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ACCESSION NBR: 8411150105 DOC. DATE: 84/11/09 NOTARIZED: NO DOCKET #
 FACIL: 50-410 Nine Mile Point Nuclear Station, Unit 2, Niagara Moho 05000410
 AUTH. NAME AUTHDR AFFILIATION
 MANGAN, C. V. Niagara Mohawk Power Corp.
 RECIP. NAME RECIPIENT AFFILIATION
 SCHWENCER, A. Licensing Branch 2

SUBJECT: Forwards info requested during 841030-31 Caseload Forecast
 Panel visit, consisting on monthly status repts. W/nine
 oversize drawings. Aperture cards available in PDR.

DISTRIBUTION CODE: B001D COPIES RECEIVED: LTR 1 ENCL 6 ^{ON SHELF} SIZE: 2+897
 TITLE: Licensing Submittal: PSAR/FSAR Amdts & Related Correspondence

NOTES: PNL 1cy FSAR'S & AMDTS ONLY.

05000410

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	NRR LB2 LA	1 0		HAUGHEY, M 01	1 1
INTERNAL:	ACRS 41	6 0		ADM/LFMB	1 0
	ELD/HDS3	1 0		IE FILE	1 1
	IE/DEPER/EPB 36	1 1		IE/DEPER/IRB 35	1 1
	IE/DQASIP/QAB21	1 1		NRR ROE, M. L	1 1
	NRR/DE/AEAB	1 0		NRR/DE/CEB 11	1 1
	NRR/DE/EHEB	1 1		NRR/DE/EGB 13	2 2
	NRR/DE/GB 28	2 2		NRR/DE/MEB 18	1 1
	NRR/DE/MTEB 17	1 1		NRR/DE/SAB 24	1 1
	NRR/DE/SGEB 25	1 1		NRR/DHFS/HFEB40	1 1
	NRR/DHFS/LQB 32	1 1		NRR/DHFS/PSRB	1 1
	NRR/DL/SSPB	1 0		NRR/DSI/AEB 26	1 1
	NRR/DSI/ASB	1 1		NRR/DSI/CPB 10	1 1
	NRR/DSI/CSB 09	1 1		NRR/DSI/ICSB 16	1 1
	NRR/DSI/METB 12	1 1		NRR/DSI/PSB 19	1 1
	NRR/DSI/RAB 22	1 1		NRR/DSI/RSB 23	1 1
	<u>REG FILE</u> 04	1 1*		RGN1	3 3
	RM/DDAMI/MIB	1 0			
EXTERNAL:	BNL (AMDTs ONLY).	1 1		DMB/DSS (AMDTs)	1 1
	FEMA-REP DIV 39	1 1		LPDR 03	1 1*
	NRC PDR 02	1 1*		NSIC 05	1 1.
	NTIS	1 1*			

NOTES:

1 1

Encls to: Mary Haughey (by advanced)
 11/15
 Reg. Files
 NRC PDR
 NTIS
 NSIC
 LPDR

TOTAL NUMBER OF COPIES REQUIRED: LTTR 54 ENCL 46

[illegible]

TITLE: Freedom Submittal: PSAR/PSAR Amendments & Related Correspondence
DISTRIBUTION CODE: BOID COPIES RECEIVED LTR 1 ENCL 2
SIZE: 4

NOTES: 4. NO. 100 FEAR'S & ANNOTS ONLY

[illegible]

SYSTEM

上

2017
 2018
 2019
 2020
 2021
 2022

4- TOTAL NUMBER OF COPIES REQUIRED: 178 64 ENCLOS.

November 9, 1984
(NMP2L 0229)

Mr. A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Schwencer:

Re: Nine Mile Point Unit 2
Docket No. 50-410

Six (6) copies of the information listed below are enclosed as you requested during the Caseload Forecast Visit on October 30-31, 1984. If you have identified any additional information which you desire, please contact the Unit 2 Licensing Manager, Mr. A. Zallnick, and we will arrange to have copies made for you. The enclosed information is segregated as follows:

1. Caseload Forecast briefing book
2. Folder labeled "Overhead Presentations" which contains copies of the overhead projections used during the Niagara Mohawk presentations.
3. Folder labeled "Followup Material 1 of 2" which contains copies of the following:
 - a. Milestone schedule for 4160V energization
 - b. Milestone schedule for turbine generator vacuum pull
 - c. Milestone schedule for diesel generator
 - d. Milestone schedule for integrated flush
 - e. Interoffice memorandum on Scheduled Release Dates to Startup and Test
 - f. Startup Test Sequence
 - g. Engineering schedule (three sheets)
 - h. Cost performance reports for the periods from 5/21/84 to 10/21/84

*Encls To: Mary Haughey (Cy Advanced)
11/15/84
Reg Files
NRC PDR
NTIS
NSIC
LPDR*

8411150105 841109
PDR ADDCK 05000410
R PDR

Boo!
1/12

U.S. DEPARTMENT OF JUSTICE
FEDERAL BUREAU OF INVESTIGATION
WASHINGTON, D.C. 20535
MAY 14 1964

MEMORANDUM FOR THE DIRECTOR

RE: THE HILL GROUP, INC.
CIVIL RIGHTS - RACIAL MATTERS

On May 13, 1964, the following information was received from the Hill Group, Inc. (HGI) regarding its activities in the field of civil rights and racial matters. HGI is a corporation organized under the laws of the State of New York. It is currently operating out of New York City. HGI is engaged in the business of providing financial and administrative services to various organizations and individuals. HGI is currently providing such services to the Southern Christian Leadership Conference (SCLC) and the Student Nonviolent Coordinating Committee (SNCC). HGI is also providing such services to various other organizations and individuals who are active in the field of civil rights and racial matters.

1. HGI is currently providing financial and administrative services to the SCLC and the SNCC.
2. HGI is also providing such services to various other organizations and individuals who are active in the field of civil rights and racial matters.
3. HGI is currently operating out of New York City.
4. HGI is a corporation organized under the laws of the State of New York.
5. HGI is engaged in the business of providing financial and administrative services to various organizations and individuals.
6. HGI is currently providing such services to the SCLC and the SNCC.
7. HGI is also providing such services to various other organizations and individuals who are active in the field of civil rights and racial matters.
8. HGI is currently operating out of New York City.
9. HGI is a corporation organized under the laws of the State of New York.
10. HGI is engaged in the business of providing financial and administrative services to various organizations and individuals.

Mr. A. Schwencer
Page 2

4. Folder labeled "Followup Material 2 of 2" which contains copies of the Project Reports from January 1984 to September 1984.

Very truly yours,

C. V. Mangan

C. V. Mangan
Vice President
Nuclear Engineering & Licensing

AFZ:ja

Enclosure

xc: R. A. Gramm, NRC Resident Inspector
Project File (2)

AGENDA

- I. INTRODUCTION.....D. Quamme
- II. PROJECT CONTROL PROCESS.....R. Gibson
 - Milestone Status
 - % Complete Table and Calculations
- III. S/U PLANNING PROCESS.....G. Afflerbach
 - Time intervals for key milestones
 - ISF/FL FL/C.O.
- IV. CONSTRUCTION COMMODITIES
 - Hangers
 - Cable.....C. Crocker
- V. QA.....C. Beckham
- VI. ENGINEERING STATUS.....J. Thomas
- VII. OPERATION PLANNING.....R. Abbott
 - Staffing
 - Procedures
- VIII. QUESTIONS AND ANSWERS ON "BOOK"

8411150105

PROJECT CONTROLS PROCESS

• A. Control Tools

1. Summary Milestone Schedule
2. Milestone Schedules
 - a. The "Bible"
 - b. Commodity Roll-up Schedules
3. Area System Schedules - 90% of work content
4. TWLAS - 95% of work content
5. Weekly Work Schedules
6. Master Tracking System
7. Start-up Level 3's
8. Pre-op Schedules
9. Special Schedules, i.e...
 - a. Diesel Generator Milestone
 - b. Control Room
 - c. Main Steam System
 - d. Suppression Pool Fill

• B. Scope Sources

1. Engineering/Planning Files
 - a. PPS - Piping Progress System
 - b. PES - Project Equipment System
 - c. ECSIS - Electrical Cable Schedule Information System
 - d. Instrument File
2. Component List
3. Master Tracking System

• C. Functional Organizations

1. Project Management
2. Engineering (Site; H/Q)
3. Construction
 - a. Area Management
 - b. Discipline Management
 - c. System Completions

PROJECT CONTROLS PROCESS (Cont.)

