

# TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401  
400 Chestnut Street Tower II

January 24, 1984

Chief, Management Information Branch  
Office of Management and Program Analysis  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Sir:

**WATTS BAR AND BELLEFONTE NUCLEAR PLANTS - CONSTRUCTION STATUS REPORT  
(NUREG-0030) (YELLOW BOOK)**

Enclosed are our construction status reports for Tennessee Valley Authority's nuclear plants under construction. Entries on the sheets reflect the status as of December 31, 1983. As stated in my January 23, 1984 letter to E. Adensam, the fuel load dates for Watts Bar units 1 and 2 have been changed.

Watts Bar Units 1 and 2--The fuel load dates are as follows:

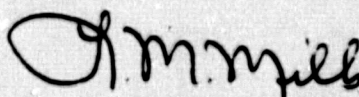
Unit 1 - June 1984  
Unit 2 - December 1985

Bellefonte Units 1 and 2--The fuel load dates are as follows:

Unit 1 - October 1987  
Unit 2 - October 1989

Very truly yours,

TENNESSEE VALLEY AUTHORITY



L. M. Mills, Manager  
Nuclear Licensing

**Enclosures**

cc: U.S. Nuclear Regulatory Commission (Enclosures)  
Region II  
Attn: James P. O'Reilly, Regional Administrator  
101 Marietta Street, Suite 2900  
Atlanta, Georgia 30303

8504120257 840606  
PDR FOIA  
KILLEFEB4-367 PDR

PLANT CHARACTERISTICS:

DOCKET NO: 05000438  
 CP NO. & DATE ISSUED: CPB-122 / 12-24-74  
 CP EXPIRATION DATE: 03-01-83  
 APPLICANT: TENNESSEE VALLEY AUTHORITY  
 PLANT LOCATION: JACKSON COUNTY, ALABAMA  
 IE REGION: II  
 AE: TVA  
 NSSS: BABCOCK & WILCOX  
 CONSTRUCTOR: TVA  
 REACTOR TYPE: FWR  
 DER (NWB): 1235

KEY PERSONNEL:

CORPORATE CONTACT : H. G. PARRIS, MANAGER  
 OF POWER  
 CORPORATE ADDRESS : 500A CHESTNUT STREET TOWER 11  
 CHATTANOOGA, TENNESSEE 37401  
 CORPORATE PHONE NO : (615) 751-2823  
 MRC LFN : R. HERNAN  
 IE PRINCIPAL INSPECTOR:  
 -CONSTRUCTION: P. FREDRICKSON  
 -TEST AND STARTUP:  
 IE RESIDENT INSPECTOR : J. D. WILCOX

INSPECTION STATUS:

TIME PERIOD		
REPORT NUMBER	BEG DATE OF INSP.	END DATE OF INSP.
83-18	08-01-83	08-05-83
83-19	08-02-83	08-05-83
83-20	06-11-83	07-31-83
83-21	07-11-83	07-13-83
83-22	08-23-83	08-26-83
83-23	08-01-83	08-31-83
83-24	09-06-83	09-09-83
83-25	09-13-83	09-16-83
83-26	09-01-83	10-31-83
83-27	10-18-83	10-21-83
83-28	10-25-83	10-28-83
83-29	11-14-83	11-18-83

FUEL LOAD DATE CHANGES  
AS REPORTED BY UTILITY:

REPORT DATE	NEW SCHEDULE	REASON FOR CHANGE REPORTED BY UTILITY
04-11-75	12-00-79	NO REASON NOTED.
09-06-78	03-00-81	NO REASON NOTED.
08-16-79	09-00-82	NO REASON NOTED.
09-10-80	03-00-83	NO REASON NOTED.
12-01-81	09-00-83	NO REASON NOTED.
06-30-82	05-00-85	NO REASON NOTED.
12-02-83	10-00-89	NO REASON NOTED.

