



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-3415

June 22, 1998

MEMORANDUM TO: Jean Lee, Senior Allegations Coordinator  
Office of Nuclear reactor Regulation

FROM: Oscar De Miranda, Senior Allegations Coordinator  
Region II *Oscar de Miranda*

SUBJECT: TENNESSEE VALLEY AUTHORITY, AMERICAN ELECTRIC POWER & DUKE  
POWER ICE CONDENSERS - REGION II REVIEW OF DOL TRANSCRIPTS  
(REF: RII-1998-A-0025 & RII-1997-A-0058)

Region II conducted a review of the allegor's DOL transcript to identify any potential issues; and whether or not they had been previously addressed. On June 19, 1998, the results of the staff's review of the DOL transcript was presented to the Allegation Review Board (ARB) for disposition.

Attachment 1 is a copy of the June 19, 1998, region II ARB meeting minutes which provides the ARB's determination on the results of the staff's review of the DOL transcript.

Attachment 2 is a copy of the June 15, 1998, Division of Reactor Safety memorandum which outlines the issues developed from the staff's review of the DOL transcript.

Attachment 3 is a copy of the Matrix of the DOL transcript that includes ARB action items.

Region II will close RII-1998-A-0025 as we have completed our review of the DOL transcript and transfer the allegation to NRR who has the lead to coordinate findings with the allegor. This approach was previously agreed upon during region II participation in an NRR ARB meeting. The region II technical staff will continue to perform inspections and review of issues as directed by NRR.

Attachments: 1. 6/19/98 ARB Meeting Minutes  
2. 6/15/98 DRS-Memo  
3. Matrix of DOL Transcript

cc w/attachments:  
J. Hopkins, RIII

Information in this record was deleted  
in accordance with the Freedom of Information  
Act, exemptions 7C  
FOIA- 2001-0017

X/11

ARB MEETING AGENDA  
JUNE 19, 1998

RII-1998-A-0025

WATTS BAR, MCGUIRE

RECEIVED 2/5/98

DAYS OPEN 134

REASON FOR ARB:

RE-ARB AFTER REVIEW OF TRANSCRIPT.

CONCERN 1

[REDACTED]

7c

PROBLEMS WITH D.C. COOK ICE CONDENSER CONTAINMENT SUCH AS CONFIGURATION & TESTING, AND ICE BASKET BAY DOORS AND COMPONENTS WERE KNOWN BUT NOT REPORTED BY D.C. COOK, WATTS BAR, MCGUIRE, AND WESTINGHOUSE.

ACTION: EICS (DE MIRANDA) FORWARD ALLEGATION ALONG WITH THE MATRIX WHICH DELINEATES THE ARB DETERMINATION TO NRR OAC AND CLOSE CASE.

LEAD DIVISION/BRANCH: NRR

LICENSEE REFERRAL: NO

OI ACTION: NO

OI PRIORITY: N/A

GENERIC ISSUES: YES - NRR HAS THE LEAD

SAFETY SIGNIFICANCE: LOW BECAUSE MOST OF THE ISSUES HAVE BEEN INSPECTED

COMPLETION DATE: 30 DAYS FOR REFERRAL TO NRR

ORA

BOLAND  
 EVANS  
 IGNATONIS  
 DEMIRANDA  
 SPARKS  
 SLACK

DRP

CHRISTENSEN  
 CASTO  
 OGLE  
 SKINNER  
 SHYMLOCK  
 HAAG  
 CHRISTENSEN

DRS

JAUDON  
 MALLET  
 BARR  
 BELISLE  
 LANDIS  
 FREDRICKSON  
 ECONOMOS  
 JULIAN

DNMS

COLLINS  
 HOSEY  
 DECKER  
 MCALPINE  
 LESSER  
  
OI  
 MCNUITY

ARB MINUTES ARE REVIEWED AND APPROVED AT THE ARB

ATTACHMENT 2



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June 15, 1998

MEMORANDUM FOR: Anne Boland, Director, EICS  
THROUGH: Johns Jaudon, Director, DRS  
THROUGH: Paul Fredrickson, Chief, Maintenance Branch, DRS  
FROM: Caudle Julian, Technical Assistant, DRS  
SUBJECT: Results of Review of ALLEGER Transcript for Technical Issues

As directed, I have completed a review of the three day transcript of a hearing before an administrative law judge in a Department of Labor case of ALLEGER vs. Tennessee Valley Authority. The hearing was held December 16-18, 1997, and the transcript consists of three volumes for the three days. The purpose of my review was to attempt to identify any allegations of nuclear safety issues. Then the NRC management in an Allegation Review Board can determine if the NRC has already addressed the issues elsewhere in our previous work on ice condenser allegations. Any issues not adequately previously addressed, can then be inspected. Enclosed are the issues I identified from my transcript review.