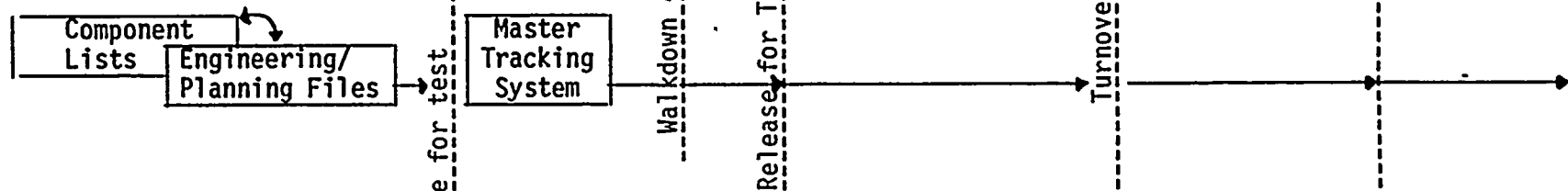
4. QA/QC
5. Project Controls
6. Startup & Test
7. Records Management
8. NMPC Operations

PROJECT CONTROLS PROCESS

Project Phases:

Construction Systems Completion Startup & Test Operations Backfit

Scope Sources:



Controls Tools:

1. Milestone Schedules
2. Area System Schedules
3. Weekly Work Schedules
4. Special Schedules

13 weeks prior to release for test

1. Milestone Schedules
2. TWLAS
3. Master Tracking
4. Weekly Work Schedules

1. Milestone Schedules
2. Master Tracking
3. S/U Level 3's

1. Milestone Schedules
2. Pre-op Schedule
3. Master Tracking

1. Outage Schedule
2. Master Tracking

PROJECT CONTROLS PROCESS

A. Control Tools

1. Summary Milestone Schedule - This schedule is an Executive Management overview of the remaining Project Milestones. It is updated on a monthly basis for inclusion in the project progress report. The remaining milestones are as follows:
 - a. 4160V Energization
 - b. Diesel Generation
 - c. Integrated Flush/RPV Hydro
 - d. Turbine Generation/Vacuum Pull
 - e. Ventilation
 - f. Integrated Leak Rate Test
 - g. Radwaste System
 - h. Fuel Receipt and Transfer
 - i. Loss of Power/ECCS
 - j. Fuel Load
 - k. Commercial Operations
2. Milestone Schedules - Eleven schedules have been identified which depict major milestones within the Project Schedule. These schedules include critical engineering, construction, and testing tasks. They were developed based upon input from Contractor Representatives, SWEC supervision, and testing personnel and represent the overall approach recommended by the Project team and approved by management. The eleven milestone schedules formulate the cornerstone for all more detailed project schedule information. The logic is depicted manually and updated for near-term milestones weekly and is the basis for project decisions. The computerized backup for this logic is termed the "Bible", it represents the total project schedule by "BIP" or Flush Path and major contractor. The "Bible" is updated as required or any time there is an approved change. The Commodity Roll-up schedules are generated from the "Bible" and are computer generated lists by commodity types, corresponding weeks, and the quantities to go. They are the basis for our project quantity curves. The Project Controls organization assists Project management in development, maintenance, and updating this tool.
3. Area System Schedules - The Area System Schedules depict all remaining construction work within a Building/Elevation. Twenty-five (25) areas have been defined. Activities are identified by specific System/BIP, commodity and contractor allowing for coordination and prioritizing of system and work type activities. These schedules are manually drafted updated on a weekly basis and are consistent with the activities on the Milestone Schedules. The Construction Area Management Organization has the responsibility to develop, maintain, and update this tool.
4. TWLAS - The Thirteen Week Look Ahead Schedule Program is designed to provide a tool for managing the work required to achieve the scheduled release from construction to start-up and test. The Master Tracking System (Punchlist) is the basis for scoping work remaining

PROJECT CONTROLS PROCESS (Cont.)

to be completed thirteen weeks prior to release for test. These are hand drawn networks which include remaining engineering, construction, and QA/QC tasks. Four weeks prior to release for test a system walkdown is conducted and any refinements to the Master Tracking System are made. The Construction Systems Completion organization has the responsibility to develop, maintain, and update this tool.

5. Weekly Work Schedules - The Weekly Work Schedules (WWS) is a detailed work plan developed at the foreman level. The sources of information for this tool are as follows:
 - a. Priority work is defined as work which appears within the thirteen (13) week window and is defined in detail on the Master Tracking System.
 - b. Bulk work falls outside the thirteen (13) week schedule and is scheduled to consider turnover priorities, material restraints, area congestion, and manpower availabilities. This information is derived from the Area/System Schedules and is defined in detail in the Engineering/Planning files.
 - c. Fallback work is also outside the thirteen (13) week window but has not been scheduled under the bulk work section due to manpower limitations.

This schedule results in clean and available work for the first week of execution and a projection for the three (3) addition weeks. The WWS is approved and signed by the SWEC discipline superintendent, the craft general foreman, the foreman and the planner. The Construction Area Management Organization has the responsibility to develop, maintain and update this tool on a weekly basis.

B. Scope Sources

1. Engineering/Planning Files

- a. Piping Progress System (PPS) - provides a computerized system which reports progress status at various stages in the erection process. This system applies to hangers, piping, valves, specialists, welds and boltups.
- b. Project Equipment System (PES) - provides a computerized system which scopes major mechanical equipment, electrical equipment and instrumentation.
- c. Electrical Cable Schedule Information System (ECSIS) - this system is the primary source of information regarding all aspects of the cable effort on the project.

PROJECT CONTROLS PROCESS (Cont.)

- d. System 38 Instrumentation File - this is a site generated file which maintains the status of instruments, instrument tubing and supports.
2. Component Lists - These are lists of all components within a system, and are maintained in the site 38 computer. The component list is developed during the construction phase from the boundary diagrams, and Start-up's review to determine total scope, and it is compared to the engineering/planning files to ensure the accuracy of both.
3. Master Tracking System - (Punchlist) The MTS is developed thirteen (13) weeks prior to release of a system or BIP for test, from information derived from the engineering/planning files and a system walkdown. This system is further refined to include all outstanding hardware and software items via a walkdown and detailed review four (4) weeks prior to release for test. The Master Tracking System will be maintained for the life of the plant.

TOTAL PROJECT PERCENT COMPLETE SUMMARY TABLE

DATE 14-Oct-84

DATE	14-Oct-84	PERCENT OF TOTAL PROJECT	ITEM PERCENT COMPLETE	ACTUAL PERCENT COMPLETE		PLANNED PERCENT COMPLETE	
				CUMM	INC	CUMM	INC
I. MILESTONES							
1	ENERGIZATION 4160 V	2.49%	98.37%	2.45%	.00%	2.49%	0.02%
2	DIESEL GEN\REL. TEST	0.63%	73.56%	0.46%	.00%	0.50%	0.04%
3	INT. FLUSH\RPV HYDRO	17.09%	86.46%	14.78%	0.25%	14.70%	0.15%
4	T G\INT VAC PULL	3.50%	80.83%	2.83%	0.01%	2.85%	0.03%
5	VENTILATION	3.95%	74.00%	2.92%	0.00%	2.94%	0.02%
6	INTEGRATED LEAK RATE	0.24%	56.97%	0.14%	.00%	0.14%	0.00%
7	RADWASTE SYSTEM	1.34%	68.67%	0.92%	.00%	0.92%	0.00%
8	FUEL RECEIPT	0.75%	58.25%	0.44%	.00%	0.44%	0.00%
9	LOSS OF POWER/ECCS	3.01%	70.87%	2.13%	0.01%	2.15%	0.03%
10	FUEL LOAD	2.50%	65.39%	1.63%	0.01%	1.63%	0.00%
11	FUEL LOAD TO C.O.	0.50%	0.00%	0.00%	0.00%	0.00%	0.00%
SUBTOTAL		36.00%	79.73%	28.70%	0.28%	28.76%	0.29%
II. CONSTRUCTION COMM.							
1	PIPING	10.45%	92.16%	9.63%	0.05%	9.72%	0.18%
2	ELECTRICAL	7.63%	86.25%	6.58%	0.19%	6.42%	0.23%
3	I & C	0.99%	62.08%	0.61%	0.03%	0.64%	0.05%
4	HVAC	0.83%	85.11%	0.71%	0.01%	0.73%	0.03%
5	CIVIL	13.10%	100.00%	13.10%	---	13.10%	0.00%
SUBTOTAL		33.00%	92.83%	30.63%	0.27%	30.61%	0.49%
III. STARTUP & TEST COMM.		5.00%	8.48%	0.42%	.00%	0.62%	0.17%
IV. ENGINEERING							
1	DESIGN VERIFICATION	0.54%	45.39%	0.25%	0.01%	0.27%	0.03%
2	EQUIP. QUALIFICATION	0.25%	81.49%	0.20%	0.01%	0.21%	0.00%
3	LICENSING	0.56%	80.14%	0.45%	0.01%	0.46%	0.02%
4	SUPPORT OF STARTUP	0.38%	74.13%	0.28%	0.01%	0.29%	0.01%
5	BAL OF ENGINEERING	18.27%	95.31%	17.41%	0.11%	17.54%	0.15%
SUBTOTAL		20.00%	92.96%	18.59%	0.15%	18.77%	0.21%
V. QUALITY ASSURANCE		5.00%	65.63%	3.28%	0.26%	3.14%	0.12%
VI. RECORDS TURNOVER TO PPF		1.00%	32.00%	0.32%	0.01%	0.35%	0.03%
TOTAL		100.00%	---	81.95%	0.98%	82.25%	1.31%

