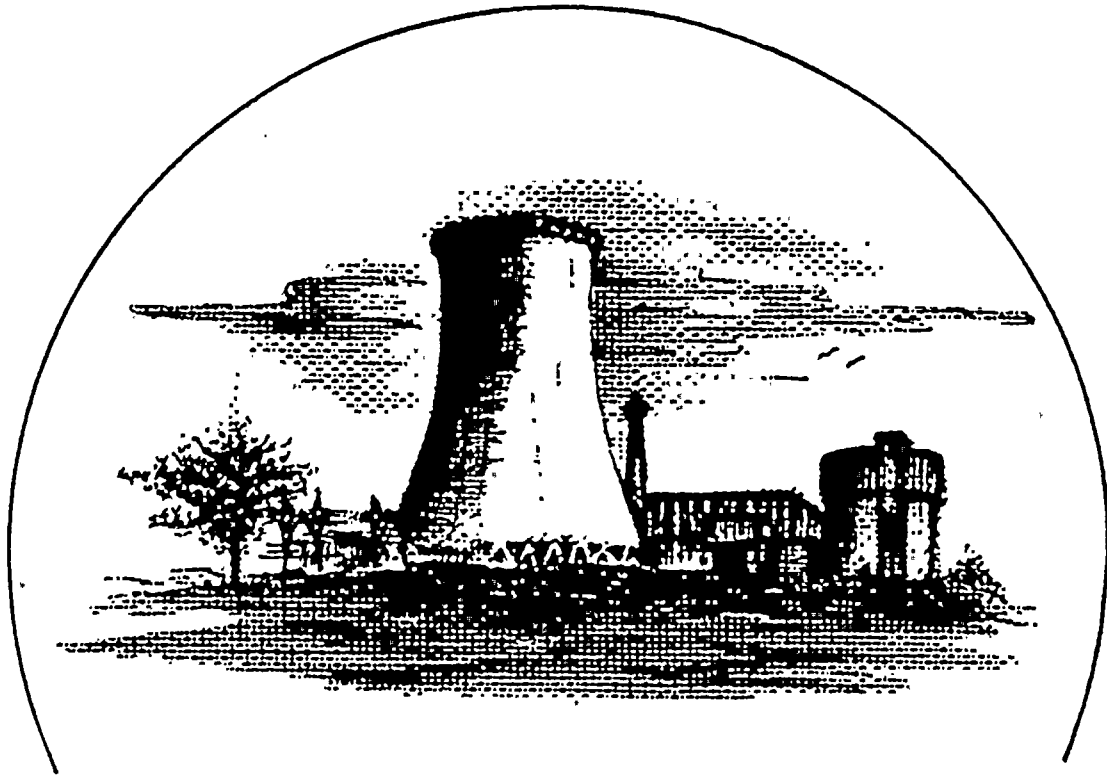


MAY '84

# Project Report



## Nine Mile Point Unit 2

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MAY 1984  
PROJECT REPORT

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I. EXECUTIVE SUMMARY

A. Project Director

With this issue of the monthly report, we henceforth make the reporting period coincident with our fiscal months. Therefore, the period of this report is from May 1 through May 20, which is essentially a three week period.

For this period, we achieved 1.47 percent progress, which was close to the 1.55 percent planned. The Project is presently on schedule for a February 24, 1986 fuel loading. This is based on the actual progress of work measured from the new milestone schedule program. We have experienced some problems which caused near term delays in the milestone schedules, the most serious of which is a three week delay to the service water system. These delays will be discussed later in this report. If these delays are not recovered, then a drawdown from our schedule contingency time will be necessitated. We do believe that we will recover these delays in the near term and leave the contingent time intact.

Bulk production of commodities continue at a near satisfactory rate. A major problem area is in that of cable pulling. We have not been successful in sufficiently opening up a satisfactory backlog of "clean work available." Corrective steps have been taken but immediate results will not be seen. We have a high confidence level that this area will be brought under control.

Many overall improvements in productivity have been seen in this period, notably in the area of piping and instrumentation.

We experienced in this period an unexpected and unofficial one day strike by the carpenters, due to an incident between our site security and a member of the Carpenter's Union. A one day production loss was experienced. The problem was quickly resolved and team building actions were taken to reinforce mutual respect between crafts and security.

Significant actions are underway to streamline and "de-bureaucratize" our work procedures, which will have beneficial effect on our day-to-day work efficiencies.

While our overall cash flow is within plan, we are still concerned about high rates of field purchasing, Project overtime and overall staff levels. Management directed "belt-tightening" actions are underway.

I. EXECUTIVE SUMMARY (Continued)

A. Project Director (Continued)

As of this report, the following are the issue which I believe could be critical to the success of the Project:

1. Appendix R (Fire Protection) - The Project is currently assessing the results of the Appendix R required analysis of a fire in the control room. Potentially, wiring and hardware change could be required to alleviate concerns relative to remote shutdown capability and fire-induced spurious operation. The Project will be developing a licensing strategy for this concern in the very near future.
2. Documentation Management - The Project has indications that the document generation, review and transmittal process may not support timely Construction-to-AOD and AOD-to-NMPC Startup and Test system turnovers. These required record functions will be integrated as detailed activities in the overall Project Control Plan. As such, they will receive equal emphasis relative to all other supporting activities.
3. LKC Cable Pulling - The cumulative LKC cable pulling shortfall for 1984 is approximately 370,000 feet. The following management actions are being taken:
  - a. Increasing the existing backlog of clean available cable pulling in advance of the construction effort by dispositioning cable pull tickets currently on hold, disposition engineering holds restraining bulk conduit and releasing yard duct bank which is restraining 400,000 feet of cable.
  - b. Established a contractor team to resolve instrument locations restraining conduit runs.
  - c. Established a management team comprised of Planning and Scheduling, Construction, Engineering, Quality Assurance and LKC personnel to identify and resolve restraints in plant areas to establish clean work available for cable pulling.
4. ITT Grinnell Weld Reject - Over the last two months, the weld reject rate, measured as the number of rejected welds (for radiographed weld), has been in the range of 35 to 40 percent. NMPC has retained the services of a welding specialist who is working with the Quality Assurance, Construction and Engineering organizations to examine probable cause and enhancements to the existing welding processes. Results will be provided in subsequent reports.

I. EXECUTIVE SUMMARY (Continued)

A. Project Director (Continued)

The majority of 1984 wage negotiations are currently in progress. It is expected that the overall cost of settlements will be within the estimate allowance.

The tone of this Project seems to be becoming more positive. The quality perceptions are improving, management of work in accordance with schedules is also improving and by moving to a new cost center cost control program, significant improvements in cost control will be seen quite soon.

B. Project Quality Assurance Manager

Quality activities continue with a high level of commitment from site organizations. In general, construction activities at the site are being performed in compliance with Quality Assurance requirements. However, there does appear to be a lack of attentiveness for following specific detailed procedural requirements based on NMPC Quality Assurance overview of construction activities. Also, another concern pertains to the ITT Grinnell weld reject rate which is too high. Corrective actions are presently underway to resolve these concerns.

The corrective and preventative actions required in response to the NRC notice of violation are nearing completion. No major discrepancies have been identified at this time. The verification program to close out all of the NRC CAT items is currently in progress.

The plan for a review of the CAT inspection findings, recent SALP report and NMPC identified deficiencies, past and current has been developed and implementation by an independent service organization is underway.

The Quality Performance Management Program (QPMP) including the Quality Performance Indicators Program (QPIP) required by the NRC enforcement action is partially developed.

**SUBTOTAL**

1. PIPING
2. ELECTRICAL
3. I & C
4. HVAC
5. CIVIL

**SUBTOTAL**

**COMMODITIES**

- 1. PRE-OPERATIONAL TESTING**
- 2. HYDROS**
- 3. LOOP CALIBRATIONS**
- 4. CONTROL CIRCUIT VERIFICATIONS**
- 5. INITIAL EQUIPMENT OPERATION**
- 6. FLUSHES**
- 7. PENETRATION LEAK RATE TESTS**

**SUBTOTAL**

1. DESIGN VERIFICATION
2. EQUIPMENT QUALIFICATION
3. LICENSING
4. SUPPORT OF STARTUP
5. BALANCE OF ENGINEERING

**SUBTOTAL**

1. QUALITY ASSURANCE  
2. RECORDS TURNOVER TO PPF

**SUBTOTAL**

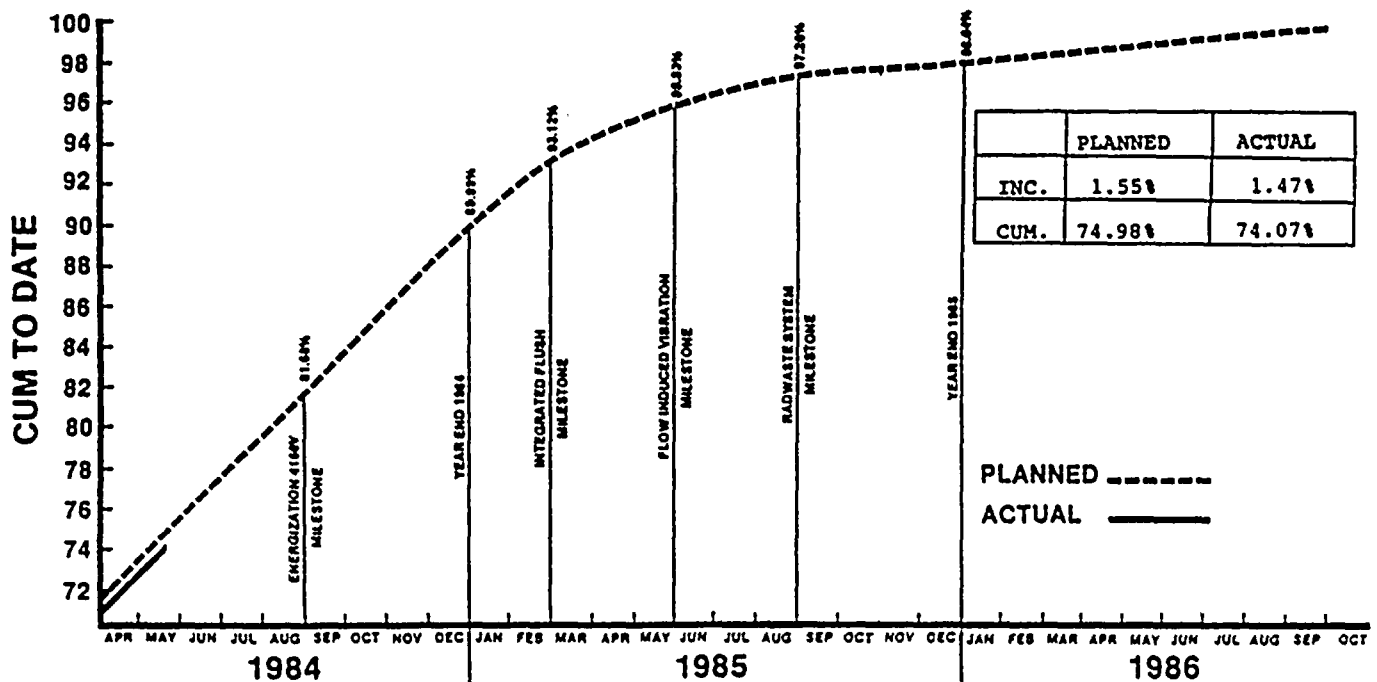
**TOTAL**

NOTE 1: This table is preliminary & reflects project data available as of 5/20/84. Group I reflects the most recent project planning. Groups II, III, IV and V reflect 1984 Work Plan information. As revised Project Control Program data is finalized it will be included in the table.

**NOTE 2:** Corrected Total Percent Complete as of 5/1/84 was 72.60% based on data refinements and addition of pre-operational testing.



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



**NOTE:** This curve is preliminary & reflects project data available as of 5/20/84.  
 As revised Project Control Program data is finalized it will be included  
 in the curve.

## II. MILESTONE SCHEDULE STATUS

### A. Energization 4160V

During May, the 4160V Milestone slipped to one week behind schedule because of delays in turning over DC distribution and 4160V turnovers. Plans are underway to regain the lost time during testing without impact to the overall milestone completion.

### B. Condensate Demineralizer

Work proceeded in sequence with the Milestone Schedule. The schedule slipped two weeks due to hydro test failure on the critical condensate storage tanks. A repair method is in hand and work will be accelerated to maintain the overall schedule. It is expected that this time will be regained within the next two months.

### C. Service Water

Overall status of this work is three weeks behind due to difficulties experienced in the service water pump bays. Electrical and instrumentation work activities have not proceeded as planned due to congestion. The areas have now been cleared for work to proceed and a detailed recovery plan is being generated. Upon completion of this analysis, a clear picture of impact and ability to recover will be presented.

### D. Diesel Generator

Work proceeded in support of the Milestone Schedule with no major variances noted.

### E. Integrated Flush

Overall status is one week behind schedule due to a number of major mechanical activities falling behind. Logic and resources are under evaluation to improve the work sequence in congested areas which are the cause of critical path delays. Positive steps have already been taken to expedite pipe whip restraint work.

For the following, work proceeded in support of the Milestone dates with no overall impacts noted.

1. Flow induced vibration
2. Turbine generator
3. Ventilation
4. Integrated leak rate
5. Radwaste system
6. Fuel receipt
7. Loss of power/ECCS
8. Fuel load

II. MILESTONE SCHEDULE STATUS (Continued)

Detailed reviews of the area system schedule will begin next month to substantiate the Milestone logic. Resource constraints will necessitate adjustments internal to the Milestone Schedules, but it is expected that the Milestone dates will be maintained.

### III. CONSTRUCTION

#### A. General

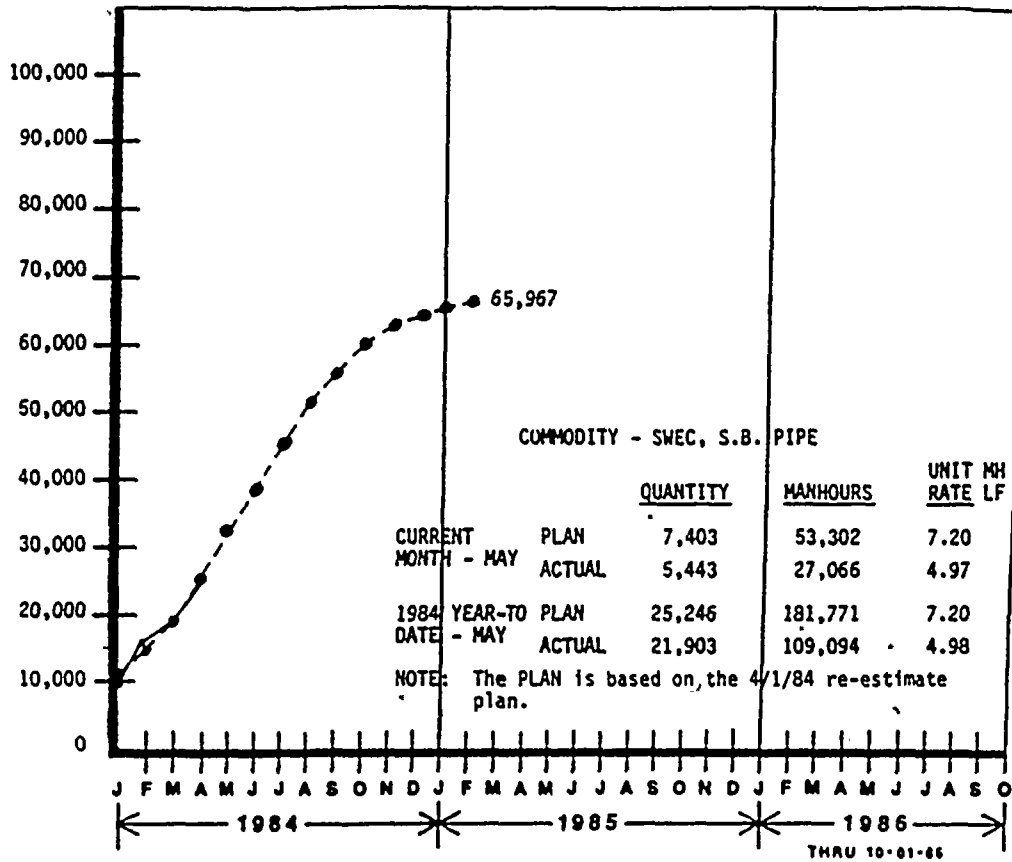
Construction performance is generally proceeding reasonably well as discussed under Contractor Performance. The major construction commodities are depicted on the following graphs along with the year-to-date and current unit rates.

Efforts are essentially complete relative to SWEC and subcontractor organizational rationalization, with a concomitant reconfiguration of NMPC Construction such that appropriate interties exist. This is referenced as a singular example of an overall program to effectively manage the balance of the Project while achieving cost optimization.

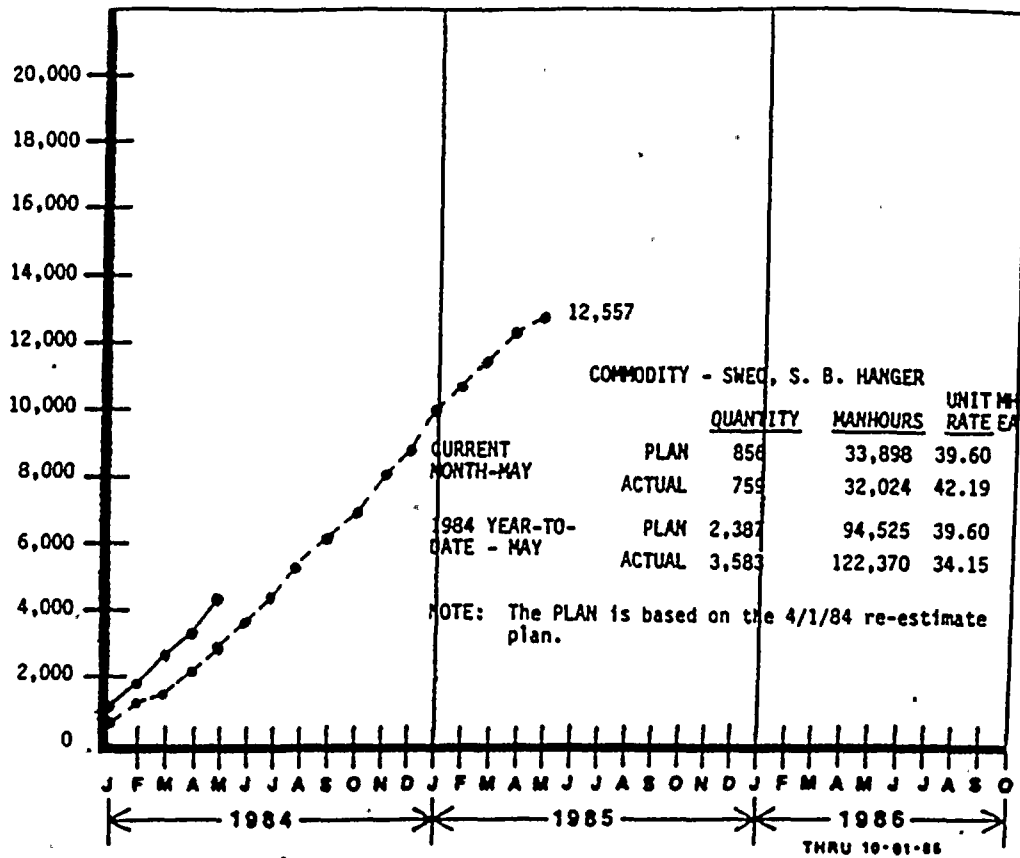
Difficulty is being experienced in the turnover of systems to Advisory Operations for preliminary testing primarily due to the need to finalize the required preplanning and support organizations.

A renewed emphasis placed on improving general site cleanliness has reduced a significant proportion of prior deficiencies. SWEC and subcontractors must continue to proactively pursue necessary management controls to assure further results in this area.

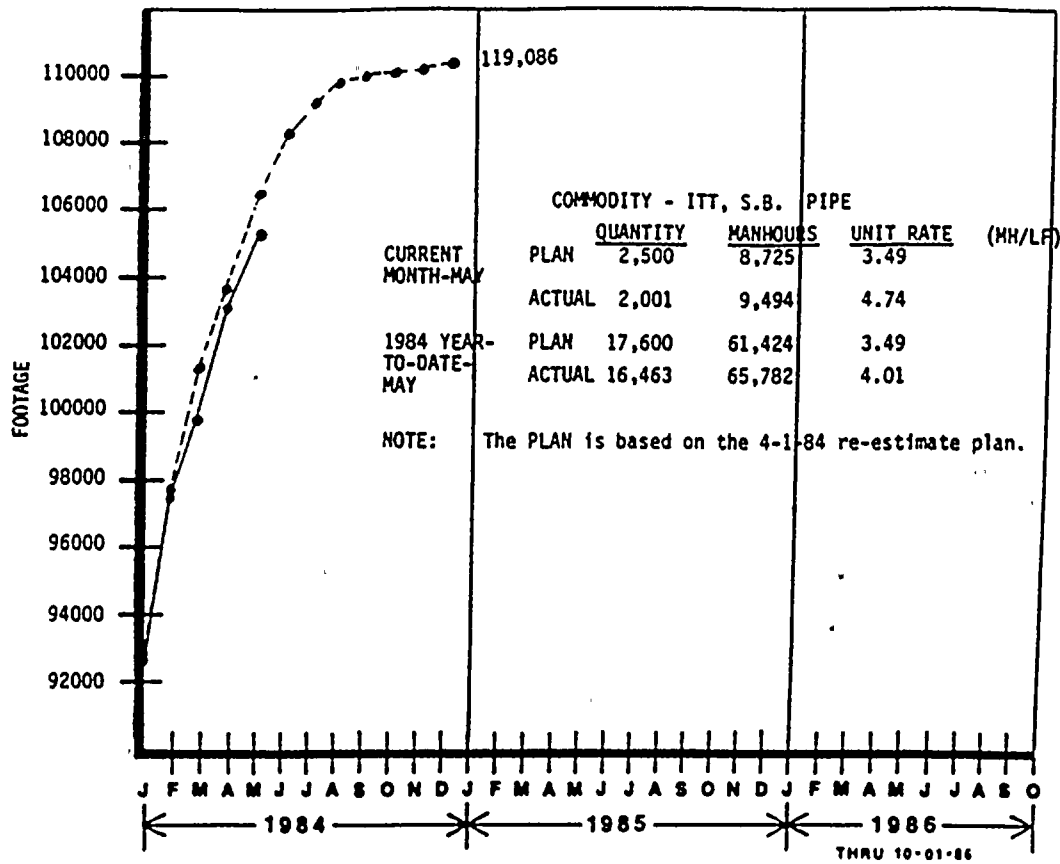
# SWEC S. B. PIPE



# SWEC S.B. HANGER



ITT PLAN VS ACTUAL  
S B PIPE

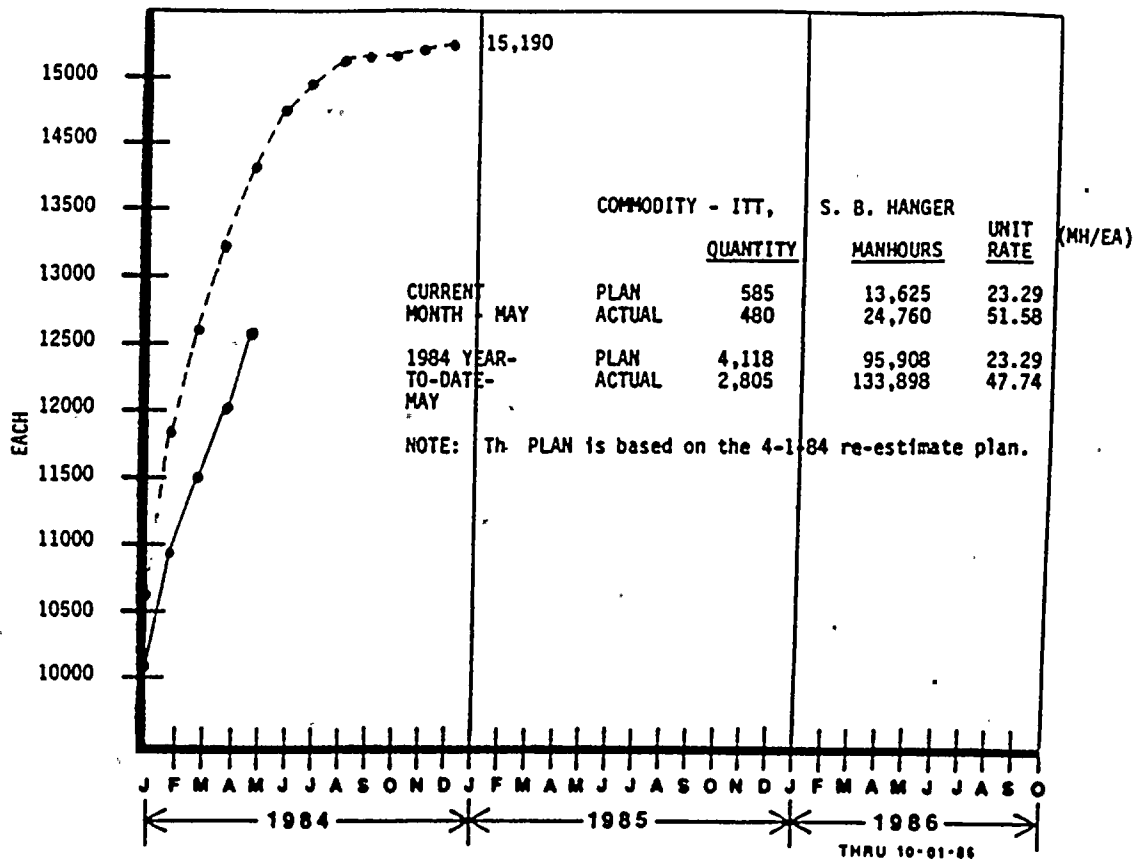


Monthly quantities exceeded plan.

