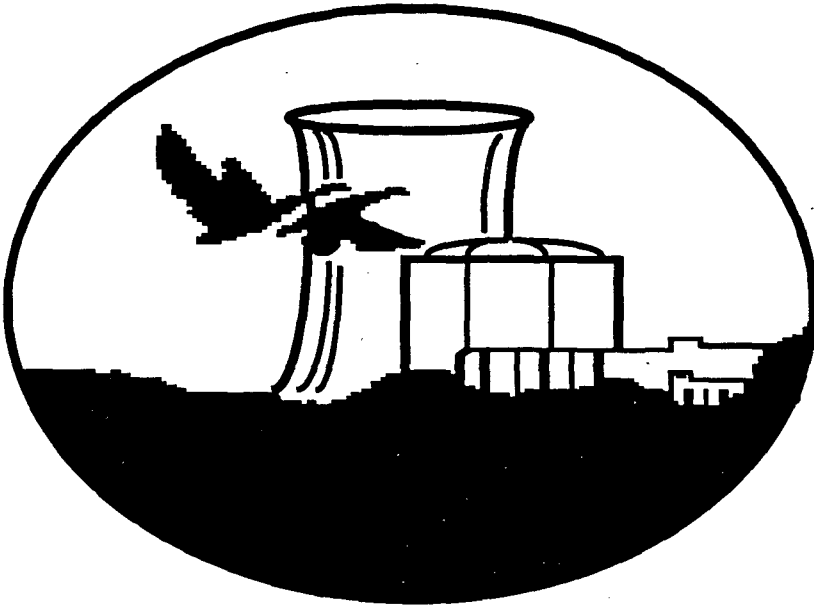


WATTS BAR NUCLEAR PLANT



Site Report

September 23, 1991

SITE REPORT
WATTS BAR NUCLEAR PLANT
SEPTEMBER 23, 1991

TABLE OF CONTENTS

	Page No.
I. EXECUTIVE SUMMARY	<u>1-6</u>
II. COST/SCHEDULE EVALUATION	<u>7-31</u>
III. ENGINEERING/MODIFICATIONS	<u>32-62</u>
IV. LICENSING	<u>63-68</u>
V. PLANT	<u>69-83</u>
VI. QUALITY	<u>84-92</u>
VII. OTHER	<u>93-98</u>
VIII. PUNCHLIST FOR FURTHER IMPROVEMENTS	<u>99-100</u>

I. EXECUTIVE SUMMARY

A. Site Vice President	J. H. Garrity
B. Vice President, Completion Assurance	N. C. Kazanas
C. Engineering & Modifications Manager	H. H. Weber
D. Site Licensing Manager	G. L. Pannell
E. Plant Manager	L. L. Jackson

SITE REPORT
WATTS BAR NUCLEAR PLANT
SEPTEMBER 23, 1991

I. EXECUTIVE SUMMARY

SITE VP SUMMARY

Quality of work being performed onsite remains generally good and improving as indicated by line organizations quality indicators, and by QA independent verification. However, we still have a way to go down the learning curve to reach the quality levels necessary to ensure smooth progress after restart of construction. The use of quality indicators by line organizations as a first line defense against deficiencies, prompt feedback about and correction of problems by line personnel, and aggressive monitoring by the completions organization, all in place and growing stronger week by week, will ensure the necessary quality levels. The site will have to learn to use quality indicator types in addition to reject rates, i.e. to use cycle time, capacity utilization, and rate of process improvement QIs too. Line organizations are not widely using these indicators, although progress in this direction is beginning to show.

Progress toward restart continued at a good pace overall. Most of the ten closure reports for management objectives for restart have been drafted (80 percent) and half have been finalized and put into the review cycle. All are on schedule. Seventy two percent of the 3189 individual restart items have been signed off by management, 9 percent have been checked okay by QA, and NRC has checked 9 percent okay. A serious problem has arisen in the area of closing restart NRC open items. The schedule for this task appears to have slipped from completion by October 4, 1991 to early November, based on a detailed review covering every item's scheduled progress through each step of the process. Significant management attention is being given to recovering as much of this schedule as possible and preventing further slippage. Although this is a disappointment, the overall restart schedule still remains good. New workplans representing over 100,000 manhours of work have been generated.

In licensing, we are down to sixty nine items tracked by ONRR's system, down from about two hundred fifty a little more than a year ago. Most of the remaining items are associated with CAPs and Special Programs. An effort is underway to develop plans and schedules for closing each CAP/SP that are coordinated with NRC.

INPO granted renewal of accreditation of three maintenance training programs as well as the Chemistry and Radcon programs on September 19. All WBN's programs are now good until 1995/1996.

Issues that require site management attention are: improvement of line organization response to licensing and PAC/AQ issues; further definition and planning of plant programs; reducing the cycle time for closure of Incident Investigation's; improvement of cost performance and schedule performance indicators for some projects; development of a site punchlist that meshes with the schedule to ensure all tasks are scheduled, resourced and tracked by management; and development of still better and broader quality use by line management indicators. All are being worked.

Overall, good progress was made this week, with some problems or areas for further improvement which the site is handling.

I. EXECUTIVE SUMMARY (continued)

ORGANIZATIONAL SUMMARIES

COMPLETION ASSURANCE

Quality of work is in an improving trend, however, continued management attention is needed to achieve or maintain an acceptable quality level in the following areas:

- ° QA review of workplans (initiated) results are at a 86 percent acceptance rate (see discussion pg. 88).
- ° QC Receipt inspection results are at a 92 percent acceptance rate (see discussion pg. 86).
- ° QA review of Procurement Documents are at a 94% acceptance rate (see discussion pg. 85).
- ° QA review of Procedures/Instructions for Mods are trending negatively. 83 percent acceptance rate.

QA's effort to support the 09/30/91 schedule for the completion of the Administrative Procedures Upgrade project is ongoing. Management attention is still required in coordinating reviews of the remaining procedures and their cancellations with QA.

SWEC has processed 3 personnel. Anticipated start work in Receipt Inspection is 9/30/91.

The Corrective Action Program Audit which began 09/03/91 is scheduled for completion 9/23/91. Two FIRs were identified. One FIR was written against QA for failure to retrieve FIR records (see discussion pg. 87). The other FIR was assigned to QA as the responsible organization but identified problems with NE, QA, and the Plant for failure to follow corrective action program procedures (see discussion pgs 86, 87, and 88).

An audit of the Replacement Items Program (WBA91110) started 09/16/91. This audit also is reviewing the file maintenance lookback. No adverse conditions have been identified.

An audit of Plant Layup (WBA91107) which began 8/13/91 is scheduled for completion 9/30/91. One FIR has been identified against Mechanical Maintenance.

QA is conducting a special assessment to evaluate the adequacy of recently issued DCNs and calculations. The assessment started 09/16/91 and no adverse conditions have been identified. An exit briefing has been scheduled for 9/23/91.

Site-wide Document Control Incident Investigation is underway to resolve NRC identified issues and is in the management review process.

Monitoring of records storage practices in the Startup Test Group has revealed a potential records control problem. The Plant is in the process of generating a PER which will document the deficiencies noted. The currently identified deficiencies involve test drawings which have been located in temporary storage areas that are apparently not retrievable from the vault.

NE has drafted a Corrective Action Plan to resolve QA identified deficiencies of NE training. The plan indicates completion by 09/30/91.

QA is in the process of reviewing all closed FIRs for which QA is the responsible organization to determine if generic review documentation is adequate. QA will supplement FIRs with adequate justification, if required. All QA individuals will be informed of this deficiency, of their responsibility for adequate documentation, and the importance of verbatim procedural compliance. (see discussion pg. 87).

I. EXECUTIVE SUMMARY (continued)

COMPLETION ASSURANCE

QA is in the process of reconstructing WBFI910216109 and submitting to RIMS. QA will maintain a copy of all future adverse condition packages until receipt confirmation has been received from RIMS. QA is also reviewing all RIMS logs used for adverse condition packages to determine if any others have not been confirmed as having been received in RIMS (see discussion pg. 87).

PAC/AQ - Phase I, II, and III of the Prototype Program have been completed. Phase IV of the Prototype Program is on schedule to be completed by 09/30/91. Program is proving effective in finding problems and fixing them, however, improvement is needed on timeliness of engineering responses to identified concerns.

Quality Indicators (QIs) show most quality targets are being met or exceeded. Noteworthy exceptions include: Engineering - (PEG) Procurement document reviews acceptance rate dropped marginally below acceptable quality limit (AQL) (94.9 vs. 95 percent page 33). Modifications - Workplan development second party reviews dropped to 94 percent acceptance. The acceptance rate for second-party review of safety net workplan closures improved from 92 to 94 percent (page 46).

ENGINEERING & MODIFICATIONS

The overall progress on the restart schedule was quite good this week. We are finally getting a backlog of work from MODs into QE and now must ensure that there is adequate resources in QE. Engineering is working on moving more of the Restart Corrective Actions forward to decrease the last week of October load. ESI has been working closely with Westinghouse on supporting the Mechanical Calculation effort. Engineering has now firmly established enough backlog for MODs workplan writing for Restart and now must maintain it for the rest of the schedule. MODs has started the reduction of its Hourly Trades and Labor (HTL) this week and will be at zero on September 27, 1991. Ebasco Construction (ECI) will start bringing their HTL on site Monday September 23, 1991. The progress is good on the management objective closure and is holding the schedule dates.

SITE LICENSING

A detailed review of individual open items and promised action completions has indicated that the effort could extend into early November. Further, there is some indication that the individuals responsible for completing the actions do not have specific time set aside in their personal schedules to accomplish this task. This issue has been discussed with the Site Vice President and Site Scheduling. Direction has been given to schedule individual time for actions in Engineering and to ensure non-scheduled punch list activities are resourced.

As a result of a joint effort to assess progress on resolving NRR open items, the NRC projects manager has provided the following summary:

"The staff noted that when licensing activities resumed in June 1990, there were about 250 actions (i.e., TAC numbers) identified in the NRR WISP. By January 1991, this number was reduced to about 100. Currently, this number stands at 69. This rate of closure indicates that more actions were resolved than created, and considerable progress has been achieved in reducing the backlog of licensing activities. The staff emphasized that the most significant activities (those most likely to be on the critical path to OL issuance) include approximately two dozen activities that cover the CAPs and SPs."

I. EXECUTIVE SUMMARY (continued)

SITE LICENSING (continued)

Several NRC inspections have been scheduled over the next two months. These inspections are listed in the Licensing Section of this report. The restart team inspection has been tentatively scheduled for mid-October to meet the inspection objectives of achieving the maximum number of NRC closures of restart activities.

NRC inspection of the special nuclear material licenses conducted on 09/17/91 resulted in no open items.

PLANT

The Plant quality indicators show three target values were not met. The actions to achieve target values are shown in the tables for the QIs. The age of drawing deficiencies still exceeds the target value but is trending in the right direction. Maintenance missed one target value because two WOs had poor copies of 575s attached. Operations missed one target value because one data package out of 36 was rejected by in-house review. This week's value of 97.3 percent acceptable is up from 71.4 percent on 9/4/91. Overall, the Plant is showing improvement in the indicators. One incident investigation was initiated Friday because a craft foreman improperly signed off a QC hold point. This was not a material quality issue, but a procedure compliance issue. The error was identified in the review process by Maintenance.

As of 09/20/91, the Plant had 29 open corrective actions (CAs).

Plant items identified as construction restart issues are on schedule. One restart CA was closed this week. The schedule for completing the seven remaining CAs within the restart schedule has been established and loaded on P/2. The Plant has 2 CATDs which are considered restart issues. These have been scheduled on P/2 for completion prior to restart.

The SSP/PAI/BP procedure rollover remains ahead of schedule with 69 Plant procedures planned to date and 82 actual completions. Phase I of the Plant procedure upgrade project which includes Operations Instructions, Surveillance Instructions, and Instrument Maintenance Instructions remains on schedule.

An NRC audit of the Plant Special Nuclear Material (SNM) program was performed this week which resulted in no findings.

Productivity improvements being pursued include a procedure revision issued this week to increase scope of the minor Maintenance procedure, and procurement of an automated tagging system (PO in process and expect approval by 9/27/91).

Investigation as to whether the ASME code and/or licensing commitments were met on the initial cut out of a leaking pipe on the high pressure fire protection (HPFP) system completed this week, and the issuance of a final report is pending. The incident investigation documents changes to procedures and training necessary to prevent recurrence. Guidance concerning code interpretation will be clearly established. The work package to perform a full ASME Section III code replacement of the affected piping is in development. It is expected that actual repair work will resume within a week after the final report is issued.

I. EXECUTIVE SUMMARY (continued)

PLANT (continued)

Plant programs have been categorized into the five areas below:

1. General Programs Required for Licensing
2. Special Programs for Startup
3. Ongoing Programs
4. Special Tasks
5. Special Assessments of Programs

Review is continuing to determine if all necessary actions have been identified and if they are appropriately scheduled (Level 2, Level 3, etc.). The current list of Plant programs/tasks is included on page 82.

II. COST SCHEDULE EVALUATION

A. SCHEDULE ASSESSMENT

- | | |
|--|--------------|
| 1. Critical Milestones to Restart | T. Congleton |
| 2. Status of <u>Work</u> Associated With Each Management Objective for Restart | W. L. Byrd |
| 3. Status of Development and Signoff of <u>Closure Reports</u> for Each Management Objective | W. L. Byrd |
| 4. Status of <u>Management Signoffs</u> For Level 2/
Level 3 Items Associated With Each Objective | W. L. Byrd |
| 5. Restart Work Off Curves | |
| 6. Critical Restart Incident Investigation | S. Casteel |

B. COST PERFORMANCE/SCHEDULE PERFORMANCE INDICATORS

D. Miller

C. TASK COST SUMMARY

B. Seay

D. BUDGET TREND SUMMARY

B. Seay

E. P/2 PERFORMANCE INDICATORS

D. Miller

F. STAFFING

E. Brabham

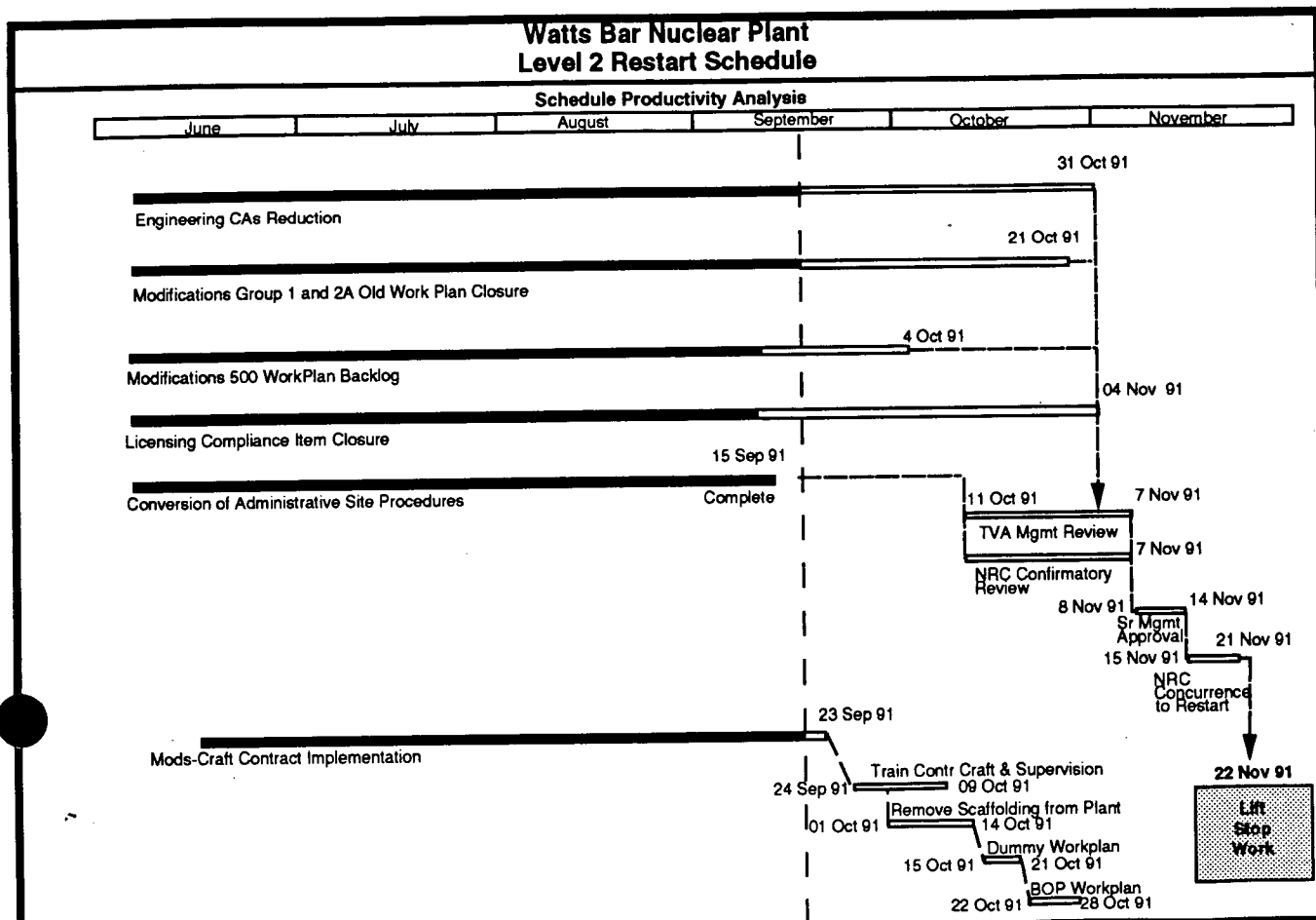
II. COST/SCHEDULE EVALUATIONS

A. Schedule Assessment

1. Current Milestones - RESTART

The forecast restart date is 11/22/91 based on the following four issues.

- Corrective Actions (CAs) - Engineering has continued to level their schedule for work off of the Restart required CAs. The target completion is 10/31/91. The Engineering group is showing improved performance in managing this effort to meet the schedule. (See work off curve page 36.)
- Modifications Old Workplan Closures - Production is behind. The target for completion is 10/21/91. The major restraint to closure is the Quality Engineering Review for closure (130 backlog). Modifications weekly production to meet the schedule is 69 per week. (See Work off Curve, page 49)
- Licensing Compliance Item Closure - Package development information and concurrence reviews from the line organizations continue to impede the work off rates. Licensing addresses the recovery action and responsible organizations required to meet the target completion of 11/04/91, on the work off graph, page 67.
- 500 New Workplans Available - Modifications has developed a bow-wave of approximately 2 weeks (behind schedule). The weekly production goal is trending better as a result of the staffing additions and learning curve. A detail analysis and recovery plan is shown on the work off curve, page 48.
- CATD Closure - Based on the evaluation of restart required CATDs, 54 are required to be closed; 13 are closed. The work off curve has projected an aggressive schedule and will require high management attention to meet the 10/31/91 closure goal. (See work off curve page 14.)



II. COST/SCHEDULE EVALUATION

A. Schedule Assessment (Continued)

2. Status of Work Associated With Each Management Objective for Construction Restart

- Historical Problems Understood and Not Repeated (George Pannell) – The closure packages for this objective has been completed and signed by the Site Licensing Manager. Independent QA verification is scheduled for completion by 09/26/91.
- Simplified Workplans and Related Procedures (Aaron McLemore) – Workplan writing is in progress. Modifications is in process and has generated over 113,000 manhours of work. Modifications is in process of reviewing 43 Modifications and Addition Instructions (MAIs) for further standardization with other plants and to ensure NRC commitments are properly captured. The 429 NRC submitted packages are being evaluated for incorporation into the MAIs. The closure report has been drafted and will be QA verified by 10/16/91.
- Backlogs – The backlog reduction effort is scheduled to have a draft package ready by 10/01/91. The final QA verification is scheduled for 11/04/91.
- Process Improvements (Mike Bellamy) – Site Administrative procedures have been reviewed for upgrade. Procedures evaluated for restart were completed 09/13/91, and the non-restart procedures are scheduled to be complete by 09/30/91. (See page 95) The closure package draft is scheduled for 09/20/91 with QA verification scheduled for 10/03/91.
- Corrective Action (CA) Program Improvements (L. E. Martin) – Department manager signoff and responsible management review were completed on 9-18-91. Independent QA verification is scheduled to be complete 9-20-91, Senior management review is scheduled 9-23-91 and the Site Vice Presidents signoff is scheduled for 09/25/91.
- Quality Monitoring and Performance (Randall McIntosh) – The final closure package is complete with QA verification closure scheduled for 09/27/91.
- Organization (H. H. Weber) – Reorganizations are complete. The draft closure package is scheduled for 09/23/91 and QA verification closure scheduled for 10/09/91.
- Training (R. W. Johnson) – The craft training programs have been completed and are awaiting implementation at the return of craftsmen and craft supervision. The draft closure package is complete and QA verification closure scheduled for 10/15/91.
- Engineering Ahead of Modifications (Elliott) – This objective is complete, as Modifications currently has an adequate backlog of safe go-forward work. A process is in place that will enable us to ensure adequate backlog will continue to be available. The closure draft package is complete and QA verification closure is scheduled 09/25/91.
- Carefully Monitored/Slow Restart (Byrd) – A detailed plan for carefully monitored, slow resumption of field work has been written. The draft closure package is complete and QA verification/closure is scheduled for 09/25/91.

II. COST/SCHEDULE EVALUATION

A. Schedule Assessment (Continued)

3. Status of Development and Signoff of Closure Reports for Each Management Objective

This table shows status and schedule for the steps necessary to achieve closure of each Management Objective for Restart. This work is progressing well.

STATUS OF CLOSURE PKG - SCHEDULE FINISH DATES

	Management Objective	Draft	Final	Dept. Mgrs. Signoff	Resp. Mgmt. Verify	Independ. QA Verify	Senior Mgmt. Review	Site VP Signoff	NRC Concurr
1	Historical Problems G. Pannell	Comp1	Comp1	09/24	09/24	09/26	09/27	09/30	
2	Simplified Workplans L. A. McLemore	Comp1	09/30	10/14	10/14	10/16	10/17	10/21	
3	Backlog Reduction* W. L. Byrd	10/01	10/31	11/01	11/01	11/04	11/07	11/11	
4	Process Improvements R. M. Bellamy	Comp1	09/30	10/01	10/01	10/03	10/04	10/07	
5	Corrective Action Program Improvements L. E. Martin	Comp1	Comp1	Comp1	Comp1	09/20	09/23	09/25	
6	Quality Monitoring and Performance C. R. McIntosh	Comp1	Comp1	09/25	09/25	09/27	09/30	10/02	
7	Organization H. H. Weber	09/23	09/30	10/07	10/07	10/09	10/11	10/15	
8	Training R. W. Johnson	Comp1	09/30	10/11	10/11	10/15	10/17	10/21	
9	Engineering Ahead Of Construction W. L. Elliott	Comp1	Comp1	09/23	09/23	09/25	09/27	09/30	
10	Carefully Monitored/ Slow Restart W. L. Byrd	Comp1	Comp1	Comp1	Comp1	09/25	09/27	09/30	
	TOTAL	80%	50%	20%	20%	0%	0%	0%	0%

* CRITICAL PATH:

II. COST/SCHEDULE EVALUATION

A. Schedule Assessment (Continued)

4. Management Signoffs For Level II/Level III Restart Items

Legend

TOTAL
ACTUAL

This table shows status of signoffs by managers for individual tasks or items supporting completion of each Management Objective for Restart

CURRENT STATUS OF OPEN ITEMS

Management Objective	NE	MODs	Plant	LIC	ECP	MTLS	PROJ MGMT	PROJ CONTRS	QA	SITE SUPPT	ST&T	HR	SITE VP	TRNG	Compl. Assur.	QA Verify	NRC Inspect	Comment
Historical Problems	2	0	1	6	0	0	0	1	2	0	0	0	0	0	0	12	12	See Below
Simplified Workplans	0	118	0	3	0	0	0	0	0	0	1	0	0	0	0	123	123	
(1)	923	1092	101	28	4	53	166	1	192	20	13	0	1	0	2	2600	2600	
Backlog Reduction	743	551	98	20	4	44	120	1	160	16	11	0	0	0	0	191	191	
Process Improvements	90	6	41	11	2	13	0	0	6	19	7	3	3	2	0	203	203	
Corr. Action Prog. Improvements	88	3	40	9	2	13	0	0	6	16	5	0	0	2	0	0	0	
Quality Monitoring and Performance	2	3	0	0	0	0	0	0	2	0	0	0	0	0	0	7	7	
	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Organization	3	2	0	0	0	2	1	0	0	0	0	0	0	0	0	8	8	
	3	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	
Training	0	4	0	0	0	0	0	0	1	0	1	28	0	0	0	34	34	
	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
Engineering ahead of Construction	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50	
Carefully Monitored Slow Restart	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	46	46	
	156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	156	156	
	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ORGANIZATIONAL TOTALS	0	1	0	0	0	3	0	0	1	0	0	0	0	0	0	5	5	
	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	
PERCENT COMPLETE	1176	1276	143	48	6	71	167	2	204	39	22	31	4	2	2	3198	3198	
	958	724	138	38	6	61	121	2	170	32	17	0	0	2	0	283	283	
	81%	56%	96%	79%	100%	67%	72%	100%	83%	82%	86%	0%	0%	100%	0%	9%	9%	

GRAND 3198

TOTAL 2303

THIS WEEK = 72%

LAST WEEK = 64%

(1) See breakdown on page ____.

II. COST/SCHEDULE EVALUATION

A. Schedule Assessment (Continued)

4. Backlog Reductions Breakdown Status

CURRENT STATUS OF OPEN ITEMS

Management Objective	NE	MODs	Plant	LIC	ECP	MTLS	PROJ MGMT	PROJ CONTRS	QA	SITE SUPPT	ST&T	HR	SITE VP	TRNG	Compl. Assur.	QA Verify	NRC Inspect	Comment
Backlog Reduction	<u>923</u>	<u>1092</u>	<u>101</u>	<u>28</u>	<u>4</u>	<u>53</u>	<u>166</u>	<u>1</u>	<u>192</u>	<u>20</u>	<u>13</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>2</u>	<u>2600</u>	<u>2600</u>	See
Breakdown	<u>743</u>	<u>551</u>	<u>98</u>	<u>20</u>	<u>4</u>	<u>44</u>	<u>120</u>	<u>1</u>	<u>160</u>	<u>16</u>	<u>11</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>191</u>	<u>191</u>	Below
CAQs	<u>345</u>	<u>223</u>	<u>78</u>	<u>7</u>	<u>1</u>	<u>43</u>	<u>3</u>	<u>1</u>	<u>74</u>	<u>13</u>	<u>6</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>			
	<u>215</u>	<u>192</u>	<u>77</u>	<u>7</u>	<u>1</u>	<u>36</u>	<u>3</u>	<u>1</u>	<u>70</u>	<u>12</u>	<u>6</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>			
CATDs	<u>11</u>	<u>21</u>	<u>1</u>				<u>1</u>		<u>3</u>									
	<u>10</u>	<u>3</u>	<u>0</u>				<u>1</u>		<u>0</u>									
Old Workplans		<u>567</u>																
		<u>127</u>																
CAT	<u>13</u>	<u>8</u>	<u>5</u>															
	<u>10</u>	<u>0</u>	<u>5</u>															
IDI	<u>59</u>								<u>1</u>									
	<u>46</u>								<u>0</u>									
Lic. Closure Pkg.	<u>138</u>	<u>87</u>	<u>16</u>	<u>21</u>	<u>3</u>	<u>8</u>	<u>158</u>		<u>49</u>	<u>7</u>	<u>7</u>				<u>2</u>			
	<u>117</u>	<u>67</u>	<u>15</u>	<u>13</u>	<u>3</u>	<u>6</u>	<u>112</u>		<u>26</u>	<u>4</u>	<u>5</u>				<u>0</u>			
VSR/DR	<u>146</u>	<u>182</u>					<u>2</u>		<u>64</u>									
	<u>136</u>	<u>162</u>					<u>2</u>		<u>64</u>									
Other	<u>212</u>	<u>4</u>	<u>1</u>			<u>2</u>	<u>2</u>		<u>1</u>									
	<u>209</u>	<u>0</u>	<u>1</u>			<u>2</u>	<u>2</u>		<u>0</u>									

5. Restart Work Off Curves

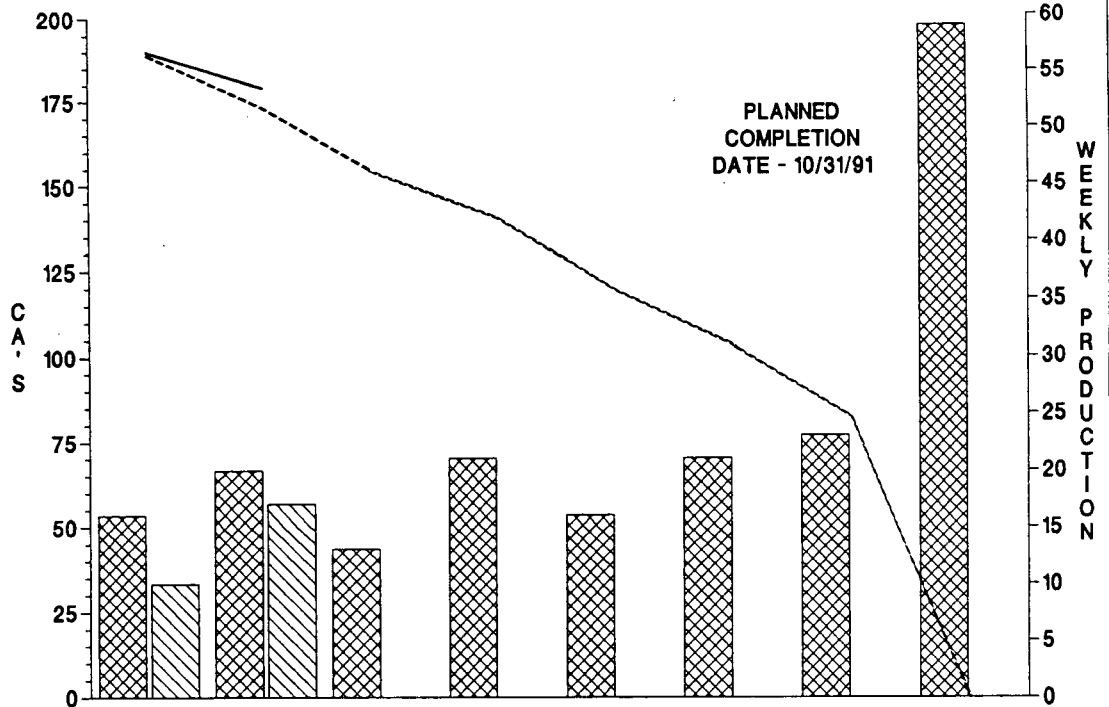
• Backlog Reduction Task Completed

- Material File Maintenance: Backlog Reduction Complete
Current In-Process Work Level 0
- Procurement Engineering Documents: Backlog Reduction Complete
Current In-Process Work Level 247
- Drafting Backlog: Backlog Reduction Complete
Current In-Process Work Level 260

Milestone : RESTART

CORRECTIVE ACTIONS OVERVIEW WBN

RESPONSIBLE
MANAGER,
M. CLEVELAND



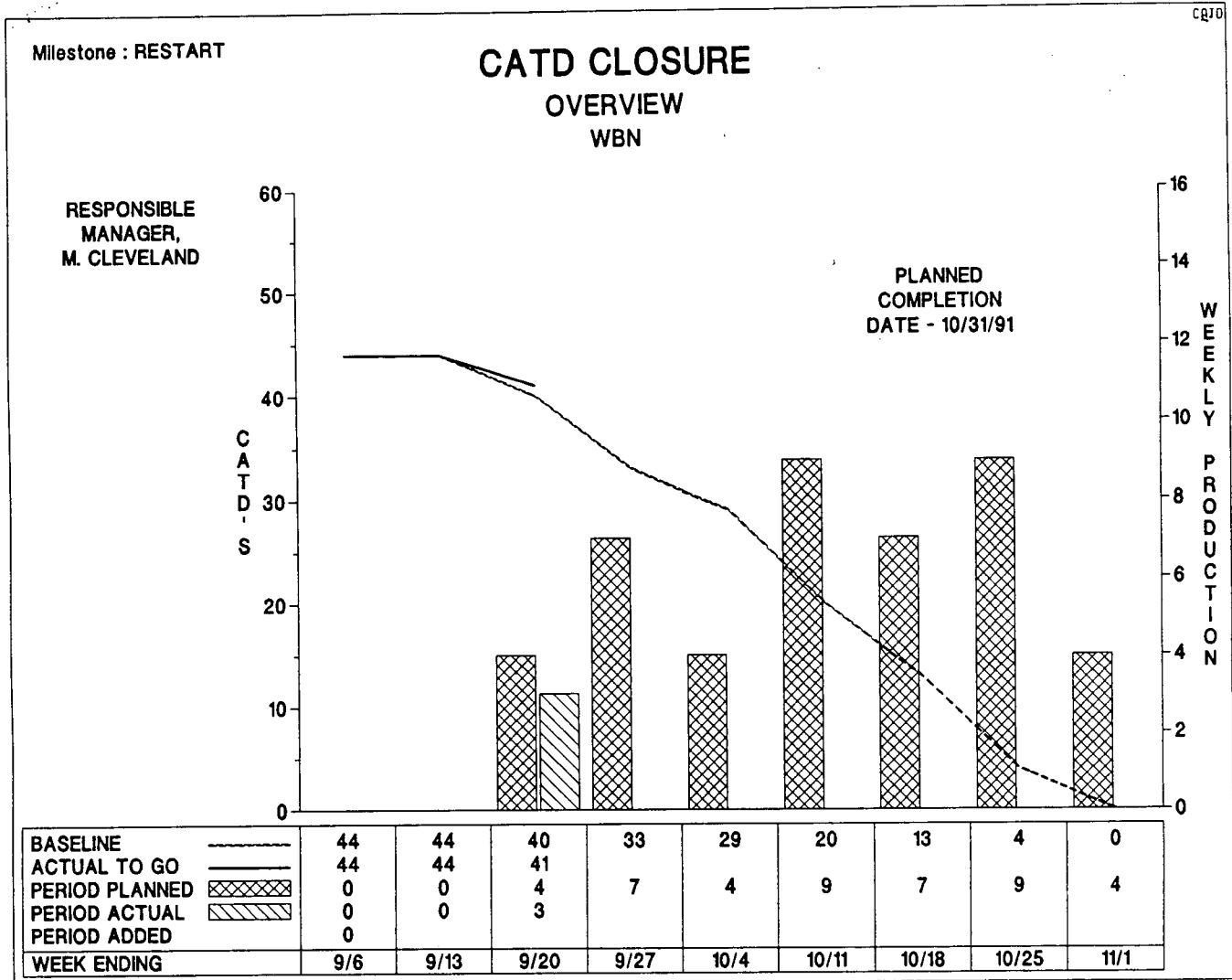
BASELINE	189	173	153	140	119	103	82	0
ACTUAL TO GO	190	179						
PERIOD PLANNED	16	20	13	21	16	21	23	59
PERIOD ACTUAL	10	17						
PERIOD ADDED	0	6						
WEEK ENDING	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

STATUS: BEHIND SCHEDULE

	THIS WEEK	LAST WEEK	delta
TOTAL OPEN CAs	810	798	+12
POST RESTART	253	258	-5
BLUE DOT	327	321	+6
TO GO FOR RESTART	179	184	-5

ANALYSIS:

- * THERE ARE 51 EMERGENT CAs STILL BEING REVIEWED FOR RESTART. OF THESE, 7 HAVE NOT BEEN ASSIGNED TO RESPONSIBLE ORG.: II-W-91-005, WBFIR910249, WBPFR910367, WBPFR910376, WBPFR910384, WBPFR910390, WBPFR910392.
- * ALL CAs OPENED PRIOR TO 09/16/91 WILL BE EVALUATED TO THE 6 POINT RESTART CRITERIA, AND WILL BE INCORPORATED IN THE WORKOFF CURVES BY 09/27/91. ALL CAs INITIATED AFTER 09/16/91 WILL BE EVALUATED AGAINST PROCEDURAL/PROGRAM IMPACT ONLY.
- * 30 CAs ARE TASKED AMONG LIC., SITE SUPPORT, MATERIALS AND QA. THESE WILL BE INCORPORATED IN WORKOFF CURVES FOR RESTART FOR NEXT WEEK.
- * SEE WORKOFF CURVES BY ORGANIZATION PAGE 35, 51, 78.