Enclosure: RESULTS OF REVIEW OF ALLEGER TRANSCRIPT FOR ADDITIONAL TECHNICAL ISSUES BY REGION II

RESULTS OF REVIEW OF ALLEGER TRANSCRIPT FOR ADDITIONAL  
TECHNICAL ISSUES BY REGION II

ISSUE 1. BROKEN SCREWS

Pg 18-21 Mr. ALLEGER's lawyer, Mr. Van BEKE, describes concisely their case. He states that Mr. ALLEGER found in an ice melt tank a number of whole and broken screws that are used to fasten the segments of the ice condenser ice baskets together. ALLEGER wrote a problem evaluation report (PER) on the issue and proposed using a remote television camera to inspect the ice baskets in Watts Bar unit 1 for missing or broken screws. He contends that TVA took actions to remove the resolution of the PER from ALLEGER, had Westinghouse write a report to conclude there was no safety problem, and closed the PER without ever doing inspections to positively visually verify if there are missing or broken screws in service. He further contends that TVA transferred ALLEGER to the Services group then RIFed him to prevent him from raising further issues about the ice condenser screws.

Pg 156-167 ALLEGER is led in questioning by his lawyer to discuss the nature of the closure documentation of the PER. He alleges by implication that the PER was improperly closed without a sound technical basis. Key examples are:  
1) the PER was dispositioned "accept as is" based on the Westinghouse report.  
2) the Westinghouse report concludes that the ice basket ring joint is strong enough if 10 of the 12 screws are in place.  
3) the report does not affirm that any inspection was done to verify how many screws are actually in place in the ice baskets.  
4) the report does not mention the TVA metallurgical report, or consider the possibility of broken or partially broken screws.  
5) the PER states that all screws are in place and the proposed corrective actions have been taken, but it provides no basis for that conclusion.

ISSUE 2. GENERIC PROBLEM (DUKE POWER, AMERICAN ELECTRIC POWER)

Pg 104-106 ALLEGER alleges that he contacted [REDACTED] Duke Power and American Electric Power, the other utilities operating ice condenser plants and told them of the problem of potential broken or missing screws. He alleges that the [REDACTED] stated that they have encountered up to hundreds of screws in their melt system but did not raise the issue to management because the plants were operating at the time. ALLEGER alleges that the [REDACTED] applauded him for doing the right thing. ALLEGER says the [REDACTED] told him Duke had done some testing (presumably strength testing) of the basket connecting rings and "didn't find any problem". ALLEGER alleges that the AEP peer told him that AEP had the same problems. AEP had pulled a basket apart during ice weighing, and AEP at times had to use nuts and bolts instead of screws to hold some of their baskets together. 70

ISSUE 3. METTALURIGICAL REPORTS

Pg 124-127 ALLEGER describes a document titled Central Laboratories Services Technical Report and numbered 95-1021. He states that this report presents

the results of a metallurgical examination of the whole and broken screws along with some new replacement screws removed from stores. He later alleges (Pg 134-140) that this report was retracted, copies confiscated, and a replacement report issued that does not contain all the information of the first report and does not reach the same conclusions. He alleges that the first version of the report shows that the new unused screws contain cracks, implying a generic defect, and that information was not included in the replacement report.

Pg 397-399 ALLEGER offers his opinion on the significance of the difference between the two TVA metallurgical reports and the new screws that had cracks in them.

Pg 470-476 Fine calls Ms. Sisson, a TVA metallurgical engineer from the Central Laboratory who describes that the first met lab report contains statements that were speculation and not supported by lab tests.

Pg 474-477 Sisson describes a meeting at the lab and says the decision to revise the report was reached at the meeting by consensus and neither the fact that Mr. ALLEGER was involved in the PER nor a desire to down play the importance of the issue played a part in the decision.

Pg 477-482 Sisson describes and is questioned about the June 14, 1995 meeting with Terry Woods, James Adair, et. al., and provided no revelation. She thought the meeting was routine and proper.

Pg 486-496 Sisson is questioned about the potential seven causes deleted from the report and the validity of them. She supports their removal and provides her reasons. When asked if the decision to revise the report was made before the June 14 meeting, she says she believes it was.