TOTAL PROJECT PERCENT COMPLETE SUMMARY TABLE

I. MILESTONES

EQ CREDIT EQ TOTAL

1 ENERGIZATION 4160 V	0	91
2 DIESEL GEN\RELIABILITY TEST	0	54
3 INTEGRATED FLUSH\RPV HYDRO	29	297
4 T G\INT VAC PULL	5	175
5 VENTILATION	0	139
6 INTEGRATED LEAK RATE	0	30
7 RADWASTE SYSTEM	1	117
8 FUEL RECEIPT	3	118
9 LOSS OF POWER/ECCS	12	415
10 FUEL LOAD	4	355
11 FUEL LOAD TO C.O.	0	1
	54	1792

TOTAL PROJECT PERCENT COMPLETE SUMMARY TABLE

II. CONST. COMM.	CUMM	EST
-----	----	----
LB PIPE	225656	228260
LB HGRS	16453	18231
LB WELD	22708	23893
SB PIPE	167150	198331
SB HGRS	21600	30297
PWR'S	12513	17333
VALVES	1960	2200
 CABLE	 6314019	 9538858
CONDUIT	758533	842716
TERMS	136895	277401
 TUBING	 146240	 231854
TUBE SPTS	3293	5316
HVAC DUCT	35921	43976
HVAC DUCT SPTS	2036	2341

TOTAL PROJECT PERCENT COMPLETE SUMMARY TABLE

V. QUALITY ASSURANCE

	QC CAT 1 QTY'S	CUMM QTY	EST
SWEC	SB WELDS	11623	17258
"	SB HGR'S	666	6300
"	CABLE PULLS	1884	6319
"	CABLE TERMS	18870	63190
"	HVAC DUCT	211	11079
ITT	LB WELDS	3573	5131
"	LB HGRS	2913	4793
"	LB ISO'S	28	500
JCI	TUBING	300	46926
"	SPTS	44	2688
RCI	PCKG'S	8473	13856

STARTUP PLANNING & SCHEDULING

. ORGANIZATION

- . Organizational Chart
- . Manpower

. PHILOSOPHY

- . Test in parallel with Construction Completion.
- . Control Construction access to system with responsible Test Engineer.
 - . Safety
 - . Configuration Control
- . Place the entire test program including preliminary testing under NMPC control and responsibility.
- . Test program Description
 - . Release for test (A or B release) (custody)
 - . Preliminary Testing (Prerequisite).
 - . Inspection
 - . Wire Checks
 - . Initial Energization
 - . Alignment checks (alignment)
 - . Initial pump runs
 - . Instrument calibrations
 - . System Flushing
 - . Logic checkout
 - . T/O (Unconditional Release)
 - . Preoperational/Acceptance Test
 - . Integrated System Tests
 - . Cold Functional Tests
 - . Surveillance Testing

. PLANNING

- . Develop a S/U sequence logic that will provide shortest duration to F/L using the major process systems and their interrelationships to develop the critical path.
- . Use the balance of systems to levelize manpower requirements throughout the program.

- . Establish the durations required for the PTA/AT's.
- . Establish durations for preliminary testing of these systems and interface the logic and sequence with project milestones.

. SCHEDULE

. Level II

- . Load the plan into PC-2 and develop a schedule with all restraints and system ties.
- . Interface the system release dates with the projects commodity rollup schedules and work all the areas which do not interface until satisfactory work arounds are developed.
- . Forward pass the schedule to determine the completion date (if this meets project milestones ok).
- . If not, backwards pass the schedule and determine all releases that are negative.
- . Re-evaluate logic and determine if work arounds are possible, which will remove negatives.
- . If not, report project completion slip.

. LEVEL III (Scheduled completion 11/1/84)

- . Develop detailed level III fragnets of all preliminary (prerequisite) testing.
- . Use as rolling 3/4 week look-ahead schedules.
- . Statused daily in the POD.
- . Reported to project weekly - S/U progress.

. LEVEL IV (Project Master Work List)

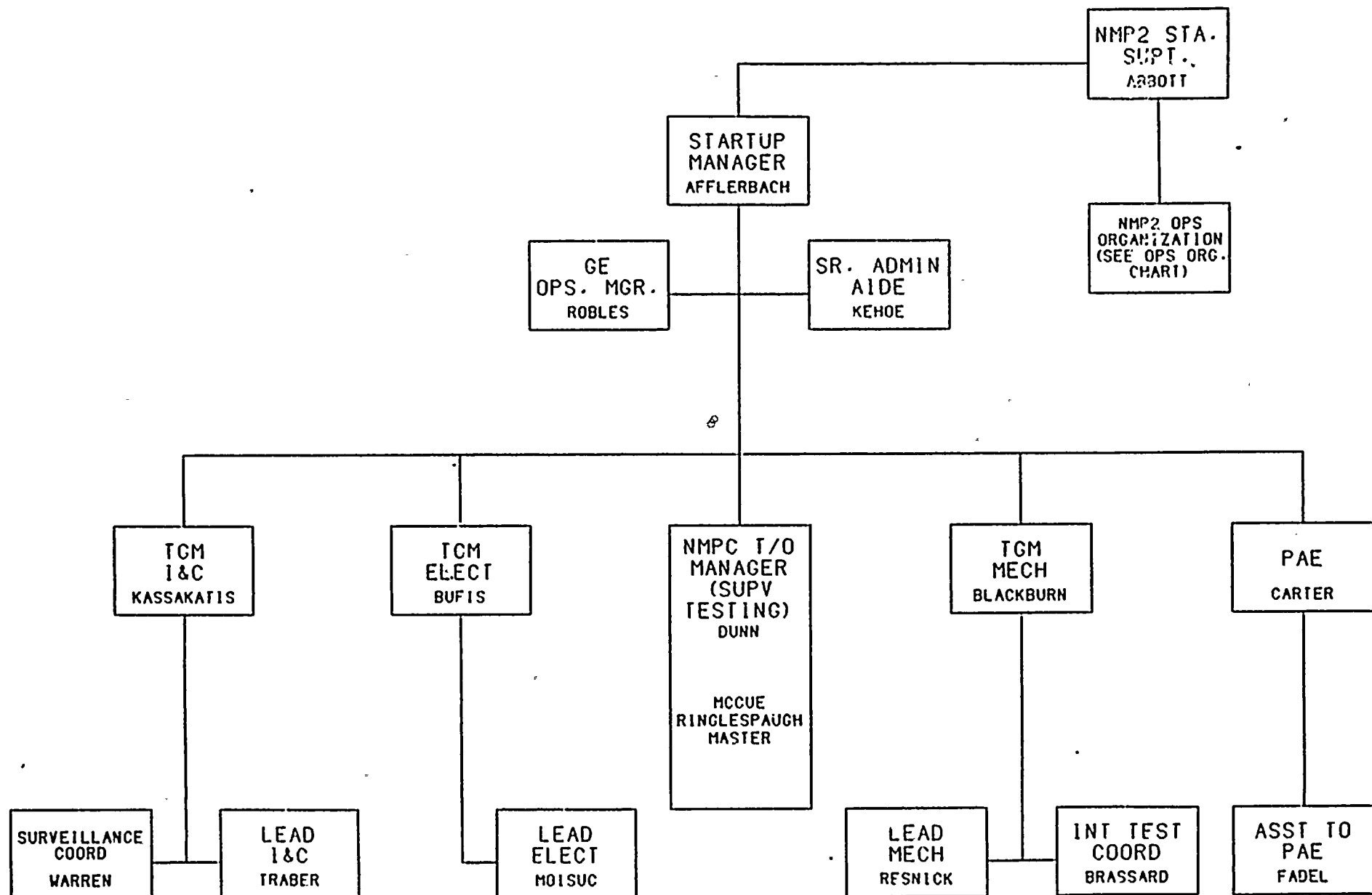
- . Listing of all deficiencies against system.
- . Sorting available.
 - . System
 - . BIP
 - . EPN

