nos. 50-259
- 50-260
- 50-296
- 50-327
- 50-328
- 50-390
- 50-391
- 50-438
- 50-439

In response to the September 17, 1985 letter from W. J. Dircks to C. H. Dean, we provided Volumes I and II of TVA's Nuclear Performance Plan (NPP) to NRC on November 1, 1985 by letter from C. H. Dean to W. J. Dircks. As committed to in the November 1 letter, we submitted the Employee Concern Program to NRC by the November 20, 1985 letter from H. G. Farris to W. J. Dircks. This letter supplements our November 1 and November 20, 1985 responses to NRC's September 17, 1985 10 CFR 50.54(f) letter and provides information requested by Hugh Thompson's letters dated November 19 and December 6, 1985. Also please note that the November 20 submittal of our Employee Concern Program supersedes the information contained in the November 1 submittal in section 4.22 of Volume II of the Sequoyah NPP, regarding employee concerns.

Each employee concern received by QTC through the Special Employee Concern Program at Watts Bar is documented on an individual "K-form" and transmitted to NSRS. Before sending the K-form to NSRS, QTC makes a preliminary determination of the classification of each concern as safety related or not safety related and whether or not a concern potentially involves employee intimidation and harassment (I&H) or misconduct. When a concern potentially involves I&H or misconduct, two separate "K-forms" are generated. One "K-form" documents the safety-related issue. A second "K-form" is used to

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document the I&M or misconduct aspect of the concern. This ensures that safety-related issues will be investigated independent of I&M or misconduct issues and the identification and investigation of safety-related issues is not tied to completion of I&M and/or misconduct investigations.

When NERS receives "K-forms" from QTC, NERS reviews QTC's preliminary classification of the concerns. Concerns that NERS determines to be potentially safety-related are assigned for investigation to either QTC or NERS. Also as "K-forms" are received by NERS, copies of those that are potentially safety related are sent to the site director of the appropriate nuclear plant.

Watts Bar, Browns Ferry, and Bellefonte Nuclear Plants evaluate the "K-forms" they receive to determine whether or not the concern identified could be considered generic and applicable to Sequoyah (SQW). These plants also review NERS/QTC safety-related investigation reports and the plant's responses to those investigation reports for generic applicability to SQW as they are received. Forms similar to enclosures 1, 2, and 3 define the criteria used to perform each of these reviews.

Sequoyah Nuclear Plant evaluates all potentially safety-related employee concerns that have been identified as specifically applicable to Sequoyah and those that were initially identified to be applicable to other TVA nuclear plants, but which have been determined to be potentially generic to Sequoyah. Each of these concerns is evaluated to determine which issues have to be addressed before restart of a Sequoyah unit. Attachment 4 to Sequoyah's Standard Practice SQA-166, (enclosure 4) provides the form used for the preliminary evaluation. This evaluation is performed at Sequoyah by SQW trained personnel who were shift technical advisors and are knowledgeable in plant technical specifications, safety limits, operability, attendant equipment, transient and accident analysis, and the margin of safety as defined in the technical specification bases. Enclosure 5 provides the guidelines used in the evaluation for determining safety significant employee concerns.

Over 1300 safety-related "K-forms" applicable to Sequoyah, Watts Bar, Browns Ferry, or Bellefonte have been reviewed and evaluated to date and additional "K-forms" are being evaluated as they are received. Enclosure 6 is a current listing of potentially safety-related employee concerns that were identified as specifically applicable to Sequoyah which we have determined must be

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evaluated before restart of Sequoyah. The investigation of the NRSR/QTC concerns should be completed by January 17, 1986. Enclosure 7 is a current listing of potentially safety-related employee concerns that were identified as specifically applicable to Watts Bar, Browns Ferry, or Bellefonte but which we have determined could have generic implications for Sequoyah and which must be evaluated before restart of Sequoyah. These concerns have been grouped into one of six generic categories and then subdivided specific issues. A Management Review Group (MRG) with representatives from the Sequoyah plant staff and NRSR is responsible for determining which of these issues will require further investigation before Sequoyah restart. A task force has been established to investigate those issues that the MRG designates and will report the results to Sequoyah site management for disposition before restart.