Pg 500-503 The judge questions Sisson about cracks in the screws and revising the report.

Pg 504-514 Fine questions Daryl Smith, TVA metallurgical engineer who wrote the met lab report. On page 512 he states that the report was revised to remove conjecture and it was decided to revise it by group consensus. On page 513 he states that he thinks figure 7 of the report was revised to document further testing, and that no one told him to revise it.

Pg 515-521 Mr. Van Beke cross examines Mr. Smith. Smith states that it was their practice to not put revision numbers on revised reports. Smith agrees that the revised report just states that the broken screws were caused by intergranular separation and does not state possible causes.

Pg 522 On redirect, Smith says they were "enlightened" as to how they could help TVA and stay out of trouble by not putting conjecture in their reports. He states this is especially important for reports that NRC might review because NRC becomes involved, asks a lot of questions, and causes the expenditure of a lot of paper work and time.

Pg 540-555 Mr. Terry Woods testifies and is cross examined on his role in causing the metallurgical report to be revised. He says that it was done only

because it had conjecture statements in it, and had nothing to do with downplaying or speeding the closure of the Watts Bar PER.

#### ISSUE 4. SEQUOYAH SCREW EXAMINATION

Pg 127-129 ALLEGER alleges that he contacted his peer and his supervisor at Sequoyah to discuss the screw problem and to ask them to give him some screws from Sequoyah for examination. He alleges that the supervisor refused to release the screws because it might cause the Sequoyah plant to be shut down.

#### ISSUE 5. MANAGEMENT DIRECTIVE TO NOT WRITE PERS, ETC

Pg 173-179 ALLEGER describes a meeting on May 11 of the Technical Support Section with several members of plant management. He alleges that some member of management said there should be no more PERS, WRs, DCNs, etc. written unless they are work critical to achieving fuel load. His description of the meeting is very uncertain. On Pg 174 he states that his PER 246 had been initiated three weeks earlier on April 26.

Pg 430 Mr. Fine cross examines a system engineer Mr. Law, and asks if he ever remembers the Technical Support Manager telling people not to write PERS unless they were directly related to fuel load, and Law replies no.

Pg 678-680 Fine questions Mr. Dennis Koehl about the May 11 meeting. Koehl denies telling the staff not to write PERS.

#### ISSUE 6. REPORTABILITY

Pg 401-402 ALLEGER describes to the judge that TVA concluded that the issue was not reportable to the NRC.

Pg 680-681 Koehl is questioned on the PER process, the criteria for escalation to a SCAR, and reportability to the NRC.

Pg 809-811 & 813-816 Fine questions Mr. Landy McCormick on reportability of this issue and he explains how the issue was determined not to be reportable.

#### ISSUE 7. SWITCHING SUPPLIERS OF SCREWS


Pg 403-408 ALLEGER reads to the judge from the PER. It states TVA concluded the issue was not a problem at Sequoyah because they do structural inspections during refueling and for 12 cycles have never found any broken or missing screws. It also states on page 406 that Sequoyah does not use Westinghouse provided screws, but since 1988 has used "qualified replacement screws from an alternate vendor". This was a surprise to ALLEGER when he first read it, and he questions the motive for Sequoyah switching to another supplier.