————— Actual  
----- Planned

# ITT PLAN VS ACTUAL

S B HANGERS

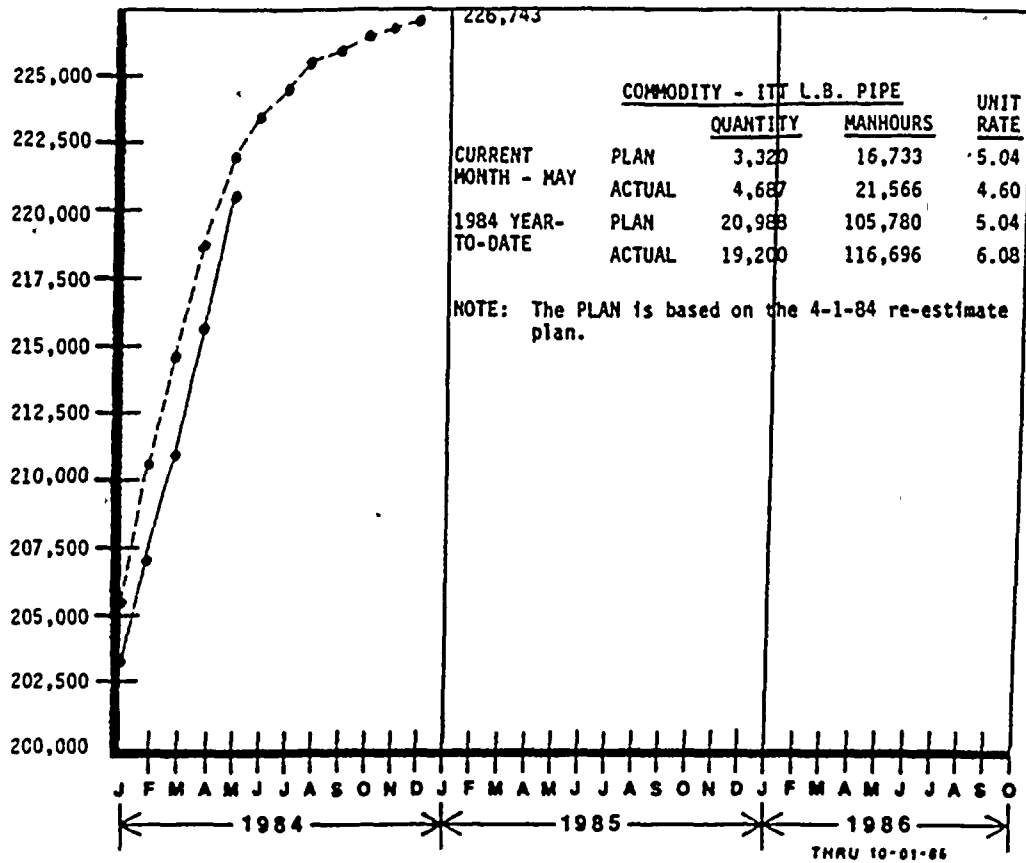


Major action item has been identified to improve small bore hanger fabrication and installation. ITT-G, SWEC, NMPC are reviewing processes and developing corrective actions.

————— Actual  
 - - - - - Planned



ITT PLAN VS ACTUAL  
L B PIPE

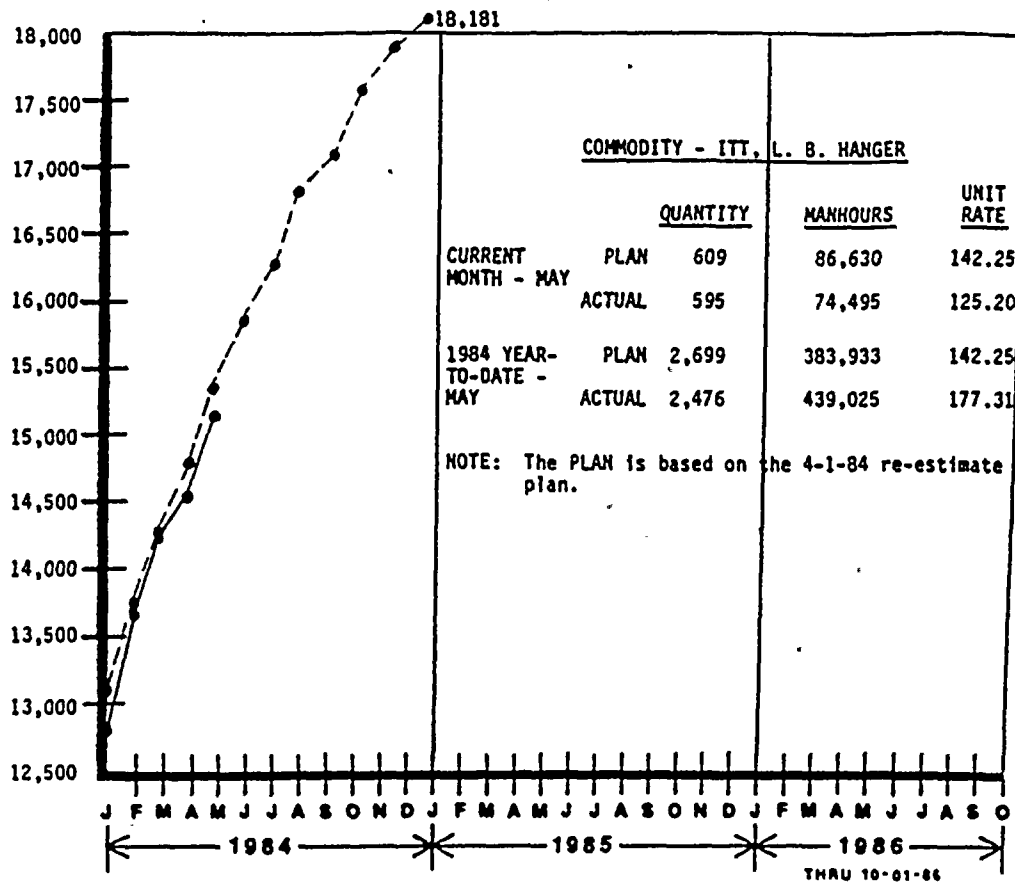


Monthly quantities exceeded planned installation requirements.

Efforts are in process to expedite remaining spools in the vendor's shop to maintain this positive trend.

————— Actual  
----- Planned

ITT PLAN VS ACTUAL  
L B HANGERS



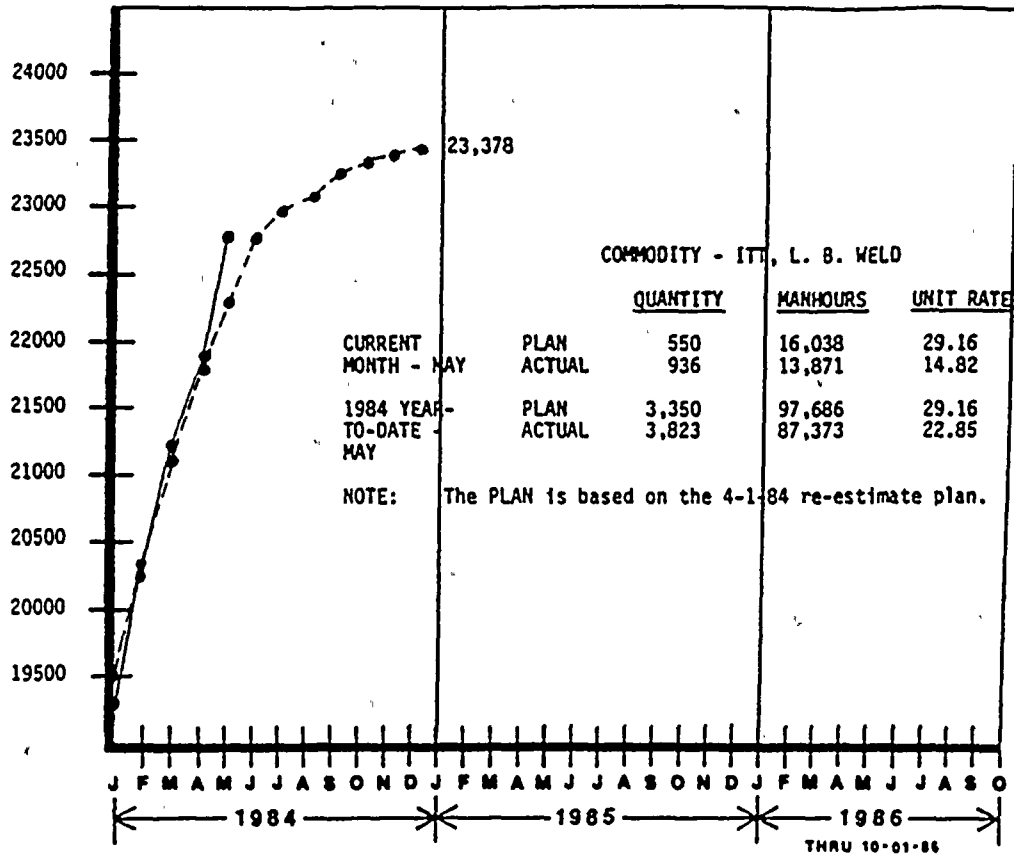
Monthly quantities were slightly below plan.

Action program is being developed to improve hanger production and reduce unit rate.

————— Actual  
----- Planned

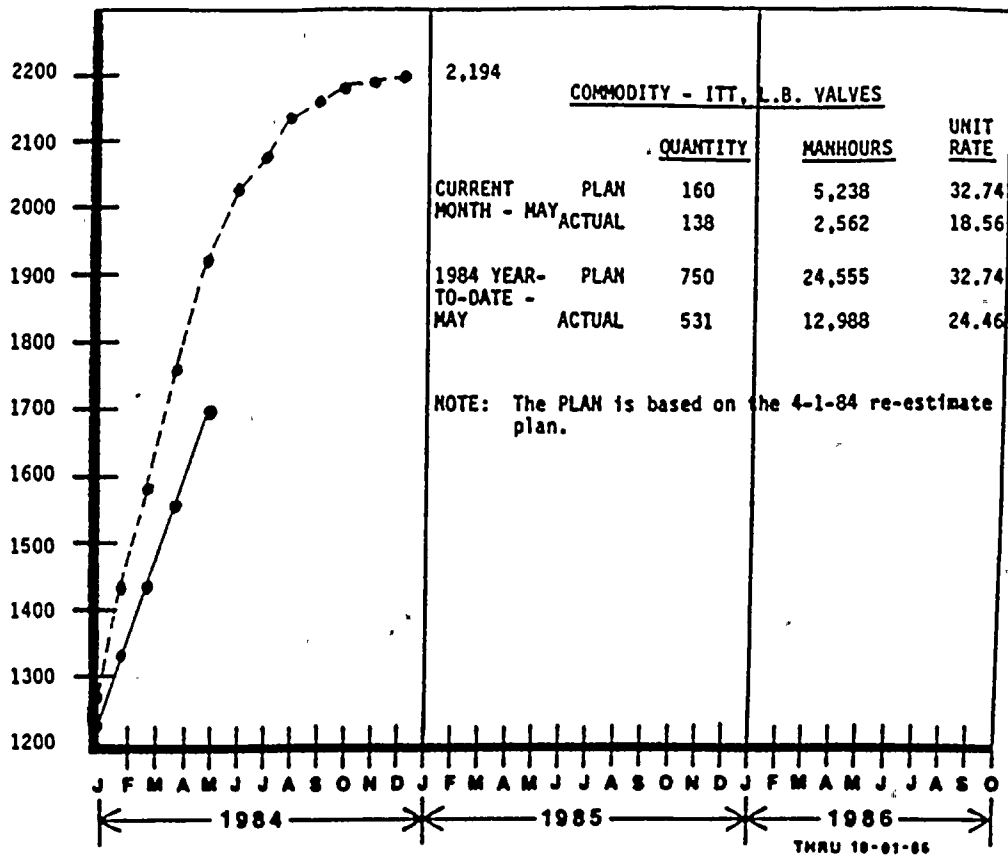
# ITT PLAN VS ACTUAL

L B WELD



# ITT PLAN VS ACTUAL

## L B VALVES



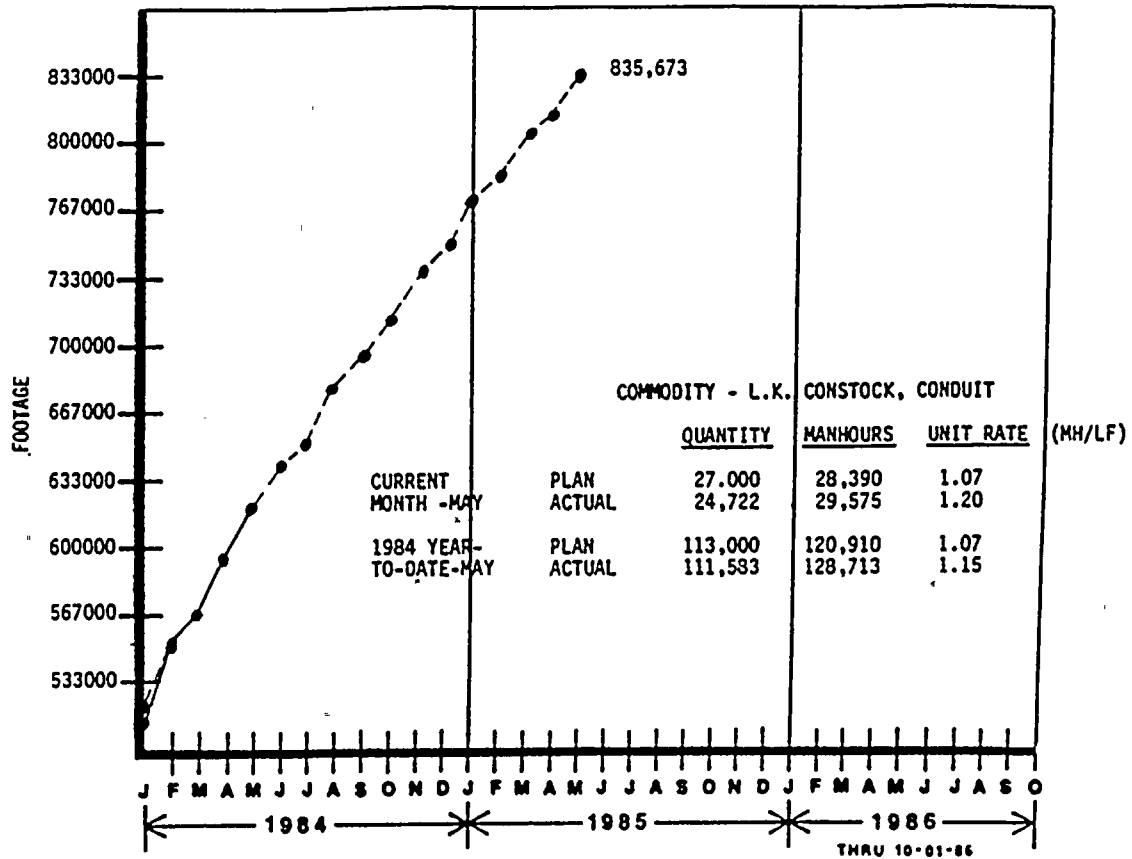
L B valves and valve packing are being expedited to improve performance.

Schedule recovery is achievable.

——— Actual  
 - - - - - Planned

# LKC PLAN VS ACTUAL

## CONDUIT

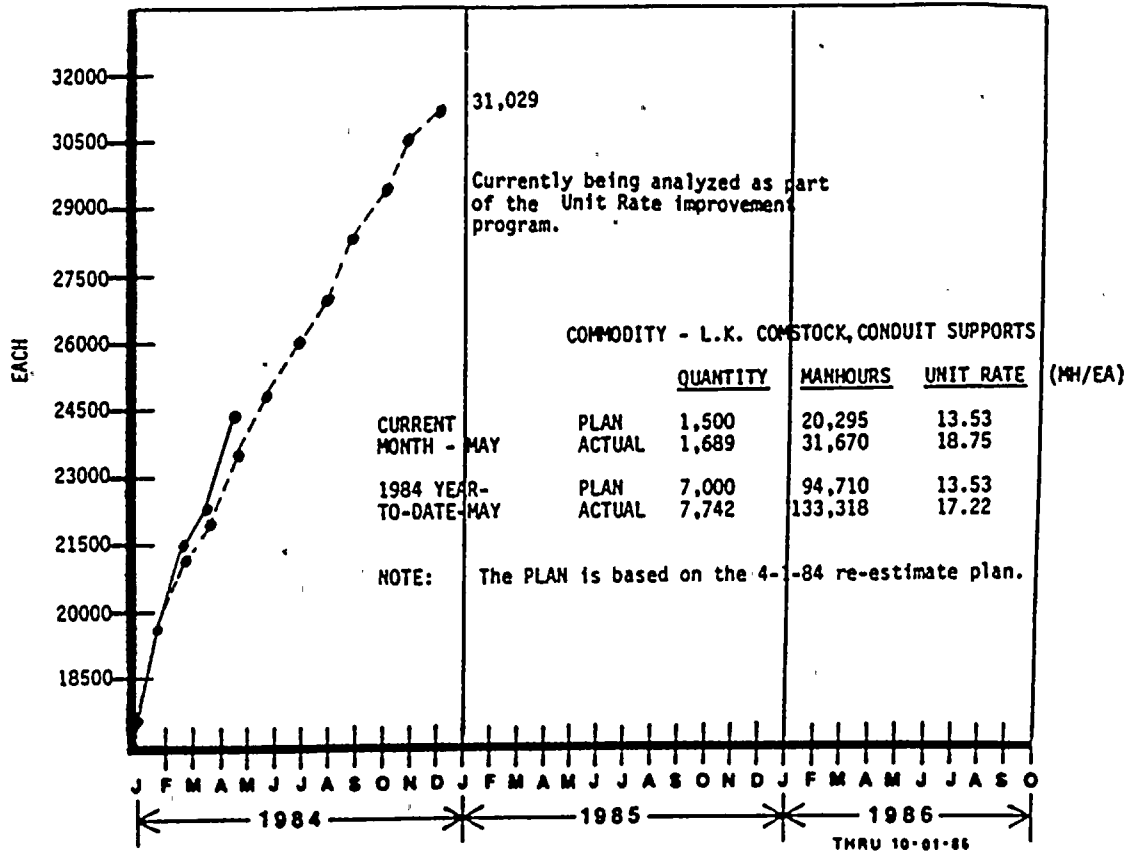


Conduit is currently ahead of plan by about 1% (cumulative for the year).  
 Actions are underway by SWEC to increase conduits released for installation.

————— Actual  
 - - - - - Planned

# LKC PLAN VS ACTUAL

## CONDUIT SPTS.

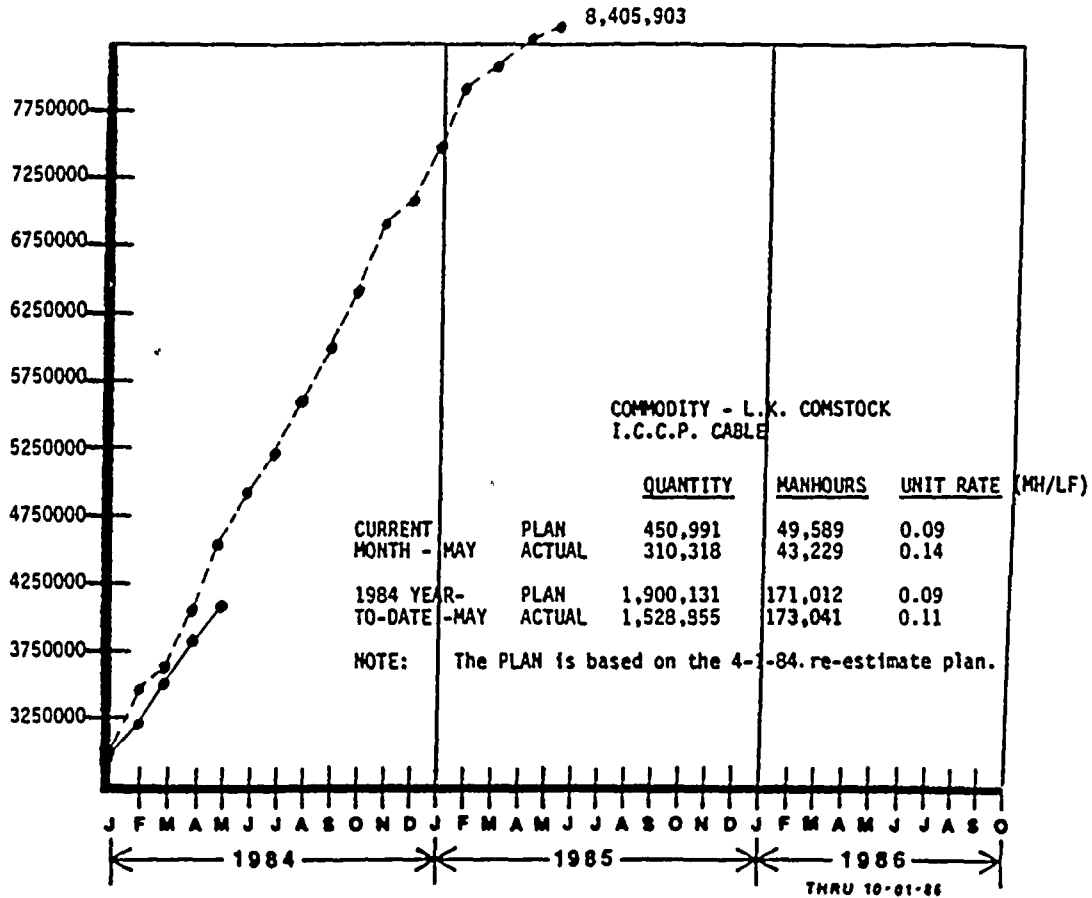


Conduit supports ahead of plan.

————— Actual  
----- Planned

# LKC PLAN VS ACTUAL

## CABLE PULLING



A team has been established as part of the planning effort to schedule raceways in advance of pulling cable to improve production.

