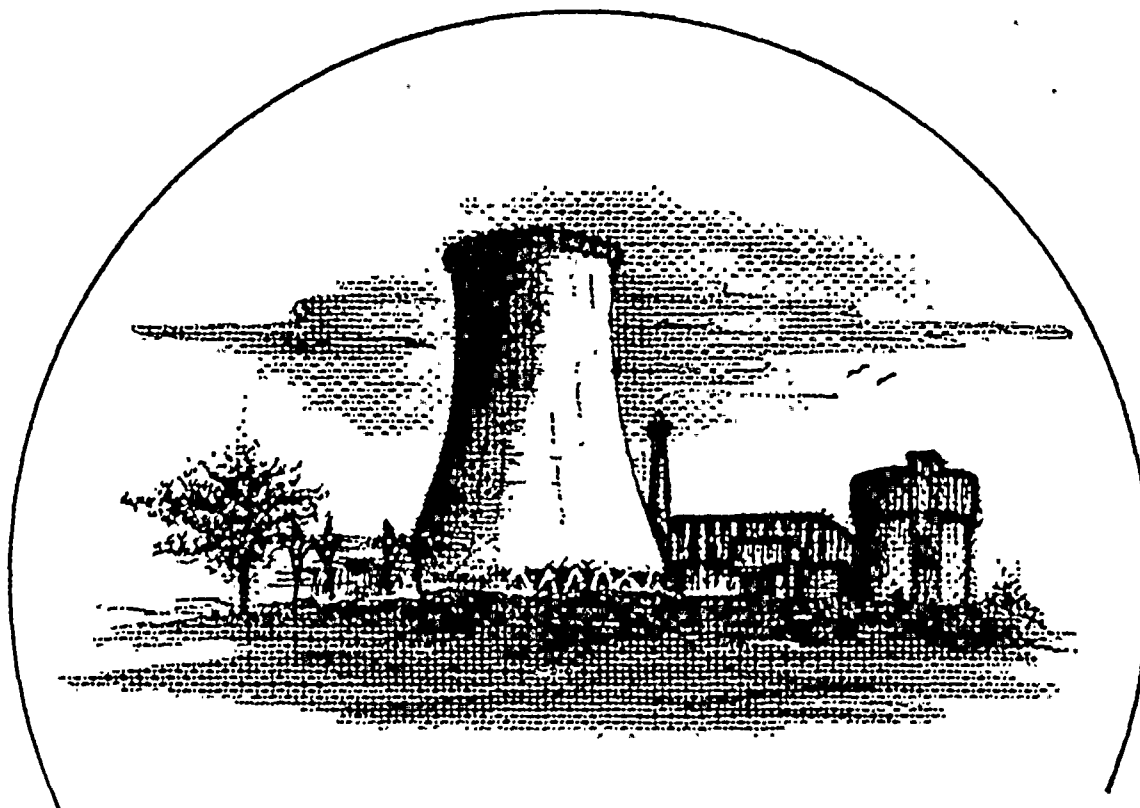


MJR

Project Report



Nine Mile Point Unit 2

JULY 1984

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PDR ADDCK 05000410
R PDR

JULY 1984
PROJECT REPORT

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I. EXECUTIVE SUMMARY

A. Project Director

The Project was 76.70% complete at the end of this period. We should have been 79.21%. Although the Project is still on schedule for a February 1986 fuel load date, we continued the unacceptable trend of contingency erosion.

The 1.63% Project progress obtained for this period is considered by management as not satisfactory. The following are reasons for this deviation from the 2.29% plan:

1. The unlevelized front end loading of Major Milestones in support of systems completion work is creating a bow wave of work that is not being achieved.
2. The Startup production goals are inhibited by the lag in turnover of clean completed work.

We reported previously that this gap of 2.0% delay should not be extrapolated to indicate a future trend. I am disappointed in that although we improved over the previous month's performance nevertheless the shortfall in progress has widened this gap to 2.5%. The following immediate corrective actions are underway to bring a halt to this decline:

1. Schedules are being levelized and refined
2. Commodity production plans are being finalized in accordance with the levelized and refined schedules.
3. Comprehensive and detailed work plans, as with the integrated system milestone rescheduling, are being developed to facilitate clear work plans to support required system completion turnovers in the most cost effective and work economizing fashion.
4. A specialist in the field of piping and related commodities is working with SWEC and others to initiate improvements to unit rates and better work techniques.

To meet our objectives and get this Project turned around NMPC met with SWEC Management and presented a stringent action plan requiring significant immediate corrective action. I will be reviewing SWEC's progress relative to this action plan with the SWEC Project Director on a weekly basis and have targeted the end of August as a benchmark to measure SWEC's responsiveness to the Project needs.

As stated, the Project is completing a detailed assessment of the Integrated Flush Milestone Schedule. The preliminary indication is that by concentrating the Project efforts on the work actually required for the Milestone, the March 4, 1985 scheduled Milestone date is achievable.

I. EXECUTIVE SUMMARY (Cont.)

A. Project Director (Cont.)

The Project is nearing completion of the revised cash flow forecast to the end of the Project. Preliminary results indicate that the 1984 cash flow will be in excess of the $\$675 \times 10^6$ previously projected. In addition, the efforts expended in the development of the forecast have added assurance that the current $\$3.37 \times 10^9$ Project estimate is adequate.

On July 27, 1984, NMPC provided the NRC with a status report relative to NMPC's commitments to the Construction Appraisal Team inspection report. Several items were not completed by the June 15, 1984, scheduled date; however, most were completed by July 27, 1984, with the balance to be completed by August 31, 1984.

The CHOC headquarters manhours continued to increase during this period. This management directed SWEC to immediately return to the planned manhour curve. During September SWEC is scheduled to be utilizing a system which provides weekly reporting of manhour expenditures. This will allow the Project to more closely detect manhour overruns and take prompt corrective action.

MAJOR PROBLEMS

The following is an update to the major problems define in last month's report.

- wm/bc*
- Crocker*
- Salmon*
- Crocker*
Yeager
1. "Our ability to control work within schedule requires significant improvement." This item is addressed in several areas of the SWEC Action Plan.
 2. "Despite strenuous planning efforts and excellent conduit production we have failed to open up adequate backlog for cable installation." The conduit production continues to be excellent; however, we still have not opened a significant cable installation backlog. Engineering will issue by 8/15/84 a System/38 computer report which will provide detailed information relative to the status of each raceway, and junction box. This report will allow construction to determine specific work which must be completed for the raceway.
 3. "Improved planning efforts and precise definition of components within test boundaries are required." This item is addressed in several areas of the SWEC Action Plan.
 4. "MSIV modifications must be stated very soon." A detailed plan has been developed to resolve the problem which entails the application of a corrosion-resistive cladding to the affected area. It has also been identified that valve body test coupons were not heat treated as required by ASME. To meet code requirements, it may be necessary to cut test coupons from the valve bodies.

I. EXECUTIVE SUMMARY (Cont.)

A.. Project Director (Cont.)

- Balno*
5. "The Records Identification and Management Program must be brought within total control at the earliest date." This item is addressed in several areas of the SWEC Action Plan.

The following items are being added to the list of major problems:

- Waggoner*
6. In a number of significant areas we have not been satisfied with General Electric Company attention to Project schedule requirements under the NSSS scope of work.
- Kappas*
7. ITT Grinnell has not been able to meet the recovery plan for Large Bore Category I Pipe Supports. Additionally, the large bore hanger acceptance rate is unacceptable.

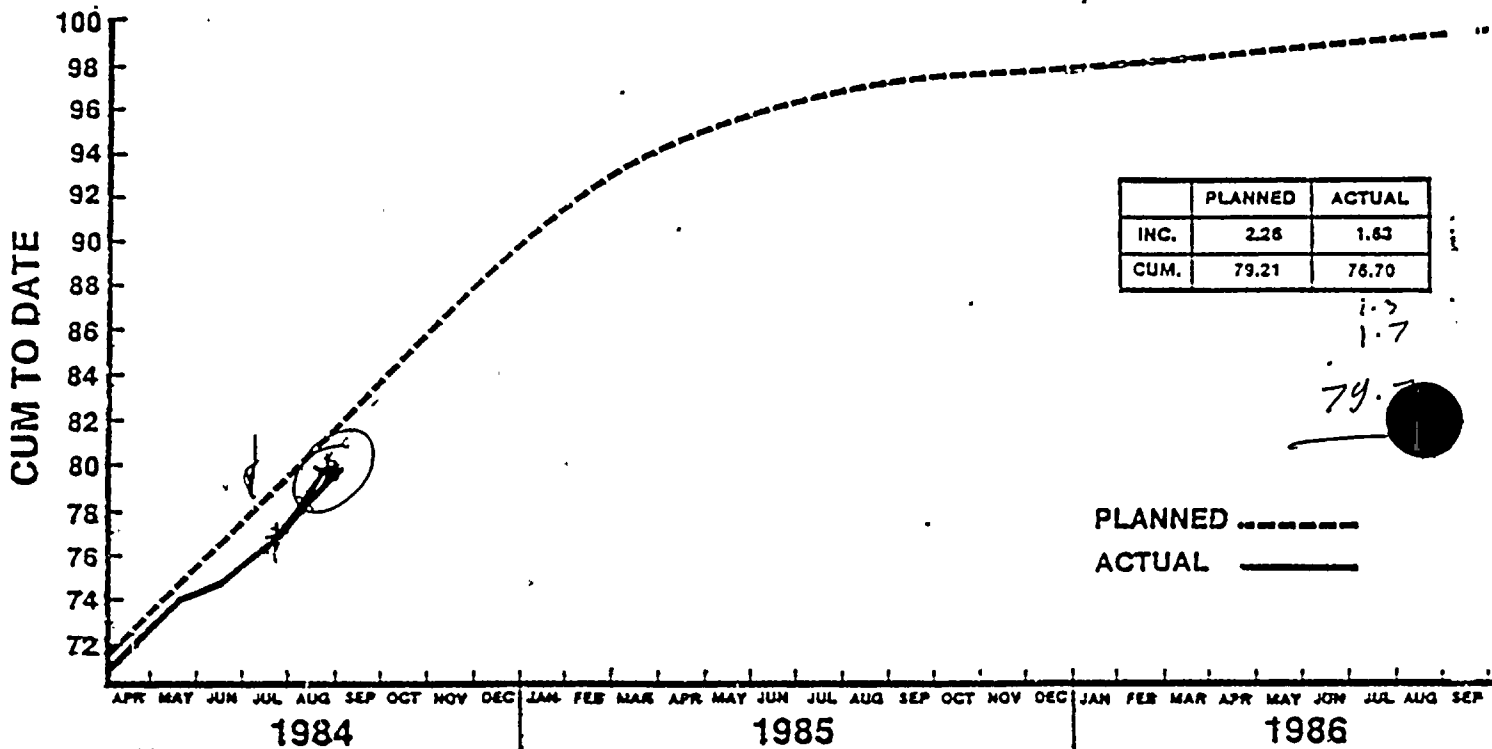
TOTAL PROJECT PERCENT COMPLETE SUMMARY TABLE **NINE MILE POINT NUCLEAR STATION - UNIT 2**

	PERCENT OF TOTAL PROJECT	ITEM PERCENT COMPLETE	WEIGHTED PERCENT COMPLETE		1984		1985		1986	
			CUM	INC	JIFIMIAIMJLJIAISIOINIO	JIFIMIAIMJLJIAISIOINIO	JIFIMIAIMJLJIAISIOINIO	JIFIMIAIMJLJIAISIOINIO	JIFIMIAIMJLJIAISIOINIO	JIFIMIAIMJLJIAISIOINIO
I MILESTONES										
1. ENERGIZATION 4160 V	2.49	98.29	2.40	0.0000						
2. CONDENSATE DEMINERALIZER	2.98	89.11	2.66	0.0513						
3. SERVICE WATER	6.06	88.43	5.36	0.1357						
4. STANDBY DIESEL	0.53	65.08	0.34	0.0200						
5. INTEGRATED FLUSH	13.09	74.25	9.72	0.1728						
6. FLOW INDUCED VIBRATION	0.09	71.14	3.06	0.0044						
7. TURBINE GENERATOR	2.70	77.68	2.10	0.0701						
8. VENTILATION	4.45	70.09	3.12	0.1305						
9. INTEGRATED LEAK RATE	1.14	50.28	0.57	3.0436						
10. RADWASTE SYSTEM	1.34	62.31	0.83	0.0244						
11. FUEL RECEIPT	0.75	50.78	0.38	0.0273						
12. LOSS OF POWER/ECCS	0.81	44.27	0.36	0.0278						
13. FUEL LOAD	0.47	57.65	0.27	0.0121						
14. FUEL LOAD TO C.O.	1.10	0.00	0.00	0.0000						
SUBTOTAL	38.00%	74.14%	28.17%	0.7201%						
II CONSTRUCTION COMMODITIES										
1. PIPING	9.45	88.24	8.34	0.2315						
2. ELECTRICAL	6.63	73.04	4.84	0.2465						
3. I & C	0.99	52.65	0.52	0.0474						
4. HVAC	0.83	77.60	0.54	0.0214						
5. CIVIL	13.10	100.00	13.10	—						
SUBTOTAL	31.00%	88.54%	27.45%	0.5469%						
III STARTUP & TEST COMMODITIES										
1. PRE-OPERATIONAL TESTING	0.80	0.00	0.000	0.0000						
2. HYDROS	0.80	19.33	0.155	0.0604						
3. LOOP CALIBRATIONS	0.80	3.02	0.024	0.0103						
4. CONTROL CIRCUIT VERIFICATIONS	0.80	3.88	0.031	0.0168						
5. INITIAL EQUIPMENT OPERATION	0.80	1.83	0.015	0.0014						
6. FLUSHES	0.75	4.78	0.036	0.0233						
7. PENETRATION LEAK RATE TESTS	0.25	0.00	0.000	0.0000						
SUBTOTAL	5.00%	5.21%	0.260%	0.1122%						
IV ENGINEERING										
1. DESIGN VERIFICATION	0.54	28.60	0.154	0.0118						
2. EQUIPMENT QUALIFICATION	0.25	69.25	0.173	0.0029						
3. LICENSING	0.56	69.07	0.387	0.0038						
4. SUPPORT OF STARTUP	0.38	88.70	0.261	0.0127						
5. BALANCE OF ENGINEERING	18.27	91.98	16.801	0.0837						
SUBTOTAL	20.00%	88.88%	17.78%	0.1199%						
V QUALITY ASSURANCE	5.00%	55.20%	2.76%	0.110%						
VI RECORDS TURNOVER TO PPF	1.00%	28.00%	0.28%	0.020%						
TOTAL	100.00%	—	76.70%	1.63%						

STATUS AS OF 7/15/84
 — MILESTONE SCHEDULE
 CRITICAL PATH

NOTE: This table is preliminary and reflects project data available as of 7/15/84. Revised data from the Project Control Program will be included as it is developed.

TOTAL PROJECT PERCENT COMPLETE PERFORMANCE CURVE NINE MILE POINT NUCLEAR STATION - UNIT 2



NOTE:

THIS CURVE IS PRELIMINARY & REFLECTS PROJECT DATA AVAILABLE AS OF 7/15/84.
 AS REVISED PROJECT CONTROL PROGRAM DATA IS FINALIZED IT WILL BE INCLUDED IN THE CURVE.

I. EXECUTIVE SUMMARY

B. Manager Quality Assurance - Projects

Corrective actions have been implemented to reduce the ITT Grinnell weld reject rate. Though the reject rate has declined, it is still at an unacceptable level and corrective actions will continue.

Stone and Webster is preparing to perform a detailed audit of the SWEC Quality Assurance Program to determine its effectiveness in monitoring the on-site contractor's activities. Parallel to this action, NMPC Project Quality Assurance is preparing to perform a detailed assessment of the effectiveness and adequacy of the on-site contractor's programs.

The independent assessment team is continuing its review of complete CAT Action plans, NRC deficiencies identified in the SALP Report, and NMPC/Contractor identified deficiencies.

[Wm - wants general statement as to
quality of on going work.]

II. MILESTONE SCHEDULE STATUS

A. Energization 4160V

During July, a number of systems were turned over. However, the backlog of turnovers was not sufficiently reduced to recover schedule time. Further slippage was experienced on critical 4160V switchgear turnover and testing activities. Overall schedule status through July is eight weeks behind schedule.

A study is underway to determine the impact of required modification to high pressure core spray 4160V switchgear modification upon the scope of this milestone. It has already been determined that these modifications will not impact the overall schedule.

B. Condensate Demineralizer

The milestone schedule remains at four weeks behind schedule. During July, the makeup water storage and transfer system was turned over and testing was initiated. No overall project delay is anticipated.

C. Service Water

Overall status of this milestone remains at three weeks behind through July. Work concentration continued toward release and operation of three of the six service water pumps. The screenwell was flooded during July in preparation for pump operation.

D. Integrated Flush

During July, the integrated flush status slipped to six weeks behind schedule. Although significant progress was made, the level of work completed was insufficient on a number of critical systems in the small bore piping area.

It has been recognized that a further subdivision of work is required to permit the integrated flush schedule to be maintained. A study has been initiated to defer work not necessary to support the integrated flush and RPV Hydro to a point later in the schedule. This will optimize the application of resources to critical areas.

E. Turbine Generator

During July, an improvement of one week was noted on work critical to supporting the lube oil flush. Overall status is now one week behind schedule.

II. MILESTONE SCHEDULE STATUS

F. Diesel Generators

Through July, the milestone status remained at two weeks behind schedule with no impact projected to the overall schedule.

G. Radwaste System

An effort is underway to adjust the radwaste schedule and develop a revised work sequence. Status against the base milestone plan is three weeks behind schedule.

For the balance of the milestones, work proceeded in support of the milestone dates with no overall impacts noted.

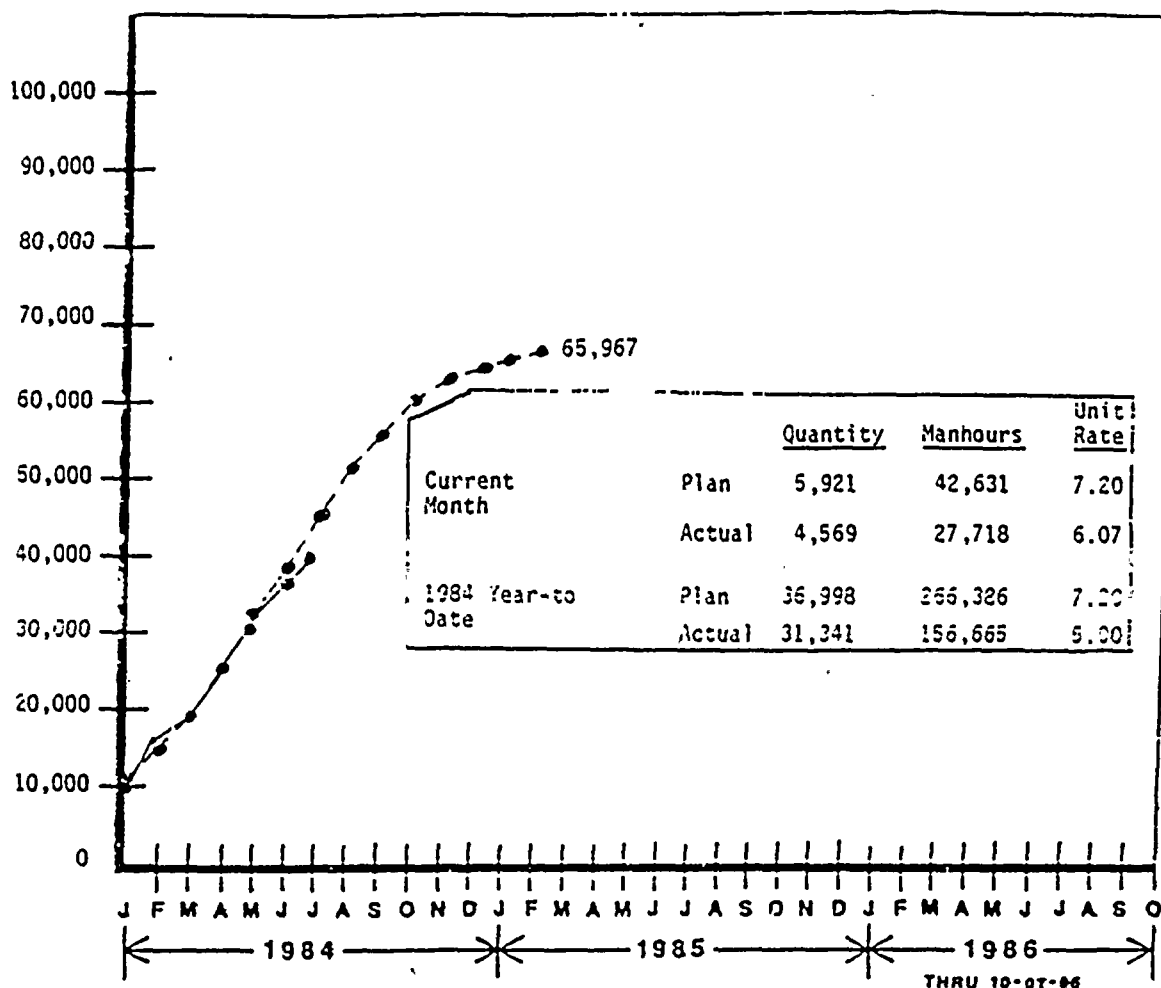
1. Flow Induced Vibration
2. Ventilation
3. Integrated Leak Rate Test
4. Fuel Receipt
5. Fuel Load

III. CONSTRUCTION

A. General

Overall, Construction cumulative performance relative to key indicator commodities was positive in July. This is noteworthy, considering the high levels of absenteeism experienced during the week of July 4. The major construction commodities are depicted in the following graphs which have been updated to show year-to-date and current period performance.

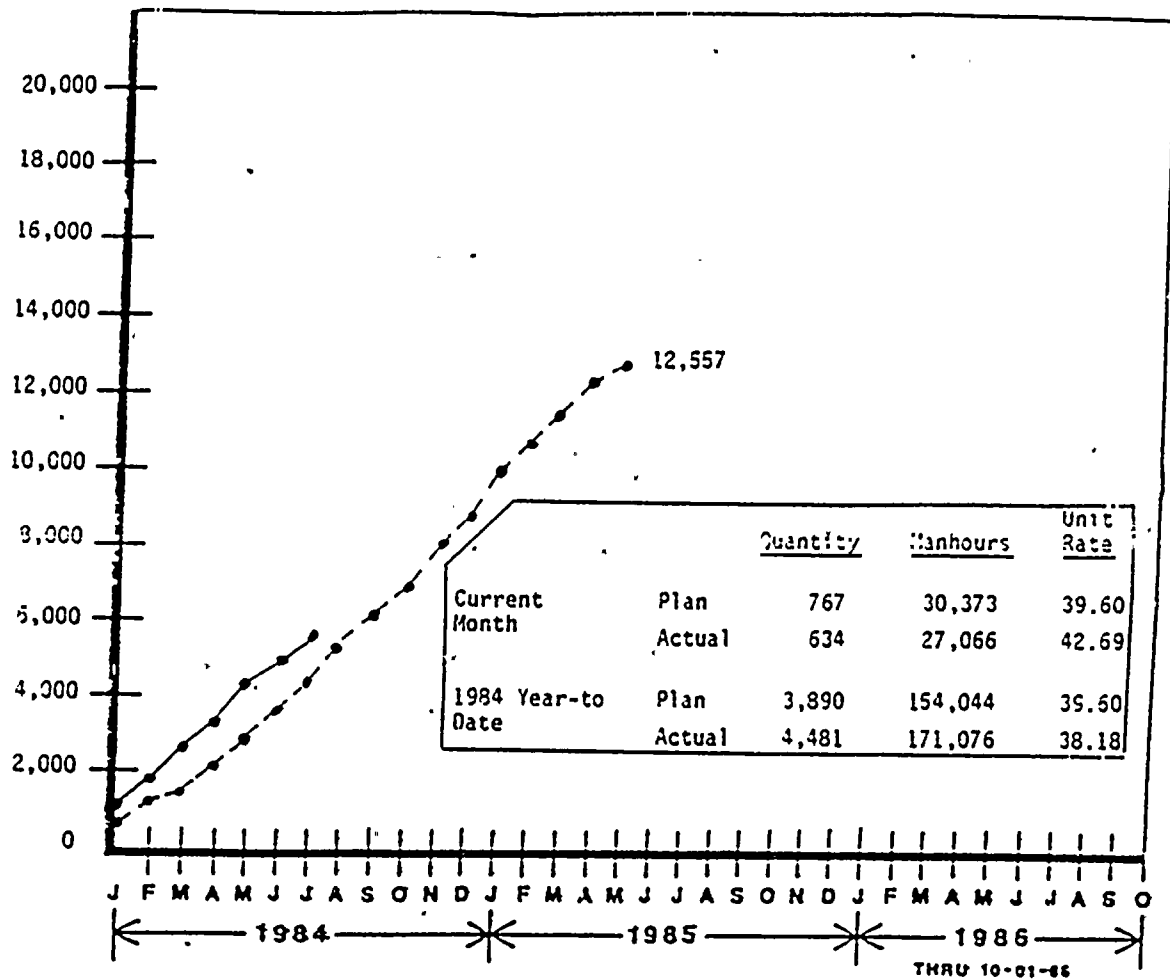
SWEC S. B. PIPE



SWEC small bore piping installation improved from the previous month. A return to plan is expected in view of process improvements relative to shop fabrication previously identified. (See text for additional details.)