STATUS TABLE: BEHIND SCHEDULE

	THIS WEEK	LAST WEEK	delta
TOTAL RESTART	54	54	
RESTART COMPLETE	13	10	
TO GO FOR RESTART	41	44	-3

ANALYSIS:

- * THREE CATDs WERE CLOSED THROUGH EMPLOYEE CONCERNS. TWO CATDs WERE REJECTED BY QA AND RETURNED TO THE PARENT ORGANIZATION. QA PRESENTLY HAS FIVE IN HOUSE FOR REVIEW. THE REVIEW OF THESE FIVE CATDs IS BEING EXPEDITED TO MEET THE PLANNED SCHEDULE FOR NEXT WEEK.
- * ALL OPEN CATDs HAVE BEEN REVIEWED AND EVALUATED FOR RESTART. THE NRC HAS IDENTIFIED FIVE ISSUES FROM THE CLOSED CATDs THAT WILL REQUIRE FOLLOWUP VISITS. WBN IS EVALUATING AND ADDRESSING THESE ISSUES.

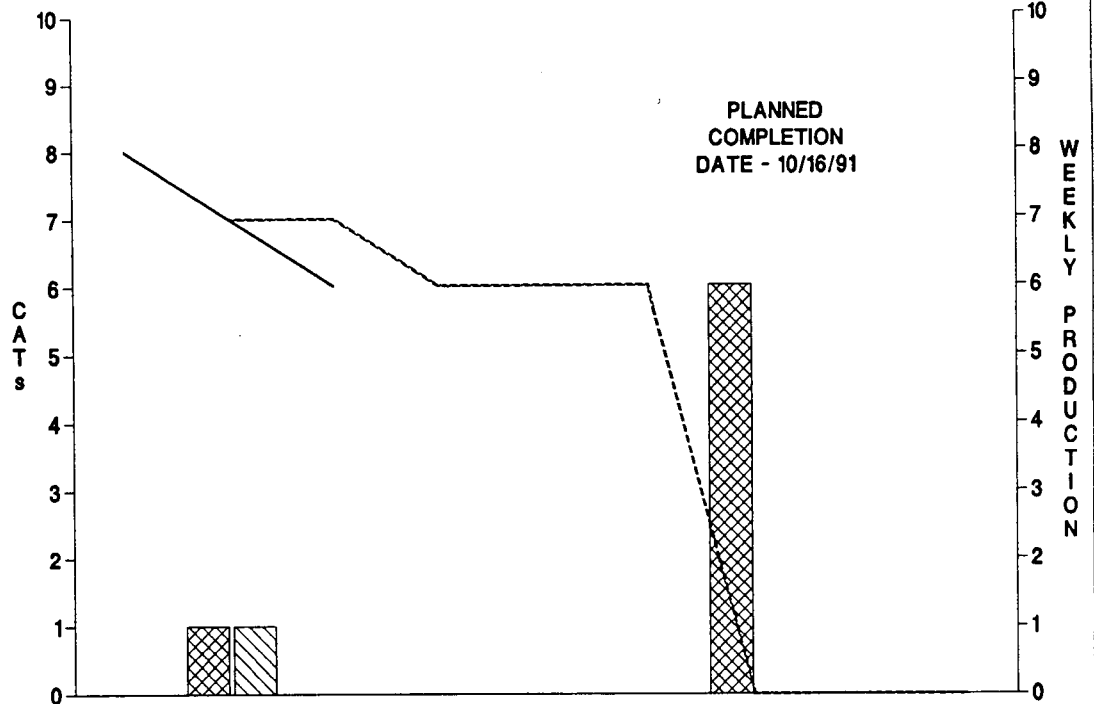
Milestone : RESTART

CATF

CONSTRUCTION ASSESSMENT TEAM (CAT) FINDINGS

OVERVIEW
WBN

RESPONSIBLE
MANAGER,
J. CHARDOS



BASELINE	8	7	7	6	6	6	0	0	0
ACTUAL TO GO	8	7	6	6	6	6	0	0	0
PERIOD PLANNED	0	1	0	0	0	0	6	0	0
PERIOD ACTUAL	0	1	0	0	0	0	6	0	0
PERIOD ADDED	0	0	0	0	0	0	0	0	0
WEEK ENDING	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

STATUS TABLE: ON SCHEDULE

	THIS WEEK	LAST WEEK	delta
TOTAL RESTART	67	67	
RESTART COMPLETE	60	60	
TO GO FOR RESTART	6	7	-1

ANALYSIS:

Milestone : RESTART

IDI

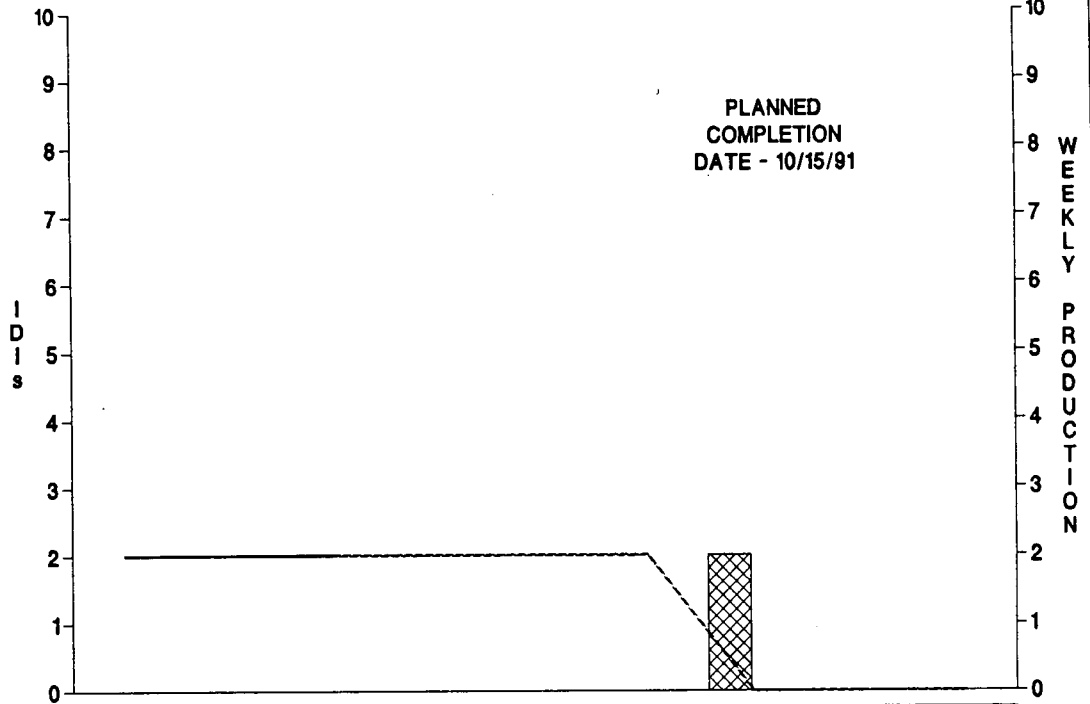
INDEPENDENT DESIGN INSPECTIONS (IDI) FINDINGS

OVERVIEW

WBN

RESPONSIBLE
MANAGER,
J. CHARDOS

PLANNED
COMPLETION
DATE - 10/15/91



BASELINE	2	2	2	2	2	2	0	0	0
ACTUAL TO GO	2	2	2	2	2	2	0	0	0
PERIOD PLANNED	0	0	0	0	0	0	2	0	0
PERIOD ACTUAL	0	0	0	0	0	0	0	0	0
PERIOD ADDED	0	0	0	0	0	0	0	0	0
WEEK ENDING	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

STATUS TABLE: ON SCHEDULE

	THIS WEEK	LAST WEEK	delta
TOTAL RESTART	46	46	-
RESTART COMPLETE	44	44	-
TO GO FOR RESTART	2	2	-

ANALYSIS:

A. Schedule Assessment

6. CRITICAL RESTART INCIDENT INVESTIGATIONS

RESPONSIBLE MANAGER: S. O. CASTEEL

	PROBLEM IDENTIFIED	TEAM FORMED	INVESTIGATION COMPLETE	ROOT CAUSE ANALYSIS	DEVELOP CORRECTIVE ACTION	IMPLEMENT CORRECTIVE ACTION	CORRECTIVE ACTION FOLLOW UP
DESCRIPTION (OWNER)	DATE	DATE	DATE	DATE	DATE	DATE	DATE
1. Licensing Letter (G. L. Pannell)	08/14/91	08/15/91	08/23/91	08/28/91	09/20/91	09/30/91	
2. Fire Protection (S. F. Tanner)	08/28/91	08/29/91	09/05/91	09/06/91	09/20/91F		
3. Uncontrolled Dwgs. in Field/QC Insp. using Uncontrolled Spec. for Walkdown (R. M. Norton)	09/03/91	09/10/91	09/12/91	09/12/91	WORKING		
4. Dwg. Info. to NRC (S. O. Casteel)	09/03/91	09/10/91	09/18/91	09/18/91	WORKING		
5. Mods Tags (J. M. Henard)	08/22/91	08/26/91	08/30/91	09/04/91	09/06/91	09/20/91F	
6. Oil Spill at D/G (P. L. Candage)	09/10/91	09/11/91	WORKING				

Assessment

1. Corrective action completed. Licensing manager to implement corrective actions.
2. Corrective actions have been developed and obtaining line organization concurrence with actions and schedule. Final report in final review for signature.
3. A complete draft of the investigation which includes proposed corective actions has been given to the appropriate managers for review. A final report is expected to be completed next week.
4. Investigation is complete and a report in in final review.
5. The root cause analysis identified seven contributing causes of which one was only a perceived problem. Of the corrective action required for the six remaining contributing causes, five have been completed as of 09/10/91, leaving dating the existing "Information Only Tags" as the long pole. The root cause corrective action is presently being worked and should reach completion by 09/20/91.
6. The investigation is in the final stages and should reach completion during the week of 09/23/91.

II. COST/SCHEDULE EVALUATIONS

B. Cost Performance/Schedule Performance Indicators (CPI/SPI)

The attached report contains only those projects which have been active during this period with all remaining projects being rolled to an "other" category at the bottom of the page. The improvement in the accuracy of the numbers as a result of the schedule scrubs is still projected for 09/30/91. Increasing improvement is evident as the projects are scrubbed and the information incorporated in the cost and schedule data bases.

Analysis

Engineering continues to have good overall performance for the period with a CPI of 1.16 and an SPI of 1.08.

Modifications also has good overall performance with a CPI of 1.05 and an SPI of 1.02. The critical issue of Work Plan Backlog (JXB) however did not fare well this week with a CPI of .53 and an SPI of .69. This performance is attributed to the addition of contractors and the associated learning curve.

ENGINEERING COST/SCHEDULE PERFORMANCE

PWL	DESCRIPTION	PERIOD 9/09-9/15/91					CUMMULATIVE 8/12-9/15/91				
		BUDGET	EARNED	ACTUAL	CPI	SPI	BUDGET	EARNED	ACTUAL	CPI	SPI
A7	CATD/EC BACKLOG	89	0	0	0.00	0.00	517	0	0	0.00	0.00
AU	RADIATION MONITORING	164	409	248	1.65	2.49	951	1920	1052	1.83	2.02
AY	DRAFTING SUPPORT	540	634	602	1.05	1.17	3154	2916	2734	1.07	0.92
BJ	APPENDIX R FIRE PROTECTION	358	319	382	0.84	0.89	2081	1364	1440	0.95	0.66
BN	GROUP 1 SYSTEMS COMPLETION	79	192	136	1.41	2.43	477	660	679	0.97	1.38
BP	GROUPS 2A/2B/2C SYSTEMS COMPLETION	71	248	1152	0.22	3.49	411	1161	2866	0.41	2.82
BR	GROUPS 4 & 5 SYSTEMS COMPLETION	7	188	320	0.59	26.86	43	753	1027	0.73	17.51
BT	GROUP 6 SYSTEMS COMPLETION	51	338	938	0.36	6.63	293	1488	3063	0.49	5.08
BU	BOP SYSTEMS COMPLETION	76	886	171	5.18	11.66	447	3040	1533	1.98	6.80
BX	QA RECORDS PHASE 2	300	112	228	0.49	0.37	1768	462	1285	0.36	0.26
BY	I & C	372	209	118	1.77	0.56	2174	832	1759	0.47	0.38
CA	CIVIL/SEISMIC CALC PROJECTS	3074	4659	2623	1.78	1.52	18203	16509	13238	1.25	0.91
CC	COLD LEG ACCUMULATOR LEVEL INST	161	132	459	0.29	0.82	930	685	719	0.95	0.74
CD	CAQ CORRECTIVE ACT	167	394	522	0.75	2.36	553	1636	2477	0.66	2.96
CG	CONDUIT/SUPPORTS STRUC QUALF N-CAP	787	618	1079	0.57	0.79	6791	3074	5001	0.61	0.45
CJ	SECURITY SYSTEM UPGRADE	118	18	33	0.55	0.15	694	80	86	0.93	0.12
CR	CONTROL ROOM DESIGN REVIEW	166	133	123	1.08	0.80	956	634	538	1.18	0.66
CX	PAC/AQ	334	617	87	7.09	1.85	1949	2990	208	14.38	1.53
CY	CIVIL/SEISMIC REVIEW	320	239	0	0.00	0.75	1876	1420	0	0.00	0.76
DD	DRAWING DEVIATIONS	227	149	46	3.24	0.66	1326	604	453	1.33	0.46
DE	MICROBIOLOGICAL INDUCED CORR	91	76	43	1.77	0.84	531	369	195	1.89	0.69
DK	CONTRACTOR PROGRAM MANAGEMENT	217	350	182	1.92	1.61	1268	1388	895	1.55	1.09
DV	DESIGN BASELINE VERIFICATION PROGRAM	613	1289	972	1.33	2.10	3573	5699	4318	1.32	1.60
EA	CABLE & RACEWAY ISSUES	1857	1526	1878	0.81	0.82	9842	6479	7265	0.89	0.66
EC	ENVIRONMENTAL QUALIFICATION	871	314	405	0.78	0.36	5098	1194	1945	0.61	0.23
FA	MASTER EQUIPMENT LIST (MEL)	233	96	248	0.39	0.41	1365	465	1061	0.44	0.34
FG	MOV TESTING & SURVEILLANCE	270	134	69	1.94	0.50	1584	689	370	1.86	0.43
FN	REACTOR PROTECTION SYS UPGRADE (EAGL	78	195	53	3.68	2.50	449	919	522	1.76	2.05
GE	CIVIL STACK & TRACK,ENG. EFFORT ONLY	1346	2134	1124	1.90	1.59	7852	8645	5308	1.63	1.10
GH	EQUIPMENT SEISMIC QUALIFICATION	1261	1135	827	1.37	0.90	7359	5674	4087	1.39	0.77
GW	SLEEVES/SEALS	537	82	18	4.56	0.15	3134	310	93	3.33	0.10
HB	INSTRUMENT PROJECT	522	783	402	1.95	1.50	3046	3419	2073	1.65	1.12
HN	SMALL BORE PIPING/SUPPORTS	3018	1994	2636	0.76	0.66	17818	8765	14012	0.63	0.49

ENGINEERING COST/SCHEDULE PERFORMANCE

PWL	DESCRIPTION	PERIOD 9/09-9/15/91					CUMMULATIVE 8/12-9/15/91				
		BUDGET	EARNED	ACTUAL	CPI	SPI	BUDGET	EARNED	ACTUAL	CPI	SPI
HR	LARGE BORE PIPING SUPPORTS	1828	2419	1371	1.76	1.32	11866	10849	7392	1.47	0.91
JC	ADMIN ENGR CRAFT	259	0	0	0.00	0.00	1510	0	0	0.00	0.00
LG	NUCLEAR ISSUES - SGTR & MSLB	190	23	40	0.58	0.12	1115	112	112	1.00	0.10
NP	ENGINEERING PROCUREMENT SUPPORT	527	123	584	0.21	0.23	3075	538	2860	0.19	0.17
PA	REG GUIDE 1.97, POST ACCIDENT MONITO	234	93	67	1.39	0.40	1366	473	271	1.75	0.35
RB	NE-SITE INDIRECTS	906	1260	1211	1.04	1.39	5284	6061	5112	1.19	1.15
RF	NE-TECHNICAL SUPPORT	1384	1653	1216	1.36	1.19	8073	9081	6099	1.49	1.12
RV	PLANT ENGG SUPPORT	166	71	131	0.54	0.43	961	242	645	0.38	0.25
TC	TESTING SUPPORT	126	74	27	2.74	0.59	732	328	82	4.00	0.45
TE	LICENSING & REGULATORY SPT	304	351	298	1.18	1.15	1773	1169	2111	0.55	0.66
WE	HVAC DUCT/SUPPORTS-STRUC QUALF CAP	1009	102	967	0.11	0.10	5880	512	1809	0.28	0.09
WF	CABLE TRAY/SUPPORTS-STRUC QUALF CAP	1548	1029	835	1.23	0.66	9266	4913	3369	1.46	0.53
WJ	SELF ASSESSMENT	1499	917	1200	0.76	0.61	8739	4056	6748	0.60	0.46
WK	DCN/WORKPLAN SAFETY NET	1183	2486	1060	2.35	2.10	6901	12405	5467	2.27	1.80
WR	DCN CLOSURE	0	741	266	2.79	0.00	2598	3427	1864	1.84	1.32
WX	CCRIS	0	46	0	0.00	0.00	0	140	587	0.24	0.00
WY	INDEPENDENT DESIGN INSPECTION	79	53	284	0.19	0.67	440	249	1075	0.23	0.57
	TOTAL	29617	32043	27681	1.16	1.08	178092	140798	127905	1.10	0.79
	OTHER	398	1365	897	1.52	3.43	2583	6414	3269	1.96	2.48
	GRAND TOTAL	30015	33408	28578	1.17	1.11	180675	147212	131174	1.12	0.81

MODIFICATIONS AND FACILITIES COST/SCHEDULE PERFORMANCE

PWL	DESCRIPTION	PERIOD 9/09-9/15/91					CUMMULATIVE 8/12-9/15/91				
		BUDGET	EARNED	ACTUAL	CPI	SPI	BUDGET	EARNED	ACTUAL	CPI	SPI
BV	QUALITY ASSURANCE RECORDS CAP	390	174	438	0.40	0.45	2272	855	1862	0.46	0.38
CE	CONSTRUCTION TOOL ROOM	18	137	40	3.43	7.61	1311	615	190	3.24	0.47
CM	MISCELLANEOUS MRS	117	556	288	1.93	4.75	2718	2409	1172	2.06	0.89
HR	LARGE BORE PIPING SUPPORTS	0	197	43	4.58	0.00	0	857	207	4.14	0.00
JC	ADMIN ENGR CRAFT	2238	2204	3032	0.73	0.98	13058	9936	12889	0.77	0.76
JT	TRAINING FOR FIELD	1752	1978	511	3.87	1.13	10219	8901	3048	2.92	0.87
JX	QUALITY IMPROVEMENT PROGRAM-CONST	3314	3777	4464	0.85	1.14	19325	17943	17866	1.00	0.93
RJ	NC CORRECTIVE ACT	749	684	113	6.05	0.91	4367	3080	467	6.60	0.71
WP	WELD PROJECT	1352	1022	136	7.51	0.76	7880	4916	306	16.07	0.62
JXB	DEVELOP WORKPLAN BACKLOG	1740	1200	2276	0.53	0.69	9090	5880	7042	0.83	0.65
	TOTAL	11670	11929	11341	1.05	1.02	70240	55392	45049	1.23	0.79
	OTHER	63	114	20	5.70	1.81	366	530	140	3.79	1.45
	GRAND TOTAL	11733	12043	11361	1.06	1.03	70606	55922	45189	1.24	0.79

II. COST/SCHEDULE EVALUATIONS (continued)

D. Budget Trend Summary

OPERATIONS AND MAINTENANCE (O&M)

1. POTENTIAL IMPACTS

Description	Estimated Cost (\$000s)	Estimated Impact in FY 1991	Estimated Impact in FY 1992	Estimated Impact in FY 1993
o OWCP costs.	\$430	\$430		
o No new items identified.				
TOTAL	\$430	\$430		

2. SUMMARY (Brief overview of site O&M status)

The current projection for FY 91 Operations & Maintenance costs at Watts Bar consist of hospitality funds (\$50K) and worker's compensation payments (\$709K). The increase of \$430K is due to higher than planned payments of workers compensation during the year.

(No change to last week.)

3. COST PROJECTIONS (\$000s)

	<u>FY 1991</u>
(1) Budget	329
(2) Current Projection	759 (Based on above change)
(3) Delta from Original Budget	430

II. COST/SCHEDULE EVALUATIONS (continued)

D. Budget Trend Summary

CAPITAL

1. POTENTIAL IMPACTS

Description	Estimated Cost (\$000s)	Estimated Impact in FY 1991	Estimated Impact in FY 1992	Estimated Impact in FY 1993	Estimated Impact Total Project
Underruns due to delays in construction.				\$25M ±	N/A
TOTAL					

2. SUMMARY (Brief Overview of Site Capital Status)

Fiscal year capital expenditures continue to underrun for the year, due to the construction stop work and delays in implementing the transition to contractor labor. The fourth quarter FY 91 forecast was reduced to \$305M to reflect the impact of the transition plan and a construction restart of November 1991. The latest forecast projections for WBN reflect year end expenditures of \$297M.

The workscope delayed to future years will impact FY 93. Once the detailed budget is loaded and final estimates are made for FY 91, this number will be more definitive. Not reflected are costs that would be incurred due to any slippage to a commercial operation date, i.e. O&M costs converted back to capital and added support costs.

The final FY 92 detailed budget was finalized and "locked down" on September 15, 1991.

3. COST PROJECTIONS (\$000s)

	Unit 1 <u>FY 1991</u>	Unit 2 <u>Unit 2</u>	<u>Total</u>
(1) Budget	322,674	35,428	= 358,102
(2) Current Projection	297,013	17,893	= 314,906
(3) Delta from Original Budget	(25,661)	(17,535)	= (43,196)

II. COST/SCHEDULE EVALUATIONS (continued)

E. P2 Performance Indicators

Analysis is presented on each quality indicator page.

Summary:

Level 2 starts and finishes continue to be accomplished as scheduled.

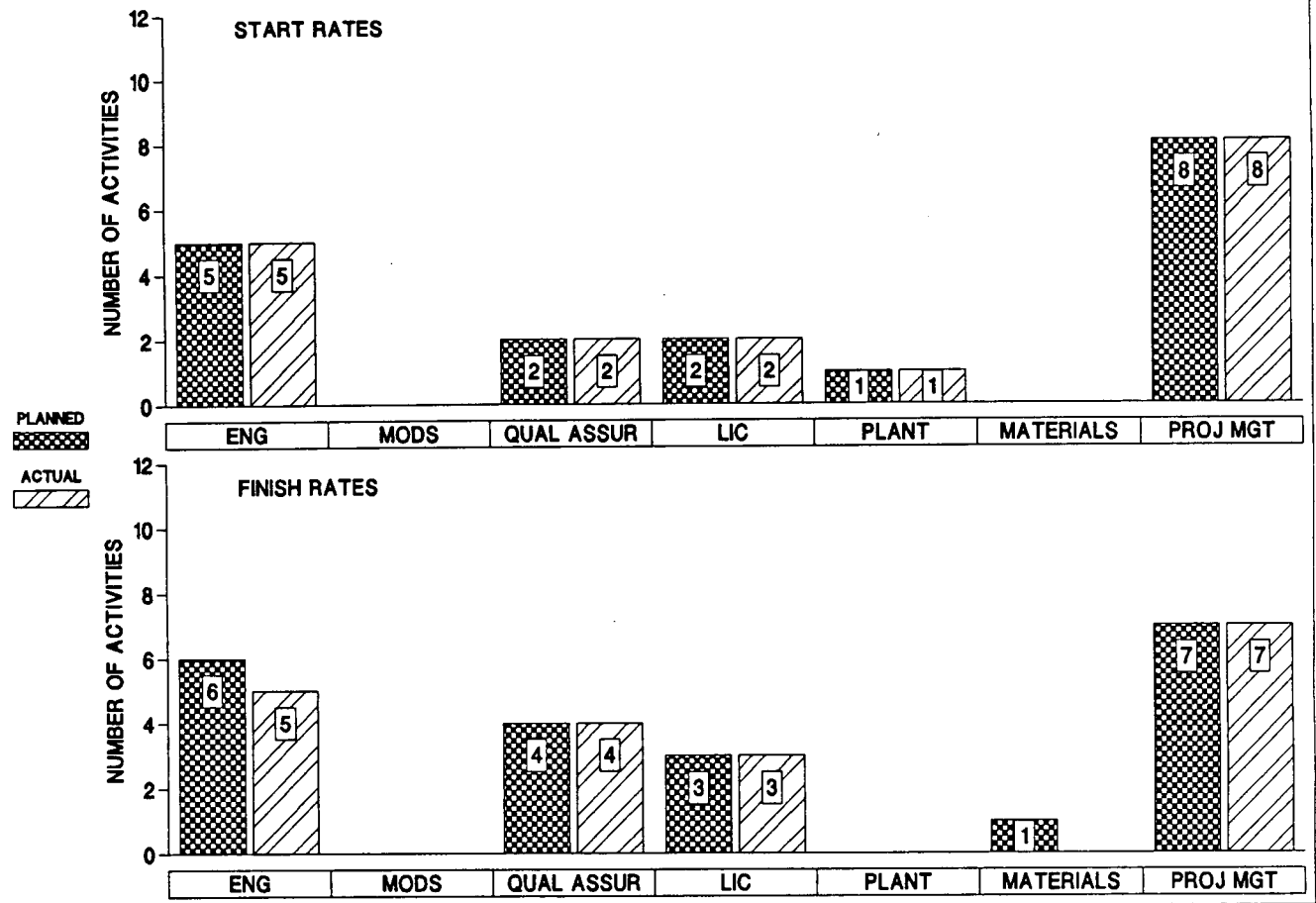
Level 2 resource schedules are satisfactory except for the plant.

Level 3 resource schedules continue to have adjustments made in the engineering data bases. These adjustments are part of the schedule scrub to be complete 09/30/91.

Level 3 starts and finishes performance was acceptable for Engineering, Materials, and QA. Modifications showed some improvement but continues with adjustments to priorities. Project Management was surprised with the addition of NCO and will adjust these data date riders during the schedule scrubs. Licensing improved significantly in the area of items scheduled.