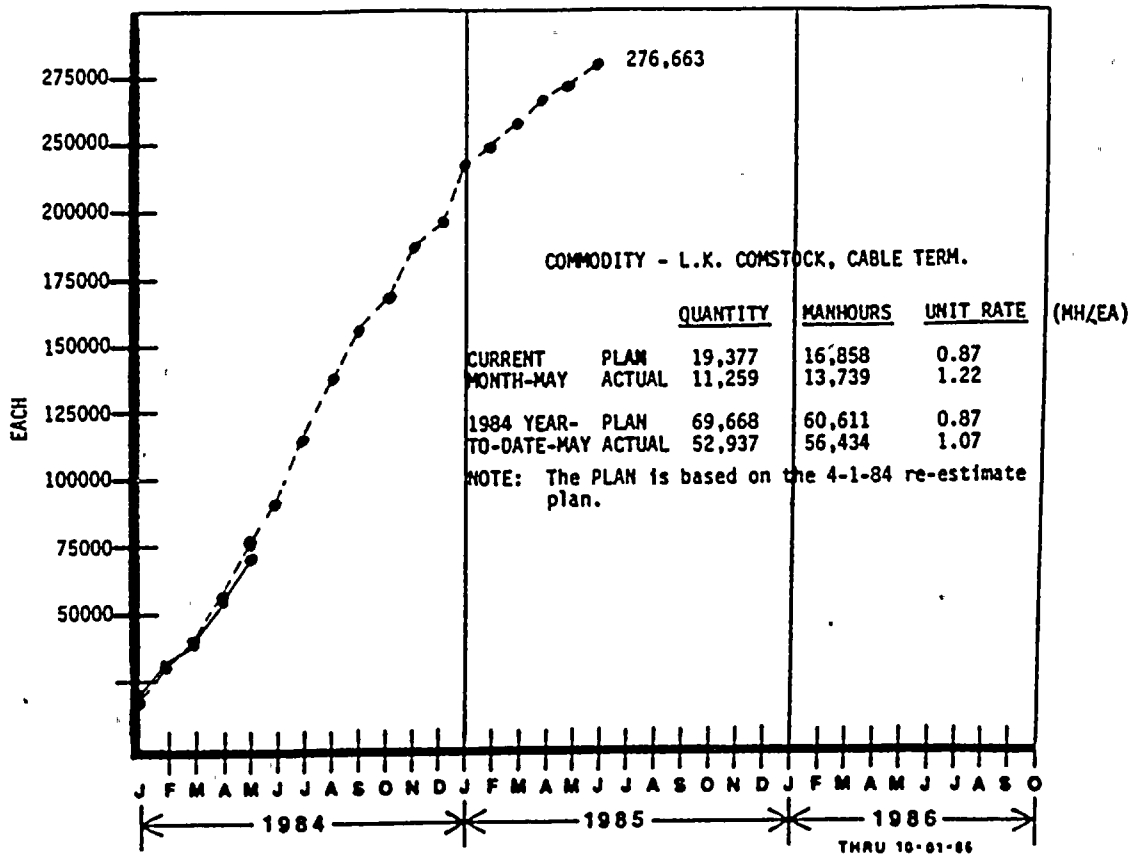
Weekly SWEC/LKC production meetings have been re-instituted.

Actions are underway to improve cable pulling efforts by timely release of pull tickets by SWEC Engineering.

————— Actual  
----- Planned

# LXC PLAN VS ACTUAL

## CABLE TERM



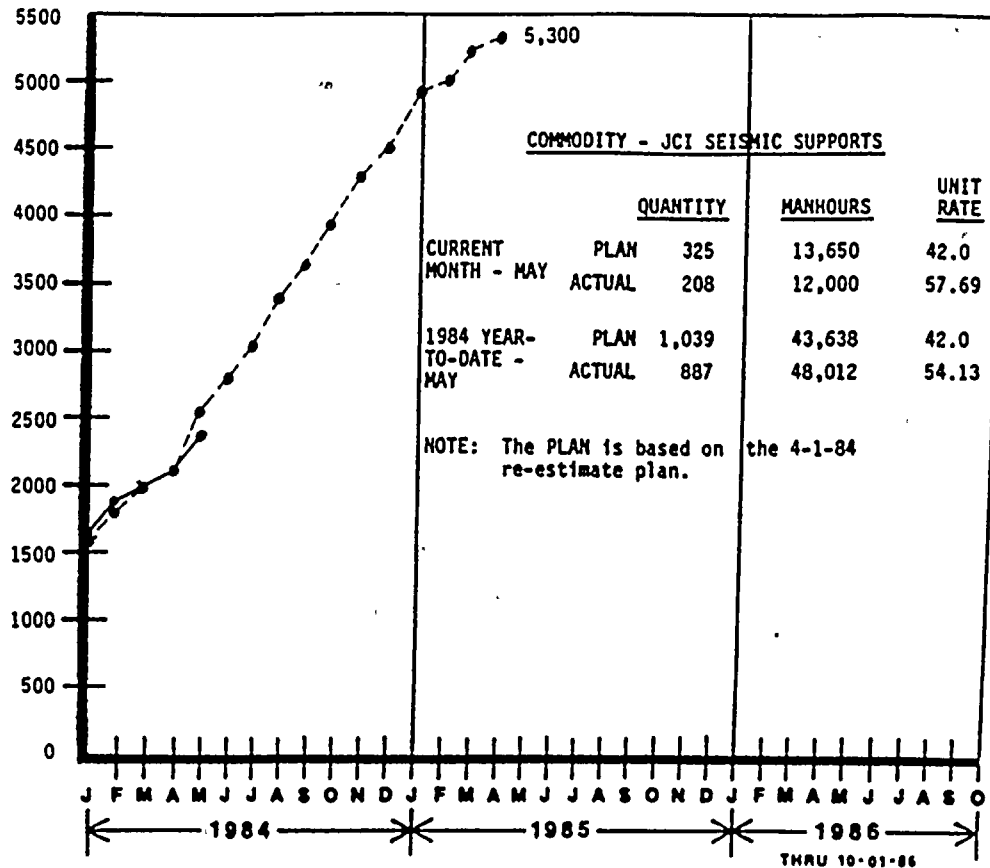
Terminations are not lagging seriously at this time and have improved over the last two (2) weeks.

————— Actual  
 - - - - - Planned



# JCI PLAN VS ACTUAL

## SEISMIC SPTS.

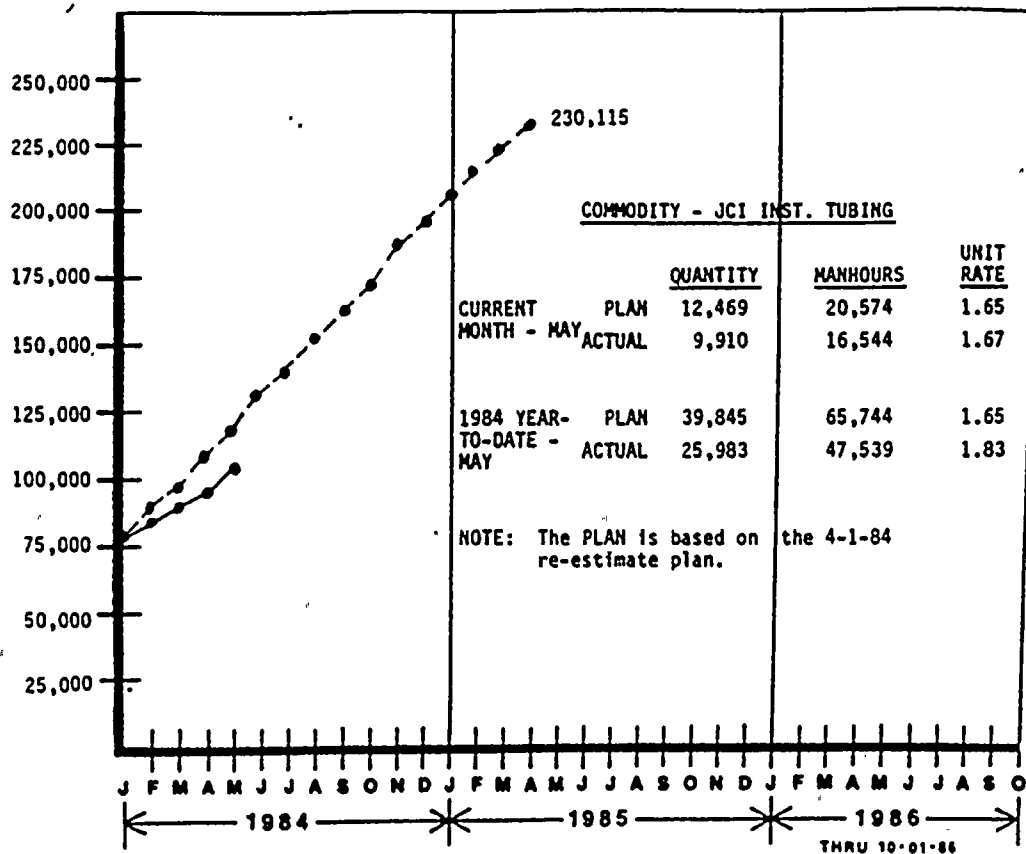


Engineering instrument drawing confirmation, scope definition, and quantity take-off effort is scheduled to be complete within two (2) weeks. The quantity curve will be adjusted to reflect new quantity based on the above.

JCI is proceeding with pre-installation layout and walkdowns to facilitate production and quality acceptance.

————— Actual  
 - - - - - Planned

JCI PLAN VS ACTUAL  
INST. TUBING



A recovery trend has been noted this month.

JCI has established a weekly installation plan with full recovery projected in support of the milestone schedule.

———— Actual  
----- Planned

### III. CONSTRUCTION (Continued)

#### B. Contractor Performance

##### 1. SWEC Force Account

In general, SWEC Force Account work scope is proceeding well in terms of commodity installation targets and schedule compliance.

##### Mechanical Equipment Erection

Approximately 80 percent of the equipment scheduled to be installed has been released for external piping connections. In addition, there is a considerable level of effort which places the balance at various stages of completion. All planned maintenance requirements for installed equipment were satisfactorily met during this period. No significant schedule impacts are anticipated or projected.

##### Cat II and III Hanger Completion

Planned quantities were achieved this month. Approximately 1000 Cat II Hangers in the 0x to 4x phase were transferred from the ITT Grinnell to SWEC to permit ITT Grinnell to concentrate efforts on critical Cat. I items. ITT Grinnell was in full agreement with this scope modification.

##### Small Bore Pipe and Supports

Small bore pipe installations are tracking slightly below the original 1984 Work Plan requirements. Full recovery is anticipated.

With regard to small bore hangers, installation performance exceeded planned quantities.

##### Condenser Erection

The hydrostatic test is complete. Identified leaks have been repaired.

##### 2. ITT Grinnell

Overall, ITT Grinnell continues to sustain the improved performance trend and have essentially achieved key commodity installation values above planned requirements. This accomplishment was noteworthy in view of a substantial work force reduction of approximately 550 pipefitters.

### III. CONSTRUCTION (Continued)

#### B. Contractor Performance (Continued)

A major effort is underway to improve large bore hangers installation performance in the Primary Containment from both cost and schedule considerations.

##### 3. L. K. Comstock

Cumulatively, L. K. Comstock continues to experience shortfalls with regard to key indicator commodities. The activities required to maintain a substantial backlog and allow satisfactory installation rates are as follows:

Engineering has defined a methodology for expediting raceway tickets on hold, improving the disposition of items restraining bulk raceway and coordinating priority work requirements defined by L. K. Comstock. L. K. Comstock is in the process of establishing additional cable pulling and conduit crews and interfacing with Johnson Controls and ITT Grinnell to provide access points for raceway installations. Once these impediments are resolved, the cable pulling backlog of clean work available will increase, thus allowing work pace to accelerate. Cable terminations will follow suit.

Current efforts are concentrated in support of the 4160 milestone, resolving associated material constraints, accomplishing required Field Quality Control inspections and required testing.

##### 4. GE-PGCC

Subsequently identified subdivisional separation problems and the implementation of resolutions to both divisional and subdivisional open items have moved the completion date to the end of June 1984. The closure of these separation issues and associated work activity continue to be managed as the leading indicator of overall PGCC schedule performance. Total completion, including NSSS/BIP program requirements, isscheduled for February 1985.

##### 5. Johnson Controls

Johnson Controls improved previous instrument tubing installation requirements, but remain below the cumulative plan. Seismic tube supports continue to exhibit shortfall. A quantity development effort, due June 15, 1984, may reduce the number of required supports by about 2400. Additional SWEC

### III. CONSTRUCTION (Continued)

#### B. Contractor Performance (Continued)

Field Engineers have been assigned to assist Johnson Controls in preinstallation walk-downs in an effort to significantly reduce required rework and strengthen Johnson Controls coverage in other areas. Restraints relative to interfacing piping, design, procurements and contractor interferences have been identified for Management response. Performance projections are favorable. However, continued proactive efforts are required to accomplish schedular requirements.

##### 6. Schneider Power Corporation

The HVAC effort is proceeding with same commodity shortfall. Schneider is managing their work effort and communicating problems to SWEC as they arise. Actions are in process to strengthen the schedule coordination and engineering support.

##### 7. GE (Turbine/Generator)

On schedule - no serious impacts projected.

##### 8. Reactor Controls, Inc.

On schedule - no serious impacts projected.

##### 9. Viking (Fire Protection - Radwaste)

On schedule - no serious impacts projected.

##### 10. Grinnell Fire Protection

Generally on schedule. Preparations are commencing for testing activity.

##### 11. Metal Cladding Industries

Minor problems encountered with regard to hydro test activity. Resolutions pending and some rework may be required. No serious schedule threat.

##### 12. Insulation Contracts (Various)

This effort will begin to receive increasing visibility consistent with schedule requirements. Limited progress reported.

### III. CONSTRUCTION (Continued)

#### B. Contractor Performance (Continued)

13. Randall Electric

Overall progress has been limited due to the late release of cooling tower electrical design information. SWEC Engineering and expediting are working to improve turnaround. No serious schedule exposure.

14. Synder, Mackin and Shaffer

No problems reported - efforts continue.

15. NMPC Line Department

Work activity is proceeding on schedule.

16. Zurn Industries (Cooling Tower)

On schedule - punch list items.

17. Cives Steel Company (Miscellaneous Steel Erection)

On schedule - punch list items.

18. Tuscarora Construction (Revetment Ditch)

Work activity is proceeding on schedule.

19. H. H. Robertson (Siding and Roof Decks)

Work activity is proceeding on schedule.

20. Central City Roofing (Built-up Roofs)

Work activity is proceeding on schedule.

21. Plimouth Management, Inc. (Fireproof - Protective Coatings)

Work activity is proceeding on schedule.

22. Walsh Construction

Work activity is proceeding on schedule (i.e. site backfill, security duct banks, masonry walls, grouting (equipment), storm drain structures, etc.

III. CONSTRUCTION (Continued)

B. Contractor Performance (Continued)

23. Pullman (Main Gas Stack)

Work activity proceeding on schedule.

24. Northern Ready Mix

Minor problems noted with regard to cement supplies. Overall, no serious impacts projected. Coverage is being maintained through alternative suppliers.

C. Construction Completion

The turnovers of BIPs from Construction to SWEC Advisory Operations Division is currently 24 turnovers behind schedule as indicated in the following table.

### III. CONSTRUCTION (Continued)

#### BIP CONSTRUCTION T/Os to AOD As of May 28, 1984

	<u>Schedule Cum.</u>	<u>Actual Cum.</u>
4160	26	19
Condensate Demin.	8	3
Service Water	6	1
Radwaste	1	0
Integrated	1	0
Integrated Leak Rate Test	0	0
Ventilation Test	3	0
Diesel Generator	2	0
Turbine/Generator	0	0
Loss of Power/ECCS	1	1
Fuel Receipt	0	0
Fuel Load	0	0
	<u>48</u>	<u>24</u>
		Prior turnovers +13
		<u>37</u>

Efforts to strengthen the turnover rate center around appropriate work planning and completion of bulk commodity installations and the formation of integrated systems completion groups within each organization to properly manage BIP priority work. The new Project Control Plan scheduling array will provide visibility of critical items.

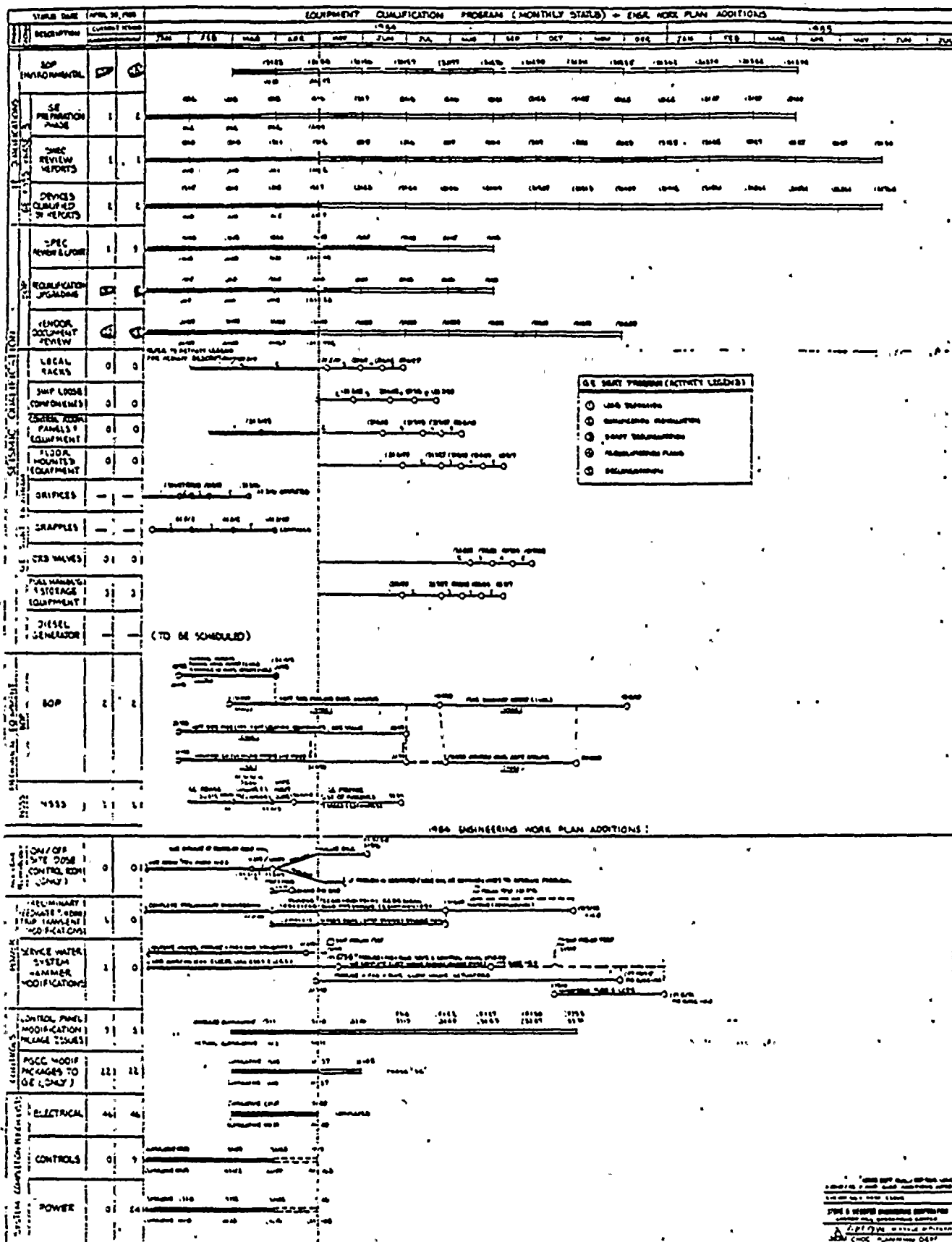


#### IV. ENGINEERING

##### A. General

Overall Engineering and design efforts continue on schedule for cable routing, cable ticketing, set point development, responses to FSAR questions, Appendix R efforts, Cat. II and III stress data packages, ALARA shielding and the main plant process computer. The Bar Chart summary of the 1984 Engineering Work Plan as amended is provided on the following two pages.

[illegible]



#### IV. ENGINEERING (Continued)

##### B. Problem Areas

###### 1. Spare Parts

The spare parts effort has been totally reevaluated. A new schedule has been developed which is based on procuring spare parts two months before BIP turnover. The total procurement effort is scheduled to be completed by October 1984. The effort is currently 50% complete.

###### 2. As-Builts

The as-built stress reconciliation program for the large-bore pipe and hanger effort remains behind schedule due to lack of ITT-Grinnell as-built drawing input. Efforts are continuing on the as-built stress scheduling effort. Project Planning has committed to provide this schedule by June 1, 1984.

###### 3. Appendix R

Methods for compliance with Appendix R considering a fire in the Control Room is currently being evaluated for remote shutdown capability and fire induced spurious operation. Engineering is currently developing a licensing position and action plan to address this problem. This plan will be available by mid-June.

###### 4. Equipment Qualification

Responsiveness of certain vendors has been a problem. A list of these vendors has been developed and actions are being taken to expedite vendor actions to meet the schedule and technical requirements of equipment qualification.

##### C. Drawing Schedule

Of the 110 drawings remaining to be issued as of last month, 110 still remain to be issued. Of the 110, only 69 are required for construction and will be issued as follows:

Electrical - 32	- June
Structural - 4	- May

#### IV. ENGINEERING (Continued)

##### C. Drawing Schedule (Continued)

Neutron monitoring support - 4	- May
Instrumentation - 4	- June
Power Engineering- 12 on hold	- July
Berm Drawings - 13	- September

Note: There has been no change in these drawing counts since the April report because the status date of this report is through the 20th of May. We anticipate that approximately 20 of these drawings will be issued by May 30.

##### D. Staffing

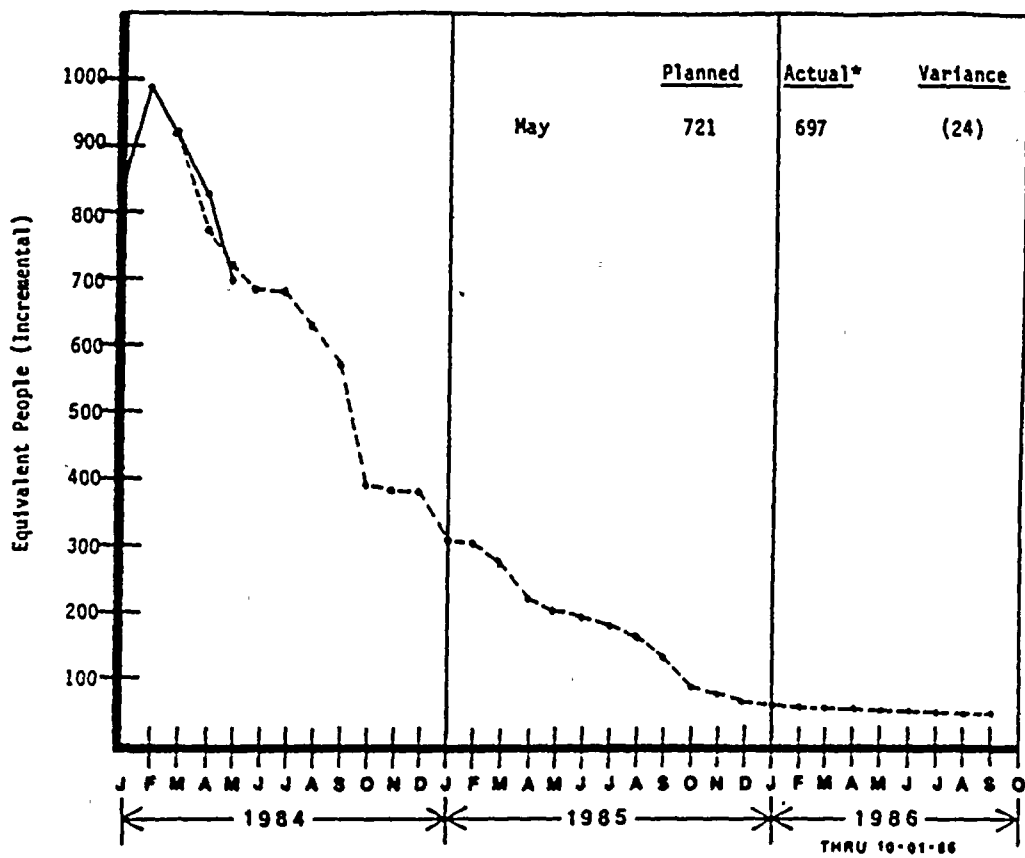
The results of Headquarters Engineering and Design de-staffing and overtime reductions are evident this month. The current Engineering and Design staffing level in May is projected to be 697\*, down from 984\* in February 1984. Refer to the following two graphs for the Headquarters Engineering and Design cumulative manhours and the Headquarters de-staffing plan.

SEG has increased due to new scope activities such as more assistance to Johnson Controls Engineering and assignment of additional field engineers to assist contractors. An evaluation of additional manpower requirements will be provided next month.