- . Responsible Organization
- . Secondary Responsible Organization
- . Type - Software/Hardware

. RECORDS MANAGEMENT INTERFACE/REQUIREMENTS

- . Requirements for release for test.
 - . Maintenance Records.
 - . Deficiency/Punch List.
 - . NDE of piping welds complete/documented.
- . Requirements for T/O.
 - . Commence construction document review.
 - . 4 Weeks prior to turnover - Complete doc review and provide punch list to S/U for review.
 - . Satisfactory - accept deficiencies and provide resolution.
 - . Unsatisfactory - notify engineering/QC of required date.

STARTUP AND TEST ORGANIZATION



STARTUP AND TEST PROGRAM OUTLINE

CONSTRUCTION MANAGEMENT
AREA OF RESPONSIBILITY

NMPC AREA OF RESPONSIBILITY

CONSTRUCTION MANAGER:
PROVIDES OVERALL
MANAGEMENT. COORDINA-
TION OF CONSTRUCTION
AND TECHNICAL DIRECT-
ION OF CONSTRUCTION
TESTING.

NMPC: CALIBRATES. RECHECKS. TESTS. VERIFIES. OPERATES AND MAINTAINS SYSTEMS

CONSTRUCTION PHASE

RELEASE FOR
TEST PHASE

PREOPERATIONAL PHASE

STARTUP PHASE

CONTRACTORS: FINISH
CONSTRUCTION.
MAINTAIN EQUIPMENT.
PERFORM CONSTRUCTION
TESTING ACTIVITIES.

NMPC: PERSONNEL
PERFORM LINEUP
ACTIVITIES

CONSTRUCTION MANAGER:
COORDINATES CONTRACTOR
ACTIVITIES.

NMPC: PERSONNEL PERFORM
TEST ACTIVITIES. MAINTAIN
AND OPERATE PLANT.

CONTRACTOR: COMPLETES
HIS WORK RESPONSIBIL-
ITIES. ASSISTS
PRELIMINARY TEST
ACTIVITIES AS DIRECTED
BY NMPC.

COMERCIAL
OPERATION

RELEASE
FOR
TEST

TURNOVER

LOAD FUEL

FINISH
CONSTRUCT-
ION

CONSTRUCT-
ION
TESTING

COMPONENT
VERIFICATION
SYSTEM PREPAREDNESS

SYSTEM
VERIFICATION

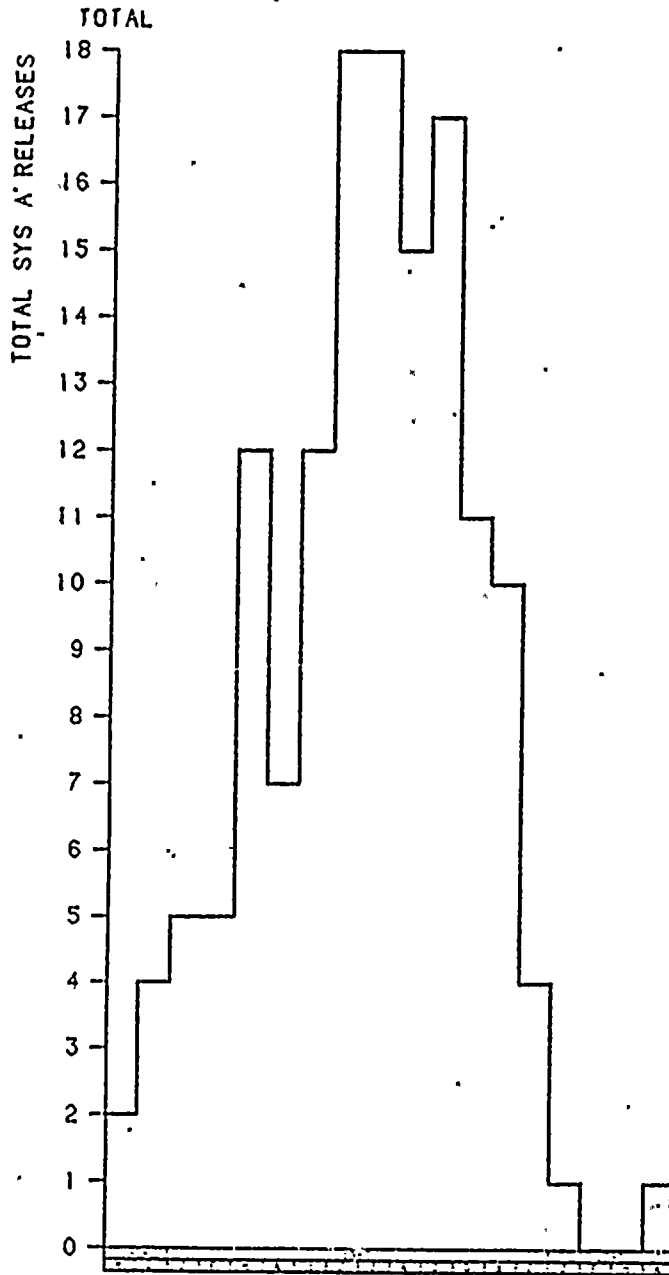
INTEGRATED
FUNCTIONAL
TESTING

RISE
TO
POWER

WARRENTY
DEMON-
STRATION

STARTUP AND TEST PROGRAM

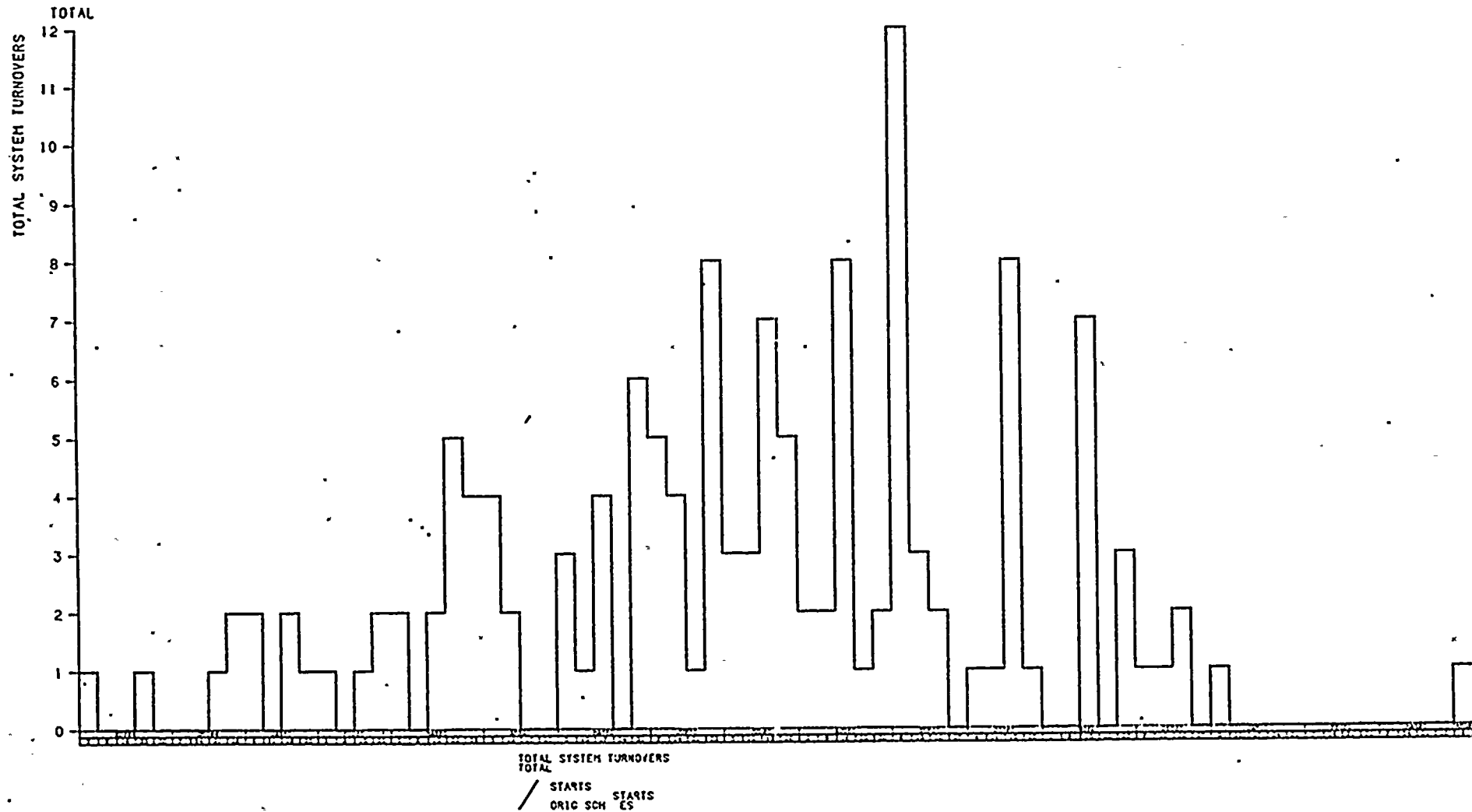
NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT UNIT 2
NUMBER OF SYSTEM TURNS PER MONTH