SITE LEVEL 2 SCHEDULE

WBN

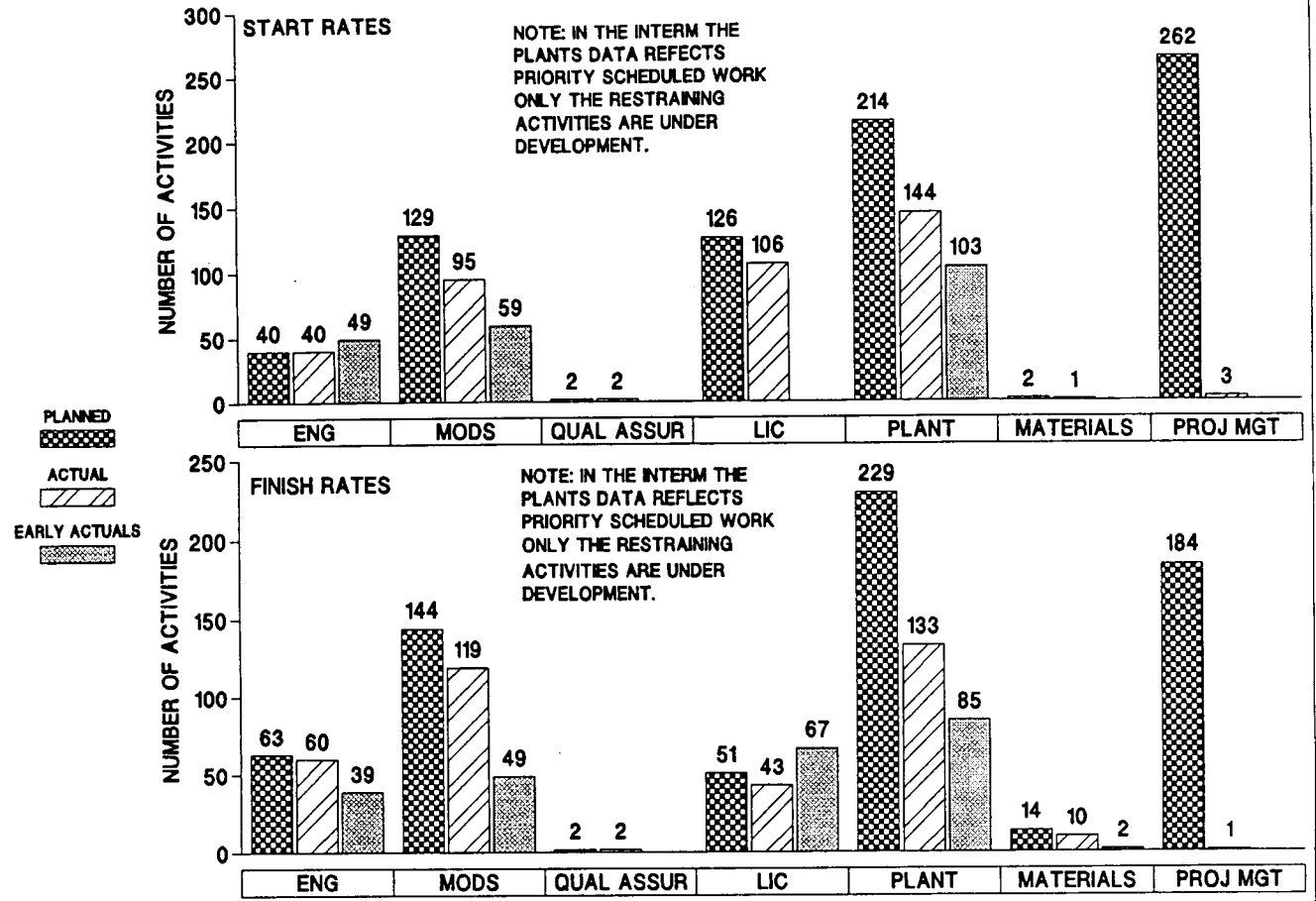


ANALYSIS:

* PERFORMANCE: ACCEPTABLE.

ACTION/RECOVERY PLAN:

SITE LEVEL 3 SCHEDULE WBN



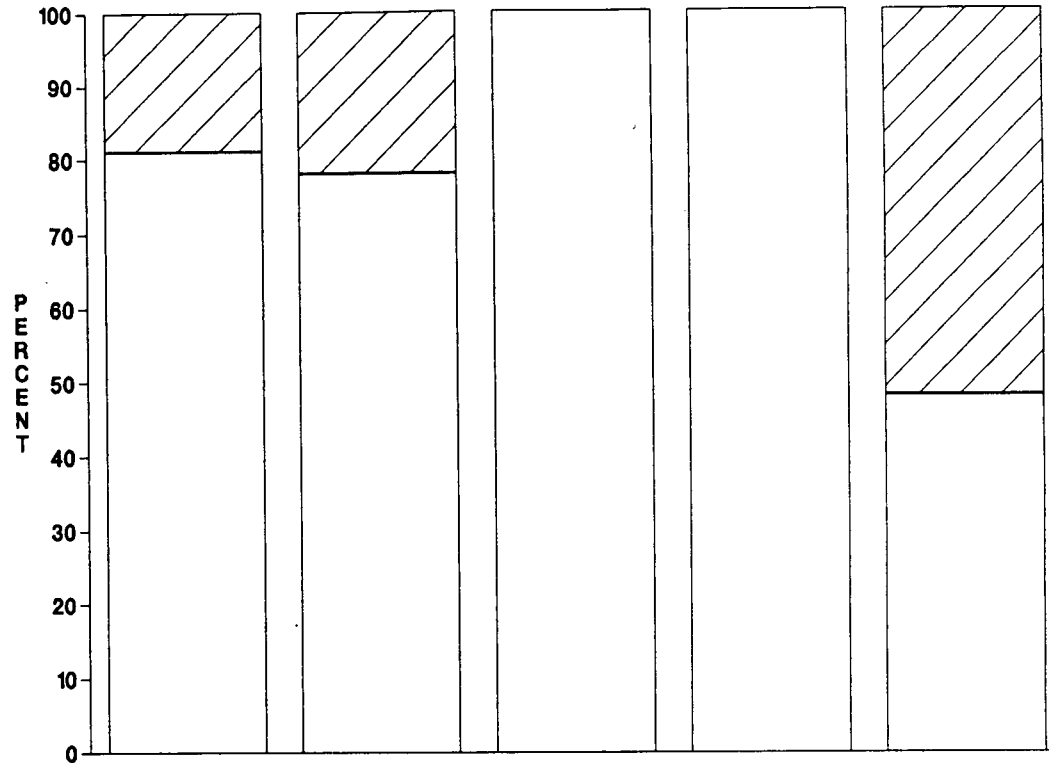
ANALYSIS:

- * GOOD PERFORMANCE BY ENGINEERING. IMPROVED PERFORMANCE BY PLANT AND MATERIALS.

ACTION/RECOVERY PLAN:

- * THE MATERIALS GROUP HAS AGAIN MADE GREAT PROGRESS, AND THEIR LEVEL 3 CLEAN-UP IS COMPLETE. LICENSING HAS ALSO IMPROVED GREATLY ON THE NUMBER OF ITEMS SCHEDULED.
- * MODS MISSED 34 STARTS WHICH INCLUDE 8 SAFETY NET REVIEWS, AND 26 WP WRITES. THE 22 MISSED FINISHES INCLUDE 13 WPs, 2 CAQs, AND 9 SAFETY NET REVIEWS. THE SAFETY NET REVIEW SCHEDULE HAS BEEN REVIEWED AND PRIORITIZED TO MOVE OUT SOME OF THE MASSIVE WORKPLANS WHICH ARE IMPEDING PROGRESS.
- * THE SIGNIFICANT INCREASE IN PROJECT MANAGEMENT WAS DUE TO NCOS. THESE WILL BE RESCHEDULED IN THE SCHEDULE SCRUBS BY OCTOBER 1, 1991.

LEVEL 2 ACTIVITIES WITH RESOURCES CURRENT WBN



TOTAL LVL 2 SCHED	706	402	21	4	52
# ACT WITH RES	575	312	21	4	25
% RESOURCED	81	78	100	100	48
% UNRESOURCED	19	22			52
ORGANIZATION	ENG	MOD	QUAL ASSUR	LIC	PLANT

ANALYSIS:

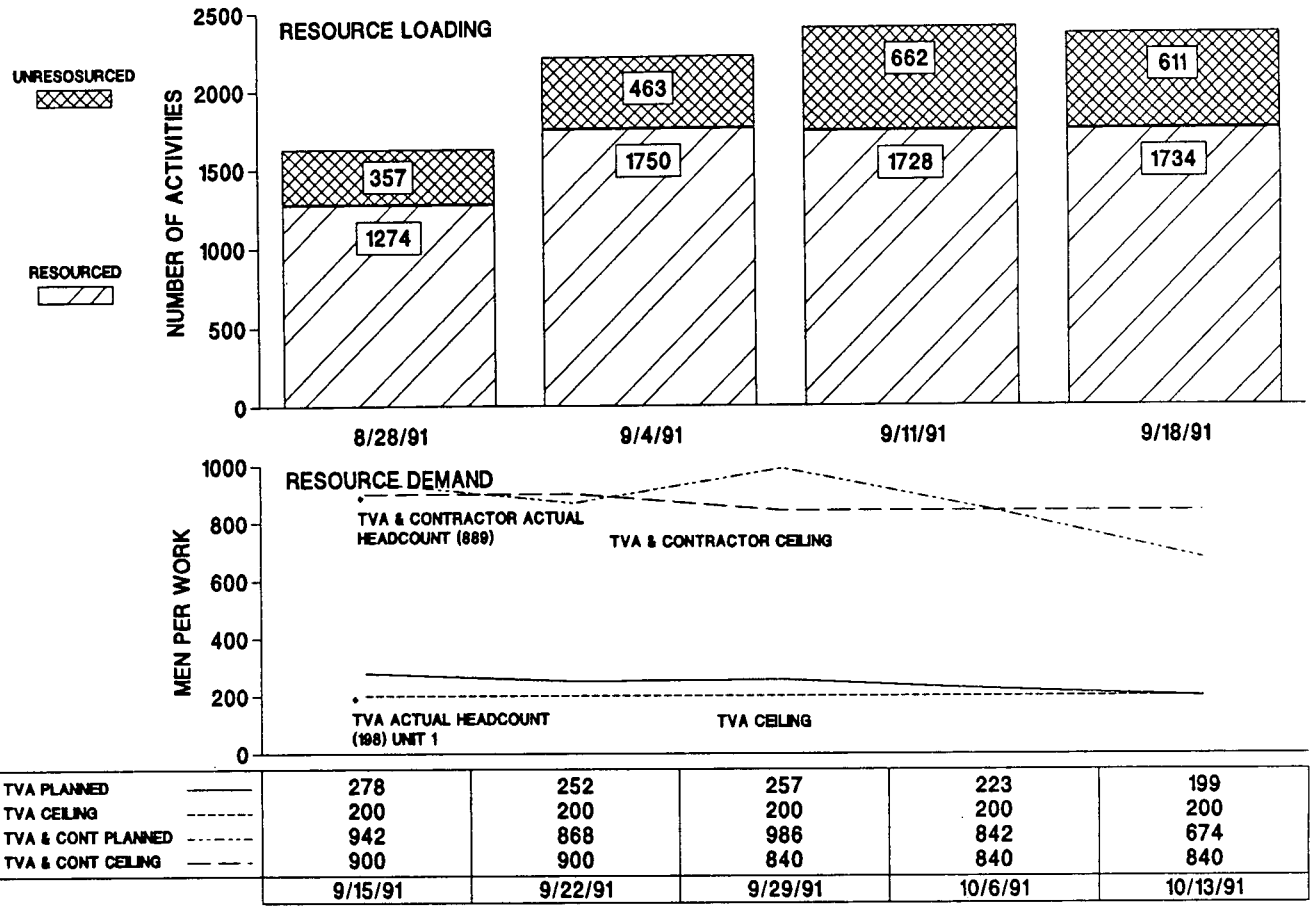
- * ACCEPTANCE.

ACTION/RECOVERY PLAN:

- * THE REGRESSION IN ENGINEERING AND MODS NUMBERS IS DUE TO THE INFLUX OF DATA FROM THE SCHEDULE SCRUBS. AS THE CLEAN-UP IS COMPLETED THE RESOURCES WILL BE ADDED. COMPLETION IS EXPECTED BY 10/01/91.
- * THE PLANT HAS CONTINUED TO MAKE PROGRESS ADDING RESOURCES AS IS EVIDENCED BY THE INCREASE TO 48% NOTED THIS WEEK.

LEVEL 3 - 30 DAY SCHEDULE

WBN - NUCLEAR ENGINEERING



ANALYSIS:

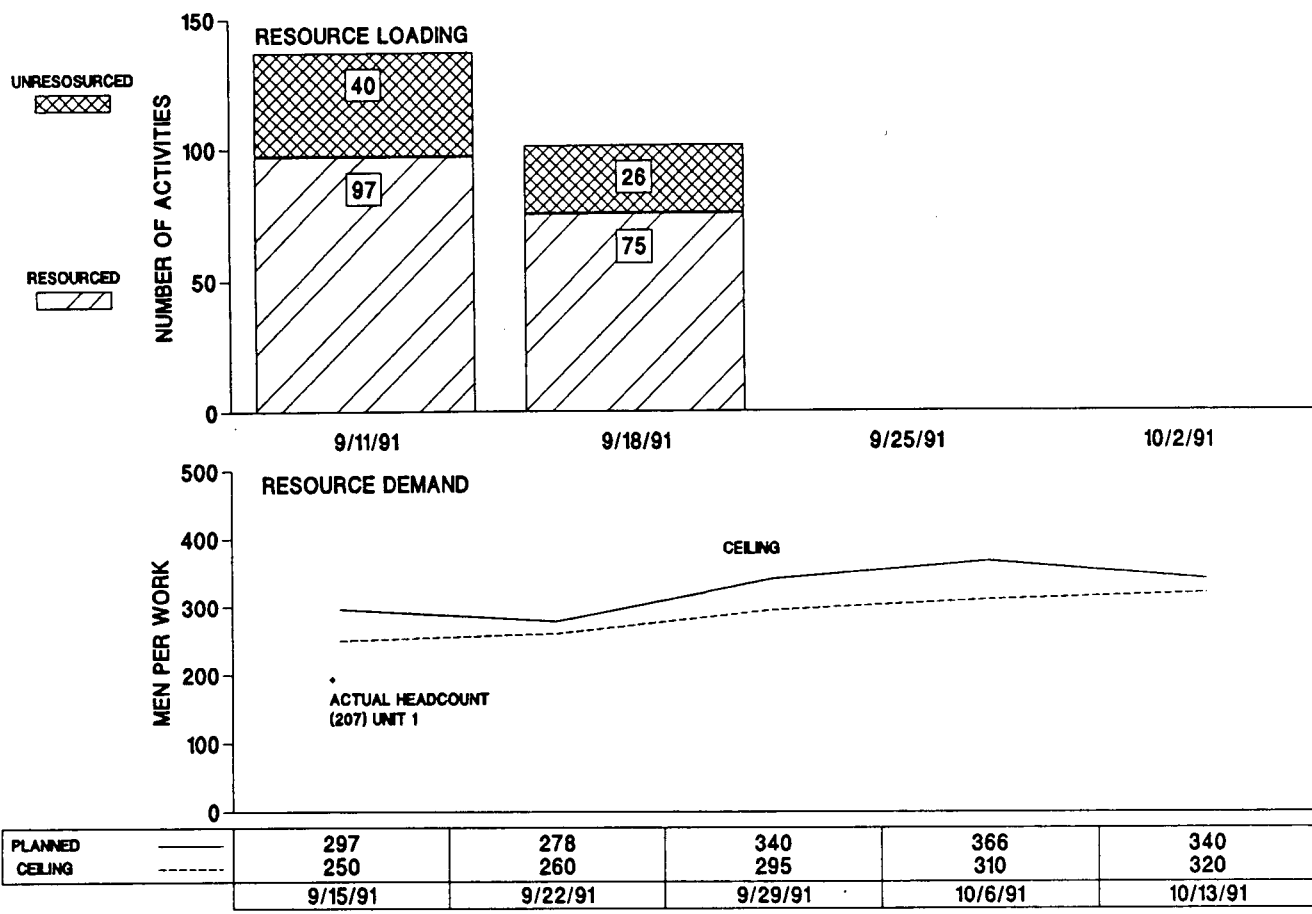
- * NEEDS IMPROVEMENT.

ACTION/RECOVERY PLAN:

- * THE ENGINEERING PLANNED RESOURCES EXCEED THE APPROVED LEVELS BECAUSE THEY HAVE MANY ACTIVITIES WHICH HAVE ACTUAL STARTS AND ARE NOT CURRENTLY BEING WORKED. THESE NEED TO BE RESCHEDULED. THE RESCHEDULING WILL BE COMPLETED BY OCTOBER 1, 1991.

LEVEL 3 - 30 DAY SCHEDULE

WBN - MODIFICATIONS



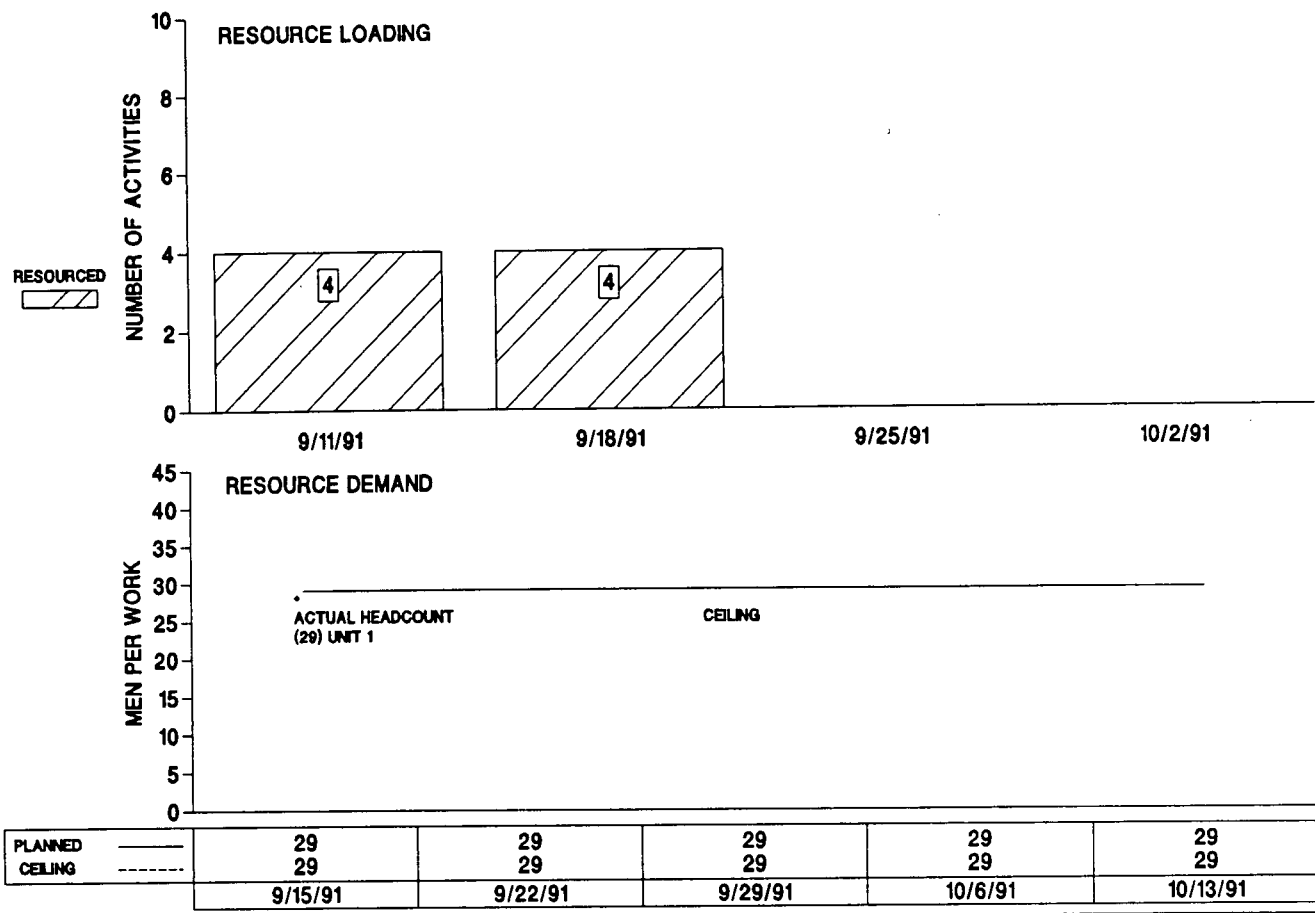
ANALYSIS:

- * INCONSISTENCY OF DATA DUE TO THE CURRENT METHODOLOGY OF RESOURCE LOADING ACTIVITIES. ALTERNATIVE SOLUTIONS ARE STILL BEING INVESTIGATED.

ACTION/RECOVERY PLAN:

- * CURRENTLY MODS IS WORKING AN EQUIVALENT OF 284 PEOPLE.

LEVEL 3 - 30 DAY SCHEDULE **WBN - LICENSING**



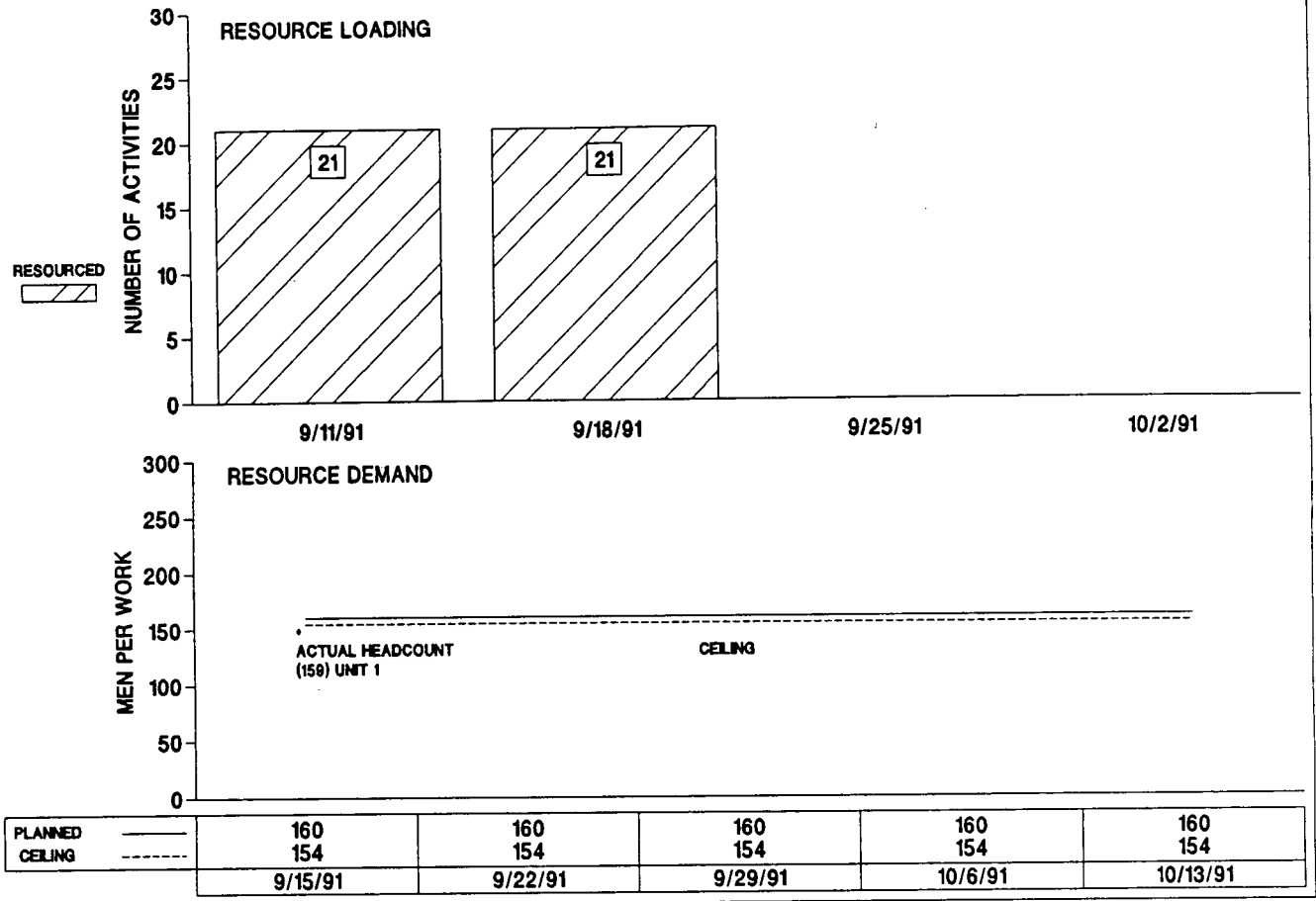
ANALYSIS:

* GOOD PERFORMANCE.

ACTION/RECOVERY PLAN:

* NONE REQUIRED. TEN NON-SCHEDULED CLERICAL PEOPLE ARE NOT INCLUDED IN THE COUNTS.

LEVEL 3 - 30 DAY SCHEDULE **WBN - QUALITY ASSURANCE**



ANALYSIS:

* GOOD PERFORMANCE.

ACTION/RECOVERY PLAN:

* NONE REQUIRED.

III. ENGINEERING/MODIFICATIONS

H. H. Weber

A. ENGINEERING

W. L. Elliott

B. MODIFICATIONS

R. W. Johnson

C. PROCUREMENT

A. J. Roberts

D. STARTUP (LATER)

A. J. McCabe

III. ENGINEERING/MODIFICATIONS

A. ENGINEERING

WEEKLY QUALITY INDICATORS

Quality Indicator Description	VALUE - WEEK ENDING				TARGET	TARGET	REMEDIAL
	08/28	09/04	09/11	09/18	VALUE	MISSED	CORRECTIVE ACTION
°Reject Rate QIs							
DCNs - Acceptance Rates	100	98.3	100	96.2	95%		
Calculations - Acceptance Rates	94.5	97.7	100	100	95%		
Procurement Document Reviews Acceptance Rates	94.9	93.9	100	94.9	95%	X	(1)
° Cycle Time QIs*							
° Capacity Utilization QIs*							
° Process Improvement QIs*							

*Under Development - More information later

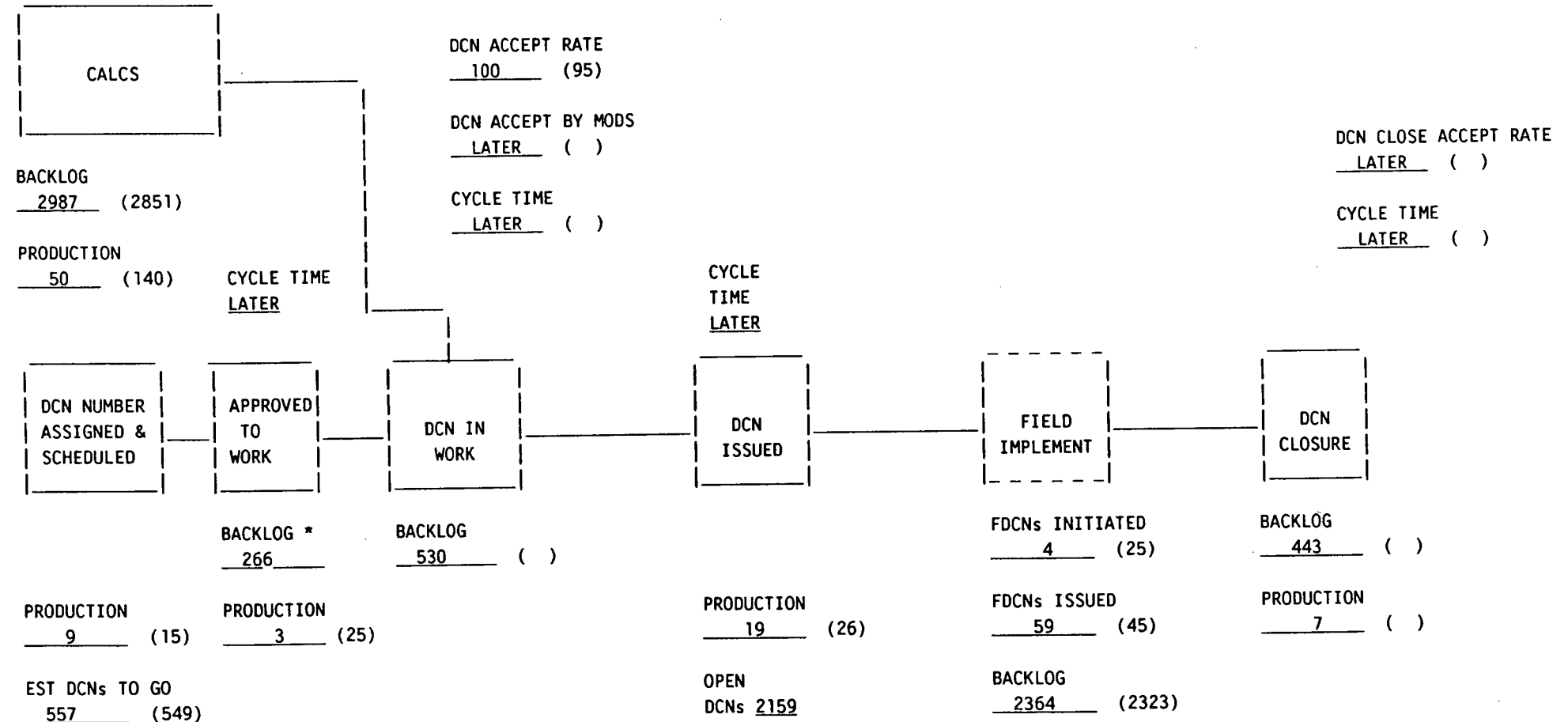
(1) Continue management emphasis on adherence to the administrative requirements of the new procedure.

