



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

FEB 13 1981

Docket No. 50-382

APPLICANT: Louisiana Power & Light Company
FACILITY: Waterford Steam Electric Station, Unit No. 3
SUBJECT: SUMMARY OF CASELOAD FORECAST PANEL MEETING AND SITE VISIT

A meeting was held on January 13 - 15, 1981, in Taft, Louisiana with the applicant to discuss the status of construction of the facility. A tour of the site was made on January 14 and 15 to witness the status of construction. The agenda of the meeting is shown in Enclosure 1, the NRC proposed agenda is Enclosure 2, and the meeting attendees are listed in Enclosure 3. Enclosures 4 and 5 summarize the status and bulk performance of construction on Waterford Unit No. 3 as of 12/28/80.

SUMMARY

The applicant and Ebasco, the architect engineer and constructor, made a detailed presentation of the status of plant construction and project scheduling. The Unit is presently 82% complete. The presentation focused on the applicant's efforts in identifying and dealing with potential problem areas. They feel confident that they can meet the October 1982 fuel load date for several reasons. These include increased financial commitments, built-in three month float in their schedule, and management attention (including President Wyatt) to all problems that could affect the schedule. The applicant believes that the only potential delay is the licensing process which they feel is four months behind schedule.

The caseload forecast panel expressed concern about the rate at which electrical terminations must be made in order to complete construction on schedule. The Ebasco Project Manager presented information on the electrical work schedule, which showed that in the past they have concentrated on cable trays and conduits. Now that those portions of the electrical work are nearly completed, they are concentrating on cable pulling and terminations. Cable pulling is presently 57% complete while terminations are 33% complete. The electrical work is now concentrating on these areas, and although the work must exceed industry averages in order to meet the schedule they believe that this is achievable. They point out that they achieved double the industry average in conduits, and that over the 10-90% range, the rate of cable pulling can fall slightly below the average and the rate of terminations need only be 5% higher than the average to meet the schedule. The staff, however, maintained that from 33-90% completion they will have to greatly exceed industry averages. Staff also questioned the cable pulling and termination schedule as it could potentially impact system

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completion and turnover to LP&L. Ebasco has considered this potential problem and is planning to do some selective cable pulling in order to complete systems on schedule. Other potential problem areas are pipe hangars, reactor internals alignment, tube track, plant operating procedures, TMI-related procurement, and plant staffing. After licensing, which is the critical path item, the safety injection system is the next most limiting item and is one and one-half months ahead of an October 1982 fuel-load date. This problem with the safety injection system was caused by more rework being required for fit up than anticipated. LP&L feels that their schedule is attainable because they have aggressive management, built-in conservatism and a three month slack in their schedule.

The caseload forecast panel took a detailed tour of the plant on January 14 and 15. In the course of this tour, the staff questioned the status of the control room. After the tour, the panel's concerns were adequately addressed. The tour also led the panel to ask why there were not more electricians at work in the plant. The electrical subcontractor was asked to address this and his explanation was that the build up of the electrician work force was just beginning.

After further discussions on Thursday, which included the basis for LP&L's financial commitments, the caseload forecast panel met privately to determine a new fuel load date for the Waterford Plant. After lengthy discussion, the panel concluded, with some reservation, that the October 1982 fuel load is attainable. However, the panel will return in mid-May to reassess the status of electrical work. If significant progress has not been made, the panel will revise the fuel load date. The panel pointed out that in the past LP&L has promised a high performance rate and failed to attain it.

Suzanne Keblusek

S. Keblusek, Project Manager
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Enclosures:
As stated

cc w/enclosures:
See next page

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LOUISIANA POWER & LIGHT COMPANY
WATERFORD SES - UNIT NO. 3

SITE PRESENTATION TO NRC CASE LOAD
FORECAST PANEL

MEETING AGENDA

- I. INTRODUCTION AND PURPOSE OF MEETING
- II. PRESENTATION
 - A - ORGANIZATION
 - B - PROJECT OVERVIEW
 - C - CONSTRUCTION
 - D - ASSESSMENT OF POTENTIALLY REPORTABLE INCIDENTS
 - E - ENGINEERING/DESIGN AND PROCUREMENT
 - F - START UP
 - G - PLANT OPERATIONAL REVIEW
 - H - PROJECT COMPARISONS
 - I - SUMMARY OF HIGHLIGHTS AND HARD SPOTS
- III. TOUR OF SITE
- IV. DISCUSSIONS
- V. EXIT INTERVIEW

WATERFORD UNIT 3
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 September 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)

- (e) Small Bore Pipe Hangers, Restraints. (ea)
 - (f) Cable Tray (LF)
 - (g) Total Conduit (LF)
 - (h) Total Exposed Metal Conduit (LF)
 - (i) Cable (LF)
 - Power
 - Control
 - Security
 - Instrumentation
 - Plant Lighting
 - (j) Terminations (ea)
 - Power
 - Control
 - Security
 - Instrumentation
 - Plant Lighting
 - (k) Electrical Circuits (ea)
 - Power
 - Control
 - Security
 - (l) Instrumentation (ea)
8. Detailed review and current status of preparation of preop and acceptance test procedures, integration of preop and acceptance test activities with construction schedule, system turnover schedule, preop and acceptance tests schedule, current and proposed preop and acceptance tests program manpower.
- (a) Total number of procedures required for fuel load.
 - (b) Number of draft procedures not started.
 - (c) Number of draft procedures being written.
 - (d) Number of procedures approved.
 - (e) Number of procedures in review.
 - (f) Total number of preop and acceptance tests required for fuel load.
 - (g) Number of preop and acceptance tests completed.
 - (h) Number of preop and acceptance tests currently in progress.
 - (i) Number of systems turned over to start-up.

