

Docket Nos.: 50-390 and
50-391

APPLICANT: Tennessee Valley Authority
FACILITY: Watts Bar Nuclear Plant, Units 1 and 2
SUBJECT: SUMMARY OF MEETING TO DISCUSS CONCRETE CONCERNS

On April 21, 1986, representatives from the NRC and TVA met at the Watts Bar Nuclear Plant to discuss concerns regarding concrete poured at that facility which were raised in the QTC Investigation Report No. IN-85-995-002. Enclosure (1) is the attendee list.

After a site tour of Seismic Category I structures, TVA began the discussion with a history of their special Employee Concern Program, and specifically discussed the background of the concerns raised by Quality Technology Company (QTC). TVA pointed out that they were still in the process of reviewing these concerns and related records, and have not completed their evaluation of this matter. The following is a summary of where TVA is to date.

After receipt of the QTC report, TVA formed a team to evaluate the concerns in the report. After a review of 6100 test result records, TVA concluded that there are three non-conforming conditions (for which NCRs were filed) as follows:

1. There are a number of low-strength test results
2. There were insufficient procedures in place to control the use of Grout 7, and
3. In some cases, TVA did not meet all of the test frequency requirements.

TVA indicated that although NCRs were issued on individual problems with the samples during the time the concrete was being poured, the applicant did not evaluate these problems for their overall impact on the plant structures.

After their investigation into these concerns, TVA wrote an initial report discussing the applicant's findings and evaluations. This initial report was written to provide information to a team of outside consultants hired by TVA to look into this matter. When the evaluations by both TVA and their consultants are complete, the applicant will then issue their final report.

TVA stated that their proposed resolution to the three non-conforming conditions involve estimation of in-place strength where there is doubt that the original poured strength has been met. Where the calculated in-place strength is lower than the design strength, TVA intends to perform a structural evaluation for that concrete to determine if modifications are required to meet their commitments.

In response to a staff inquiry about the generic applicability of these concerns to other TVA facilities, TVA stated they looked at the Sequoyah, Brown's Ferry, and Bellefonte records on a sample basis, interviewed TVA personnel, and did not find similar trends at these facilities. TVA indicated they believed that the overall strength of the concrete at these plants is acceptable.

At the close of the meeting, the NRC staff recommended TVA consider addressing the following in their final report:

1. The report should address QA/QC involvement in this issue, including concurrence with the final report and what, if any, modification to QA/QC policies and procedures were made as a result of TVA's evaluation.
2. The report should include the consultant's report, with the consultant's resumes.
3. The QTC concerns need to be addressed on a one-to-one basis, including the basis supporting TVA's evaluations.
4. The report should address the root cause(s) leading to the concerns, including a discussion of the safety significance of the items.
5. The report should address how differences between TVA commitments and nationally known standards affect the safety of the plant. In addition, it should address if a commitment was violated and what, if anything, was done to meet the commitment.
6. The report should address the generic aspects of these concerns as they affect other TVA facilities, including specifics of their sampling program, the basis for their sampling size, and the basis for their conclusions.

At the close of the meeting, the staff requested TVA to submit their final report to the NRC when it is completed.

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Thomas J. Kenyon, Project Manager
PWR Project Directorate #4
Division of PWR Licensing-A

Enclosure:
As stated

PWR#4: DPWR-A
TKenyon: jr
04/1/86
5/1/86

md
5/1/86

DPWR-A/EB
FRinaldi
05/1/86

DPWR-A/EB
DJeng
05/1/86

DPWR-A/EB
RBedland
5/1/86

PWR#4: DPWR-A
BJYoungblood
05/6/86

ENCLOSURE 1

ATTENDANCE LIST

TVA/NRC Meeting on Concrete
Concerns at Watts Bar, April, 21, 1986

NAME

ORGANIZATION

Ralph H. Shell	TVA-Nuclear Licensing
W. R. Brown	TVA-WBN Phase II Task Force
Kenneth Parr	TVA-Nuclear Licensing
John Stiner	TVA - CQC
Larry Nathan	TVA - CQC
Frank Cason	TVA - Info. Svcs.
R. G. Cochran	TVA-WBN Phase II Task Force
Glenn Ashley	TVA-WBN Regulatory Engr.
Mark Burzynski	TVA-WBN Regulatory Engr.
Don R. Denton	TVA-DNE/CEB
Basil W. Whittier	TVA-DNE/WBEP
Joe V. Peyton	TVA-DNE/CEB
Rupert E. Bullock	TVA-DNE-CEB
Newton H. Perry	TVA-DNE-CEB
Thomas Kenyon	NRC/NRR/DPWR-A
David C. Jeng	NRC/NRR/DPWR-A
Charles A. Miller	BNL
R. Q. Barnett	TVA-DNE-Chief Civil Engr.
Frank Rinaldi	NRC/NRR/DPWR-A
Donald E. Nixon	WBN-ECTG
Wesley L. Byrd	Watts Bar Employee Concerns Asst.
E. R. Ennis	TVA
M. W. Branch	NRC Resident Inspector
G. A. Walton	NRC Resident Inspector
Floyd Smith	TVA Const.