DESIGN CHANGE PROCESS

WEEK ENDING 09/20/91
RESPONSIBLE MANAGER
W. L. ELLIOTT

CALC ACCEPT RATE
100 (95)

CYCLE TIME
LATER ()



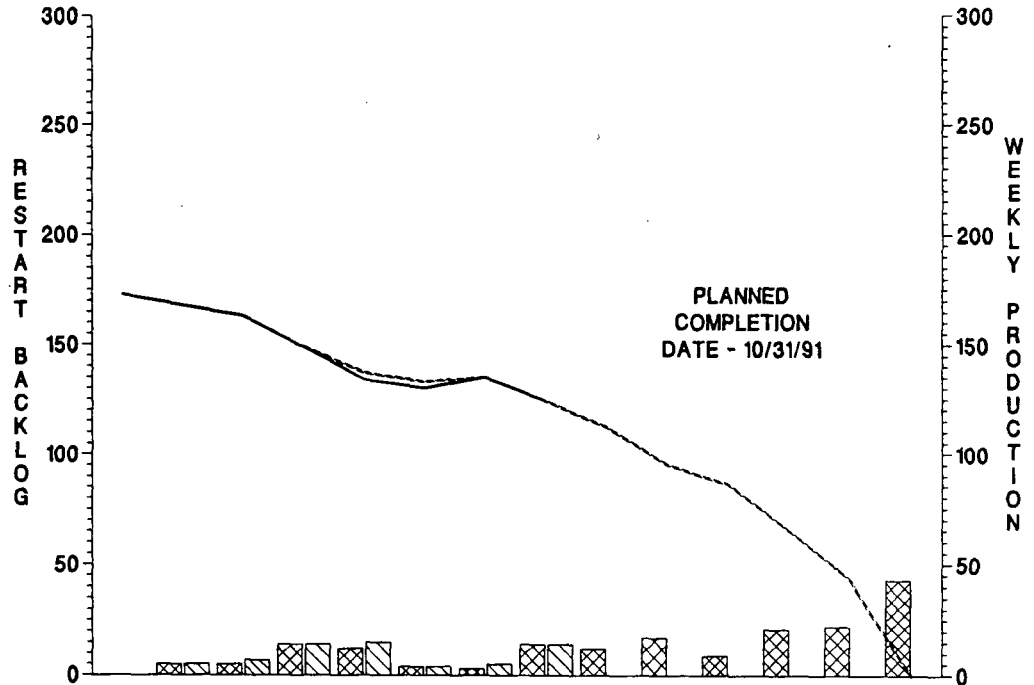
NOTE: GOALS IN () AFTER ACTUALS

Milestone : RESTART

FORM20

CORRECTIVE ACTIONS WBN - NUCLEAR ENGINEERING

RESPONSIBLE
MANAGER,
J. F. TORTORA



BASELINE	173	168	163	149	137	133	135	124	112	95	86	65	43	0
ACTUAL TO GO	173	168	163	149	134	130	135	124	112	95	86	65	43	0
PERIOD PLANNED		5	5	14	12	4	3	14	12	17	9	21	22	43
PERIOD ACTUAL		5	7	14	15	4	5	14						
PERIOD ADDED		0	2	0	0	0	10	3						
MANPOWER ACTUAL						215	230	230						
MANPOWER PROJECTED						215	230	240	250	260	270	280	290	290
WEEK ENDING	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

ANALYSIS: ON SCHEDULE

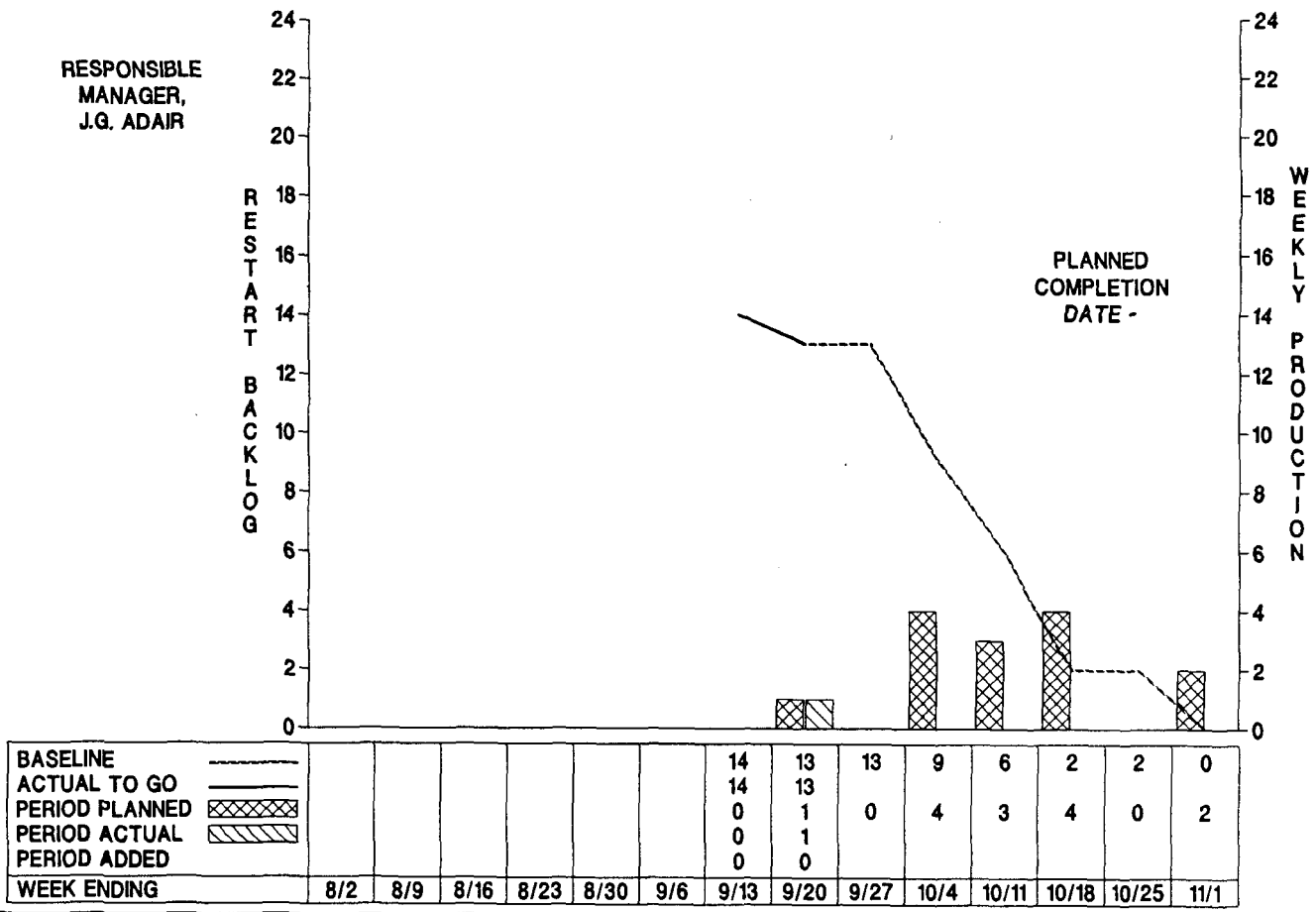
- * THIS WEEK THREE NEW RESTARTS WERE ADDED DUE TO A SCRUB WITH PENDING CORRECTIVE ACTIONS. THIS DID NOT INCREASE THE BOW WAVE OF 11/01/91. THE BOW WAVE FOR THE PERIOD 11/01/91 WAS REDUCED FROM 49 TO 43. ADDITIONAL EFFORTS WILL BE MADE TO PULL BACK 11/01/91 FINISHES.

ACTION/RECOVERY PLAN:

- * MANAGEMENT ATTENTION IS BEING FOCUSED ON MAINTAINING/IMPROVING PRODUCTION OF THE ABOVE BASELINE WORK-OFF CURVE.

CORRECTIVE ACTION TRACKING DOCUMENTS (CATDs)

WBN - NUCLEAR ENGINEERING



ANALYSIS: ON SCHEDULE

ACTION/RECOVERY PLAN:

- * INDIVIDUAL CATDs AND THEIR PREDECESSORS ARE SCHEDULED IN P2 AND ARE REVIEWED AT THE DAILY SCHEDULE MEETING TO MAINTAIN MANAGEMENT VISIBILITY.

TOP LICENSING ISSUES

	Priority Score
1. CIVIL/SEISMIC ISSUES (AMENDMENT 64)	183 (159)
Of 15 SSER 6 items, 6 items currently in NRC review. Discussions are ongoing with the Staff to address NRC questions as they arise. Other 9 original issues have been acceptably resolved.	
2. CIVIL COMMODITY CAP IMPLEMENTATION	168 (144)
NRC reviewing critical case methodology. Letter submitted to staff 06/28/91 to clarify the number of attributes to be used in evaluation of HVAC, Cable Tray and Conduit Support CAPs. Implementation review will be performed with IDI audit in January, 1992 to assure Staff reviewers of technical adequacy.	
3. CABLE ISSUES	162 (73)
NRC issued the safety evaluation for the cable issues CAP on April 25, 1991. WBN issued the pullby testing (Brand Rex) letter on 8/22/91.	
4. NRC BULLETIN 88-05	135 (43)
WBN proposed in an 8/1/91 ltr. to demonstrate by sample testing (contrary to bulletin) that the material is OK. NRC's position for NTOL plants was sent to TVA 8/27/91. TVA has expanded the scope of review to resolve this issue. Expanded scope has been scheduled and currently being entered in P2.	
5. ENVIRONMENTAL QUALIFICATION - SPECIAL PROGRAM	134 (NC)
Historically a politically sensitive issue at TVA. Need NRC review and approval of EQ program submitted to minimize risk of rework.	
6. STATION BLACKOUT RULE - USI A-44	132 (78)
NRC is encouraging WBN to submit plan for complying with the rule well before fuel load. Management decided that WBN would submit coping analysis as their response to SBO. Currently in the process of scoping and scheduling work for this method.	
7. QA RECORDS - CAP	129 (135)
NRC raised a concern on the scope of the Additional Systematic Records Review (ASRR). NRC issued an RAI 8/30/91. TVA's response is due 10/14/91.	
8. DESIGN BASELINE VERIFICATION PROGRAM (IDI) - CAP	106 (74)
NRC raised numerous concerns regarding calculation adequacy during January 1991 inspection. TVA's response to the issues has been submitted for staff review August 1, 1991. Civil calculation followup will occur in January 1992.	
9. FIRE PROTECTION - CAP	104 (56)
TVA is rebaselining the fire protection program at WBN. This draft report, to be completed by Engineering in November, has not been reviewed by NRC at this time.	

CORRECTIVE ACTION PROGRAM SPECIAL PROJECT GENERIC LIFE CYCLE

1988 SYSTEMATIC EVALUATION

- **October 1988 - January 1989**

Corrective Action Programs Submitted to NRC

- **May 1989**

Special Projects submitted in Nuclear Performance Plan
Volume 4

- **December 1989**

SER issued on NPP Volume 4

- **August 1989 - April 1991**

SERs issued for each of the CAPs

- **July - September 1990**

CAP/SP Criteria Review

- **TVA currently Implementing CAP/SP requirements**

- **75% Notification to NRC**

Initial 75% completion - All NE work complete, 50% of modifications
work complete, closure paperwork in the vault.

Current 75% complete consistent with the systems group completion
process:

- A. Mature Process
- B. All Discovery Complete
- C. All NE work complete for systems
- D. All modifications work complete for systems
- E. Open NRC items - Closed
- F. 75% completion notification to NRC

- **75% Completion Inspection**

CAP/SP Milestone Inspection

- **Project Completion**

ALL CAP/SP work complete, records in the vault

Completion Report is Prepared

QA Verification

TVA submit certification letter to NRC

- **NRC Closure Inspection**

- **NRC issues SSER on CAP/SP**

- **CAP/SP Status Meetings**

Purpose: Keep NRC Informed

CAP/SP - Methods
 Progress - Allow for Scheduling NRC Inspections
 Results

Meeting Participants - Working Level Meetings

NRR Project Manager
Region II Lead Inspectors for CAP/SP
TVA Lead NE Engineer
Lead Licensing Engineer
Resident Inspectors

Recommended Standard CAP/SP Meeting Agenda

- A. Reason for CAP/SP
- B. Methodology of CAP/SP:
 - 1. Changes if any from initial NRC review
 - 2. Critique of progress to date and lessons learned
 - 3. CAP/SP records
- C. Work to go
- D. Schedule - Include window for NRC Inspection

Schedule for Meetings - TBD

CAP/SP TITLE	PM/PCN	ISSUE/REV	SER
Cable Issues	Lalor/EA	12/16/88 0 06/27/89 1	04/25/91
Cable Tray & Tray Supports	Engel/WF	11/18/88 0	09/13/89
Design Baseline and Verification Program	McIntosh/DV	10/20/88 1 06/29/89 2 07/31/90 3	IR-89-12 11/20/89
Elec. Conduit and Conduit Supts	Engel/CG	11/18/88 1	09/01/89
Electrical Issues	Lalor/EA	02/15/89 0	09/11/89
Equipment Seismic Qualification	Raheja/GH	12/23/88 0 06/29/89 1	09/11/89
Fire Protection	Jordan/BJ	12/16/88 0 03/28/90 1	09/07/89
Hanger & Analysis Update Program	Skaggs/HR,HN	11/18/88 0 06/29/89 1	10/06/89
Heat Code Traceability	Briggs/HC	12/23/88 0 06/26/89 1 09/21/89 2	09/20/89
HVAC Duct and Duct Supports	Engel/WE	11/18/88 0	10/24/89
Instrument Lines	Skaggs/HB	12/23/88 0 06/12/89 1 06/27/89 2	09/08/89
Prestart Test	McCabe/RK	12/30/88 1 06/26/89 2	10/17/89

CAP/SP TITLE	PM/PCN	ISSUE/REV	SER
QA Records	Lewis/BV	12/21/88 2 06/27/89 3	12/08/89
Q-List	McIntosh/LR	10/27/88 1 12/16/88 2 07/20/90 3	09/11/89
Replacement Items	F. Smith/PP	12/14/88 0 08/07/89 1 08/25/89 2 07/31/90 3	11/22/89
Seismic Analysis	Raheja/CY	06/29/89 1 05/09/90 2	09/07/89
Vendor Information	McIntosh/DV	12/14/88 1 03/15/90 3	09/11/90
Welding	Taylor/WP,WT	01/13/89 0 05/12/89 1 07/31/90 2	IR 89-04 NUREG 1232 03/05/91
Concrete Quality Program	N/A	NPP Volume 4 Rev. 0 05/22/89 Rev. 1 09/06/91	IR 90-26 01/08/91
Containment Cooling	Smith/BE	NPP Volume 4 Rev. 0 05/22/89 Rev. 1 09/06/91	NUREG 1232 Vol. 4
Detailed Control Room Design Review	Maddox/CR	NPP Volume 4 Rev. 0 05/22/89 Rev. 1 09/06/91	NUREG 1232 Vol. 4
Environmental Qualification	Kokesh/EC	NPP Volume 4 Rev. 0 05/22/89 Rev. 1 09/06/91	NUREG 1232 Vol. 4

CAP/SP TITLE	PM/PCN	ISSUE/REV	SER
Master Fuse List	Keller/DN	NPP Volume 4 Rev. 0 05/22/89 Rev. 1 09/06/91	02/06/91
Mech. Eqpt. Qualification	Kokesh/DJ	NPP Volume 4 Rev. 0 05/22/89 Rev. 1 09/06/91	NUREG 1232 Vol. 4
Microbiologically Ind. Corr.	McIntosh/DE	NPP Volume 4 Rev. 0 05/22/89 Rev. 1 09/06/91	NUREG 1232 Vol. 4
Mod. Energy Line Break Flooding	Smith/EB	NPP Volume 4 Rev. 0 05/22/89 Rev. 1 09/06/91	NUREG 1232 Vol. 4
Radiation Monitoring Sys.	Bruce/AW	NPP Volume 4 Rev. 0 05/22/89 Rev. 1 09/06/91	NUREG 1232 Vol. 4
Soil Liquefaction	Raheja/CA	NPP Volume 4 Rev. 0 05/22/89 Rev. 1 09/06/91	NUREG 1232 Vol. 4
Use-As-Is CAQs	McIntosh/BD	NPP Volume 4 Rev. 0 05/22/89 Rev. 1 09/06/91	NUREG 1232 Vol. 4
Containment Isolation	McIntosh/AW	10/20/88 0 05/12/89 Withdrawn	

WATTS BAR CAPs AND SPs
REMAINING NRR AUDITS/INSPECTIONS

The following information is derived from the WISP report, wall charts and discussions in monthly licensing status meetings. Note that none of these audits/inspections are tied to the '75 % completion' criterion:

Cable CAP

One or two audits remaining, to be performed when TVA is ready to resolve the issues of ampacity, hot pipe and cable jamming; will discuss in licensing status meetings.

CAPs on Cable Tray, Conduit Support, Equipment Seismic Qual., HAAUP, HVAC Support

One audit to be done to close IR 89-14 and 90-05 open issues; TVA should propose date.

Implementation inspection to be done as part as IDI inspection, currently scheduled for 1/92; TVA should continue to inform the staff as to readiness. NRR will send 'bag man' to site to make final decision on Watts Bar readiness.

CAP on DBVP (IDI)

One team inspection, currently scheduled for 1/92; NRR 'bag man' will determine Watts Bar readiness. This audit will review (1) mechanical calcs., (2) civil CAP implementation as stated above, (3) close out of IR 91-201 issues.

Fire Protection CAP

One audit is usually done as part of fire protection and safe shutdown review; no date has been set since NRR has not received submittal.

QA Records, Q-List CAPs

One final audit; will discuss date in future licensing status meetings.

Seismic Analysis CAP and Civil Calcs Review

One audit of seismic CAP likely; will discuss in future licensing status meetings.

NRR staff is evaluating need for one more audit on civil calcs; will discuss in future licensing status meetings.

SP on DCRDR

One HED audit, as is typical for any DCRDR review, to be done

within a year of OL issuance.

SPs on EQ and Mechanical EQ

One audit as part of EQ review likely, though not for sure; will discuss in licensing status meetings.

Containment Isolation (almost became a SP)

One site review, tentatively set for 8/92; will discuss in licensing status meetings.

'Functional' SPDS (not a CAP or SP)

One audit, as is typical for any SPDS review, to be done within a year of OL issuance.

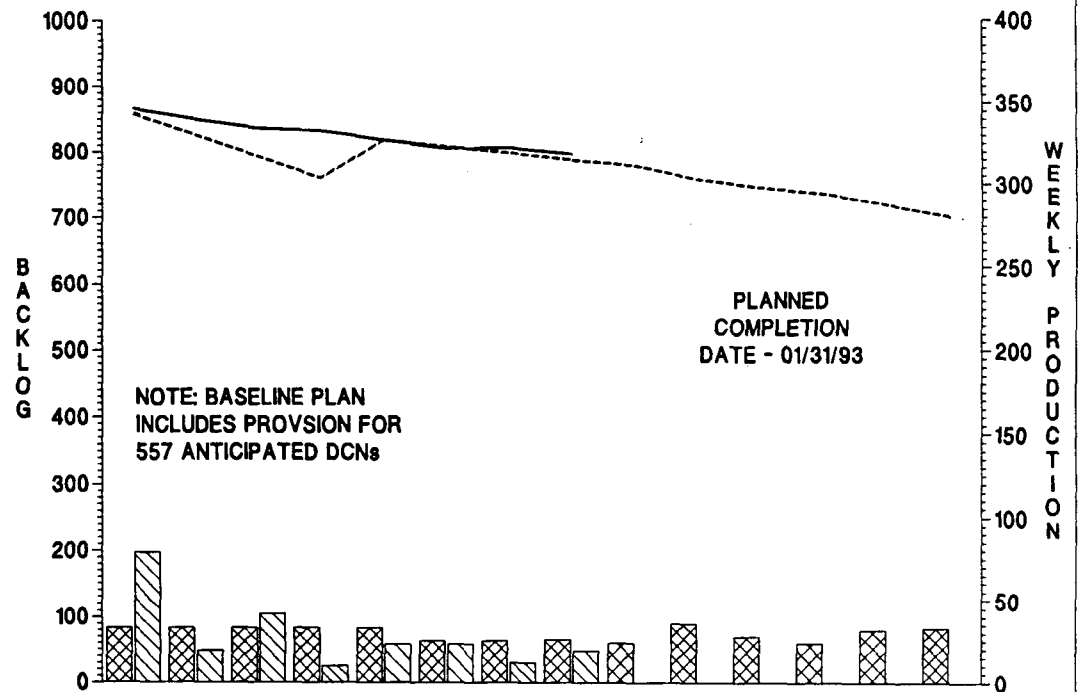
Milestone : N/A

WKJSHDCN

ISSUANCE OF DESIGN CHANGE NOTICES (DCNs)

WBN - NUCLEAR ENGINEERING

RESPONSIBLE
MANAGER,
W. L. ELLIOTT



BASELINE	859	826	793	760	818	808	798	787	778	757	744	735	718	700
ACTUAL TO GO	866	850	837	833	818	805	806	796	778	757	744	735	718	700
PERIOD PLANNED	33	33	33	33	33	25	25	26	24	36	28	24	32	33
PERIOD ACTUAL	79	19	42	10	23	23	12	19						
PERIOD ADDED	63	3	29	6	8	10	13	9						
MANPOWER ACTUAL						84	70	63						
MANPOWER PLANNED						120	120	123	122	130	135	140	140	140
WEEK ENDING	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

ANALYSIS: BEHIND SCHEDULE

- * DCN PRODUCTION HAS BEEN IMPACTED BY THE REALLOCATION OF CONTRACTOR RESOURCES TO WORKOFF 'RESTART CORRECTIVE ACTIONS'. WORK HAS RESUMED ON PROJECT 'WL' (ECN CONVERSION) AND ALL BUT THREE OF THE REMAINING ECNs ARE TO BE CONVERTED BY 09/30/91).

ACTION/RECOVERY PLAN:

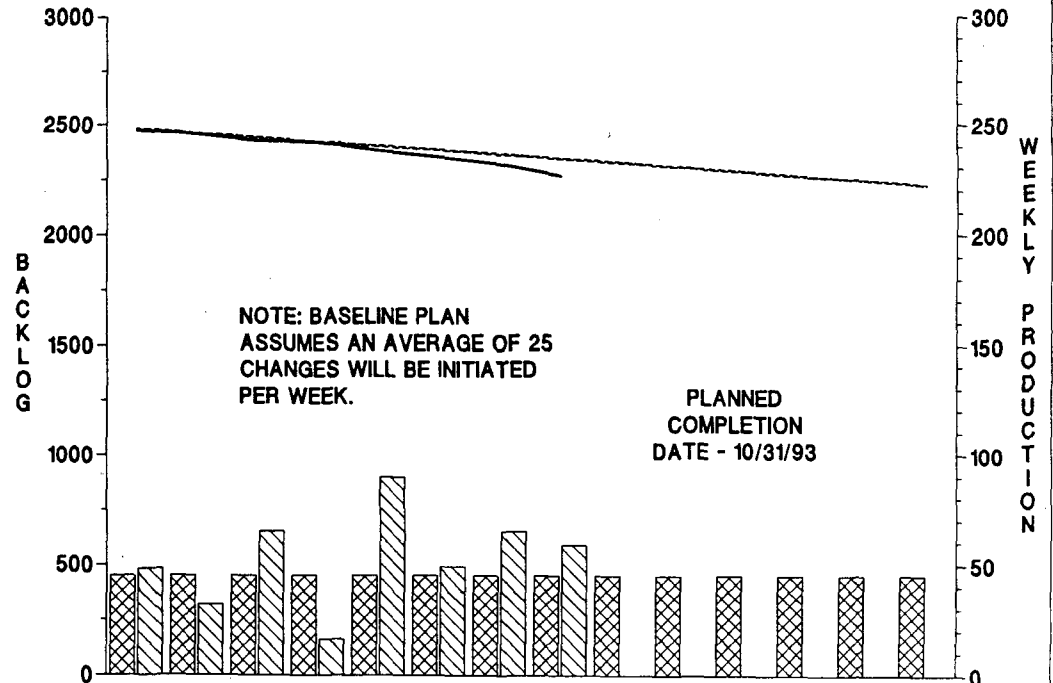
- * THE EBASCO ANALYSIS OF IMPACTS DUE TO REALLOCATION OF MANPOWER TO 'RESTART CORRECTIVE ACTIONS' HAS BEEN RECEIVED AND IS IN FINAL REVIEW. TVA WILL CONCUR ON SPECIFIC DELIVERABLES TO BE DEFERRED BY 09/19/91 AND THE RESULTING IMPACTS ON PRODUCTION WILL BE REFLECTED ON NEXT WEEKS GRAPH.

Milestone : N/A

FIELD INITIATED DESIGN CHANGES

WBN - NUCLEAR ENGINEERING

RESPONSIBLE
MANAGER,
C.E. FLOYD



BASELINE	2483	2463	2443	2423	2403	2383	2363	2343	2323	2303	2283	2263	2243	2223
ACTUAL TO GO	2478	2459	2428	2421	2382	2351	2319	2264						
PERIOD PLANNED	45	45	45	45	45	45	45	45	45	45	45	45	45	45
PERIOD ACTUAL	48	32	65	16	90	49	65	59						
PERIOD ADDED	23	13	34	9	51	18	33	4						
MANPOWER ACTUAL						45	45	45						
MANPOWER PROJECTED						45	45	45	45	45	45	45	45	45
WEEK ENDING	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

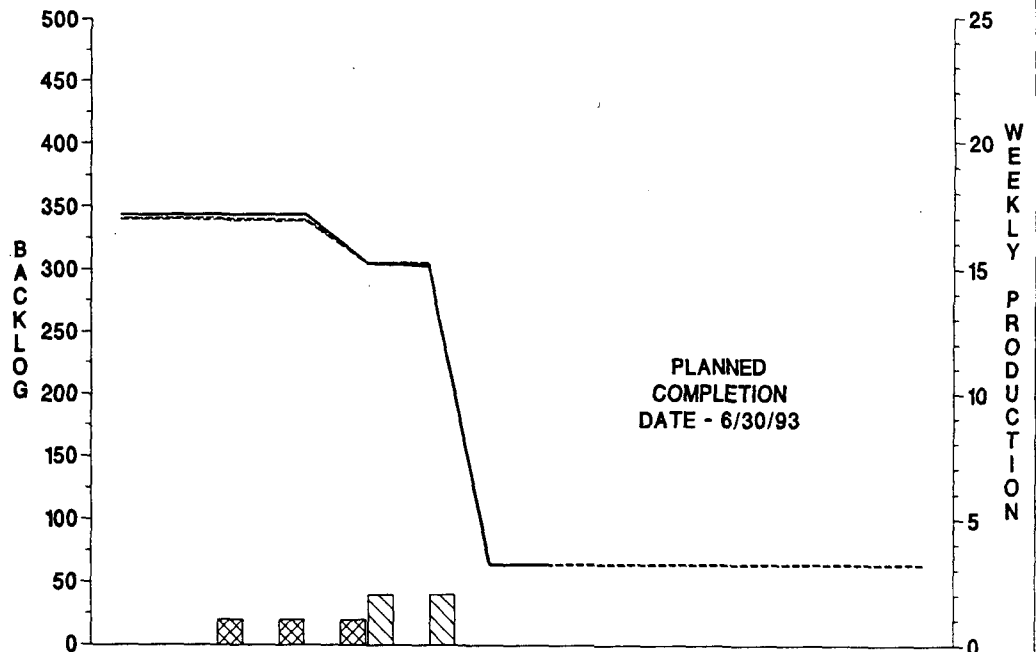
ANALYSIS: AHEAD OF SCHEDULE

- * AT THIS TIME THERE IS NO ANTICIPATED IMPACT ON THIS EFFORT AS A RESULT OF REALLOCATING MANPOWER TO RESTART CORRECTIVE ACTIONS.

Milestone : N/A

FORM 19

ELECTRICAL ESSENTIAL CALCULATIONS

INITIAL ISSUE
WBN - NUCLEAR ENGINEERINGRESPONSIBLE
MANAGER,
J. D. COLLINS

BASELINE	341	341	340	339	305	305	64	64	64	64	64	64	64	64
ACTUAL TO GO	344	344	344	344	305	303	64	64	64	64	64	64	64	64
PERIOD PLANNED	0	0	1	1	1	0	0	0	0	0	0	0	0	0
PERIOD ACTUAL	0	0	0	0	2	2	0	0	0	0	0	0	0	0
PERIOD ADDED	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MANPOWER ACTUAL						1	1	1	1	1	1	1	1	1
MANPOWER PROJECTED						1	1	1	1	3	3	3	3	3
WEEK ENDING	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

ANALYSIS: ON SCHEDULE

- * FORTY-FIVE (45) OF THE REMAINING CALCULATIONS REQUIRE COMPLETION OF FIELD WORK (INSTRUMENT SENSE LINES) BEFORE THEY CAN BE ISSUED.
- * OF THE 19 REMAINING CALCULATIONS (TWO ELECTRICAL AND 17 I&C) ONLY ONE ELECTRICAL CALCULATION AND FOUR I&C CALCULATIONS ARE SCHEDULED FOR COMPLETION THIS CALENDAR YEAR. THE REMAINING 14 CALCULATIONS ARE SCHEDULED TO BE COMPLETED BY THE END OF FY 92 TO SUPPORT SYSTEMS COMPLETION.

Milestone : N/A

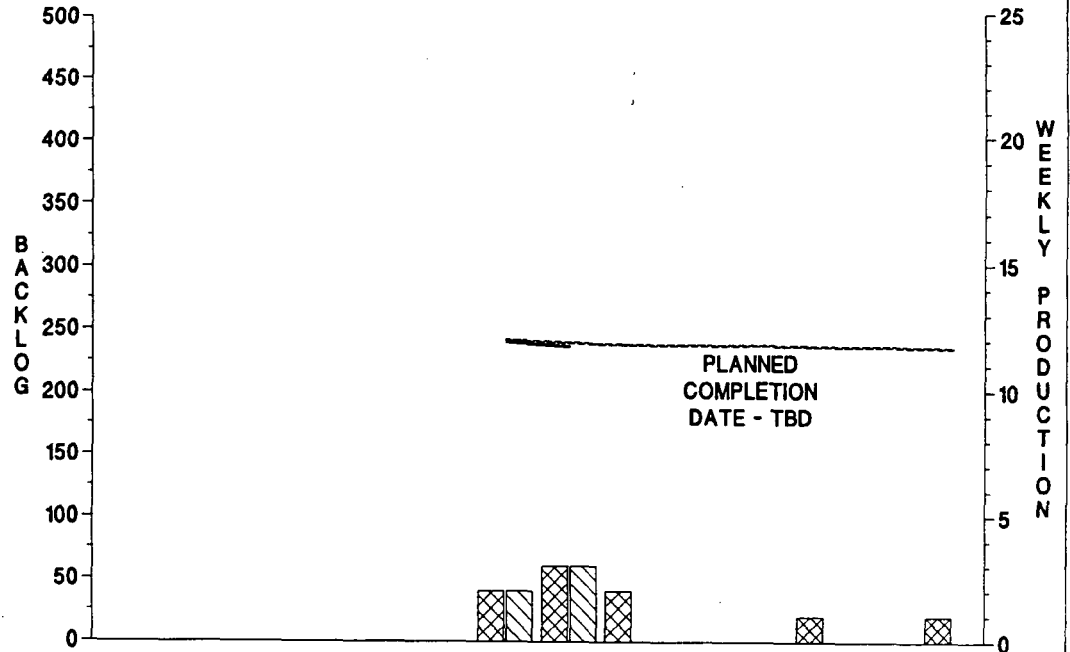
FORM 17

ELECTRICAL ESSENTIAL CALCULATIONS

REMOVAL OF UNVERIFIED ASSUMPTIONS (UVAs)

WBN - NUCLEAR ENGINEERING

RESPONSIBLE
MANAGER,
J. D. COLLINS

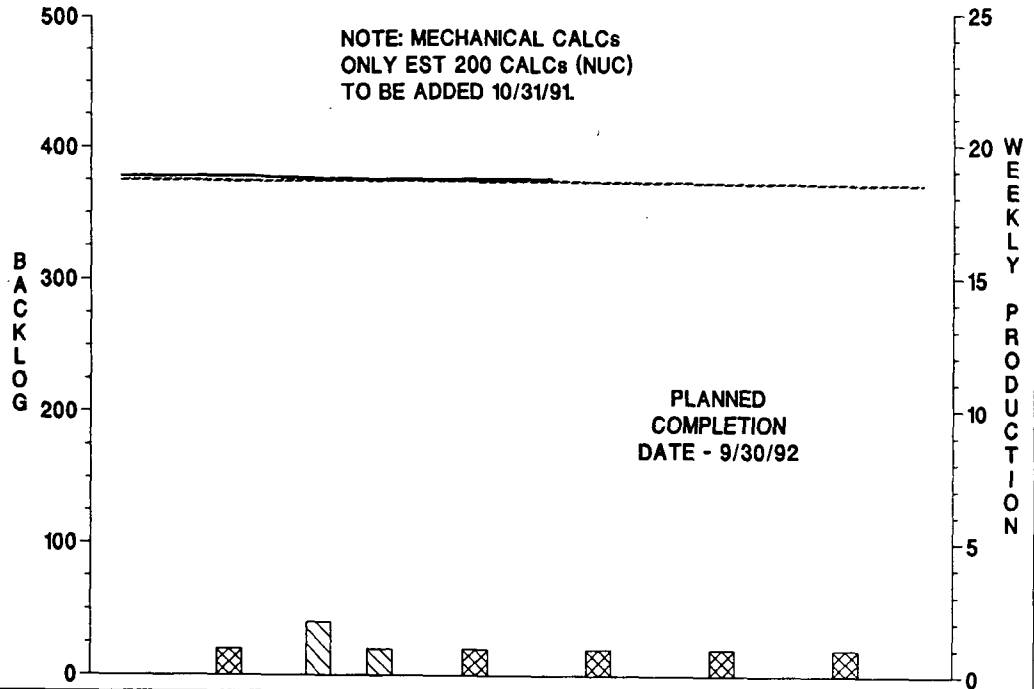


ANALYSIS: ON SCHEDULE

- * 201 OF THE REMAINING CALCULATIONS ARE RESTRAINED BY COMPLETION OF FIELD WORK (PRIMARILY INSTRUMENT SENSE LINES).
- * THE MAJORITY OF THE REMAINING CALCULATIONS ARE SCHEDULED TO BE COMPLETED BY THE END OF THE THIRD QUARTER OF FY 92 TO SUPPORT SYSTEMS COMPLETION.

MECHANICAL/NUCLEAR ESSENTIAL CALCULATIONS

WBN - NUCLEAR ENGINEERING

RESPONSIBLE
MANAGER,
S.D. FERRELLNOTE: MECHANICAL CALCs
ONLY EST 200 CALCs (NUC)
TO BE ADDED 10/31/91.

BASELINE	375	375	374	374	374	374	373	373	372	372	371	371	370	370
ACTUAL TO GO	378	378	378	376	375	375	375	375						
PERIOD PLANNED	0	0	1	0	0	0	1	0	1	0	1	0	1	0
PERIOD ACTUAL	0	0	0	2	1	0	0	0						
PERIOD ADDED	0	0	0	0	0	0	0	0						
MANPOWER ACTUAL						12	10	12						
MANPOWER PROJECTED						12	13	18	18	30	30	30	44	44
WEEK ENDING	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

ANALYSIS: BEHIND SCHEDULE

- * THE GRAPH REFLECTS ONLY MECHANICAL CALCs (ISSUE OR UVA REMOVAL). NUCLEAR CALCs (150-200) TO BE ADDED AFTER SCOPE REVIEW, FORECASTED 10/30/91.