ATTACHMENT 3



# MATRIX OF DOL TRANSCRIPT

Monday, June 22, 1998

| ID | ISSUE                                               | ALLEGATION                                                                                                                                                                                                                                                                                              | REF          | ALLEGATION<br>Y/N | EVALUATED | ARB ACTION                                                                                |
|----|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------------|-----------|-------------------------------------------------------------------------------------------|
| 1  | BROKEN SCREWS -<br>IMPROPER<br>CLOSURE OF PER       | The ALLEGER found in an ice melt tank a number of whole and broken screws that are used to fasten the segments of the ice condenser ice baskets together.                                                                                                                                               | Pg 18-21     | YES               | YES       | NO FURTHER ACTION REQUIRED                                                                |
| 2  | BROKEN SCREWS -<br>IMPROPER<br>CLOSURE OF PER       | The ALLEGER contends that TVA took actions to remove the resolution of the PER from ALLEGER, had Westinghouse write a report to conclude there was no safety problem, and closed the PER without ever doing inspections to positively visually verify if there are missing or broken screws in service. | Pg 18-21     | YES               | YES       | NO FURTHER ACTION REQUIRED                                                                |
| 3  | BROKEN SCREWS -<br>IMPROPER<br>CLOSURE OF PER       | The ALLEGER alleges by implication that the PER was improperly closed without a sound technical basis.                                                                                                                                                                                                  | Pg 156-167   | YES               | YES       | NO FURTHER ACTION REQUIRED                                                                |
| 4  | GENERIC PROBLEM<br>(DUKE POWER)<br>WRONGDOING<br>7C |  stated that they have encountered up to hundreds of screws in their melt system but did not raise the issue to management because the plants were operating at the time.                                              | Pg 104-106   | YES               | YES       | NO FURTHER ACTION REQUIRED                                                                |
| 5  | GENERIC PROBLEM<br>(AEP)                            | AEP had pulled a basket apart during ice weighing, and AEP at times had to use nuts and bolts instead of screws to hold some of their baskets together.                                                                                                                                                 | Pg 104 - 106 | YES               | NO        | REFER TO NRR - RECOMMEND AN INSPECTION OF THE AEP STATEMENT.                              |
| 6  | METALLURGICAL<br>REPORTS                            | The ALLEGER later alleges (Pg 134-140) that this report was retracted, copies confiscated, and a replacement report issued that does not contain all the information of the first report and does not reach the same conclusions.                                                                       | Pg 134-140   | YES               | YES       | NO FURTHER ACTION REQUIRED                                                                |
| 7  | METALLURGICAL<br>REPORTS                            | The ALLEGER alleges that the first version of the report shows that the new unused screws contain cracks, implying a generic defect.                                                                                                                                                                    | Pg 470-476   | YES               | NO        | REGION II RECOMMENDS TO HQ THAT AN INSPECTION OF NEW UNUSED SCREW CONDITION BE INSPECTED. |

| ID | ISSUE                                  | ALLEGATION                                                                                                                                                                                                                                                                                         | REF        | ALLEGATION Y/N | EVALUATED     | ARB ACTION           |                                                                                                                                                                                                                                                                                                                                                                                                          |
|----|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------|---------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8  | SEQUOYAH SCREWS                        | The ALLEGER alleges that the supervisor refused to release the screws because it might cause the Sequoyah plant to be shut down.                                                                                                                                                                   | Pg 127-129 | NO             | RII-97-A-0148 | PARTIALLY            | RECOMMEND TO HQ THAT AN INSPECTION OF STATEMENT BE CONDUCTED, NOW THAT SPECIFIC INDIVIDUAL IS NAMED. (NOTE: RII ALLEGATION 97-148 HAD SAME STATEMENT, BUT INDIVIDUAL WAS NOT NAMED. ISSUE NOT IDENTIFIED AS AN ALLEGATION.)                                                                                                                                                                              |
| 9  | MANAGEMENT DIRECTIVE TO NOT WRITE PERS | The ALLEGER alleges that some member of management said there should be no more PERs, WRs, DCNs, etc. written unless they are work critical to achieving fuel load.                                                                                                                                | Pg 173-179 | YES            |               | NO - NEW INFORMATION | NO ACTION BECAUSE RII BELIEVES STATEMENT WOULD HAVE RESULTED IN EXTENSIVE SITE COMPLAINTS TO NRC. NO INDICATION DURING TIME FRAME OF ALLEGED STATEMENT THAT ONLY SPECIFIC NONCONFORMANCES WOULD BE ALLOWED. IN ADDITION, INSPECTION REPORT 50-390/95-71, (CONDUCTED 9/18-9/29/95, AND ISSUED ON 10/27/95) WHICH EVALUATED THE WATTS BAR CORRECTIVE ACTION PROGRAM FOUND THAT PERS INCREASED DURING 1995. |
| 10 | REPORTABILITY                          | Koehl is questioned on the PER process, the criteria for escalation to a SCAR, and reportability to the NRC.                                                                                                                                                                                       | Pg 680-681 | NO             |               | NO                   | RII TO INSPECT WATTS BAR REQUIREMENT TO REPORT ISSUE TO NRC UNDER 50.55(e).                                                                                                                                                                                                                                                                                                                              |
| 11 | SWITCHING SUPPLIERS OF SCREWS          | It also states on page 406 that Sequoyah does not use Westinghouse provided screws, but since 1988 has used "qualified replacement screws from an alternate vendor". This was a surprise to ALLEGER when he first read it, and he questions the motive for Sequoyah switching to another supplier. | Pg 403-408 | NO             |               | NO                   | RII TO INSPECT DIFFERENCE IN SCREWS BETWEEN WATTS BAR AND SEQUOYAH.                                                                                                                                                                                                                                                                                                                                      |