

APR 28 1993

Docket Nos. 50-390, 50-391
License Nos. CPPR-91, CPPR-92

Tennessee Valley Authority
ATTN: Dr. Mark O. Medford
Vice President, Technical
Support
3B Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Gentlemen:

SUBJECT: MEETING SUMMARY - MARCH 19, 1993

This refers to the meeting conducted at the Region II Office on March 19, 1993. This meeting concerned activities associated with the preoperational test program at your Watts Bar Facility.

It is our opinion that this meeting was beneficial in that it provided an understanding of the actions you are taking and plan with respect to completing the submittal of the FSAR Chapter 14.0 Initial Test Program and the updating of the FSAR in a more timely manner, in particular FSAR Section 8.0, Electrical Power. The improvements you have made with drawings to enhance the review and preparation of test procedures and the on going review to identify acceptance tests and preoperational tests for the Initial Test Program were discussed also.

In accordance with Section 2.790 of the NRC's Rules of Practice, Part 2, Title 10, Code of Federal Regulations a copy of this letter and its enclosures will be placed in the NRC Public Document Room.

Should you have any questions concerning this matter, please contact us.

Sincerely,

/S/

Albert F. Gibson, Director
Division of Reactor Safety

Enclosures:

1. List of Attendees
2. Handout

cc w/encls - (See page 2)

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APR 28 1993

cc w/encls:

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(cc w/encls cont'd - See page 3)

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(cc cont'd)
Honorable Robert Aikman
County Judge
Rhea County Courthouse
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Honorable Garland Lanksford
County Judge
Meigs County Courthouse
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Michael H. Mobley, Director
Division of Radiological Health
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401 Church Street
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A. Harris

bcc w/encls:

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P. E. Fredrickson, DRP/RII
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M. S. Callahan, GPA/CA
P. A. Taylor, DRS/RII
G. C. Lainas, NRR
F. J. Hebdon, NRR
L. C. Plisco, OEDO
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V. Nerses, NRR
B. S. Mallett, DRSS/RII
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RII:DRS

Pat
PTaylor:pd
04/27/93

RII:DRS

CJ
CJuttan
04/27/93

RII:DRS

for WAB
PFrederickson
04/27/93

ENCLOSURE 1

LIST OF ATTENDEES

NRC

A. Gibson, Director, Division of Reactor Safety (DRS), RII
T. Foley, Senior Engineer, Performance & Quality Evaluation Branch (RPEB), NRR
P. Fredrickson, Chief, Section 4B, Division of Reactor Projects (DPR), RII
R. Gramm, Chief, RPEB, NRR
G. Humphey, Resident Inspector, Watts Bar, DPR, RII
C. Julian, Chief, Engineering Branch, DRS, RII
M. Merriweather, Reactor Inspector, Plant Systems Section, DRS, RII
E. Merschoff, Director, DRP, RII
V. Nerses, Deputy Director, Project Directorate II-4, NRR
L. Reyes, Deputy Regional Administrator, RII
C. Smith, Reactor Inspector, Test Programs Section (TPS), DRS, RII
P. Tam, Senior Licensing Project Manager, NRR
P. Taylor, Reactor Inspector, TPS, DRS, RII
G. Zech, Branch Chief, RPEB, NRR

TVA

J. Ballowe, Startup Support Manager, Watts Bar Nuclear (WBN), TVA
W. Elliott, Engineering Manager, WBN, TVA
D. Koehl, Technical Support Manager, WBN, TVA
D. Moody, Plant Manager, WBN, TVA
D. Nunn, Vice President, TVA
G. Pannell, Manager, Site Licensing, WBN, TVA
R. Purcell, Startup & Test Manager, WBN, TVA
C. Touchstone, Licensing Engineer, WBN, TVA

ENCLOSURE 2

AGENDA

TVA/NRC MEETING IN ATLANTA

STARTUP AND TEST PROGRAM

MARCH 19, 1993

OPENING REMARKS - G. PANNELL

WBN RG-1.68 R2 STARTUP TEST PROGRAM - R. PURCELL

FSAR CHAPTER 14 - G. PANNELL

NRC REVIEW OF PREOP TESTS - R. PURCELL

DRAWINGS - W. ELLIOTT

SUMMARY - G. PANNELL

WBN RG-1.68 R2 STARTUP TEST PROGRAM

- **PROGRAM REVIEW**

- Review of RG-1.68 attributes to confirm WBN adequately addresses
- Scope of Startup Test Program exceeds RG-1.68
- Matrix developed to identify testing to RG-1.68 and FSAR Chapter 14 test summaries
- Screened "other" systems to ensure scope of test program is adequate

