UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 8, 2000

LICENSEE: Tennessee Valley Authority

FACILITY: Browns Ferry Nuclear Plant Unit 2

SUBJECT: BROWNS FERRY UNIT 2 - MEETING SUMMARY RELATING TO FORTHCOMING REQUEST FOR APPROVAL OF RISK-INFORMED INSERVICE INSPECTION (TAC NO. MA8873)

INTRODUCTION

A meeting was conducted on May 24, 2000, with the Tennessee Valley Authority (TVA), licensee for the Browns Ferry Nuclear Plant, and its contractor. Attachment 1 is the list of attendees.

SUMMARY

The licensee plans to request approval of a risk-informed inservice inspection program for Unit 2. The proposed program would be similar to that recently approval for Unit 3. The purpose of the meeting was for TVA to brief the staff on the format and level of detail of the supporting information to be provided in the forthcoming request. Attachment 2 is a copy of the licensee's handout. The licensee stated that the proposed Unit 2 program utilizes the methodology of the approved Unit 3 program, and differs only as needed to reflect plant specific differences.

The proposed program would be an alternative to the program required by American Society of Mechanical Engineers Code, Section XI. It would be implemented beginning with a refueling outage scheduled to begin in April 2001.

William O. Long, Senior Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-260

Attachments: 1. List of Meeting Attendees
2. Licensee's Handout

cc w/atts: See next page

Meeting With Tennessee Valley Authority

May 24, 2000

LIST OF ATTENDEES

NAME	AFFILIATION
William Long	NRR/PD2-2
Timothy Abney	TVA/BFN/Licensing
L.J. Victory	Enertech E & S
Robin Graybeal	Enertech E & S
Timothy S. Taylor	TVA
Jim White	Curtis Wright Flow Control
Ted Achorn	TVA/BFN/Licensing
Syed Ali	NRR/EMCB
Stephen Dinsmore	NRR/SPSB

ATTACHMENT 1

OVERVIEW OF PROPOSED U2 RI-ISI PROGRAM

1. BACKGROUND

- TVA submitted original Unit 2 RI-ISI program (October 23, 1998)
- TVA withdrew Unit 2 submittal (September 10, 1999) based on NRC request
- TVA submitted the Unit 3 RI-ISI program (April 23, 1999) and NRC approved on February 11, 2000

2. SIMILARITY OF UNITS 2 AND 3

- Units 2 and 3 are essentially the same (BWR 4, Mark I Containment, 3458 Mwt)with following major differences:
  - -Unit 2 RHR system has cross-tie capability to Units 1 and 3
  - -Unit 3 RHR system has cross-tie to Unit 2 only
  - -Unit 2 shares Diesel Generators with Unit 1
  - -Unit 3 has four Diesel Generators
  - -Unit 1 and Unit 2 Diesel Generator have more RHRSW pumps
  - -Shutdown Board control power is configured differently between the Units
- Significant piping differences
  - -Unit 2 reactor recirculation header is hard connected with isolation valves
  - -Unit 3 reactor recirculation header is split into two separate headers
  - -Unit 3 piping was replaced with IGSCC resistant material
- PSA difference
  - -Unit 2 PRA/CDF is 5.39E-06
  - -Unit 3 PRA/CDF is 9.19E-06

3. UNIT 2 RI-ISI METHODOLOGY

- The same rules and principles applied to the Unit 3 program were also applied to the Unit 2 program (e.g., Failure Probabilities per WCAP-14572, Revision 1, Regulatory Guides 1.174, and 1.178; Analysis performed per Code Case N-577; and Failure Rates calculated using WinPRAISE)
- Expert Panel performed operational reviews
- Welds were selected for inspection based on actual calculated risk for each individual weld
- All welds with RRW greater than 1.001 were selected for inspection

4. UNIT 2 SUBMITTAL CONTENTS

- Mirrors the Unit 3 program
- Includes the Unit 3 RAIs lessons learned

5.Unit 2 RI-ISI PROGRAM DIFFERENCES FROM UNIT 3

- Unit 2 analysis results in risk neutral application
  Unit 3 analysis results in risk reduction application
- Unit 2, Table 5.1, Proposed RI-ISI Examination, (0) Category A, (109) Category C, (6) Category D,(16) Category E and (2) Category G welds
- Unit 3, Table 5.1, Proposed RI-ISI Examination, (41) Category A, (83) Category C, (2) Category D, (10) Category E and (2) Category G welds
- Unit 2, Table 5.1, Proposed RI-ISI Examination, (7) Code class 1 and (9) Code class 2 R1.11 exams, and (51) R1.16 exams
- Unit 3, Table 5.1, Proposed RI-ISI Examination, (6) Code class 1 and (9) Code class 2 R1.11 exams, and (70) R1.16 exams
- Unit 2, Table 3.1-1 Systems in the RI-ISI, system 071(RCIC) has 13 segments and Unit 3 has 12 segments

6.CONCLUSIONS

- Mirrors the BFN Unit 3 program
- Includes the Unit 3 lessons learned
- Risk neutral application
- Improves safety with targeted inspections and selective inspection techniques

UNIT 2 RI-ISI SUBMITTAL CONTENT

SECTION 1 - INTRODUCTION

Discuss U2&U3 RHR crosstie differences
Discuss PSA Quality (Same as Unit 3)

SECTION 2 - PROPOSED ALTERNATIVE TO THE ISI PROGRAM

2.1 - ASME Section XI (same as Unit 3)
2.2 - Augmented programs (same as Unit 3) Plus includes RAI response (i.e., listed augmented programs not included in RI-ISI program)

SECTION 3 - RISK-INFORMED ISI PROCESS

3.0 - RI-ISI Process (same process as Unit 3) Plus included RAI clarification for segment definition deviation and added Safety significance Determination deviation

3.1 - Scope of Program (same scope as Unit 3)and include RAI discussion for excluded portions of systems)

3.2 - Segment Definition (same definition as Unit 3) Plus RAI clarification to segment definition

3.3 - Consequences Evaluation (methodology same as Unit 3)

3.4 - Failure Assessment (same method as Unit 3) Plus additional clarification for failure rate due to FAC, last paragraph

3.5 - Risk Evaluation (same method as Unit 3) Plus include RAI regarding calculation use to rank all segments, paragraph below Table 3.5-1

3.6 - Expert Panel (same process as Unit 3)

3.7 - Expert Panel Categorization of HSS (same process as Unit 3)

3.8 - Structural Element and NDE Selection (same as Unit 3)Plus added RAI response for defense in depth welds

3.9 - Program Relief Requests (same as Unit 3)

3.10 - Change in Risk (same process as Unit 3) Plus include RAI for comparison of CDF/LERF for current program and RI-ISI program)

4.0 IMPLEMENTATION AND MONITORING PROGRAM (same as Unit 3) Plus include RAI for feedback for monitoring program

5.0 PROPOSED ISI PROGRAM PLAN CHANGE (same as Unit 3) Plus include RAI for revision to Table 5-1

ADDITIONAL INFORMATION

Added Attachment 1, Segment CDF, LERF, and RRW for Applicable Case with and without Operator actions

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/RA/

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DISTRIBUTION: Attached

Document Name: G:\PDII-2\BFN\a8873sum.wpd See previous concurrence

OFC	PDII-2/PM	PDII-2/LA	SPSB/SC*	EMCB/SC*	PDII-2/SC
NAME	WLong	BClayton	MRubin	ESullivan	RCorrea
DATE	06/7/2000	06/1/2000	6/6/2000	05/31/2000	06/8/2000

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BROWNS FERRY UNIT 2 - MEETING SUMMARY

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