----- Planned
 _____ Actual

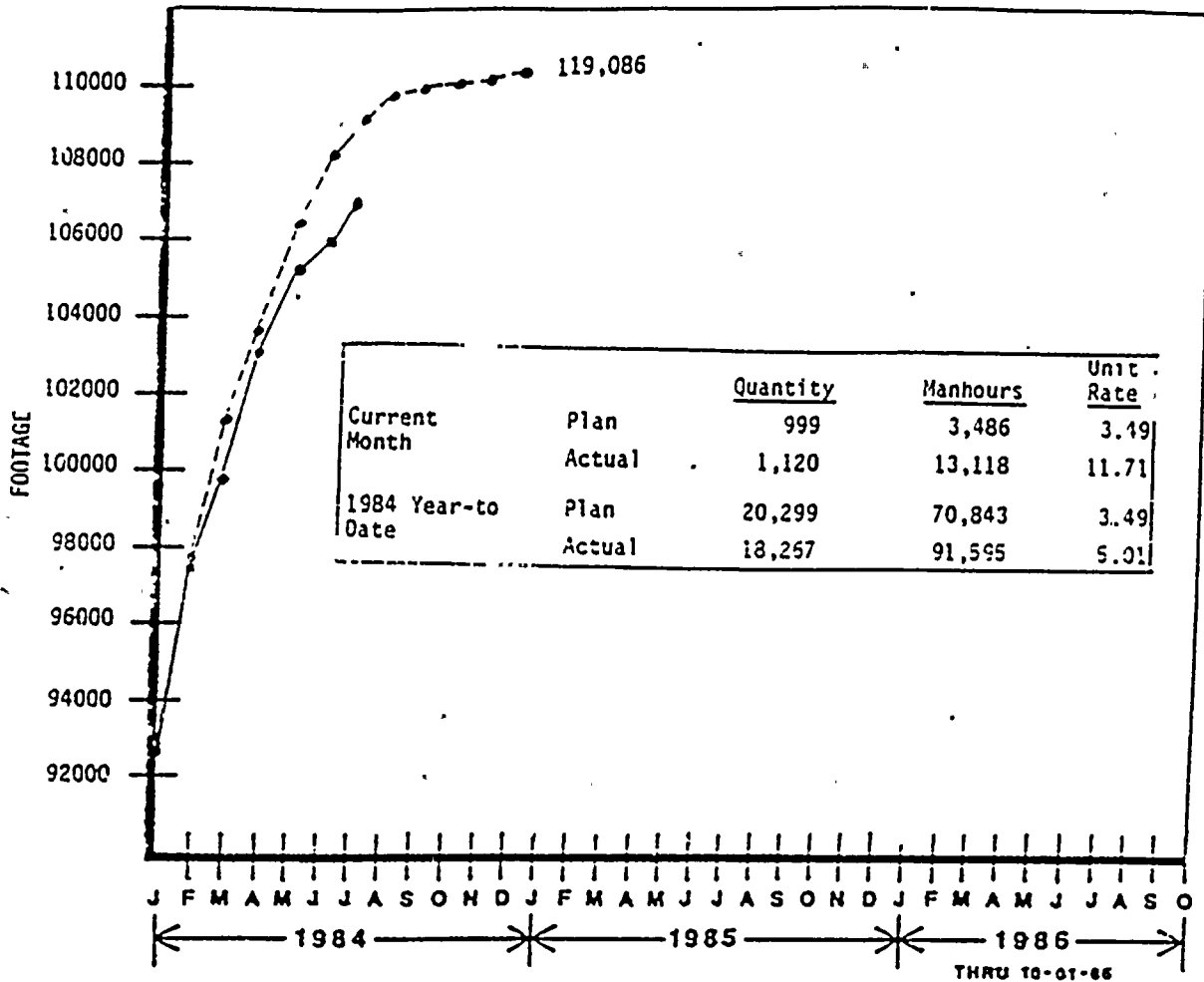
SWEC S.B. HANGER



SWEC small bore hangers continue to exceed cumulative plan requirements, although production for this month fell slightly behind. No negative impact projected.

----- Planned
 _____ Actual

ITT PLAN VS ACTUAL
S B PIPE



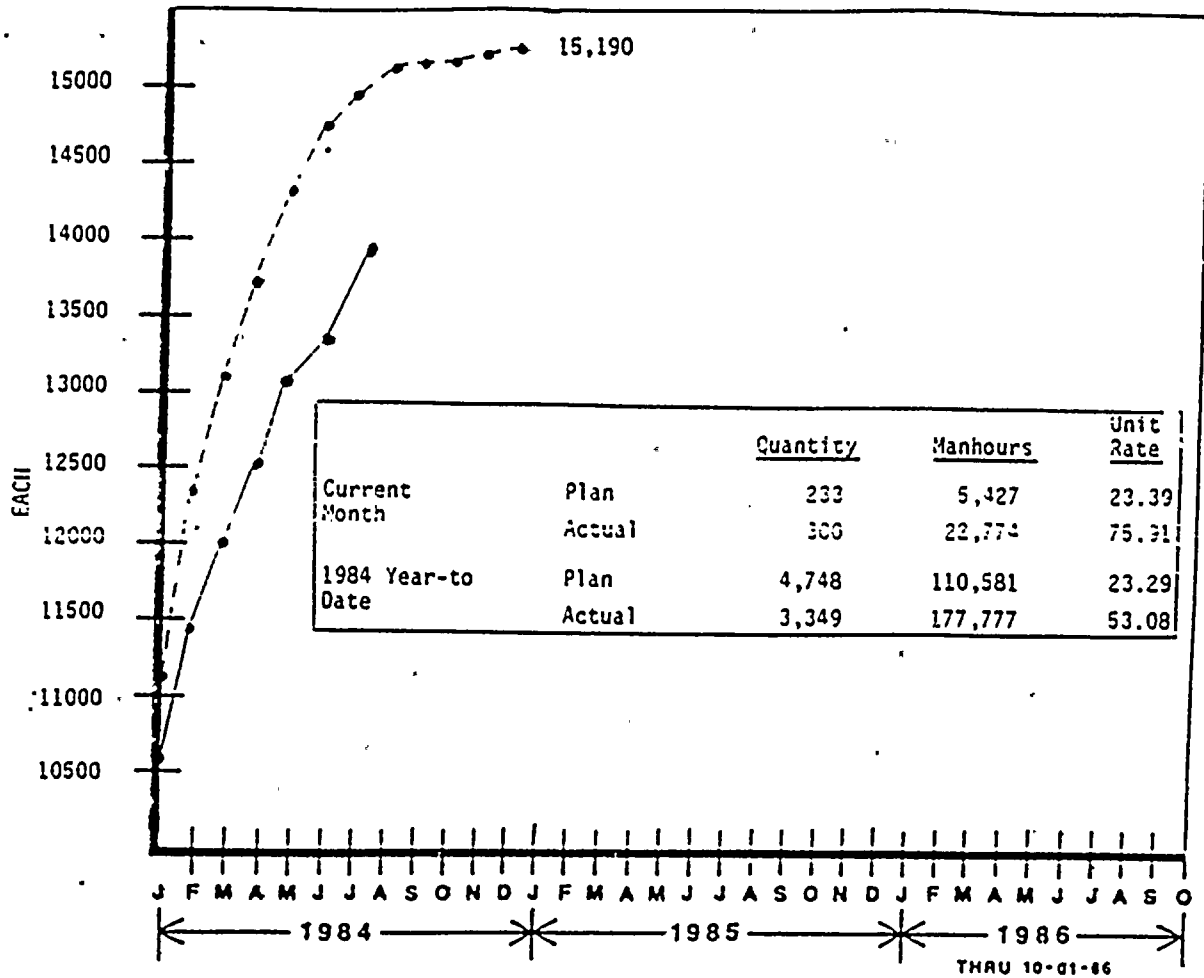
Good progress was reported relative to ITT Grinnell small bore piping throughout the period, with the exception of the July 4th week and associated high absenteeism. However, ITT Grinnell achieved approximately 30% more than was required and continued progress is expected. Cumulative plan performance remains below plan.

The current period unit rate overrun is a result of inefficiencies as a result of small bore piping efforts in support of system turnovers and rework levels in excess of plan.

————— Actual
-----Planned

ITT PLAN VS ACTUAL

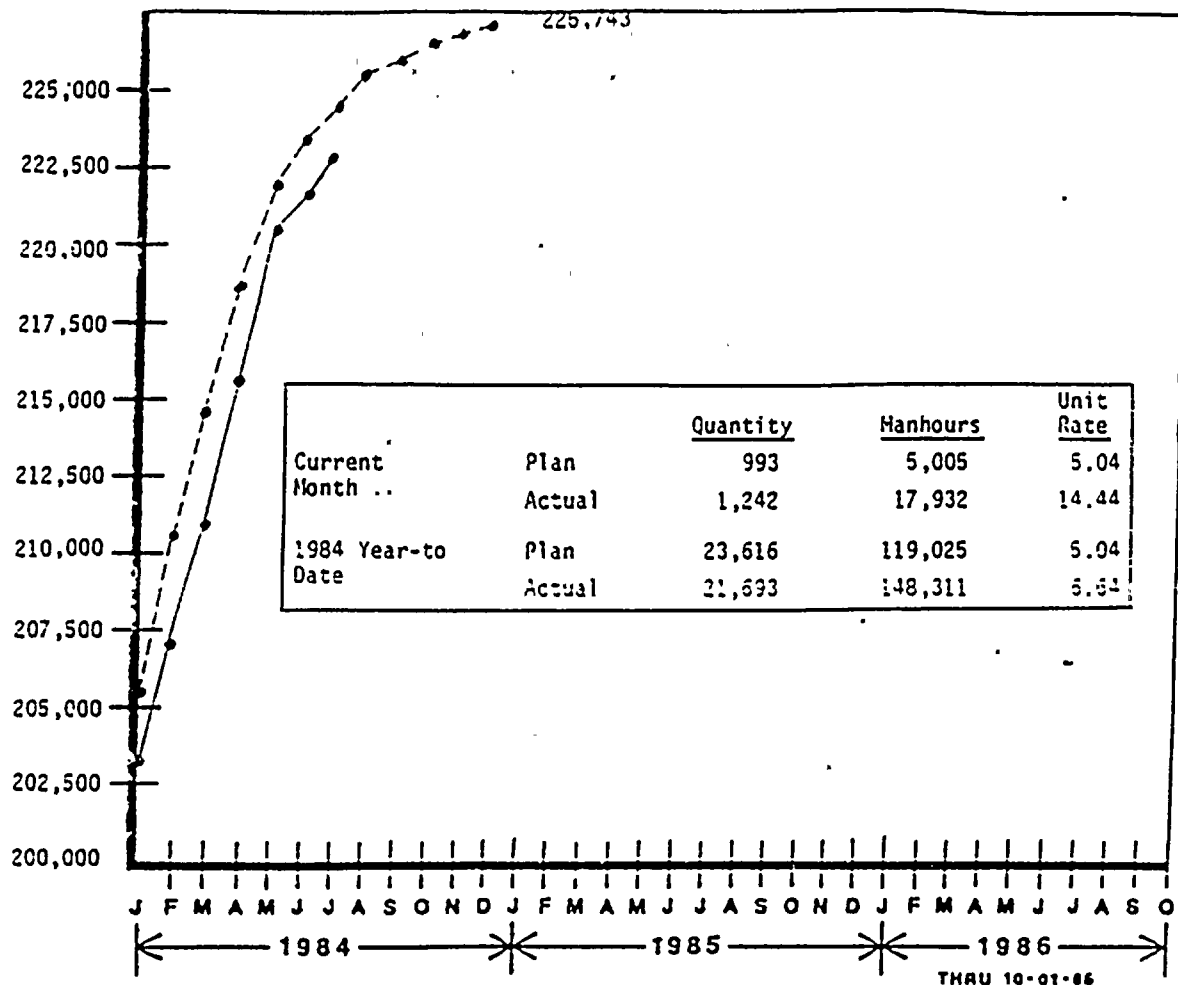
S B. HANGERS



ITT Grinnell small bore hangers also exceeded planned installation targets for this month, and recovery efforts are expected to continue. Significant rework to the hangers for the service and instrument air systems required to support turnover priorities has contributed to the unit rate overrun in this period.

_____ Actual
 ----- Planned

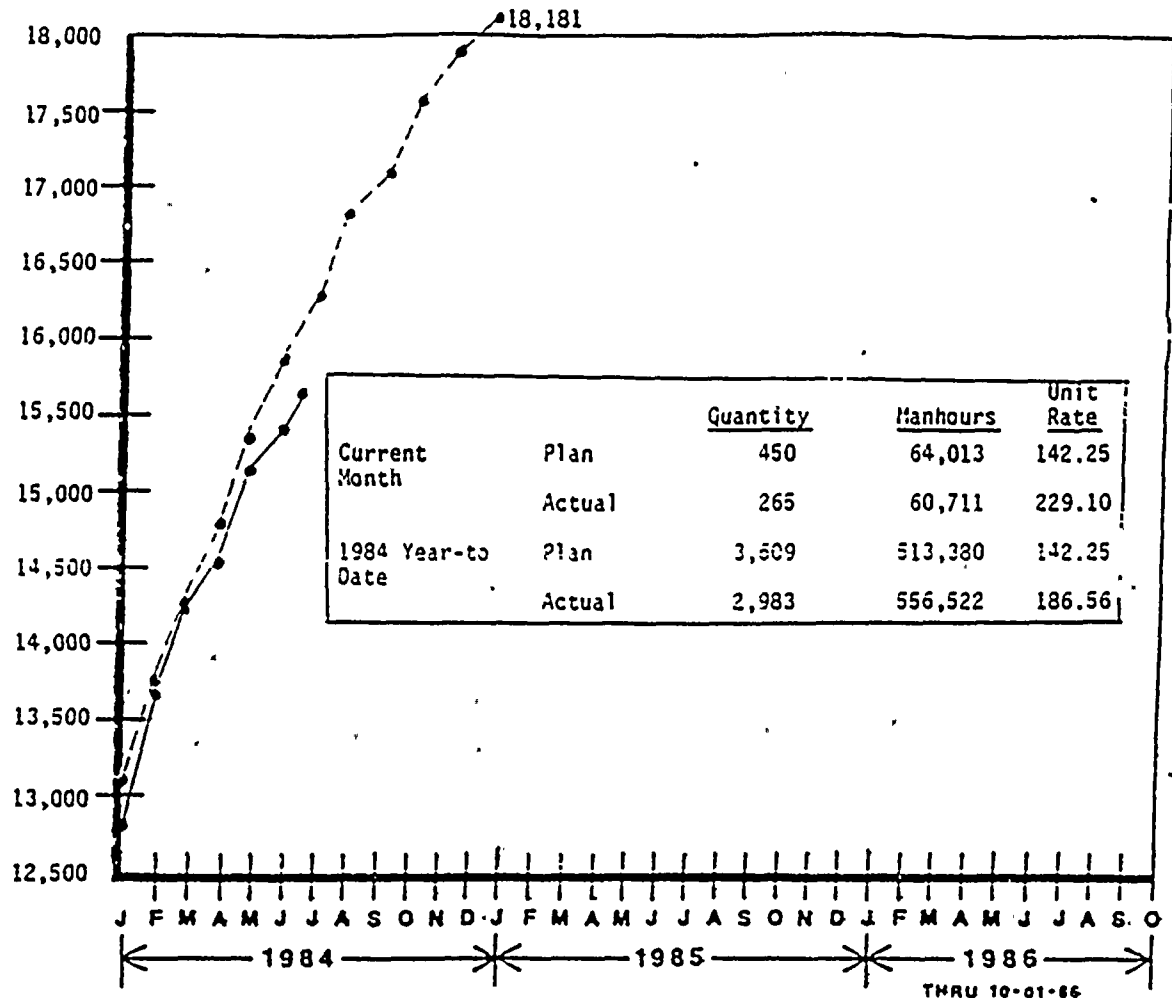
ITT PLAN VS ACTUAL
L B PIPE



Again, ITT Grinnell's large bore pipe performance for the period exceeded the planned installation target. The period unit rate overrun is due to the closing out of punch list items for pipe that has previously earned full credit.

————— Actual
----- Planned

ITT PLAN VS ACTUAL
L 8 HANGERS

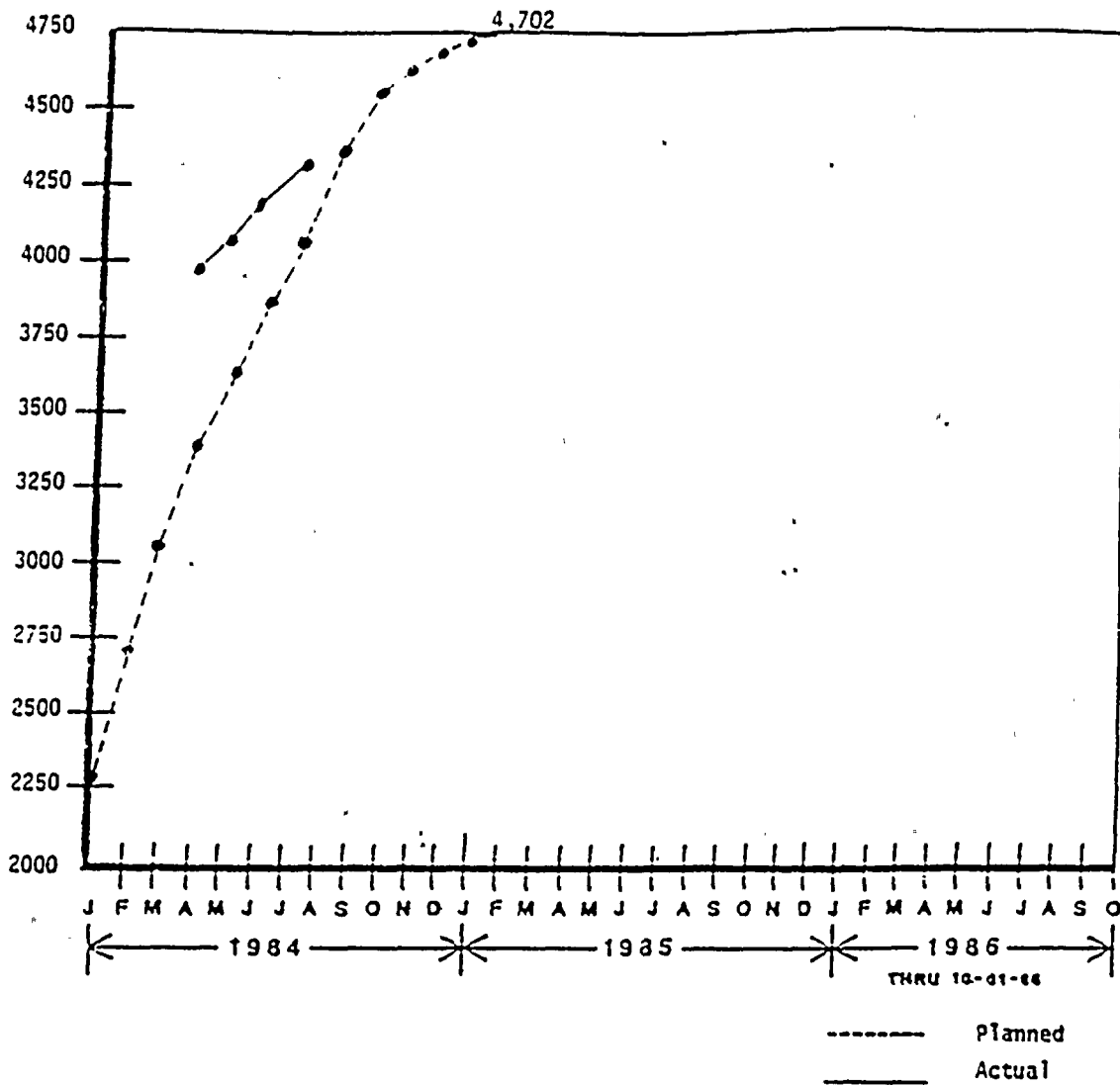


ITT Grinnell performance relative to large bore hangers exhibited a shortfall this period against the required target. Plans are currently being developed to establish dedicated resources (craft, engineering, QC, etc.) to drive this effort to successful completion. (See text for additional details.)

The period unit rate is exceeding plan due to hanger complexity in the primary containment that requires excessive manhours. In addition, hours in excess of plan are being expended to advance hangers from the 4X to 5X completion status.

