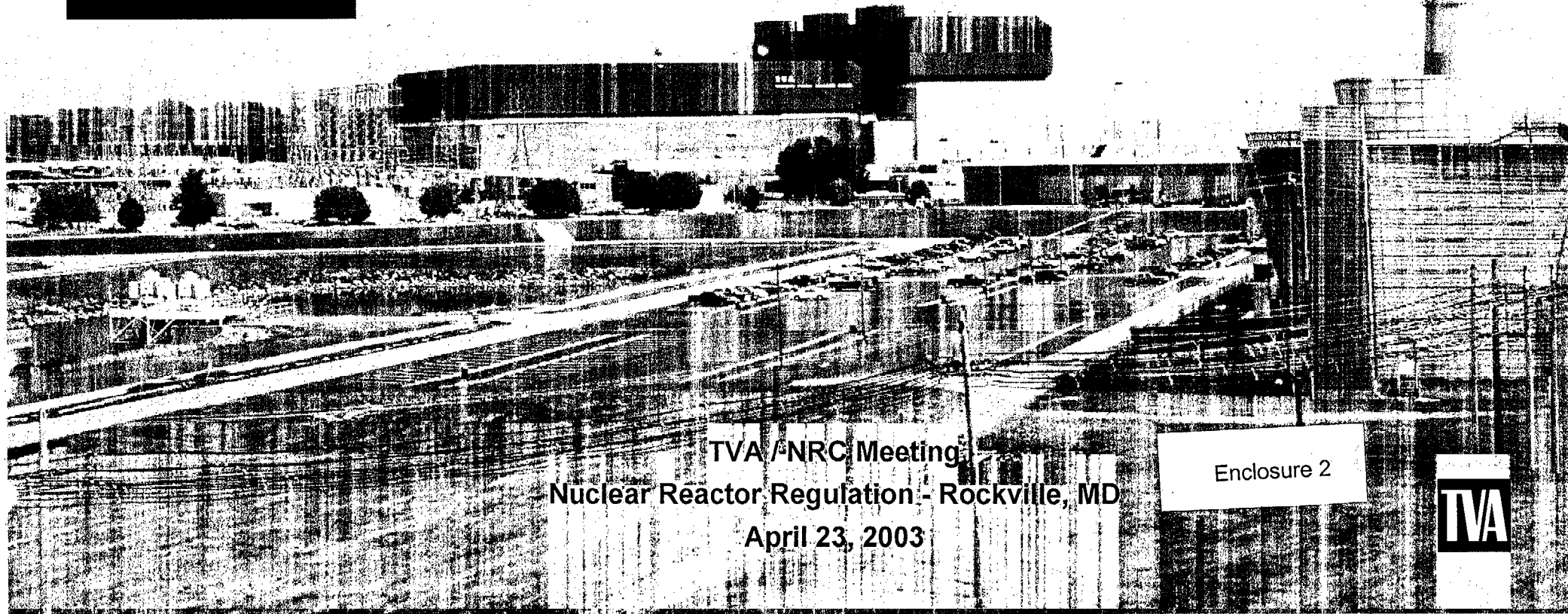
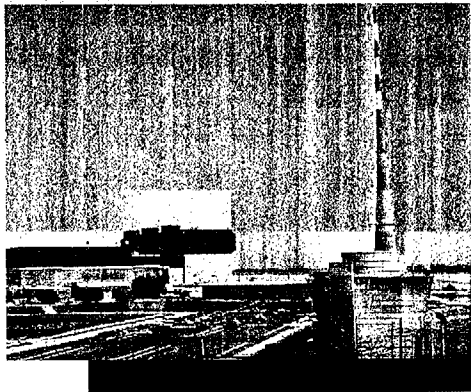


Tennessee Valley Authority Browns Ferry Nuclear Plant Units 1, 2, and 3

License Renewal Application



TVA /NRC Meeting
Nuclear Reactor Regulation - Rockville, MD
April 23, 2003

Enclosure 2



Agenda



- | | |
|---|---------------|
| ❖ Introduction | Tim Abney |
| ❖ Unit 1 Restart Program Status | Joe Valente |
| ❖ License Renewal Project Status | Ray Alexander |
| ❖ Presentation of Unit 1 Current Licensing Basis Differences in the LRA | Gary Adkins |
| ❖ Evaluation of the Unit 1 Layup Program | Mike Morrison |
| ❖ Unit 1 Restart and Inspection and Examination Activities | Joe Valente |
| ❖ The Renewed License | Tim Abney |
| ❖ Closing Remarks | Tim Abney |

Introduction



❖ Meeting Objectives

- Continue the dialogue on TVA's approach for the preparation of a three-unit license renewal application for Browns Ferry Nuclear Plant using the latest standard application format
- Address specific issues raised by the staff in previous meetings
- Reach agreement on application content

❖ Background

- October 31, 2002 TVA/NRC meeting highlights
 - The Unit 1 CLB provides an adequate basis for an LRA
 - The Browns Ferry application will resemble multi-site applications previously reviewed by the staff
 - Current Licensing Basis (CLB) differences will be annotated in the application
 - TVA will credit the same aging management programs for all three units
 - TVA recognizes the review of a three-unit Browns Ferry application may take longer than the standard review schedule
 - TVA agrees that a Unit 1 license condition would be acceptable to facilitate the issuance of the renewed Unit 1 license
 - Staff agrees to review a three-unit application and agrees to further discussions on the content and format of the application.
 - TVA was requested to address the following issues in the application:
 - Unit 1 layup
 - Description and schedule for the resolution of Unit 1 CLB differences