LOCAL PUBLIC DOCUMENT ROOM:

SCOTTSBORO PUBLIC LIBRARY  
 1002 SOUTH BROAD STREET  
 SCOTTSBORO, ALABAMA 35768

CONSTRUCTION STATUS:

APPLICANT'S CURRENT ESTIMATED FUEL LOADING DATE : 10-00-87  
 APPLICANT'S PREVIOUS ESTIMATED FUEL LOADING DATE : 05-00-85  
 APPLICANT'S ESTIMATED FUEL LOADING DATE AT CP ISSUANCE : 06-00-79  
 APPLICANT'S CURRENT ESTIMATED COMMERCIAL OPERATION DATE: 11-00-85

APPLICANT'S CONSTRUCTION COMPLETION ESTIMATE AS  
 DEFINED IN CP: (EARLIEST) - 06-01-79  
 (LATEST) - 12-01-79

DATE CONSTRUCTION STARTED: 09-18-74

CURRENT ESTIMATED PERCENT CONSTRUCTION COMPLETE: 77%

CURRENT ESTIMATED CONSTRUCTION DURATION IN MONTHS: 157

COMMENTS REGARDING CURRENT CONSTRUCTION STATUS:

	<u>ESTIMATED START</u>	<u>ACTUAL START</u>	<u>ESTIMATED COMPLETION</u>	<u>ACTUAL COMPLETION</u>	<u>ESTIMATED % COMPLETION</u>
MOBILIZE AND PREPARE SITE:		09-00-74		07-00-75	100 %
PLACE STRUCTURAL CONCRETE:		06-00-75		08-00-82	100 %
INSTALL REACTOR PRESSURE VESSEL:		08-00-76		11-00-76	100 %
INSTALL LARGE BORE PROCESS PIPE:		10-00-75	07-00-86		98 %
INSTALL LARGE BORE PIPE HANGERS, RESTRAINTS, AND SNUBBERS:		05-00-77	09-00-86		83 %
INSTALL SMALL BORE PIPE:		01-00-76	07-00-86		96 %
INSTALL CABLE TRAY:		02-00-77	10-00-85		99 %
INSTALL EXPOSED METAL CONDUIT:		04-00-75	03-00-86		80 %
INSTALL POWER, CONTROL, INSTRUMENTATION, AND SECURITY CABLE:		11-00-77	08-00-86		84 %
INSTALL ELECTRICAL TERMINATIONS:		03-00-78	08-00-86		82 %
CONDUCT REACTOR COLD HYDROSTATIC TEST:	03-00-84		06-00-84		0 %
CONDUCT HOT FUNCTIONAL TEST:	06-00-84		12-00-84		0 %
CONDUCT PREOP AND ACCEPTANCE TESTS NECESSARY FOR FUEL LOAD:		01-00-82	05-00-87		5 %

PLANT CHARACTERISTICS:

BUCKET NO: 05000439  
 CP NO. & DATE ISSUED: CPE-123 / 12-24-74  
 CP EXPIRATION DATE: 12-01-83  
 APPLICANT: TENNESSEE VALLEY AUTHORITY  
 PLANT LOCATION: JACKSON COUNTY, ALABAMA  
 IE REGION: II  
 AE: TVA  
 NSSS: BABCOCK & WILCOX  
 CONSTRUCTOR: TVA  
 REACTOR TYPE: FWR  
 DER (NWE): 1235

KEY PERSONNEL:

CORPORATE CONTACT : H. G. PARRIS, MANAGER  
 OF POWER  
 CORPORATE ADDRESS : 500A CHESTNUT STREET TOWER II  
 CHATTANOOGA, TENNESSEE 37401  
 CORPORATE PHONE NO : (615) 751-2823  
 NRC LFN : B. HERNAN  
 IE PRINCIPAL INSPECTOR:  
 -CONSTRUCTION: P. FREDRICKSON  
 -TEST AND STARTUP:  
 IE RESIDENT INSPECTOR : J. D. WILCOX

INSPECTION STATUS:

TIME PERIOD		
REPORT NUMBER	BEG DATE OF INSP.	END DATE OF INSP.
83-18	08-01-83	08-05-83
83-19	08-02-83	08-05-83
83-20	06-11-83	07-31-83
83-21	07-11-83	07-13-83
83-22	08-23-83	08-26-83
83-23	08-01-83	08-31-83
83-24	09-06-83	09-09-83
83-25	09-13-83	09-16-83
83-26	09-01-83	10-31-83
83-27	10-18-83	10-21-83
83-28	10-25-83	10-28-83
83-29	11-14-83	11-18-83