9. Detailed discussion of potential schedular influence due to changes attributed to NUREG-0737 and other recent licensing requirements.
10. Site tour and observation of construction activities.
11. Discussion of schedular impact, if any, regarding potential deficiencies reported in accordance with 10 CFR 50.55(e).
12. Financial commitments to complete the plant.

MEETING ATTENDEES

Louisiana Power and Light

- *G. McClendon, Senior Vice President
- D. Aswell, Vice President - Power Production
- L. Maurin, Project Director
- F. Drummond, Project Manager
- D. Lester, Plant Manager
- T. Gerrats, QA Manager
- *L. Bass, Project QA Engineer
- *C. Decareaux, Project Construction Coordinator
- R. Prados, Engineer
- T. Armington, Start-Up Supervisor
- P. Gregory, Start-Up Cost/Scheduling Engineer
- P. Prasankumar, Maintenance Superintendent - Nuclear
- *D. Kliest, Consumer Communication Representative

Ebasco Services Incorporated

- *J. Cernich, Regional Manager
- R. Stampley, Project Manager
- R. Milhiser, Site Manager
- J. Wills, Project Superintendent
- J. Padalino, Project Engineer
- J. Costello, Assistant Project Manager
- W. Pettigrew, Construction Control Superintendent
- N. Saar, Cost Scheduling Analyst

Combustion Engineering

- F. Sernatinger, Project Manager

NRC Participants

- S. Koblusek, RR, Project Manager
- W. Lovelace, NRR, Engineer Specialist
- R. Stewart, IE, Project Inspector
- G. Constable, IE, Senior Resident Inspector

*Denotes only attended January 15, 1981, meeting.

LOUISIANA POWER & LIGHT COMPANY
WATERFORD SES - UNIT NO 3

BULK PERFORMANCE

ACTIVITY	CURRENT EST QUANTITIES	INSTALLED QUANTITIES (12/31/80)	SCHEDULED TO-DATE (12/31/80)	% QUANTITY COMPLETE	% OF SCH
A) CONCRETE	206,480	204,168	203,947	99.3	100.1
B) <u>TOTAL PROCESS PIPE</u>					
LARGE BORE 2 1/2"	108,025	102,562	104,472	94.9	98.2
SMALL BORE 2"	100,013	81,713	79,506	81.7	102.8
C) YARD PIPE	38,435	36,091	34,776	93.9	103.8
D) LARGE BORE HANGERS, RESTRAINTS, SNUBBERS	6,629	5,593	5,638	84.4	99.2
E) SMALL BORE HANGERS		INCLUDED WITH SMALL BORE PIPE			
F) CABLE TRAY*	42,382	42,382	42,382	100.0	100.0
G) <u>TOTAL EXPOSED CONDUIT*</u> (EXCLUDING LIGHTING)	503,794	454,662	424,963	90.2	107.0
H) <u>CABLE</u>					
POWER*	970,124	689,921	665,412	71.1	103.7
CONTROL/ INSTRUMENT*	4,317,676	2,488,641	2,541,196	57.6	97.9
SECURITY	293,800	860	62,811	-0-	-0-
LIGHTING*				75.4	
I) <u>TERMINATIONS</u>					
POWER*	18,990	6,237	6,000	32.8	104.0
CONTROL/ INSTRUMENT*	197,280	65,075	80,459	33.0	82.0
SECURITY	4,466	-0-	-0-	-0-	-0-
LIGHTING					75.4
J) <u>ELECTRICAL CIRCUITS</u>					
POWER	2,022				
CONTROL/ INSTRUMENT	17,976				
SECURITY	752				

*SWA/RETROFIT MANHOURS NOT INCLUDED IN UNIT RATES

LOUISIANA POWER & LIGHT COMPANY
 WATERFORD SES UNIT No. 3

1980 CONSTRUCTION PROGRESS

<u>INSTALLATION</u>	<u>CURRENT ESTIMATE</u>		<u>% INSTALLED 12/30/79</u>	<u>% INSTALLED 12/28/80</u>
LARGE BORE PIPE	108,025	LF	85	95
LARGE BORE HANGERS	6,629	EA	68	84
SMALL BORE PIPE	100,013	LF	58	82
CABLE TRAY	42,382	LF	99	100
EXPOSED CONDUIT	503,794	LF	48	90
POWER & CONTROL CABLE	5,581,600	LF	29	57
TERMINATIONS	216,270	EA	14	33
HVAC DUCT	1,092,072	LB	70	93
HVAC SUPPORTS	880,642	LB	89	95
INSTRUMENT TUBING	105,519	LF	11	53
INSTRUMENT RACKS, CABINETS, PANELS	143	EA	71	76

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MEETING SUMMARY DISTRIBUTION

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Docket File
NRC PDR
Local PDR
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LB #2 File
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