For the safety-related generic employee concerns identified to date in enclosure 7, the evaluation will be performed in two stages. The first stage will involve identifying other efforts or studies that, if completed satisfactorily, will provide a satisfactory response for one or more of these generic concerns. The first stage should be completed by January 10, 1986. For the second stage, a detailed evaluation will have been scoped and begun before Sequoyah restart for those employee concerns which, if substantiated, could involve a technical specification or unreviewed safety question problem.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*J. A. Damer*  
J. A. Damer, Chief  
Nuclear Licensing Branch

Sworn to and subscribed before me  
this 27<sup>th</sup> day of Dec. 1985

*Charllette H. White*  
Notary Public

My Commission Expires 8-24-88

Enclosures

cc: See page 4

FORM D

WATTS BAR SPECIAL PROGRAM ON EMPLOYEE CONCERNS  
"K-FORM" REPORT REVIEW FOR GENERIC APPLICABILITY

Employee Concern Number

I. Preliminary Screening

Does the "K-Form" provide sufficient information to perform a meaningful preliminary evaluation of the generic applicability?

YES \_\_\_\_\_ NO \_\_\_\_\_

If "no," no further evaluation is required until investigation information is available. Proceed to Section IV.

II. Codes, Standards, Specifications, Procedures, and Processes Checklist

A. An employee concern which states/implies that an approved code, standard, specification, procedure, process, etc., itself is deficient may have generic applicability to activities at the site for which the concern is identified, or may have generic applicability at other sites where the same code, standard, specification, procedure, or process is used. Complete the following:

- o design criteria or specification                            yes \_\_\_\_\_ no \_\_\_\_\_
- o construction specification                                    yes \_\_\_\_\_ no \_\_\_\_\_
- o construction process/procedure                                yes \_\_\_\_\_ no \_\_\_\_\_
- o material specification/qualification                            yes \_\_\_\_\_ no \_\_\_\_\_
- o maintenance, operation, or testing                              yes \_\_\_\_\_ no \_\_\_\_\_
- o process/procedure    yes \_\_\_\_\_ no \_\_\_\_\_
- o inspection process/procedure                                    yes \_\_\_\_\_ no \_\_\_\_\_
- o other (specify) \_\_\_\_\_    yes \_\_\_\_\_ no \_\_\_\_\_

If the answer to any of the above questions is "yes," the concern has potential generic implications and should be further evaluated.

B. An employee concern which states/implies that a code, standard, specification, procedure, process, etc., is not being properly implemented or followed may have generic applicability at the site for which the concern is identified, or may apply to other sites. Complete the following.

Does the concern appear to be an isolated matter or does it appear to have generic implications?

isolated \_\_\_\_\_ generic \_\_\_\_\_

If generic, the concern should be further evaluated.

III. Other Evaluation Factors

The checklist above may not adequately cover the particular employee concern. The evaluator should note below any other factors important to the generic applicability evaluation.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

generic implications YES \_\_\_\_\_ NO \_\_\_\_\_

IV. Evaluators Determination

generic implications YES \_\_\_\_\_ NO \_\_\_\_\_

Plants potentially effected:

- WBN \_\_\_\_\_
- BLN \_\_\_\_\_
- BPH \_\_\_\_\_
- SQN \_\_\_\_\_

Evaluator notes indicating any clarifying comments, explanation of generic determination rationale, etc.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Evaluator \_\_\_\_\_ (Signature) Date \_\_\_\_\_

ENCLOSURE 2

FORM I

**WATS BAR SPECIAL PROGRAM ON EMPLOYEE CONCERNS**  
**INVESTIGATION REPORT REVIEW FOR GENERIC APPLICABILITY**

Employee Concern Number(s)

Investigation Report Number

**I. Codes, Standards, Specifications, Procedures, and Processes Checklist**

**A. Employee concern investigation report findings which states that an approved code, standard, specification, procedure, process, etc., itself is deficient may have generic applicability to activities at the site for which the concern is identified, or may have generic applicability at other sites where the same code, standard, specification, procedure, or process is used. Complete the following:**

- design criteria or specification                      yes \_\_\_\_\_ no \_\_\_\_\_
- construction specification                               yes \_\_\_\_\_ no \_\_\_\_\_
- construction process/procedure                        yes \_\_\_\_\_ no \_\_\_\_\_
- material specification/qualification                    yes \_\_\_\_\_ no \_\_\_\_\_
- maintenance, operation, or testing  
process/procedure   yes \_\_\_\_\_ no \_\_\_\_\_
- inspection process/procedure                            yes \_\_\_\_\_ no \_\_\_\_\_
- other (specify) \_\_\_\_\_  
\_\_\_\_\_    yes \_\_\_\_\_ no \_\_\_\_\_

If the answer to any of the above questions is "yes," the investigation report findings have potential generic implications and should be further evaluated.