————— Actual
-----Planned

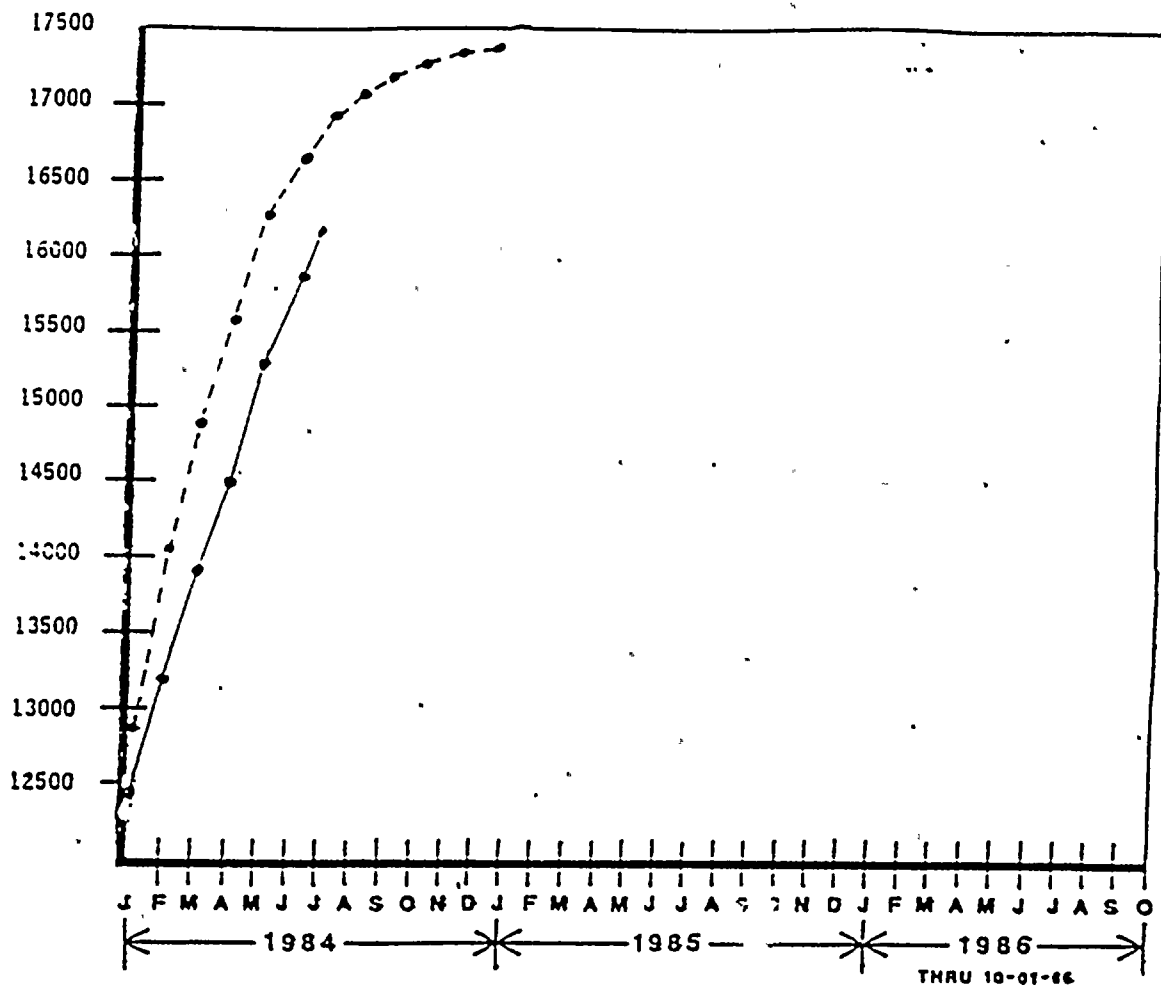
ITT L. B. WELDS (CAT 1)



ITT Grinnell large bore weld performance, although exhibiting a downturn in production, remains cumulatively above the plan. Also noted is a significant improvement in the weld reject rate. (See large bore weld curve.)

ITT PLAN VS ACTUAL

L 8 WELD (PROCESS)



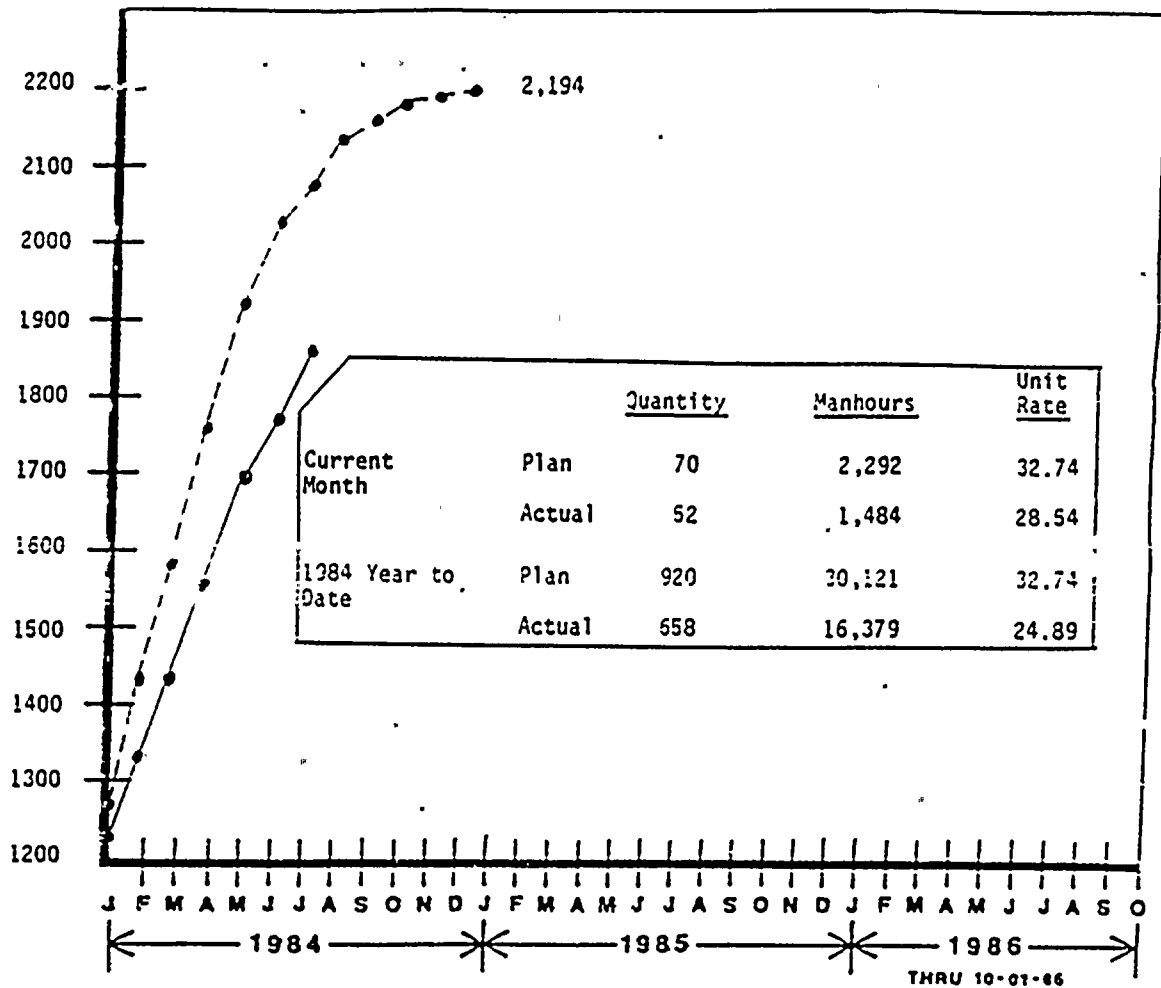
ITT Grinnell large bore weld performance this month exceeded the plan. Full recovery is, however, contingent upon successful completion of the large bore piping effort.

Additionally, ITT Grinnell has substantially improved their weld reject rate and is reporting 17.68% for 931.1 and 2.45% for ASME III.

----- Planned
 _____ Actual

ITT PLAN VS ACTUAL

L 8 VALVES

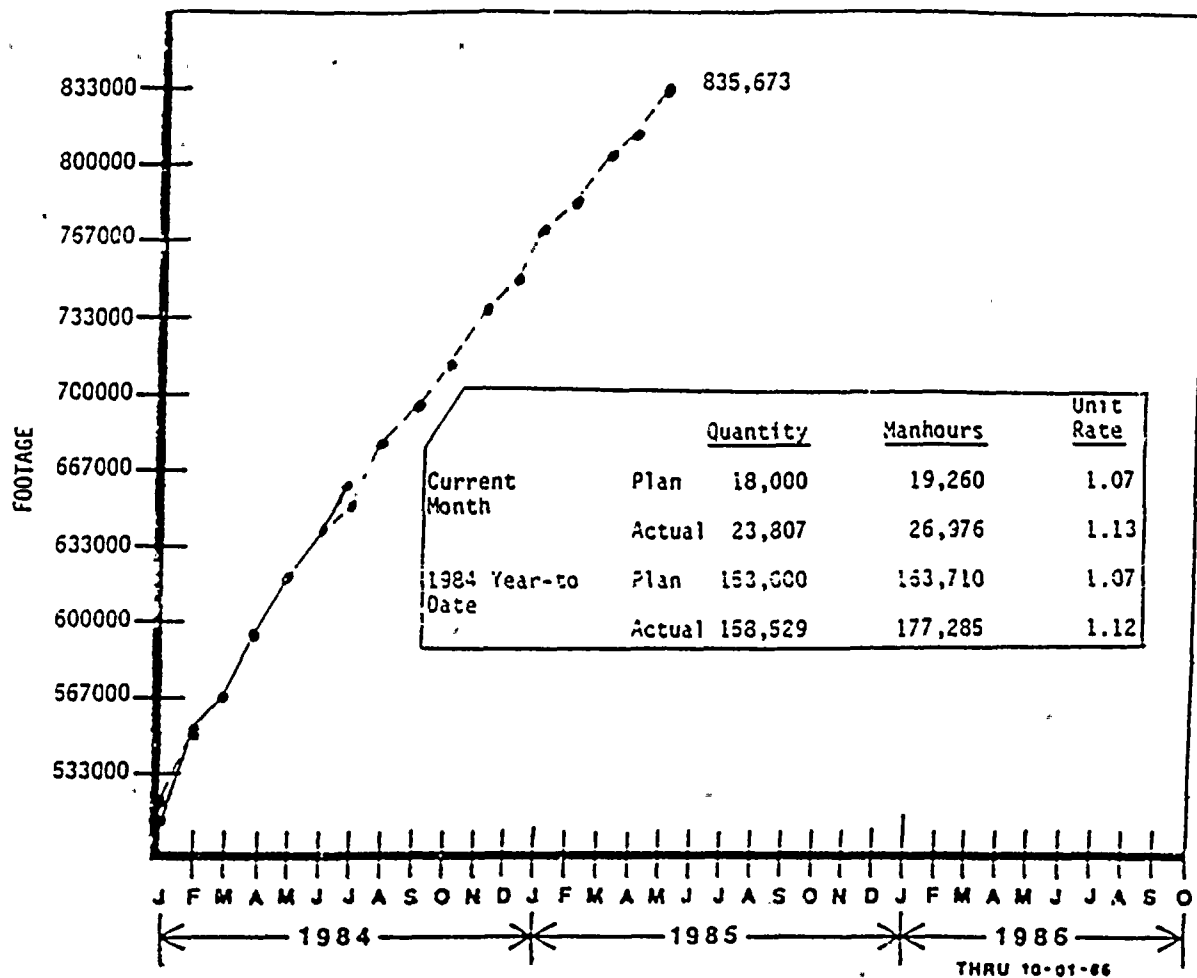


Expediting efforts are in progress to assure timely delivery of remaining valves. Large bore valve production is exhibiting positive trends which are expected to continue.

———— Actual
 ----- Planned

LKC PLAN VS ACTUAL

CONDUIT

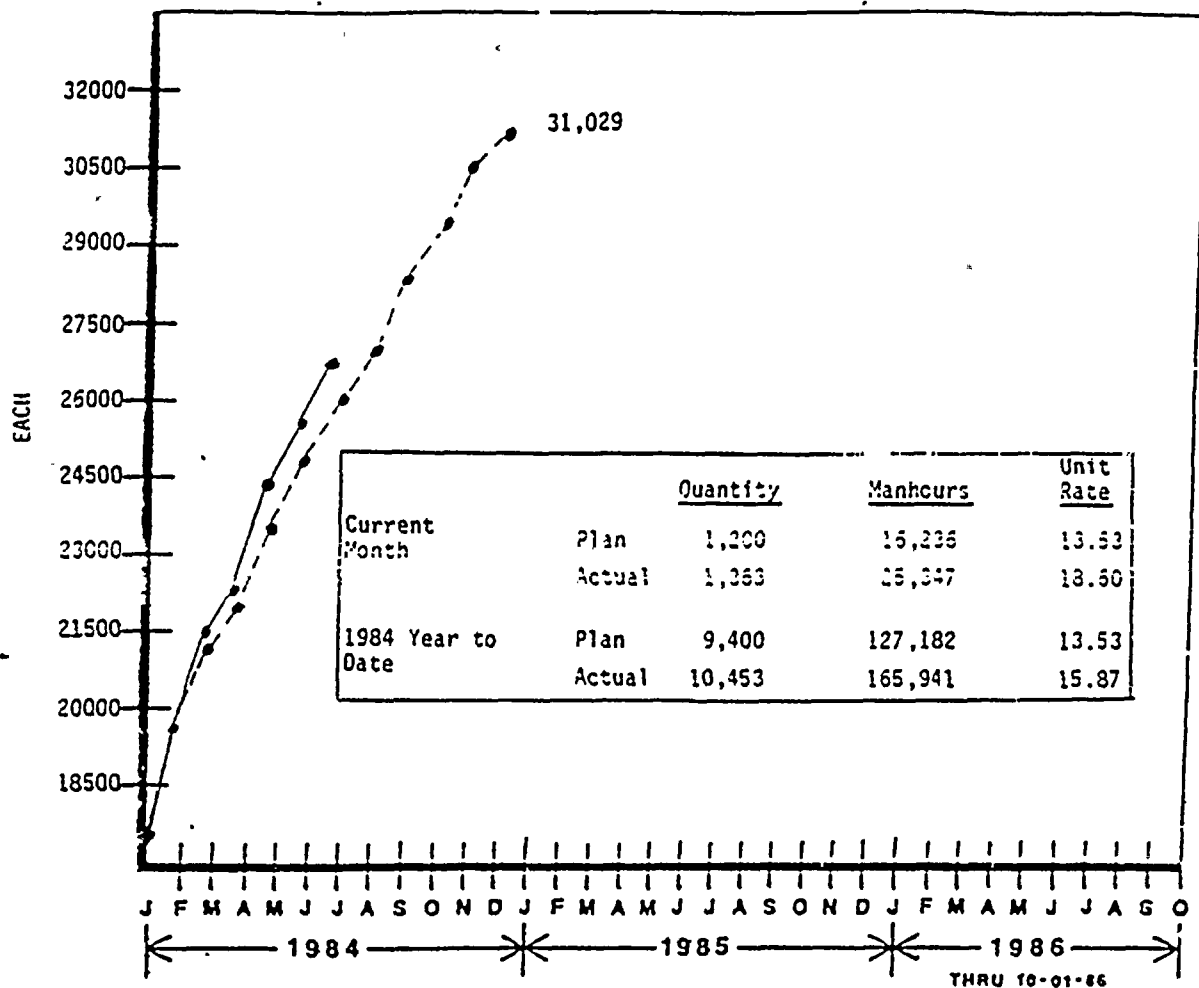


LKC conduit continues well ahead of plan. (See text for additional comments.)

————— Actual
----- Planned

LXC PLAN VS ACTUAL

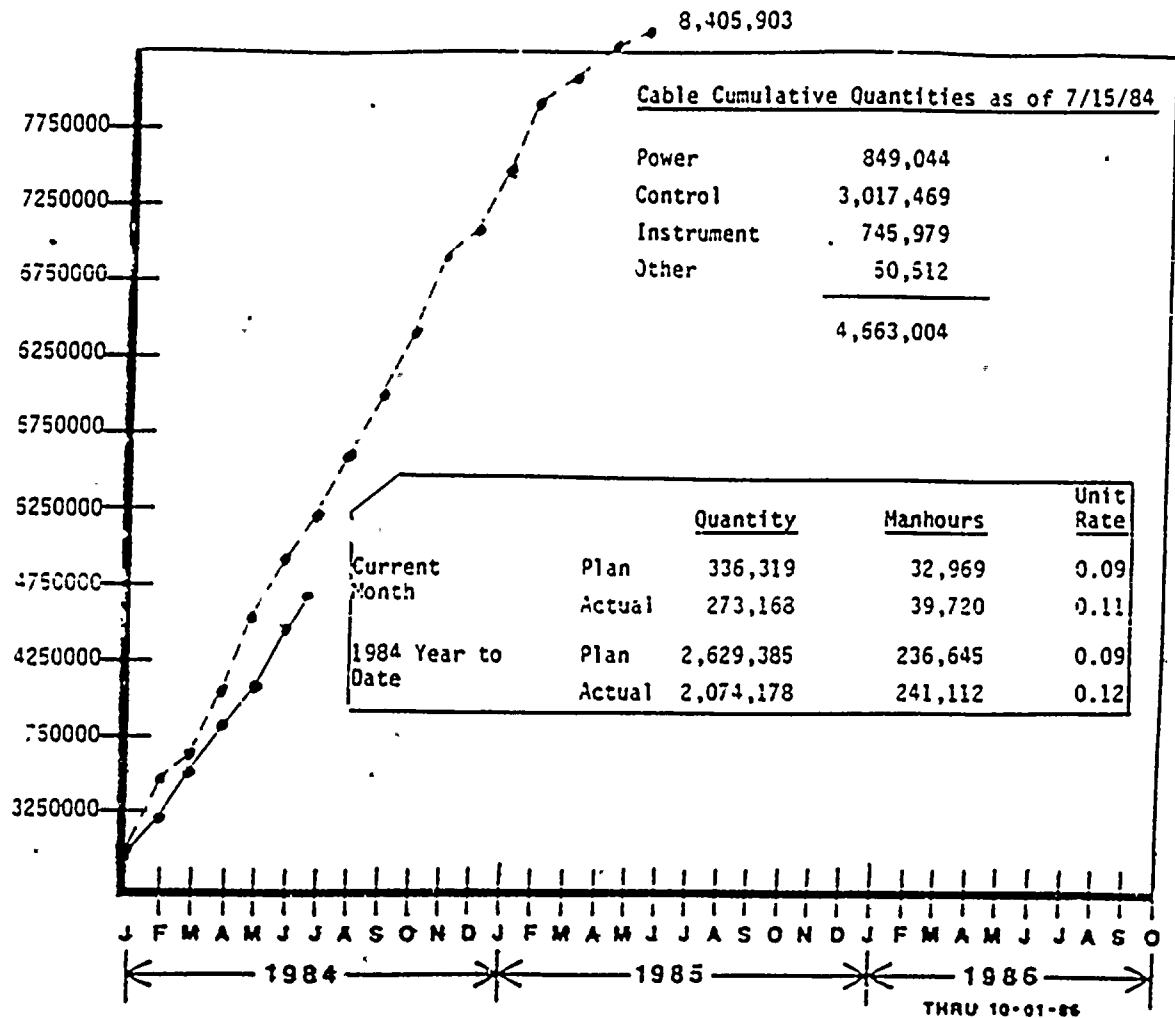
CONDUIT SPTS.



LXC conduit supports installation continues cumulatively ahead of plan.

——— Actual
 - - - - - Planned

LKC PLAN VS ACTUAL
CABLE PULLING

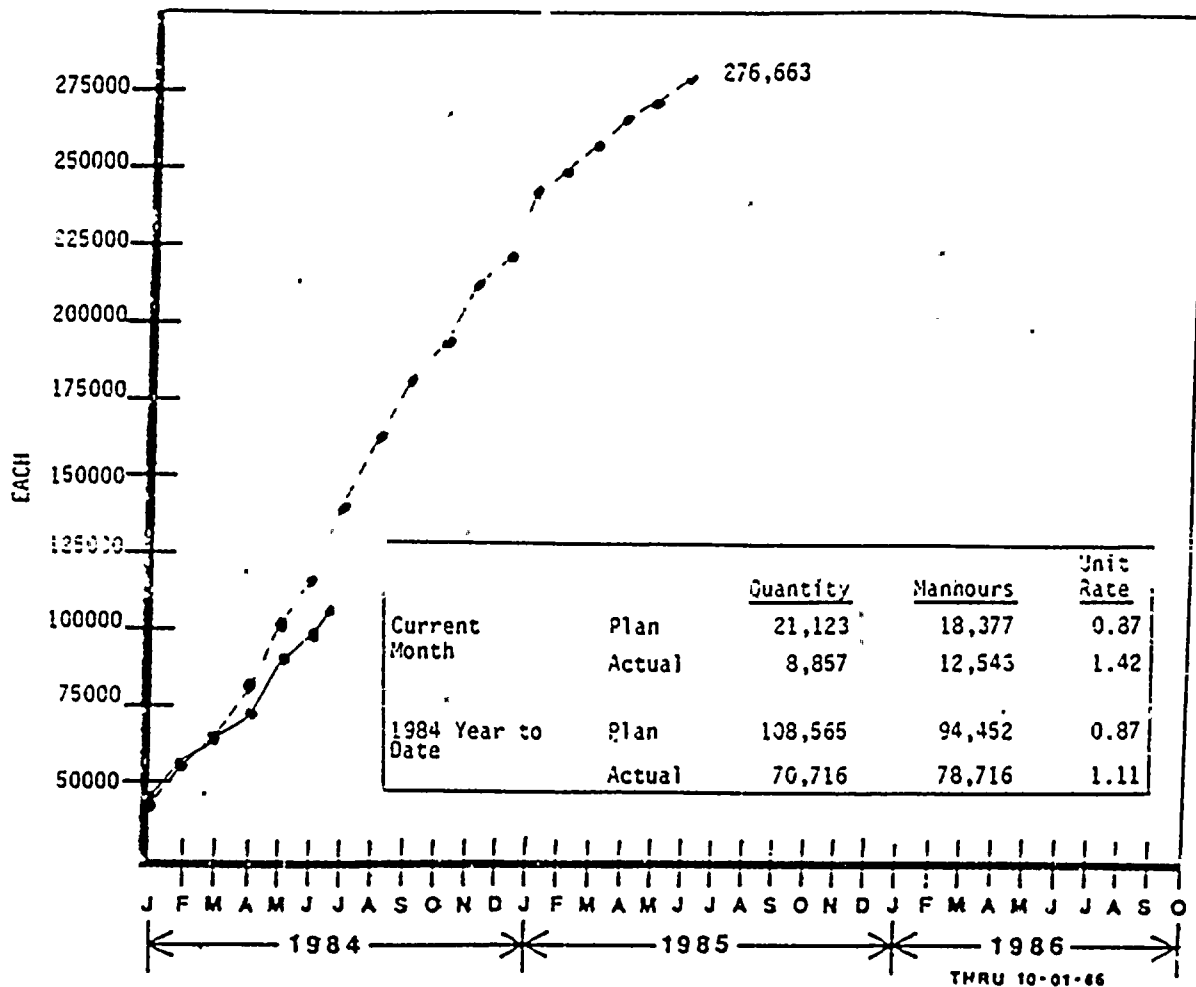


Although slight improvements are reported against LKC cable pulling performance, this area continues to receive Project Management focus. LKC/SWEC have apparently dissolved the log jam responsible for the negative trend which began in May. (See text for additional details.)

————— Actual
----- Planned

LKC PLAN VS ACTUAL

CABLE TERM

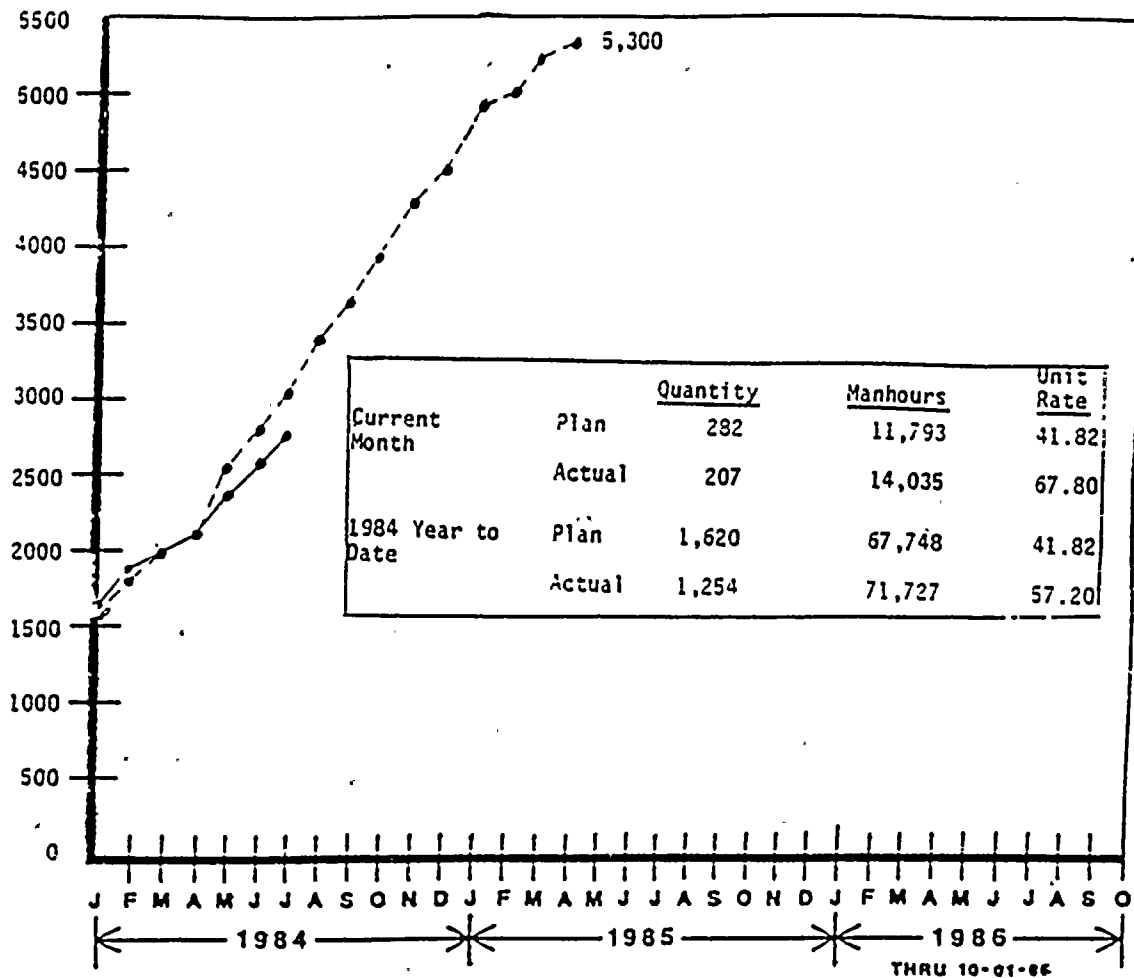


LKC's performance relative to cable terminations continues to exhibit cumulative shortfall. Project is focusing efforts to increase the backlog of clean, available termination work.

