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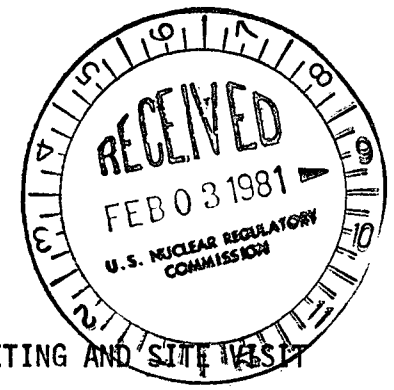

Docket Nos.: 50-390
and 50-391

APPLICANT: TENNESSEE VALLEY AUTHORITY

FACILITY: WATTS BAR NUCLEAR PLANT, UNIT 1

SUBJECT: SUMMARY OF CASELOAD FORECAST PANEL MEETING AND SITE VISIT

The last Caseload Forecast Panel assessment in May, 1979 projected a fuel load date for Unit 1 of December, 1980. In a letter dated June 26, 1980, the applicant projected a revised fuel load date of November, 1981. On December 8-10, 1980, the Caseload Forecast Panel again visited the site to update its projected fuel load date. The meeting agenda (Enclosure 1) and the list of attendees (Enclosure 2) is attached.

The applicant indicated Unit 1 was 84% complete. The schedule the applicant is currently working to indicates a 5.5 month float from a September, 1981 date, indicating a completion date of mid February, 1982. Enclosure (3) shows the information presented to the Panel at the meeting.

During the exit interview, the following reasoning was given by the Caseload Forecast Panel to arrive at a projected fuel load date of August, 1982:

1. Analysis of the quantities of material installed (particularly large pipe and hangers) indicates a 1-2 year period of work prior to cold hydro. Adding an additional 9 months from cold hydro to fuel load indicates the earliest fuel load date to be August, 1982.

2. At an 84% overall completion status, the earliest completion date is estimated to be March, 1982. The lack of an integrated schedule from construction turn-over to pre-operational testing could be detrimental to meeting this date, but the introduction of the "work package program" at the facility should offset this potential problem.

3. Due to the increase in work caused by the requirements developed after the Three Mile Island accident, the facility's overall percentage of construction completion has essentially stayed the same since the last caseload forecast. At that time, the Panel projected 19 months of remaining work. Since the reasons presented in May, 1979 are still valid, a fuel load date of July, 1982 is indicated.

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OFFICE							
SURNAME							
DATE							

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4. With a steady turnover rate from construction to pre-operational the pre-operational program should take approximately 18 months. This indicates a fuel load date of May, 1982.

Considering the above factors and the status of construction and pre-operational testing at this time, the Caseload Forecast Panel projected the earliest fuel load date to be August, 1982.

Original signed by

T. J. Kenyon, Project Engineer
Licensing Branch #2
Division of Licensing

Enclosures: As Stated

cc: See next page

OFFICE	LB #2/DL	LB #2/DL	MPA				
SURNAME	TKenyon/cc	ASchwencer	SBoyd				
DATE	1/23/81	1/21/81	1/19/81				

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Resident Inspector/Watts Barr NPS
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ENCLOSURE 1

WATTS BAR UNIT 1 AND NEEDED COMMON FACILITIES
CASELOAD FORECAST PANEL SITE VISIT
MEETING AGENDA

1. Overview of project construction schedule including progress and major milestones completed, current problems and any anticipated problem areas that may impact the current projected fuel load date.

2. Detailed review and current status of design and engineering effort (by major discipline) including any potential problems that may arise from necessary rework.

3. Detailed review and current status of procurement activities including valves, pipe, instruments, cable, major components, etc.

4. Actual and proposed craft work force (by major craft), craft availability, productivity, potential labor negotiations and problems.

5. Detailed review and current status of all large and small bore pipe hangers, restraints, snubbers, etc., including design, rework, procurement, fabrication, delivery and installation.

6. Detailed review of project schedule identifying critical path items, near critical items, amount of float for various activities, the current critical path to fuel loading, methods of implementation of corrective action for any activities with negative float, and provisions for contingencies. The estimated project percent complete as of November 30, 1980.

7. Detailed review and current status of bulk quantities including current estimated quantities, quantities installed to date, quantities scheduled to date, current percent complete for each, actual versus forecast installation rates, and basis for figures.

   (a) Concrete (CY)

   (b) Process Pipe (LF)

   - Large Bore Pipe (2 1/2" and larger)
   - Small Bore Pipe (2" and smaller)

   (c) Yard Pipe (LF)

   (d) Large Bore Pipe Hangers, Restraints, Snubbers (ea)

9. Detailed discussion of potential schedular influence due to changes attributed to NUREG-0660, NUREG-0694 and other recent licensing requirements.