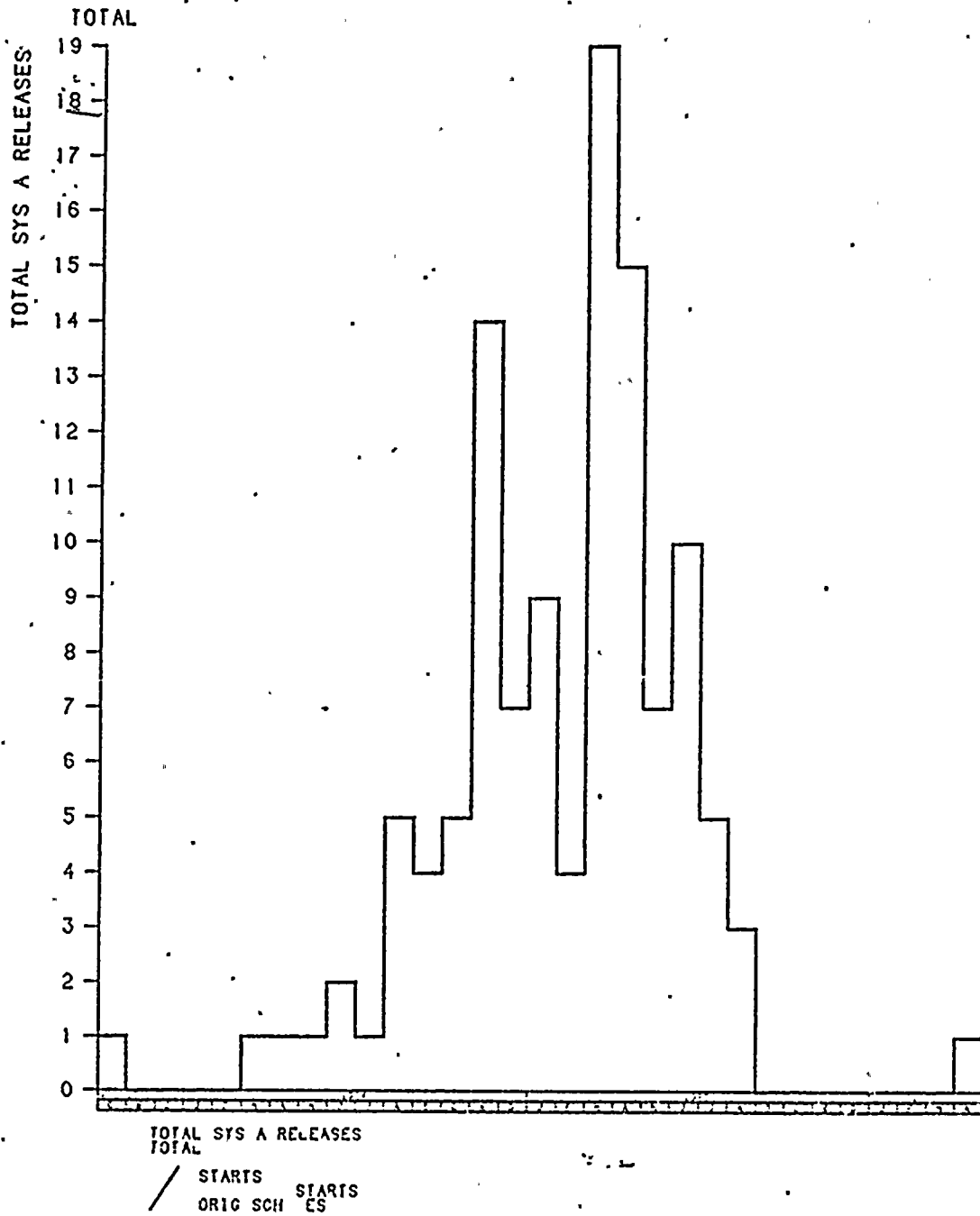
TOTAL SYS A RELEASES
TOTAL

STARTS
ORIG SCH STARTS
ES

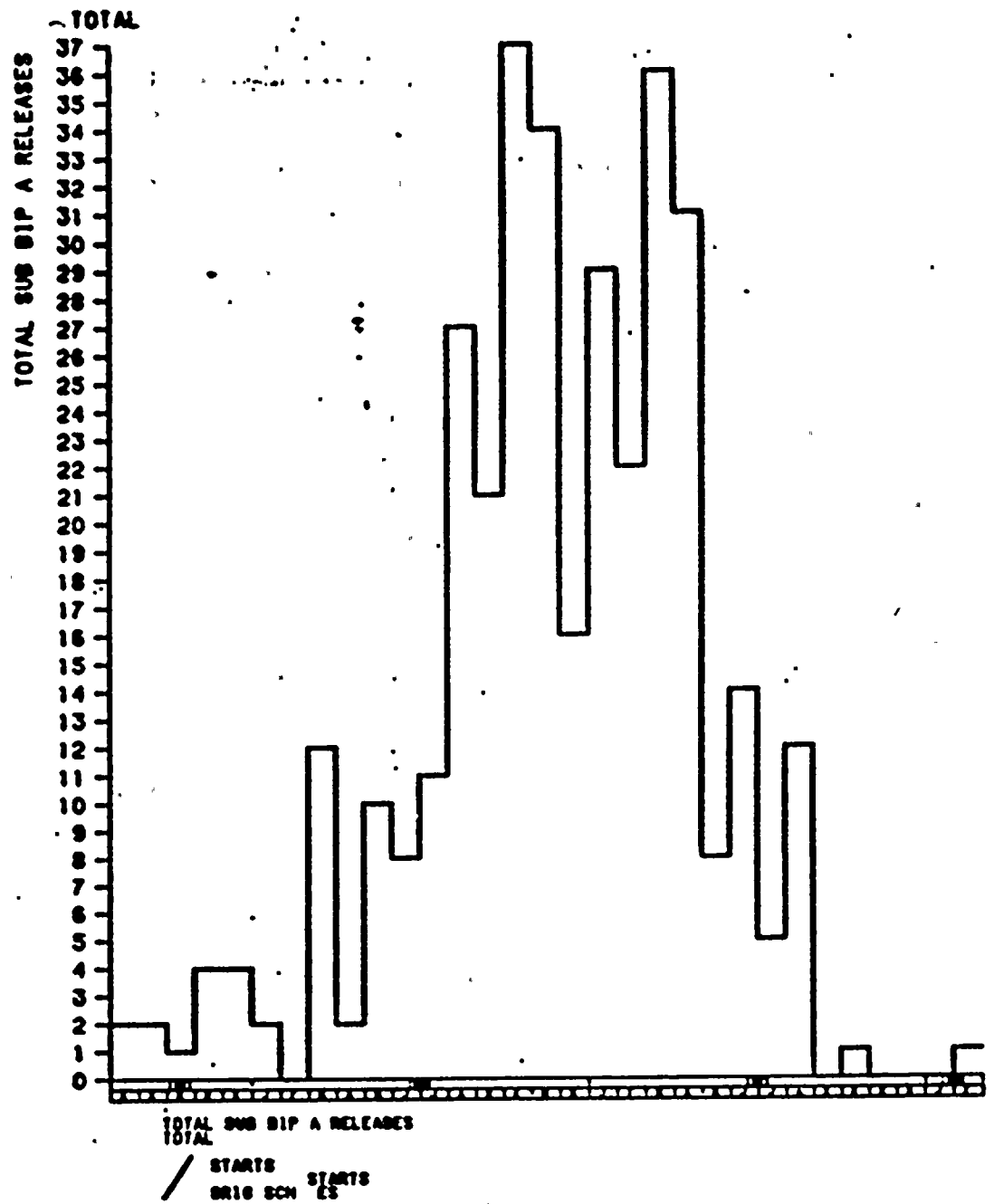
NIAGARA MOHAWK POWER CORPORATION
 NINE HILE POINT UNIT 2
 NUMBER OF SYSTEM TURNOVERS PER WEEK