\* equivalent men

# SWEC ENGINEERING AND DESIGN PERSONNEL

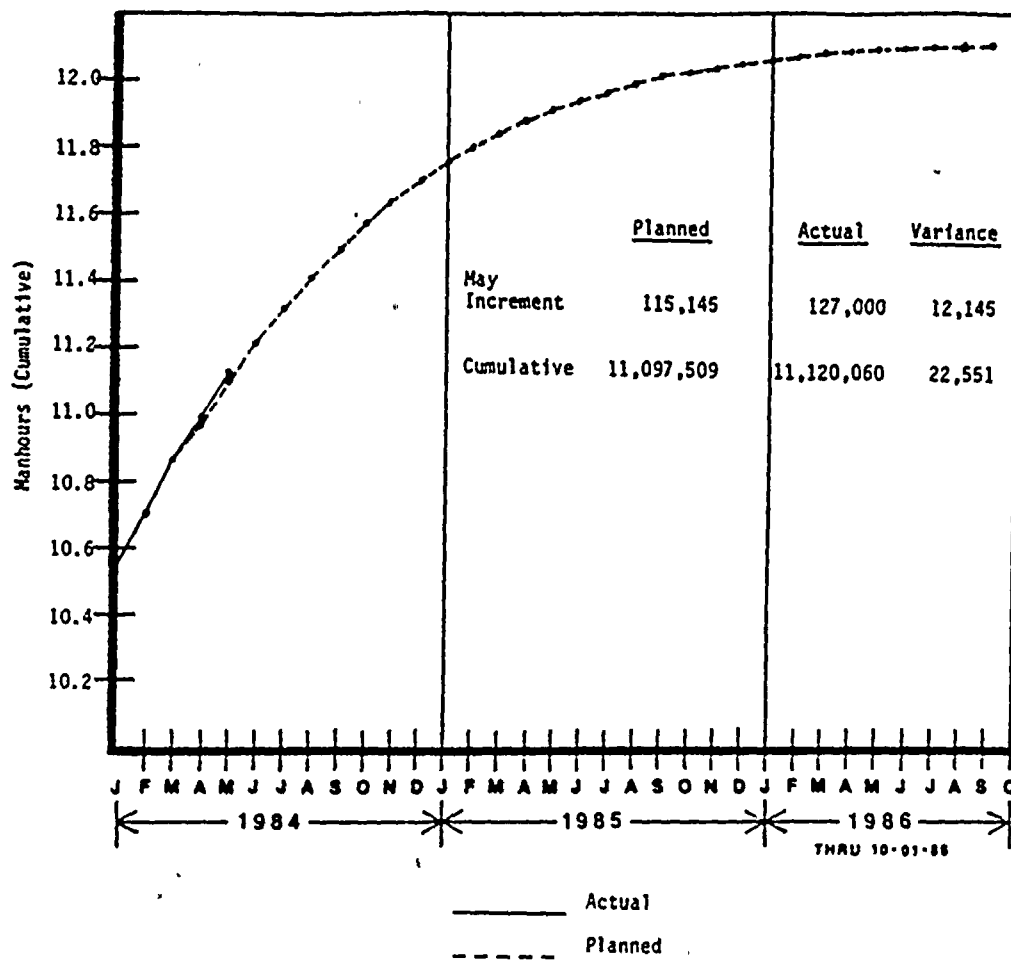
(Cherry Hill)



\* Estimate

— Actual  
 - - - Planned

SWEC ENGINEERING AND DESIGN MANHOURS  
(Cherry H111)



#### IV. ENGINEERING (Continued)

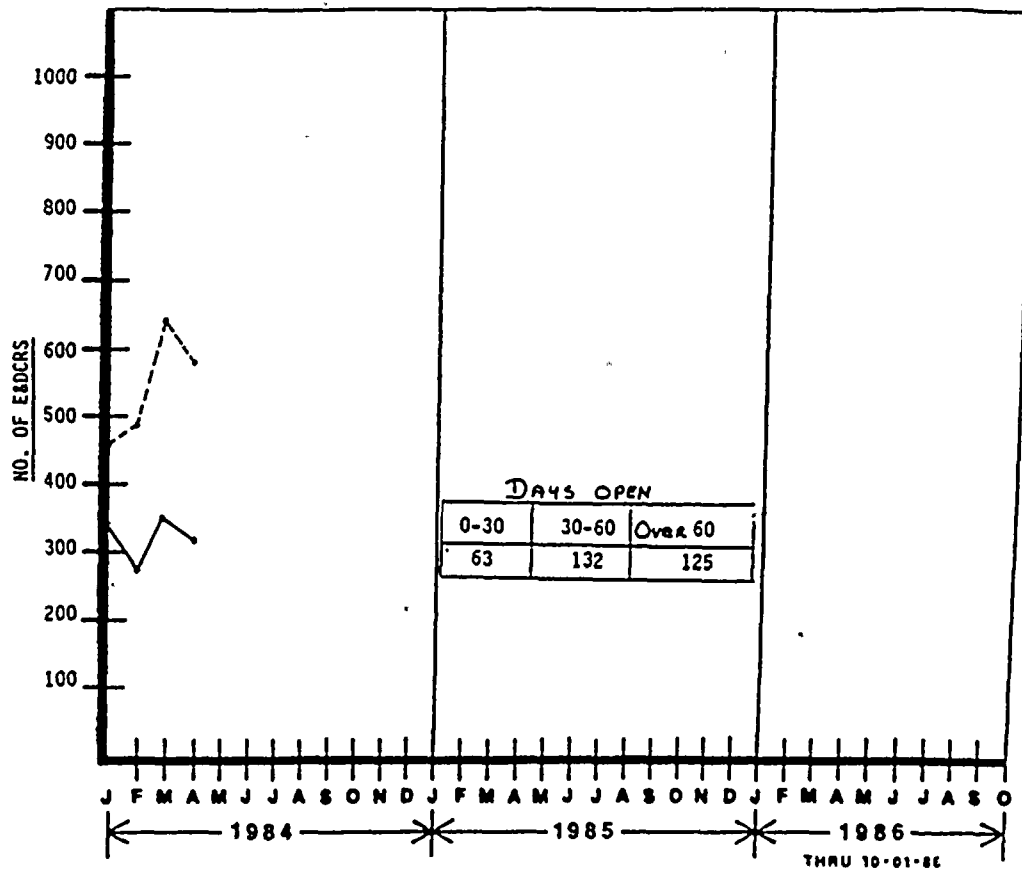
##### E. Other Activities

Engineering has developed a change control procedure that will be used on the project to package all future changes to allow proper management to minimize schedule impact.

Status of E&DCRs dispositioned by Engineering is illustrated on the following graph. This area will be monitored closely and emphasis will be placed on reducing the number of E&DCRs open for over 60 days with Engineering.



# E&DCR STATUS



—— Open with Engineering at Month End

----- Answered by Engineering during Month

V. WORKFORCE LEVELS

The site staffing for all contractors is displayed on the following table. The planned number corresponds to the approved \$630 million cash flow (See Cost Section for explanation). Also attached is a graph depicting the site headcount. The graph indicates that approximately 700 people have been removed from the site over the last two months and is approaching the 630 million dollar plan.

The CHOC staffing is displayed on the Headquarters Services Manpower Graph. It is anticipated that the actual levels will approach the planned levels. Also attached is the Site Engineering Group workforce levels.

# 5/19/84 SITE STAFFING (PAYROLLS)

<u>COST REIMBURSABLE</u>	<u>MANUAL</u>		<u>NON-MANUAL</u>		<u>TOTAL</u>	
	<u>P</u>	<u>A</u>	<u>P</u>	<u>A</u>	<u>P</u>	<u>A</u>
SWEC	1219	1309	1072	1092	2291	2401
Walsh	776	760	38	40	814	800
LKComstock	734	859	100	102	834	961
ITT Grinnell	1055	1024	350	434	1405	1458
SMS	129	100	4	5	133	105
JCI	168	206	80	85	248	291
Schneider	141	160	16	16	157	176
Wiltzie	<u>161</u>	<u>0</u>	<u>10</u>	<u>0</u>	<u>171</u>	<u>0</u>
Subtotal	4383	4418	1670	1774	6053	6192

## Hard Money

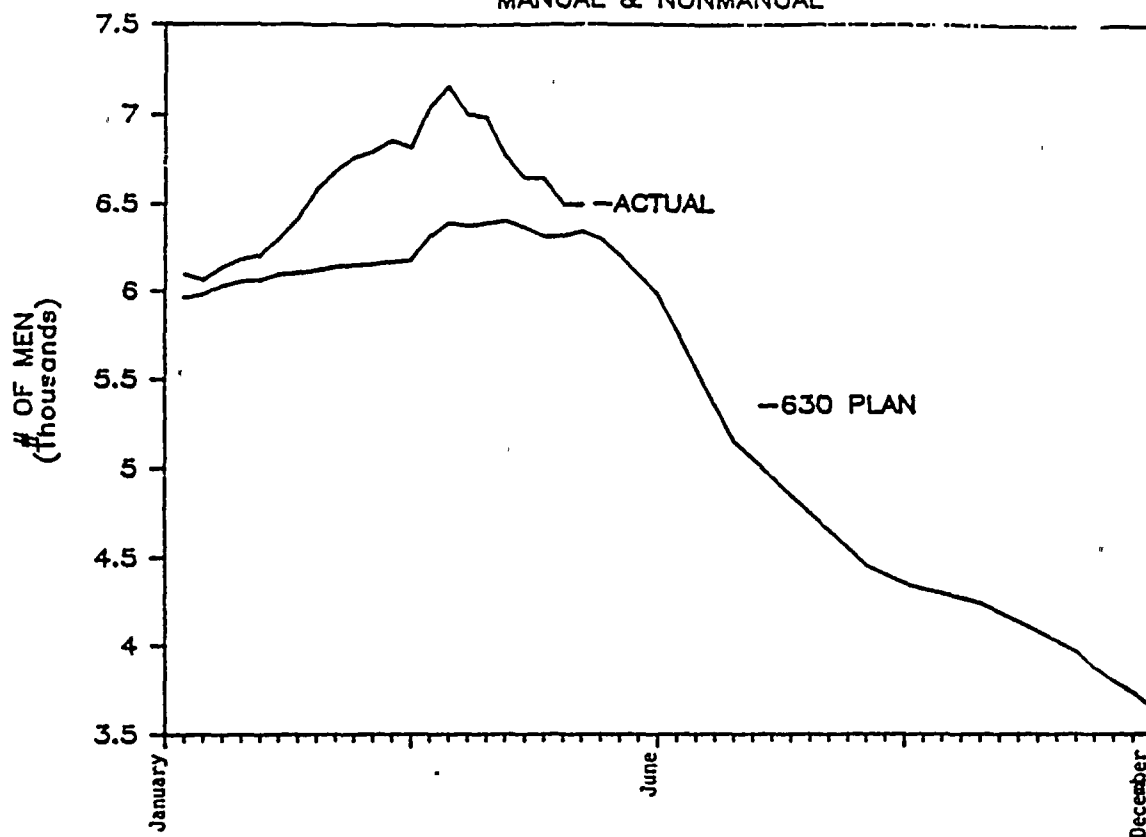
RAKasbey	5	0	5
Central City	4	0	4
Cives	13	3	16
ITT FPS	12	2	14
RCI	69	12	81
Castaldo	16	1	17
GE	59	10	69
PMI	12	1	13
HHRobertson	5	0	5
Zurn	18	2	20
Pullman	14	3	17
Viking	3	1	4
Randall	4	0	4
Metal Cladding	3	1	4
Tuscarora	<u>22</u>	<u>5</u>	<u>27</u>
Subtotal Hard Money	259	41	300
GE/NSSS		75	75
NMPC		<u>394</u>	<u>394</u>
TOTAL	4677	2182	6961

Notes: A. SEG CHOC paid are not included on this report, see the following three curves.

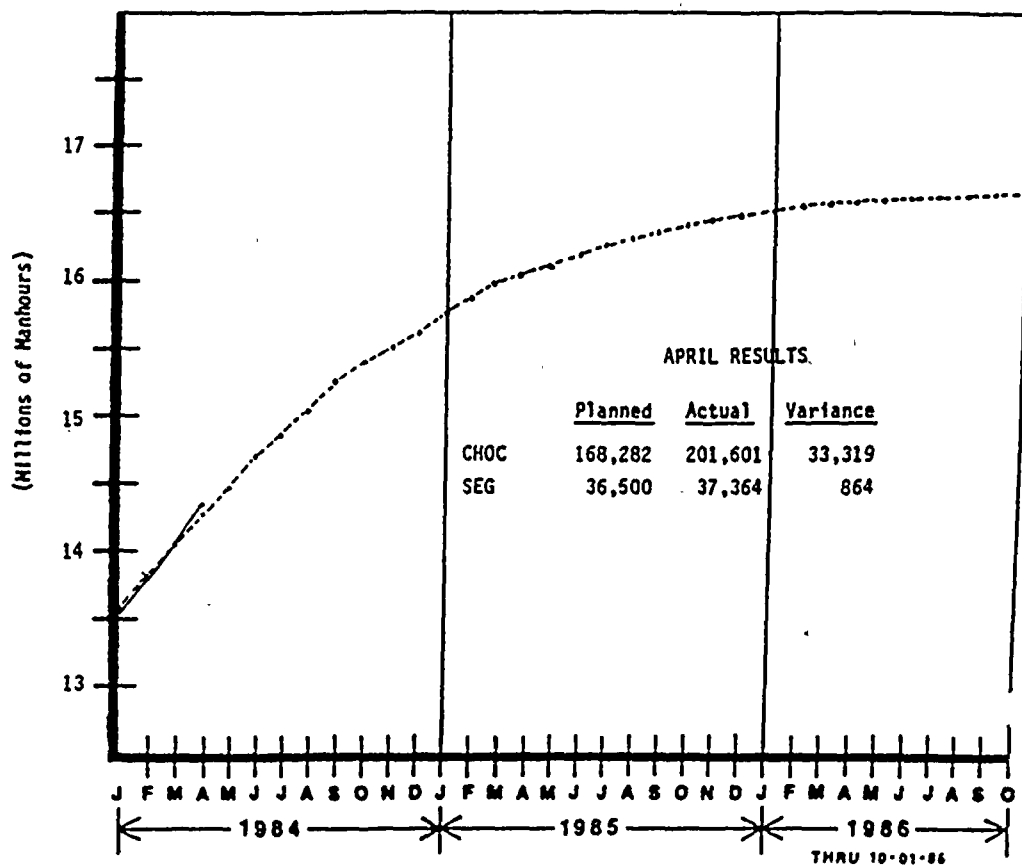
B. NMPC includes MAC, NYSEG, RG&E and Central Hudson.

# 1984 TOTAL PAYROLL

MANUAL & NONMANUAL

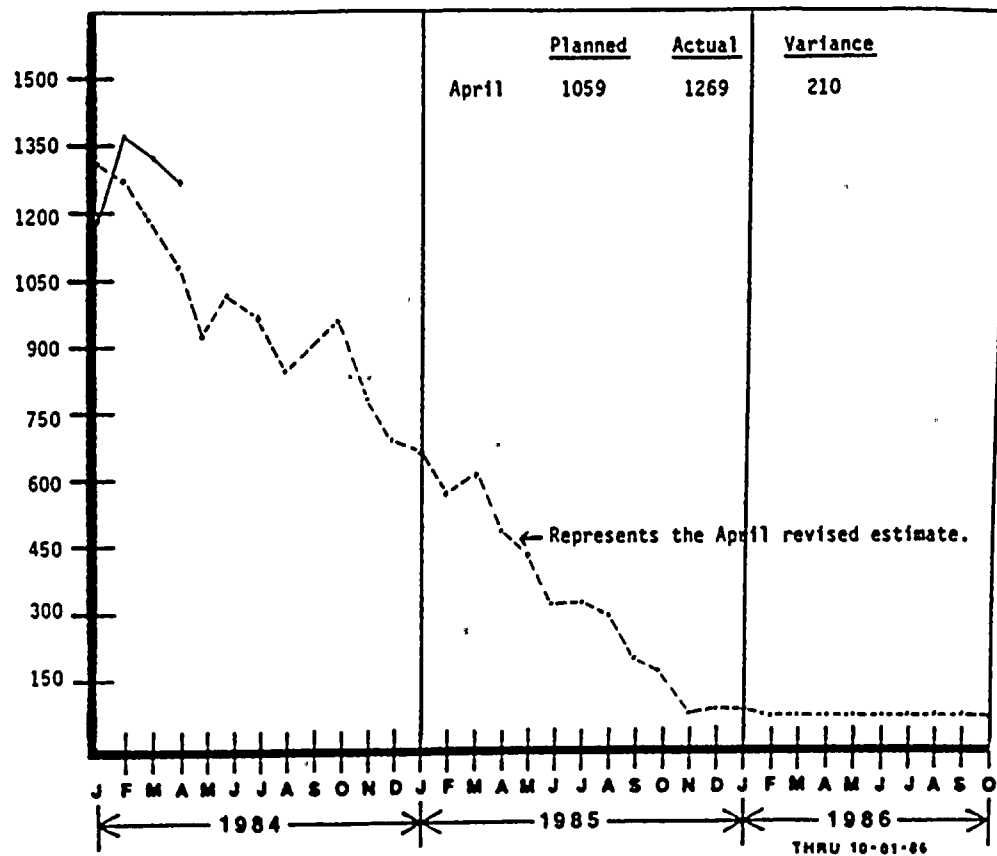


**SWEC ENGINEERING AND DESIGN**  
 (CHOC, and Site including Advisory Operations, SEG,  
 QA/QC and Project Services)



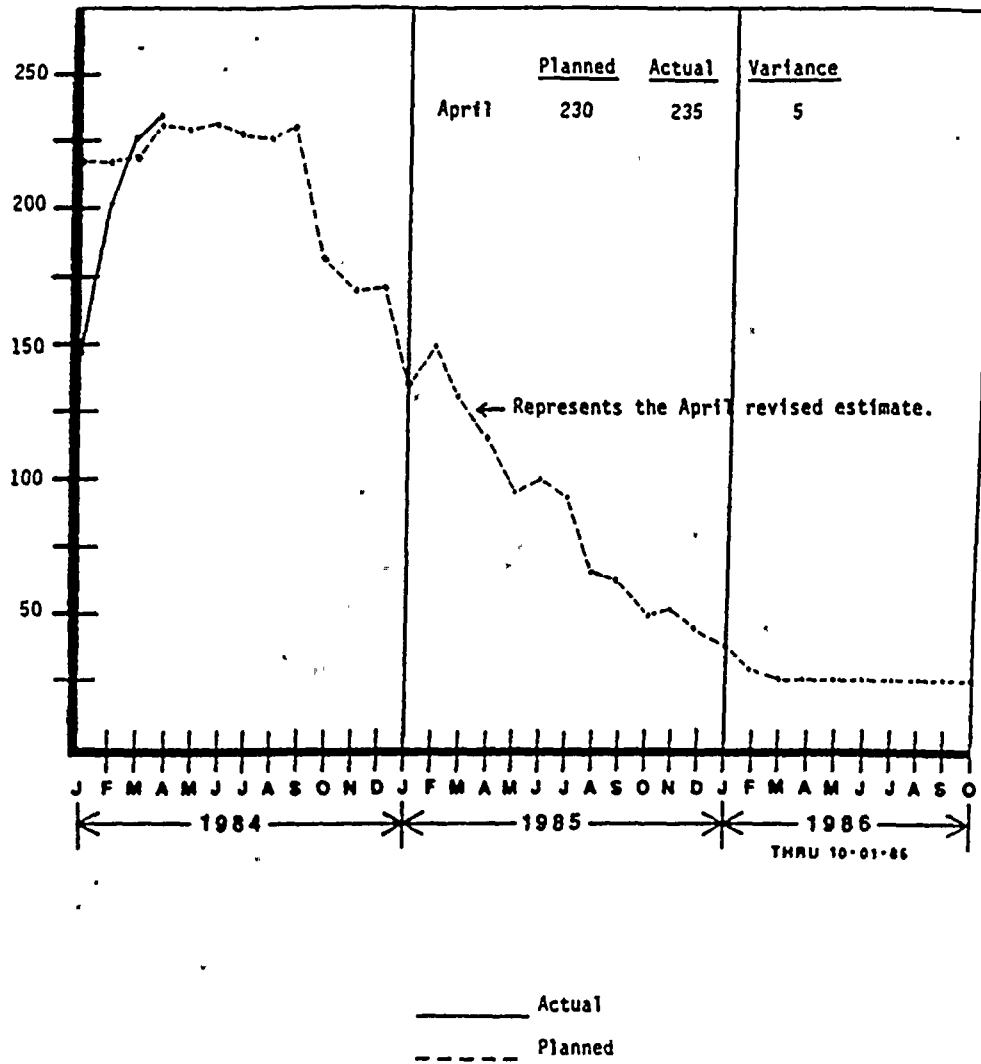
— Actual  
 --- Planned

**SWEC HEADQUARTER SERVICES EQUIVALENT MANPOWER**  
**(CHOC E&D and Project Services, Advisory Operations and QA/QC)**



— Actual  
 - - - Planned

# SEG EQUIVALENT MANPOWER



## VI. QUALITY ASSURANCE

### A. Quality Performance Management Program

The Quality Performance Management Program (QPMP), including the Quality Performance Indicator Program (QPIP) required by the NRC enforcement action, is almosts fully developed. Implementation on site will commence June 7. Attached are graphs of installation for certain Category I commodities; additional curves will be provided in future reports. Also attached are plots of NMPC corrective action requests and surveillance reports. The attached table provides the initial data for the deficiency documents which will be analyzed under the QPIP for trends. Several of these will be depicted on graphs in future reports.

### B. NRC Construction Assessment Team (CAT) and Enforcement Letter

On May 4, 1984, NMPC responded to the Notice of Violation, Enclosure 2, of NRC letter dated March 20, 1984. Enclosure 2 cited NMPC for eight (8) alleged violations of 10CFR50, Appendix B. NMPC Quality Assurance has completed the verification of the corrective and preventive actions addressed in the response. At present there are 19 items that require resolution prior to closure of the verification process.

NMPC has also responded to Enclosure 4 of the Notice of Violation of the NRC letter dated March 20, 1984. Enclosure 4 required three (3) additional actions by NMPC as follows:

1. Submittal of a plan to the NRC for a review of the CAT inspection finding, the most recent SALP Report and NMPC identified deficiencies (both past and current). This plan was submitted to the NRC on May 14, 1984 for review and approval. The review is to be conducted by an independent group that has not been involved in performing any work on the project. This review is scheduled to commence June 4, 1984.
2. Establish, define and submit a listing of performance indicators to be used to measure and monitor future quality construction on the project. This listing was submitted to the NRC on May 14, 1984 and the implementation plan is currently being finalized.
3. Initiate a plan for an independent third party to conduct an appraisal of organizational responsibilities, management controls, staffing levels, communications, and operating practices both at the site and the corporate office. This appraisal is to be initiated no later than one year from the effective date of the Notice of Violation.



## VI. QUALITY ASSURANCE (Continued)

The CAT Action Plans have been updated to reflect the additional/revised commitments included in the response to the NRC Enforcement Letter. Formal issuance of these CAT Action Plans is complete. Also, formal written direction has been separately provided by NMPC Project and QA Management to implement the majority of the new actions required.

Verification efforts associated with completed CAT Action Items begin May 7. Initial efforts were concentrated on items included in the response to the NRC Notice of Violation as noted above. Checklists are being prepared by NMPC Quality Assurance Engineering for verifying the implementation of specific action plans developed to correct the deficiencies identified by the CAT inspection. As of May 29, 41 checklists were complete. It is expected that verification of the generic and specific action plans will be completed by June 15, 1984.

### C. Other NRC Activities

The NRC Non-Destructive Examination (NDE) Team completed its inspections at the site with an Exit Meeting on May 25, 1984. As a result of the inspection, two (2) violations and five (5) unresolved items were identified. The NRC concluded that the NDE Activities at NMP2 are average and that the welding being performed is very good.

The NRC Hanger Inspection Team completed its inspections at the site with an Exit Meeting on May 18, 1984. There were no violations, unresolved items or open items identified during this inspection.

NRC open items, unresolved items and Notices of Violations, that remained open as of May 22, 1984, are statused below. It should be noted that the 10 Notices of Violations requiring additional actions includes five (5) violations recently issued to NMPC as a result of Inspection Report #84-06.

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	9	2	0	22
Unresolved:		26	23	4	3	56
Violations:		10	6	3	2	<u>21</u>
					TOTAL	100

- 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.

To expedite closure of these items, a weekly meeting has been established between NMPC and the resident NRC inspector. The meetings began on May 16, 1984.

D. Staffing

The present Quality Assurance/Quality Control Staff (including contractors) at the Project site is 516. This is an acceptable staffing level to support the construction activities that are presently being conducted.

## VI. QUALITY ASSURANCE (Continued)

It has been reemphasized to all site organization, that the NMPC Quality Assurance Department has overall responsibility for Quality Assurance on the NMP2 Project. The site organizations recognize NMPC's responsibility, and are cooperating to assure that NMPC Quality commitments are maintained, and that any concerns addressed by NMPC Quality Assurance Department are resolved. Recent contractor management changes on the project has helped to enhance these activities.

