



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

July 2, 1987

Docket Nos: 50-390/391

LICENSEE: Tennessee Valley Authority (TVA)

FACILITY: Watts Bar Nuclear Plant, Units 1 and 2

SUBJECT: MEETING SUMMARY FOR THE JUNE 26, 1987 MEETING BETWEEN NRC AND TVA REGARDING COMMITMENT TO ASME SECTION III REQUIREMENTS FOR WELDING ACTIVITIES

On June 26, 1987, a meeting was held in Bethesda, Maryland, at the request of TVA between the NRC staff and representatives of TVA for the purpose of discussing TVA's commitment to the requirements of ASME Section III for welding activities at Watts Bar Unit 1. Attachment 1 is the list of attendees and Attachment 2 is a copy of the handout provided by TVA at the meeting.

TVA began the meeting by summarizing the ASME rules as applied at the Watts Bar site. Specifically, TVA stated that:

- ASME Section III programmatic and technical requirements were applied for construction through stamping.
- ASME Section XI programmatic and technical requirements were applied subsequent to stamping of component or system.
- After transfer to operations, work was performed under auspices of permanent plant organizations.

TVA further stated that ASME rules require that, when Section III is selected as the basis for performing repairs or modifications, only organizations holding Section III certificates of authorization may perform work, and in the case of TVA, it will be the Division of Construction. TVA is implementing an "Augmented" ASME Section XI program. The work will be performed in accordance with Section III technical requirements by the permanent plant organization.

The NRC staff stated its position regarding Section III welding activities as follows:

- All work should be performed to the code of record for construction, i.e., Section III-1971 through Summer 1973.
- TVA shall review any repairs/modifications performed following closure of the N-5 packages. If cases are identified where work was performed in accordance with Section XI or by a non-stamp holder, TVA shall identify these as exceptions to the code of record. For these exceptions, TVA shall request approval from the NRC staff for the proposed alternatives as prescribed by 10 CFR 50.55a(a)(3).

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- ° Documentation of the N-5 packages may be accomplished by supplementing the current N-5 packages. This is an acceptable method to the jurisdictional authority (NRC) for resolving nonconformances that is consistent with code interpretation III-1-83-175.

Original signed by:
Rajender Auluck, Project Manager
TVA Projects Division
Office of Special Project

Attachments:

1. List of Attendees
2. TVA Handout

cc: See next page

DISTRIBUTION

Docket File

NRC PDR

Local PDR

Those on attached lists

CJ
ZJA/OSP:LA
CJamerson
7/6/87

RA
OSP/TVA:PM
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Tennessee Valley Authority

Watts Bar Nuclear Plant

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Meeting with TVA - June 26, 1987

NAME

| | |
|---------------------|--|
| Raj Auluck | NRC/OSP/TVA |
| Glenn Walton | NRC/OSP/Watts Bar |
| Steve Elrod | NRC/OSP/TVA |
| D. J. (Pete) Etzler | TVA |
| H. B. Bounds | TVA |
| George Toto | TVA |
| G. J. Pitzl | TVA |
| J. T. Beard | TVA |
| Graig D. Lundin | TVA |
| Hoyt C. Johnson | TVA/Watts Bar |
| Gary G. Zech | NRC/OSP/TVA |
| B. D. Liaw | NRC/OSP/TVA |
| R. A. Hermann | NRC/OSP/TVA |
| John A. Zwolinski | NRC/OSP/TVA |
| David E. Smith | NRC/OSP/TVA |
| T. A. Ippolito | TVA Consultant |
| R. J. McMahon | TVA/DNSL/WBN |
| B. W. Bain | Bechtel-Gaithersburg, MD-Welding Specs't |

**INFORMAL TECHNICAL MEETING WITH THE NRC STAFF
BETHESDA, MARYLAND
JUNE 26, 1987**

**COMMITMENT TO TECHNICAL REQUIREMENTS OF ASME SECTION III
FOR WELDING ACTIVITIES AT
WATTS BAR NUCLEAR PLANT UNIT 1**



PURPOSE:

TO PROVIDE THE NRC STAFF INFORMATION REGARDING THE TVA
COMMITMENT TO MEET THE TECHNICAL REQUIREMENTS OF
ASME SECTION III FOR WELDING ACTIVITIES AT WATTS BAR
NUCLEAR PLANT UNIT 1



AGENDA:

- o OPENING COMMENTS

- o BACKGROUND
 - = HOW ASME RULES WERE APPLIED AT WATTS BAR
 - = ASME RULES REGARDING SECTIONS III AND XI INTERFACES

- o DESCRIPTION OF "AUGMENTED" PROGRAM
 - = PROPOSED PLAN FOR REPAIR, REPLACEMENT, AND MODIFICATIONS FOR UNIT 1
 - = WELD REPAIR COMMITTEE
 - = ELEMENTS OF "AUGMENTED" PROGRAM
 - = COMPARISON OF "AUGMENTED" PROGRAM TO SECTION III AND SECTION XI REQUIREMENTS

- o PROCEDURAL IMPLEMENTATION OF "AUGMENTED" PROGRAM

- o SUMMARY

- o CLOSING COMMENTS

BACKGROUND:**HOW ASME RULES WERE APPLIED AT WATTS BAR:**

- o ASME SECTION III PROGRAMMATIC AND TECHNICAL REQUIREMENTS WERE APPLIED FOR CONSTRUCTION THROUGH STAMPING

- o ASME SECTION XI PROGRAMMATIC AND TECHNICAL REQUIREMENTS WERE APPLIED SUBSEQUENT TO STAMPING OF COMPONENT OR SYSTEM

- o AFTER TRANSFER TO OPERATIONS, WORK WAS PERFORMED UNDER THE AUSPICES OF PERMANENT PLANT ORGANIZATIONS

BACKGROUND:**ASME RULES REGARDING SECTIONS III AND XI INTERFACES:**

- o ASME SECTION XI IS GOVERNING CODE WHEN:
 - = FOR COMPONENT OR SYSTEM:
 - ALL SECTION III WORK IS COMPLETED
 - DATA REPORT FORM CERTIFIED
 - ITEM IS STAMPED
 - = FOR ENTIRE NUCLEAR UNIT:
 - ALL SECTION III WORK IS COMPLETED
 - OWNER HAS CERTIFIED N-3 DATA REPORT



BACKGROUND:

ASME RULES REGARDING SECTIONS III AND XI INTERFACES (CONT'D):

- o ASME JOINT INTERPRETATION III-1-83-61 AND XI-1-83-10,
"JURISDICTION OF ASME SECTION III/XI REQUIREMENTS
WHEN PERFORMING REPAIRS OR MODIFICATION SUBSEQUENT
TO CODE SYMBOL STAMPING"
 - = EITHER SECTION III OR XI MAY BE
APPLIED TO REPAIRS OR MODIFICATIONS OF
ITEMS SUBSEQUENT TO STAMPING BUT PRIOR
TO FILING OF N-3 DATA REPORT.
 - = WHEN SECTION III IS SELECTED AS BASIS FOR
PERFORMING REPAIRS OR MODIFICATIONS,
ONLY ORGANIZATIONS HOLDING SECTION III
CERTIFICATES OF AUTHORIZATION MAY PERFORM
WORK (E.G., FOR TVA, DIVISION OF
CONSTRUCTION).



TVA'S PROPOSED PLAN FOR REPAIR, REPLACEMENT, AND
MODIFICATIONS ON UNIT 1:

- o TVA IS IMPLEMENTING AN "AUGMENTED" ASME SECTION XI PROGRAM THAT APPLIES ASME SECTION III TECHNICAL REQUIREMENTS FOR ALL REPAIR, REPLACEMENT, OR MODIFICATION ACTIVITIES AFFECTING CODE PIPING SYSTEMS AND COMPONENTS ON UNIT 1

- o IN THE EVENT SECTION III ACCEPTANCE STANDARDS CANNOT BE MET, TVA WILL:
 - = ASSESS ALTERNATE ACTIONS
 - = DEVELOP TECHNICAL BASIS FOR DETERMINING ACCEPTABILITY IN ACCORDANCE WITH REGULATORY REQUIREMENTS AND GOOD ENGINEERING PRACTICE
 - = PROVIDE INFO COPY OF EACH TECHNICAL BASIS TO NRC RESIDENT INSPECTOR
 - = SUBMIT RESULTS TO NRC FOR REVIEW AND APPROVAL

