

TENNESSEE VALLEY AUTHORITY

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MAR 31 1988

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of
Tennessee Valley Authority

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Docket Nos. 50-327
50-328

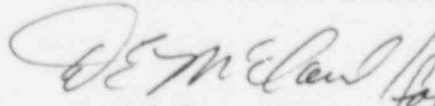
SEQUOYAH NUCLEAR PLANT (SQN) - UNIT 1 RESTART PLAN

This letter documents the differences between TVA's programs planned for the restart of unit 1 and the programs used for the restart of unit 2. Forty programs were identified as being the same for both units. Four unit 1 programs were identified as being different because of lessons learned on unit 2 or they are unique to unit 1. A description of these program differences is included in enclosure 1. The Sequoyah Nuclear Performance Plan will be revised to include detailed information on these four unit 1 programs by April 29, 1988. Enclosure 2 is a compilation of new commitments made in this letter.

If you have any questions, please telephone M. R. Harding at (615) 870-6422.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



R. Gridley, Director
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Regulatory Affairs

Enclosures

cc: See page 2

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U.S. Nuclear Regulatory Commission

MAR 31 1988

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ENCLOSURE 1

SEQUOYAH NUCLEAR PLANT - UNIT 1 RESTART PLAN

EXECUTIVE SUMMARY

In order to develop the Sequoyah Nuclear Plant (SQN) unit 1 restart plan, an evaluation of the unit 2 programs identified in the SQN Nuclear Performance Plan (SNPP) and the correspondence between TVA and NRC was performed. Each unit 2 program was evaluated by the manager responsible for the implementation of that program. These evaluations concluded that 40 of the 44 unit 1 programs are identical to the unit 2 programs and therefore have been reviewed and approved by the staff with the issuance of the unit 2 Restart Safety Evaluation Report. The remaining four programs are different because of lessons learned from unit 2 or they are unique to unit 1. Attachment 1 shows the results of these evaluations.

The four unit 1 programs are: the Civil Engineering Program; the Design Baseline and Verification Program (DBVP); the Operational Readiness Program; and the Restart Activities List. A brief description of the differences between units 1 and 2 for these four programs is provided below.

PROGRAM DIFFERENCES

1.0 DBVP

The unit 1 DBVP is the same as the program for unit 2 with the following two exceptions: The unit 1 DBVP takes credit for the applicable unit 2 reviews, and the review of testing has been transferred to TVA's Restart Test Program.

The implementation of the unit 1 DBVP has also been structured into two phases. The prerestart phase carries out the program for the unit 1 portion of the systems required to mitigate the Final Safety Analysis Report (FSAR) Chapter 15 accidents and to provide for safe shutdown. The postrestart phase will continue the engineering activities to complete engineering documentation describing the functional as-constructed configurations. Also, the postrestart phase will extend the program to unit 1 prerestart phase punchlist items not required for restart and to other safety-related systems.

2.0 CIVIL ENGINEERING PROGRAM

Several activities are included in what is called the civil engineering program for unit 1. Those activities include: preparation and submittal of the response to Information and Enforcement (IE) Bulletin 79-14 for unit 1; verification of alternate analysis calculations; regeneration of missing rigorous analysis pipe support calculations; and restart resolution of Condition Adverse to Quality Reports (CAQRs), Engineering Change Notices (ECNs), audit findings, and employee concerns. Therefore, the unit 1 program is essentially the same as unit 2 except a final report will be submitted on IE Bulletin 79-14 for unit 1.

Unit 1 work items have been planned and scheduled to: perform necessary functional verification walkdowns; evaluate and disposition outstanding restart paperwork; regenerate calculations as necessary; issue required pipe support modifications to meet design bases; and field-complete pipe support modifications needed to meet interim pipe support design criteria. The interim pipe support design criteria will be provided by April 29, 1988. The civil engineering program will be completed and the final report for IE Bulletin 79-14 for unit 1 will be submitted to NRC before restart.

3.0 RESTART ACTIVITIES LIST

The identification and tracking of unit 1 restart items are accomplished by the use of the Office of Nuclear Power's (ONP) Tracking and Reporting of Open Items (TROI) System rather than the Sequoyah Activities List used for unit 2. The unit 1 restart list was developed by an item-by-item review of completed and open unit 2 restart activities and of open unit 1 issues. After this review, a baseline was established for the unit 1 restart list. Standard Practice SQA203, "Use of TROI for unit 1 Restart Action List," was issued to specify the requirements for maintaining and controlling the unit 1 restart list. The SQA203 restart criteria used to guide the line organizations in raising potential restart issues and making recommendations to management are the same restart criteria set forth in the SNPP.

The Site Director has identified a unit 1 Restart Director who is responsible for coordinating the activities for the unit 1 restart effort. The unit 1 Restart Director reports directly to the Site Director and has responsibility and authority to establish specific schedule priorities, to ensure that line managers are coordinating their activities to complete all restart actions, to establish site goals as appropriate to achieve a safe and timely restart, to call and conduct restart schedule status meetings, and to ensure performance of the individual groups and integrated work activities. This position has been established in order to ensure that all restart requirements are properly completed in an integrated fashion and on a timely basis. Through the activities of the unit 1 Restart Director, the Site Director is provided with an early signal of potential problem areas and is able to take prompt action.