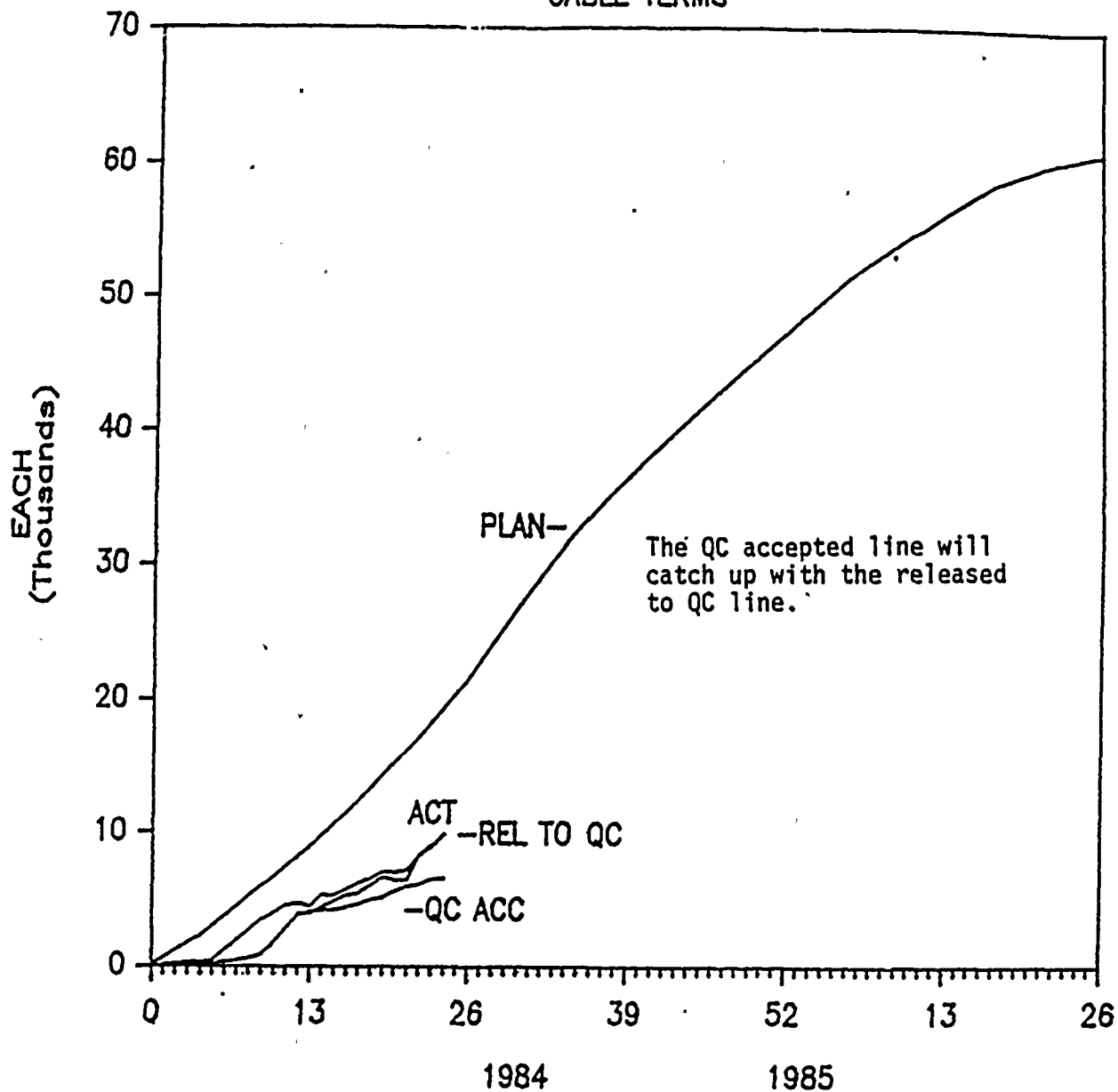
Plans will be initiated by June 6, 1984 to develop a Team Building Program. The purpose of the Team Building Program is to further enhance the cooperation of the various site organization, to develop a sense of team work and to improve the efficiency of each of the organizations. The program is also intended to integrate and align the site organizations to further ensure that Niagara Mohawk commitments are achieved.

### E. Independent Review

The Independent Review which was directed by the NRC in the CAT Enforcement Action will commence on June 4, 1984. The review will be performed by an independent service organization utilizing personnel that have not been involved in performing any work on the project. This review is scheduled to be completed in approximately six months.

# LKC CAT 1 ACT VS QC ACC.

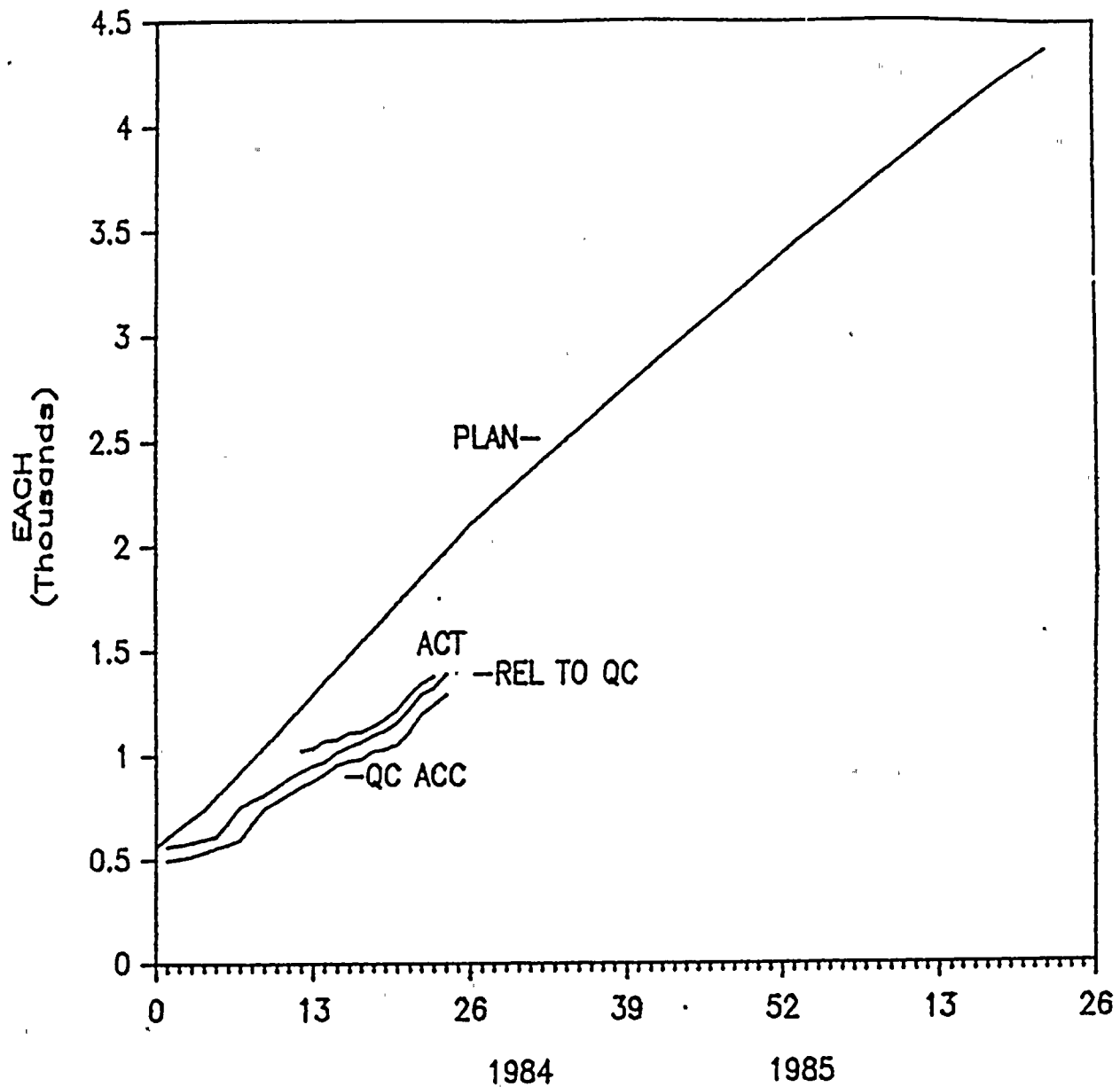
CABLE TERMS



ITEM	WEEK	CUMM	ACTION PARTY	ACTION
ACTUAL INST. (-1)	770	9060		
RELEASED TO QC	945	9875		
QC ACCEPTED	15	6550		
Z ACCEPTED	100	—		

# LKC CAT 1 ACT VS QC ACC

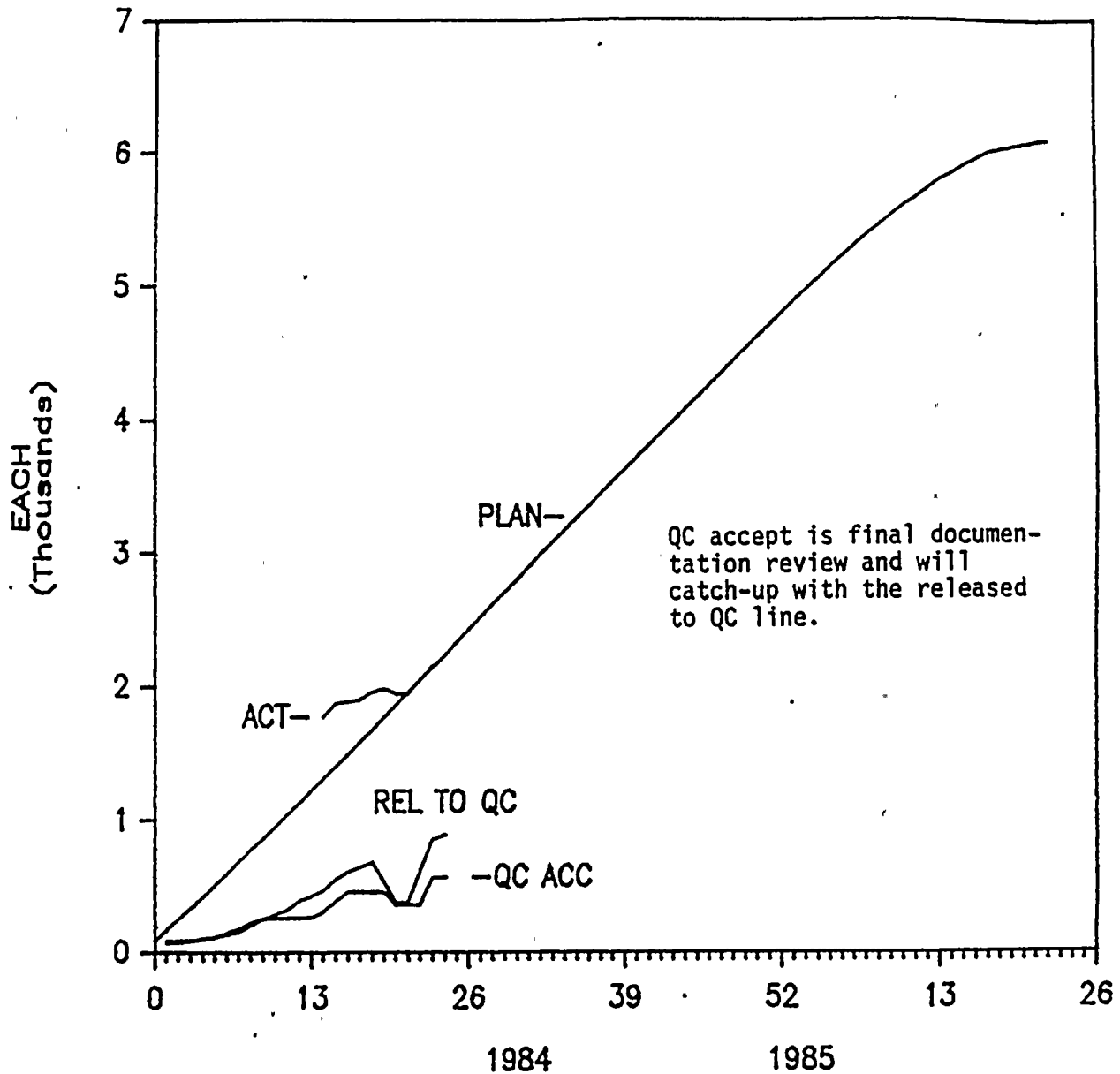
## CONDUIT



ITEM	WEEK CUMM	ACTION PARTY	ACTION
ACTUAL INST. (-1)	35 / 1383		
RELEASED TO QC	64 / 1390		
QC ACCEPTED	44 / 1294		
Z ACCEPTED	95.7 / —		

# LKC CAT 1 ACT VS QC ACC

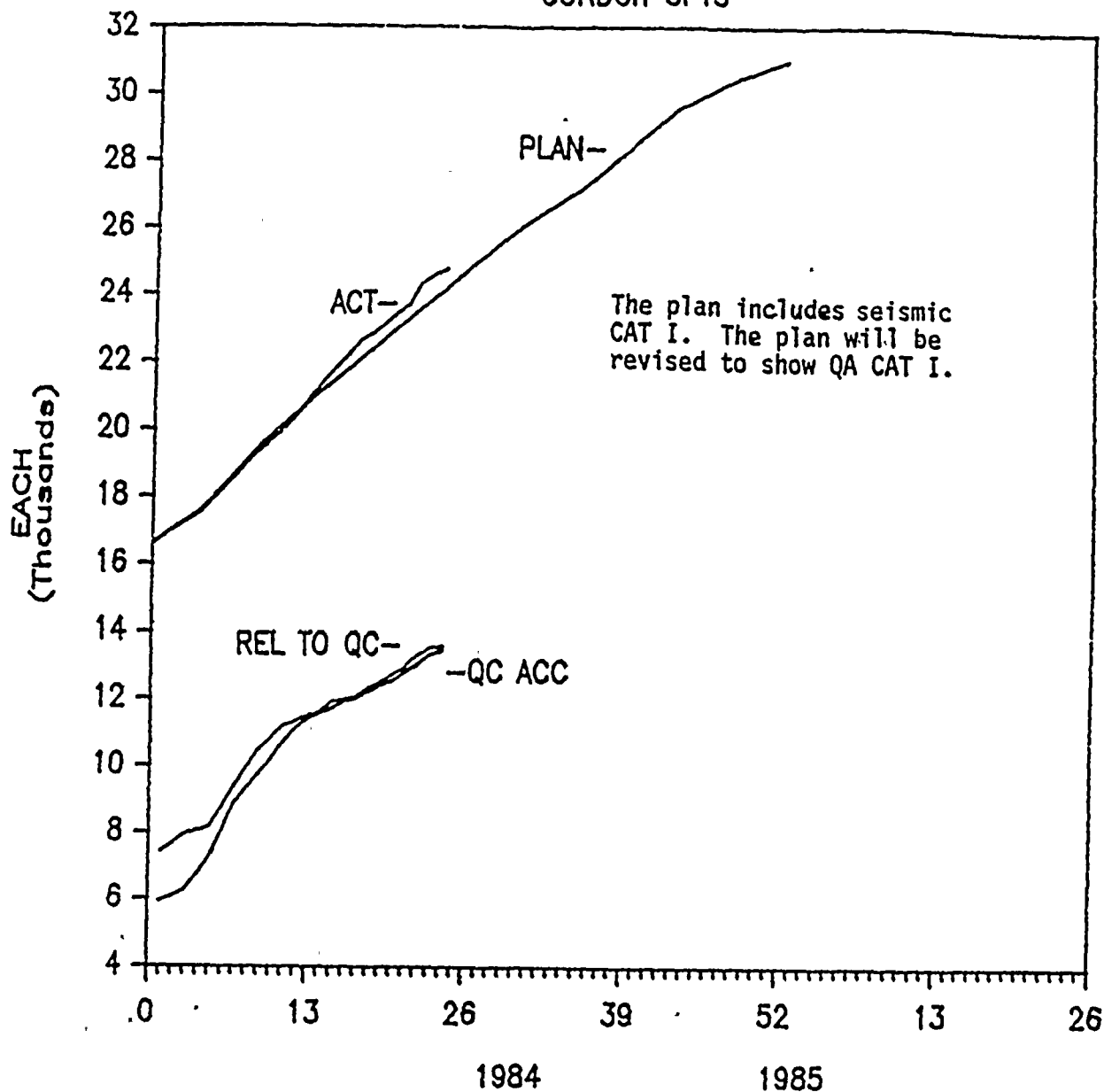
CABLE



ITEM	WEEK	CUMM	ACTION PARTY	ACTION
ACTUAL INST. (-)	107	2150		
RELEASED TO QC	38	893		
QC ACCEPTED	3	567		
Z ACCEPTED	100	-		

# LKC SEISMIC ACT VS QC ACC CAT 1

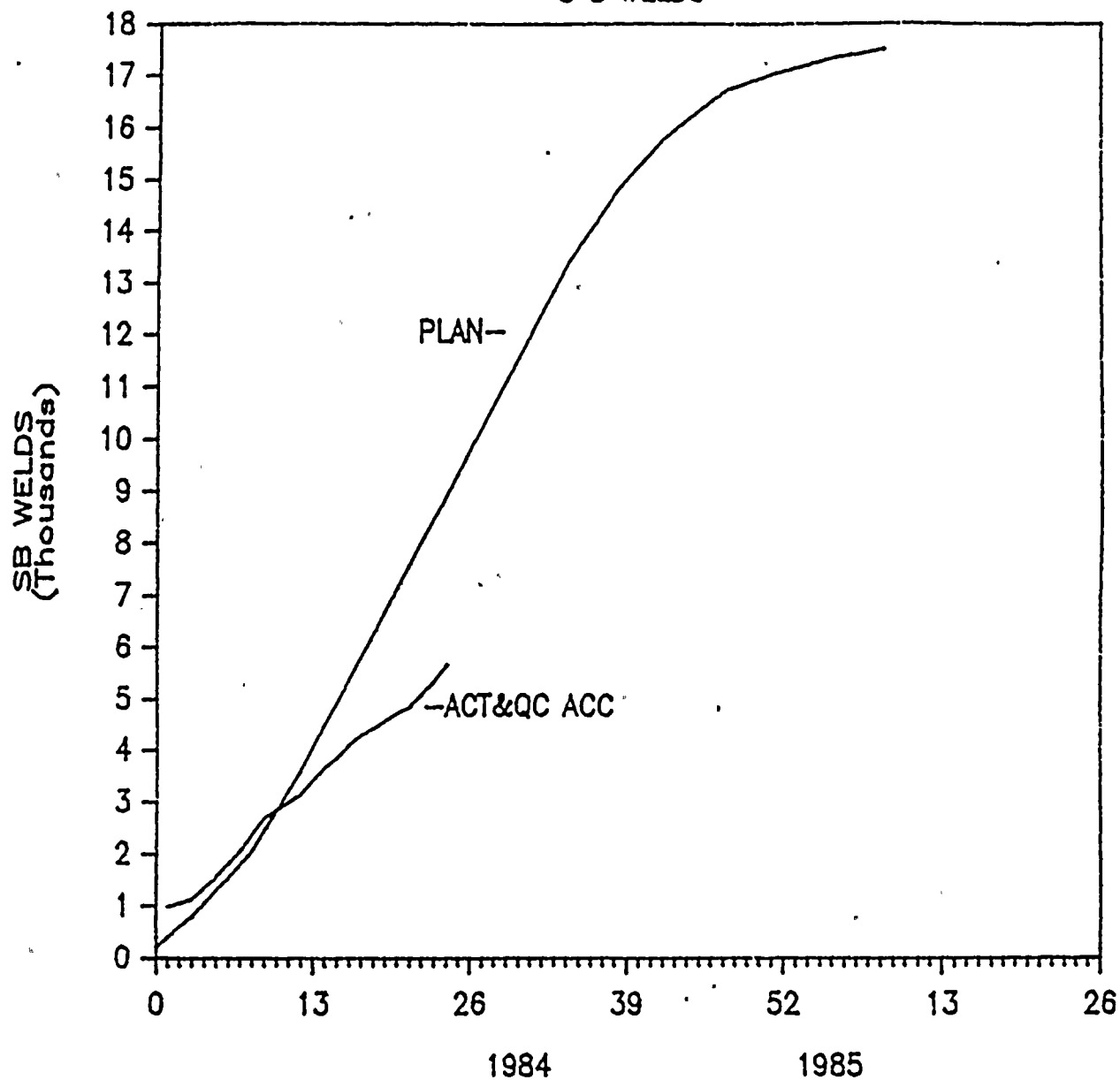
CONDUIT SPTS



ITEM	WEEK	CUMM	ACTION PARTY	ACTION
ACTUAL INST.	182	24800		
RELEASED TO QC	70	13618		
QC ACCEPTED	141	13484		
Z ACCEPTED	100	—		

# SWEC CAT 1 ACT VS QC ACCEPT

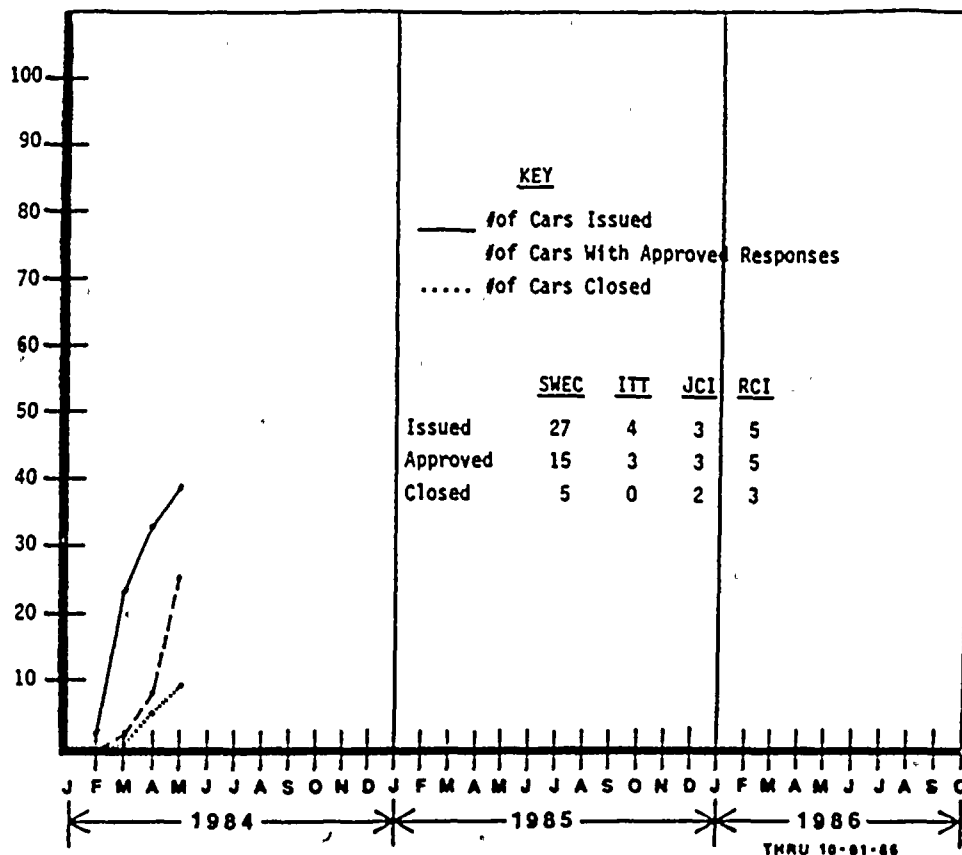
S B WELDS



ITEM	WEEK CUMM	ACTION PARTY	ACTION
ACTUAL INST.	308 5665		
RELEASED TO QC	308 5665		
QC ACCEPTED	308 5665		
Z ACCEPTED	100 —		