————— Actual
 - - - - - Planned

JCI PLAN VS ACTUAL

SEISMIC SPTS.

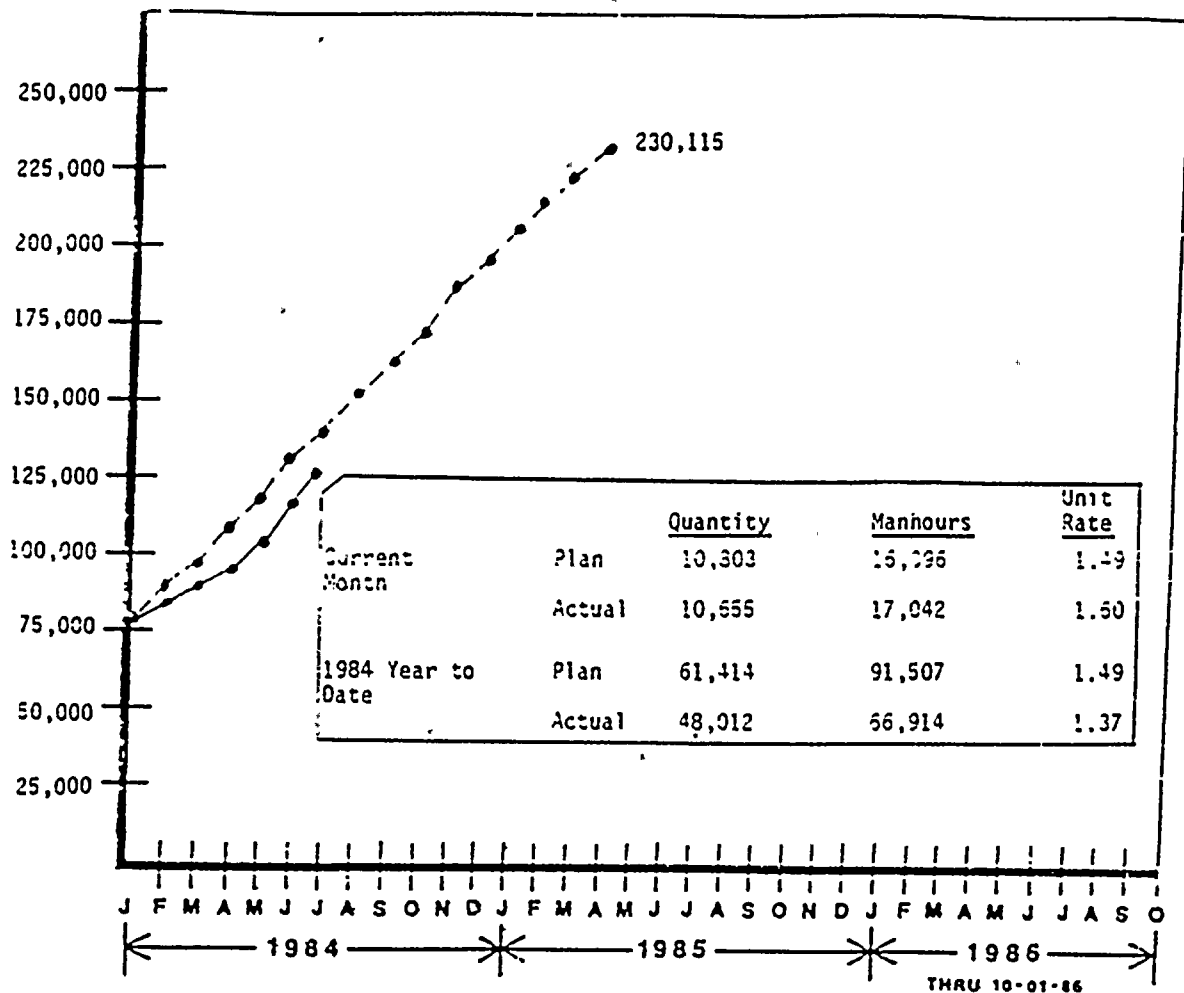


JCI seismic supports continue to exhibit a cumulative shortfall. However, this period's performance is a significant improvement from the previous month. Efforts are being focused in the upper levels of the Reactor Building in support of the BIP T/O Program.

The unit rates are over the plan as a result of seismic supports previously reported as full credit for which rework is required to achieve QC acceptance.

————— Actual
 - - - - - Planned

JCI PLAN VS ACTUAL
INST. TUBING



Johnson Controls installation progress is improving. This trend is positive and should provide recovery.

— Actual
- - - Planned

III. CONSTRUCTION

A. General (Continued)

Construction turnover of systems to SWEC Advisory Operations Division for preliminary testing continues to exhibit shortfall. As discussed in various sections of this report, significant Project Management actions are being provided in this area.

Weld reject rate performance has improved since the previous report. ITT Grinnell has implemented a comprehensive program to complete activities within the proper levels of acceptability and minimize repair work.

Construction Management continues to emphasize housekeeping and cleanliness. General site conditions continue to improve as a result of proactive Materials Management within the power block, follow through of contractor responsibilities, and vigorous surveillance by Construction personnel.

Mr. J. Weaver commenced an assignment under the direction of the NMPC Sr. Manager of Construction relative to SWEC force account small bore piping production improvements. Mr. Weaver will also examine ITTG Cat. I Hangers.

III CONSTRUCTION (Continued)

B. Contractor Performance

1. SWEC Force Account

Overall, SWEC Force Account work scope performance continues to proceed in a positive direction both in terms of commodity installation targets and schedule compliance. However, there are areas, such as small bore piping, which require improvement. Specific production assessments and exceptions are addressed below.

Mechanical Equipment Erection

Approximately 89% of the equipment scheduled to be installed has been released for external piping connections. The remaining equipment continues to be prioritized to support BIP turnovers. No schedule impacts are anticipated.

Cat II and III Hanger Completion

Performance in this area remains above plan.

Small Bore Pipe and Supports

The piping effort exhibited slight shortfalls during this period. SWEC has implemented pipe assembly walkdowns and a weld performance improvement plan designed to strengthen shop fabrication production. In addition, extensive modifications to the fabrication process, along with FQC hold point reductions, will improve small bore piping production.

Small bore hanger performance is tracking slightly ahead of plan.

Preventative Maintenance

Planned maintenance requirements and inspections were performed during this period. No significant problems were identified.

Painting (Temporary)

Schedule sequencing during July will prioritize required Milestone painting activity to avoid turnover impacts.

III. CONSTRUCTION (Continued)

2. ITT Grinnell

Overall, ITT Grinnell's commodity installation performance through this period exhibited improvements. However, large bore hangers continue below planned quantities. Management actions will include improvement recommendations by Mr. J. Weaver, review of potential positive actions which can be adapted from the SWEC Hanger Program, and a prioritization of those essential hangers required to support near term BIP turnovers.

SWEC is working with ITT to improve the turnaround to support the Stress Reconciliation Program.

Coordinated efforts are required on the part of ITT Grinnell to support Johnson Controls in the installation of root valves and thermal wells.

3. L. K. Comstock

L. K. Comstock's production has generally accelerated throughout this period in the areas of cable pulling and conduit/raceway installation. Emphasis remains focused on these two elements so production levels can increase and cumulative deficits recover.

Although slight improvements were experienced relative to cable terminations, LKC must substantially improve their performance in this area.

Assistance by Johnson Controls in identifying future instrument locations will permit L. K. Comstock to route conduit in advance of device installation.

Efforts continue toward release of raceway tickets on hold, improvement of the cable pulling backlog and cable termination output, and completion of the 4160v milestone. Internal management actions implemented by L. K. Comstock favorably accelerated production performance during the last half of the fiscal month.

Cable pulling backlog drawdown, electrical FQC inspector attrition affecting commodity releases, and BIP restraints continue to receive management scrutiny. The interim results thus far suggest favorable performance.

III. CONSTRUCTION (Continued)

B. Contractor Performance (Continued)

4. GE-PGCC

July remains the goal for completion of subsequently identified subdivisional separation problems and both divisional and subdivisional outstanding open items. Progress is reported on schedule with total completion, including NSSS/BIP modifications, targeted for February 1985.

5. Johnson Controls

Johnson Controls exceeded scheduled quantities for instrument tubing installation requirements, accelerating cumulative recovery. Process improvement plans have been devised and implemented in response to production deficits in seismic tube support installations. The instrumentation quantity development program has concluded, resulting in more accurate scope definition.

Johnson Controls is awaiting program manual changes which will improve QC inspection process for Cat. II and III installations.

6. Schneider Power Corporation

The HVAC effort is proceeding with improved commodity installation. The HVAC milestone schedule is undergoing logic and activity sequencing examination. Engineering clarification and support of technical issues have improved considerably.

7. Viking (Fire Protection - Radwaste)

This contractor has performed on schedule. However, late delivery of fire detection equipment will have a short-term schedule impact. This contractor will demobilize on July 31, 1984 and remobilize on March 19, 1985.

9. Metal Cladding Industries (Condensate Storage Tanks)

The tanks were successfully hydrotested subsequent to minor rework. Additional rework has been punchlisted on internals, but schedule impacts are not anticipated.

III. CONSTRUCTION (Continued)

B. Contractor Performance (Continued)

4. GE-PGCC

July remains the goal for completion of subsequently identified subdivisional separation problems and both divisional and subdivisional outstanding open items. Progress is reported on schedule with total completion, including NSSS/BIP modifications, targeted for February 1985.

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III. CONSTRUCTION (Continued)

B. Contractor Performance (Continued)

9. Insulation Contracts (Various)

Schedule slippages in hydro testing mechanical piping systems are restraining insulation applications. This is not significant in terms of major impact, but does require management attention. The contractor is restricting manpower levels until a sufficient backlog is generated.

10. Randall Electric

Progress is being affected by the late release of cooling tower electrical design information. Engineering is expediting required design information. Schedule exposure is not serious at this time.

11. Snyder, Mackin and Shaffer

Major efforts are underway to consolidate and streamline the construction site power systems.

12. Tuscarora Construction (Revetment Ditch)

Progress is currently three weeks behind schedule and completion is anticipated in October 1984, with no schedule impacts.

13. Pullman (Main Gas Stack)

Pullman has fallen behind the schedule and has been advised that backcharges will be employed to recover costs generated in maintaining the on-site concrete batch plant beyond the scheduled dismantling. Pullman is reassessing their manpower and the potential for shift work to avoid this action.

14. Reactor Controls Inc. (NSSS)

In general, the Recirculation System and control rod drive installations are proceeding on schedule. Internal activity on the RPV remains about eight weeks behind schedule. This portion of work is being assessed.

C. Construction Completion

The status of the Boundary Identification Package (BIP) Construction Completion Program as of July 17, 1984 is shown in the following table.

III. CONSTRUCTION (Continued)

BIP CONSTRUCTION TURNOVERS to AOD

As of July 17, 1984

	<u>Schedule Cum.</u>	<u>Actual Cum.</u>
4160 Volt Energization	31	24
Service Water	20	16
Condensate Demin.	13	10
Diesel Generator	0	0
Turbine/Generator	1	1
Radwaste	2	1
Integrated Leak Rate Test	0	0
Ventilation	9	3
Integrated Flush.	0	0
Fuel Receipt	0	0
Fuel Load	1	1
Loss of Power/ECCS	<u>2</u>	<u>2</u>
	79	58

Since last month's report, a total of 17 BIPs have been accepted by SWEC A.O.D. for Preliminary Testing. Those BIPs accepted included:

- # 4.001 and #4.002 (Condensate Storage and Transfer)
- #10.A01 (Circ. Water Supply to Service Water)
- #10.B01 (Acid Treatment)
- #16.001 (Demin. Water Storage and Transfer)
- #22.C01 (Waste Oil Collection)
- #58.001 (Diesel Fire Pump Room Vent.)
- #66.001 (Aux. Boiler Drains)
- #66.003 (Condensate Storage Drains)
- #71.A10 (600v Load Centers)
- #71.A11 (Motor Control Centers)
- #71.B03 (Power Distribution Panels)
- #71.B05 and #71.B05 (Reactor Protection M/G Sets)
- #72.001 (4160v Switchgear)
- #72.003 (4160v Switchgear)
- #74.002 (Emergency DC Distribution).

IV. ENGINEERING

A. General

Overall Engineering and Design efforts continue on schedule. The most notable areas include cable routing and ticketing, setpoint development, responses to FSAR questions, Appendix R efforts, Cat. II and III stress data packages, ALARA shielding and P&IDs. The Bar Chart Summary of the 1984 Engineering Work plan, as amended, is provided on the following two pages.

[illegible]

[illegible]

IV. ENGINEERING (Continued)

B. Problem Areas

1. Spare Parts

The spare parts effort remains behind schedule, primarily due to discrepancies between GE and SWEC QA categorizations. Additional manpower has reduced the backlog of purchase orders. The total procurement effort is scheduled to be complete by October 1984.

2. As-Builts

The revised as-built stress schedule, based on the Project Milestone schedule, has been incorporated into the Engineering Work Plan. Additional revision may be required, however, once construction manpower levelization scheduled for early August 1984 is completed.

3. Appendix R

Discussions were held with GE and the NRC to ensure that SWEC's approach of addressing a control room fire and related spurious operation was acceptable to the NRC. Design changes for rerouting of cables required for safe shutdown were started in accordance with schedules recently developed to monitor work related to this effort. The Engineering Work Plan will be revised to reflect these schedules. Evaluation of the fixes necessary to have a safe shutdown capability in case of fire in the control room or relay room is in progress. Because of spurious operation redefined rules, SWEC is generating a list of the minimum required number of signals. A meeting is scheduled with NMPC for July 26, 1984, to review this final list.

4. Equipment Qualification

Equipment Qualification remains behind schedule. However, specifications are being amended to include the revised environmental requirements. Resolution of comments relating to qualification documents continues to improve. An additional 61 documents have been approved since last month.

IV. ENGINEERING (Continued)

B. Problem Areas

5. Main Steam Isolation Valves

Similar type valves furnished on other plants have experienced corrosion problems during extended periods of storage and layup, affecting seating capability. A detailed plan has been developed to resolve the problem which entails the application of a corrosion-resistive cladding to the affected area. A request for proposals has been issued and an award is expected on July 24, 1984.

It has also been identified that valve body test coupons were not heat treated as required by ASME. To meet code requirements, it may be necessary to cut test coupons from the valve bodies. A plan has been developed to address all possible solutions.

C. Drawing Schedule

As of July 10, 91 drawings are required for construction. They consist of the following:

New drawings added this month:

20 - Power drawings which show additional details for sealing electrical and piping wall and floor sleeves. These drawings are scheduled for issue in December and will have no impact on construction.

2 - Vessel drawings that are required for additional details for the reactor head cavity pit and canal were added to the schedule and will be issued in August.

Drawings issued at 80% and needing finalization:

31 - Electrical wiring and termination drawings. Expected issue is the end of July.

21 - Power drawings that contain holds due to lack of vendor detail on expansion joints and other miscellaneous equipment. Expected issue is September.

13 - Berm drawings scheduled for September.

4 - Instrumentation drawings - scheduled for August.

IV. ENGINEERING (Continued)

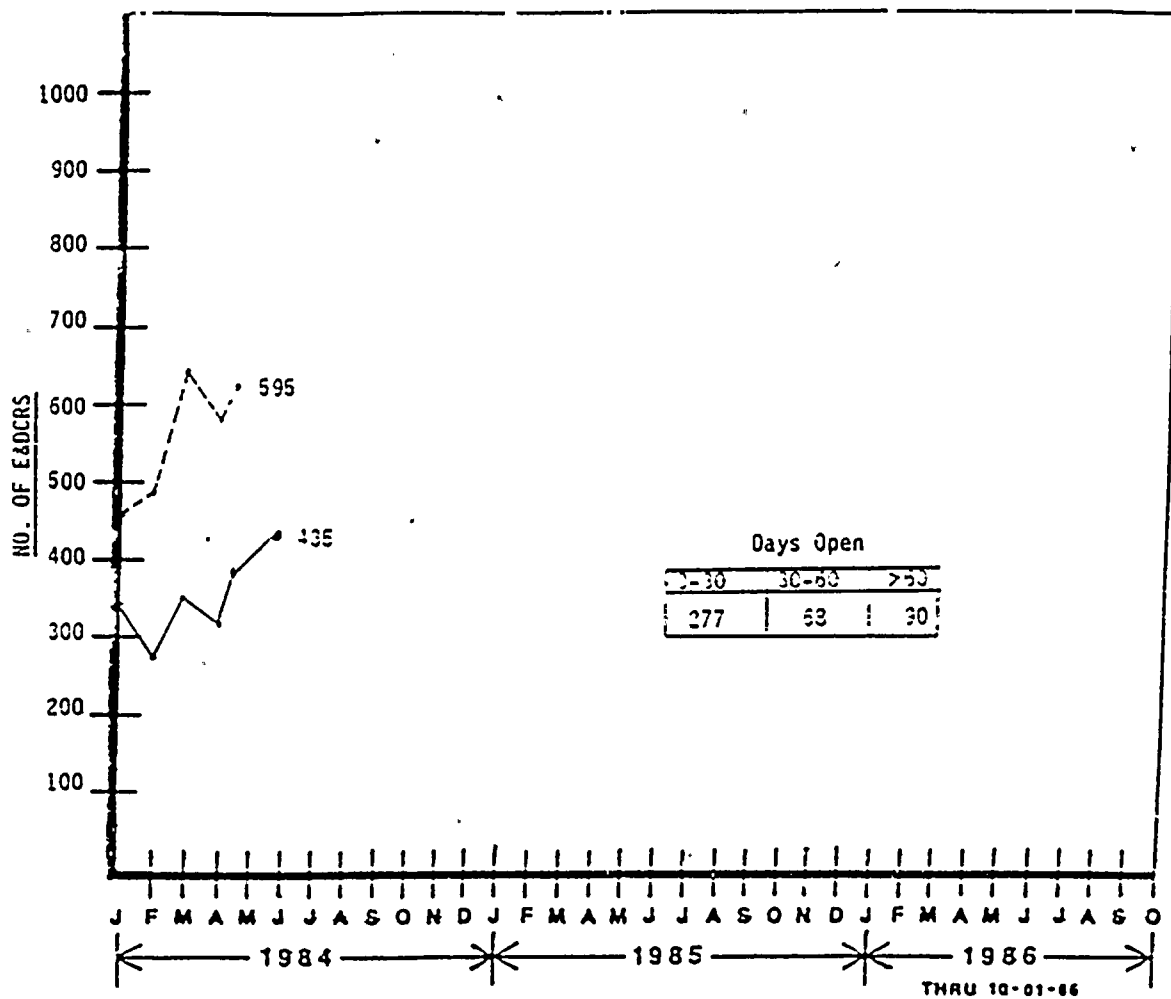
D. Staffing

An accelerated Headquarters and SEG destaffing effort is underway in order to meet the 1984 cash flow requirements. Some of the activities discussed in Section IV.B may have revised schedule dates as a result of the plan. Details of the evaluation and revised manpower plans will be provided this month. See Section V for the present Engineering staffing curves.

E. Other Activities

Status of E&DCRs dispositioned by Engineering is illustrated on the following graph.

E&DCR STATUS



———— Open with Engineering at Month End

----- Answered by Engineering during Month

V. WORKFORCE LEVELS

The site staffing is displayed on the following table. The planned number corresponds to the \$630 million cash flow (See Cost Section for explanation). Also attached is a graph depicting the site equivalent headcount. Graphs depicting the site manual and non-manual payroll headcount and percent overtime have been added. The site equivalent staffing for July was 143 less than the June count.

The CHOC staffing is displayed on the Headquarters Services Manpower Graph. The actual increased by 36 during July. However, NMPC has aggressively addressed the CHOC staffing and a large reduction can be expected during the next period.

JULY SITE STAFFING (EQUIVALENT)

	<u>MANUAL</u>		<u>NON-MANUAL</u>		<u>TOTAL</u>	
<u>D</u> <u>COST REIMBURSABLE</u>	<u>P</u> ⁽¹⁾	<u>A</u>	<u>P</u> ⁽¹⁾	<u>A</u>	<u>P</u> ⁽¹⁾	<u>A</u>
SWEC	777	1343	1129	1109	1906	2452
Walsh	594	717	26	35	620	752
LKComstock	547	779	100	108	647	887
ITT Grinnell	752	898	300	380	1052	1278
SMS	75	89	3	5	78	94
JCI	181	203	80	80	261	283
Schneider	139	136	16	7	155	143
Wiltsie	139	0	10	0	149	0
Subtotal	3204	4165	1664	1724	4868	5889
<u>Hard Money</u>						
A11		193		37		230
GE/NSSS				85		85
<u>D</u> NMPC				441 ⁽²⁾		441 ⁽²⁾
TOTAL		4358		2287		6645

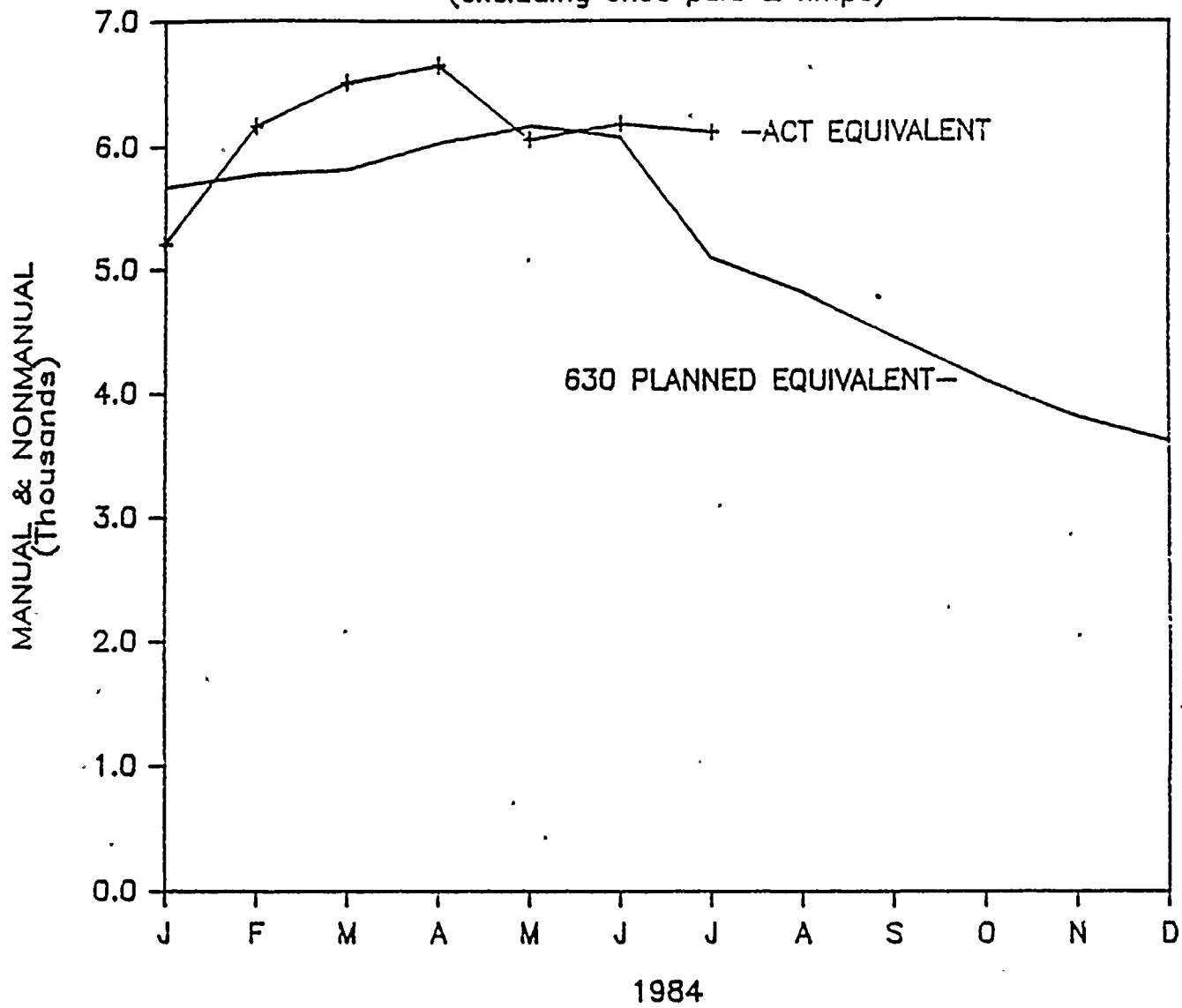
Note:

(1) 630 Plan

(2) NMPC includes MAC, NYSEG, RG&E and Central Hudson.