ACTION/RECOVERY PLAN:

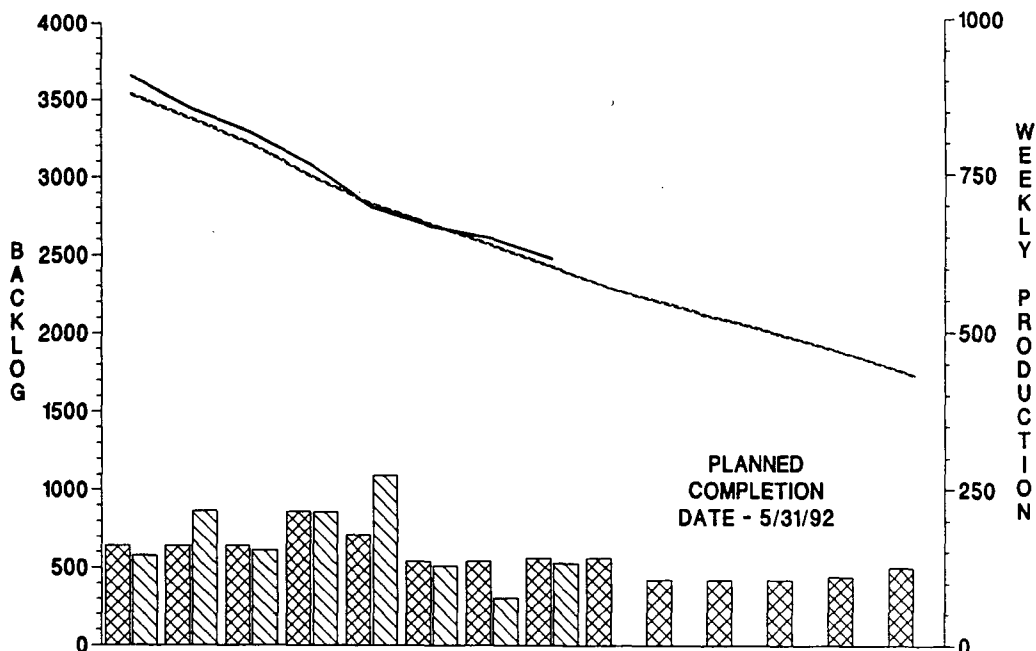
- * TVA AND EST ARE CONTINUING TO DEVELOP THE PLAN TO ADDRESS PROBLEMS IN THE AUX. FEEDWATER ANALYSIS AND TO PROVIDE THE REQUISITE MANAGEMENT TEAM TO ADEQUATELY RUN THE MECH CALC PROGRAMS. PLANS INCLUDING IMPARTS TO THE PRODUCTION CURVE WILL BE FINALIZED 09/30/91.

Milestone : N/A

CIVIL ESSENTIAL CALCULATIONS

INITIAL ISSUE
WBN - NUCLEAR ENGINEERING

RESPONSIBLE
MANAGER,
R.O. HERNANDEZ



BASELINE	3536	3376	3216	3001	2824	2689	2554	2414	2274	2169	2064	1959	1849	1724
ACTUAL TO GO	3656	3440	3287	3073	2801	2674	2598	2467						
PERIOD PLANNED	160	160	160	215	177	135	135	140	140	105	105	105	110	125
PERIOD ACTUAL	144	216	153	214	272	127	76	131						
PERIOD ADDED	0	0	0	0	0	0	0	0						
MANPOWER ACTUAL						250	253	240						
MANPOWER PROJECTED						283	283	283	283	356	356	356	356	356
WEEK ENDING	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

ANALYSIS: BEHIND SCHEDULE

- * THE DELTA IS 53 BEHIND THE PLAN. THIS IS DUE TO UNREALIZED PLANNED STAFFING LEVELS DURING AUGUST AND SEPTEMBER 1991 IN PWLS WE (HVAC) AND WF (CABLE TRAYS).
- * THE IMPACT OF WORKING RESTART CAS IS BEING FELT PRIMARILY IN THE PIPING AND SUPPORT AREA (PWLS HR, HN AND HB).

ACTION/RECOVERY PLAN:

- * THE SCHEDULES FOR PWLS: CG, WE, WF HR, HN AND HB HAVE BEEN SCRUBBED TO REFLECT THE SHIFT OF SOME EFFORT TO RESTART CAS AND THE RECENT HEADCOUNT LIMITATIONS.
- * THE RESULTS OF THE SCHEULE SCRUB WILL BE REFLECTED BY 10/04/91 WITHOUT IMPACTING THE OVERALL COMPLETION SCHEDULE.

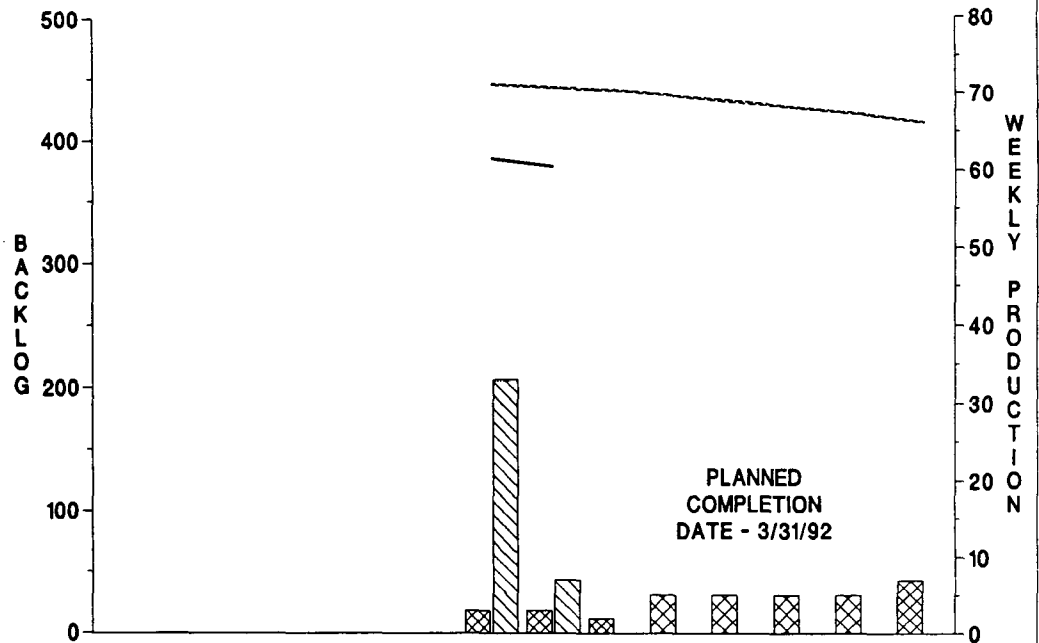
Milestone : N/A

CIVIL CALCULATIONS

REMOVAL OF UNVERIFIED ASSUMPTIONS

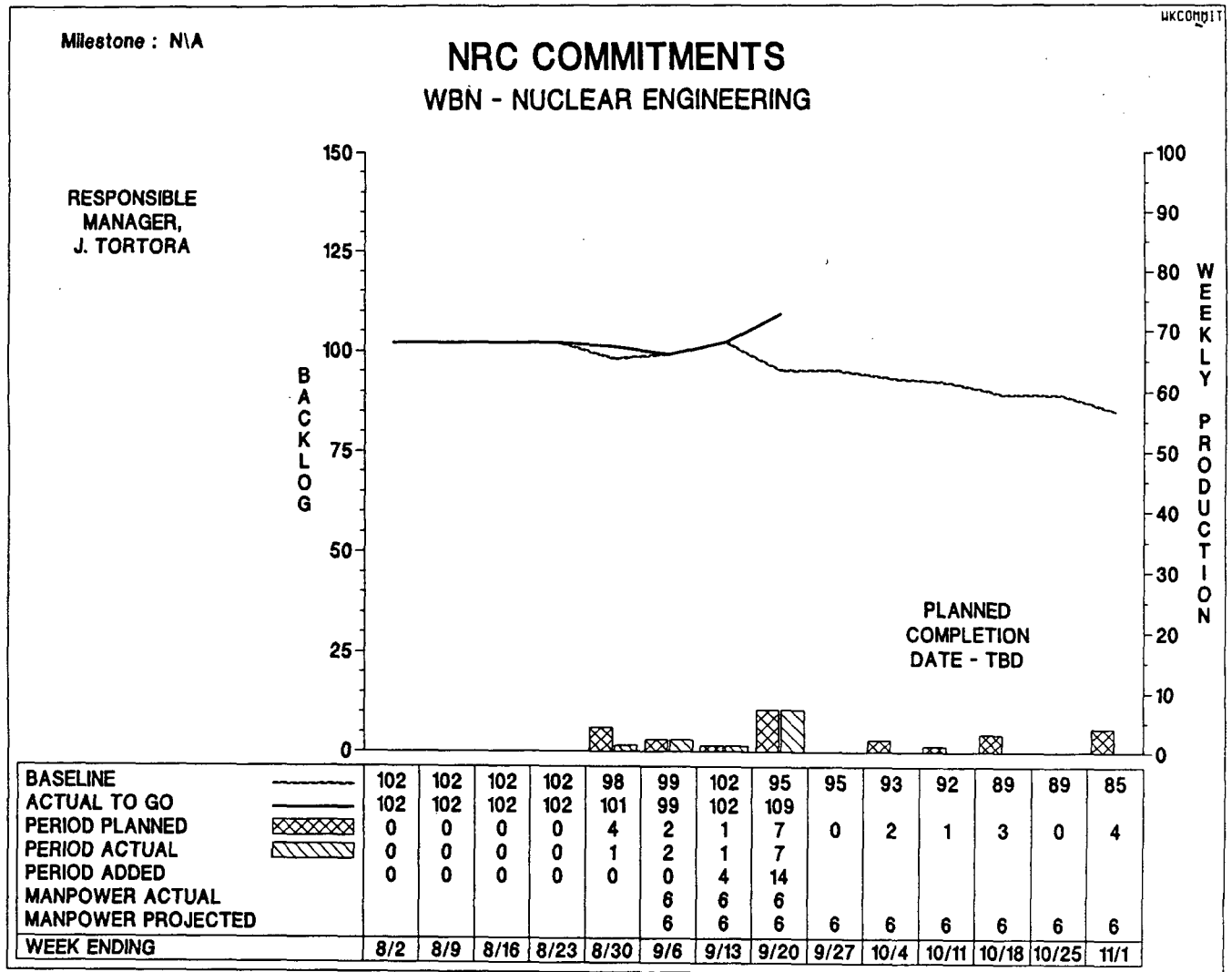
WBN - NUCLEAR ENGINEERING

RESPONSIBLE
MANAGER,
J.G.ADAIR



BASELINE	-----							445	442	440	435	430	425	420	413
ACTUAL TO GO	-----							385	378						
PERIOD PLANNED	-----							3	3	2	5	5	5	5	7
PERIOD ACTUAL	-----							33	7						
PERIOD ADDED	-----							0	0						
MANPOWER ACTUAL	-----							3	2						
MANPOWER PROJECTED	-----							2	2	2	2	2	2	2	2
WEEK ENDING		8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

ANALYSIS: AHEAD OF SCHEDULE



ANALYSIS: BEHIND SCHEDULE

- * ACTUAL PRODUCTION HAS BEEN IN ACCORDANCE WITH THE PLAN. THE CURRENT SCHEDULE DEFICIT IS A RESULT OF NEW COMMITMENTS, ALL WHICH WERE TRANSFER OF OWNERSHIP FROM THE PROJECT MANAGEMENT ORGANIZATION.

ACTION/RECOVERY PLAN:

- * ENGINEERING WILL REVIEW OTHER ITEMS TO BE TRANSFERRED WITH THE PROJECT MANAGEMENT ORGANIZATION AND REBASELINE THE WORKOFF CURVE TO REFLECT THE ADDITIONAL COMMITMENTS BY 10/04/91.

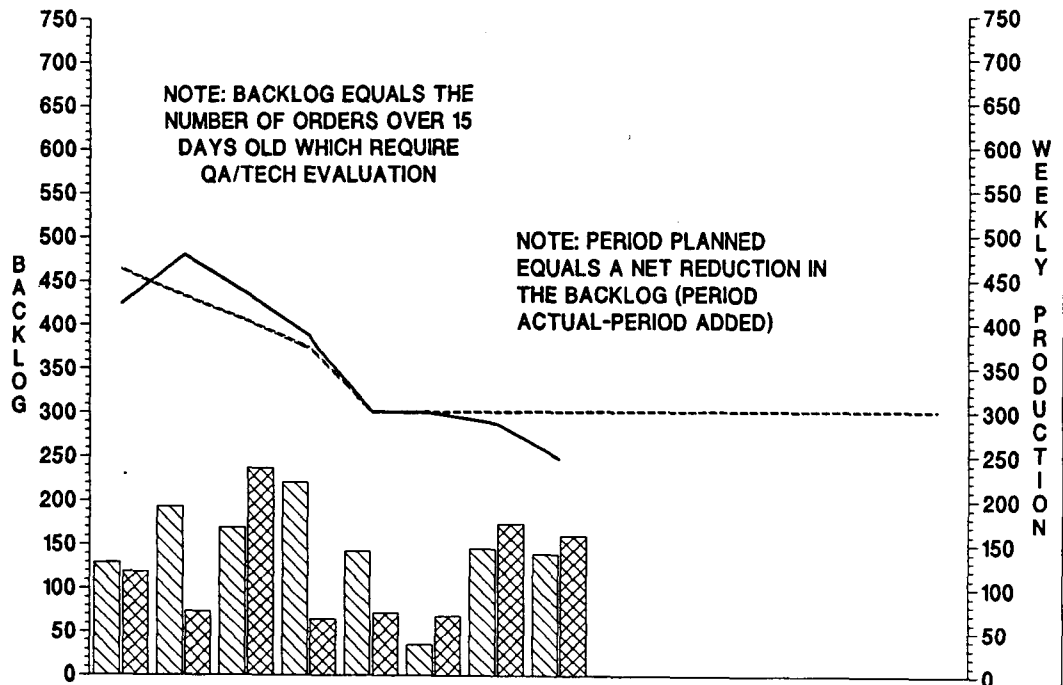
Milestone : RESTART

WKPEG

PROCUREMENT ENGINEERING BACKLOG

WBN - NUCLEAR ENGINEERING

RESPONSIBLE
MANAGER,
W.R. ROGERS



BASELINE	-----	464	433	405	374	300	300	300	300	300	300	300	300	300	300
ACTUAL TO GO	-----	424	480	436	387	301	299	287	247						
PERIOD PLANNED	-----	31	31	28	31	74	0	0	0	0	0	0	0	0	0
PERIOD ACTUAL	▨	129	193	169	220	142	35	145	139						
PERIOD ADDED	▩	119	73	236	64	72	68	173	160						
MANPOWER ACTUAL							26	26	25						
MANPOWER PLANNED							26	26	26	26	26	26	26	26	26
WEEK ENDING		8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

ANALYSIS: ON SCHEDULE

ACTION/RECOVERY PLAN:

- * AN INTERNAL TARGET IS ESTABLISHED TO ENSURE THAT THE BACKLOG IS HELD BELOW 300.
- * INCOMING WORK WILL BE MONITORED DAILY AND OVERTIME WORKED AS NECESSARY TO MAINTAIN THE BACKLOG BELOW 300.

III. ENGINEERING/MODIFICATIONS (continued)

B. MODIFICATIONS

WEEKLY QUALITY INDICATORS

Quality Indicator Description	VALUE - WEEK ENDING				TARGET	TARGET	REMEDIAL
	08/28	09/04	09/11	09/18	VALUE	MISSED	CORRECTIVE ACTION
Workplan Development							
A. Second Party Reviews Acceptance Rate	97	93	98	94	95%	X	(1)
B. Quality Specialist Review Acceptance Rate		98	98	98	97%		
Second-Party Review on Safety Net Workplan Closures	96	97	92	94	95%	X	(2)
° Cycle Time QIs*							
° Capacity Utilization QIs*							
° Process Improvement QIs*							

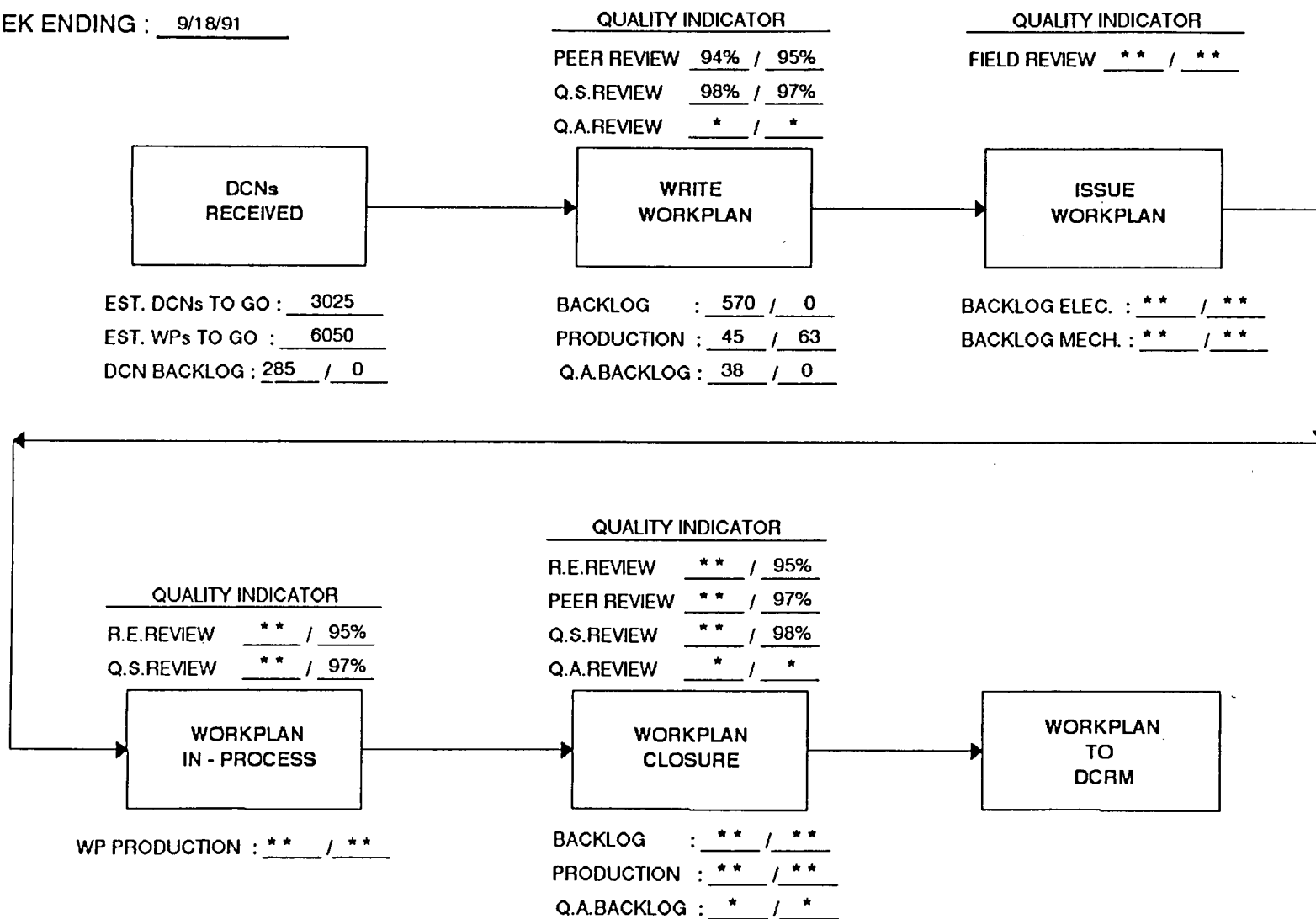
* Under development more information later.

- (1) Electrical workplan technical attributes is the most significant problem with a 26 percent reject rate. The rejection rate increase of 4 percent was due to increased attention to detail by peer reviewers and emphasis by management to increase workplan quality as a result of the low acceptance rate last week by QE and Quality Specialists.
- (2) The rejection rate is higher than the acceptable rate due to recent contractor staff augmentation as indicated by the number of packages reviewed for the reporting period. Contractors assigned to this task are progressing through a learning curve; therefore, improvement in this area is anticipated as indicated by the overall progress made since August 2, 1991. Specific attributes rejected will be discussed with contractor and TVA employees and any additional training required will be provided.

MODIFICATIONS

WORKPLAN PROCESS

WEEK ENDING : 9/18/91



NOTES

- * - Information to be provided by Q.A.
- ** - Quality Indicators on new workplans will be developed using goals shown throughout restart effort. Backlog and production are not applicable at present.

Legend - Actual / Goal

Milestone : RESTART

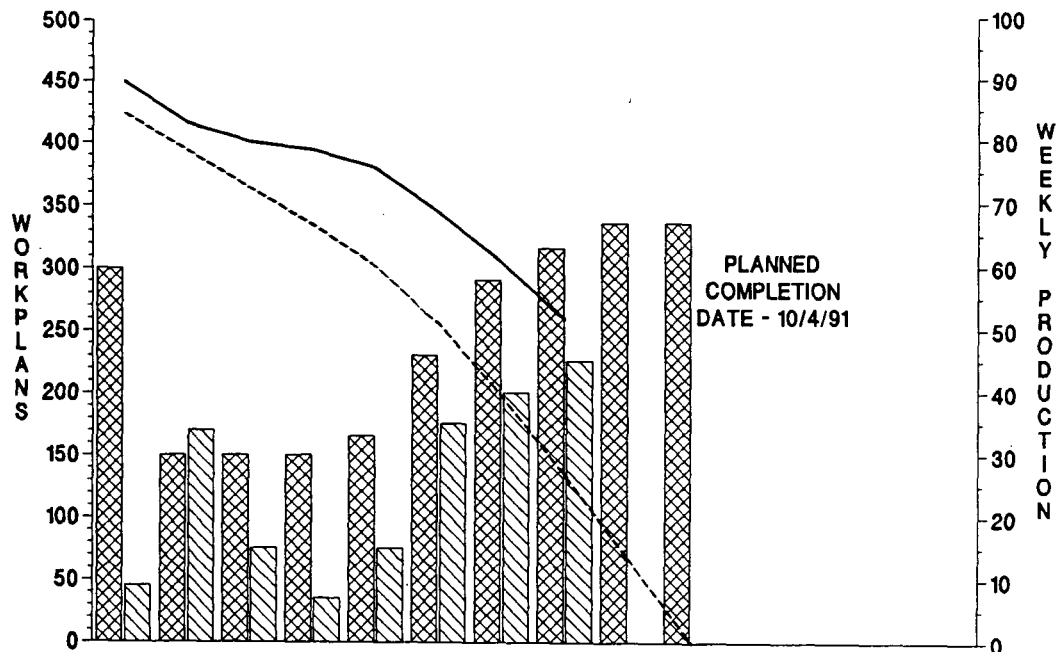
QP81

WORKPLAN DEVELOPMENT BACKLOG

500 APPROVED WORKPLANS

WBN - MODIFICATIONS

RESPONSIBLE
MANAGER,
R.W. JOHNSON



BASLINE	424	394	364	334	301	255	197	134	67	0					
ACTUAL TO GO	450	416	401	394	379	344	304	259							
PERIOD PLANNED	60	30	30	30	33	46	58	63	67	67					
PERIOD ACTUAL	9	34	15	7	15	35	40	45							
PERIOD ADDED	0	0	0	0	0	0	0	0							
MANPOWER ACTUAL						32	32	32							
MANPOWER PLANNED						32	32	32	37	37					
WEEK ENDING	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1	

ANALYSIS: BEHIND SCHEDULE

- * PRODUCTION HAS CONTINUED TO INCREASE DUE TO ADDITIONAL STAFF AUGMENTATION, AND SHOULD CONTINUE TO INCREASE AS THE NEW STAFF TRAINING IS COMPLETED.

ACTION/RECOVERY PLAN:

- * THE ACTION PLAN IS IN PLACE WITH THE EXCEPTION OF A COMPUTERIZED EQ DATA BASE. (NE ESTIMATED COMPLETION DATE 10/01/91).
- * WORKING TWO SHIFTS AND 6-10'S.

HTL MANHOUR BACKLOG SUMMARY:

	WORKPLANS		**MRs/WRs**		**TOTAL**
	NUMBER APPROVED	HTL MANHOURS	NUMBER APPROVED	HTL MANHOURS	HTL MANHOURS
ELECTRICAL	98	33,276	7	942	34,218
HANGERS	96	69,582	0	0	69,582
MECHANICAL	47	10,477	2	276	10,753
TOTAL	241	113,335	9	1,218	114,553

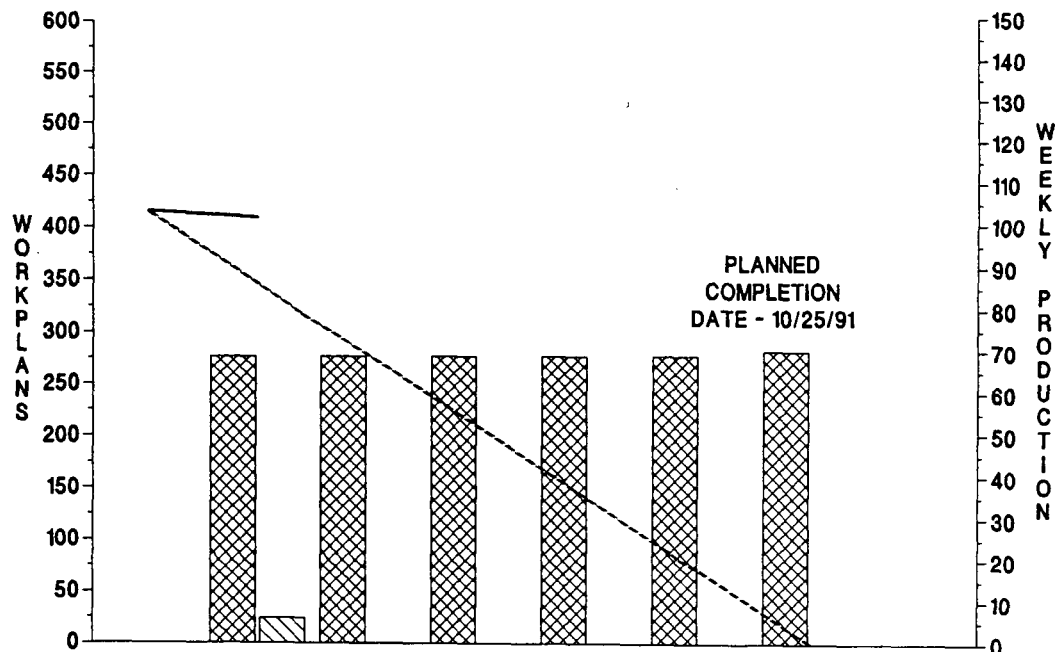
Milestone : RESTART

OLD WORKPLAN CLOSURE

REQUIRED FOR RESTART

WBN - MODIFICATIONS

RESPONSIBLE
MANAGER,
R.W. JOHNSON



BASELINE		415	346	277	208	139	70	0	
ACTUAL TO GO		415	409						
PERIOD PLANNED		0	69	69	69	69	69	70	
PERIOD ACTUAL		0	6						
PERIOD ADDED		0	0						
MANPOWER ACTUAL		0	0						
MANPOWER PLANNED		0	0						
WEEK ENDING		9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

ANALYSIS: BEHIND SCHEDULE

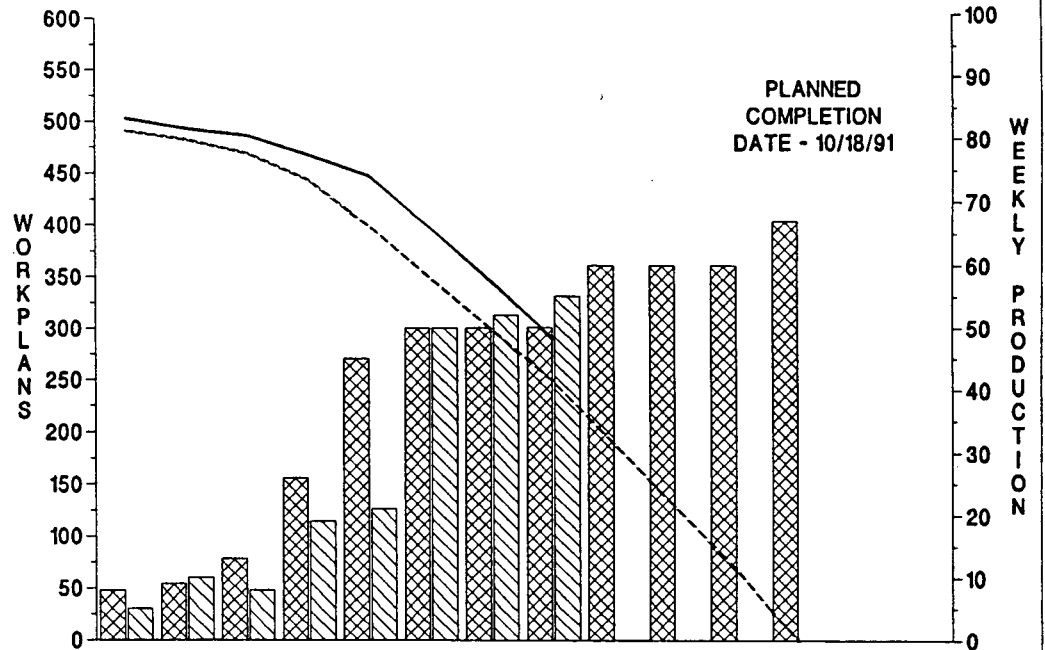
RECOVERY/ACTION PLAN:

- * QE CURRENTLY HAS A BACKLOG OF 130 WORKPLANS FOR CLOSURE REVIEW. ADDITIONAL MANPOWER NEEDS TO BE ALLOCATED BY QE TO SUPPORT THIS RESTART GOAL.

Milestone : RESTART

SAFETY NET WORKPLAN REVIEW REQUIRED FOR RESTART WBN - MODIFICATIONS

RESPONSIBLE
MANAGER,
R.W. JOHNSON



BASELINE	491	482	469	443	398	348	298	247	187	127	67	0		
ACTUAL TO GO	503	493	486	467	446	396	344	289						
PERIOD PLANNED	8	9	13	26	45	50	50	50	60	60	60	67		
PERIOD ACTUAL	5	10	8	19	21	50	52	55						
PERIOD ADDED	0	0	1	0	0	0	0	0						
MANPOWER ACTUAL						62	62	57						
MANPOWER PROJECTED						62	62	62	62	62	62	62		
WEEK ENDING	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

ANALYSIS : Behind schedule

- Production continues to increase due to contractors progressing through the learning curve to the extent some resources were distributed to other projects in support of Modification Restart Effort.

RECOVERY/ACTION PLAN :

Action plan is in place and total recovery is forecast for 10/4/91.