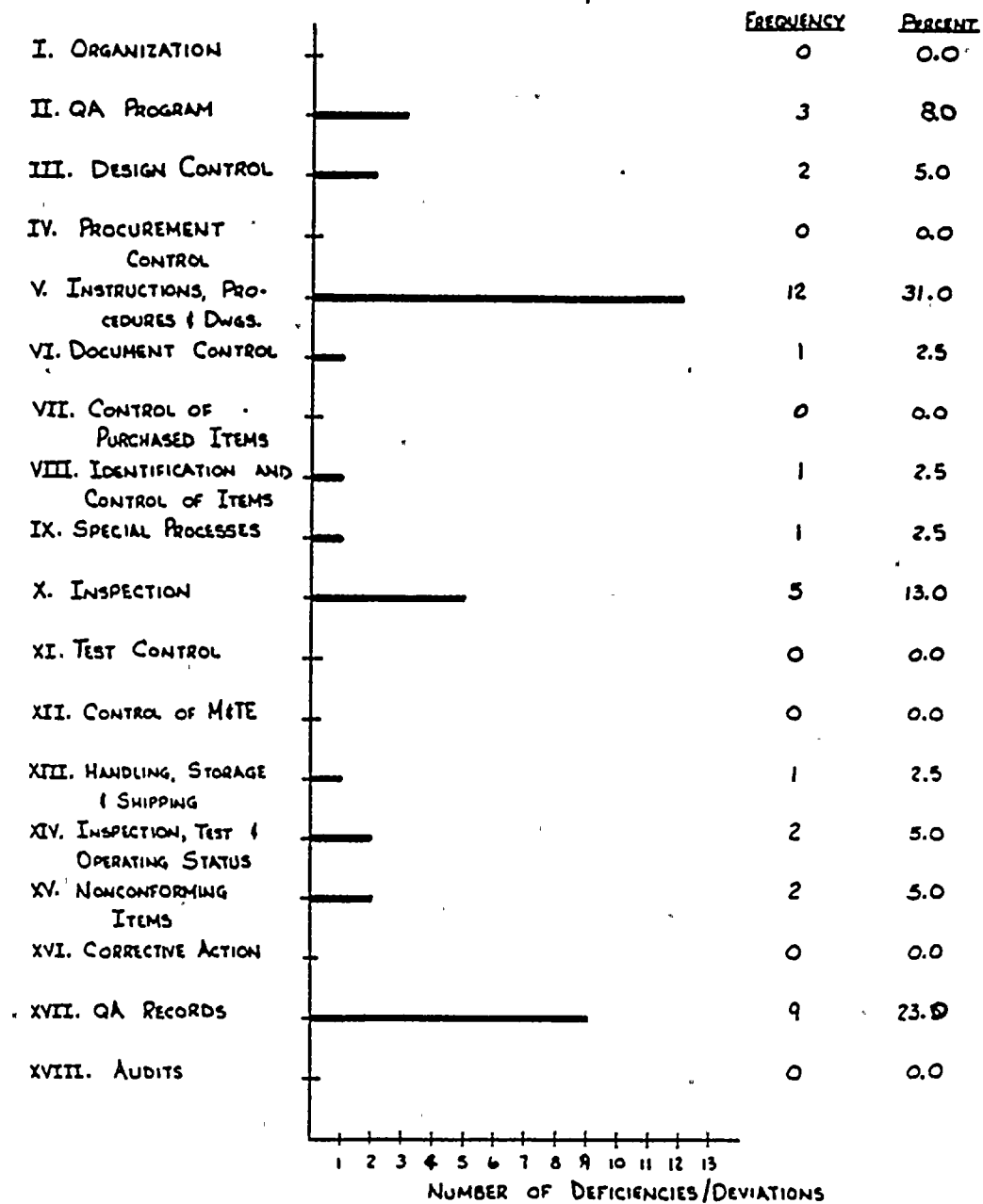
# CORRECTIVE ACTION REQUESTS ( CAR'S ) - ALL CONTRACTORS



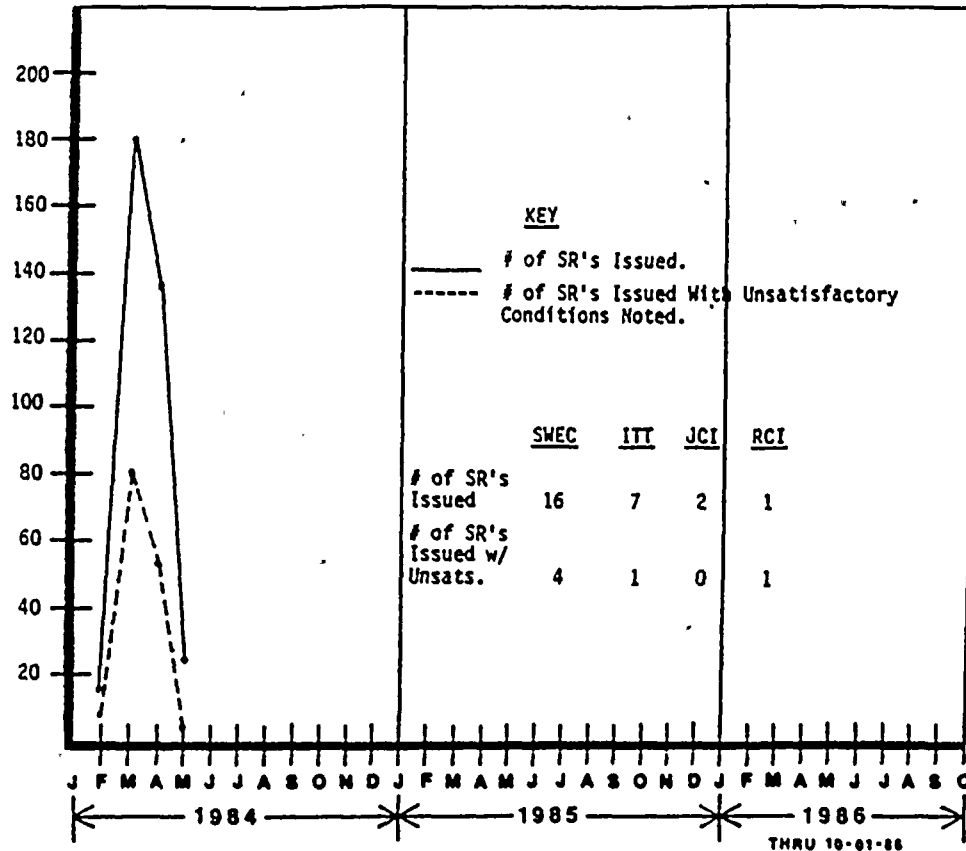
## SUMMARY

The increase in issuance of CAR's from February to March was due to the increase in surveillance activities and the use of the new program to identify deficiencies/ deviations. The rate of CAR issuance is decreasing due to implementation of new program controls and direct management involvement. The substantial increase in approval of CAR responses from April to May was a result of direct management involvement, culminating in two full-day sessions, in which resolution of the CAR's was obtained. The remaining CAR's are presently being processed in the same manner.

CAR's  
FREQUENCY OF DEFICIENCIES/DEVIATIONS



# SURVEILLANCE REPORTS (SR) - ALL CONTRACTORS

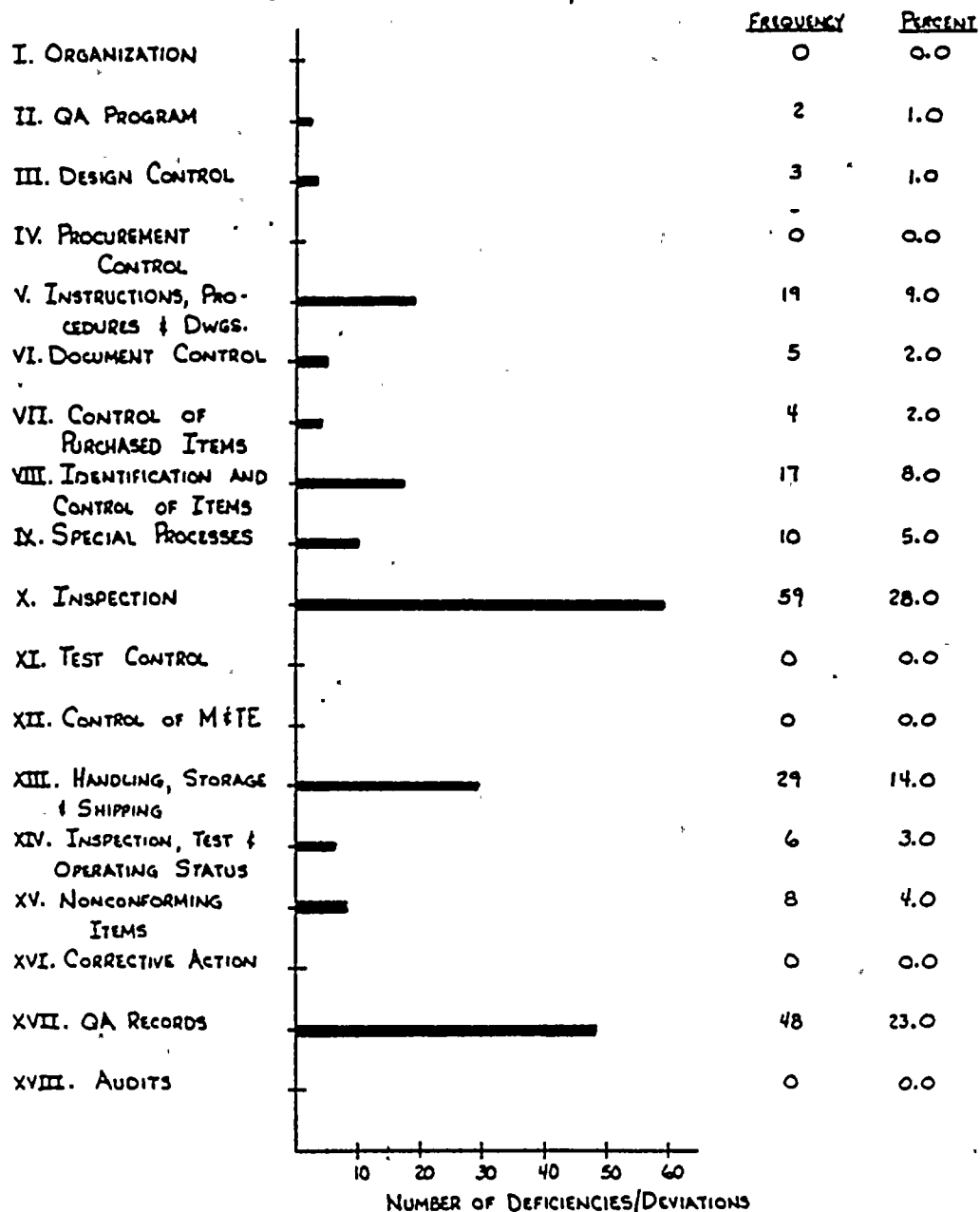


## SUMMARY

The increase in Surveillance Reports from February to March occurred because implementation of a revised NMPC Surveillance Program that begun on February 16. The decrease from March to April was a result of expanding the scopes of the Surveillance Activities to combine more of the Surveillance activities; therefore, reducing the actual number of reports while maintaining the same coverage.

The "apparent" reduction of reports from April to May is because many of the Surveillances for the month of May were still in process at the time of this status (May 18, 1984).

SR's  
FREQUENCY OF DEFICIENCIES / DEVIATIONS



## VII. CONTRACT ADMINISTRATION

### A. Major Contracts/Purchase Orders to Go

Four CHOC originated purchase orders remain to be awarded. The attached table lists the purchase orders and their estimated value. Eighteen site originated contracts remain to be awarded. Most are miscellaneous contracts such as doors, floor, tile and fencing.

CHOC ORIGINATED PURCHASE ORDERS

	<u>FRD DATE</u>	<u>OUT TO BID PRESENT ANTICIPATED</u>	<u>DATE OF AWARD PRESENT ANTICIPATED</u>	<u>EST. VALUE</u>
1. *Dripproofing Mod. HPCS Diesel Generator (Engr. and Design)	9/14/84	(A) 6/11/84	(A) 7/20/84	\$ 50,000
2. P414B Turbine Bldg. Ventil.	9/24/84	2/10/84	6/15/84	25,532
3. P233N Alara Shielding Steel	2/25/85	4/02/84	(A) 6/23/84	324,850
4. W014B Resin Sampling Sys.	8/17/84	3/23/84	(A) 6/22/84	35,000

A = Anticipated Date, otherwise all dates are to be considered actual.

\* = P.O. Number not assigned.

## VII. CONTRACT ADMINISTRATION (Continued)

### B. Major Contract Issues

#### 1. P301C - ITT Grinnell

A program is being developed to provide revised incentive for the remaining work to be accomplished by ITT Grinnell under Contract P301C. Existing contract funds are being used. The program is targeted for completion by mid-June.

#### 2. Penetration Insulation (Sealing)

A delay in completion of the penetration insulation (sealing) specification has delayed release of the respective inquiry for bids. Release of the specification is targeted for July 23. The project is currently reviewing the impact of this delay.

#### 3. E061A - L. K. Comstock

LKC maintains that they are not in agreement with the tentative agreement reached by SWEC on fee adjustment for contract growth. LKC has been asked to submit their position to settle this issue.

#### 4. P111P - Anaconda American Brass Company - Condenser Tubes

Anaconda's parent company, ARCO Metals Co., proposed a lump sum settlement of \$10,000 to closeout the alleged defective tube claim. This settlement is predicated upon unqualified acceptance of a disclaimer. NMPC agreed with SWEC's recommendation to accept the cash sum and reject any disclaimer.

#### 5. P301B - ITT Grinnell Fabricated Pipe

- a. Backcharges (\$500,000) - ITTG must respond to backcharges dating back three years. ITTG has committed to meet with SWEC and NMPC before the end of May and attempt to resolve the backcharges. NMPC has deducted the \$500,000 from ITTG invoices.
- b. Material Inventory (\$300,000 to date) - ITTG must respond to audit findings identified to ITTG on April 26. ITTG has committed to meet with SWEC/NMPC before the end of May to resolve the issue.

## VII. CONTRACT ADMINISTRATION (Continued)

### 6. P301N - ITT Grinnell Pipe Supports

Engineering Billing Issue (\$880,000) - ITTG had the action to provide justification for engineering rates and hanger design charges. SWEC was advised on May 10th that ITTG would not be providing actual costs as justification. Instead, a comparison with other vendor price books would be furnished. This response is expected from ITTG by May 18. NMPC has deducted the \$880,000 from ITTG invoices.

### P282 - Rockwell International Hydrogen Recombiners

A qualification program was procured for \$37,000. Rockwell International contends that their contractual obligations have been met even though the original program has been completed without attaining the desired goal. In order to supply a program that conforms to IEEE-323-1974, Rockwell International solicited NMPC to join a second qualification program for \$250,000. SWEC maintains that this is a requirement of the specification and no additional compensation is required. SWEC has requested Rockwell to reevaluate their position and submit a response no later than the week of May 21, 1984.

### 7. MAC Contract

The contract between NMPC and MAC was executed the week of May 14, 1984.

## C. Materials Management

### 1. Site Storage

Activities at the offsite warehouse have increased with the addition of 15,000 sq. feet of Level C storage. This additional space was necessitated due to aisle congestion in the main warehouse and the loss of two Level C storage facilities at the site.

### 2. Inventory Control

In late April, the Materials Group conducted a full inventory of the warehouse. The inventory was limited to material and equipment by purchase order, material receiving report number, and storage location.



## VIII. STARTUP AND TEST

### A. General

Preliminary testing continues at an acceptable rate to adhere to the project schedule. Preoperational test procedures are in the final review and approval stage in preparation for preop test commencement following jurisdictional transfer to NMPC. NMPC Records Management has been advised of the following impending system turnovers.

- |   |      |
|---|------|
| - 115KV yard drains (BIP 66.004)          | 5/30 |
| - 115KV switchyard (BIP 70.001)           | 5/30 |
| - 115KV yard ground grid (BIP 77.001)     | 5/30 |
| - 125 VDC control power (BIP 73.002, 003) | 6/7  |

### B. Preliminary Test Status

Initial energization of the 115KV yard was completed April 29. Condenser hydro has been completed. Make-up demineralizer system is expected to be operable by the end of May. Mechanical system testing is in progress on the Water Treatment System with 99% of the flushing completed and initial operation of equipment in progress. Field I&C work is approximately 90% complete for the Water Treatment System.

### C. Major Problems

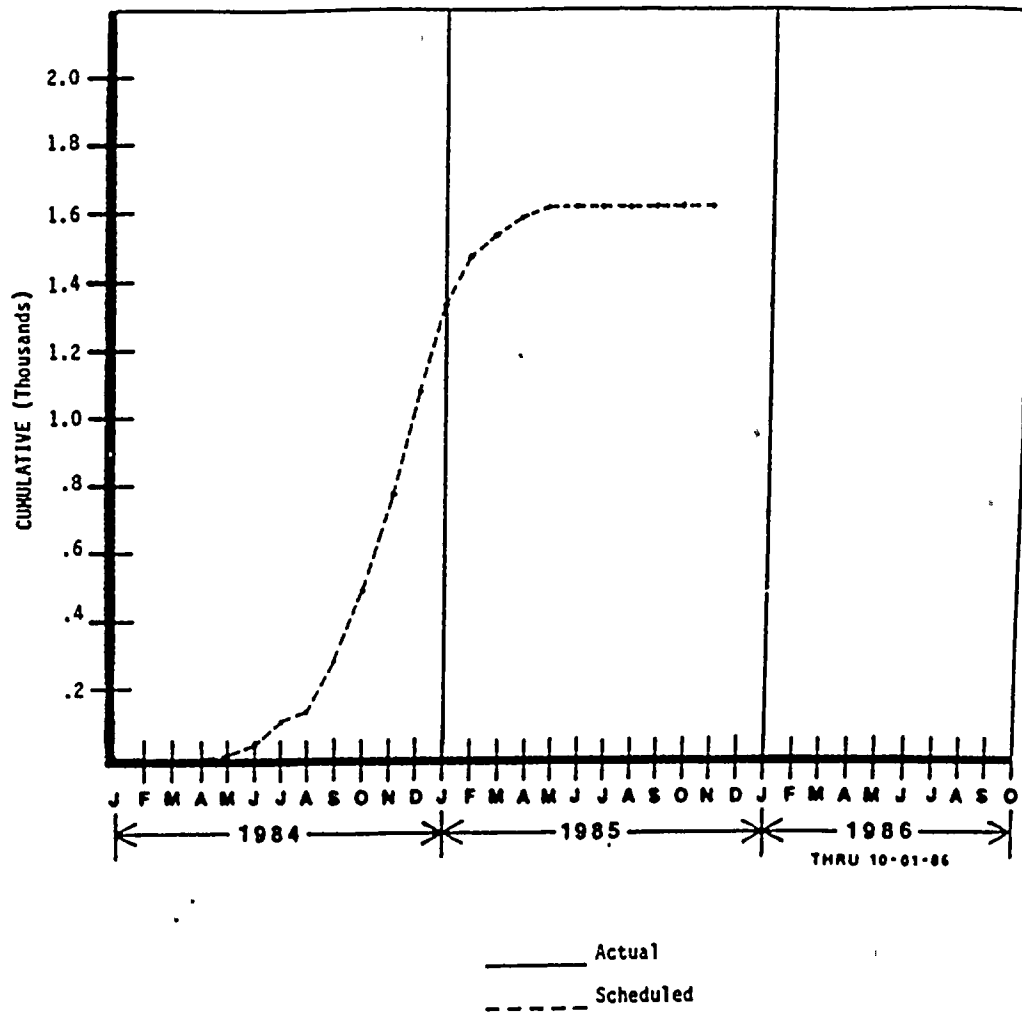
1. Replacement Parts: Lack of replacement parts continues to affect the testing effort. Preliminary meetings have been held in CHOC with Plant Service division personnel. CHOC Engineering is responsible to develop a schedule to bring this effort back on track.
2. Late release of systems from construction: Twenty-seven current turnovers are behind schedule. Startup and test is working with construction to determine which of these turnovers are critical to testing.
3. Design Changes: Late design changes and modifications continue to impact the overall schedule and test program. For example, current design changes to correct the water hammer problem scheduled for release by October 29 will impact the Service Water System by eight weeks. As noted under Engineering, a change control procedure has been developed to effectively manage future changes.

#### VIII. STARTUP AND TEST (Continued)

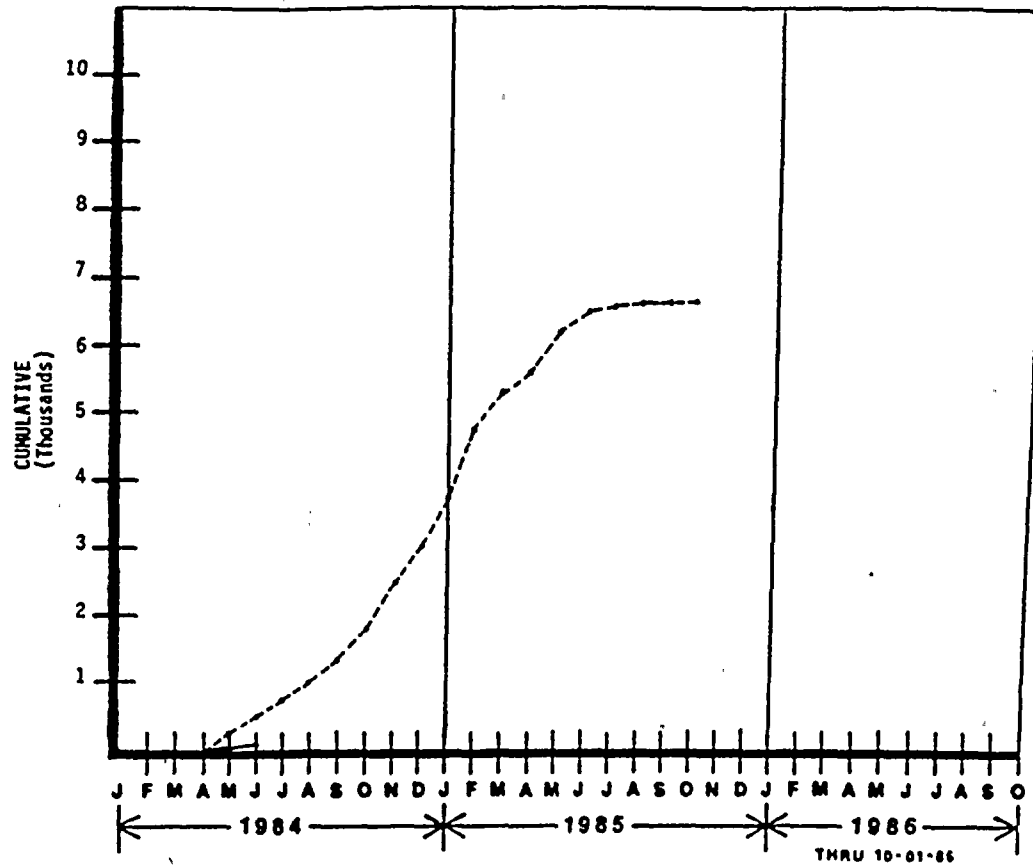
4. Systemic Software: Current permanent plant file contents indicate a need to increase the emphasis and activities for software processing to be completed to support system turnover. A major effort is underway to define the records required for turnover and provide the required records to support the turnover.
5. Project Milestone Integration: Startup and test is continuing its review of the total milestone schedule. This initial effort should be completed by June 30.