10. Site tour and observation of construction activities.

11. Discussion of 50.55e items which may have an impact on the construction completion schedule.

ENCLOSURE 2

WATTS BAR

CASELOAD FORECAST PANEL

MEETING ATTENDEES

NAME	ORGANIZATION
T. Kenyon	NRC
S. Boyd	NRC
J. MacDonald	NRC
T. Heatherly	NRC
D. Ormsby	TVA
S. Puckett	TVA
E. Cole	TVA
D. Jividen	TVA
V. Bianco	TVA
W. Pattison	TVA
M. McAllister	TVA
R. Olson	TVA
D. Cowan	TVA
H. Peters, II	TVA
J. Nicholls, III	TVA
S. Trout (Telecon)	TVA
C. Jones	TVA
J. Wilkins	TVA
B. Brantley	TVA
F. Lawhearn	TVA
B. Ray	TVA

ENCLOSURE 3

Watts Bar Nuclear Plant
Tennessee Valley Authority

Project Status as of November 27, 1980

Total Project	78% Complete
Unit 1 & Common	84% Complete
Unit 2	70% Complete

Major Milestones Completed in Past 18 Months

Set Diesel Generators	8/6/79

Scheduled Major Milestone Dates - Unit 1

Reactor Coolant System Cold Hydro	2/02/81	+ 6 weeks
Hot Functional Testing	5/29/81	+ 6 weeks
Fuel Load	9/15/81	+ 6 weeks
Commercial Operation	3/15/82	

Current Problems

Major critical items still include: pipe location, pipe hanger reanalysis and installation, outstanding work items on transferred systems and documentation for unit 1 fuel load. An additional critical item identified is the redesign of fire protection piping. This item will require an additional 208,000 man-hours to the total project man-hours estimate. Critical systems presently include 1) Component Cooling System, 2) Safety Injection System, 3) Chemical Volume and Control System, and 4) Fire Protection Piping. Recent reviews indicate that the Reactor Coolant System will also be critical once all work is identified under the work package procedure. A minimum of 16 week slip is anticipated.

Incorporation of the new Work Package Procedure is well underway and the net affect on progress is now on the increase. By the end of December, the project should be operating completely under this new procedure. A continuing effort is ongoing to identify remaining work and its relative impact on the project's schedule and man-hour estimate.

QUANTITY STATUS
ENCLOSURE (3)

TVA - WB
12/8/80

A. TOTAL PROJECT

		ESTIMATED	REMAINING	% COMPLETE
Large Pipe	LF	489,465	40,561	92%
Small Pipe	LF	228,193	41,716	81%
Large Pipe Hangers	EA	20,464	10,528	47%
Small Pipe Hangers	EA			
P & C Conduit	LF	1,017,000	237,870	77%
P & C Cable	LF	15,725,000	3,132,011	81%
P & C Terminations	EA	335,100	121,893	64%
HVAC Ductwork	LB	1,086,904	61,060	94%

B. UNIT 1 OPERATIONS (INCLUDE U2 REQ'D FOR U1 FL)

Large Pipe	LF	419,465	31,716	92%
Small Pipe	LF	181,713	23,380	87%
Large Pipe Hangers	EA	15,076	8,850	41%
Small Pipe Hangers	EA			
P & C Conduit	LF	740,000	174,600	77%
P & C Cable	LF	13,245,295	1,629,816	88%
P & C Terminations	EA	228,300	72,011	69%
HVAC Ductwork	LB	866,797	21,044	98%

C. UNIT 2

Large Pipe	LF	70,000	10,000	86%
Small Pipe	LF	46,470	18,336	61%
Large Pipe Hangers	EA	5,388	1,678	69%
Small Pipe Hangers	EA			
P & C Conduit	LF	277,000	63,270	79%
P & C Cable	LF	2,479,705	1,502,195	41%
P & C Terminations	EA	106,800	49,882	53%
HVAC Ductwork	LB	220,107	40,016	82%

MEETING SUMMARY DISTRIBUTION

Docket File
NRC PDR
Local PDR
NSIC
TIC
TERA
NRR Reading
LB #2 File
H. Denton
E. Case
D. Eisenhut
R. Purple
B. J. Youngblood
A. Schwencer
F. Miraglia
J. Miller
G. Lainas
R. Vollmer
J. P. Knight
R. Bosnak
F. Schauer
R. E. Jackson
Project Manager CStahle/TKenyon
Licensing Assistant MService
Attorney, OELD
I&E (3)
ACRS (16)
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G. Lear
V. Noonan
S. Pawlicki
V. Benaroya
Z. Rosztoczy
W. Haass

D. Muller
R. Ballard
W. Regan
D. Ross
P. Check
R. Satterfield
O. Parr
F. Rosa
W. Butler
W. Kreger
R. Houston
T. Murphy
L. Rubenstein
T. Speis
W. Johnston
J. Stolz
S. Hanauer
W. Gammill
F. Schroeder
D. Skovholt
M. Ernst
R. Baer
C. Berlinger
K. Kniel
G. Knighton
A. Thadani
D. Tondi
D. Vassallo
J. Kramer
P. Collins
D. Ziemann
S. Ramos
S. Schwartz

NRC Participants:
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J. MacDonald
T. Heatherly

Others:

BCC: Applicant & Service List