FUEL LOAD DATE CHANGES  
AS REPORTED BY UTILITY:

REPORT DATE	NEW SCHEDULE	REASON FOR CHANGE REPORTED BY UTILITY
04-11-75	12-00-79	NO REASON NOTED.
09-06-78	03-00-81	NO REASON NOTED.
08-16-79	09-00-82	NO REASON NOTED.
09-10-80	09-00-84	NO REASON NOTED.
06-30-82	05-00-86	NO REASON NOTED.
12-02-83	10-00-87	NO REASON NOTED.

LOCAL PUBLIC DOCUMENT ROOM:

SCOTTSBORO PUBLIC LIBRARY  
 1002 SOUTH BROAD STREET  
 SCOTTSBORO, ALABAMA 35768

CONSTRUCTION STATUS:

APPLICANT'S CURRENT ESTIMATED FUEL LOADING DATE : 10-00-89  
 APPLICANT'S PREVIOUS ESTIMATED FUEL LOADING DATE : 05-00-86  
 APPLICANT'S ESTIMATED FUEL LOADING DATE AT CP ISSUANCE : 03-00-80  
 APPLICANT'S CURRENT ESTIMATED COMMERCIAL OPERATION DATE: 11-00-86

APPLICANT'S CONSTRUCTION COMPLETION ESTIMATE AS  
 DEFINED IN CP: (EARLIEST) - 03-01-80  
 (LATEST) - 09-01-80

DATE CONSTRUCTION STARTED: 09-18-74

CURRENT ESTIMATED PERCENT CONSTRUCTION COMPLETE: 57%

CURRENT ESTIMATED CONSTRUCTION DURATION IN MONTHS: 181

COMMENTS REGARDING CURRENT CONSTRUCTION STATUS:

	<u>ESTIMATED START</u>	<u>ACTUAL START</u>	<u>ESTIMATED COMPLETION</u>	<u>ACTUAL COMPLETION</u>	<u>ESTIMATED % COMPLETION</u>
MOBILIZE AND PREPARE SITE:		09-00-74		07-00-75	100 %
PLACE STRUCTURAL CONCRETE:		06-00-75		06-00-83	100 %
INSTALL REACTOR PRESSURE VESSEL:		02-00-77		02-00-77	100 %
INSTALL LARGE BORE PROCESS PIPE:		10-00-75	07-00-87		76 %
INSTALL LARGE BORE PIPE HANGERS, RESTRAINTS, AND SNUDDERS:		07-00-78	09-00-88		59 %
INSTALL SMALL BORE PIPE:		09-00-77	07-00-88		55 %
INSTALL CABLE TRAY:		05-00-77	10-00-87		93 %
INSTALL EXPOSED METAL CONDUIT:		10-00-75	03-00-88		63 %
INSTALL POWER, CONTROL, INSTRUMENTATION, AND SECURITY CABLE:		03-00-78	08-00-88		62 %
INSTALL ELECTRICAL TERMINATIONS:		04-00-78	08-00-88		53 %
CONDUCT REACTOR COLD HYDROSTATIC TEST:	07-00-85		06-00-88		0 %
CONDUCT HOT FUNCTIONAL TEST:	09-00-85		11-00-88		0 %
CONDUCT PREOP AND ACCEPTANCE TESTS NECESSARY FOR FUEL LOAD:	04-00-84		10-00-89		0 %

## PLANT CHARACTERISTICS:

DOCKET NO: 05000390  
 CP NO. & DATE ISSUED: CPR-91 / 01-23-73  
 CP EXPIRATION DATE: 06-01-79  
 APPLICANT: TENNESSEE VALLEY AUTHORITY  
 PLANT LOCATION: BREA COUNTY, TENNESSEE  
 IE REGION: II  
 AE: TVA  
 NSSS: WESTINGHOUSE  
 CONSTRUCTOR: TVA  
 REACTOR TYPE: PWR  
 DER (NWE): 1165