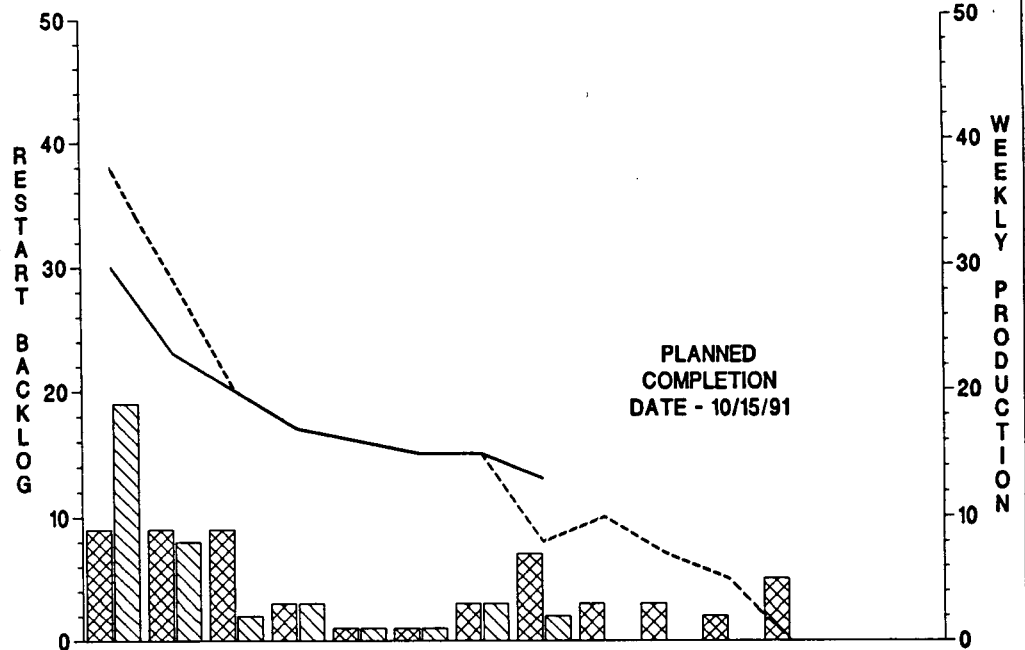
The "Period Planned" bar reflects the production average required to maintain present completion date and not actual scheduled activities for each period.

Milestone : RESTART

CORRECTIVE ACTIONS

CLOSED, BLUE DOT, OR APPROVED FOR POST RESTART
WBN - MODIFICATIONS

RESPONSIBLE
MANAGER,
R.W. JOHNSON



BASELINE	38	29	20	17	16	15	15	8	10	7	5	0		
ACTUAL TO GO	30	23	20	17	16	15	15	13						
PERIOD PLANNED	9	9	9	3	1	1	3	7	3	3	2	5		
PERIOD ACTUAL	19	8	2	3	1	1	3	2						
PERIOD ADDED	0	0	0	0	0	0	3	0						
MANPOWER ACTUAL						2	2	2						
MANPOWER PROJECTED						2	2	2	2	2	2	2		
WEEK ENDING	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

ANALYSIS : Rescheduled

Of the 13 CAs remaining, 11 are restrained/in review by other organizations as outlined in Recovery/Action Plan.

RECOVERY/ACTION PLAN :

- 3 – Restrained by NE. Present NE completion date is 10/15/91.
- 7 – Being reviewed by QA for closure.
- 1 – Hold for MRC review of Unit 2 rollover.

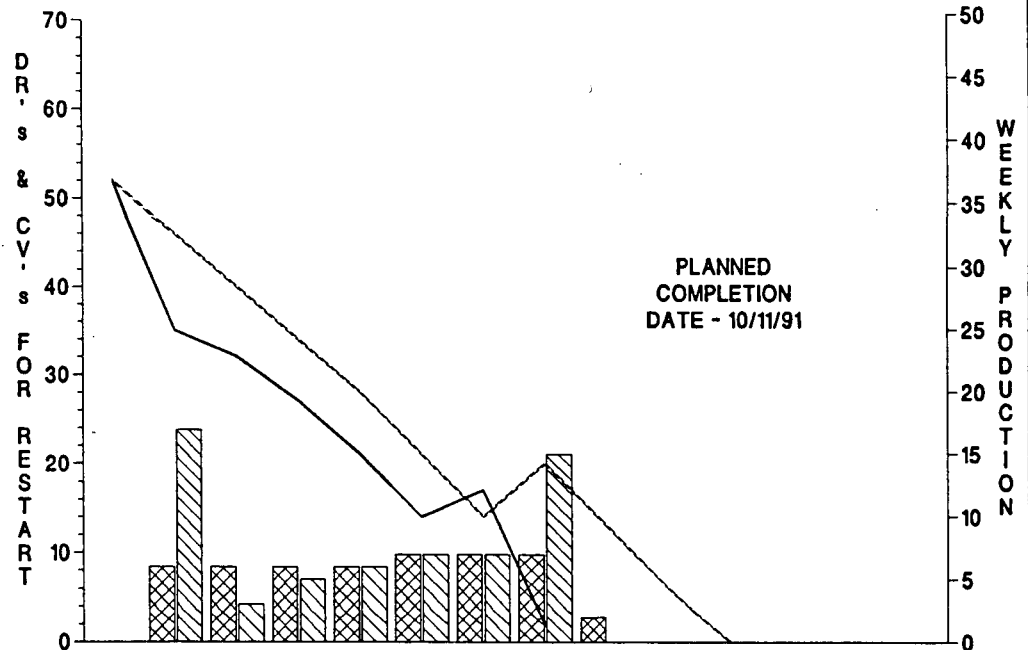
Each of the 11 restraints were coordinated with the involved organizations through the customer/supplier process. The rescheduled dates are a result of these reviews.

- * These restraints are presently identified on the Modifications Restraints List and distributed to the restraining organizations during the 8:00 AM Milestone Meetings.

Milestone : RESTART

VERTICAL SLICE REVIEW **DEFICIENCY REPORTS AND CONSTRUCTION VARIANCES** **WBN - MODIFICATIONS**

RESPONSIBLE
MANAGER,
R.W. JOHNSON



BASELINE	52	46	40	34	28	21	14	20	13	6	0			
ACTUAL TO GO	52	35	32	27	21	14	17	2						
PERIOD PLANNED	0	6	6	6	6	7	7	7	2	0				
PERIOD ACTUAL	0	17	3	5	6	7	7	15						
PERIOD ADDED	0	0	0	0	0	0	10	0						
MANPOWER ACTUAL						1	1	1						
MANPOWER PROJECTED						1	1	1	1	1	1			
WEEK ENDING	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

ANALYSIS : Ahead of schedule

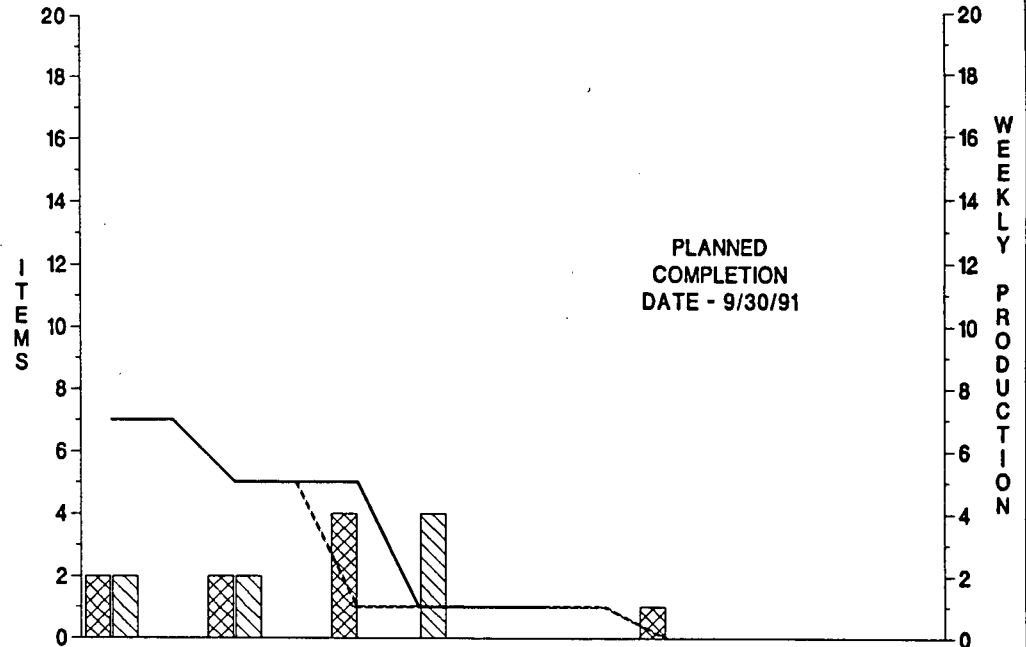
RECOVERY/ACTION PLAN :

The two (2) remaining items (DRs) are in the revision process and will complete ahead of schedule.

Milestone : RESTART

CAT ITEMS **CONVERSION TO NON-RESTART** **WBN - MODIFICATIONS**

RESPONSIBLE
MANAGER,
R.W. JOHNSON



BASELINE	7	7	5	5	1	1	1	1	1	0				
ACTUAL TO GO	7	7	5	5	5	1	1	1	1	0				
PERIOD PLANNED	2	0	2	0	4	0	0	0	0	1				
PERIOD ACTUAL	2	0	2	0	0	4	0	0	0					
PERIOD ADDED	0	0	0	0	0	0	0	0	0					
MANPOWER ACTUAL						8	8	8						
MANPOWER PROJECTED						8	8	8	8	8				
WEEK ENDING	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

ANALYSIS : On schedule

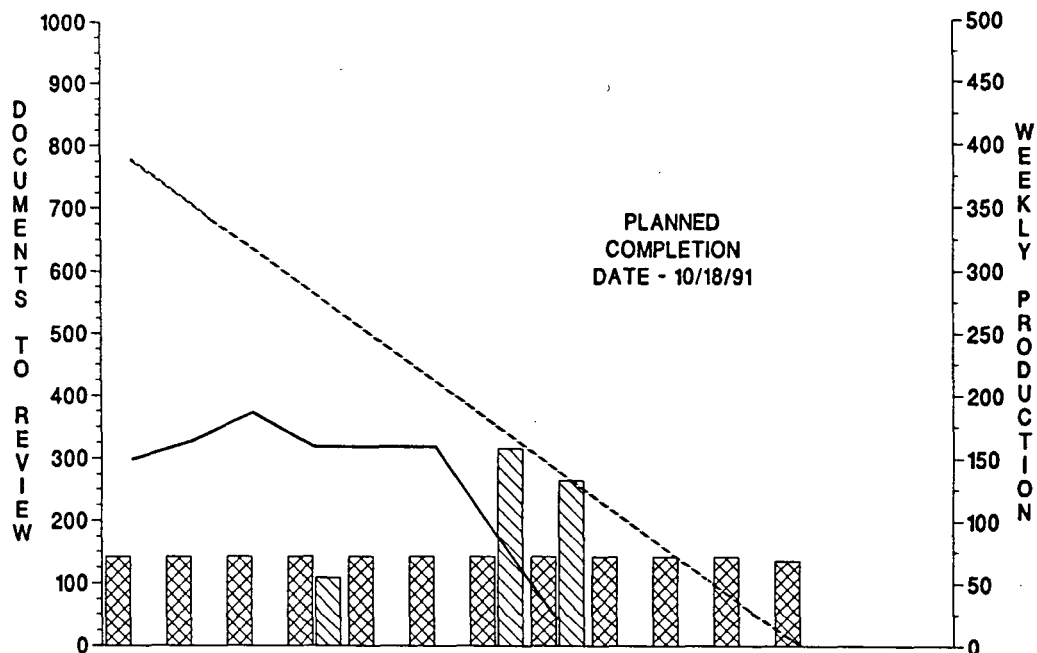
RECOVERY/ACTION PLAN :

The one remaining CAT item is progressing as planned.

Milestone : RESTART

WELDING PROJECT **REVIEW SOFTWARE DOCUMENTS & WELD MAPS** **WBN - MODIFICATIONS**

RESPONSIBLE
MANAGER,
R.W. JOHNSON



BASELINE	778	707	636	565	494	423	352	281	210	139	68	0		
ACTUAL TO GO	298	327	372	318	318	318	177	45						
PERIOD PLANNED	71	71	71	71	71	71	71	71	71	71	71	68		
PERIOD ACTUAL	0	0	0	54	0	0	157	132						
PERIOD ADDED	0	29	45	0	0	0	16	-16						
MANPOWER ACTUAL						0	2	2						
MANPOWER PROJECTED						0	2	2	2	1	1	1		
WEEK ENDING	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

ANALYSIS : Ahead of schedule

RECOVERY/ACTION PLAN :

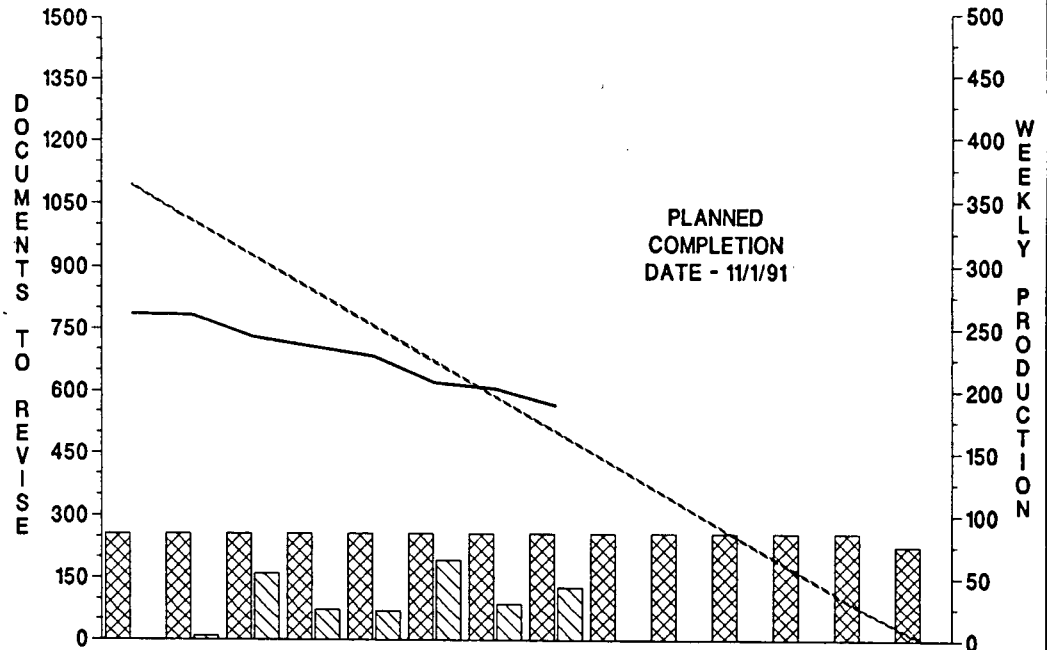
Aggressively working this activity to accomplish early finish.

Milestone : RESTART

RD

WELDING PROJECT **REVISE WELDING DOCUMENTS** **WBN - MODIFICATIONS**

RESPONSIBLE
MANAGER,
R.W. JOHNSON



BASELINE	1095	1010	925	840	755	670	585	500	415	330	245	160	75	0
ACTUAL TO GO	785	782	729	705	682	618	605	563						
PERIOD PLANNED	85	85	85	85	85	85	85	85	85	85	85	85	85	75
PERIOD ACTUAL	0	3	53	24	23	64	29	42						
PERIOD ADDED	0	0	0	0	0	0	16	-16						
MANPOWER ACTUAL						1	1	1						
MANPOWER PROJECTED						1	1	1	1	2	2	2	2	2
WEEK ENDING	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

ANALYSIS : Behind schedule

RECOVERY/ACTION PLAN :

Resources are working the "review portion" to identify all items remaining for the "revise activity". 344 (61%) of the items for revision are contained in open workplans that require Safety Net Review prior to completion. With significant progress being made in the Safety Net Reviews, this activity will recover correspondingly and will finish on schedule.

MODIFICATIONS 'PAPER' STATUS
FOR WEEK ENDING SEPTEMBER 18, 1991

DCNs (FIELD WORK REQUIRED TYPE)

TOTAL POPULATION	3025
REMAINING TOTAL	3025
IN DESIGN	2740
IN MODS	285
IN WORK	**
FIELD WORK COMPLETE	**
CLOSED	**

WORKPLANS (NEW PROGRAM)

TOTAL POPULATION	6050
APPROVED FOR WEEK	45
APPROVED TO DATE	241
REMAINING TO WRITE *	5809
AVAILABLE TO WRITE	570
IN WRITING/APPROVAL	26
IN PLANNING	241
AVAILABLE FOR WORK	0
IN WORK	0
RESTRAINED	0
MATERIAL	0
FIELD ENGINEERING	0
NUCLEAR ENGINEERING	0
SCHEDULED OUTAGE	0
OUTAGE SCHEDULED/MISC HOLD	0
NEED TESTING	0
IN CLOSURE	0
IN CRAFT REVIEW	0
IN FIELD ENGINEER REVIEW	0
TOTAL NUMBER CLOSED	0

WORKPLANS (OLD PROGRAM)

TOTAL CLOSURES	1338
CLOSED TO DATE	164
REMAINING TO CLOSE	1174
TOTAL SAFETY NET REVIEWS	1299
SAFETY NET REVIEWS COMPLETED	368
SAFETY NET REVIEWS REMAINING	931

* Does not reflect any reductions form outstanding SNR/WP closures.

** Under evaluation

0071u

MAINTENANCE REQUESTS

INITIATED THIS PERIOD	25
CLOSED THIS PERIOD	5
TOTAL NUMBER OPEN**	***4275
TO BE PLANNED*	3561
IN REVIEW	0
AVAILABLE FOR WORK	0
IN WORK	0
RESTRAINED	
MATERIAL	0
NUCLEAR ENGINEERING	0
FIELD ENGINEERING	0
OUTAGE TO BE SCHEDULED	0
FIELD WORK COMPLETE	492
TOTAL NUMBER CLOSED	191

PERS/FIRS/SCARS

	PERS/	FIRS/	SCAR	=	TOTAL
TOTAL REMAINING	194 /	3 /	111	=	308
PERIOD ADDED	0 /	0 /	0	=	0
PERIOD COMPLETE	1 /	0 /	1	=	2
TOTAL READY FOR WORK DOCUMENT WRITE (BLUE DOTS) ¹	174 /	1 /	91	=	266
APPROVED POST RESTART	14 /	2 /	13	=	29
REMAINING REQUIRED FOR RESTART	6 /	0 /	7	=	13

¹CONST WORK REQUIRED

NCOs

	RESTART	+	NONSTART	=	TOTAL
TOTAL REMAINING	1	+	23	=	24
PERIOD ADDED	0	+	0	=	0
PERIOD COMPLETE	0	+	0	=	0
NUMBER IN WORK	1	+	0	=	1
NUMBER RESTRAINED	0	+	0	=	0

LIRs

	RESTART	+	NONSTART	=	TOTAL
TOTAL REMAINING	0	+	18	=	18
PERIOD ADDED	0	+	1	=	1
PERIOD COMPLETE	0	+	1	=	1
NUMBER IN WORK	0	+	0	=	0
NUMBER RESTRAINED	0	+	0	=	0

*457 OF THESE HAVE SOME FIELD WORK PERFORMED, BUT WILL BE REPLANNED.

**220 OF THESE ARE LISTED IN 'PRIME' BUT HAVE NOT YET BEEN FOUND.

***4275 DOES NOT INCLUDE RECENT TRANSFERRED MRs FROM PLANT.

CAT

	RESTART	+	NONSTART	=	TOTAL
TOTAL REMAINING	1	+	27	=	28
PERIOD ADDED	0	+	0	=	0
PERIOD COMPLETE	0	+	0	=	0
NUMBER IN WORK	5	+	0	=	5
NUMBER RESTRAINED	0	+	5	=	5
TOTAL WRITE/READY FOR WORK DOCUMENT (BLUE DOTS) ¹	0	+	21	=	21
¹ CONST WORK REQUIRED					
COMPLETE (NO FURTHER ACTION REQUIRED)	2	+	0	=	2

CATDs

	RESTART	+	NONSTART	=	TOTAL
TOTAL REMAINING	0	+	33	=	33
PERIOD ADDED	0	+	0	=	0
PERIOD COMPLETE	0	+	0	=	0
NUMBER IN WORK	0	+	5	=	5
NUMBER RESTRAINED	0	+	0	=	0

JT - TRAINING FOR FIELD

CRAFT TRAINING

MODULES

TOTAL	26
COMPLETE	26
IN REVIEW	0
IN WRITING	0

PROCEDURE TRAINING MODULES

TOTAL	16
COMPLETE	16

JC - PROCEDURES UPGRADE

TOTAL	43
COMPLETE	6
IN REVIEW	37
IN WRITE	0

PROCEDURES CANCELLATION

TOTAL	49
COMPLETE	48
IN REVIEW	1
IN WRITE	0

PROCEDURES CONVERSION (AIs to SSPs and GCIs to CAIs)

TOTAL	14
COMPLETE	6
IN REVIEW	8
IN WRITE	0

III. ENGINEERING/MODIFICATIONS (continued)

C. PROCUREMENT

WEEKLY QUALITY INDICATORS

Quality Indicator Description	VALUE - WEEK ENDING				TARGET	TARGET	REMEDIAL
	08/28	09/04	09/12	09/18	VALUE	MISSED	CORRECTIVE ACTION
* Reject rate QIs							
Procurement Documents - Requestor Input Acceptance Rate	100	100	100	100	100%		
Procurement Documents - M&P In-House Acceptance Rate	100	80	100	100	100%		
Receipt Documents Acceptance Rate	100	100	100	100	100%		
Issue Documents Acceptance Rate	100	100	100	100	100%		

* Under development more information later.

III. ENGINEERING AND MODIFICATIONS (continued)

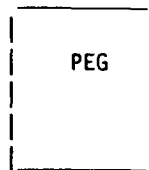
C. MATERIALS AND PROCUREMENT

MATERIALS PROCESS

WEEK ENDING 09/11/91

RESPONSIBLE MANAGER
A. J. ROBERTS

QA
ACCEPTANCE RATE
100% (95%)
CYCLE TIME
LATER

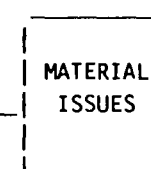
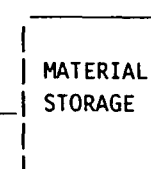
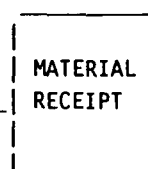
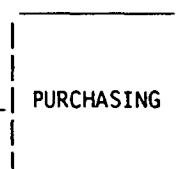
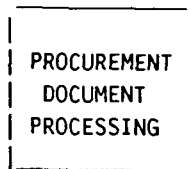


BACKLOG-ITEMS OVER 15 DAYS OLD
272 (300)
WEEKLY PRODUCTION
IN 173
OUT 148

PROCUREMENT-REQUESTOR
ACCEPTANCE RATE
100% (100%)
PROCUREMENT-MA&P
ACCEPTANCE RATE
100% (100%)
CYCLE TIME
LATER

QC DATA-RECEIPTS
ACCEPTANCE RATE
90% (95%)
CYCLE TIME
LATER
RECEIT DOCUMENTS
ACCEPTANCE RATE
100% (100%)
CYCLE TIME
LATER

ISSUE DOCUMENTS
ACCEPTANCE RATE
100% (100%)
CYCLE TIME
LATER



BACKLOG
374 (200)
WEEKLY PRODUCTION
IN 72
OUT 92

PURCHASING
INDICATORS
WILL BE
ADDED LATER

BACKLOG RECEIPTS CREDIT 575
M&P 162 (150) 233 (250)
QC 40 (TBD)
WEEKLY PRODUCTION
IN 197 *
OUT 140 *

BACKLOG
75 (20)
WEEKLY PRODUCTION
IN 202
OUT 188
STOCKOUTS 4

* DATA WILL BE PROVIDED NEXT REPORT. PRODUCTION INCLUDES CREDIT 575s THIS WEEK.
() CONTAIN GOALS

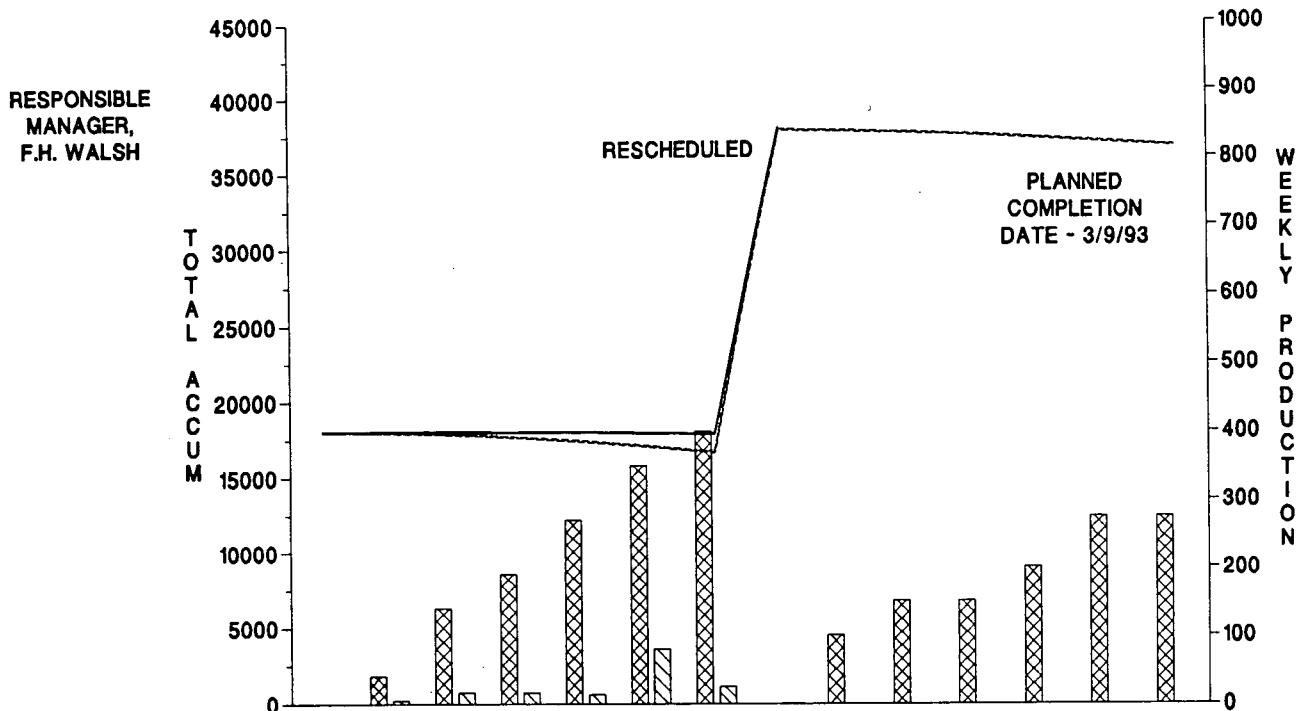
Milestone : NON-RESTART

71P1

MATERIALS IMPROVEMENT PROJECT

SANITIZATION

WBN - MATERIALS



BASELINE	18000	17960	17820	17630	17360	17010	16610	37845	37745	37595	37445	37245	36970	36695
ACTUAL TO GO	18000	17995	17979	17963	17940	17870	17845	37844						
PERIOD PLANNED	0	40	140	190	270	350	400	0	100	150	150	200	275	275
PERIOD ACTUAL	0	5	16	16	13	80	25	1						
PERIOD ADDED	0	0	0	0	0	0	0	20000						
WEEKLY ENDING	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

ANALYSIS: RESCHEDULED

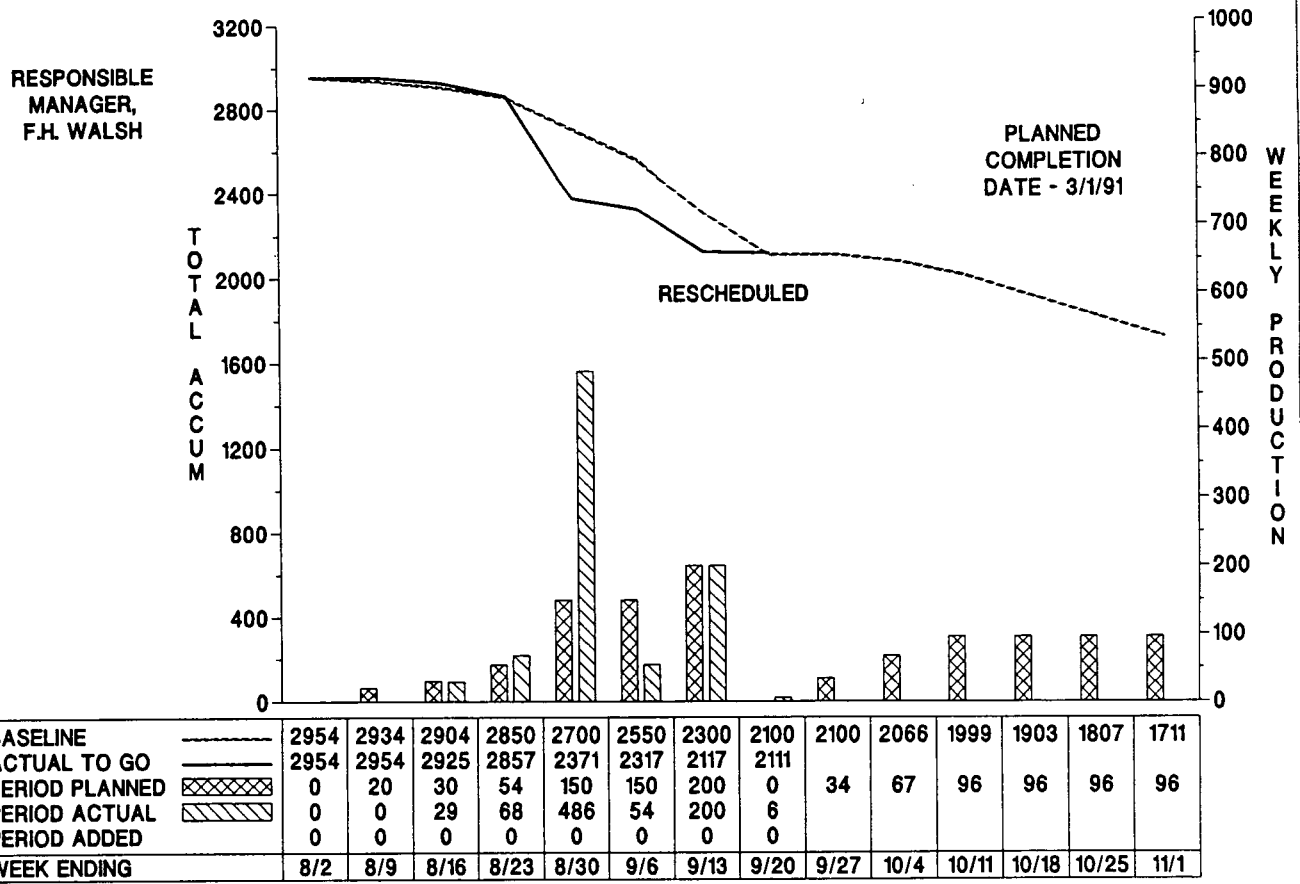
ACTION/RECOVERY PLAN:

- * A MAJOR REORGANIZATION OF THE PERSONNEL AND THE PROCEDURES TO SUPPORT THE METHODOLOGY FOR MATERIAL SANITIZATION HAS RESULTED IN THE RESCHEDULING OF THE MATERIAL IMPROVEMENT PROJECT. THE RESCHEDULED PRODUCTION CURVE REFLECTS THE TOTAL SCOPE OF THE SANITIZATION EFFORT vs. THE PREVIOUSLY SHOWN PHASE A ONLY EFFORT. THIS RESCHEDULING HAS NOT INCREASED THE OVERALL PROJECT DURATION NOR COST, IT PROVIDES FOR A REDUCED WEEKLY TARGET THAT WILL REMAIN CONSTANT THROUGHOUT THE PROJECT DURATION RATHER THAN BE DEPENDENT ON THE PROJECT PHASE BEING ADDRESSED.

Milestone : NON-RESTART

NP2

MATERIALS IMPROVEMENT PROJECT **CABLE SANITIZATION** **WBN - MATERIALS**



ANALYSIS: RESCHEDULED

ACTION/RECOVERY PLAN:

- * THIS ACTIVITY HAS BEEN RESCHEDULED DIRECTLY AS A RESULT OF THE OVERALL MIP RESCHEDULING EFFORT. THIS PRODUCTION CURVE WAS REDRAWN TO BETTER REFLECT THE ACTUAL PRODUCTION RATE THAT THE CABLE GROUP WILL BE ABLE TO MAINTAIN DURING THE COMPLETION OF THIS PROJECT.