STARTUP & TEST

FLUSHES



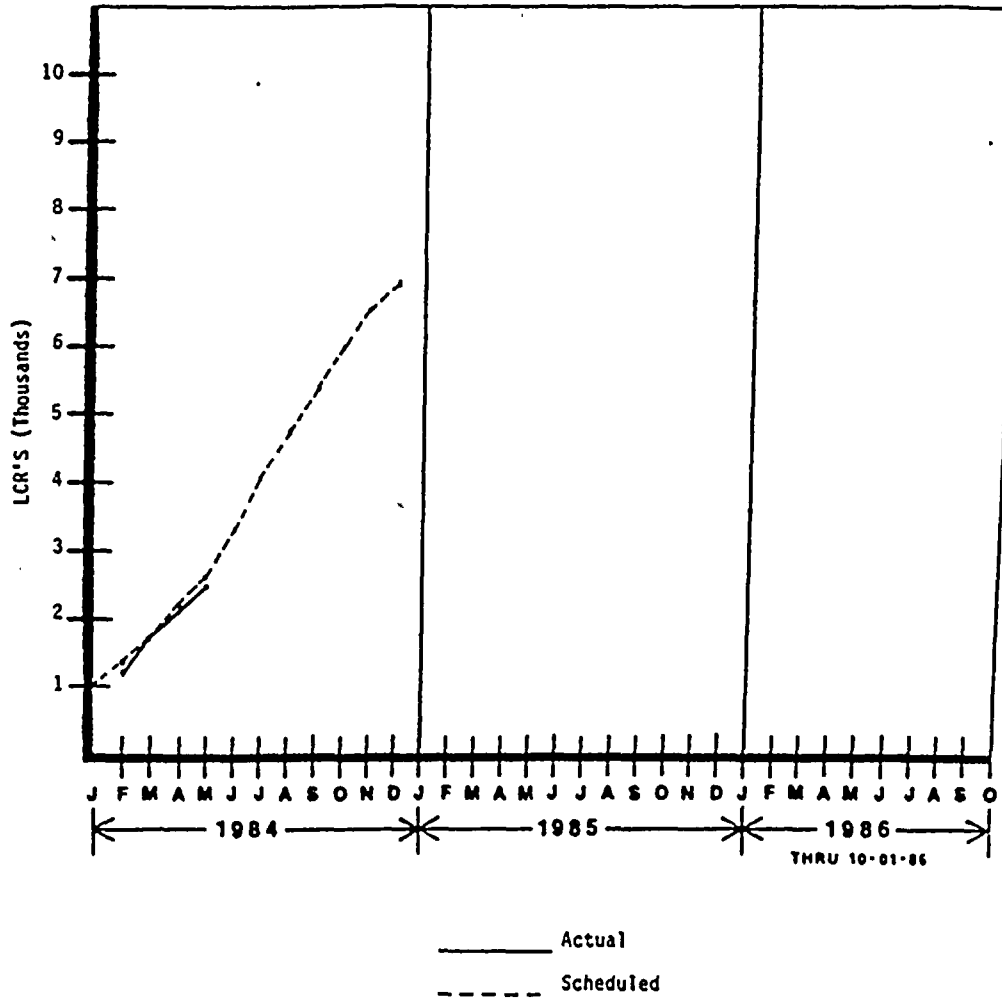
STARTUP & TEST  
LOOP CALIBRATION



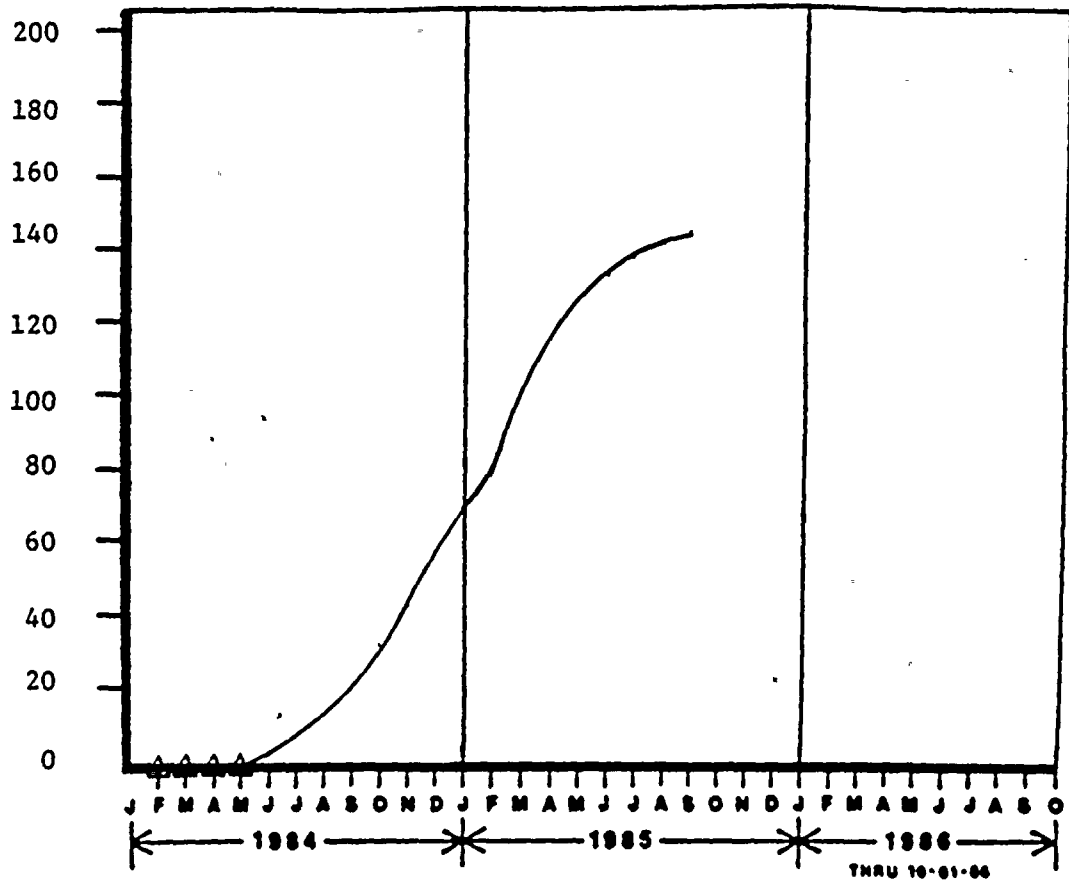
Late due to turnover problems and paper process. The procedures are being corrected to make the process more efficient.

— Actual  
- - - Scheduled

CHOC LOOP CALIBRATION REPORT  
(Cumulative)



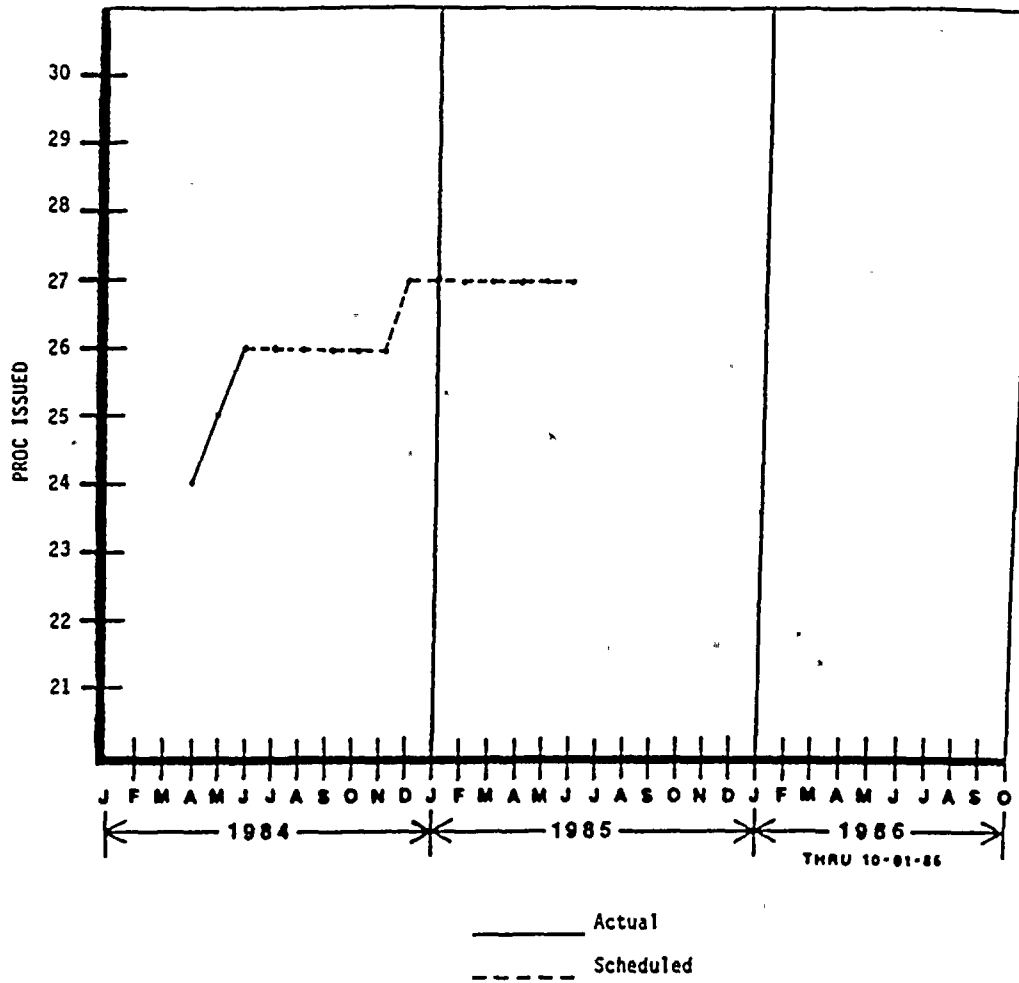
# PREOP/ACCEPTANCE PROCEDURES ISSUED (Cumulative)



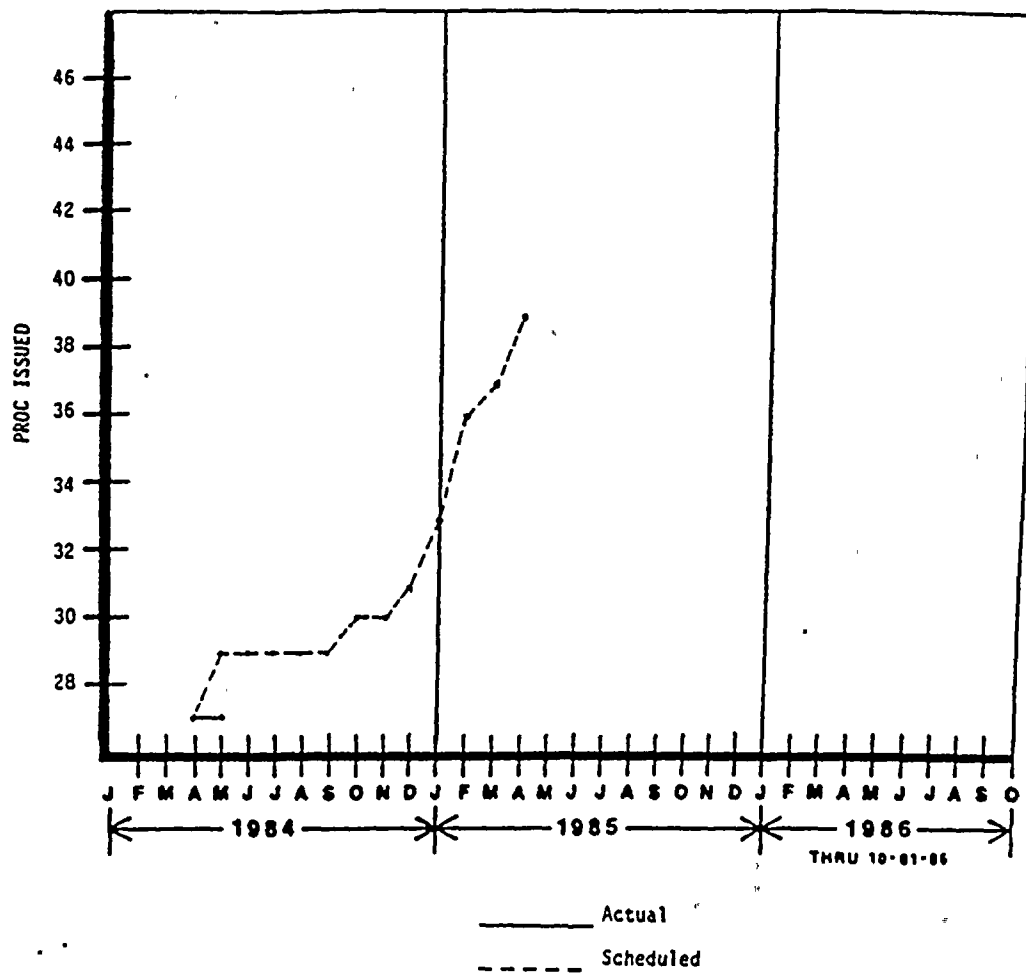
Scheduled \_\_\_\_\_

Actual  $\Delta$

ELEC PROCEDURES ISSUED  
(Cumulative)



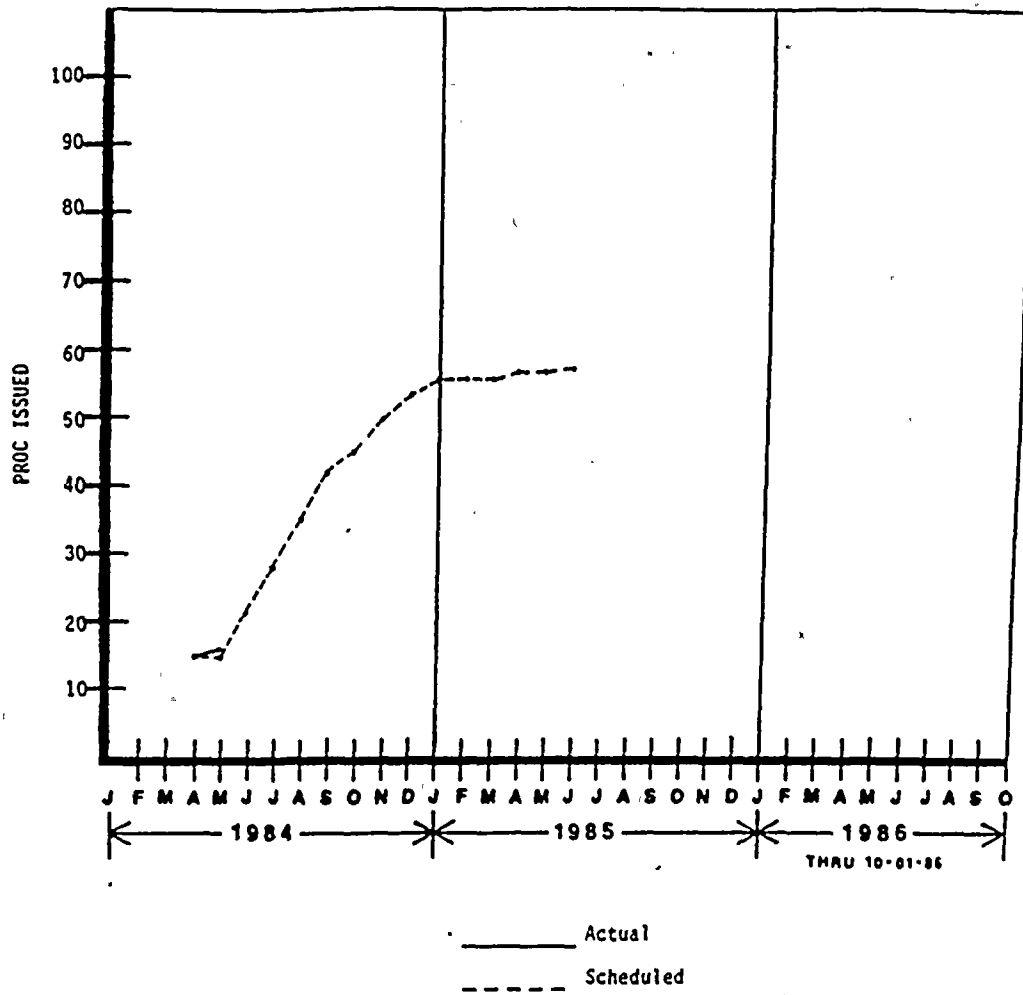
I&C PROCEDURES ISSUED  
(Cumulative)



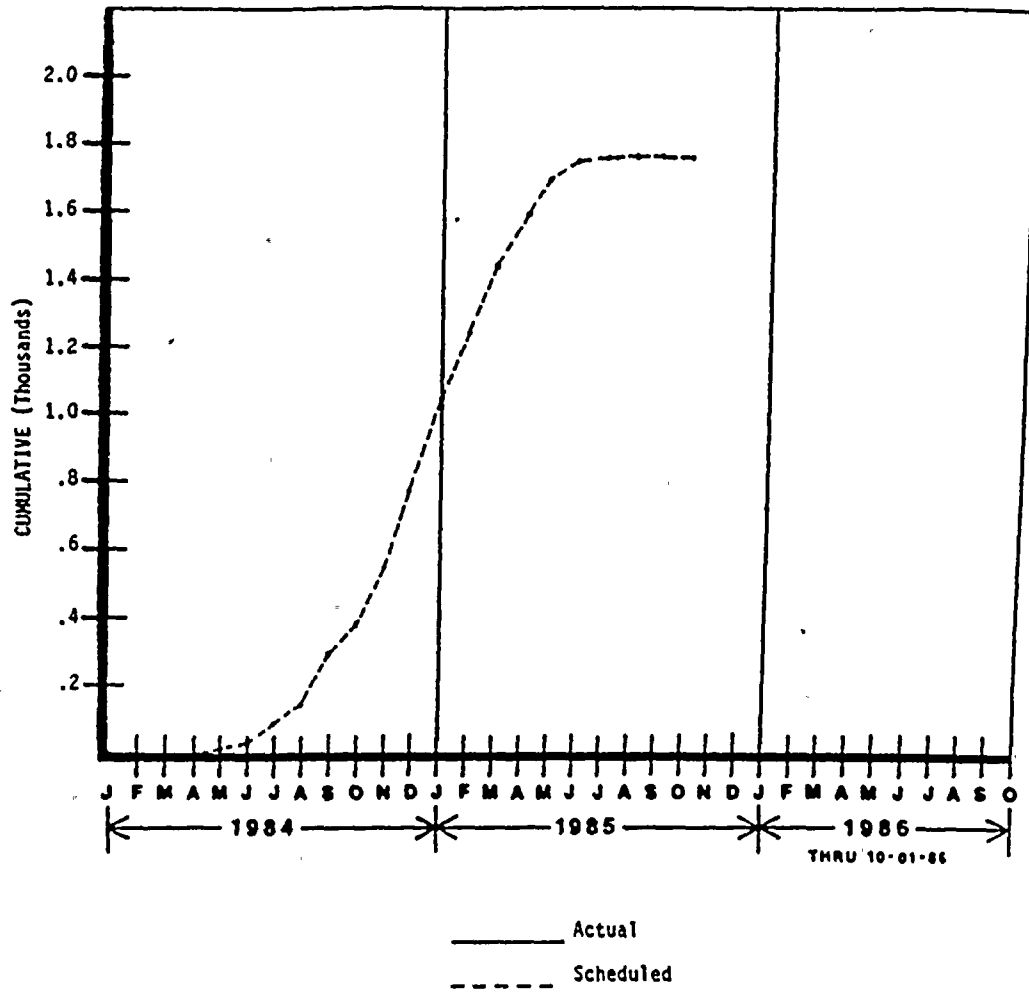
The needed procedures are in the review cycle. When complete, we will be back on schedule.



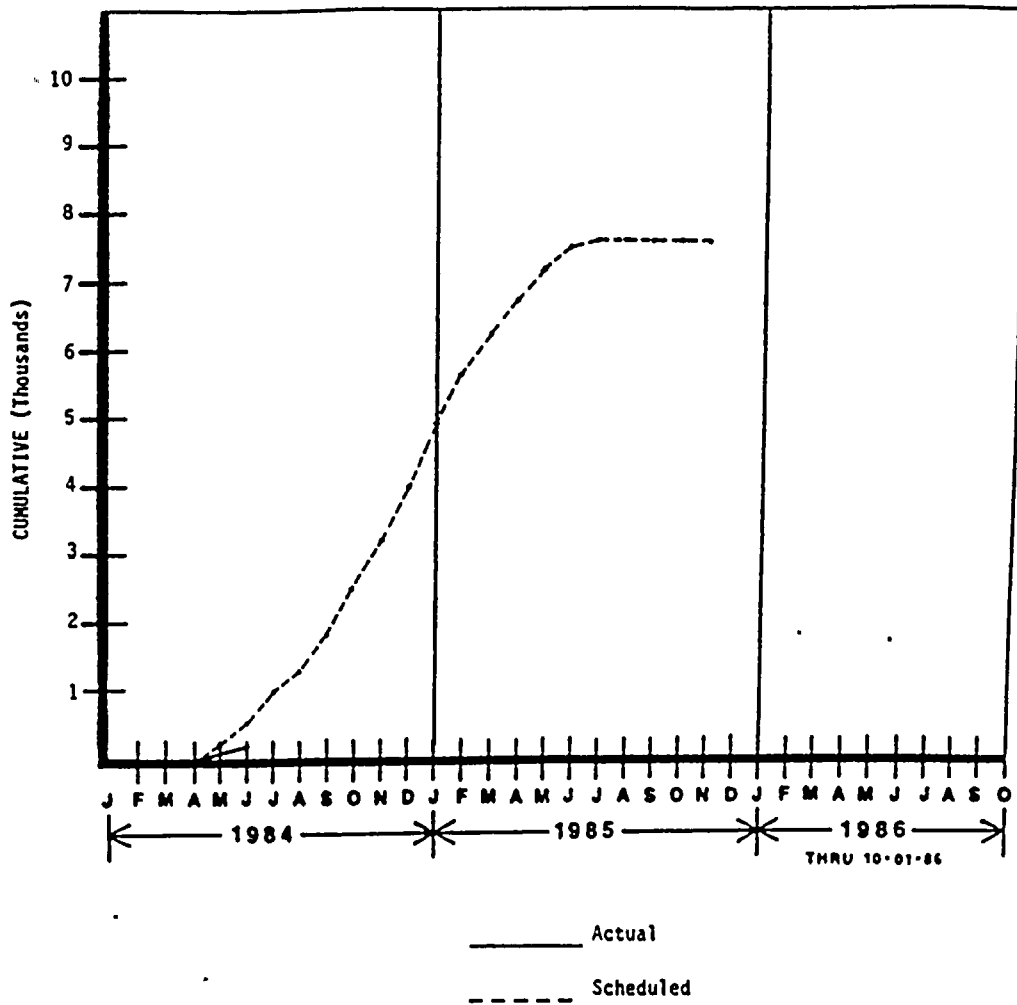
MECH PROCEDURES ISSUED  
(Cumulative)



STARTUP & TEST  
Initial Equipment Operation



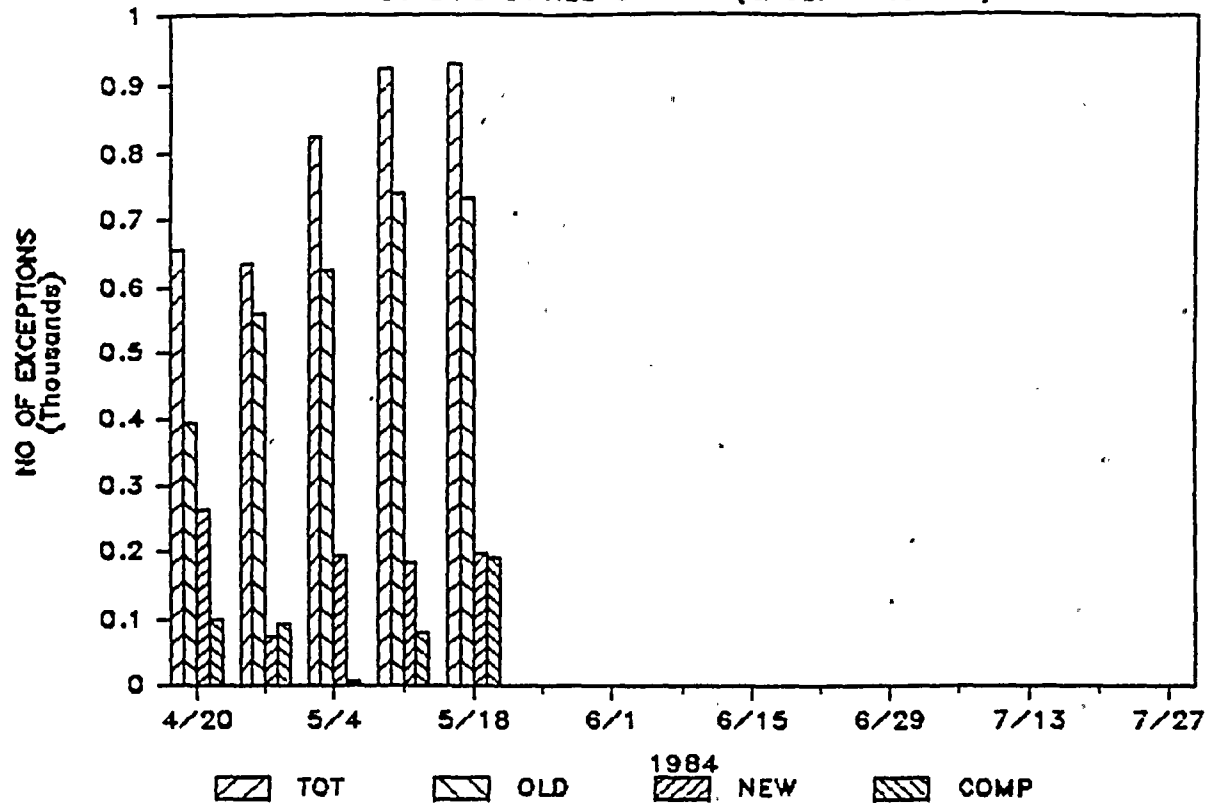
STARTUP & TEST  
CONTROL CIRCUIT VERIFICATION



Falling behind due to late turnovers. Most of the problem is software.