## KEY PERSONNEL:

CORPORATE CONTACT : H. G. PARRIS, MANAGER  
 OF POWER  
 CORPORATE ADDRESS : 500A CHESTNUT STREET TOWER II  
 CHATTANOOGA, TENNESSEE 37401  
 CORPORATE PHONE NO : (615) 751-2823  
 NRC LPW : T. KENTON  
 IE PRINCIPAL INSPECTOR:  
 -CONSTRUCTION: P. FREDRICKSON  
 -TEST AND STARTUP: D. WINCLELEY  
 IE RESIDENT INSPECTOR : T. WEATHERLEY & W. SWAN

## INSPECTION STATUS:

TIME PERIOD		
REPORT NUMBER	BEG DATE OF INSP.	END DATE OF INSP.
83-35	09-12-83	09-16-83
83-36	09-12-83	09-16-83
83-37	09-13-83	09-16-83
83-38	09-12-83	09-16-83
83-39	09-20-83	09-23-83
83-40	08-22-83	09-21-83
83-41	09-27-83	09-30-83
83-42	09-26-83	10-07-83
83-43	09-26-83	09-30-83
83-44	10-18-83	10-21-83
83-45	10-18-83	10-21-83
83-46	09-26-83	10-22-83
83-47	11-16-83	11-16-83
83-48	10-24-83	11-26-83
83-49	11-07-83	11-10-83

FUEL LOAD DATE CHANGES  
AS REPORTED BY UTILITY:

REPORT DATE	NEW SCHEDULE	REASON FOR CHANGE REPORTED BY UTILITY
11-16-73	01-16-78	INABILITY TO OBTAIN STEEL ANCHOR BOLTS AND REINFORCING RODS.
05-14-74	06-00-78	REDESIGN OF CONTAINMENT TO ACCOMMODATE HIGHER TRANSIENT PRESSURES, INABILITY TO OBTAIN REDESIGNED STEEL ANCHOR BOLTS AND REINFORCING RODS, PLUS AN INCREASE IN TIME
07-23-76	12-05-78	LATE DELIVERY OF PRINCIPAL PIPING, VALVES, AND HANGERS WHICH FORCED IMPOSSIBLE PEAKS IN STEAMPITTER MANPOWER.
01-09-78	06-00-79	LATE DELIVERY OF ICE CONDENSER EMBEDMENTS
11-07-78	12-00-79	NO REASON GIVEN.
09-12-79	09-01-80	NO REASON GIVEN.
09-10-80	11-00-81	NO REASON PROVIDED.
09-10-81	08-00-82	STEAM GENERATOR PROBLEMS AND PIPING
04-09-82	08-00-83	NO REASON PROVIDED
03-01-83	01-00-84	RECHEDULING OF STEAM GENERATOR VIBRATION MODIFICATIONS AND VARIOUS PIPING SYSTEM MODIFICATIONS FOR WATER QUALITY IMPROVEMENT
10-11-83	04-00-84	PIPING ANALYSIS AND HANGER/SUPPORT DESIGN

## LOCAL PUBLIC DOCUMENT ROOM:

CHATTANOOGA-HAMILTON COUNTY  
 BICENTENNIAL LIBRARY  
 1001 BROAD STREET  
 CHATTANOOGA, TENNESSEE 37402

## CONSTRUCTION STATUS:

APPLICANT'S CURRENT ESTIMATED FUEL LOADING DATE : 04-00-84  
 APPLICANT'S PREVIOUS ESTIMATED FUEL LOADING DATE : 01-00-84  
 APPLICANT'S ESTIMATED FUEL LOADING DATE AT CP ISSUANCE : 11-00-76  
 APPLICANT'S CURRENT ESTIMATED COMMERCIAL OPERATION DATE: 10-00-84

APPLICANT'S CONSTRUCTION COMPLETION ESTIMATE AS  
 DEFINED IN CP: (EARLIEST)  
 (LATEST)