IV. LICENSING

G. Pannell

- A. PRODUCTIVITY QUALITY INDICATORS
- B. MEETINGS
- C. INSPECTIONS
- D. MAJOR ISSUES
- E. SUBMITTALS
- F. COMMITMENTS
- G. QUALITY INDICATORS TABLE

IV. LICENSING

A. Productivity and Quality Indicators:

- Productivity for NRC open items remains behind the required production rate for an October 4, 1991 completion. A detailed review of individual open items and promised action completions has indicated that the effort could extend into early November. Further, there is some indication that the individuals responsible for completing the actions do not have specific time set aside in their personal schedules to accomplish this task. This issue has been discussed with the Site Vice President and Site Scheduling. Direction has been given to schedule individual time for actions in Engineering and to ensure non-scheduled punch list activities are resourced.

B. Meetings:

- NRR meeting in Washington 09/30/91.
- NRC Commissioner Curtiss site visit, 10/09/91.
- WBN Completion Plan meeting at Region II, 10/17/91.

C. Inspections:

- NRC RT review started 08/19/91 (E. Martindale). Estimate completion by mid-October. There have been 759 weld identifiers reviewed. There are currently 2 concerns (1 class 1 and 1 class 2) with radiographic indications raised and are being resolved with TVA Level III inspectors. Review of Class 1 weld radiographs is complete.
- NRC inspection on Special Nuclear Material License 09/17/91 (Wade Loo). No items were identified.
- NRC audit - Feedwater Check Valve Slam (John Fair) 09/24-25/91.
- NRC follow-up inspection on NE Self-Assessment Corrective Actions 09/30/91 and 10/15/91 (H. Livermore).
- NRC follow-up inspection on Corrective Action Program 09/30/91, 10/15/91, and 10/28/91 (B. Long)
- NRC follow-up team review of work control program - postponed to 10/21/91 (tentative).

D. Major Issues:

- Civil Seismic Issues - There are 6 of 15 Amendment 64 items under NRC review. Follow-up conversations were held to achieve closure on the mass eccentricities and Bulletin 79-02 report issues. Submittals to formalize agreements on 1(L) piping verification, DBA analysis for the steel containment vessel, and the minimum design load support stiffness issues are in concurrence schedule for 09/24/91 and 09/30/91. The schedule for the last SER (structural issues) is 11/30/91; this is a slip from the previous 10/31/91 date. Verbal disposition on all remaining open issues is expected by 09/30/91.
- Electrical Issues - NRC has not scheduled a review of the 08/91 cable pullby resolution letter. The reviewers prefer to wait until a site audit can be performed, but based on Licensing's request, the NRR project manager has requested a written review subject to later audit confirmation.

IV. LICENSING

- QA Records - NRC issued RAI on 08/30/91 with a response date 10/14/91. Licensing is working with the project manager to develop an enhanced action plan to address records technical adequacy by the first week in October.

E. Submittals

- Last week, 4 submittals were due. All were submitted on schedule. From the previous week, the fifth diesel generator RAI is in final concurrence.

F. Commitments:

NRC Hard Date Commitments (Dates committed to NRC)

	<u>MODS</u>	<u>ENG</u>	<u>PLANT</u>	<u>QA</u>	<u>LIC</u>	<u>SPEC PROJ</u>	<u>OTHER</u>	<u>TOTAL</u>
Scheduled this period	0	0	0	0	0	0	0	0
Late this period	0	0	0	0	0	0	0	0
Backlog of late items	0	0	0	0	0	0	0	0
Total Open	4	16	4	1	2	40	1	68

NRC Milestone Commitments (Internal commitments to specific dates)

Scheduled this period	2	1	1	0	0	5	0	9
Late this period	2	1	1	0	0	2	0	6*
Backlog of late items	2	14	0	0	0	0	90	106*
Total Open	20	93	37	2	21	360	9	542

*Although most commitments have been loaded into P2, there is a mismatch between the P2 schedule and the TROI database which provides this data. Licensing will reconcile these two listings by mid-October.

IV. LICENSING (continued)

G. Quality Indicator Table

WEEKLY QUALITY INDICATORS

Quality Indicator Description	VALUE - WEEK ENDING				TARGET	TARGET	REMEDIAL
	08/28	09/04	09/11	09/18	VALUE	MISSED	CORRECTIVE ACTION
°Reject Rate QIs							
PER Data Base Load Sheet Rejections			100	100	97%+		
Commitment Data Base Load Sheet Rejections			100	100	97%		
NER Evaluations Acceptability			100	*	95%		
Reportability Evaluation Rejects By Supr.			6.7	*	5%		
Submittal Timeliness (% Late)			25	*	0%		
Incorporation of FSAR Change Packages Received by Cut-Off Date			100	*	100%		
Acceptance of Closure Packages by Resident Inspector			N/A (NRC)	100	95%		
Acceptance of Status/Closure Packages by Responsible Org During Concurrence Review			98.5	80	95%	X	(1)
Nuclear Experience Review Program Screening Effectiveness			60	*	70-85%		
° Cycle Time QIs**							
° Capacity Utilization QIs**							
° Process Improvement QIs**							

* Data collected on monthly or FSAR submittal basis.

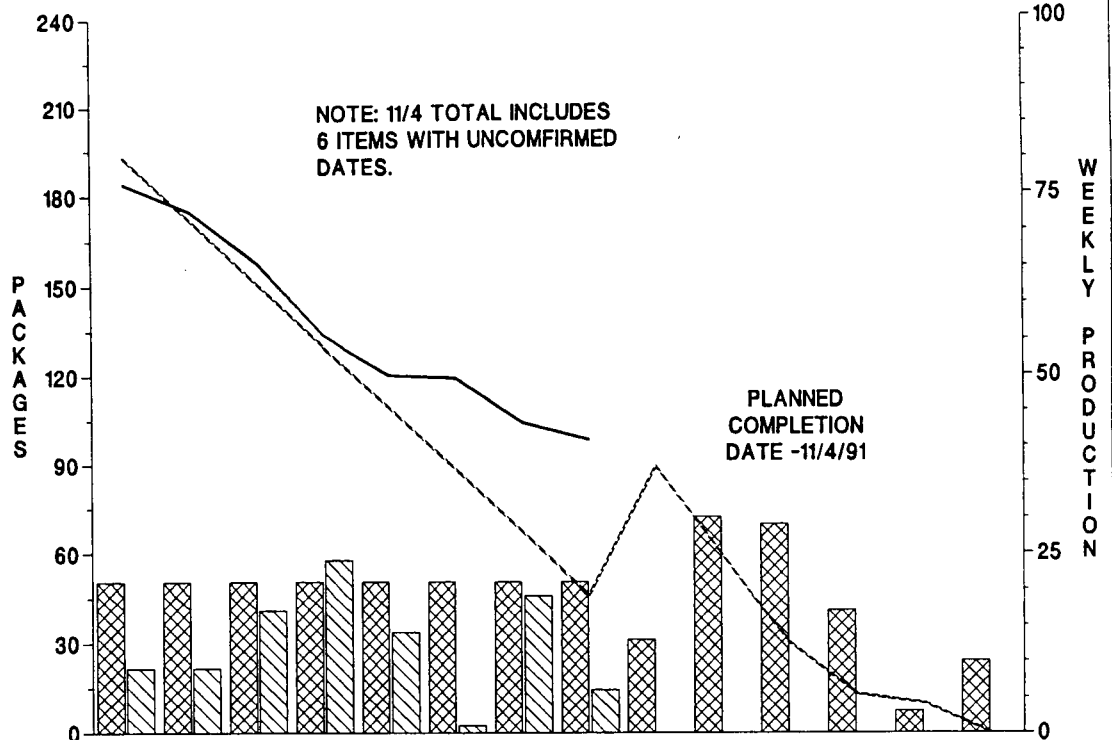
** Under development.

No remedial CA is required. The number is skewed low based upon small population of packages sampled.

Milestone : RESTART

NRC OPEN ITEM REVIEW WBN-LICENSING

RESPONSIBLE
MANAGER,
G. PANNELL



BASELINE	193	172	151	130	109	88	67	46	89	59	30	13	10	0
ACTUAL TO GO	184	175	158	134	120	119	104	98	89	59	30	13	10	0
PERIOD PLANNED	21	21	21	21	21	21	21	21	13	30	29	17	3	10
PERIOD ACTUAL	9	9	17	24	14	1	19	6						
PERIOD ADDED	0	0	0	0	0	0	4	0						
WEEK ENDING	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/4

ANALYSIS: RESCHEDULED

- * THE PREVIOUS SCHEDULE (STRAIGHT LINE WORKOFF RATE) FAILED TO CONSIDER ACTUAL COMPLETION STEPS NEEDED TO CLOSE REMAINING ITEMS. THE SCHEDULE ABOVE REFLECTS CURRENT COMMITMENTS FROM LINE ORGS. (QA REVIEW TIME FOR PKGS IS NOT YET INCLUDED IN THE SCHEDULE.)
- * INDICATIONS ARE THAT POOR PERFORMANCE FOR THE ORIGINAL CURVE CAN BE ATTRIBUTED TO A FAILURE TO PROVIDE TIME IN INDIVIDUALS SCHEDULES TO ACCOMPLISH REQUIRED TASKS.

ACTION/RECOVERY PLAN:

- * ACTIONS ARE BEING TAKEN TO CONFIRM THAT INDIVIDUALS RESPONSIBLE FOR ACTION COMPLETION HAVE SPECIFICALLY ALLOTTED TIME TO ACCOMPLISH THE TASK. ONCE TIME IS ALLOTTED, INDIVIDUALS WILL BE HELD ACCOUNTABLE FOR COMPLETION.
- * DAILY RESTART MEETINGS COMMENCED THURSDAY SEPTEMBER 19, 1991. EACH REMAINING NRC OPEN ITEM IS SPECIFICALLY DISCUSSED WITH THE LINE ORGANIZATION, INCLUDING CONCURRENCE REVIEWS.
- * LICENSING IS PREPARING PKGS BASED ON LINE ORG'S ONGOING ACTIONS TO REDUCE PACKAGE DEVELOPMENT TIME ONCE FINAL ACTIONS ARE COMPLETED.

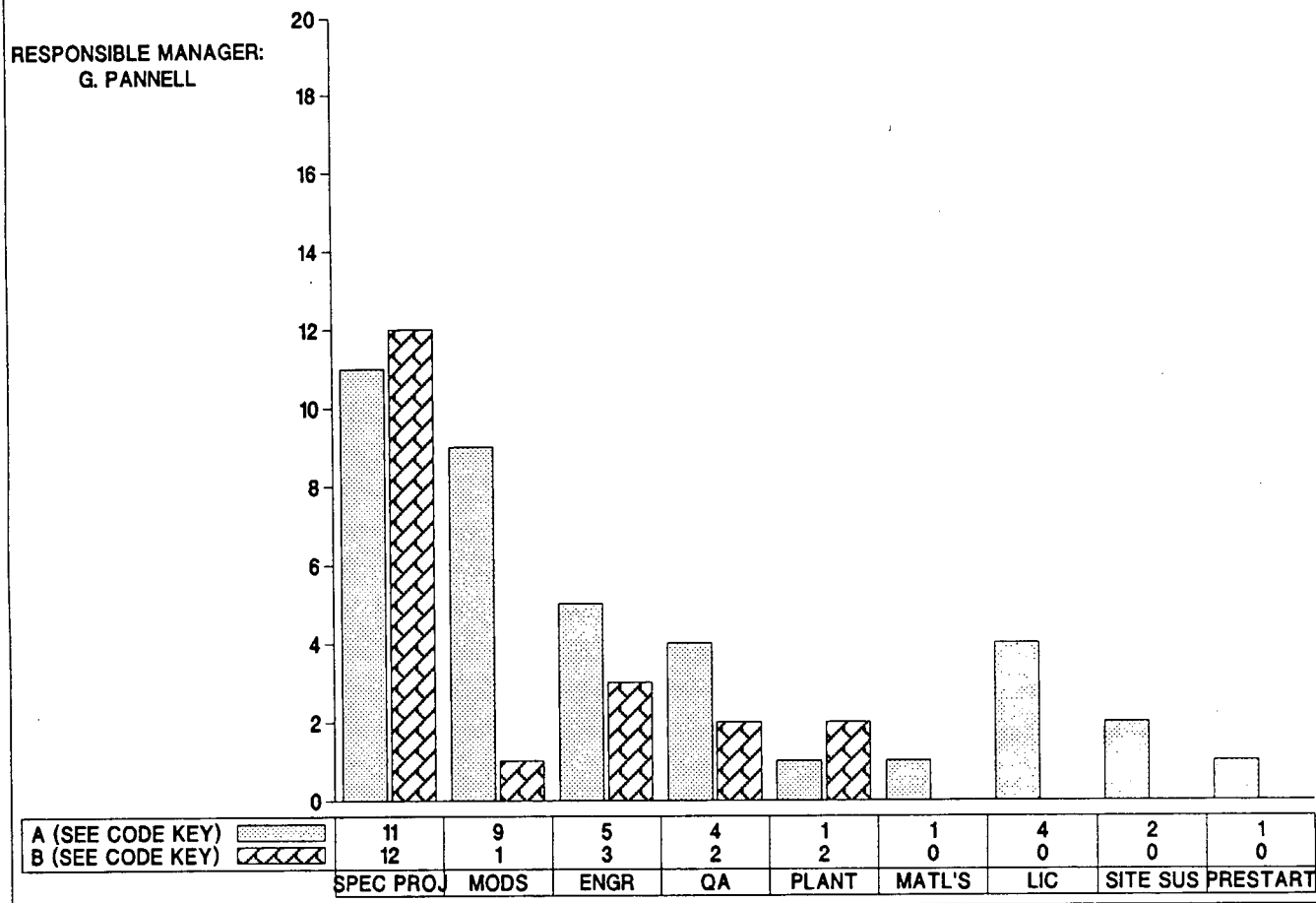
Milestone : N/A

FORM2

PERFORMANCE INDICATOR

WBN - PROVIDE LICENSING REQUIRED INFO/DOCUMENT FOR NRC OPEN ITEMS

RESPONSIBLE MANAGER:
G. PANNELL



	THIS WEEK	LAST WEEK	delta
(A) ACTION REQUIRED TO SUPPORT OPEN ITEM PACKAGE	38	32	+6
(B) RESPONSIBLE ORGANIZATION CONCURRENCE	20	14	+6
TOTALS	58	(46)	+12

ANALYSIS & CORRECTIVE ACTION: SEE WORKOFF GRAPH ON PREVIOUS PAGE

V. **PLANT**

L. L. Jackson

- ° SYNOPSIS OF PLANT ACTIVITIES
- ° QUALITY INDICATOR TABLES
- ° PIPELINE CHART
- ° WORK OFF CURVES
- ° PROGRAM STATUS

V. PLANT

Synopsis of Plant Activities

A. Deep Draft Pumps

- ° High Pressure Fire Protection (HPFP) Pump 2AA rebuilding is presently on hold pending completion of the incident investigation and subsequent rework of the check valve on HPFP Pump 1AA. Pump 2AA is not involved in the code question but is being kept operable until the line on Pump 1AA is repaired. The line repair on pump 1AA is stopped because of the code question.

B. Unit 1 Fuel Upgrade

- ° All preliminary activities leading up to the actual first shipment of fuel back to Westinghouse continue to follow the schedule as planned. Operations' training in fuel receipt inspections and fuel handling supervision is continuing this week. A fuel inventory of the spent fuel pit and new fuel vault was completed this week. The dummy fuel assembly was removed from storage and will be used for practice by Operations prior to the actual loading of fuel to be sent off site.

C. Valve Packing Enhancement Program

- ° To date 1680 valves are complete, of these 71 have live load packing. To date the valve packing enhancement program is 33 percent ahead of FY91 goal of 1254.

D. Balance of Plant

- ° Condensate was operated on long cycle to support Chemistry Control. Makeup demineralized water acid line repair work is ongoing. Verification of switchyard annunciators is underway. Lower motor bearing replacement on H-B ERCW pump is in progress. A clearance problem on the upper motor bearing was identified on this motor this week. Systems Engineering is reviewing vendor manual requirements and determining required procedure revisions to the existing Maintenance Instructions. Once the scope of the problem and necessary corrective actions are determined, a new schedule will be developed. The applicability of this problem to the other ERCW pump motors will be addressed.

V. PLANT (continued)

° TECHNICAL SUPPORT

WEEKLY QUALITY INDICATORS

Quality Indicator Description	VALUE - WEEK ENDING				TARGET	TARGET	REMEDIAL
	09/04	09/11	09/18	09/25	VALUE	MISSED	CORRECTIVE ACTION
°Reject Rate QIs							
DDs Passing Initial Review	100	100	100		95%		
DDs Invalidation Rate	8	17	0		5%		
DDs Pass NE/DCRM Review	100	100	100		100%		
Timely DDs	100	100	100		95%		
PEARs Pass Initial Review		100			95%	X	(1)
PEARs Action Plan acceptable					95%	X	(1)
PEARs Final Disposition Acceptable		100			95%	X	(1)
PEARs Meeting Time Limits					95%	X	(1)
TACFs Properly Initiated	100				95%	X	(1)
PUP Procedures Acceptable On Review (Tech/AO))	100		100		95%		
PUP Procedures Pass Field Verification			100		100%		
PUP Procedures Pass QA Rev.			100		95%		
PUP Procedures Pass PORC		100	100		100%		

(1) None received for review.

V. PLANT (continued)

° TECHNICAL SUPPORT (continued)

WEEKLY QUALITY INDICATORS

Quality Indicator Description	VALUE - WEEK ENDING				TARGET	TARGET	REMEDIAL
	09/04	09/11	09/18	09/25	VALUE	MISSED	CORRECTIVE ACTION
NE DCNs Adequately Scoped	100	100	100		95%		
DCNs Pass Plant Review	99	100	100		95%		
DCNs Review Timely	100	100	100		95%		
° Cycle Time QIs*							
Age of DDs in NE	72	63	59		30 days	X	(1)
° Capacity Utilization QIs*							
° Process Improvement QIs*							

(1) Trend shows improvement this week. NE management is informed weekly of age distribution. Expect to meet target by 01/01/92.

*Under development more information later.

V. PLANT (continued)

° MAINTENANCE

WEEKLY QUALITY INDICATORS

Quality Indicator Description	VALUE - WEEK ENDING				TARGET	TARGET	REMEDIAL
	09/04	09/11	09/18	09/25	VALUE	MISSED	CORRECTIVE ACTION
° Reject Rate QIs							
W0 replans due to QA rejection rate	1	0	0		5%		
W0 replans due to craft rejection rate	0.6	1.6	0		5%		
Craft Work Acceptance by QC Inspections	97	100	100		97%		
PM/MI QA document review acceptance	87.5	100	100		95%		
Number of personnel errors from incident investigations	0	---	0		0		(1)
Number of training course failures	2	---	0		0		(1)
Repeat Maintenance (number)	1	0	0		0		
Documentation acceptance by QC Inspection	95	100	96		97%		(2)
° Cycle Time QIs*							
° Capacity Utilization QIs*							
° Process Improvement QIs*							

(1) Monitored Monthly.

(2) Copies of 575 attached to W/O were not legible. Obtain legible copies from original 575.

*Under development more information later.

V. PLANT (continued)

° RADCON

WEEKLY QUALITY INDICATORS

Quality Indicator Description	VALUE - WEEK ENDING				TARGET	TARGET	REMEDIAL
	09/04	09/11	09/18	09/25	VALUE	MISSED	CORRECTIVE ACTION
°Reject Rate QIs							
Rad Ops Routine Records (% Pages without errors)	100	100	100		100%		
° Cycle Time QIs*							
° Capacity Utilization QIs*							
° Process Improvement QIs*							

*Under development more information later.

° CHEMISTRY

WEEKLY QUALITY INDICATORS

Quality Indicator Description	VALUE - WEEK ENDING				TARGET	TARGET	REMEDIAL
	09/04	09/11	09/18	09/25	VALUE	MISSED	CORRECTIVE ACTION
°Reject Rate QIs							
Data Recording Acceptance Rate	100	100	100		95%		
Out-of-Limits Notifications Acceptance Rate	100	100	100		95%		
Analysis of samples Acceptance Rate	100	100	100		95%		
° Cycle Time QIs*							
° Capacity Utilization QIs*							
° Process Improvement QIs*							

*Under development more information later.

V. PLANT (continued)

° OPERATIONS

WEEKLY QUALITY INDICATORS

Quality Indicator Description	VALUE - WEEK ENDING				TARGET	TARGET	REMEDIAL
	09/04	09/11	09/18	09/25	VALUE	MISSED	CORRECTIVE ACTION
° Reject Rate QIs							
Management Clearance Sheet Review Acceptance Rate		100	100		100%		
Management Review of Logsheets Acceptance Rate		96	100		95%		
Management Review of Procedures/Data Packages Acceptance Rate		100	97.3		98%	X	(1)
° Cycle Time QIs*							
° Capacity Utilization QIs*							
° Process Improvement QIs*							

(1) Unacceptable package returned to SOS for correction and increased attention to detail.

*Under development more information later.

Plant WR/WO Pipeline

Week Ending: 9 / 20 / 91

Initial Load of W/Rs Work Control	W/O Planning Maintenance Planning	WR/WO Scheduling Work Control	Field Work Craft	Foreman Review	Section Review	History & Trending Closure
QI:Replans [QA Rej] Value <u>0%</u> (< 5%) QI:Replans [Craft Rej] Value <u>0%</u> (< 5%)	QI:Repeat Maint. Value <u>0</u> (0) QI:QC Accept. Value <u>100%</u> (> 97%)	QI:QC Accept. Value <u>96</u> (> 97%) # Over 15days Old <u>12</u> # Over 20days Old <u>7</u> # Over 15days Old <u>0</u>				
Completed <u>98</u>	Completed <u>252</u>	Completed <u>106</u>	Completed <u>118</u>	Completed <u>71</u>	Completed <u>173</u>	Completed <u>60</u>
Backlog <u>20</u>	Backlog <u>629</u>	Backlog <u>590</u>	Backlog <u>307</u>	Backlog <u>56</u>	Backlog <u>379</u>	Backlog <u>121</u>
Cycle Time <u>12.2</u>	Cycle Time <u>64.8</u>	Cycle Time <u>45.9</u>	Cycle Time <u>21.7</u>	Cycle Time <u>6.5</u>	Cycle Time <u>22.6</u>	Cycle Time <u>5.4</u>
(*)	(*)	(*)	(*)	(0 > 15d)	(0 > 20d)	(0 > 15d)
Unit Rates *	Unit Rates *	Unit Rates *	Unit Rates *	Unit Rates *	Unit Rates *	Unit Rates *
Additions <u>109</u>						

Goals/Targets enclosed by "()"
Cycle Time in Days
* = Under Evaluation

Plant WR/WO Pipeline

Week Ending: 9 / 20 / 91

Initial Load
of W/Rs
Work Control

W/O Planning
Maintenance
Planning

WR/WO
Scheduling
Work Control

Field Work
Craft

Foreman
Review

Section
Review

History &
Trending
Closure

NE Cycle
Time 100.8
Backlog 83

Mat'L Cycle
Time 53.8
Backlog# 201

Backlog% 12.6
($< 5\%$)

Plt Engr

Cycle
Time 82.3
Backlog 71

Planner Hold
Cycle
Time 89.2
Backlog 155

Field Hold
Cycle
Time 61.8

Backlog 66

PMT
Cycle
Time 83.1

Backlog 149

NE Hold

Cycle
Time 51.1
Backlog 58

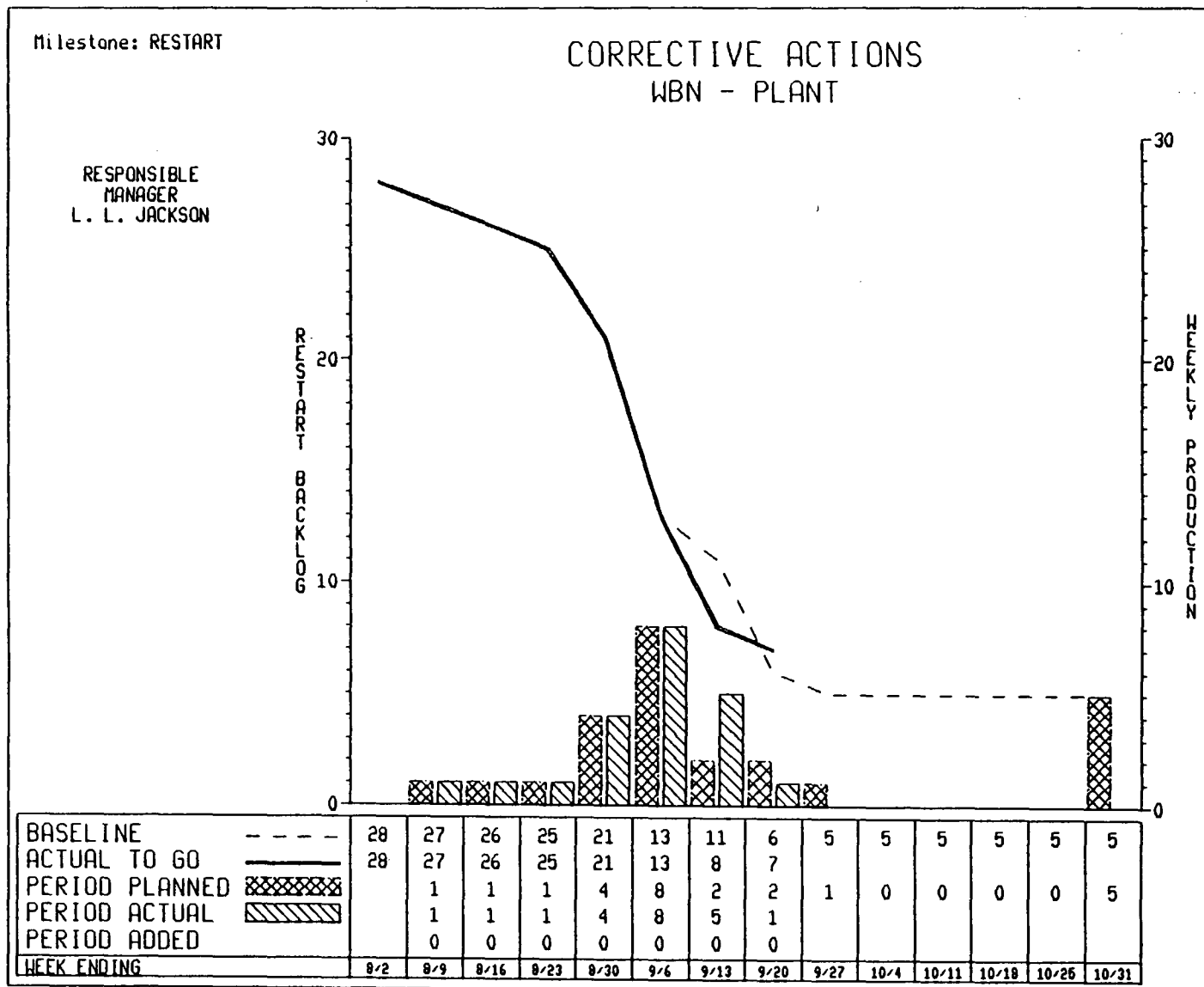
EQ Review

Cycle
Time 36.5
Backlog 52

QA Review

Cycle
Time 26.2
Backlog 72

77



Analysis: Behind Schedule

Two PERs were scheduled for closure. One closed and one is in the closure process. A QA review was not scheduled for the late item but in the closure process it was determined that a QA review was necessary.

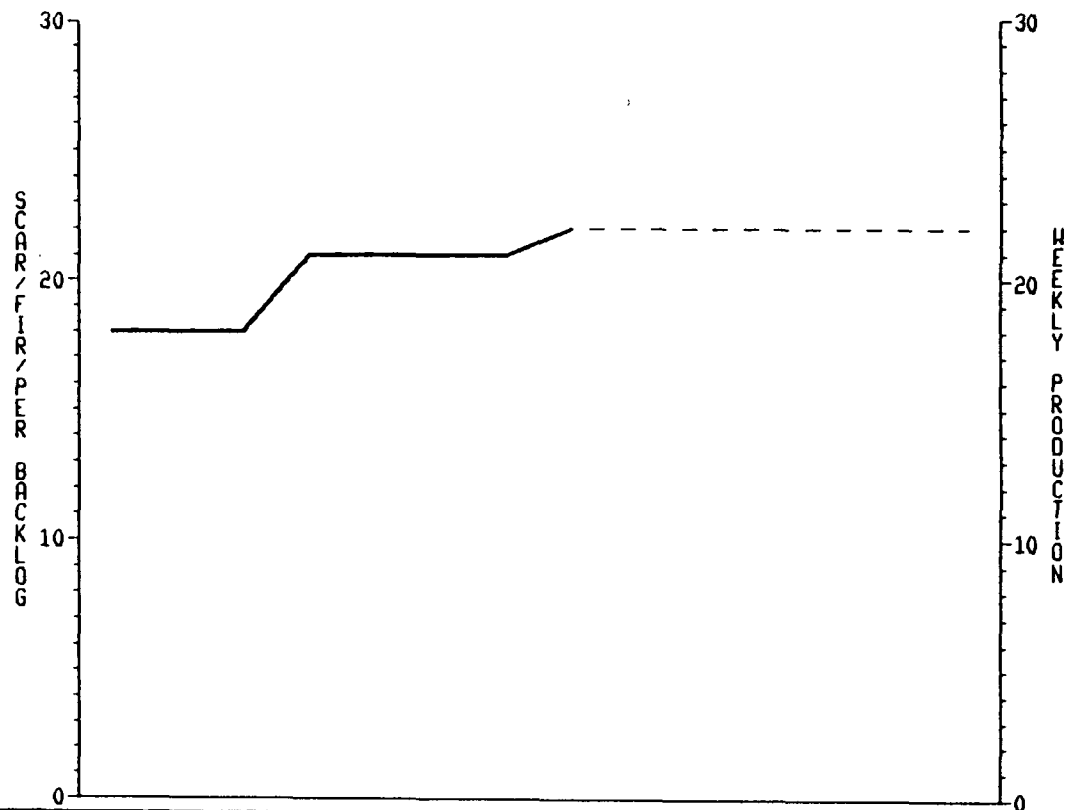
Recovery/Action Plan:

All required actions for the late PER are complete; however, the closure process (QA and Licensing) is not complete. Closure is expected the week of September 23, 1991. To prevent recurrence the remaining restart PERs will be reviewed to determine if a Quality Assurance review is required at closure. Any PERs requiring QA review will have their schedule updated accordingly.