**B. Employee concern investigation report findings which states that a code, standard, specification, procedure, process, etc., is not being properly implemented or followed may have generic applicability at the site for which the concern is identified, or may apply to other sites. Complete the following.**

Do the investigation report findings show that improper implementation is or has generic implications?

isolated \_\_\_\_\_ generic \_\_\_\_\_

If generic, the investigation report findings should be further evaluated.

II. Other Evaluation Factors

The checklist above may not adequately cover the particular employee concern investigation report findings. The evaluator should note below any other factors important to the generic applicability evaluation.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

generic implications YES \_\_\_\_\_ NO \_\_\_\_\_

III. Evaluator's Determination

generic implications YES \_\_\_\_\_ NO \_\_\_\_\_

-- Plants potentially effected:

- WBN \_\_\_\_\_
- BLN \_\_\_\_\_
- BFN \_\_\_\_\_
- SON \_\_\_\_\_

Evaluator notes indicating any clarifying comments, explanation of generic determination rational, etc.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

IV. "K-Form" Evaluation

When the "K-Form" was reviewed for potential generic implication, what was the evaluator's determination?

generic implications YES \_\_\_\_\_ NO \_\_\_\_\_

Determination by \_\_\_\_\_ Date \_\_\_\_\_  
Signature

ENCLOSURE 3

FORM N ..

REVIEW FOR GENERIC APPLICABILITY OF RESPONSE

1. Was the condition/concern determined to have generic applicability at the "K-Form" or investigation report stage?

"K-Form" stage? Yes \_\_\_ No \_\_\_

Investigation report stage? Yes \_\_\_ No \_\_\_

2. If the answer to item 1 is "no" for both determinations, does the response include significant additional information which appears to make the condition generic?

Yes \_\_\_ No \_\_\_

If "yes," note plants:

- WBN \_\_\_\_\_
- DFW \_\_\_\_\_
- SQM \_\_\_\_\_
- BLW \_\_\_\_\_

3. Should generic applicability be further evaluated?

Yes \_\_\_ No \_\_\_

4. Evaluator's Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Evaluator \_\_\_\_\_  
 Signature Date



ATTACHMENT 4  
SEQUOYAH NUCLEAR PLANT  
EMPLOYEE CONCERN PRELIMINARY EVALUATION

1. Concern No. \_\_\_\_\_
2. Is this concern potentially nuclear safety-related? \_\_\_\_\_  
If no, state justification: \_\_\_\_\_  
\_\_\_\_\_
3. Concern classified as: \_\_\_\_\_ Determinant \_\_\_\_\_ Indeterminant  
Justification for classification: \_\_\_\_\_  
\_\_\_\_\_
4. Determinant Employee Concern
  - a. Assuming concern is substantiated, what impact would it have: \_\_\_\_\_  
\_\_\_\_\_
  - b. Does any work need to be halted? \_\_\_\_\_
  - c. Does NSRS need to expedite evaluation? \_\_\_\_\_
  - d. Is there a technical specification problem? \_\_\_\_\_
  - e. Does it involve a potential USQ? \_\_\_\_\_
  - f. Does this concern need to be resolved before any particular plant milestone (if yes, list milestone)? \_\_\_\_\_  
\_\_\_\_\_
5. Indeterminant Employee Concern
  - a. If possible, describe what additional information is needed to perform a preliminary evaluation: \_\_\_\_\_  
\_\_\_\_\_
6. Additional Comments: \_\_\_\_\_  
\_\_\_\_\_
7. Completed by: \_\_\_\_\_ Date: \_\_\_\_\_
8. Approved by: \_\_\_\_\_ Date: \_\_\_\_\_
9. If 4b, c,d,e, or f is Yes, notify plant management: \_\_\_\_\_  
Individual Notified / Date
10. If 4d or e is Yes initiate generic evaluation. Applicable to: \_\_\_\_\_

11' P.11 12/30/85 13:38

FROM

**ENCLOSURE 5  
GUIDELINES FOR UNREVIEWED SAFETY QUESTION DETERMINATION**

The following guidelines are utilized by personnel who have received the Shift Technical Advisor training to determine if a potential Unreviewed Safety Question exists.