- o WILL REMAIN IN EFFECT UNTIL SUCH TIME AS TVA AND NRC ARE SATISFIED THAT SECTION XI TECHNICAL REQUIREMENTS MAY BE APPLIED



FORMATION OF WBN UNIT 1 WELD REPAIR COMMITTEE:

- o REPORTS TO WBN PROJECT ENGINEER
- o INCLUDES REPRESENTATIVES FROM LICENSING, QA, WELD TASK GROUP, ENGINEERING, AND TVA WELD CONSULTANTS
- o REVIEWS ALL UNIT 1 WELDS NOT MEETING ALL ASME SECTION III ACCEPTANCE STANDARDS
- o REVIEWS TECHNICAL BASIS FOR DISPOSITION OF THOSE WELDS NOT MEETING ALL ASME SECTION III ACCEPTANCE STANDARDS
- o FOR DISPOSITION OF ASME CODE PIPING RADIOGRAPHS, COMMITTEE HAS PREPARED SPECIAL ENGINEERING PROCEDURE SEP 87-02, "EVALUATION AND REPAIR OF WELDS WITH UNACCEPTABLE RADIOGRAPHS" -- UNDERGOING FINAL REVIEW AND APPROVAL
- o WBN PROJECT ENGINEER PROVIDES THE TECHNICAL RECOMMENDATIONS TO THE SITE DIRECTOR



ELEMENTS OF TVA WBN UNIT 1 "AUGMENTED" PROGRAM:

- o WELD ACCEPTANCE WILL BE IN ACCORDANCE WITH ASME SECTION III TECHNICAL REQUIREMENTS
- o ALL WORK PERFORMED IN ACCORDANCE WITH TVA'S QA PROGRAM FOR SAFETY-RELATED COMPONENTS AND SYSTEMS
- o WILL BE SUBMITTED FOR REVIEW AND ACCEPTANCE BY AUTHORIZED INSPECTION AGENCY
- o REQUIRES SAME OR GREATER CERTIFICATION OF WELDING AND NDE PERSONNEL AS ASME SECTION III
- o REQUIRES COMPARABLE LEVEL OF INVOLVEMENT BY AUTHORIZED INSPECTOR AS ASME SECTION III
- o FOR DISPOSITION OF ASME CODE PIPING RADIOGRAPHS, WORK WILL BE PERFORMED BY PERMANENT PLANT ORGANIZATION
- o DOCUMENTATION ON ASME SECTION ^{XI} ~~II~~ NIS-1 FORM