DATE CONSTRUCTION STARTED: 12-26-72

CURRENT ESTIMATED PERCENT CONSTRUCTION COMPLETE: 97%

CURRENT ESTIMATED CONSTRUCTION DURATION IN MONTHS: 137

## COMMENTS REGARDING CURRENT CONSTRUCTION STATUS:

	<u>ESTIMATED START</u>	<u>ACTUAL START</u>	<u>ESTIMATED COMPLETION</u>	<u>ACTUAL COMPLETION</u>	<u>ESTIMATED % COMPLETION</u>
MOBILIZE AND PREPARE SITE:		12-26-72		04-15-74	100 %
PLACE STRUCTURAL CONCRETE:		04-09-74	02-07-84		99 %
INSTALL REACTOR PRESSURE VESSEL:		12-07-76		05-05-77	100 %
INSTALL LARGE BORE PROCESS PIPE:		10-17-77	02-07-84		99 %
INSTALL LARGE BORE PIPE HANGERS, RESTRAINTS, AND SNUBBERS:		10-17-77	03-06-84		86 %
INSTALL SMALL BORE PIPE:		07-01-77	02-07-84		98 %
INSTALL CABLE TRAY:		11-02-73	02-07-84		99 %
INSTALL EXPOSED METAL CONDUIT:		09-08-75	02-07-84		91 %
INSTALL POWER, CONTROL, INSTRUMENTATION, AND SECURITY CABLE:		06-03-76	02-07-84		98 %
INSTALL ELECTRICAL TERMINATIONS:		06-03-76	02-07-84		97 %
CONDUCT REACTOR COLD HYDROSTATIC TEST:		10-15-81		10-24-81	100 %
CONDUCT HOT FUNCTIONAL TEST:		03-31-83		08-28-83	100 %
CONDUCT PREOP AND ACCEPTANCE TESTS NECESSARY FOR FUEL LOAD:		01-02-79	06-00-84		60 %

**PLANT CHARACTERISTICS:**

DOCKET NO: 05000391  
 CP NO. & DATE ISSUED: CPR-92 / 01-23-73  
 CP EXPIRATION DATE: 03-01-80  
 APPLICANT: TENNESSEE VALLEY AUTHORITY  
 PLANT LOCATION: REEA COUNTY, TENNESSEE  
 IE REGION: II  
 AE: TVA  
 NSSS: WESTINGHOUSE  
 CONSTRUCTOR: TVA  
 REACTOR TYPE: FWR  
 DER (NWE): 1165

**KEY PERSONNEL:**

CORPORATE CONTACT : H. G. PARRIS, MANAGER  
 OF POWER  
 CORPORATE ADDRESS : 500A CHESTNUT STREET TOWER II  
 CHATTANOOGA, TENNESSEE 37401  
 CORPORATE PHONE NO : (615) 751-2823  
 NRC LFN : T. KENTON  
 IE PRINCIPAL INSPECTOR:  
 -CONSTRUCTION: P. FREDRICKSON  
 -TEST AND STARTUP: D. HINCKLEY  
 IE RESIDENT INSPECTOR : T. WEATHERLEY & V. SWAN

**INSPECTION STATUS:**

<u>TIME PERIOD</u>		
<u>REPORT NUMBER</u>	<u>BEG DATE OF INSP.</u>	<u>END DATE OF INSP.</u>
83-24	09-12-83	09-16-83
83-25	09-12-83	09-16-83
83-26	09-13-83	09-16-83
83-27	09-12-83	09-16-83
83-28	09-20-83	09-23-83
83-29	09-22-83	09-21-83
83-30	09-27-83	09-30-83
83-31	09-26-83	10-07-83
83-32	09-26-83	09-30-83
83-33	10-18-83	10-21-83
83-34	10-18-83	10-21-83
83-35	09-26-83	10-22-83
83-36	11-16-83	11-16-83
83-37	10-24-83	11-26-83
83-38	10-24-83	11-26-83