1984 TOTAL SITE STAFFING

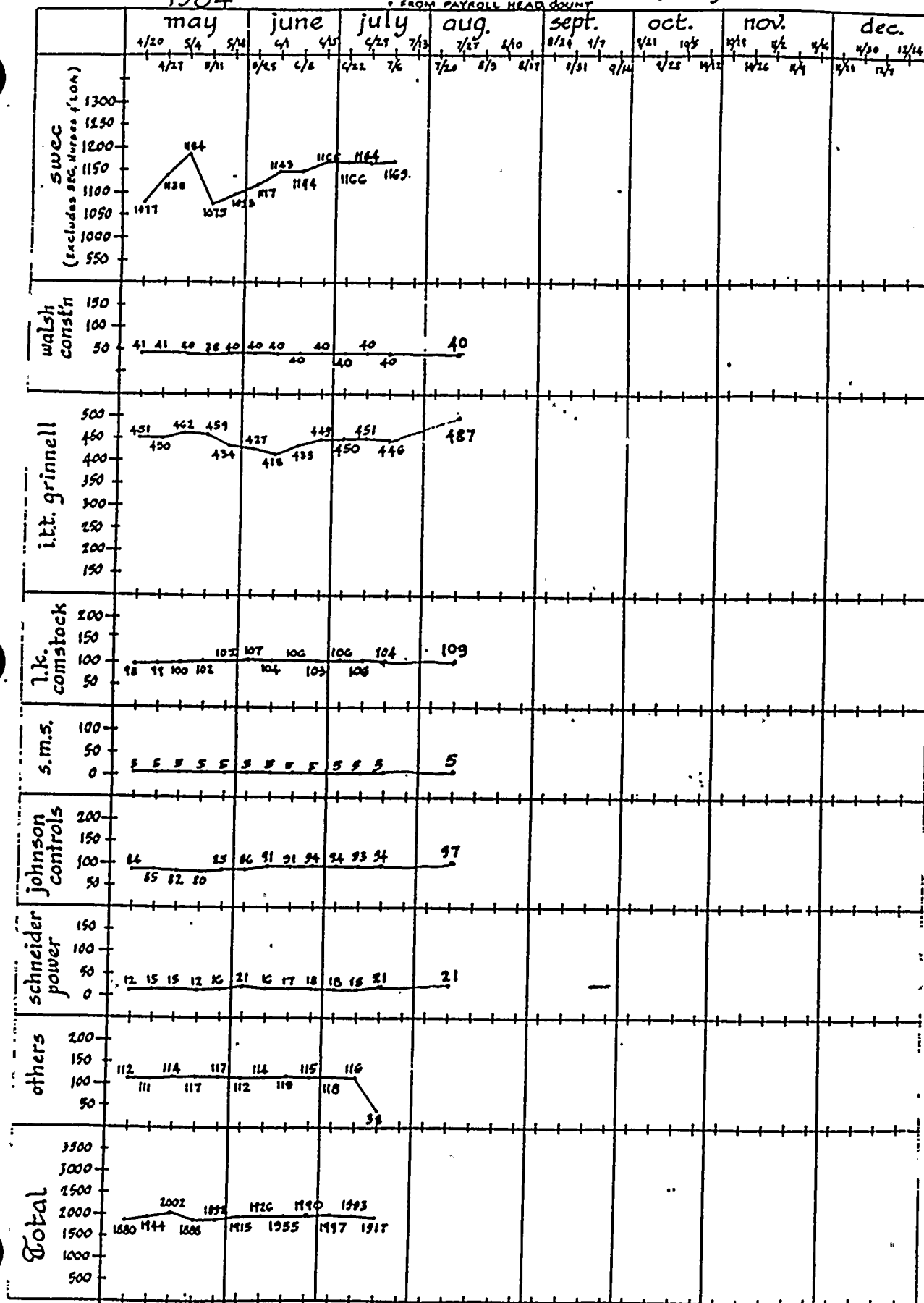
(excluding choc paid & nmpe)



1984

Nonmanual Manpower (weekly)

FROM PAYROLL HEAD COUNT



NOTE:

7-13 and 7-20 INFORMATION NOT AVAILABLE
K 86/NSR NOT INCLUDED

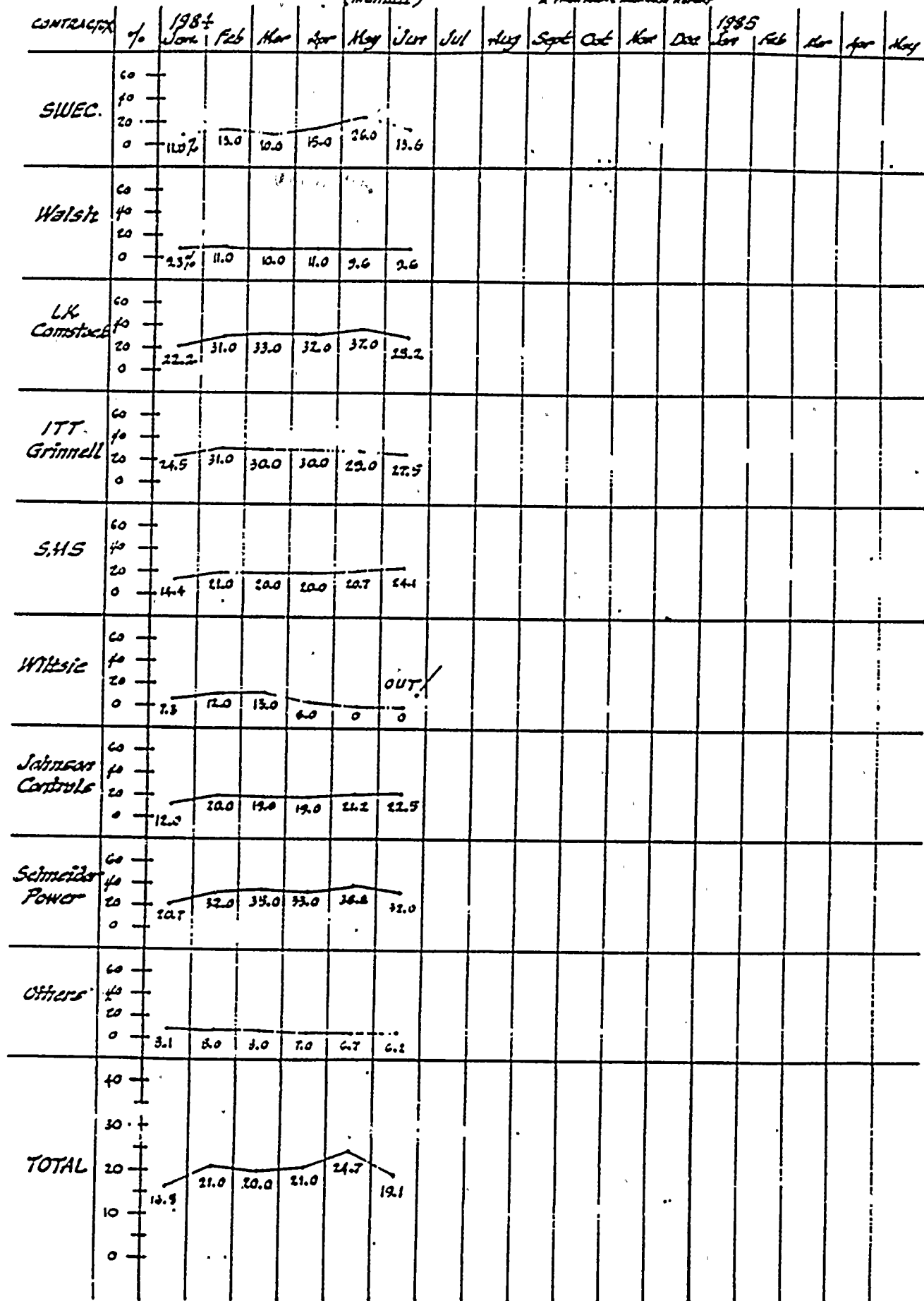
MANUAL MINIPOWER (weekly payroll headcount)

TOTAL	others non-union ge/ass and ready mix	schneider power	johnson controls	wiltzie	snyder- mackin/ schaffner	L.K. comstock	itt grinnell	walsh construction	SWEC	1984	
										JAN	FEB
4607	198	118	108	116	120	758	1391	781	1017	11/30	12/30
4563	187	119	106	117	120	755	1396	727	1036	1/10	1/30
4624	213	120	109	117	123	748	1418	726	1050	1/31	2/10
4647	204	119	113	117	123	742	1448	715	1066	2/11	2/20
4662	187	119	112	117	123	736	1473	716	1079	2/21	2/28
4746	193	127	119	116	123	735	1466	756	1111	2/29	3/10
4830	186	128	130	129	120	742	1485	770	1140	3/11	3/20
4990	191	130	143	128	117	760	1515	815	1191	3/21	3/30
5059	197	131	144	141	123	759	1530	840	1194	3/31	4/10
5122	203	139	147	137	131	780	1517	845	1223	4/11	4/20
5122	202	143	149	133	133	785	1503	854	1220	4/21	4/30
5176	200	144	152	133	131	799	1503	851	1263	4/31	5/10
5135	185	138	139	128	120	797	1536	825	1267	5/11	5/20
5182	216	153	159	129	129	818	1541	830	1297	5/21	5/30
5361	232	152	163	128	157	845	1513	865	1306	5/31	6/10
5230	217	153	165	132	132	844	1498	868	1353	6/11	6/20
5198	239	152	175	129	129	844	1393	875	1391	6/21	6/30
4975	249	156	179	129	129	804	1269	843	1346	6/31	7/10
4831	251	154	183	125	125	840	1157	835	1286	7/11	7/20
4802	257	142	182	120	120	854	1142	774	1330	7/21	7/30
4094	253	149	196	120	120	854	1038	760	1340	7/31	8/10
4505	151	160	206	100	100	854	1035	760	1394	8/11	8/20
4774	281	159	205	98	98	871	1095	757	1344	8/21	8/30
4841	243	149	233	103	103	901	1071	765	1344	8/31	9/10
4969	269	156	249	104	104	901	1041	767	1462	9/11	9/20
4895	225	153	236	115	115	902	1047	771	1427	9/21	9/30
4504	247	155	244	108	108	881	1006	776	1427	9/31	10/10

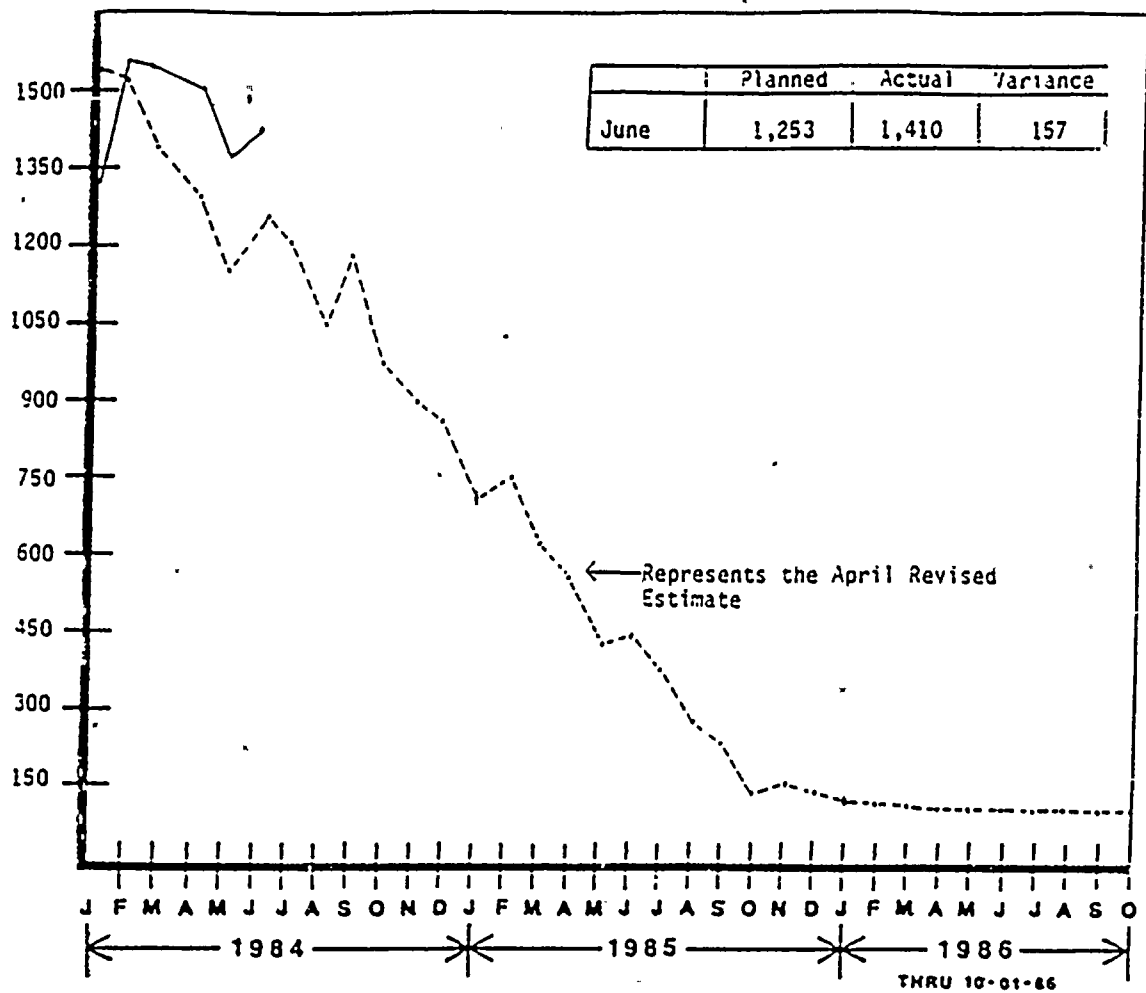
NOTE:

7-18 and 7-20 INFORMATION NOT AVAILABLE.

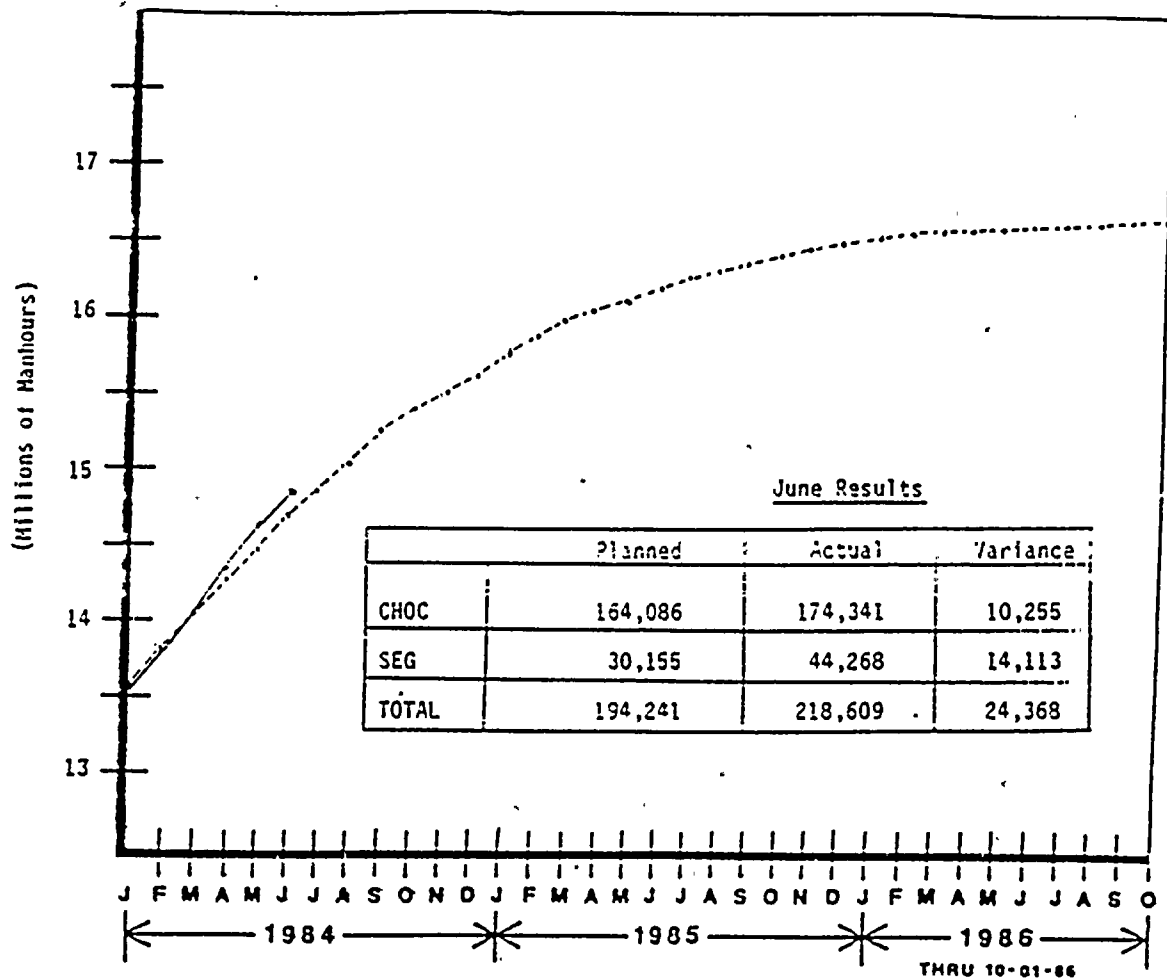
PERCENT OVERTIME (Overtime/straight time) by MONTH
(Manual)



SWEC HEADQUARTERS SERVICES
EQUIVALENT MANPOWER
(ESD Including SEG, Project Services
Ad Ops, QA/QC)



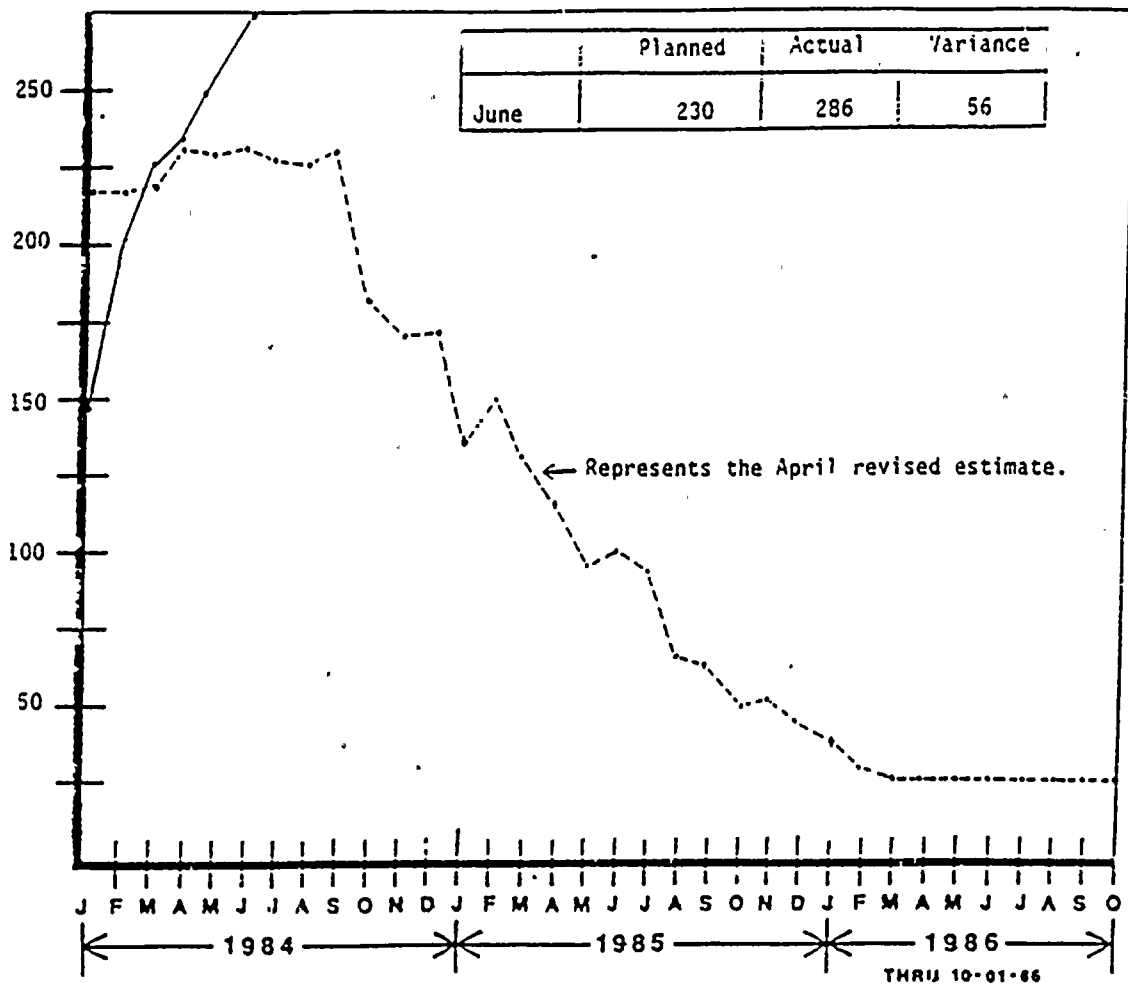
SWEC HEADQUARTERS
Cumulative Manhours
(CHOC, and Site including Advisory Operations, SEG,
QA/QC and Project Services)



The continuing trend of SWEC headquarters overruns in equivalent manpower has been directed by NMPC to be brought under immediate control and compliance with the plan. Deviations from the plan will be accepted only with NMPC prior approval.