- **TEST MATRIX - LISTED SYSTEMS/TESTS AGAINST RG-1.68 APP-A AND CHAPTER 14 TEST SUMMARIES TO SHOW:**

ALL RG-1.68 SYSTEMS ARE TESTED BY PTIs, ATIs, OR CTs/SPECIAL TESTS:

- All safety-related systems and systems important to safety have preop tests
- There are 61 total non-safety systems applicable to RG-1.68 R2:
 - 12 PTIs
 - 20 ATIs (12 of which are non-1E electrical)
 - 24 Component, Special, or Vendor tests
 - 5 covered in other Systems (PTIs/ATIs)

WBN RG-1.68 R2 STARTUP TEST PROGRAM (CONTINUED)

- **COMPONENT TESTING**

- Comparison of RG-1.68 App-C prerequisite tests to WBN component tests
- Component test program controls
 - CT procedures approved by JTG
 - CT test packages approved by ANSI N45.2.6 Level II test engineer or equivalent
 - CT test results approved by ANSI N45.2.6 Level II and III test engineer or equivalent
- It is not our intent to use component tests to satisfy FSAR Chapter 14 Test Summary criteria
- CTs are used to satisfy some requirements in NE's test scoping documents (i.e., requirements that go well beyond the scope of Chapter 14 Test Summary criteria)

Once component testing is complete, reperformance of these type tests is not necessary within the preop test

TEST HIERARCHY	REG GUIDE 1.68 R2	WBN TEST TYPE	WBN PROGRAM CONTROL
System	Preoperational Testing	PTI or ATI	Startup Test Program (JTG)
Component	Preliminary Tests	GTX or SPT	
Construction	Construction and Inspections	Hydro's Cable Meggars Flush	Construction Program

STATUS OF FSAR CHAPTER 14

- **REVIEW BY NRC**
 - **Questions/comments discussed in telecon with Region and NRR**
 - **TVA/NRC agreement on issues to resolve**
 - **No significant issues**

- **TVA TO PROVIDE CLARIFICATIONS IN REVISED RAI RESPONSE AND FORMAL FSAR AMENDMENT CHANGE**

NRC REVIEW OF PREOP TESTS

- **PROGRAM UPGRADES SINCE JUNE 1992**

- **Strengthened membership of JTG**
- **PTIs submitted to NRC after JTG approval**
- **Enhanced procedure writers guide with template**
- **Use of composite drawings (selected systems)**
- **Dedicated procedure group under manager responsible only for procedure development**
- **Operation support of draft procedure walkdown**
- **Procedures receive 3 levels of review including at least 9 individual reviewers**

- **STATISTICAL SUMMARY**

- **5 PTIs reviewed by NRC**
- **Summary of inspector comments**

DRAWINGS

- **CURRENT DRAWING SYSTEM IS AN AC/CCD DRAWING PROCESS WITH AS-DESIGNED INFORMATION ON CHANGE PAPER (DCAs)**
- **CURRENT DRAWING SYSTEM BASED ON END USER NEED FOR AS-BUILT CONFIGURATION**
- **INTERIM NEED FOR AN AS-DESIGNED DRAWING VERSION TO SUPPORT INITIATION OF SU&T PROCEDURES**
- **COMPOSITE DRAWING PROVIDES INTERIM DRAWING**
 - **Coordinated with Startup Department to identify drawings most beneficial to build composites**
 - **Example: Diesel Generator Starting Air System (Flow diagram with 16 DCAs incorporated)**
- **PRIMARY DRAWINGS UPDATED TO AS-CONSTRUCTED STATUS BY SPAE I (PRIOR TO TEST INITIATION)**
- **290 COMPOSITE DRAWINGS PRODUCED AS OF 3/14/93**
- **600 COMPOSITE DRAWINGS SCHEDULED TO BE ISSUED BY 6/30/93**
- **966 COMPOSITE DRAWINGS SCHEDULED TO BE ISSUED BY 9/30/93**
- **NO COMPOSITE DRAWING FOR CATEGORY I DRAWING WITH LESS THAN 5 DCAs**
- **NO COMPOSITE DRAWING FOR LOGIC DIAGRAMS**