**FUEL LOAD DATE CHANGES  
AS REPORTED BY UTILITY:**

<u>REPORT DATE</u>	<u>NEW SCHEDULE</u>	<u>REASON FOR CHANGE REPORTED BY UTILITY</u>
11-16-73	01-16-78	INABILITY TO OBTAIN STEEL ANCHOR BOLTS AND REINFORCING RODS.
05-14-74	06-00-78	REDESIGN OF CONTAINMENT TO ACCOMMODATE HIGHER TRANSIENT PRESSURES, INABILITY TO OBTAIN REDESIGNED STEEL ANCHOR BOLTS AND REINFORCING RODS, PLUS AN INCREASE IN TIME
07-23-76	12-05-78	LATE DELIVERY OF PRINCIPAL PIPING, VALVES, AND HANGERS WHICH FORCED IMPOSSIBLE PEAKS IN STEAMFITTER MANPOWER.
01-09-78	06-00-79	LATE DELIVERY OF ICE CONDENSER EMBEDMENTS
11-07-78	12-00-79	NO REASON GIVEN.
09-12-79	09-01-80	NO REASON GIVEN.
09-10-80	11-00-81	NO REASON PROVIDED.
09-10-81	06-00-83	
04-09-82	08-00-84	STEAM GENERATOR PROBLEMS AND PIPING
01-21-82	12-00-84	NO REASON PROVIDED
03-31-83	01-00-85	NO REASON PROVIDED
06-30-83	01-00-85	NO REASON PROVIDED
10-11-83	10-00-85	PIPING ANALYSIS AND HANGER/SUPPORT DESIGN

**LOCAL PUBLIC DOCUMENT ROOM:**

CHATTANOOGA-HAMILTON COUNTY  
 BICENTENNIAL LIBRARY  
 1001 BROAD STREET  
 CHATTANOOGA, TENNESSEE 37402



## CONSTRUCTION STATUS:

APPLICANT'S CURRENT ESTIMATED FUEL LOADING DATE : 10-00-85  
 APPLICANT'S PREVIOUS ESTIMATED FUEL LOADING DATE : 01-00-85  
 APPLICANT'S ESTIMATED FUEL LOADING DATE AT CP ISSUANCE : 05-00-77  
 APPLICANT'S CURRENT ESTIMATED COMMERCIAL OPERATION DATE: 07-00-85

APPLICANT'S CONSTRUCTION COMPLETION ESTIMATE AS  
 DEFINED IN CP: (EARLIEST)  
 (LATEST)

DATE CONSTRUCTION STARTED: 12-26-72

CURRENT ESTIMATED PERCENT CONSTRUCTION COMPLETE: 63%

CURRENT ESTIMATED CONSTRUCTION DURATION IN MONTHS: 153

## COMMENTS REGARDING CURRENT CONSTRUCTION STATUS:

	<u>ESTIMATED START</u>	<u>ACTUAL START</u>	<u>ESTIMATED COMPLETION</u>	<u>ACTUAL COMPLETION</u>	<u>ESTIMATED % COMPLETION</u>
MOBILIZE AND PREPARE SITE:		12-26-72		04-15-74	100 %
PLACE STRUCTURAL CONCRETE:		05-10-74	07-01-85		99 %
INSTALL REACTOR PRESSURE VESSEL:		06-30-77		10-10-77	100 %
INSTALL LARGE BORE PROCESS PIPE:		12-09-77	07-01-85		61 %
INSTALL LARGE BORE PIPE HANGERS, RESTRAINTS, AND SMUDDERS:		03-10-78	07-01-85		24 %
INSTALL SMALL BORE PIPE:		11-01-77	07-01-85		50 %
INSTALL CABLE TRAY:		11-02-73	07-01-85		88 %
INSTALL EXPOSED METAL CONDUIT:		09-08-75	07-01-85		73 %
INSTALL POWER, CONTROL, INSTRUMENTATION, AND SECURITY CABLE:		08-20-76	07-01-85		79 %
INSTALL ELECTRICAL TERMINATIONS:		08-20-76	07-01-85		66 %
CONDUCT REACTOR COLD HYDROSTATIC TEST:	07-25-84		08-08-84		0 %
CONDUCT HOT FUNCTIONAL TEST:	02-06-85		04-23-85		0 %
CONDUCT PREOP AND ACCEPTANCE TESTS NECESSARY FOR FUEL LOAD:	11-00-83		10-00-85		0 %