**COMPARISON OF "AUGMENTED" PROGRAM TO
SECTION III AND SECTION XI REQUIREMENTS:**

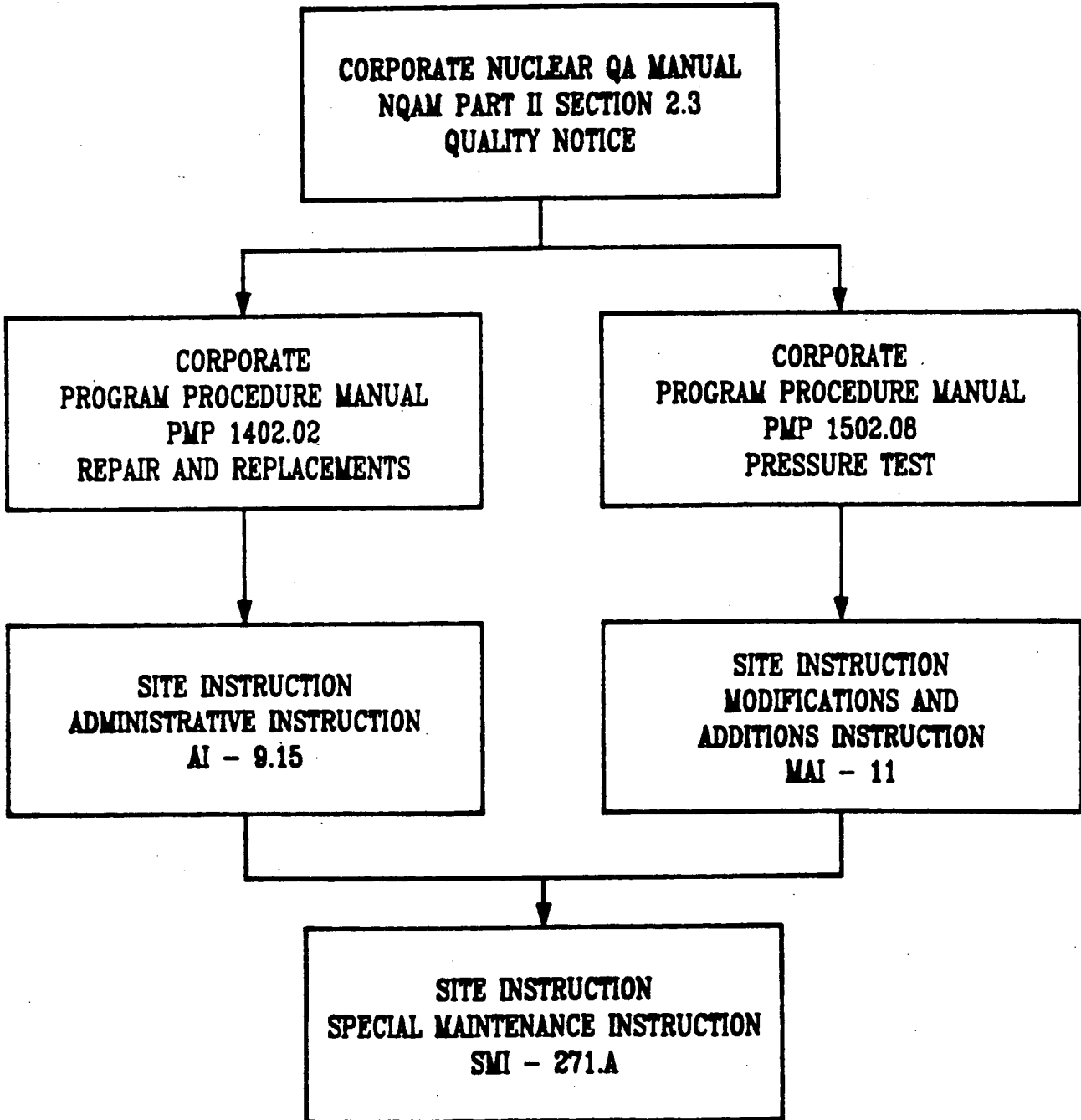
| ACTIVITY | SECTION III | SECTION XI | AUGMENTED PROGRAM | COMMENTS |
|--|--|--|--|--|
| WELDER QUALIFICATION | PER SECTION IX | PER SECTION IX | PER SECTION IX | |
| PROCEDURE QUALIFICATION | PER SECTION IX | PER SECTION IX | PER SECTION IX | |
| QA PROGRAM | NQA-1 & NA-4000 | NQA-1 OR 10 CFR 50, APP. B | NQA-1 10 CFR 50, APP. B | |
| AUTHORIZED INSPECTION | ANI FOR ALL WORK INVOLVING PRESSURE BOUNDARY | ANI & ANI (ANI ONLY FOR PRESSURE BOUNDARY WELDING) | ANI/ANI FOR ALL WORK INVOLVING PRESSURE BOUNDARY | |
| ASME CODE-SYMBOL STAMP (NA/NPT) | REQUIRED | NOT REQUIRED | NOT REQUIRED | |
| NDE ACCEPTANCE | NX-4000 | NX-4000 PLUS IXI-2000 (PSI) | NX-4000 PLUS IXI-2000 (PSI) | SECTION XI DOES NOT PERMIT FLAW ANALYSIS FOR PSI |
| EXEMPTION FOR PRESSURE-BOUNDARY REPLACEMENTS | NONE | PIPING, VALVES, & FITTINGS NPS 1 AND LESS | NONE | |

