

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON D. C. 20555

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January 6, 1988

NOTE TO:

Harold Denton

FROM Frederick Combs

SUBJECT: HENRY MYERS' COMMENTS ON INSPECTION REPORT 50-327/87-31 AND 50-87/87-31

The attached comments were provided to John Bradburne in a telephone discussion with Dr. Myers on December 17.

combs ed

BB07150246 BBC624 PDR FDIA CONNORB8-59 PDR

### DR. HENRY MYERS' COMMENTS ON INSPECTION FEFORT 50-327/87-31 and 50-328/87-31

The following comments on the subject inspection report on the TVA's Design Baseline and Verification Program (DBVP) for the Sequoyah Nuclear Power Plant were provided by Dr. Henry Myers of the House Interior Committee Staff to Congressional Affairs. The comments are keyed to the indicated sectiors of the report and its cover Tetter.

As a general comment, the report declares that problems are resolved without supporting that declaration. Also, the report does not spell out things like DVBP.

(1) Two qualifications are not spelled out or defined

(2) Does this sertence say that the NRC approves the report?

(3) Was the purpose of the inspection achieved? (See page 1 of report, the first two sentences under 2. purpose.)

- (4) 4.1 Operations
  - 4.2 Mechanical Systems
  - 4.3 Mechanical Components
  - 4.4 Nuclear Engineering
  - 4.5 Electric Power
  - 4.6 Instrumertation and Control
  - 4.7 Civil/Structural Engineering

See duplicate paragraphs on pages 3 and 4. Is the page 4 paragraph out of order?
All of the summary is out of order.
Is the paragraph at the top of page 4 talking about all or part of

Sequoyah? In essence, are all paragraphs talking about all of Sequoyah or just the particular subject covered?

- Does "closed" mean satisfactorily handled?

(Page 5) \*\*\* Does this mean no deficiencies at all?

- (5) Does this mean they are fixed?
- (6) (page 2) Does this mean "operations of the plant" or "operations of the DBVP?"

(7) (page 6) This is a major item.

(8) (page 7) Problem

(9) (page 8) What is a "non-administrative change?"

(10) (page 8) Do not "implement" a punch list items. You address the problems on the punch list and then solve the problems pointed out by the punch list. Henry believes that the report could be saying that the problems were addressed but not solved.

(11) (page 12) 357 action items and no way to determine if the deficiency is really fixed. Inspection report does not indicate if things are being fixed.

(12) Ask Harold what he thinks of the problems on page 12, 13, 14 and 15 (not all in detail). DBVP did not find them but the EA found them. No indication that problems are being resolved.

(13) (page 15) What is "the project" and is acceptable to do calculations after restart?

(14) (page 16) What are these documents? It would be helpful for a one or two line description on each one.

(15) (page 17) Does this mean that EA only reviewed three punch list items?

(16) General (page 16-17) There is a lack of seismic calculations to confirm assumptions.

(17) (page 17 and 18) Section 4.3.4 is confusing.

(18) (page 25) What problems were reviewed? What did TVA do to resolve them?

(19) (page 25) needs a look

(20) (page 29) Calculation 870223 was the basis for cancelling the variance. Does 86118 mean it was done before 870223? Is this an error-should 86118 be 860118 or is TVA pulling something?

(21) (page 31) The punch list review shows that errors were found. Is this falsifications? Who will confirm a fix here?

(22) (page 31) Disagrees with the last sentence because there is no substantiation of the claims.

(23) (page 31) "As built" verification did not appear in the IDI report on ERC.

Henry says the process is too complicated to be handled by Ebnetter-and certainly too complex to be handled by the Commission. He feels that Sequoyah and TVA are generally worse than Zimmer.



#### UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20655

DEC 3 1987

Docket Nos. 50-327 and 50-328

> Tennessee Valley Authority ATTN: Mr. S. A. White Manager of Nuclear Power 6N 38A Lookout Place 1101 Market Street Chattanooga, TN 37402-2801

Gentlemen:

SUBJECT: INSPECTION REPORT NOS. 50-327/87-31 AND 50-328/87-31

This letter forwards the results of a special inspection of TVA's Design Baseline and Verification Program (DBVP) for the Sequoyah Nuclear Power Plant, conducted at the plant site and in your Cedar Bluffs Offices between June 29 and July 24, 1987. The NRC inspection team was comprised of a multidiscipline team of personnel from the Office of Nuclear Reactor Regulation from consulting firms, and from the Region II Office. The team concentrated on the resolution and corrective action for the findings of the DBVP. The team also reviewed the corrective actions resulting from independent oversight of this program by TVA's Engineering Assurance group and evaluated TVA's actions in response to previous NRC design control and DBVP inspection reports. TVA internal reports (1) EA-OR-001, Engineering Assurance Oversight Review Report, "Sequoyah Nuclear Plant - Unit 2 Design Baseline and Verification Program," dated April 29, 1987, and (2) the SQN DBVP Unit 2 Phase I report, dated May 29, 1987, characterize the program, its findings, and the Engineering Assurance oversight effort. These reports were also reviewed during this inspection.

As a result of the inspection, the NRC team concluded that the DBVP was generally conducted in accordance with the program plan. Implementation by both DBVP personnel and the Engineering Assurance oversight group appears to have been adequate in most instances sampled by the inspection team within the scope of the program areas inspected to date.

As noted in the report, implementation of corrective actions for DBVP findings was still in progress at the time of the inspection, as was Engineering Assurance (EA) sampling and verification of implementation (3) We note that a supplemental report addressing EA oversight of the DBVP has been submitted to the NRC (R. Gridley letter dated October 23, 1987). In order for the NRC to assess the adequacy of the DBVP effort to support plant restart, the supplemental Engineering Assurance Oversight Report remains to be reviewed by the NRC.

Results of the inspection are presented in the enclosure.

#### Tennessee Valley Authority

TVA provided a written response (R. Gridley letter dated October 27, 1987) addressing the observations identified in Appendix A of the enclosed report in advance of the issuing of this report. The substance of these observations had been communicated verbally to TVA during the inspection. An additional NRC inspection (Report 327, 328/87-64) was conducted on October 26-30, 1987. This subsequent inspection addressed many of the open observations addressed in the enclosed report. The NRC's evaluation of your response to this letter will be documented in inspection report 327, 328/87-64. Any observations remaining open at restart will require an evaluation of acceptability for sucr restart by both TVA and the NRC.

In accordance with 10 CFR 2.790(a), a copy of this letter and the erclosure will be placed in the NRC Public Document Room.

Should you have any questions concerning this inspection, please contact me or Mr. Gene Imbro, (301) 492-9664.

Sincerely,

Stevento Elinter

Stewart D. Ebneter, Director TVA Projects Staff Office of Special Projects

Enclosure: Inspection Report 50-327/87-31 and 50-328/87-31

cc w/enclosure: See next page Tennessee Valley Authority

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DEC 3 1987

Distribution: (w/encl) DCS (Docket No. 50-327/328) PDR LPDR DRIS Reading SIB Reading EVImbro, NRR **BKGrimes**, NRR JGPartlow, NRR REArchitzel, NRR SEbneter, OSP JAxelrad, OSP SRichardson, OSP GZech, OSP BDLiaw, OSP FMcCoy, RII KBarr, RII BBHayes, OI SRConnelly, OIA ELJordan, AEOD Inspection Team (8) JFair, OSP Resident Inspector NSIC NTIS OGC-Beth Central Files OSP Reading FMiraglia ACRS (10) TVA-Bethesda

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DATE :11/5 /87	:11/5/87	:yi	87	:11/6 /87		:11/12/87	11/2/11