Unit 1 Restart Program Status



❖ Major Engineering Program Activities

- Design Criteria Documents - complete
- Safe Shutdown Analysis - complete
- Operation Mode Calculations - complete
- Generic Letter 89-10 Calculations - complete
- EQ Basis Calculations - complete
- Analytical Limits Calculations - complete
- Drywell Related Baseline Calculations - complete
- Reactor Building Baseline Calculations - in progress

❖ Design Change Status

❖ Maintenance and Modification Status

❖ Current Unit 1 Restart Staffing Level ~2000

❖ Breaker Closure Planned 2nd Quarter 2007

❖ Program Will Return Unit 1 to Operation the Same as Units 2 and 3

License Renewal Project Status



- ❖ **Submittal Date – December 2003**
 - Will use Class of '03 standard format (modified by understandings reached with the Staff regarding Unit 1)
- ❖ **Scoping/Screening/Aging Management Reviews for Units 1, 2, and 3**
 - Scoping/screening – 80% complete
 - Aging management review – 50% complete
 - Scoping re-review being performed on 27 Unit 2/3 systems as a result of the “non-safety affecting safety” ISG
 - Initial scoping for Unit 1 includes Criterion 2.
- ❖ **Identification of Time Limited Aging Analyses**
 - TVA is performing both calculation and CLB reviews
 - 6000/7700 document reviews complete to identify potential TLAA issues

Presentation of Unit 1 CLB Differences in the LRA



- ❖ The Browns Ferry Unit 1 Current Licensing Basis is Well-Known, Documented
- ❖ TVA Proposes To Add a New Appendix F to the Browns Ferry Application
 - The plan for the resolution of each Unit 1 CLB difference will be described
- ❖ Appendix F Will Address the Specific Issues Raised by the Staff
 - Unit 1 CLB differences clearly identified in the application
 - Differences in system intended functions explained
 - Impact on the application described
 - Schedule for resolution of differences
 - Differences annotated in the application will be hyperlinked to Appendix F
- ❖ Use of Appendix F
 - Discussion is based upon the same examples presented at the October 31, 2002, TVA/NRC meeting

Evaluation of the Unit 1 Layup Program



- ❖ **Layup Program Initiated in 1986 Following Shutdown in 1985**
 - Program was designed for asset preservation
 - Program is not a basis for Unit 1 restart
 - TVA will not credit the program for aging management
 - The principal layup method is dry layup (dehumidified air)
 - Minimal use of vapor-phase corrosion inhibitors
- ❖ **Unit 1 Systems Not in Layup**
 - Shared systems in-service to support Units 2 and 3
 - Systems in-service to support Unit 1
- ❖ **TVA Will Perform an Evaluation of the Effects of the Layup Program on the Application**
 - Evaluate layup materials and environments to identify the need for new AMPs
 - No evaluations required on in-service systems/components or on components which will be replaced
- ❖ **Results Will be Reported in an Appendix F Section to Include:**
 - Listing of systems, commodities and layup environments evaluated
 - New AMPs with links to Chapter 3 and Appendix B as appropriate

Unit 1 Restart Inspection and Examination Activities



- ❖ Components Not Being Replaced Will be Inspected and/or Tested
- ❖ Heat Exchanger Eddy Current Testing
 - All heat exchangers in the Unit 1 restart boundary have been tested
- ❖ Selected Pre-Service and ISI NDE In Progress or Completed

RPV & internals	RHR service water	Drywell liner	LLRT – electrical penetrations
MS & FW piping	HPCI piping	RCIC piping	LLRT – mechanical penetrations bellows
- ❖ Future Pre-Service and ISI
 - Completion of ISI for the first interval
- ❖ Minimal Baseline FAC / IGSCC Inspections
 - Susceptible components are being replaced
- ❖ Corrective Action Program Being Used to Document Unanticipated As-Found Conditions as Systems/Components are Breached for Modification

The Renewed License



- ❖ TVA Will Not Restart Unit 1 Without NRC Permission (Existing Commitment)
- ❖ NRC's Standard SER Template and Usual License Condition(s) are Applicable to the BFN Application
- ❖ Final Unit 1 Scoping, Screening and Aging Management Review Results (Component Level) at Restart Will be Identical to Units 2 and 3
- ❖ Additional Proposed License Condition for Unit 1
 - TVA will evaluate each of the CLB differences identified in Appendix F of the Browns Ferry application for renewed operating licenses dated _____ to confirm that its elimination did not necessitate the creation of any new Aging Management Program(s) which were not approved by the NRC in the Safety Evaluation Report dated _____.

Closing Remarks



- ❖ TVA Will Submit A Three-Unit Application
- ❖ TVA Recognizes that Some Lengthening of the Standard Review Schedule May Be Necessary
 - 1-3 months of additional review achievable
- ❖ The Unit 1 Layup Program Will be Addressed in the Application
- ❖ An Additional Unit 1 License Condition Would be Appropriate