4.0 OPERATIONAL READINESS PROGRAM

The SQN unit 1 operational readiness program will require that line managers utilize a systematic process for the identification and certification of closure of individual restart items for which they are responsible. The unit 1 program will focus on activity closure rather than on program and management system evaluations, which

were performed for unit 2 restart. The unit 1 program will be accomplished by implementation of a startup prerequisite checklist similar to that used for unit 2 restart. However, the unit 1 prerequisite checklist will also address the adequacy of staff support for two-unit operation.

The startup prerequisite checklist will be made a part of the Restart Test Instruction (RTI) 1.1, "Master Test Sequence," for unit 1. The Site Director will use the signed-off startup prerequisite checklist as well as other status reviews and inputs to make his recommendation for SQN unit 1 restart to the Manager, ONP. The Manager, ONP, will approve restart of SQN unit 1 only when he is satisfied that all preparations for restart have been satisfactorily completed.

ENCLOSURE 2

1. The SNPP will be revised to include detailed information on these four unit 1 programs and a description of the differences between these unit 1 and unit 2 programs by April 29, 1988.
2. The civil engineering program will be completed and the final report for IE Bulletin 79-14 for unit 1 will be submitted before restart.
3. The interim pipe support design criteria will be provided by April 29, 1988.

ATTACHMENT 1
COMPARISON OF
UNIT 1 PROGRAMS
WITH UNIT 2 PROGRAMS

ITEM	IDENTICAL TO UNIT 2		UNIT 1 PROGRAMS THAT ARE DIFFERENT FROM UNIT 2
	CLOSED BY UNIT 2	FIELDWORK ONLY	
1. ENVIRONMENTAL QUALIFICATION		X	
2. DESIGN BASELINE AND VERIFICATION PROGRAM			x(1)
3. CABLE TRAY SUPPORT ANALYSIS		X	
4. DESIGN CALCULATIONS REVIEW		X	
5. ALTERNATELY ANALYZED PIPING AND SUPPORTS		X	
6. MAIN STEAM LINE BREAK TEMPERATURE ISSUES		X	
7. FIRE PROTECTION-APPENDIX R	X		
8. PLANT WELDING PROGRAM	X		
9. SENSE LINE ISSUES			
a) SENSE LINE SLOPE		X	
b) COMPRESSION FITTING PROBLEM	X		
c) TEFLON TAPE	X		
10. WALL THINNING ASSESSMENT PROGRAM		X	
11. RESTART TEST PROGRAM		X	
12. COMPONENT AND PIECE PART QUALIFICATION		X	
13. ELECTRICAL ISSUES			
a) CABLE AMPACITY		X	
b) CABLE PULLING		X(2)	
c) FUSES	X		
14. CONTAINMENT ISOLATION DESIGN REVIEW	X		
15. MISCELLANEOUS PROGRAM			
a) MISC CIVIL ENGINEERING ISSUES			x(3)
b) MODERATE ENERGY LINE BREAK FLOODING	X		
c) CONTAINMENT COATINGS		X	
d) ECCS WATER LOSS OUTSIDE THE CRANE WALL		X	
e) PLATFORM THERMAL GROWTH		X	
f) HEAT CODE TRACEABILITY	X		
16. TECHNICAL SPECIFICATIONS	X		
17. TRAINING	X		
18. PROCEDURES		X	
19. CORRECTIVE ACTION	X		
20. QUALITY ASSURANCE	X		
21. EMPLOYEE CONCERNS		X	
22. NEW DESIGN CONTROL PROGRAM	X		
23. SURVEILLANCE INSTRUCTION PROCEDURES PROGRAM		X	

24. MAINTENANCE			
a) MANAGEMENT INVOLVEMENT	X		
b) MAINTENANCE INSTRUCTION ENHANCEMENT		X	
c) PREVENTIVE MAINTENANCE		X	
d) MAINTENANCE TRAINING	X		
e) ADDITIONAL MAINTENANCE RESTART ACTIVITIES		X	
25. OPERATIONAL READINESS REVIEW			X
26. RADIOLOGICAL CONTROL	X		
27. OPERABILITY REVIEW	X		
28. FUNCTIONAL TESTING		X	
29. RESTART ACTIVITIES LIST			X
30. PROCUREMENT*	X		
31. CONTROL ROOM DESIGN REVIEW*	X		

- Notes: (1) Unit 1 program takes credit for unit 2 reviews that are applicable. Review of testing transferred to Restart Test Program.
- (2) Fieldwork for vertical cable support pads for affected 50.49 silicone rubber cables inside unit 1 containment.
- (3) Unit 1 program will submit a response to IE Bulletin 79-14.

*Not included in the SNPP