————— Actual
----- Planned

HEADQUARTERS
SEG EQUIVALENT MANPOWER



Note: The Actual manpower reflects scope increases not included in the Planned manpower

———— Actual
----- Planned

VI. QUALITY ASSURANCE

A. NRC Construction Assessment Team (CAT) and Enforcement Letter

As a result of the verification of corrective/preventive actions for the eight violations identified in the Enforcement Letter, 19 discrepant/deficient items had been identified. As of July 23, 12 items have been resolved and actions continue to resolve the remaining seven.

NRC personnel arrived on site 7/16/84 to resolve questions that developed during their review of NMPC's response to the Enforcement Letter. As a result, NMPC will provide further clarification in a letter to the NRC.

NMPC Quality Assurance Engineering has developed all checklists required for verifying the implementation of the action plans developed to correct the deficiencies identified in the CAT Report. As of July 20, 59 checklists have been completed for verifying 59 CAT action plans, previously reported as 60. Of the remaining seven CAT Action Plans, four have been combined with other checklists and three do not require any verification as a result of the responses. It is anticipated that the completion date for initial verification of the 59 action plans will be 7/27/84. To date, 58 of the CAT Action Plans have been verified. As a result, 57 open items remain unresolved. The scheduled completion date for resolution and reverification of the open items is 8/30/84.

B. Other NRC Activities

On July 16, NMPC QA identified a potentially reportable deficiency per 10CFR50.55e. The deficiency was delineated on an NMPC Corrective Action Request which identified a failure in RCI's QA Program to identify and correct deficient welds in the enterprise system. NMPC Nuclear Licensing was notified of the condition and is evaluating the deficiency to determine if it should be reported to the NRC.

NRC open items, unresolved items and Notices of Violations, that remained open as of July 20, are statused below.

VI. QUALITY ASSURANCE (Continued)

1	2	3	4	5	
<u>Item</u>	<u>Additional Action Required</u>	<u>Final Review</u>	<u>On Hold</u>	<u>NRC Reviewing</u>	<u>Total</u>
Open:	11	6	3	1	21
Unresolved:	25	17	5	11	58
Violations:	8	6	2	7	<u>23</u>
				TOTAL	102

- 1- NRC Open Item, Unresolved Item, or Notice of Violation
- 2- Additional action required within NMPC or contractor prior to final review and verification by QA (i.e. more documentation required, additional calculations to be performed, etc.)
- 3- The package for the item is completed and is being reviewed for adequacy and completeness prior to submittal to the NRC.
- 4- Items which parallel or are identical to items presently identified in the CAT inspection and require further resolution prior to submittal.
- 5- Items which have been completed and have been forwarded to the NRC for review and approval for closure of the item.

VI. QUALITY ASSURANCE (Continued)

C. Staffing

The present Quality Assurance/Quality Control Staff (including contractors) at the Project Site is 594. NMPC QA-Projects is presently below the authorized staffing level due to recent transfers and resignations.

The first QA Team Building Session commenced the week of June 25 as scheduled. Subsequent sessions have been held periodically with further sessions scheduled for the near future.

D. Independent Review

The independent assessment team has performed their review of completed CAT Action Plans (Phase I). The remaining CAT Action Plans will be reviewed as they are completed. As a result of the review performed to date, two Corrective Action Requests have been issued identifying deficiencies that had remained uncorrected.

The review of the NRC deficiencies-identified in the SALP Report (Phase II) and the review of NMPC deficiencies identified during 1/1/81 through 3/31/84 (Phase III) is still in progress. The review of Contractor's deficiencies identified during 1/1/81 through 3/31/84 (Phase IV) has just commenced.

VII. CONTRACT ADMINISTRATION

A. Major Contracts/Purchase Orders to Go

Two CHOC originated Purchase Orders were awarded during the last reporting period with one Purchase Order remaining. The table below summarizes these orders.

CHOC ORIGINATED PURCHASE ORDERS TO GO

	<u>Description</u>	<u>FRD DATE</u>	<u>OUT TO BID Present Anticipated</u>	<u>DATE OF AWARD Present Anticipated</u>
1. *	Dripproofing Mod. HPCS Diesel Generator (Engr. & Design)	9/14/84	6/11/84	7/30/84
2. P233N	Alara Shielding Steel	2/25/85	4/02/84	6/27/84**
3. W014B	Resin Sampling Sys.	8/17/84	3/23/84	7/06/84**

* P.O. No. not assigned.

** Actual Date of Award

VII. CONTRACT ADMINISTRATION (Continued)

B. Major Contract Issues

1. P301C - ITT Grinnell

Negotiations are underway with ITT Grinnell to incorporate a revised incentive program. The program clearly defines performance goals consistent with schedule objectives.

2. P800A - G.E. NSSS Contract - Cost Allocation

During July, NMPC, SWEC and G.E. met to review contractual guidelines and implement a technical review program designed to establish cost allocation for corrective actions previously taken in the field. This program will initially emphasize PGCC (including electrical separation) rework. To date, approximately \$2.6M has been deducted from recent PGCC invoices.

During this reporting period, eighteen NSSS quotations have been dispositioned, including acceptances of major quotations regarding Mechanical Equipment Qualification and HPCS Diesel Generator Requalification and Modifications.

3. P282K - Rockwell International Hydrogen Recombiners

A site meeting was held July 13, 1984, between SWEC, NMPC and Rockwell to discuss Rockwell's requalification proposal (\$250,000). SWEC and NMPC have taken the position that qualification is an existing part of the PO (M/C 4 for \$37,000).

Rockwell's original qualification program failed and has requested a new qualification program for \$250,000. It was discovered that lack of traceability was the reason for Rockwell's original qualifications failure. As a result of the meeting, SWEC CHOC Engineering is evaluating whether there is an Appendix "B" violation, and will file an appropriate 10CFR50.55(e), if appropriate. This evaluation will be completed the week of July 27, 1984. Rockwell feels there is no Appendix "B" violation and will present their formal position on this and the qualification issue on August 1.

VII. CONTRACT ADMINISTRATION (Continued)

4. Spare Parts

CHOC is continuing to fall behind schedule in procuring spare parts to support construction and system turnovers. NMPC Contract Administration and SWEC Purchasing are pursuing a recovery plan to the schedule by the end of July. Listed below is the current status of May, June and July's Scheduled vs. Actual.

<u>Spare Parts Program</u>		<u>Scheduled</u>	<u>Completed</u>
<u>Month</u>			
May	Phase I	35	12
	Phase II	9	7
June	Phase II	16	10
July	Phase II	23	12

C. Material Management

1. Surplus & Scrap Materials

Efforts are ongoing to identify surplus and scrap materials. Shipments of embed plate received in 1977-1979 are with SEG for disposition.

2. Spare Parts

Provisions for spare parts storage on site are progressing on schedule.

3. Valve Inventory

Small and large bore generic valve inventories were completed during July. Accurate on hand quantities have been provided to cognizant areas for planning, installation and ordering purposes. Quantities are presently being loaded into an automated system to more readily trace these commodities.

D. Expediting

1. P301N - ITT Grinnell Large Bore Hanger Materials

ITT's performance to support material needs for the Primary Containment has been excellent to date.

VII. CONTRACT ADMINISTRATION (Continued)

2. P800A - G.E. HPCS Switchgear 102

The five HPCS Switchgear Breakers critical to testing within the 4160V Milestone were returned to G.E.-Philadelphia for re-work on 7/7/84 and returned to the site on 7/11/84, minimizing further delays.

3. Category I ASME Bolting Hardware

Shortages of ASME Bolting Hardware is impacting construction activities of JCI, ITT Grinnell and SWEC. Hardware Specialty and Hub, Inc., the two main stocking distributors are experiencing eight to 12 week lead times from bolting manufacturers. Reject rates of 50% and greater have caused further delays. Expediting has extended shop coverage of suppliers and manufacturers to improve delivery. SWEC Purchasing and NMPC Contract Administration have pursued alternative nuclear suppliers and established additional blanket orders to support the warehouse minimum/maximum bolting program.

VIII. STARTUP AND TEST

A. General

Startup Administrative Procedures (SAP) guidelines for the Startup and Test Program organization and the Joint Test Group (JTG) have been approved by the Site Operations Review Committee (SORC). Thirty-one of the known 144 Preoperational Test procedures are in the review and approval stage.

Preliminary testing continues with the major emphasis on electrical systems. Mechanical system testing is essentially complete on the Water Treatment System, with water production commencing in June.

NMPC Records Management has been advised of the system turnovers to support development of a required records list and deficiency list of outstanding documentation to support the turnover process.

Startup Turnover Reports (STR's) were issued on the following:

- 115KV yard drains (BIP 66.004) 7/5
- 125 VDC control power (BIP 73.001, .002, .003) 7/6

B. Preliminary Test Status

Initial energization of the reserve station transformer and two 13.8KV buses occurred this month. Make-up demineralizer system was operable in June. Mechanical system testing is in progress on the Water Treatment System with flushing completed. Field I&C work is approximately 98% complete for the Water Treatment System.

C. Major Problems

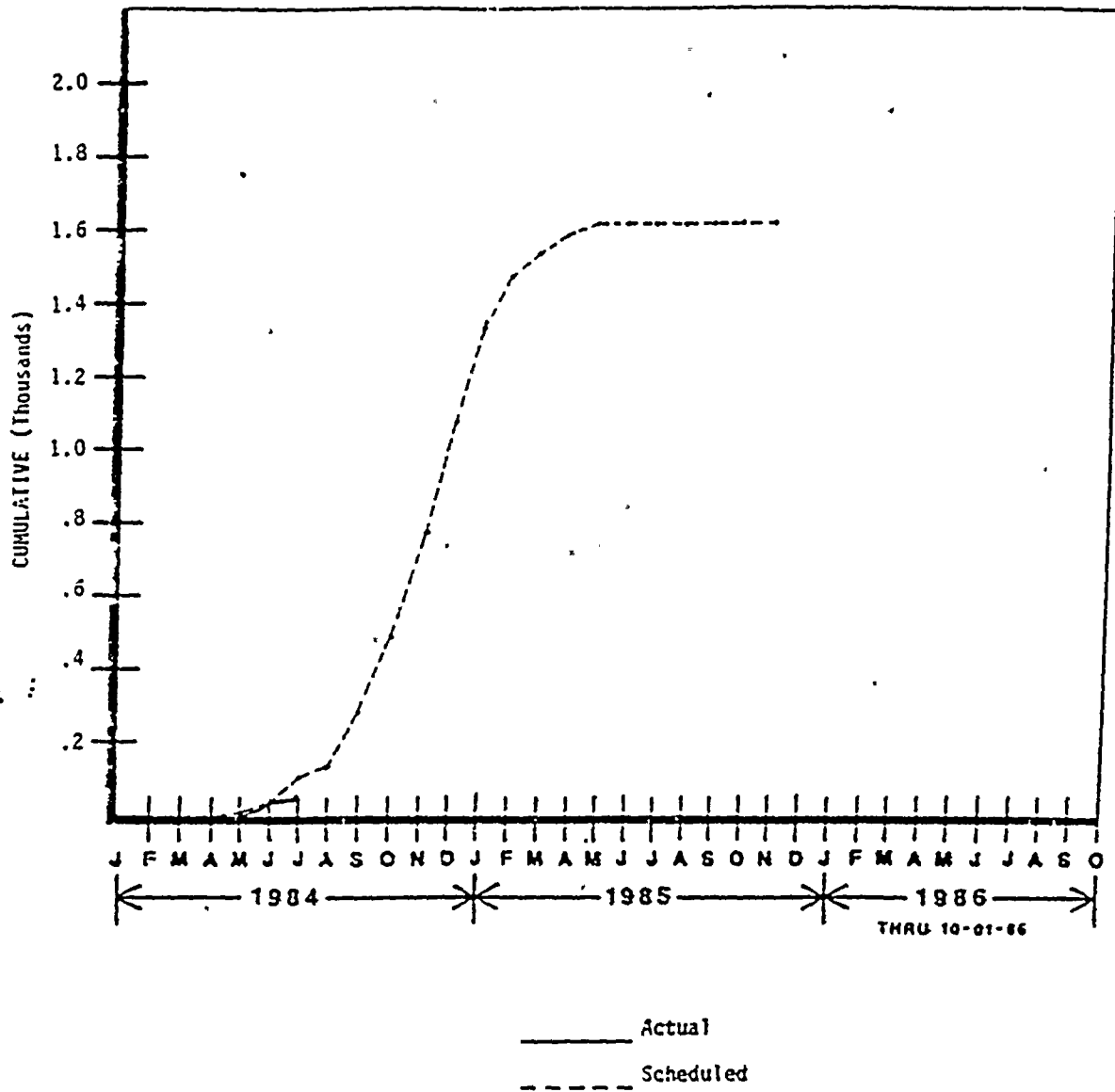
1. Replacement Parts: Lack of replacement parts continues to affect the testing effort. Preliminary meetings have been held in CHOC with Plant Service division personnel. CHOC Engineering has developed a schedule to bring this effort back on track.
2. Release of Systems From Construction: Startup and Test is working with Construction to determine which turnovers are critical to testing. Currently, 21 BIP turnovers are behind schedule. Their status as of July 17 is provided in the Construction Section of this report.

VIII. STARTUP AND TEST (Continued)

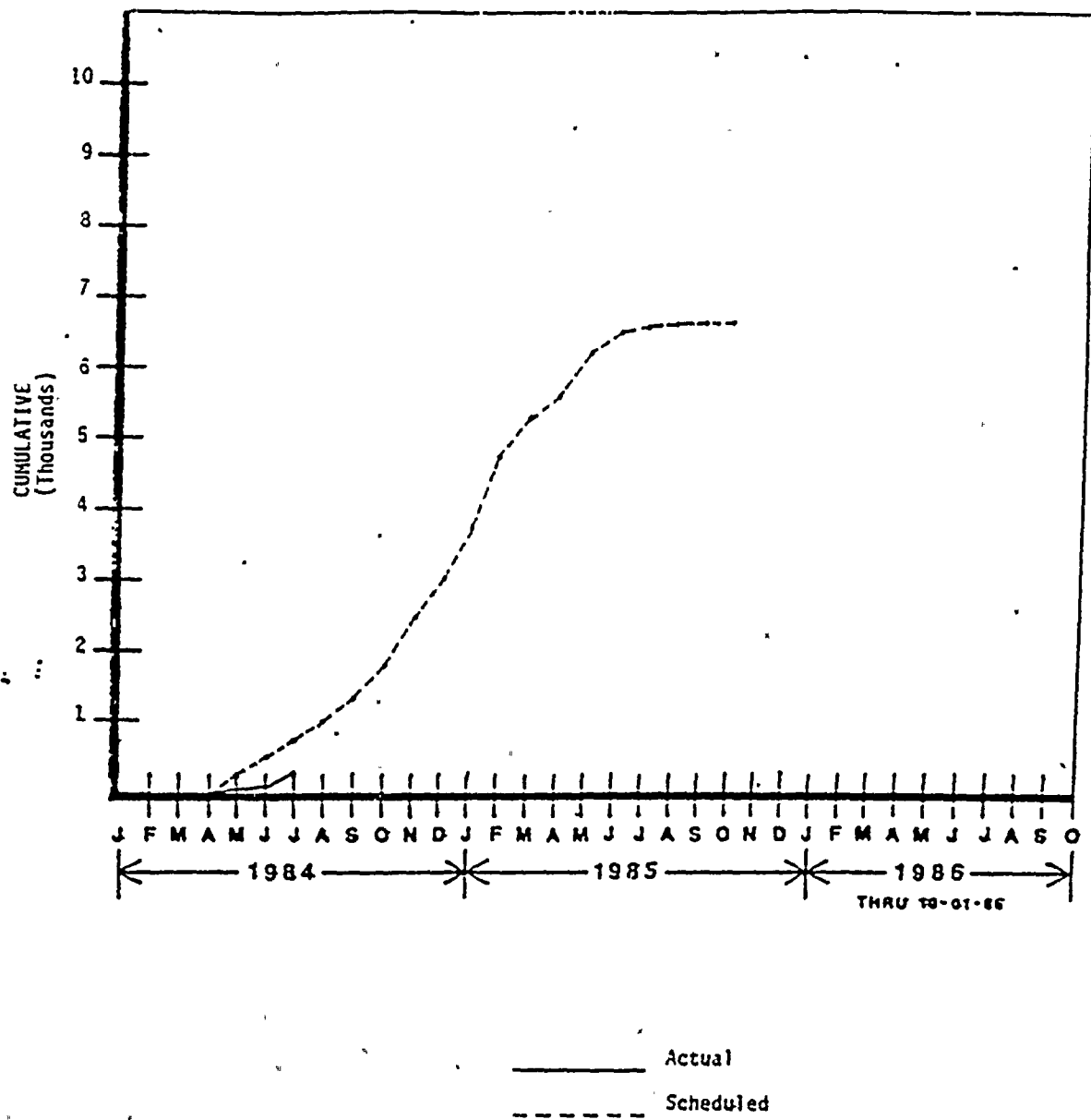
3. Systemic Software: Current Permanent Plant File contents indicate a need to increase the emphasis and activities for software processing to be completed to support system turnover. A major effort remains underway by Records Management to define the records required for turnover.
4. Project Milestone Integration: Startup and Test completed the initial review of total milestone integration on June 15. The input used is based on the original milestone schedules. The milestone schedules are under review, and have been updated to show current project standing.