# APPROVED EXCEPTIONS

36 BIPs OWNED BY AOD (EXCEPT 103.001)



The exception list has increased due to accepting systems with modifications pending to improve the testing capability and to meet critical path schedules.

IX. COST

A. Cash Flow Summary

Approximately \$2,282 million\* has been charged on the total project to date.

Approximately \$300.3 million has been expended in 1984 as of May 20. This is \$12.5 million under the 1984 forecast. 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 \$71.8 million was expended in May versus the \$60.9 million planned.

B. May Cash Flow Variance Analysis

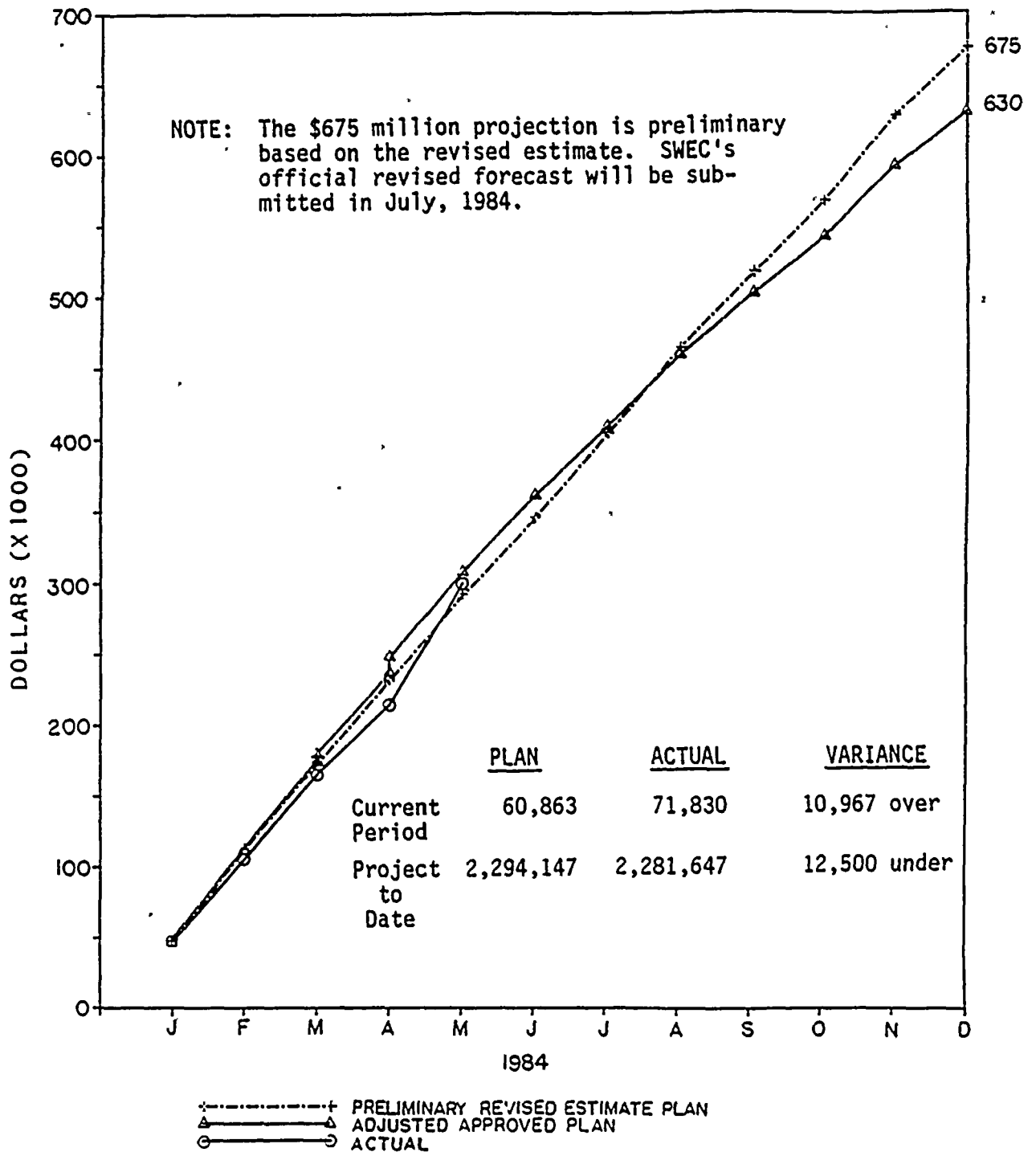
	<u>Variance</u>	<u>Remarks</u>
SWEC Manual and Non-Manual	\$ .6 million over	The non-manual manpower was 25 men over plan and substantial overtime was required. It should be noted that the substantial planning and CAT efforts have required non-manual personnel. The manual staffing was 100 over plan as more craft was required for the painting and small bore efforts.
L. K. Comstock	\$1.5 million over	Manual headcount was 81 men over plan; overtime was 37% actual vs. 19% planned. Non-manual overtime was 30% actual vs. 18% planned. Higher than forecasted manpower and overtime were utilized in order to meet "new" milestone schedules that differ from the \$630 million plan.
ITT Grinnell	\$1.6 million over	Manual headcount was 24 men over plan. Non-manual headcount was 101 men over plan. Non-manual manpower overruns are basically due to support of the CAT action items. Manual manpower overrun also related to CAT action items.

-----Continued-----

IX. COST (Continued).

	<u>Variance</u>	<u>Remarks</u>
FPO's	\$2.8 million over	Overrun is attributed to higher than anticipated staffing levels in the first quarter of 1984 and to an initial under estimate of the 1984 FPO cash requirements.
Other Misc.	\$ .7 million under	
Total Construction	\$5.7 million over	
Headqtrrs. Serices	\$ 1.1 million over	May payment for March labor. Overrun due to increased levels of overtime to complete major engineering items by March 31.
Hdqtrs. Material	\$ 4.3 million over	Due primarily to a \$3.5 million payment on P.O. E011A (step up transformers) that was forecasted for payment in April.
Total Headqtrrs.	\$ 5.4 million over	
-----		
Client Cost	\$ .2 million under	
TOTAL PROJECT	<u>\$11.0 million over</u>	

# 1984 PROJECT CASH PLANS



## IX. COST (Continued)

### B. Project Estimate

A review of the project estimate has been completed by the Budget and Cost Control Department. The results of this review were presented to the Project Director on May 25, 1984. As a result of this presentation, some additional information will be requested from SWEC. SWEC will be requested to provide this information by the first week of June so the details of the estimate can be presented at the next Co-Tenant meeting on June 14, 1984.

An Estimate Status Breakdown showing Actual Expenses compared to the "To Go" 4/1/84 Budget as well as an analysis of remaining funds, will be provided starting in next month's report.

### C. Cost Centers and Pro-Active Cash Flow

The Project's costs will be divided into a number of smaller areas of responsibility called "cost centers". Individual managers will be responsible for monitoring, controlling and reporting costs for their respective "cost centers".

"Cost center's will also be used as the basis for the pro-active cash flow. A pro-active cash flow is a monitoring tool which will inform Project management of any significant cost deviations from forecasted levels prior to their occurrence.

The cash flow for June is projected to be approximately \$60 million, which is approximately \$6 million over the plan. A summary breakdown is as follows:



NMP2 PRO-ACTIVE CASH FLOW  
(\$ X 1,000)

<u>Cost Center</u>	<u>First Month (June)</u>	
	<u>Budget</u>	<u>Projection</u>
Controllable Costs:		
Construction	28,145	29,149
Engineering	7,715	8,562
Purchase Orders	8,663	14,924
Startup and Test	3,274	2,815
Client Costs	1,298	780
QA/QC	1,542	1,508
Less Controllable Costs:		
Utilities	563	590
Insurance	510	510
Contractor Fees	772	772
Property Tax		
Total	52,482(1)	59,610

(1) The original forecast of \$54,817 was adjusted to reflect the change in payment periods for SWEC invoices.

IX. COST (Continued)

D. 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 following is a summary of these items to date are broken into two categories: NMPC approved changes and potential changes. The approved changes are actual items that have already affected the estimate. The potential changes are items which management believes may have some exposure that could affect the estimate at a later time.

For this period, \$488,220 in changes have been received. In addition, potential changes have been identified and are under review.

CONTINGENCY MANAGEMENT PROGRAM  
SUBMITTED TO NMPC FOR APPROVAL  
APRIL 1, 1984 TO MAY 25, 1984

<u>ITEM</u>	<u>DRAWDOWN</u>	<u>ADDITION</u>	<u>CONTINGENCY BALANCE</u>
Beginning Balance 4/1/84			\$ 254,111,400
Delay of Railroad Work to 1987		\$ 70,060	254,181,460
Johnson Controls - fabrication & purchase of panel materials	\$ 157,938		254,023,522
Rockbestos Co. - Additional aluminum sheath cable	156,640		253,866,882
Rockbestos Co. - twinaxial cable	73,425		253,793,457
Raychem Corp. - termination splicing materials	59,697		253,733,760
American Industrial Tech. - fabrication of outer refueling slab support ring	27,600		253,706,160
Brand-Rex. Co. - special purpose coaxial cable	39,820		253,666,340
Fisher Controls Co.	<u>38,160</u>		253,628,180
TOTAL	483,220		

POTENTIAL CONTINGENCY MANAGEMENT PROGRAM  
 CHANGES (DOLLAR ESTIMATE ARE ORDER OF MAGNITUDE)  
 APRIL 1, 1984 TO MAY 25, 1984

<u>ITEM</u>	<u>DRAWDOWN</u>	<u>ADDITION</u>	<u>CONTINGENCY BALANCE</u>
Relocation of Technical Support Center (\$400,000 Construction plus \$100,000 Engineering)	500,000		500,000
Increases to 600 V control cable quantities	400,000		900,000
Headquarter Manhour increase for computer processing to create a report to compare TLD's to ECSIS.	69,700		969,700
NRC Initiated 3rd Party Review	6,000,000		6,969,700
Future Client Manpower Additions	1,000,000		7,969,700
Paid Overtime For NMPC Personnel	100,000		8,069,700

X. RECORDS/INFORMATION MANAGEMENT

Project Management has approved an NMPC/SWEC integrated records/information management organization. Detailed work plans specifying organizational roles and responsibilities are under development. Currently, a major portion of the Records Management function is integrated using NMPC/SWEC personnel. Shortly, the total integrated organization will be staffed and made operational having(?) Records Management, Document Control and information revised (computers).

A. Significant Activities

- A schedule was developed which identifies the key activities to be accomplished to facilitate turnover of the records associated with the first six system turnovers from AOD to NMPC Startup & Test.
- An overall schedule was developed to achieve steady state implementation of the Records Management Plan.
- The Records Management Plan was revised, approved and issued on May 21.
- Roughly 30% of all Records Management concerns identified by NMPC QA Audit #37, SWEC Boston Records Management Evaluation, NMPC Internal Audit, Records Management Workshop Items (CAT) and MAC Evaluation Teams have been closed. These items are being tracked to closure as part of the Records Management Enhancement Program.

Key Actions in the Near Term are planned as follows:

1. Revise and issue the NMP2 Required Records List to support the initial system turnovers.
2. Develop System Records Lists for first six systems scheduled for turnover.
3. Develop Records Management schedule input for 13-week look ahead schedule and milestone schedule.
4. Resolve the NMPC Quality Assurance Record Review Requirements for initial system turnover.
5. Evaluation of closed contracts on the NMP2 Project for records commitment and the identification of associated required records.

X. RECORDS/INFORMATION MANAGEMENT (Continued)

B. Record Turnover

The following are estimated percent completes of SWEC turnover of documentation to the NMPC Permanent Plant File.

Total Turnover of CHOC Documents	<u>87%</u>	Complete
Total Turnover of SWEC Site Documents	<u>6%</u>	Complete
Total Turnover of all SWEC Documents	<u>17%</u>	Complete

The following are estimated percent completes of NMPC Syracuse turnover of documentation to the Permanent Plant File.

Total Turnover of NMPC Syracuse Documents	<u>71%</u>	Complete
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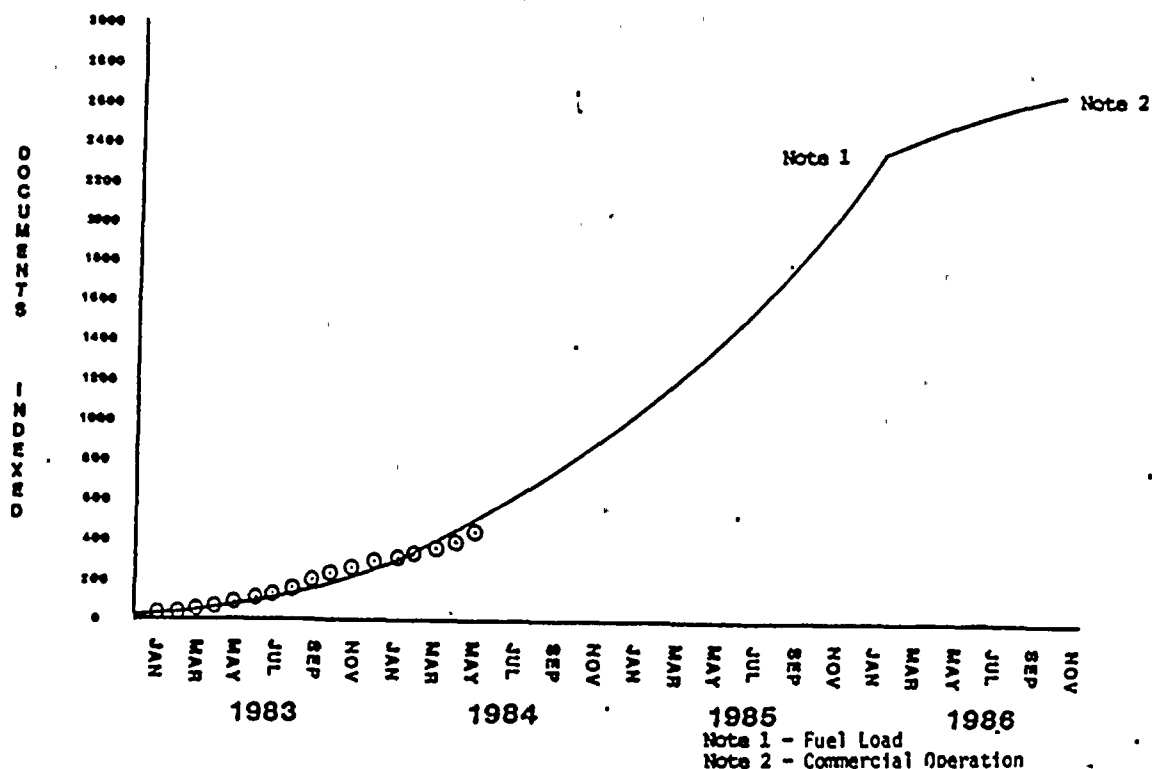
The total estimated percent complete of turnover documentation to the PPF 19% Complete.

C. Permanent Plant File Effort

The following three pages identify planning curves and production figures for record receipt filming and indexing into the Permanent Plant File.

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

PLANNED ———  
ACTUAL ○



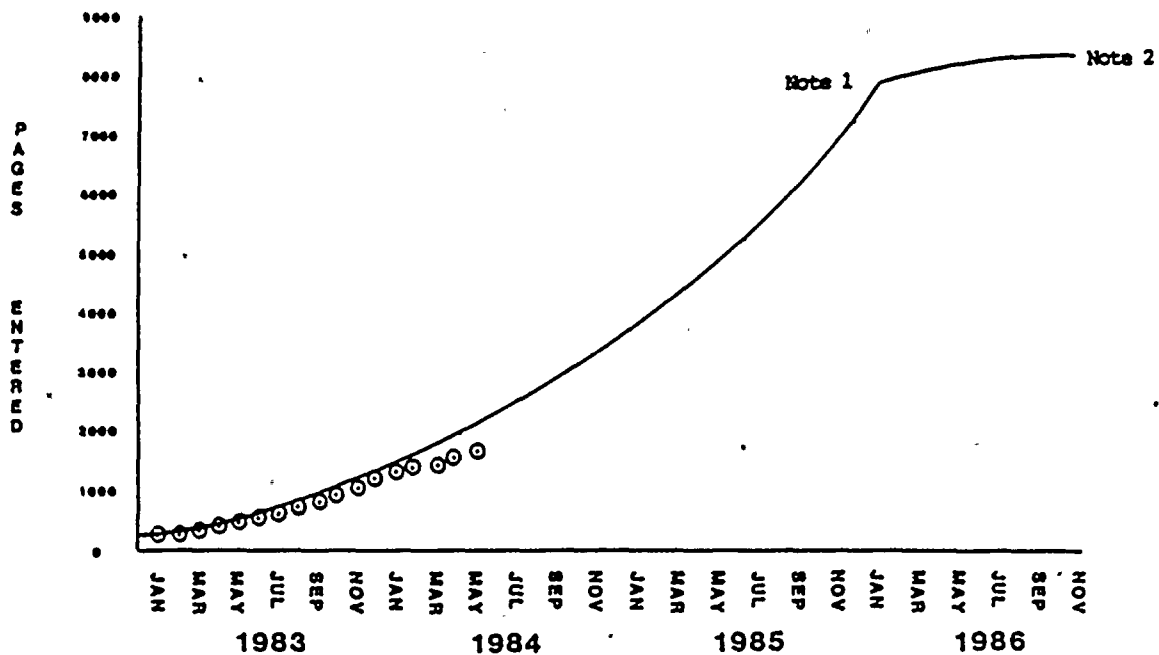
The following table summarizes the production levels of record receipt, preparation, filming and indexing into the Permanent Plant File.

Activity	April	May	Total To Date	Percent Complete
Record Receipt and Preparation (Includes Aperture Cards)	80,178 Pages	109,506 Pages	2,018,967 Pages	25%
Record Microfilming And Verification (Includes Aperture Cards)	104,573 Pages	128,327 Pages	1,652,339 Pages	21%
Computer Indexed Entries	22,554 Entries	41,038 Entries	287,896 Entries	44%
Records Indexing And Computer Entry	24,881 Documents	41,038 Documents	434,947 Documents	18%

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  
 PAGES ENTERED  
 PLANNED VS. ACTUAL  
 (IN THOUSANDS)

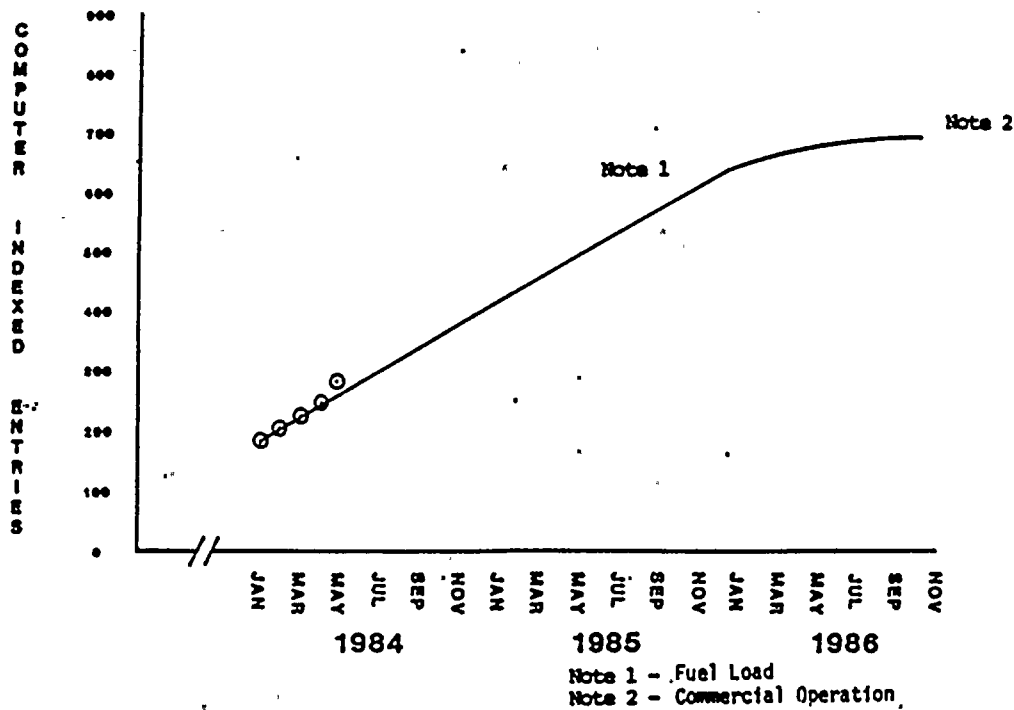
PLANNED —  
 ACTUAL ○





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

PLANNED ———  
ACTUAL ○



## XI. LICENSING

### A. FSAR Status

A total of 849 questions relative to the FSAR and ER-OLS have been received from the NRC. As of this period, 660 responses are completed. Of the responses yet to be completed, 53 involved Instrument/Control questions and discrepancies. The attached table provides a detailed breakdown of the responses. Amendment 11 to the FSAR will be sent to the NRC on June 5.

### B. Safety Evaluation Report

NMPC received a fairly complete draft with the NRC Safety Evaluation Report. Three hundred fifty-one open items have been received of which 117 items have been closed to date.

### C. 50.55(e) Reports

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

1. Rosemount 510DU Racks 55(e) 84-15, Interim 30-day Report
2. Reactor Building Roof Design - Final Report
3. Back Pressure on Valves furnished by Clow Corporation 55(e)-84-10, Final Report

### Inspection Reports

1. I.E. Inspection 84-04 was received from the NRC. No violations identified.
2. I.E. Inspection 84-05 was received from the NRC. No violations identified.

One item was reported to the NRC as a potential deficiency under 10CFR50.55(e).

1. Electrical Cable Penetration Assemblies supplied by Unax Corporation - 55(e) 84-17.

### E. Significant Issues

The NRC review of the QA and Operations section of the application is currently being held up pending receipt of additional information from NMPC regarding the recent organizational changes on the Project and QA. Unit 2 Licensing has prepared drafts of this material which is currently being reviewed by Quality

XI. LICENSING (Continued)

Assurance and Project Management personnel. At the present time, Licensing considers the major technically related licensing issue to be resolution of the 10CFR50 Appendix R requirement for independence between the control room and remote shutdown panel. SWEC is to provide a report on alternatives and a recommended course of action by June 15. The major management related licensing issue is considered to be the resolution of the CAT and SALP identified concerns with the Unit 2 QA Program. An interim SALP evaluation by the NRC is expected within the next few months, which should indicate the NRC's assessment of NMPC's management actions to resolve these concerns.

STATUS OF RESPONSES TO BRANCH TECHNICAL QUESTIONS

Technical Question Areas	<u>NUMBER OF RESPONSES</u>			<u>SCHEDULE FOR RESPONSE COMPLETION</u>				
	<u>Questions Received</u>	<u>Completed</u>	<u>Outstanding</u>	<u>May</u>	<u>1984 June</u>	<u>Sept.</u>	<u>Dec</u>	<u>1985</u>
ER-OLS	51	50	1		1			
INSTRUMENT AND CONTROLS* 421 & DISCREPANCIES	84	31	53					
RADIOLOGIC 470, 471 EFFLUENT 460, 451, 810	62	50	12	1	7	2	1	1
PIPING 210 STRUCTURE/220 SEISMIC-230 GEOLOGY-231 HYDROLOGY-240 GEOTECH-241 STRUCTURAL AUDIT	168	113	55		54			1
EQUIPMENT QUAL. 270 271	13	10	3			2		1
QA 260	51	51						
FIRE PROTECTION 280	33	29	4	2	1	1		
POWER SYSTEM 430	118	105	13	6	3	3	1	1
CONTAINMENT REACTOR PHYSICS CORE PERFORM 480, 491, 492	67	56	11	3	7		1	
REACTOR SYSTEM 440	49	43	6		4		1	1

STATUS OF RESPONSES TO BRANCH TECHNICAL QUESTIONS

<u>Technical Question Areas</u>	<u>NUMBER OF RESPONSES</u>			<u>SCHEDULE FOR RESPONSE COMPLETION</u>				
	<u>Questions Received</u>	<u>Completed</u>	<u>Outstanding</u>	<u>May</u>	<u>1984 June</u>	<u>Sept.</u>	<u>Dec</u>	<u>1985</u>
AUXILIARY SYSTEM 410	51	43	8		7		1	
STARTUP & TEST 640	41	28	13	2		10		1
OTHER 100, 250, 251 252, 281, 311 450, 451, 620 630, 640, 730	61	51	10	1	8			1
TOTALS	849	660	189	15	92	18	4	7

The outstanding Instrument and Control Questions, and I&C Discrepancies are being discussed in scheduled meetings with the Commission.



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