NIACARA MOHAWK POWER CORPORATION
NINE MILE POINT UNIT 2
NUMBER OF SYS A RELEASES PER MONTH



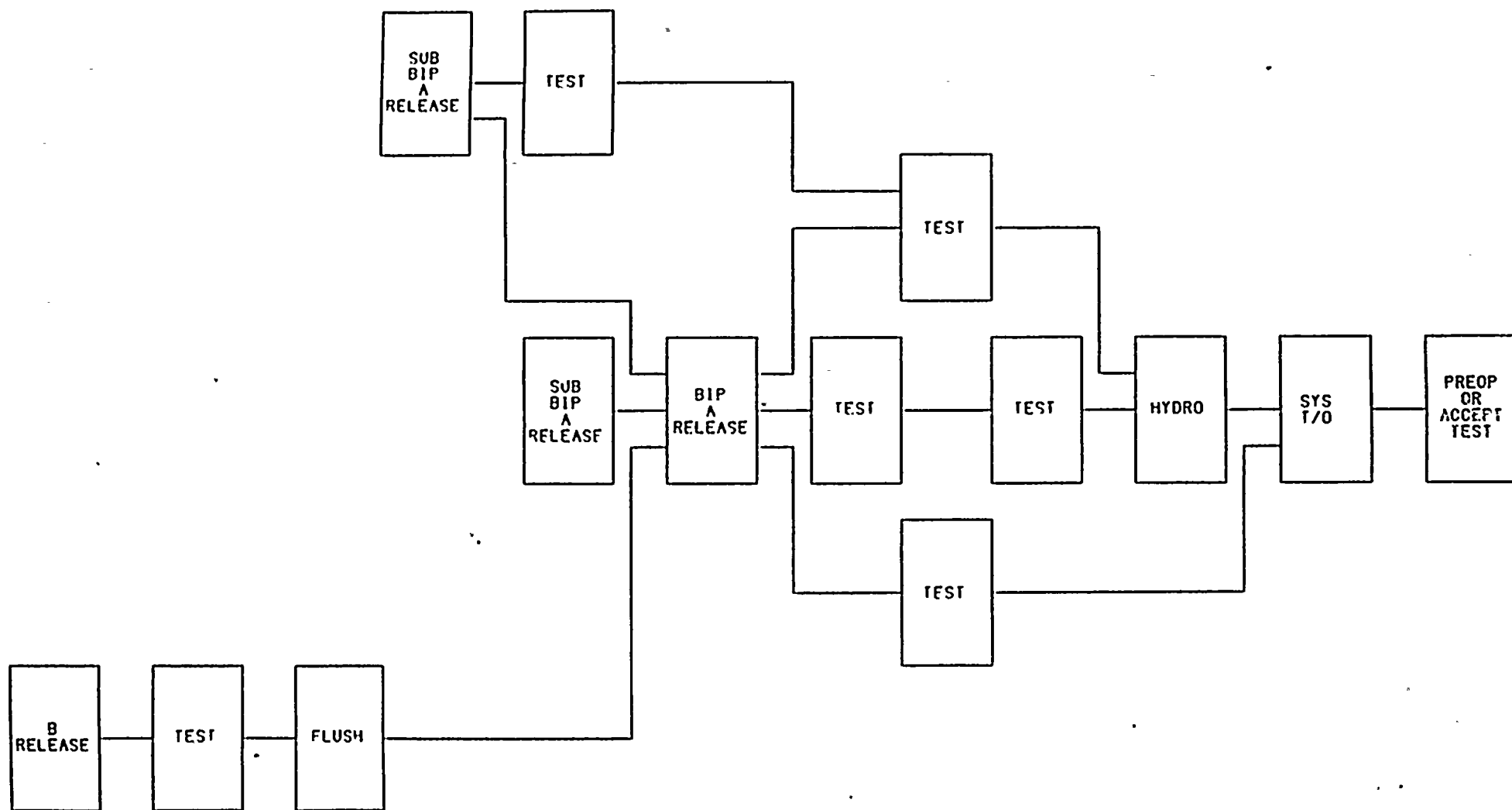
NIAGARA MOHAWK POWER CORPORATION
 NINE MILE POINT UNIT 2
 NUMBER OF SUB BIP A RELEASES PER MONTH



BASIC BIP TEST LOGIC

PRELIM TESTING

PREOP TESTING



PROJECT BICPUSH	START 5 AUG83	TESTING LOGIC FOR SYSTEM 010.000	PLANNING SCHEDULE	MODE C/F	PROJECT 12 0313
PL01 PO1	COMPLETION 12 JAN86		START	INTERVAL 1 WEEK(S)	845 START GRAPHICS
RAW DATA 110CIR4	DATA RATE 3 0CIR4				7481 1 1941 1

152031 B RELEASE 10.001A	152031 B RELEASE 10.001A
133555050 SUBBIP A RELEASE 010.001	133555050 SUBBIP A RELEASE 010.001
20189005 HYDRO MAKEUP WTR STOR & TRANSFER 010.001 7/05/84 D-4	20189005 HYDRO MAKEUP WTR STOR & TRANSFER 010.001 7/05/84 D-4
152013 FLUSH A 10.001A 7/12/84 D-30	152013 FLUSH A 10.001A 7/12/84 D-30
152008 START CCV 010.001A 7/24/84 D-7	152008 START CCV 010.001A 7/24/84 D-7
152008 MEMBER 010.001A 7/25/84 D-8	152008 MEMBER 010.001A 7/25/84 D-8
152010 UNCOUPLED RUN 10.001A 7/25/84 D-1	152010 UNCOUPLED RUN 10.001A 7/25/84 D-1
152009 ALLOW 10.001A 7/27/84 D-4	152009 ALLOW 10.001A 7/27/84 D-4
152007 COMPLETE CCV 010.001A 8/15/84 D-35	152007 COMPLETE CCV 010.001A 8/15/84 D-35
133555051 SUBBIP A RELEASE 010.002	133555051 SUBBIP A RELEASE 010.002
134444150 A RELEASE 010.000	134444150 A RELEASE 010.000
20938003 MECH ELEC C/O 010.001.2 11/12/84 D-14	20938003 MECH ELEC C/O 010.001.2 11/12/84 D-14
20938005 CAL INSTR 010.001..002 11/12/84 D-14	20938005 CAL INSTR 010.001..002 11/12/84 D-14
134444050 SYSTEM TUNNOVER FOR PO1/A.E. 010.	134444050 SYSTEM TUNNOVER FOR PO1/A.E. 010.
20950001 PO1- MAKEUP WTR STORAGE & TRANSFER 010.000 11/15/85 D-20	20950001 PO1- MAKEUP WTR STORAGE & TRANSFER 010.000 11/15/85 D-20

RUN DATE 10OCT84 1504HRS

NETWORK ANALYSIS

PROJECT START 8/05/

PROJECT BIGPUSH INTEGRATED FLUSH

CURRENT COMPL. 6/12/

MODE=C/F SORT NODES

DATA DATE 10/03/84PAGE

ES= 3/04/85

EF= 3/17/85 TF= 2

LS= 9/21/85

DUR= 14)