Would the employee concern, if substantiated, adversely affect the following items:

- a. Directly affects safety-related equipment:
  - 1. Function
  - 2. Performance
  - 3. Reliability
  - 4. Response Time
- b. Indirectly affects safety-related equipment:
  - 1. Power Supply
  - 2. Air Supply
  - 3. Cooling or Lubrication or Ventilation
- c. Affects primary containment integrity
- d. Affects secondary containment integrity
- e. Affects seismic analysis.
- f. Affects assumptions or values used in the FSAR
- g. Affects single failure criteria
- h. Affects separation criteria
- i. Affects high energy line break
- j. Affects control room habitability
- k. Affects systems used to process radioactive wastes
- l. Affects fire protection or fire loads
- m. Affects security systems
- n. Affects systems, procedures, or features described in the FSAR either in tests or drawings
- o. Affects equipment qualification

If the concern could affect any of the above items, the concern is reviewed for (1) increasing the probability or consequences of an accident previously evaluated in Chapter 15 of the FSAR, (2) creating a new type of accident or malfunction, and (3) reducing the margin of safety defined in the basis of any technical specification. If any of the above three are yes--a potential Unreviewed Safety Question exists.

**ENCLOSURE 6  
EMPLOYEE CONCERNS SPECIFICALLY APPLICABLE  
TO SEQUOYAH TO BE EVALUATED BEFORE RESTART**

**EMPLOYEE  
CONCERN NO.**

**SUBJECT**

**A. Welding**

XX-85-041-001 ✓	Improper Weld Tests
XX-85-049-001 ✓	Falsified Welder Certifications
XX-85-065-001 ✓	ISI Inspectors Remove Inspections Performed Poorly
XX-85-100-001 ✓	Improper Weld Repairs
XX-85-101-006 ✓	Welding Performed Without Certifications
XX-85-108-001 ✓	Welding Inspections in Unit 1 Acc. Rooms
XX-85-108-002 ✓	Welding Inspection Program Background

**B. Configuration Control**

XX-85-070-001 ✓	Drawing and Document Errors
XX-85-070-005 ✓	Workplan Not Authorized by Office of Engineering
XX-85-077-002 ✓	Inaccurate Design Drawings Do Not Reflect As-Built Condition

**C. Operational Readiness**

XX-85-033-006 ✓	Electrical General Foreman Used No-"G" Materials In A "G" System
XX-85-046-001 ✓	Instrument Sensing Line Slope Deficiencies
XX-85-068-007 ✓	TVA Manufactured Spool Piece Replaced A DRAGO-ASME Class Spool Piece
XX-85-069-001 ✓	Improper Certification Due to Lack of OJT
XX-85-087-001 ✓	Containment Coatings Unqualified

**D. Supports/Anchors**

XX-85-010-001 ✓	Nuts Welded to Base Plates
XX-85-023-001 ✓	Pull Tests On Hangers/Anchors in the Annulus
XX-85-070-007 ✓	Snubbers Installed Not Per Design

**E. Miscellaneous**

XX-85-001-001 ✓	Diesel Generator Batteries Replaced Without Initial Testing
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**ENCLOSURE 6  
EMPLOYEE CONCERNS SPECIFICALLY APPLICABLE  
TO SEQUOYAH TO BE EVALUATED BEFORE RESTART**

**EMPLOYEE  
CONCERN NO.**

**SUBJECT**

**B. Miscellaneous (continued)**

<b>XX-85-027-X07 ✓</b>	<b>Sign Off Data Sheets on Defective Equipment or Face Insubordination Charges</b>
<b>XX-85-070-002 ✓</b>	<b>Quality Problems Intentionally Closed to Prevent Attracting NRC Attention</b>
<b>XX-85-070-006 ✓</b>	<b>Falsified Document Errors</b>

**NOTE:** The below listed employee concerns, which were listed in our November 20, 1985 submittal, are related to the investigation of misconduct and not the safety-related aspect of the issue. They have, therefore, been deleted from the above history.

<b>XX-85-049-X03</b>	<b>Welder Certification Card Falsified</b>
<b>XX-85-023-X02</b>	<b>Falsification of Anchor Pull Tests</b>
<b>XX-85-077-X04</b>	<b>Drawings have been Falsified</b>

## ENCLOSURE 7

**EMPLOYEE CONCERNS WITH POTENTIAL GENERIC  
APPLICABILITY TO SEQUOYAH TO BE EVALUATED BEFORE RESTART**

**A. Welding**

- |   |   |
|---|---|
| 1. Weld Rod Control                               | EX-85-068-006<br>WI-85-053-004                  |
| 2. Inspection Criteria - Inspection through Paint | IN-85-458-001<br>WI-85-013-003<br>WI-85-041-008 |
| 3. Weld Inspection Tools Available                | IN-85-406-003<br>IN-85-007-001<br>IN-85-134-002 |
| 4. Vendor Welds Inadequate                        | IN-85-007-003<br>IN-85-127-001                  |
| 5. Inspection Criteria                            | IN-85-406-002                                   |
| 6. Welder/Inspector Training/Certification        | WI-85-041-002<br>WI-85-041-006                  |
| 7. Improper Welds on Hangers                      | IN-85-405-001<br>EX-85-039-003                  |
| 8. Unpainted Welds                                | IN-85-273-001                                   |