Remaining
Corrective Actions

CORRECTIVE ACTIONS WBN - PLANT

RESPONSIBLE
MANAGER
L. L. JACKSON



BASELINE	---	18	18	18	21	21	21	21	22	22	22	22	22	22	22
ACTUAL TO GO	—	18	18	18	21	21	21	21	22	22	22	22	22	22	22
PERIOD PLANNED	▨	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PERIOD ACTUAL	▨	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PERIOD ADDED		0	0	0	3	0	0	0	1						
WEEK ENDING		8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	10/31

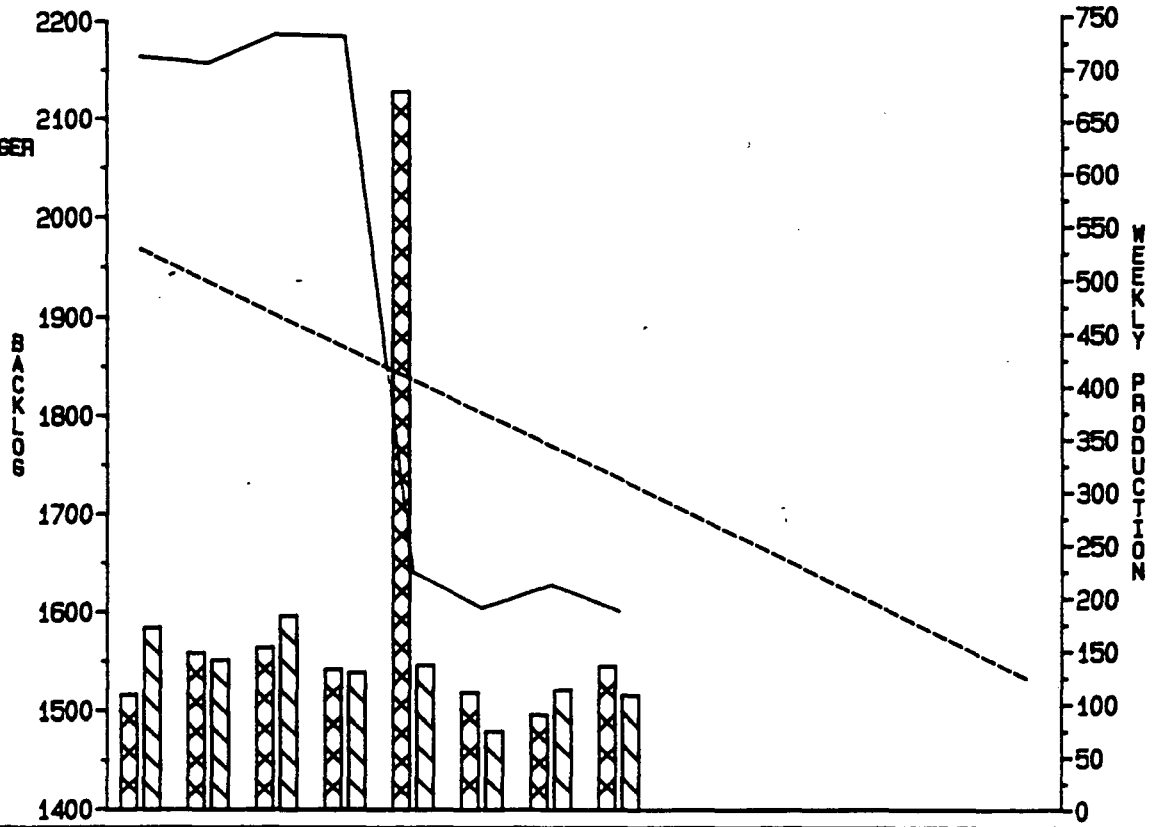
Analysis: These are post restart items. They are scheduled based on best estimates from organizations having supporting actions.

Milestone : N/A

WORK REQUEST'S/WORK ORDER'S MAINTENANCE GROUP WATTS BAR NUCLEAR PLANT

PLANT
PLANT MANAGER
L. L. JACKSON

MAINTENANCE MANAGER
C. D. NELSON



BASELINE	1967	1934	1900	1867	1834	1800	1767	1734	1700	1667	1633	1599	1565	1531
ACTUAL TO GO	2163	2156	2186	2183	1639	1603	1627	1600						
PERIOD PLANNED	33	33	34	33	33	34	33	33	34	33	34	34	34	34
PERIOD ACTUAL	109	149	154	133	681	111	90	136						
PERIOD ADDED	173	142	184	130	137	75	114	109						
WEEK ENDING	8/2	8/9	8/16	8/23	8/30	9/6	9/13	9/20	9/27	10/4	10/11	10/18	10/25	11/1

Analysis: Ahead of Schedule

There were 136 Work Orders (WOs) closed during the past week. Backlog is within established goals.

Recovery/Action Plan:

0240G-2

V. PLANT

PROGRAM STATUS

<u>AREA</u>	<u>STATUS</u>
◦ Staffing and Qualifications	◦ On schedule.
◦ Facilities and Equipment	◦ In place, except for Work Control Center and Fire Hall inside security.
◦ Tech Spec Administrative Programs	◦ On schedule.

SPECIAL PROGRAMS FOR STARTUP

◦ Performance Monitoring	◦ Procedures for thermal performance by October 1992.
◦ Check Valve Program	◦ Evaluation of selected valves complete. Spare parts list, PM procedures, equipment purchase scheduled by January 1992.
◦ Safety and Relief Valves	◦ Nameplate data collected for 90% of the valves. The SIs required for Unit 1 safety relief valves are complete. PM & MI procedures are being revised with scheduled completion of January 1992.
◦ Reactivity Management	◦ Corporate standard out for review. Will schedule plant actions when standard approved.
◦ Limitorque/MOV Program (GL-89-10)	◦ Review to determine worst case operating scenario 40% complete. Baseline static testing 55% complete. Dynamic testing not started. Test instruction and scoping document development by July 1992.
◦ Power Ascension Test Program	◦ Program developed, startup tests are scheduled for review and revision.
◦ PM/RCM	◦ In progress. Finalization of plans for restart of PM/RCM upgrade based on Corporate and INPO assessment continues. Currently 2 members of the Plant staff are at SQN reviewing and participating in the RCM process. Complete in FY94.
◦ Procedure Upgrade	◦ 50% complete on PUP. 82% complete for those requiring only technical review. Completion prior to fuel load.

V. PLANT

PROGRAM STATUS

AREA

STATUS

- Integrated Leak Rate Test
 - SIs for ILRT & LLRT being revised. Training in progress, utilizing SQN outages to get required OJT. Will schedule conduct in startup schedule. Tested 50 valves with 40% failure rate in 1990. Test indicates a need to have an action plan to ensure containment isolation valves will function as designed. Plant will evaluate.

ONGOING PROGRAMS

- Preventive and Corrective
 - MPAC and WR/WO process implemented. The Preventive Maintenance (PM) task performance for this period is 95.8% for "on time start". This is within the 95 percent "on time start" control limit.
- Predictive Maintenance
 - Vibration and lube oil sampling and trending in place. Eighty-nine components were monitored this period resulting in all but one component being in the acceptable range. A work request was written on space cooler 1-CLR-30-873 due to high vibration. Eight lube oil analysis were performed this week with all results being in the acceptable range. Developing TVA pilot thermography program with Corporate.
- Snubber Inspections
 - Database being scrubbed. Test machine onsite by April 1992. Spare parts program by August 1992. 100% functional testing and visual to be completed FY92-93.
- Obsolete Equipment
 - Committee in place. Funding deferred to FY92. Generic Spec issued. Transmitter spares reviewed.
- ASME Section XI Pump and Valve Program
 - Program developed to latest ASME XI, to be submitted 6 months prior to fuel load.
- NPRDS
 - Begin Engineering data scoping July 1992, fully implemented by April 30, 1993.
- Accredited Training Programs
 - In use. Maintenance, RADCON, and Chemistry programs reaccredited 9/19/91.

V. PLANT

PROGRAM STATUS

SPECIAL TASKS

AREA

STATUS

- | | |
|---|---|
| ◦ Valve Packing Enhancements | ◦ 1680 out of 4451 complete. Ahead of '91 schedule. |
| ◦ Deep Draft Pump Rebuild | ◦ ERCW pumps 8 of 8 complete. One of the 7 RCW pumps was rebuilt. Currently evaluating the need to rebuild the 6 remaining RCW pumps and the 4 HPFP pumps. |
| ◦ AGASTAT and HFA Relay Work | ◦ HFA relays complete, total of 174. AGASTAT relays walked down, 112 identified for NE to issue scaling setpoint documents. Complete by February 1992. |
| ◦ Main Generator Cooling Tube Replacement | ◦ Tubes to be shipped November 1991. Installation date "TBD" QC problem with tubesheet/tube rolling at vendor. |
| ◦ PCB Removal From Transformers | ◦ Of the 41 transformers, 13 have been reclassified as non-PCB, 2 are in reclassification, 23 will be ready for reclassification in mid-October, and 3 are still in processing. |
| ◦ Ice Condenser Restoration | ◦ Schedule being developed. |
| ◦ Fuel Modifications Program | ◦ Shipping casks onsite. Security issues being resolve. Start shipping October 1991. Last fuel back to WBN Unit 1 Fall 1992 and Unit 2 Spring 1994. |

SPECIAL ASSESSMENTS OF PROGRAMS

- | | |
|--------------------------------|--|
| ◦ Operational Readiness Review | ◦ Draft evaluation guidelines for Plant in place. SPOC procedure in place. NE, Industrial Safety, other site/non-plant functions need to be added. Plant Coordinator was assigned to Licensing temporarily, and has not been replaced. Will return or be replaced by December 1, 1991. |
| ◦ Maintenance Inspection Tree | ◦ 63% of actions completed. All actions will be completed by April 1, 1993. |
| ◦ INPO Assistance Visits | ◦ Reevaluating schedule for remaining visits. |

VI. **QUALITY**

L. E. Martin

- A. PERFORMANCE ASSESSMENT
- B. BACKLOG MATRIX
- C. ADDITIONAL SYSTEMATIC RECORD REVIEW (ASRR)
- D. ASME N-5 REVIEWS
- E. PAC/AQ PROJECT STATUS
- F. STAFFING
- G. QUALITY INDICATORS

VI. QUALITY

A. Performance Assessment

° Maintenance

- QA Procedure/Instruction Review Results

Total Reviewed - 1 Total Accepted - 1 100 Percent Accepted

- Quality Control Inspection Results

Total Inspections - 15 Total Accepted - 15 100 Percent Accepted

- QA Corrective Action Document Reviews/Verifications:

Total Corrective Action Plans Reviewed - 0 Total Accepted - 0

Total closure verifications performed - 1 Total Accepted - 1

100 percent Accepted

- QA WO/WR Review Results

Total Reviewed (Initiated) - 58 Total Accepted - 58 100 Percent Accepted

Total Reviewed (Closed) - 53 Total Accepted - 51 96 Percent Accepted

- Conclusion:

Slightly below AQL (97%) for closures, rejections were due to minor legible problems with forms. No recovery/action plan required.

- Audit Results

A FIR is being written on Mechanical Maintenance for failure to perform layup monitoring. It is suspected that this is a records problem and a corrective action plan for this FIR has been requested by 10/11/91.

° Procurement

- QA Procurement Document Review

Total Reviewed - 71 Total Accepted - 67 Percent Accepted - 94

Analysis:

Special supplier requirements were not included, technical requirements were not addressed, special receipt inspections were not included, and the equivalency evaluation form was not included.

Conclusion:

The errors in the package are random in nature.

Recovery/Action Plan:

Procurement Engineering Group and Quality Assurance are interfacing daily to reduce errors in package initiation.

VI. QUALITY (continued)

A. Performance Assessment (continued)

° Procurement (continued)

- Receipt Inspection Results (Line Items)

Total Inspected - 13 Total Accepted - 12 Percent Accepted - 92

Analysis:

The winding resistance on a Foxboro saturable reactor choke coil was out of tolerance.

- Receipt Inspection Results (Line Items) (continued)

Conclusion:

This problem is not indicative of an adverse trend.

Recovery/Action Plan:

The PEG engineer will discuss this problem with the responsible Foxboro engineer to determine the appropriate resolution.

° Nuclear Engineering

- QA Procedure/Instruction Review Results

Total Reviewed - 1 Total Accepted - 1 100 Percent Accepted

- QA Corrective Action Document Reviews:

Total Corrective Action Plans Reviewed - 3 Total Accepted - 3 100 Percent Acceptance Rate

- Total Closure Verifications Performed - 3 Total Accepted - 3 100 Percent Acceptance Rate

- QA Monitoring Results:

One monitoring activity (QWB-R-91-0264) on conduit/support walkthrough was performed on Engineering to evaluate the performance of Ebasco contract personnel in execution of TI-2006 (Engineering walkthrough and evaluation of Plant conduit and conduit supports.)

Conclusion:

Performance was acceptable and verified that the walkthrough data gathering process was being performed in a competent and professional manner by trained and qualified personnel in accordance with governing procedures.

- Audit Results

Training Audit WBA91106 identified continued longstanding problems with training administration and records, omitted training, and ineffective training practices. The feedback from NE indicates that the backlog of records has been updated in NET-P. A training coordinator has been appointed for WBN-NE, ASME training was conducted 9-12-91, and individual training needs are being identified. NEs actions are addressing the issues identified during the audit. QA will evaluate the corrective actions upon completion. Completion is scheduled for 9-30-91.

VI. QUALITY (continued)

A. Performance Assessment (continued)

Nuclear Engineering (continued)

- Audit Results

Analysis:

Corrective Action Program Audit WBA91108 identified problems with NE's failure to follow procedure for documenting generic reviews. This problem was documented on WBFIR910254108. In addition, the audit identified a problem with NE's evaluation of extent-of-condition for PERWBPER910340.

Conclusion:

NE is not adequately implementing some elements of the Corrective Action Program.

Recovery/Action Plan:

NE should review all FIRs and PERs initiated since implementation of the new Corrective Action Program, where they are the responsible organization, to ensure that generic reviews and extent-of-condition were properly performed and documented. The response to these problems is due by October 21, 1991.

• Quality Assurance

- Audit Results

Analysis:

Corrective Action Program Audit WBA91108 identified problems with QA's failure to follow procedure for documenting generic reviews on a FIR (WBFIR910193112) and identified a problem with QA's failure to produce a FIR package (WBFIR910216109) for review. These problems were documented on FIRs WBFIR910254108 and WBFIR910253108, respectively.

Conclusion:

QA is not adequately implementing an element of the new Corrective Action Program and of the QA Records Program.

Recovery/Action Plan:

QA should review all the FIRs initiated since the new Corrective Action Program was implemented where they are the responsible organization to ensure that generic reviews were properly performed and documented. QA should also locate or regenerate the FIR package which could not be located and review the system for transmitting of the packages to RIMS. A response is due by October 21, 1991.

• Modifications

- QA Corrective Action Document Reviews:

Total Corrective Action Plans Reviewed - 2	Total Accepted - 2
100 percent Acceptance Rate	

QA Procedure/Instruction Review Results

Total Reviewed - 12	Total Accepted - 10	Percent Accepted - 83
---------------------	---------------------	-----------------------

VI. QUALITY (continued)

A. Performance Assessment (continued)

◦ Modifications (continued)

- QA Procedure/Instruction Review Results (continued)

Total Reviewed - 12 Total Accepted - 10 Percent Accepted - 83

Analysis:

Acceptance rate is below AQL.

Conclusion:

Typical deficiencies include a missing hold point and inappropriate/incomplete references. No Recovery/Action Plan required at this time.

- QA Monitoring Results:

One monitoring activity (QWB-R-91-0269-F) on Modifications training courses for the resumption of craft work was performed. Training consisted of three courses and the Monitoring verified that training was adequate and that the instructors were qualified, knowledgeable, and well prepared. The results were acceptable.

- Audit Results

Analysis:

Corrective Action Program Audit WBA91108 identified a problem with Modifications' failure to perform/document an extent-of-condition for PER WBPER910318.

Conclusion:

Modifications is not adequately implementing an element of the new Corrective Action Program.

Recovery/Action Plan:

Modifications should review all PERs initiated since the implementation of the new Corrective Action Program where they are the responsible organization to ensure all extent-of-conditions were properly performed and documented. Modifications will provide a response on this issue by October 4, 1991.

- QC Inspections

Total Inspections - 13 Total Accepted - 13 Percent Accepted - 100

- New Workplan Reviews

Total Reviewed - 30 Total Accepted - 26 Percent Accepted - 86

Analysis:

The acceptance rate is below the AQL. Most discrepancies occurred in electrical WPs. Typical discrepancies included failure to appropriately mark associated drawings and the cable numbers in the WP were not consistent with pull sheets.

VI. QUALITY (continued)

A. Performance Assessment (continued)

- New Workplan Reviews (continued)

Conclusion:

Improvement in the acceptance rate is noted over last weeks performance.

Recovery/Action Plan:

As indicated in last week's report, Modifications initiated action to improve acceptance rate. Insufficient time has lapsed to see the effectiveness of that action.

- Safety Net Review

Total Reviewed - 3 Number Attributes Evaluated - 78 Number Attributes Accepted - 77
Percent Acceptable - 98.7

° Other Organizations

- Audit Results

Analysis:

(Site Support) - Corrective Action Program Audit WBA91108 identified a problem with Site Support's failure to perform/document an extent-of-condition (EOC) for WBP910121PPER which was invalidated and replaced with II-W-91-006.

Conclusion:

Site Support is not adequately implementing some elements of the Corrective Action Program.

Recovery/Action Plan:

Site Support should review all FIRs and PERs initiated since implementation of the new Corrective Action Program, where they are the responsible organization, to ensure that generic reviews and extent-of-conditions were properly performed and documented.

(Project Management) - Corrective Action Program Audit WBA91108 identified problems with Project Management's failure to follow procedure for documenting generic reviews on FIR WBFIR910162.

Conclusion:

Project Management is not adequately implementing some elements of the Corrective Action Program.

Recovery/Action Plan:

Project Management should review all FIRs and PERs initiated since implementation of the new Corrective Action Program, where they are the responsible organization, to ensure that generic reviews and extent-of-condition were properly performed and documented.

B. WBN Backlog Matrix

SIGNIFICANT CORRECTIVE ACTION REPORT (SCAR)/ADMINISTRATIVE CONTROL PROGRAM (ACP) STATUS REPORT

PERIOD ENDING - SEPTEMBER 20, 1991

PROGRAM/PROCEDURE	OWNER/ORGANIZATION	PREVIOUS BACKLOG	OPENED THIS PERIOD	CLOSED THIS PERIOD	CURRENT BACKLOG
Significant Corrective Action Report (SCAR) SSP-3.4	R. W. Dibeler Quality Assurance	296	1	1	296
Problem Evaluation Report (PER) SSP-3.6	S. O. Casteel Site Licensing	471	6	6	471
Finding Identification Report (FIR) SSP-3.7	T. J. Arney Quality Assurance	37	3	1	39
QC Unsatisfactory Inspection Report (IR) SSP-3.1	S. W. Crowe Quality Assurance	967	28	29	966
Receipt Unsatisfactory IR SSP-10.2	R. W. Dibeler Quality Assurance	340	2	18	324
Work Orders/Work Requests (WOs/WRs) SSP-6.2 (For Plant Only)	C. D. Nelson Plant	2091	118	118	**2091
Maintenance Requests (MRs) AI 9.2.1, 9.2.2, 9.2.3 (Modifications Only)	J. M. Hennard Modifications	4255	25	5	**4275
Drawing Deviation (DD) SSP-2.11	D. L. Koehl Plant	55	3	4	54
Incident Investigation (II) SSP-12.9	S. O. Casteel Site Licensing	8	0	0	* 7
Radiological Awareness Report (RAR) SSP-5.5	J. W. Cox Plant	2	0	0	2
Security Violation (SGER) -11.2	R. A Hardin Site Security	0	0	0	0
Corrected-on-the-Spot (COTS) QMP 102.14	T. J. Arney Quality Assurance	0	0	0	0
TOTALS		8522	186	182	8525

* Corrected Incident Investigations to reflect actual backlog.

** 490 items are in the process of being transferred from Plant to Modifications.

ASSESSMENT:

There is a total of 327 SCARs/FIRs/PERs statused as "blue-dot" (workplan ready). Therefore, the SCAR/FIR/PER backlog should decrease quickly after construction restart.

VI. QUALITY (continued)

C. Additional Systematic Record Review (ASRR)

- ASRR review of records is progressing on schedule. No new trends have been identified this period. Hardware reinspection is continuing in the HVAC support and large/small bore supports. An approach is being developed for the request for additional information from the Nuclear Regulatory Commission.

D. N-5 Review

- WBSA900145 is being revised to eliminate 100 percent review of heat code traceability for the balance of the N-5 review. A checklist has been developed expressly for the Significant Corrective Action Report N-5 review. The new checklist should streamline the review process.

E. PAC/AQ Project Status Report

- Phase I, II, and III of the Prototype Program have been completed. Phase IV of the Prototype Program is on schedule to be completed by 09/30/91. Program is proving effective in finding problems and fixing them; however, improvement is needed on timeliness of engineering responses to identified concerns.

PACR Status

- ° Total concerns/recommendations from PAC/AQ to date is 31.

Total PACRs: 31
Total Open: 22
Total Closed: 9
Total Resolved: 18
Total Unresolved: 13

(Response not acceptable or response overdue)

Recovery/Action Plan:

- ° A negative Quality Report Card has been issued by the PAC/AQ Project Manager to the Engineering Manager requesting steps be taken to improve timeliness of PACR responses.
- ° A number of meetings have been held by the PAC/AQ Project Manager with the Engineering Manager where agreement was reached to improve this area prior to escalating this issue.
- ° The Site Vice President has re-emphasized the need for scheduling the work and the need to maintain a 2-week turn-around time on responses to PACRs at a recent offsite meeting, including making PACRs more visible through this report.
- ° The Engineering Manager is discussing these items with each of the lead engineers at his daily 3:00 PM meetings.
- ° This area will be monitored very closely by the PAC/AQ Project Manager in order to expedite resolution, corrective action, and closure of PACRs.

F. Staffing

TVA 92
Contractor 71
163

TVA - Permanent Staff 72
TVA - Loaned 20
Contractors 71
Total as of 9-20-91 163

VI. QUALITY (continued)

G. QUALITY INDICATORS

WEEKLY QUALITY INDICATORS

Quality Indicator Description	VALUE - WEEK ENDING				TARGET	TARGET	REMEDIAL
	08/28	09/04	09/11	09/18	VALUE	MISSED	CORRECTIVE ACTION
• Reject Rate QIs							
Responses to Employee Concerns Accepted by ECTG			100%	100%	95%	No	
Manager's Review of Audit Reports			100%	100%	95%	No	
Procedure Reviews (Internal)	85%	95%	90%	92.5%	95%(1)	X	(2)
Monitoring Reports Reviews (Internal)	85%	90%	95%	90%	95%(1)	X	(2)
CAQ Reviews (Internal)	80%	95%	90%	79%	95%(1)	X	(2)
QC Peer Inspections			100%	100%	100%		
• Cycle Time QIs*							
• Capacity Utilization QIs*							
• Process Improvement QI*							

(1) Based on 4 week rolling average.

(2) Internal administrative QA process errors. No effect on product. Errors are discussed and resolved with individuals prior to release of work.

* Being developed more information later.

VII.

OTHER

A. SITE SUPPORT

- ° PROCEDURE UPGRADE
PRODUCTION GRAPHS

- ° QUALITY INDICATORS

L. E. MAILLET

B. SITE CONTROLLER

- ° QUALITY INDICATORS

C. R. SEAY

C. HUMAN RESOURCES

- ° QUALITY INDICATORS

E. R. BRABHAM

D. PROJECT CONTROLS

- ° QUALITY INDICATORS (SITE-WIDE)

P. A. RANKIN

VII. OTHER

A. SITE SUPPORT

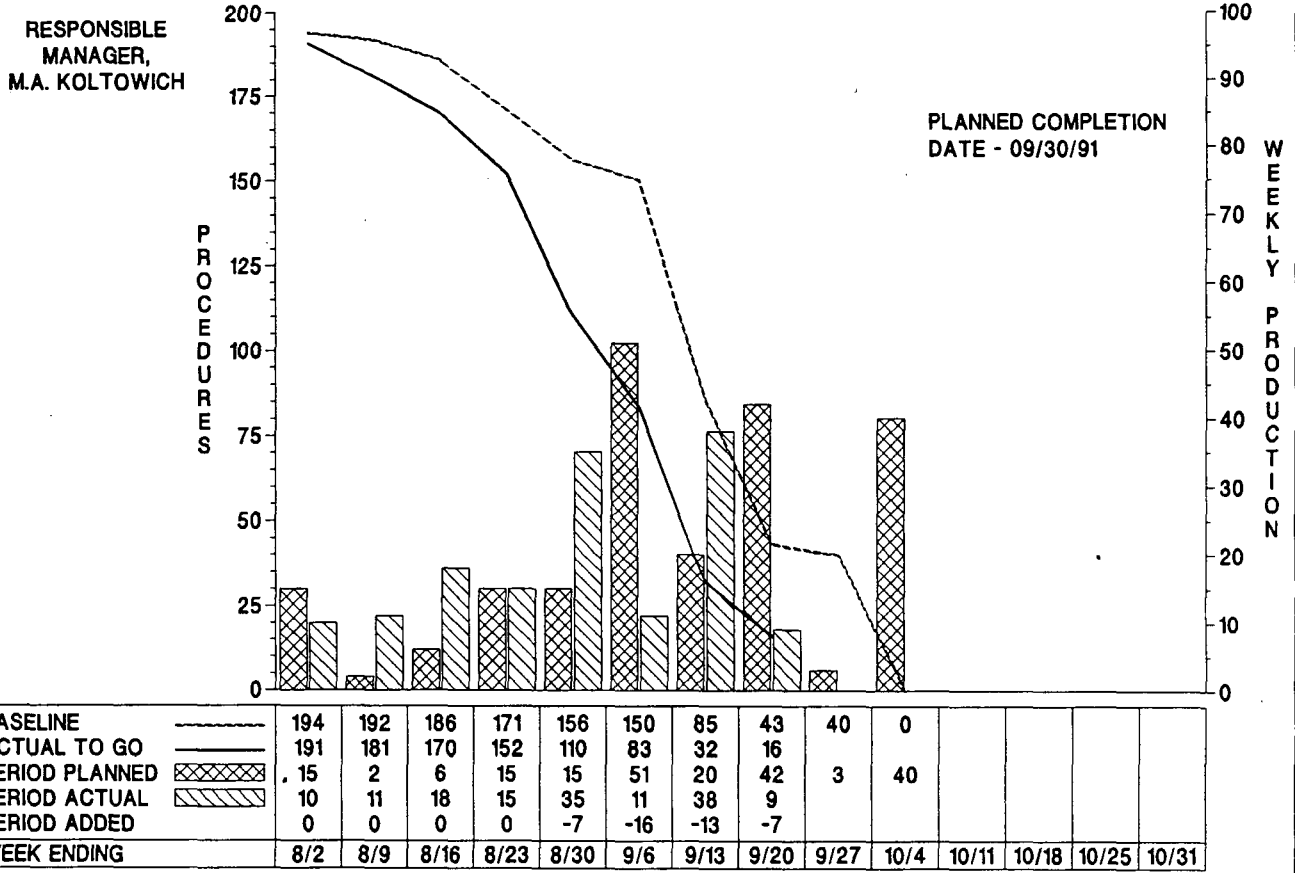
- ° All quality targets were met for the week ending 09/11/91.
- ° The Procedures Upgrade effort for restart (09/15/91) has been completed on time and for full completion (09/30/91) is currently ahead of schedule.
- ° There is one incident investigation currently underway that involves Document Controls' performance in providing information to support an NRC inspection. The cause and corrective actions are being determined.
- ° There was also a completed incident investigation which involved 1) a controlled drawing found unattended; and 2) a procedure used in work that was not verified for use. The causes identified include: 1) Little or no guidance exists for identifying and locating missing controlled drawings or for maintaining user controlled drawing files; and 2) All organizations do not identify or conduct adequate training in site programs which use site procedures. The corrective actions include 100 percent audits of all files; training matrix reviews by all departments; revise the controlled drawing procedure, training on all three records management procedures; etc.

WEEKLY QUALITY INDICATORS

Quality Indicator Description	VALUE - WEEK ENDING				TARGET	TARGET	REMEDIAL
	08/23	09/04	09/11	09/18	VALUE	MISSED	CORRECTIVE ACTION
Preparation for Microfilming Acceptance Rate	100	99.9	99.8	100	98%		
Microfilming Acceptance Rate	99	70.4	99.3	100	97%		
Indexing Acceptance Rate	98	100	100	97	97%		
Retrievals With 24 Hours	100	100	100	100	99%		
° Cycle Time QIs*							
° Capacity Utilization QIs*							
° Process Improvement QIs*							

*Under Development - This information will be developed by October 1.

Milestone: N/A

PROCEDURES UPGRADES**TOTAL SSPs AND PROCEDURES****WBN - SITE PROCEDURES****ANALYSIS: AHEAD OF SCHEDULE (THIS WEEK'S PRODUCTION WAS BEHIND)**

- * DELETED 6 CAIs; THESE ARE UNIT 2 PROCEDURES WHICH ARE NOT REQUIRED AT THIS TIME. ALSO EXTENDED IMPLEMENTATION OF ONE PAI; THIS IS A PROGRAM ENHANCEMENT WHICH IS NOT NEEDED UNTIL A LATER DATE.
- * OF THE 42 PLANNED TO BE COMPLETE DURING THIS PERIOD, 9 WERE COMPLETED, 6 WERE DELETED, 1 WAS EXTENDED BEYOND THE REPORT DATE, 24 WERE COMPLETED IN PREVIOUS REPORTING PERIODS, AND 1 REMAINS INCOMPLETE (MAINTENANCE).

ACTION/RECOVERY PLAN:

- * WORK IS IN PROGRESS ON THE LATE INCOMPLETE PROCEDURE. THIS WILL BE FINISHED BY 09/27/91.
- * OF THE OTHER 15 PROCEDURES TO BE DONE TO COMPLETE THIS PROJECT, ALL ARE IN VARIOUS STAGES OF COMPLETION AND ALL DEPARTMENTS PLAN TO MEET THE REQUIRED SCHEDULE. TRAINING HAS BEEN ADDED AS A RESTART ITEM FOR DEPARTMENTS. DEPARTMENTS MUST TRAIN ON PROCEDURES THAT AFFECT WORK.

VII. OTHER (continued)

B. SITE CONTROLLER

QUALITY INDICATOR	VALUE-WEEK ENDING				TARGET	TARGET	REMEDIAL
	8/28	9/04	9/11	9/18	VALUE	MISSED	CORRECTIVE ACTION
Accounting Errors (Actual Expenditure)	0	1	0	0	8/WK		
Payroll Processing Errors	100%	100%	99.9%	100%	99.5%		
CARs (Budget Report) Errors	0	0	0	0	1/WK		
CCN/CCB Action Input to CARs	100%	75%	(1)	94%	100%	X	(2)

(1) No CCNs formally approved for week.

(2) The materials portion of CCN91-GB-02 is being held pending clarification from project manager. Line budget officers will more aggressively pursue questionable portions of CCNs. (7.5 out of the 8 CCNs approved during the week were entered into CARs.)

*Under development - more information later.

VII. OTHER (continued)

C. HUMAN RESOURCES

WEEKLY QUALITY INDICATORS							
Quality Indicator Description	VALUE - WEEK ENDING				TARGET	TARGET	REMEDIAL
	08/28	09/04	09/11	09/18	VALUE	MISSED	CORRECTIVE ACTION
°Reject Rate QIs							
Personnel Action Acceptance	100	100	97	95	95%		
Correspondence Timeliness and Accuracy Acceptance Rate	98	88	90	93	95%	X	(1)
Quality Indicator Surveys Acceptance Rate	100	100	100	100	95%		
° Cycle Time QIs*							
° Capacity Utilization QIs*							
° Process Improvement QIs*							

(1)Volume of correspondence down this week. Two errors represent 7 percent error rate. Down from 5 errors previous week. Performance is improving.

*Under Development - More Information Next Week

VII. OTHER (continued)

D. PROJECT CONTROLS (Site-Wide Quality Indicators)

QUALITY INDICATOR	VALUE-WEEK ENDING				TARGET	TARGET	REMEDIAL
	8/23	9/04	9/11	9/18	VALUE	MISSED	CORRECTIVE ACTION
NRC Commitments in Level 3 Schedule	98	99	99	98	97		
Corrective actions in Level 3 Schedule	96	99	99	99	97		
Level 3 rollup to Level 2 Schedule Comparison	83	88	77	84	97	X	(1)
Employee concerns (CATDs) in Level 3 Schedule	59	66	66	71	97	X	(2)
DCNs (including all non-F type) in Level 3 Schedule	54	57	59	57	97	X	(3)

- (1) The reduction of the percent value of Level 2/3 rollup will be addressed in the comprehensive overall schedule review, to be completed by 10/1/91. This review will ensure quality of the schedules.
- (2) A review of all CATDs is scheduled after the cleanup of CAQs and DCNs to ensure quality is maintained.
- (3) By October 1, 1991, the unscheduled DCNs will be added to the P/2 schedule with pre-authorization responsibility assigned to TVA.

*Under Development - More Information Next Week

VIII. PUNCHLIST FOR FURTHER IMPROVEMENTS

- ° SITE WEEKLY REPORT

VIII. PUNCHLIST FOR FURTHER IMPROVEMENTS

- Human Resources to add cycle times for key actions as AIs/for example, salary action (09/09) Brabham
- CPI/SPI process improvement punchlist and project by project recovery plans for projects not meeting CPI and SPI target (09/09) Weber

4 Previous items completed

2 Items not completed, both - 2-weeks old
Items added