Mr. S. A. White Tennessee Valley Authority

cc: General Counsel Tennessee Valley Authority 400 West Summit Hill Drive Ell B33 Knoxville, Tennessee 37902

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Dr. Henry Myers, Science Advisor Committee on Interior and Insular Affairs U.S. House of Representatives Washington, D.C. 20515

## U.S. NUCLEAR REGULATORY COMMISSION OFFICE OF NUCLEAR REACTOR REGULATION

Division of Reactor Inspection and Safeguards

Report Nos.:	50-327/87-31, 50-328/87-31			
Docket Nos.:	50-327; 50-328			
Licensee:	Tennessee Valley Authority 6N, 38A Lookout Place 1101 Market St. Chattanooga, TN 37402-2801			
Facility Name:	Sequoyah Nuclear Plant, Units 1 & 2			
Inspection At:	Cedar Bluffs and Soddy Daisy, TN			
Inspection Conducted	d: June 29-July 2 and July 20-24, 1987			
Inspection Team Mem	bers:			
Team Leader:	R. E. Architzel, Senior Operations Engineer, NRR			
Mechanical Systems:	F. J. Mollerus, Consultant, Mollerus Engineering Inc.			
Nuclear Engineering	J. A. Nevshemal, Consultant*			
Mechanical Componen	ts: A. V. du Bouchet, Consultant			
Civil/Structural:	A. I. Unsal, Consultant, Harstead Engineering			
Electrical Power:	S. V. Athavale, Electrical Engineer, NRR*			
Instrumentation & Control:	L. E. Stanley, Consultant, Zytor Inc.			

Operations:

P. E. Harmon, Resident Inspector, Sequoyah H. E. Bibb, Resident Inspector, St. Lucie NPP\*

10/9 Date

Ralph E. Architzel Team Leader

E.Y. Umbo 10/18/87

Eugene V. Imbro Date Section Chief Team Inspection Appraisal and Development Section #2 Special Inspection Branch

\*6/29-7/2/87 only

# LIST OF ABBREVIATIONS

ABGTS AFW	auxiliary building gas treatment system auxiliary feedwater
CAQ CAQR CCP CCRIS CCS CEB CFR	condition adverse to quality condition adverse to quality report centrifugal charging pump Calculation Cross Reference Information System component cooling water system Civil Engineering Branch Code of Federal Regulations
DBVP DCR DES DIM DNE	Design Baseline and Verification Program design change request Discipline Evaluation Supervisor design input memorandum Division of Nuclear Engineering
EA ECCS ECN EEB ERCW	Engineering Assurance emergency core cooling system engineering change notice Electrical Engineering Branch essentia: raw cooling water system
FCN FCR FSAR	field change notice (Westinghouse) field change request Final Safety Analysis Report
HPFP HVAC	high-pressure fire protection heating, ventilation, and air conditioning
I&C IEEE	instrumentation and control Institute of Electrical and Electronics Engineers
LDCR LOCA	local design change request loss of coolant accident
MEB MI	Mechanical Engineering Branch maintenance instruction
NCR NEB NPSH NRC NSSS	nonconformance report Nuclear Engineering Branch net positive suction head Nuclear Regulatory Commission nuclear steam supply system
OR	oversight review
PGCE PIR PL	potential generic condition evaluation problem identification report punchlist

QIR	quality information report
RCS	reactor coolant system
RHR	residual heat removal
RIMS	records information management system
SCR	significant condition report
SE	System Engineer
SQR	surveillance instruction
SQRP	Static-O-Ring
SQP	Sequoyah Engineering Procedure
SQN	Sequoyah Nuclear Plant
SSE	safe shutdown earthquake
SWBID	system walkdown boundary identification drawing
SYSTER	System Evaluation Report
TACF	temporary alteration control form
TVA	Tennessee Valley Authority
USQD	unreviewed safety question determination
WDP	walkdown package
WP	work package
WR	work request
ZPA	zero period acceleration