**COMPARISON OF "AUGMENTED" PROGRAM TO
SECTION III AND SECTION XI REQUIREMENTS:**

| ACTIVITY | SECTION III | SECTION IX | AUGMENTED PROGRAM | COMMENTS |
|---|----------------------------------|-------------------------------------|----------------------------------|--|
| HYDRO TEST EXEMPTION (PIPE SIZE ONLY) | NONE | PIPING & CONNECTIONS NPS 1 AND LESS | NONE | AUGMENTED PROGRAM WILL COMPLY WITH ASME SECTION III TECHNICAL REQUIREMENTS |
| HYDRO TEST PRESSURE REQUIREMENTS | 1.25 Pd | VARIES, DEPENDING ON CODE CLASS | 1.25 Pd | |
| EXAMINATION AREA EXPOSED | EXAMINATION AREA MUST BE VISIBLE | INSULATION MAY BE LEFT IN PLACE | EXAMINATION AREA MUST BE VISIBLE | |
| CERTIFICATION OF DNE <i>NIDE</i> PERSONNEL | ASNT-TC-1A | ASNT-TC-1A | ASNT-TC-1A | |
| CERTIFICATION OF PRESSURE TEST PERSONNEL WHO PERFORMS THE VISUAL EXAM | NOT REQUIRED | ANSI N45.2.6 | ANSI N45.2.6 | |
| DOCUMENTATION | N-5 DATA REPORT | NIS-1 AND SUMMARY REPORTS | NIS-1 AND SUMMARY REPORTS | SECTION XI DOCUMENTATION WILL BE ADDED TO EXISTING N-5 DATA REPORTS |

PROCEDURAL IMPLEMENTATION OF TVA

"AUGMENTED" PROGRAM FOR WBN UNIT 1:



SUMMARY:

- o TVA RECOGNIZES THE UNIQUE SITUATION INVOLVING WBN UNIT 1
- o TVA IS IMPLEMENTING A UNIT 1 "AUGMENTED" ASME SECTION XI PROGRAM THAT APPLIES ASME SECTION III TECHNICAL REQUIREMENTS FOR ALL REPAIR, REPLACEMENT, OR MODIFICATION ACTIVITIES AFFECTING CODE PIPING SYSTEMS AND COMPONENTS
- o "AUGMENTED" PROGRAM CONTROLLED BY SITE IMPLEMENTING INSTRUCTIONS
- o WELD REPAIR COMMITTEE WILL REVIEW DISPOSITION OF THOSE WELDS NOT MEETING ALL ASME SECTION III ACCEPTANCE STANDARDS
- o WATTS BAR SITE DIRECTOR WILL MAKE TVA DECISION ON EXCEPTIONS FROM ASME SECTION III TECHNICAL REQUIREMENTS
- o TVA WILL SUBMIT TO NRC FOR REVIEW AND APPROVAL ALL CONDITIONS THAT DO NOT MEET TVA LICENSING COMMITMENTS



DISTRIBUTION FOR MEETING SUMMARY DATED: July 2, 1987

Facility: Watts Bar Nuclear Plant, Units 1 and 2*

| | |
|---------------------------|---------------|
| Docket File | |
| NRC PDR | |
| Local PDR | |
| Projects Reading | |
| J. Keppler/J. Axelrad | |
| S. Ebnetter/S. Richardson | |
| J. Zwolinski | |
| S. R. Connelly | EWS-461 |
| J. Donohew | |
| R. Auluck | |
| C. Jamerson | |
| OGC-Bethesda | MNBB-9604 |
| F. Miraglia | P-428 |
| E. Jordan | MNBB-3302 |
| J. Partlow | EWS-360 |
| G. Walton | RII/Watts Bar |
| S. Elrod | RII |
| G. Zech | RII |
| B. D. Liaw | |
| R. Hermann | |
| D. E. Smith | |
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| Hon. J. Cooper | |
| Hon. A. Gore | |
| Dr. Henry Myers | |
| Mr. R. King, GAO | |
| P. Gwynn | H-1149 |
| J. Meyer | H-1149 |
| J. Austin | H-1149 |
| J. Milhoan | H-1149 |
| C. Ader | H-1149 |
| TVA-Bethesda | |

*Copies sent to persons on facility service list