STARTUP & TEST

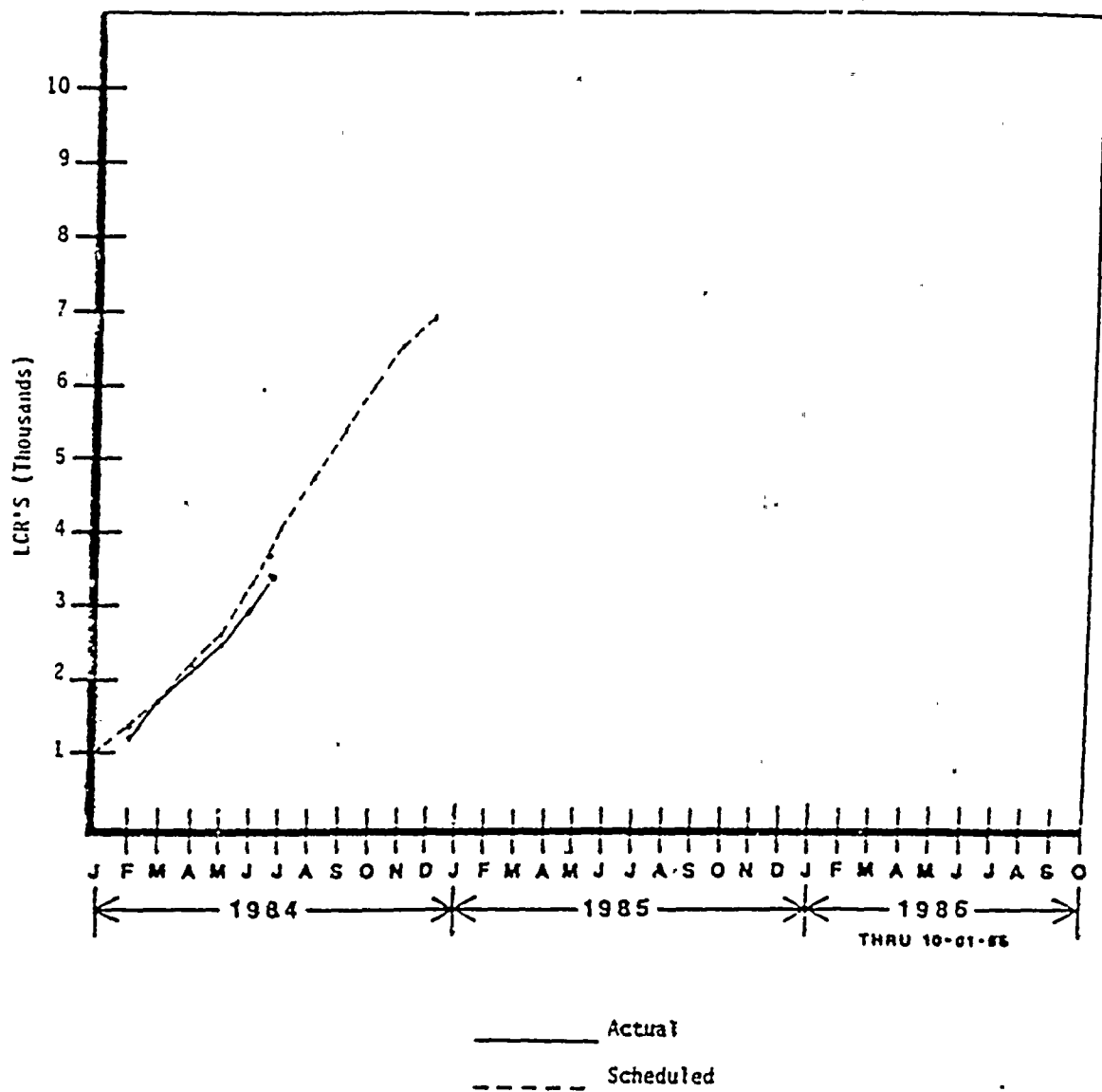
FLUSHES



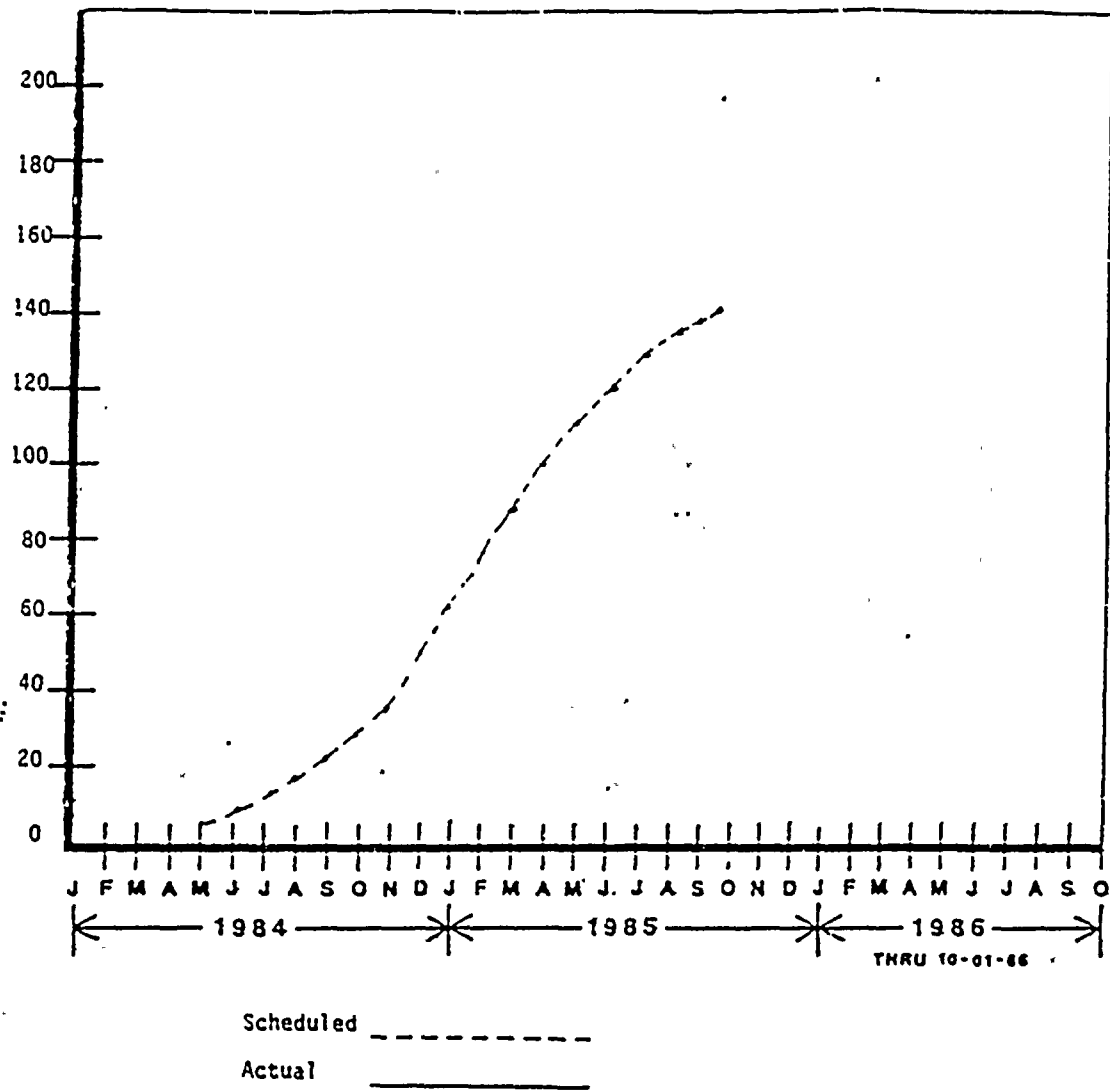
STARTUP & TEST
LOOP CALIBRATION



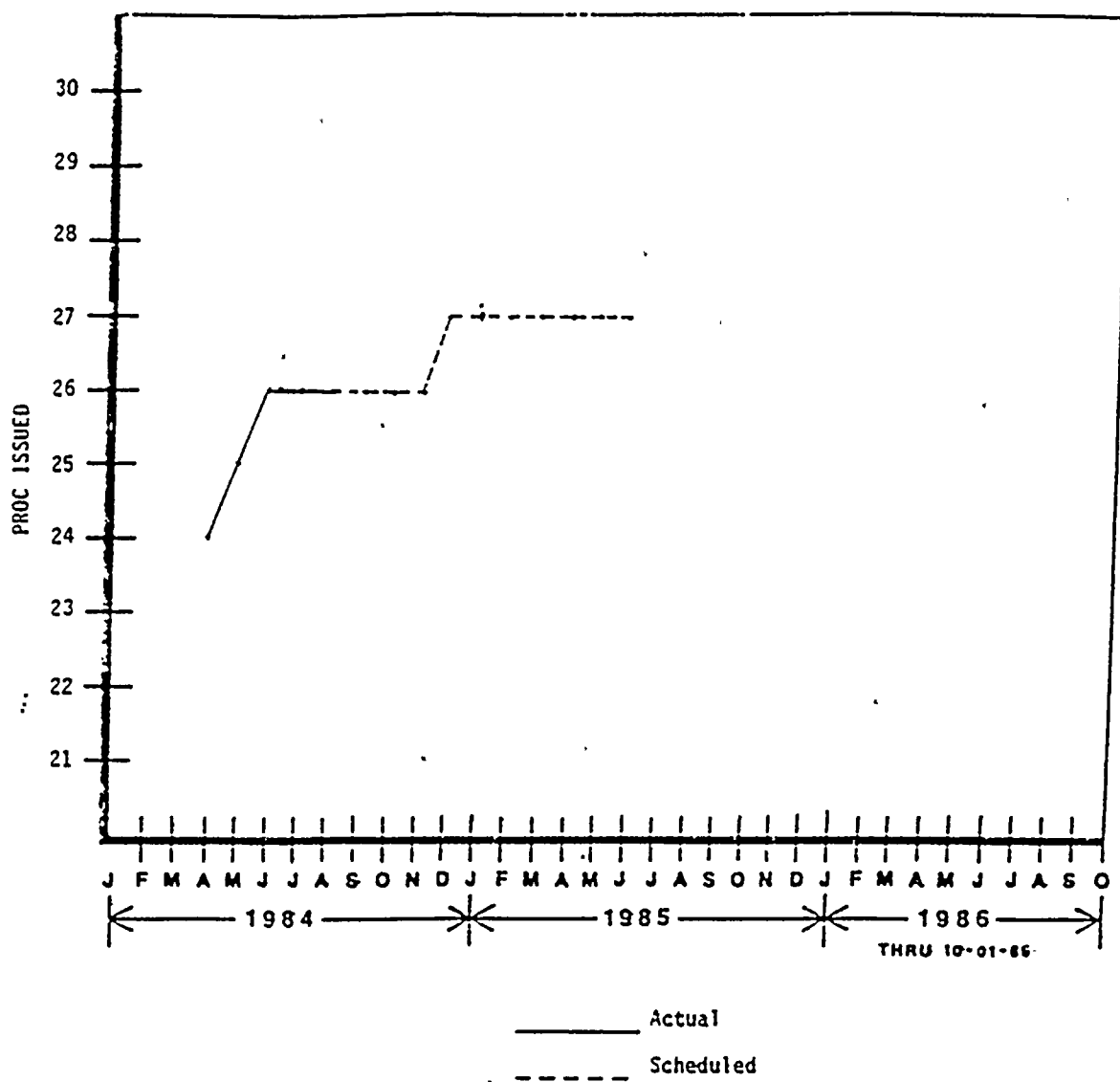
CHOC LOOP CALIBRATION REPORT
(Cumulative)



PREOP/ACCEPTANCE PROCEDURES ISSUED
(Cumulative)

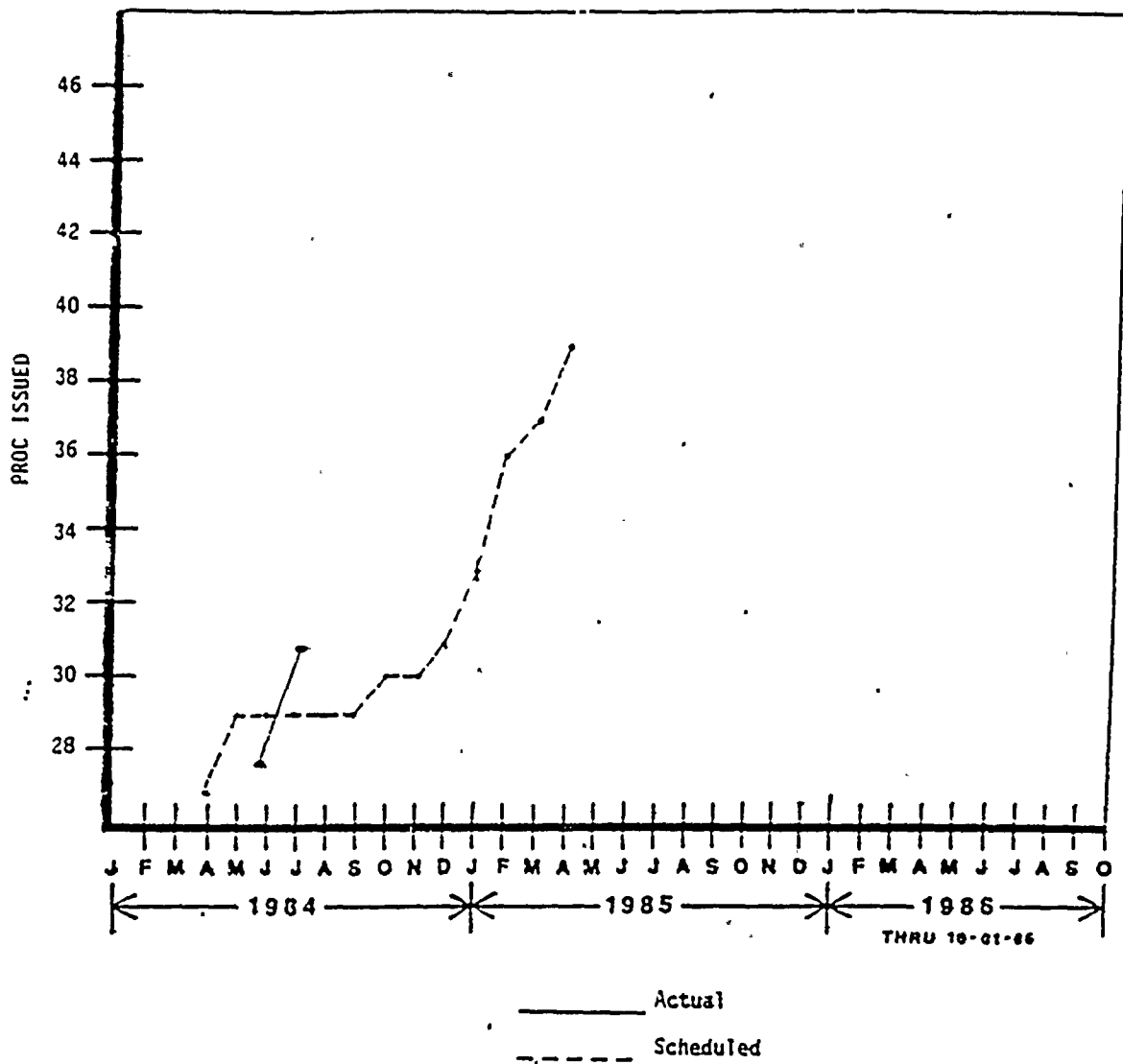


ELEC PROCEDURES ISSUED
(Cumulative)

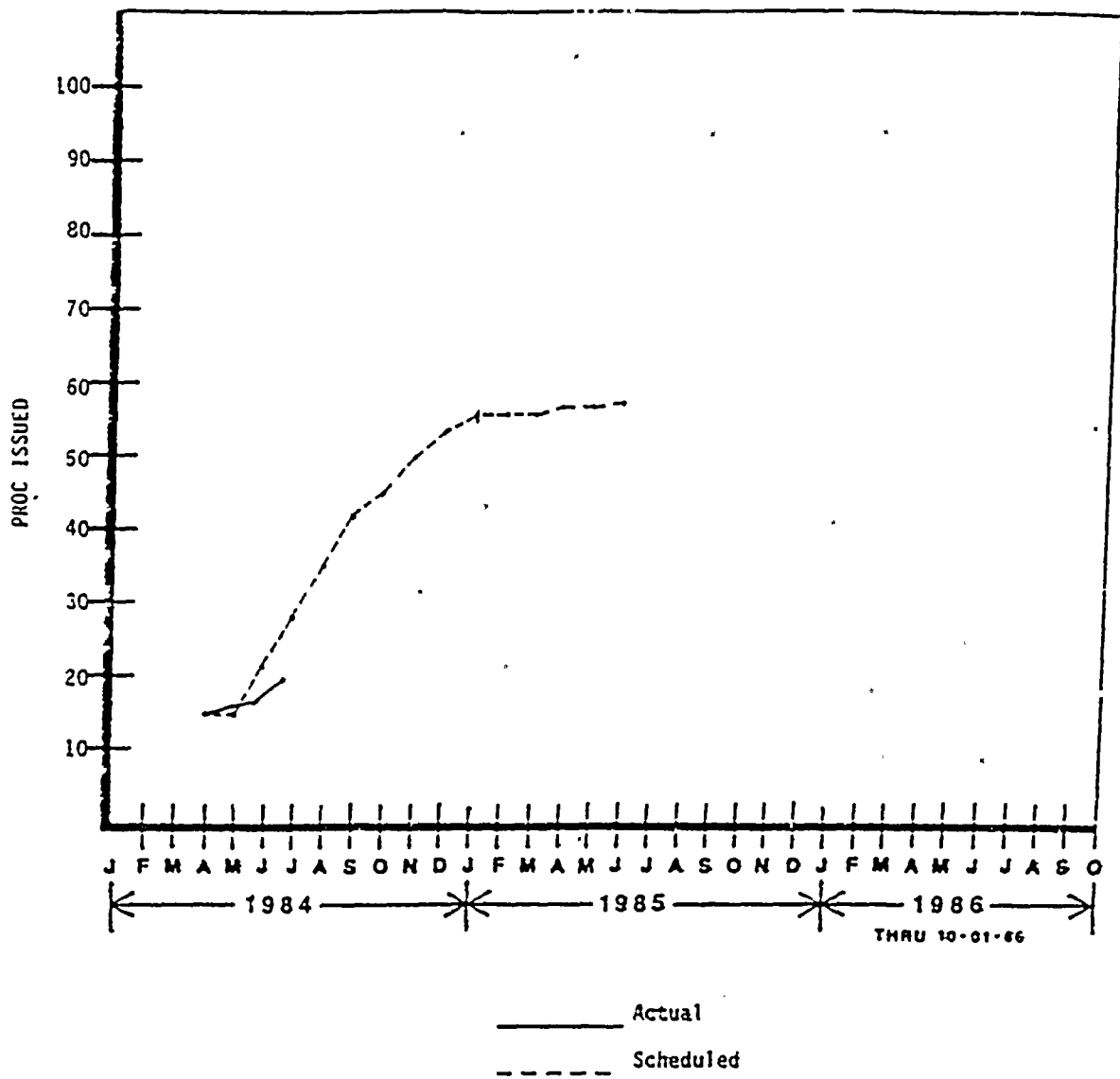


I&C PROCEDURES ISSUED

(Cumulative)

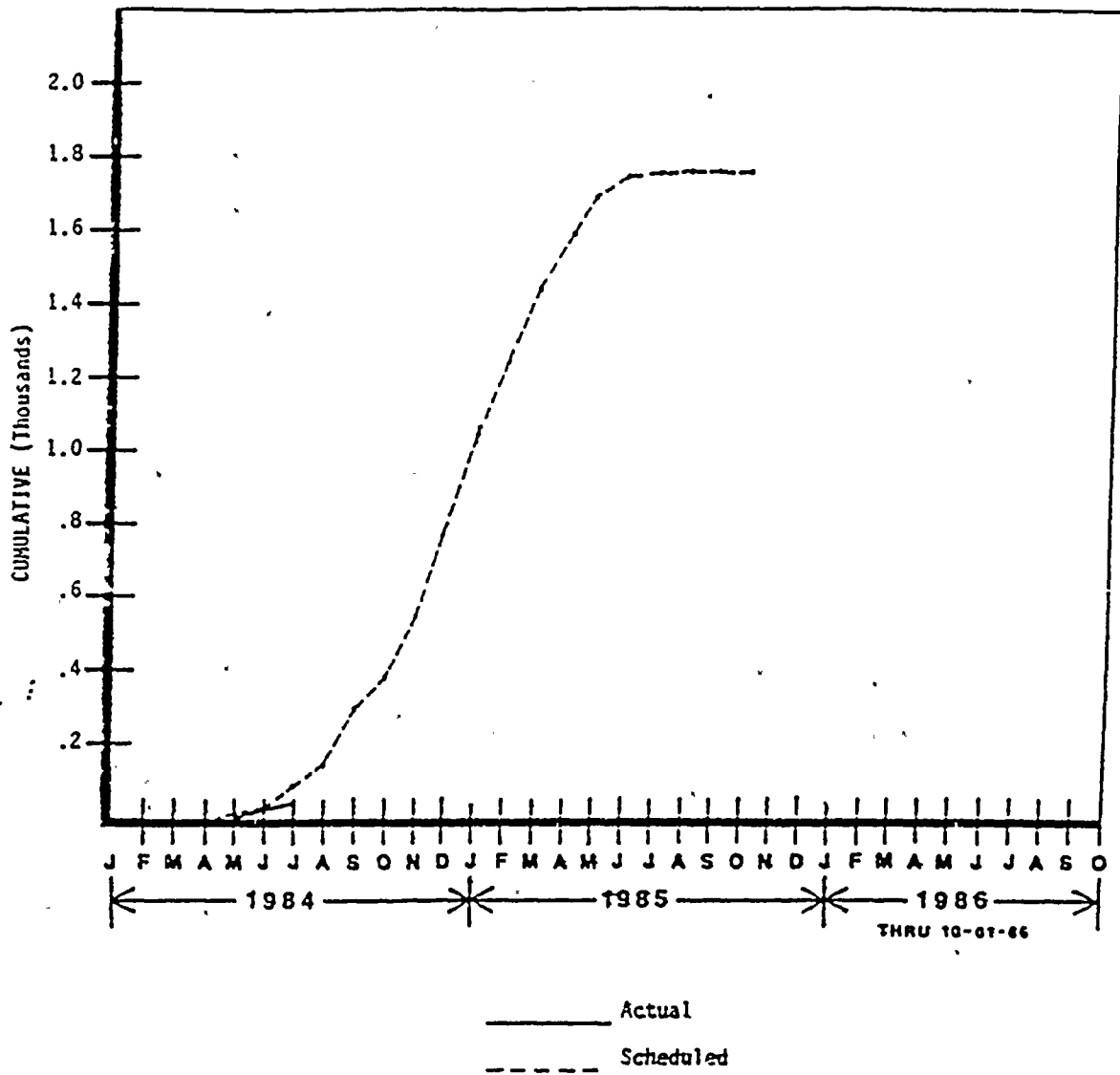


MECH PROCEDURES ISSUED
(Cumulative)

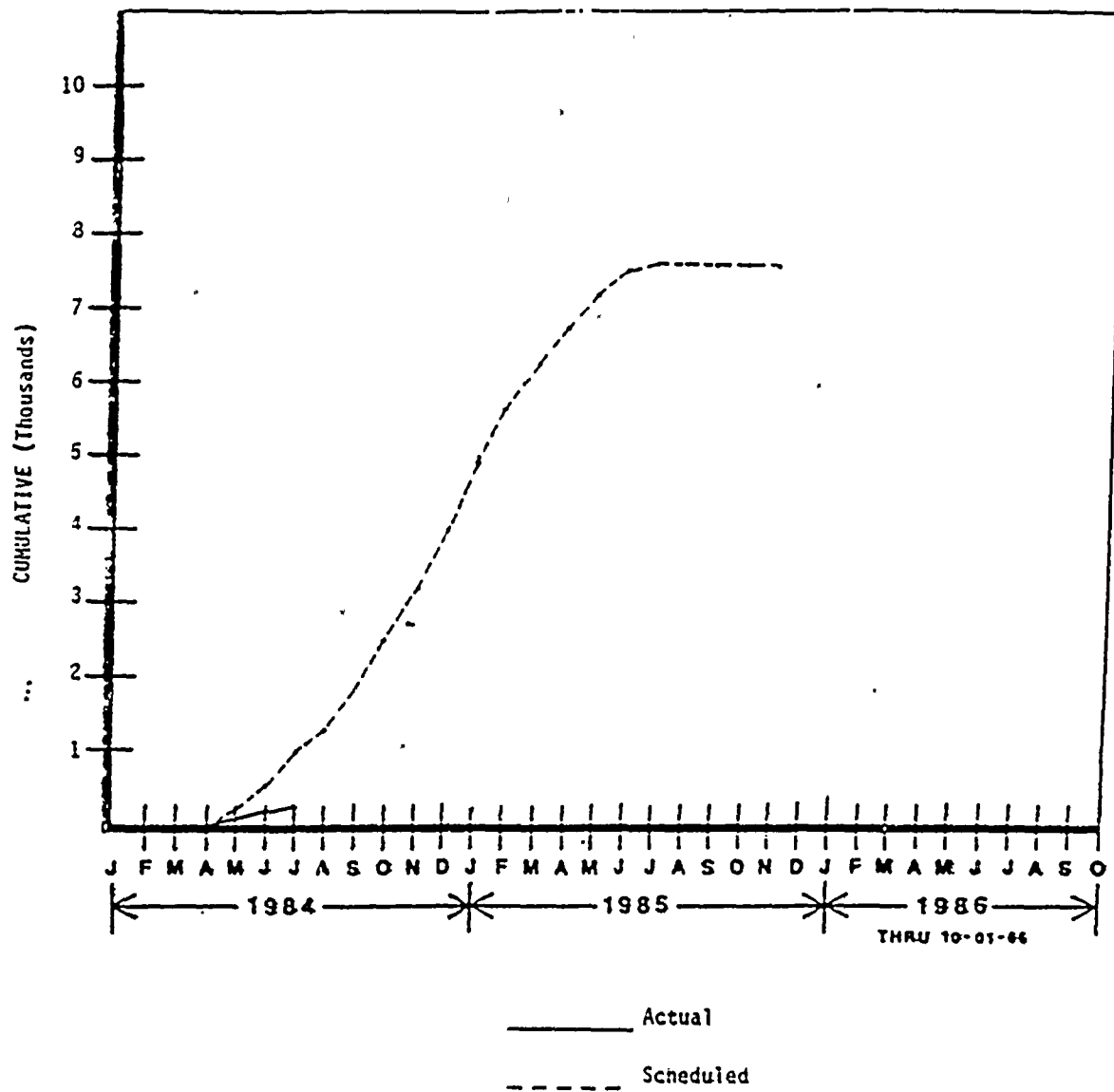


STARTUP & TEST

Initial Equipment Operation



STARTUP & TEST
CONTROL CIRCUIT VERIFICATION



IX. COST

A. Cash Flow Summary

Approximately \$2,391 million* has been charged on the total Project to date.

As of July 15, approximately \$409.3 million has been expended in 1984. This is \$2.4 million under the \$630 million 1984 forecast plan. The original \$615 million 1984 forecast has been revised to \$630 million to reflect the recent contract re-negotiations between SWEC and NMPC for non-manual and Headquarters services.

Approximately \$53.0 million was expended in July versus the \$46.2 million planned.

B. July Cash Flow Variance Analysis

	<u>Variance</u>	<u>Remarks</u>
SWEC Manual and Non-Manual	\$2.2 million over	The manual staffing was approximately 675** manuals over the plan of 797. The non-manual manpower was 83** men over plan and non-manual overtime was over plan at 21%.
L. K. Comstock	\$1.5 million over	The manual staffing was approximately 321** manuals over the plan of 577. The manual overtime was 27% versus 22% planned. The non-manual staffing was approximately 6** men over the plan of 100. The non-manual overtime was 21% versus 18% plan.
ITT Grinnell	\$1.2 million over	The manual staffing was approximately 321** manuals over the plan of 577. The nonmanual staffing was approximately 140 over the plan of 300. The nonmanual overtime was 28% versus 25% plan.

-----Continued-----

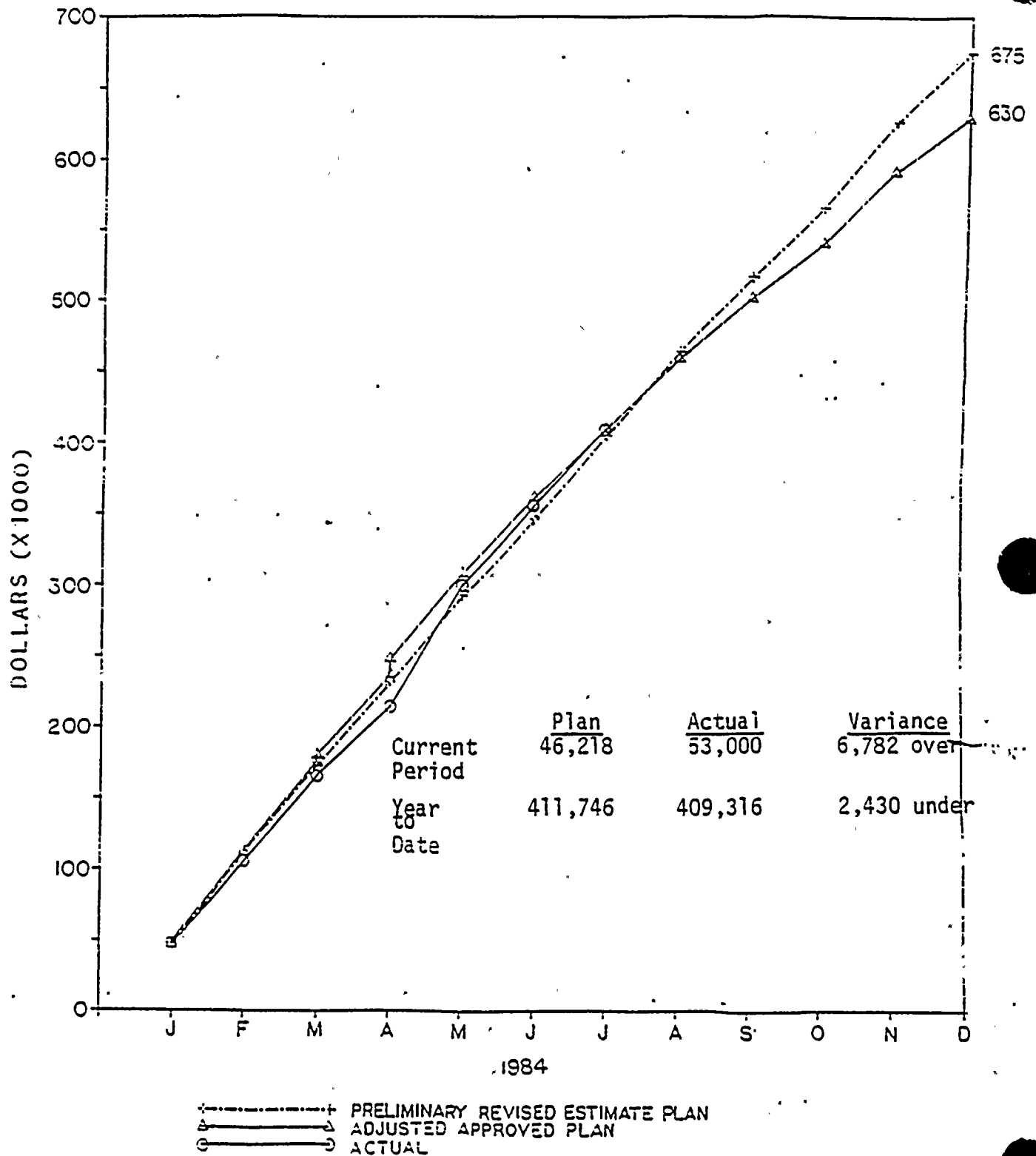
Note* This figure excludes \$2.6 million in Administration Building Expenditures.