**B. Configuration Control**

- |                              |                                |
|------------------------------|--------------------------------|
| 1. Relocation of Equipment   | IN-85-463-007<br>IN-85-964-003 |
| 2. Vendor Manuals            | IN-86-073-001                  |
| 3. Installation of Equipment | IN-85-463-006                  |

## ENCLOSURE 7

EMPLOYEE CONCERNS WITH POTENTIAL GENERIC  
APPLICABILITY TO SEQUOYAH TO BE EVALUATED BEFORE RESTARTC. Environmental Qualification

1. Instrument (Pressure) Transmitters Sent to Sequoyah  
From Watts Bar Without Adequate Documentation IN-85-463-008

D. Operational Readiness

1. Operator Training/Qualification  
IN-85-289-001  
IN-85-894-001
2. QA Program Restricted, Violated, Or Hampered  
by Management  
XX-85-102-010  
IN-85-767-001  
XX-85-069-009
3. Orifice Plates Causing Inaccurate Flow  
Measurements Due to Incorrect Hole Sizes  
RS-85-004-001  
IN-85-293-001  
PH-85-022-001
4. Electrical Penetrations Inadequate  
IN-85-346-002
5. Collusion Between Hartford Steam Boiler & TVA  
Causes Nonconforming Items  
WI-85-053-001
6. Incorrect Instrument Sensing Lines Slopes  
Cause Incorrect Readings  
IN-86-222-001  
IN-85-197-001
7. Use of Jack Hammers to Compact Ice in Ice  
Condenser  
IN-86-110-001
8. Power Block Restricting/Slowing Access  
to Equipment  
IN-86-291-007

## ENCLOSURE 7

EMPLOYEE CONCERNS WITH POTENTIAL GENERIC  
APPLICABILITY TO SEQUOYAH TO BE EVALUATED BEFORE RESTARTE. Cables

## 1. Overfill of Cable Trays/Conduit

PH-85-003-023  
 IN-86-310-001  
 IN-85-506-001  
 IN-85-186-003  
 IN-85-432-001  
 IN-86-238-003  
 IN-85-622-001  
 IN-85-685-001  
 IN-86-028-002  
 IN-85-743-008

2. Overtensioning of Cables Due to Improper  
Cable Pull Methods

IN-85-255-001  
 IN-86-199-001  
 IN-85-213-001  
 IN-85-367-001  
 IN-86-259-004  
 IN-85-433-002  
 IN-85-856-005  
 IN-86-201-001  
 XX-85-094-005  
 IN-85-531-001  
 IN-95-325-005  
 IN-85-295-003  
 IN-85-112-001  
 XX-85-094-004  
 IN-86-259-001  
 IN-86-028-001  
 XX-85-008-001

F. Cable Tray and Conduit Hangers1. Insufficient Support for Triax Cable From  
Neutron Flux Detectors

IN-85-120-001

## 2. Embedded Plates on Cable Tray Supports

IN-85-107-001

ENCLOSURE 7

EMPLOYEE CONCERNS WITH POTENTIAL GENERIC  
APPLICABILITY TO SEQUOYAH TO BE EVALUATED BEFORE RESTART

C. Environmental Qualification

1. Instrument (Pressure) Transmitters Sent to Sequoyah  
From Watts Bar Without Adequate Documentation IN-85-463-008

D. Operational Readiness

1. Operator Training/Qualification  
IN-85-289-001  
IN-85-894-001
2. QA Program Restricted, Violated, Or Hampered  
by Management  
XX-85-102-010  
IN-85-767-001  
XX-85-069-009
3. Orifice Plates Causing Inaccurate Flow  
Measurements Due to Incorrect Hole Sizes  
NS-85-004-001  
IN-85-293-001  
PH-85-022-001
4. Electrical Penetrations Inadequate  
IN-85-346-002
5. Collusion Between Hartford Steam Boiler & TVA  
Causes Nonconforming Items  
WI-85-053-001
6. Incorrect Instrument Sensing Lines Slopes  
Cause Incorrect Readings  
IN-86-222-001  
IN-85-197-001
7. Use of Jack Hammers to Compact Ice in Ice  
Condenser  
IN-86-110-001
8. Power Block Restricting/Slowing Access  
to Equipment  
IN-86-291-007