LF=10/04/85

***	PRECEDING ACTIVITIES	DIR	FLOAT	F.FLOAT	REM	DUR	PC	COMP	LAG	CAL	***
1002	STROKE & SET AOV5	01.001A	57	57	21		0				
1007	COMP CCVS 01.001A		27	27	11		0				
1012	ELEC CHECK MOV5	01.001A	67	0	11		0				
1013	STROKE MOV5	01.001A	67	67	10		0				
1016	FLUSH XXX	04.002D	78	0	7		0				
1116	FLUSH XXX	04.002E	82	4	10		0				
2716	FLUSH XXX	11.001T	25	25	4		0				
2816	FLUSH XXX	11.001V	21	21	6		0				
4016	FLUSH XXX	14.001E	87	10	15		0				
4216	FLUSH XXX	19.001F	36	36	7		0				
4816	FLUSH XXX	19.002H	12	12	9		0				
5116	FLUSH XXX	30.001B	25	25	3		0				
5216	INTEGRATED	31.001L	19	19	3		0				
5416	INTEGRATED FLUSH	32.001C	8	8	14		0				
5516	FLUSH	32.001D	40	40	5		0				
5616	FLUSH XXX	33.001C	31	31	2		0				
5716	FLUSH	33.001D	22	22	14		0				
5816	FLUSH XXX	35.001F	8	8	14		0				
5916	FLUSH	36.001A	38	38	12		0				
6016	INTEGRATED FLUSH	36.001C	12	12	3		0				
6116	FLUSH	37.001D	8	8	14		0				
23015	FLUSH	06.002G	0	0	4		0				
29015	FLUSH	10.A01C	21	21	11		0				
44015	FLUSH	13.001M	42	42	5		0				
51015	FLUSH	19.002G	5	5	9		0				
57015	FLUSH INIT OP RECIRC LOOP B	29.001D	3	3	7		0				
67015	FLUSH	31.001G	10	0	6		0				
68015	FLUSH	31.001H	4	4	6		0				
69015	FLUSH	31.001I	24	24	3		0				
78015	FLUSH	35.001C	26	26	4		0				
79015	FLUSH	35.001D	26	26	4		0				
80015	FLUSH	35.001E	8	8	14		0				
81015	FLUSH	36.001B	17	17	12		0				
84015	FLUSH	37.001C	21	21	5		0				
89015	FLUSH	38.001F	13	13	2		0				
91021	B RELEASE 01.001B		8	8	0		0				
98588019	FINAL INST OF INNER REFUELING BELLOWS 081.001		123	123	28		0				
118730001	CLEAN & INSTALL FUEL POOL RACKS 038.000		0	-88	63		0				
134444005	PRELIM SPRAY PATTERN TEST (SPECIAL) 033.000		156	144	2		0		FF	0	
134444005	PRELIM SPRAY PATTERN TEST (SPECIAL) 033.000		144	144	2		0		SS	0	

*** SUCCEEDING ACTIVITIES

ES LAG CAL ***

59962001

PRELIM INSTALL HD, RPV HYDRO (SPECIAL) 001.000

3/18/85

118731002

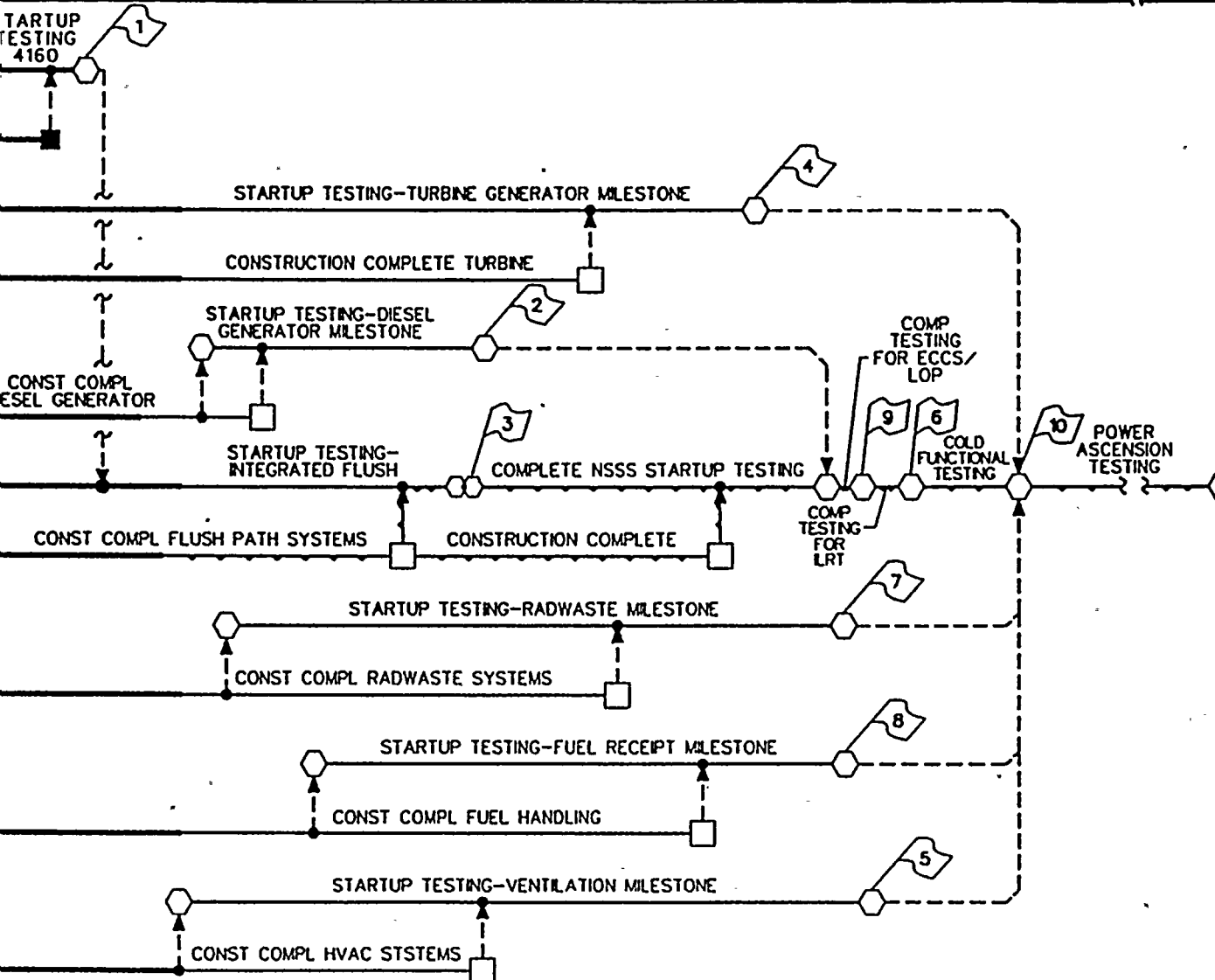
DRAIN & CLEANUP FUEL POOL 038.000

3/18/85

TOOLS AVAILABLE AT NMP - 2




NOT AVAILABLE AT WNP - 2

- ° STARTUP SCHEDULE ON PROJECT 2
 - ° PROVIDES DETAILED SCHEDULING WITH RAPID TURNAROUND
 - ° ALLOWS INSTANTANEOUS ANALYSIS OF IMPACTS OF SCHEDULE SLIPS AND QUICK IMPLEMENTATION OF WORKAROUNDS AND RECOVERIES
- ° PLANT OPERATIONS
 - ° OPERATORS HAVE DEPTH OF EXPERIENCE ON BWR's (NMP-1 and FITZPATRICK)
 - ° NINE SHIFTS - PROVIDES EXTRA EXPERIENCED RESOURCES FOR PLANT TESTING
 - ° MAINTENANCE - SKILLED/EXPERIENCED MAINTENANCE PERSONNEL - TRAINED ON NIAGARA MOHAWK PROCEDURES / METHODS
- ° STARTUP & TEST
 - ° PROGRAM RELATIVELY THE SAME AS WNP - 2
 - ° GREATER MANPOWER RESOURCES
 - ° OVERALL MORE EXPERIENCED STARTUP PERSONNEL



<u>MILESTONE</u>	<u>SCHEDULED COMPLETION</u>
1) 4160 V ENERGIZATION	21 AUG 84
2) DIESEL GENERATION	06 APR 85
3) INTEGRATED FLUSH/ RPV HYDRO	11 MAR 85 01 APR 85
4) TURBINE GENERATION VACUUM PULL	12 SEP 85
5) VENTILATION	14 NOV 85
6) INTEGRATED LEAK RATE TEST	06 DEC 85
7) RADWASTE SYSTEM	20 OCT 85
8) FUEL RECEIPT AND TRANSFER	07 NOV 85
9) LOSS OF POWER/ ECCS	08 NOV 85
10) FUEL LOAD	24 FEB 86
11) FUEL LOAD TO C.O.	01 OCT 86