** All manpower figures are approximate since actual payroll headcount figures for week ending date 7/13/84 were not available.

IX. COST (Continued)

	<u>Variance</u>	<u>Remarks</u>
FPO's	\$.3 million over	The 1984 cumulative \$6.3 million overrun is attributed to higher than anticipated staffing levels through 1984 and to an initial under estimate of the 1984 FPO cash requirements.
+Other Misc.	\$2.4 million under	
Total Construction	\$3.3 million over	
Headqtrrs. Services	\$1.4 million over	July payment for May services. Manhours overran approximately 41,000 from plan mainly in CHOC Engineering and Design. Major reasons for overrun were new or increased work scope not in the budget.
Hdqtrs. Material	\$ 1.4 million over	
Total Headqtrrs.	\$ 2.8 million over	
<hr/>		
Client Cost	\$.8 million over	
TOTAL PROJECT	\$ 6.8 million over	

1984 PROJECT CASH PLANS



:(Continued)

Project Forecast

The Revised Project Forecast is currently in process. Essentially, all input has been completed on a preliminary basis. The commodity curves are under joint NMPC/SWEC review. Any adjustments resulting from this review will be incorporated and a final package will be prepared for the target due date of 8/1/84.

Project Estimate

SWEC is presently loading the Total Project Estimate file which combines the expenditures through December 1983 with the "To Go" Project Estimate of 4/1/84. This effort is targeted for completion by 8/15/84. Once the Total Project Estimate is available, a Monthly Estimate Status Statement showing actual expenses compared to the 4/1/84 Budget Estimate will be presented in this report.

Contingency Management Program

The Contingency Management Program was instituted to keep track of all items that were not included in the April 1, 1984 Baseline Estimate and therefore, must be taken from Contingency. The Contingency balance has been adjusted, based on NMPC's estimate review, to \$205,000,000. The following is a summary of the items affecting Contingency up through July 20 and are broken into two categories: NMPC Approved Changes and Potential Changes. The NMPC Approved Changes are actual items that have already affected the estimate and have been approved by the Project Director. The Potential Changes are items which management believes may have some exposure that could affect the estimate at a later time.

To date, the Contingency balance has been increased by \$4,495,000 in approved additions. Also, \$38,845,766 in potential changes have been identified and are under review.

CONTINGENCY MANAGEMENT PROGRAM
APPROVED CHANGES
APRIL 1, 1984 TO JULY 20, 1984

<u>ITEM</u>	<u>DRAWDOWN</u>	<u>ADDITION</u>	<u>CONTINGENCY BALANCE</u>
Balance 4/1/84			\$205,000,000
Rejection of NSSS PGCC Quote 256 by NMPC. This quote dealt with the Compensated Water Level Instrumentation. System.		\$695,000	
Budget value in excess of vendor quote for Specification P233N for the procurement of materials and fabrication of Reactor Building radiation shields.		800,000	
NSSS Amendment #20 quote under budgeted amount. Amendment #20 is for technical technical for preliminary test and startup.		3,000,000	
Totals	0	4,495,000	\$209,495,000

POTENTIAL CHANGES
(DOLLAR ESTIMATE ARE ORDER OF MAGNITUDE)
APRIL 1, 1984 TO JULY 20, 1984

<u>ITEM</u>	<u>DRAWDOWN</u>	<u>ADDITION</u>
Relocation of Technical Support Center Based on Recently Completed Radiation Dose Calculations and Finding that Original Site would be Uninhabitable Following a Loss of Coolant Accident (\$800,000 Construction and \$200,000 Engineering).	\$1,000,000	
Headquarter Manhour increase for computer processing to create a report to compare Test Loop Diagrams and Electrical Cable Schedule Information System	70,000	
NRC Initiated 3rd Party Review	6,000,000	
Future Client Manpower Additions over and above NRC Initiated 3rd Party Review	1,000,000	
Paid Overtime For NMPC Personnel per Corporate Policy Concerning Extended Overtime. Being Paid to NMPC Construction Personnel Working with SWEC	100,000	
Implementation of "Fixes" due to Appendix R Evaluation: Including Recent Guidance by NRC Pertaining to Potential Fire in Control Room	3,000,000	

POTENTIAL CHANGES
(DOLLAR ESTIMATE ARE ORDER OF MAGNITUDE)
APRIL 1, 1984 TO JUNE 20, 1984
(Continued)

<u>ITEM</u>	<u>DRAWDOWN</u>	<u>ADDITION</u>
H/Q Manhour Overrun. Scope additions for Humphrey concerns, equipment qualifications, security system, etc.	3,000,000	
Delay of Remaining Railroad Work, currently scheduled for 1985 until 1987		70,000
Headquarter manhour increases over and above the 4/1/84 estimate (see attached schedule)	25,095,766	
Increase to the Site Document Control Department Staff	750,000	
Addition of new photocopy machines at the site.	<u>400,000</u>	<u> </u>
TOTALS	\$38,915,766	\$70,000
NET POTENTIAL CHANGES	\$38,845,766	

POTENTIAL CHANGES
HEADQUARTER MANHOUR INCREASES
OVER AND ABOVE THE APRIL 1, 1984 ESTIMATE

<u>Description</u>	<u>Dollar Amount of Change</u>	<u>Change Evaluation Package Number</u>
Planning and Scheduling: Temporary Site assistance for revised project planning program.	\$ 746,295	01164
Reevaluation of Records Management Budget in support of the July 1, 1984 forecast effort.	2,651,387	01161
Revised budget for Project Cost including System 38 and mainframe applications computer support.	167,500	01165
Telecommunications support for the Project	101,800	01157
Department 53 budget from May 1984 through September 1986	309,400	01166
Computer Department services support for the Project.	1,157,791	01158
Preliminary Test Program Field Testing	10,712,000	01131
AOD CHOC Review of NMPC preoperational and acceptance test procedures	259,700	01130
Extracting cable numbers from test loop diagrams	53,200	01149
PGCC/NSSS support	1,910,192	01153
Spare Parts procurement/ evaluation	801,598	00159

Project Management budget revision	424,299	01168
Management Systems Division revised budget	72,800	01169
Division 78 (Boston Forecasting) revised budget	2,130	01170
Revised budget for QA/QC, Engineering Assurance and PQA	4,243,480	01171
System 38 Activity control system	266,800	01172
Division 06 (Purchasing and Travel) revised budget	704,498	01173
Project Cost environmental support	208,298	01174
Problem reporting system (AOD Headquarters Loop Calibration Reports)	302,598	01175
	<hr/>	
TOTAL INCREASES	\$25,095,766*	

* This amount may decrease based on reevaluations of SWEC Headquarters manpower levels presently being performed by NMPC. Amount of decrease is unknown at this time.

IX. COST (Continued)

G. Common Facilities

The costs of facilities common to NMP #1 and NMP#2 must be split in an equitable and justifiable manner. A review is now in process to arrive at this allocation approach. The review will be performed in two phases. Phase I is the review of facilities that are common at this time. Phase II is the review of facilities that will become common at a later date. Phase I is scheduled to be completed this fall. Phase II will be done when it is considered necessary.

X. RECORDS/INFORMATION MANAGEMENT

A. Significant Activities

The following policies were finalized and distributed to project participants for incorporation as Project Guidelines by August 1, 1984.

1. Record Review and Transfer Policy of Category I Records.
2. Record Review and Transfer Policy of Category II and III Records.
3. Owner Verification and Acceptance of Category I Records.
4. Owner Verification and Acceptance of Category II and III Records.

The activity involved with compiling the NMP2 Records/Traceability Matrix was initiated with SWEC and NMPC. Associated with this activity is the initiation of the procedural review for compliance to the Records Management Plan.

Comments on Project Guidelines 80 and 81 on the Records Traceability Matrix and Required Records List respectively were resolved and have been submitted for final approval.

The initial logic for the scheduling of all Project Record-Related Activities was finalized. Project Control committed to a 7/20/84 issue date.

Key Actions in the Near Term are planned as follows:

1. Issue of first five System Records Lists, transmittal of remaining system records relating to first five systems, and accountability of those records.
2. Review and track progress of initial schedule logic with Project Control for the scheduling of Project record-related activities.
3. Preparation of generic records list for non-systems related records by 8/1/84.

X. RECORDS/INFORMATION MANAGEMENT

A. Significant Activities (Continued)

4. Final completion of Records/Traceability Matrix and initial review for revision to Required Record List by 8/30/84.
5. Focused attention to be placed on record storage concerns in field. Joint Records Management/QA assessment will be conducted and corrective actions taken. Commence on or about 8/6/84.

B. Record Turnover

The following are estimated percents complete of SWEC turnover of documentation to the NMPC Permanent Plant File.

Total Turnover of CHOC Documents 89% Complete

Total Turnover of SWEC Site Documents 10% Complete

Total Turnover of all SWEC Documents 21% Complete

The following are estimated percents complete of NMPC Syracuse turnover of documentation to the Permanent Plant File.

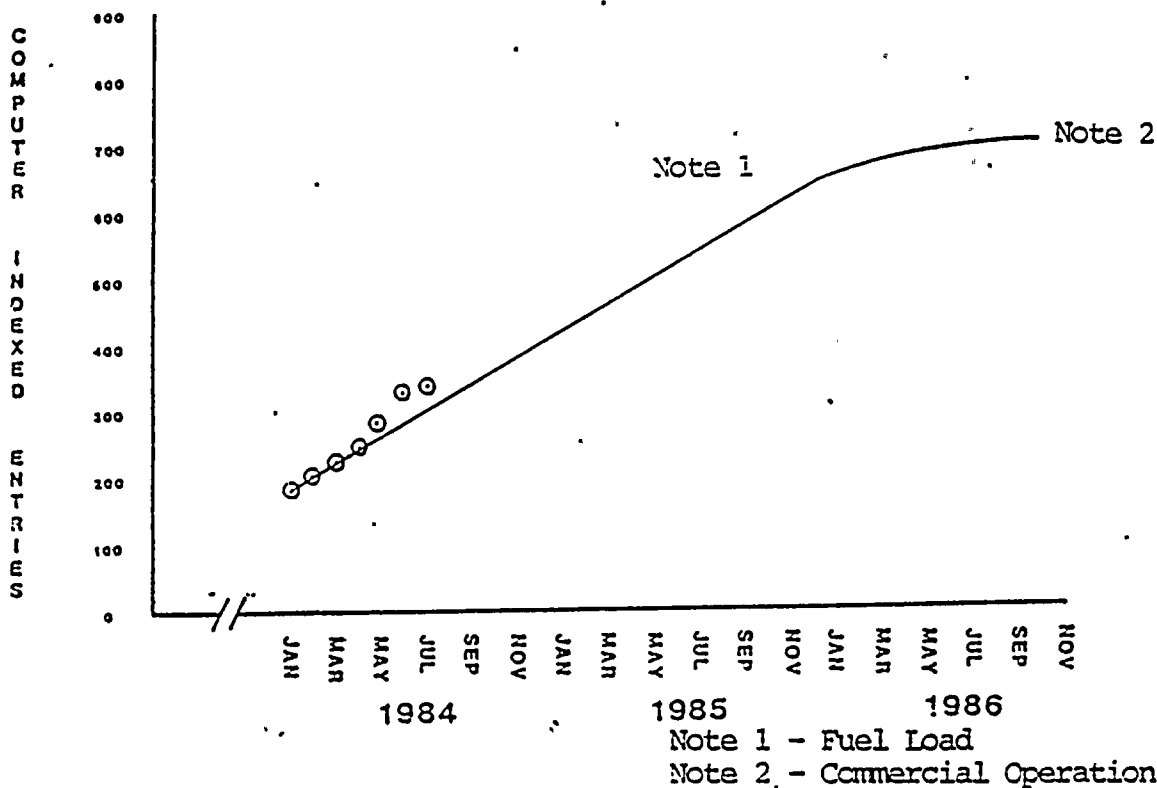
Total Turnover of NMPC Syracuse Documents 73% Complete

The total estimated percent complete of turnover documentation to the PPF 26%* Complete.

* Cumulative Total up to 6/20/84 recalculated to 26%.

NMP2 PERMANENT PLANT FILE
COMPUTER INDEXED ENTRIES
PLANNED VS. ACTUAL
(IN THOUSANDS)

PLANNED ———
ACTUAL ○



The following tables summarize the production levels of record receipt preparation, filming and indexing into the Permanent Plant File.

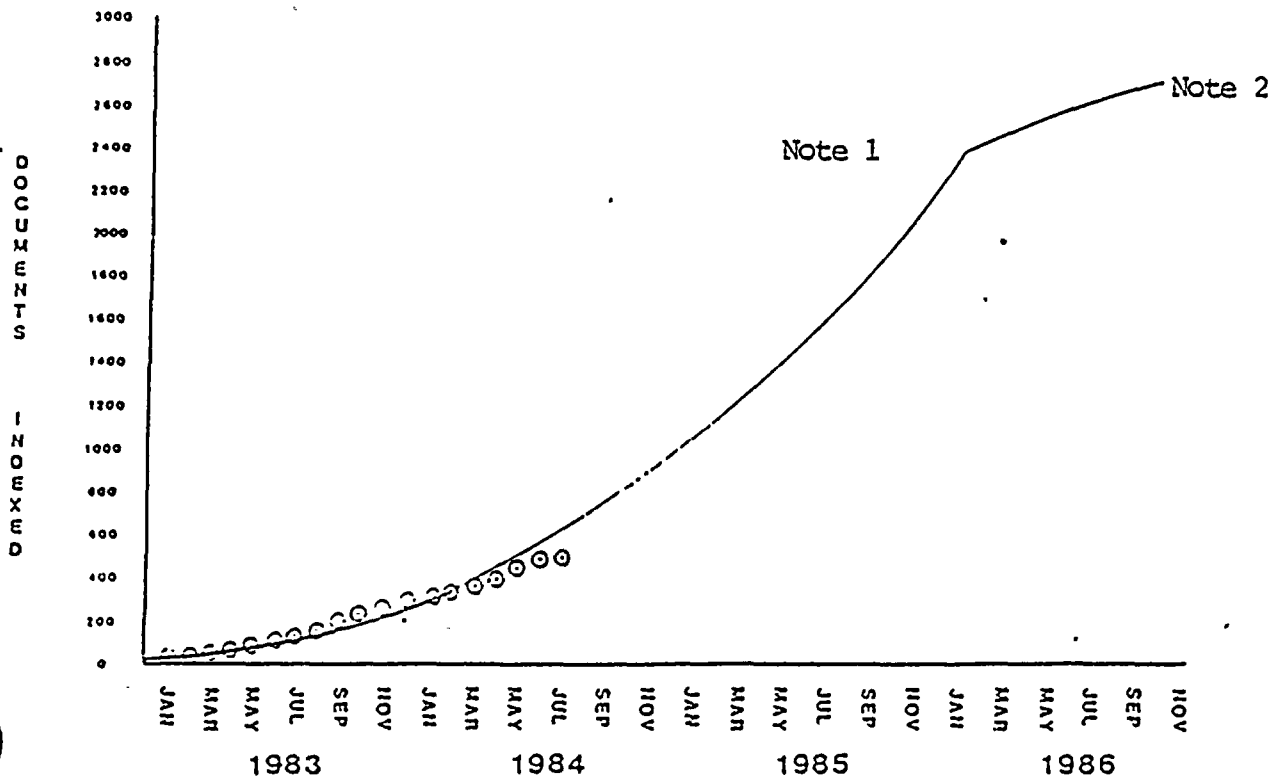
Activity	July	June	Total To Date	Percent Complete
Record Receipt and Preparation (Includes Aperture Cards)	46,590 Pages	109,506 Pages	2,078,781 Pages	26%
Records Microfilming And Verification (Includes Aperture Cards)	46,040 Pages	128,327 Pages	1,753,511 Pages	22%
Computer Indexed Entries	7,045 Entries	41,038 Entries	340,298 Entries	52%
Records Indexing And Computer Entry	7,045 Documents	41,038 Documents	487,349 Documents	20%

Percent complete is based on an estimated 2,400,000 documents comprising 8,000,000 pages and 650,000 computer index entries required for Permanent Plant File entry by fuel load.

NMP2 PERMANENT PLANT FILE
DOCUMENTS INDEXED
PLANNED VS. ACTUAL
(IN THOUSANDS)

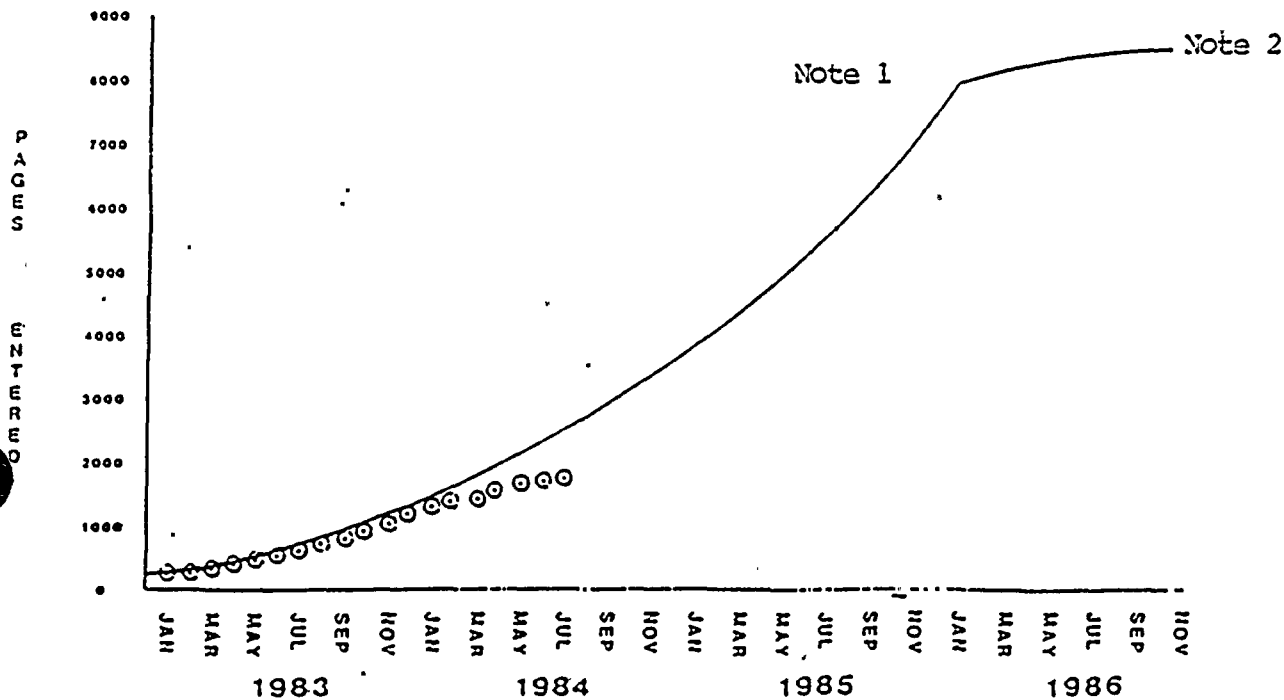
Note 1 - Fuel Load
Note 2 - Commercial Operation

PLANNED —
ACTUAL ○



NMP2 PERMANENT PLANT FILE
PAGES ENTERED
PLANNED VS. ACTUAL
(IN THOUSANDS)

PLANNED —
ACTUAL ○



XI. LICENSING

A. FSAR Status

A total of 850 questions relative to the FSAR and ER-OLS have been received from the NRC. For this period, 780 responses are complete. Amendment 12 of the FSAR was sent to the NRC on July 5. Amendment 13 will be sent to the NRC the first week in August.

B. SER Status

There are 233 SER open items and an additional 80 Power Systems SER items for a total of 313. Based upon meetings with the NRC, we believe that 204 SER items are closed.

C. 50.55(e) Reports

Seven 50.55(e) Reports were sent to the NRC.

1. Anchor Darling Valves, final report
2. MSIV Test
3. Rosemount 510 DU Racks, final report
4. Velan Valves, final report
5. RCIC Turbine Exhaust, final report
6. SRC Controllers, interim 30-day report
7. Rockbestos Control Cable, interim 30-day report

Inspection Reports

I.E. Inspection 84-06 was received and contained five violations. Six items were reported to the NRC as a potential deficiencies under 10CFR50.55(e).

1. RHR Safety Valves (55(e)-84-23)
2. Cat. I MCC (55(e)-84-24)
3. MSIV Corrosion (55(e)-84-25)
4. SAM Relays (55(e)-84-26)
5. QC for Cat. I Bolted Joints (55(e)-84-27)
6. RCI Undersized Welds (55(e)-84-28)

STATUS OF RESPONSES TO BRANCH TECHNICAL QUESTIONS

NUMBER OF RESPONSES

SCHEDULE FOR RESPONSE COMPLETION

Technical Question Areas

Questions
Received

Completed

Outstanding

Aug.

1984
Sept.

Dec

1985

ER-OLS

51

50

1

1

INSTRUMENT AND
CONTROLS*
421 &
DISCREPANCIES

85

68

17

17

RADIOLOGIC
470, 471
EFFLUENT
460, 451, 810

62

55

7

3

2

1

1

PIPING 210
STRUCTURE/220
SEISMIC-230
GEOLOGY-231
HYDROLOGY-240
GEOTECH-241
STRUCTURAL AUDIT

168

160

8

7

1

EQUIPMENT
QUAL.
270
271

13

11

2

1

1

QA 260

51

51

FIRE
PROTECTION
280

33

29

4

3

1

POWER
SYSTEM
430

118

107

1

1

CONTAINMENT
REACTOR PHYSICS
CORE PERFORM
480, 491, 492

67

58

9

8

1

REACTOR
SYSTEM
440

49

44

5

3

1

1

STATUS OF RESPONSES TO BRANCH TECHNICAL QUESTIONS

NUMBER OF RESPONSES

SCHEDULE FOR RESPONSE COMPLETION

Technical Question Areas	Questions Received	Completed	Outstanding	July	1984 Sept.	Dec	1985
AUXILIARY SYSTEM 410	51	45	6	5		1	
STARTUP & TEST 640	41	37	4	2	1		1
OTHER 100, 250, 251 252, 281, 311 450, 451, 620 630, 640, 730	61	55	6	5			1
TOTALS	850	780	70	55	5	4	6