



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

DEC 12 1989

Docket No. 50-390

Mr. Oliver D. Kingsley, Jr.
Senior Vice President, Nuclear Power
Tennessee Valley Authority
6N 38A Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

Dear Mr. Kingsley:

SUBJECT: WATTS BAR BROAD-BASED CONSTRUCTION ASSESSMENT
REPORT NO. 50-390/89-200

I have enclosed the report of the broad-based construction assessment conducted by the Special Inspection Branch of the NRC's Office of Nuclear Reactor Regulation during the period September 25-October 6 and October 16-27, 1989, at the Watts Bar Nuclear Plant, Unit 1. This special, announced inspection was performed to (1) determine the construction quality at the Watts Bar facility; (2) identify significant construction deficiencies, if they exist, that had not previously been identified; and (3) evaluate the plant's status in relation to projected schedules.

The enclosed report identifies the areas examined during the assessment. Within these areas, the effort consisted primarily of detailed inspections of a selection of completed hardware installations, reviews of selected aspects of your quality assurance program, and examinations of procedures and records. Section 1 of the enclosed report is an Executive Summary of the results of our assessment and the conclusions reached by this office. The general conclusion reached after this inspection was that the major areas of construction are adequate; however, a great deal of work remains to correct previously and newly identified hardware deficiencies. We also concluded that there is not a realistic basis for Watts Bar's current fuel load date of December 1990.

The team's major concerns were: (1) the poor general condition of plant equipment, (2) a number of problems not previously identified by TVA, (3) the site management's lack of understanding of the amount and scope of remaining work, and (4) the lack of control over interrelationships among site programs. Although TVA was already aware of many of the deficiencies found by the team, the team also found a number of problem areas that TVA had not previously identified. The new problem areas included deficiencies in vendor equipment, the qualification of specific parts, and other component deficiencies. Table 1-1 of the report lists those new deficiencies that the staff intends to monitor to resolution. TVA should document its actions for each of the open items and inform this office when those actions are complete.

I request that you respond to this letter within 120 days, addressing each of the team's major concerns.

DFo1
||

8912190408 891212
PDR ADOCK 05000390
Q PNU

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosure will be placed in the NRC Public Document Room. If you have any questions regarding this report, please contact us.

Sincerely,

Original signed by

B. D. Liaw

B. D. Liaw, Director

Division of TVA Projects

Office of Nuclear Reactor Regulation

Enclosure:

Assessment Report 50-390/89-200

cc w/enclosure: See next page

Distribution:

Docket Files 50-390

RSIB R/F

DRIS R/F

TEMurley, NRR

JHSniezek, NRR

BKGrimes, NRR

WDLanning, NRR

JEKonklin, NRR

SRStein, NRR

RLSpessard, AEOD

BDLiaw, NRR

RAuluck, NRR

BAWilson, NRR

RCPierson, NRR

SBlack, NRR

MBranch, RII

Regional Administrators

Regional Division Directors

Inspection Team

LPDR

PDR

ACRS (3)

OGC (3)

IS Distribution

DMCrutchfield, NRR

RWBorchardt, EDO

RSIB: ~~DRIS~~
SRS: ~~DRIS~~ bt
12/11/89

SC: ~~DRIS~~
JEKonklin
12/11/89

C: ~~DRIS~~
WDLanning
12/11/89

D: ~~DRIS~~
BKGrimes
12/11/89

D: ~~TVA~~
BDLiaw
12/11/89

cc w/enclosure:
General Counsel
Tennessee Valley Authority
400 West Summit Hill Drive
ET 11B 33H
Knoxville, Tennessee 37902

Mr. F. L. Moreadith
Vice President, Nuclear Engineering
Tennessee Valley Authority
400 West Summit Hill Drive
WT 12A 12A
Knoxville, Tennessee 37902

Dr. Mark O. Medford
Vice President and Nuclear
Technical Director
Tennessee Valley Authority
6N 38A Lookout Place
Chattanooga, Tennessee 37402-2801

Manager, Nuclear Licensing
and Regulatory Affairs
Tennessee Valley Authority
5N 157B Lookout Place
Chattanooga, Tennessee 37402-2801

Mr. Dan Douthit, Program Manager
Watts Bar Nuclear Plant
Tennessee Valley Authority
P. O. Box 800
Spring City, Tennessee 37381

Mr. R. J. Stevens
Site Licensing Manager
Watts Bar Nuclear Plant
Tennessee Valley Authority
P. O. Box 800
Spring City, Tennessee 37381

Mr. Richard F. Wilson
Vice President, New Projects
Tennessee Valley Authority
6N 38A Lookout Place
Chattanooga, Tennessee 37402-2801

Honorable Robert Aikman
County Judge
Rhea County Courthouse
Dayton, Tennessee 37321

Honorable Johnny Powell
County Judge
Meigs County Courthouse
Route 2
Decatur, Tennessee 37322

Mr. Michael H. Mobley, Director
Division of Radiological Health
T.E.R.R.A. Building, 6th Floor
150 9th Avenue North
Nashville, Tennessee 37219-5404

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta Street, N.W.
Atlanta, Georgia 30323

Senior Resident Inspector
Watts Bar Nuclear Plant
U.S. Nuclear Regulatory Commission
Route 2, Box 700
Spring City, Tennessee 37381

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

Tennessee Valley Authority
Rockville Office
11921 Rockville Pike
Suite 402
Rockville, Maryland 20852