LEGEND

-  PRELIMINARY TESTING
 CONSTRUCTION
 CRITICAL PATH

STATUS AS OF **OCT 15, 1984**

MILESTONE SUMMARY SCHEDULE

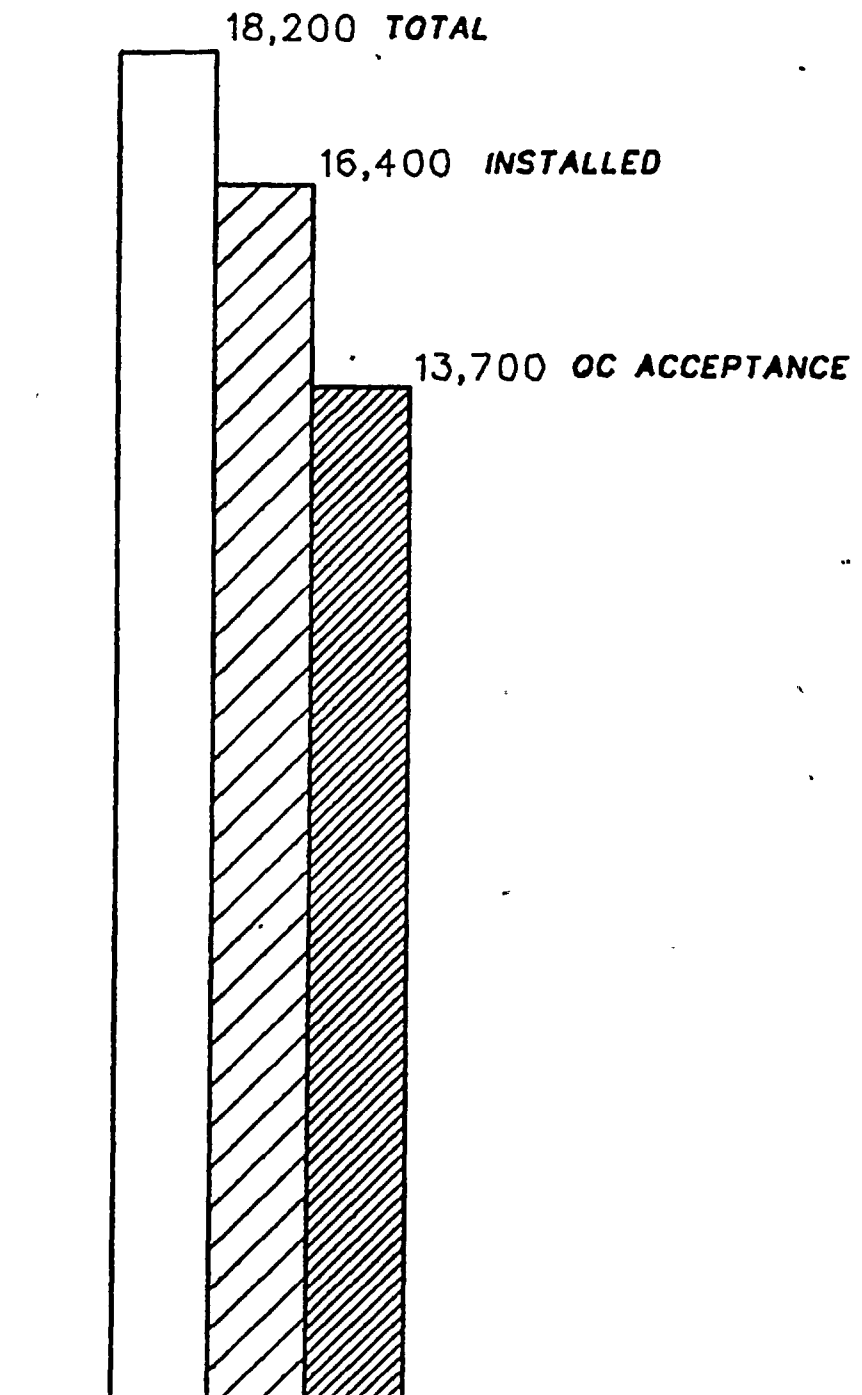
NIAGARA MOHAWK POWER CORPORATION
STONE & WEBSTER ENGINEERING CORP.
J.O. 12187

REVISIONS

2	1	ORIGINAL
		15 OCT 84

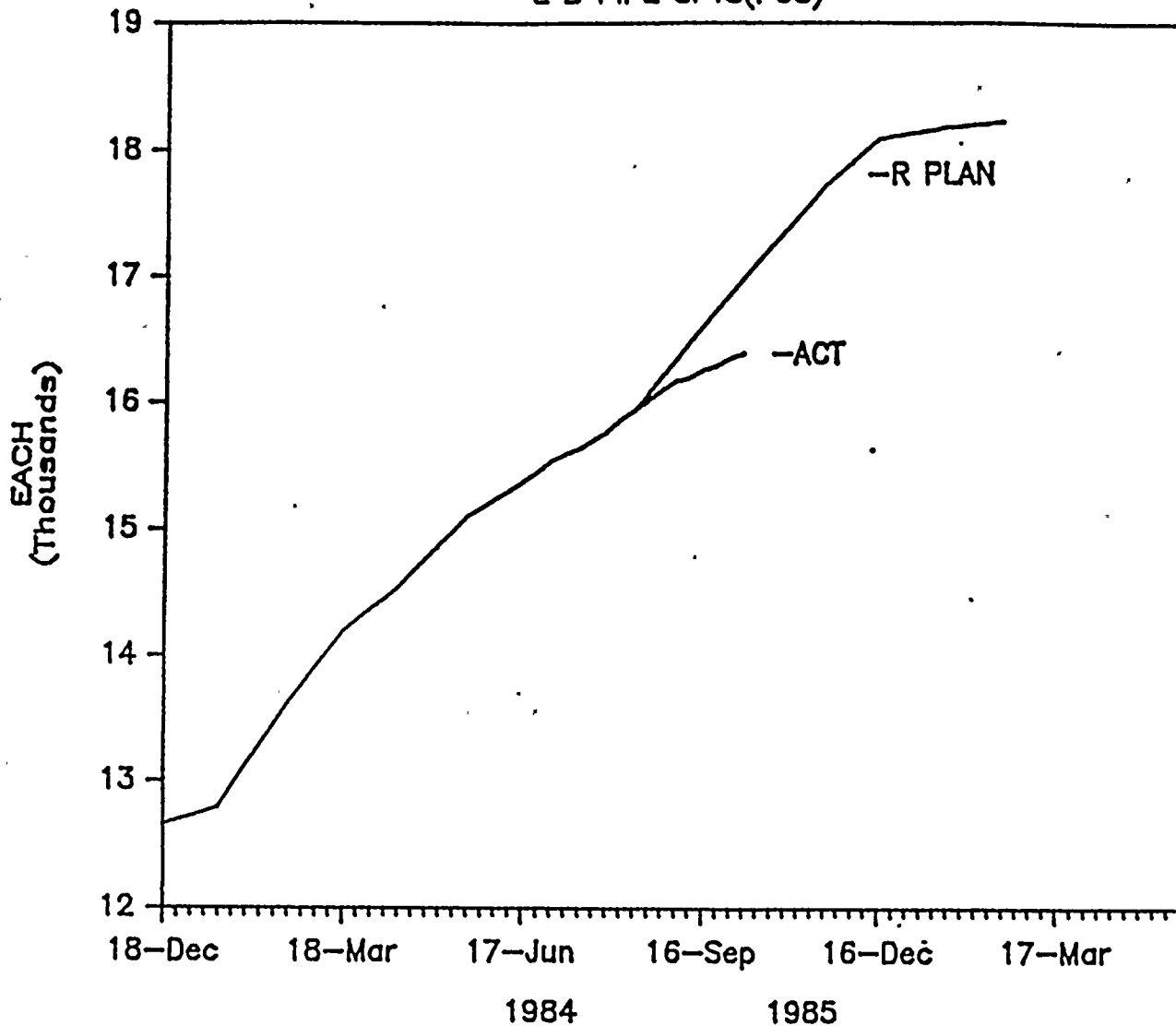


LARGE BORE HANGER STATUS



PLAN VS ACT

L B PIPE SPTS(POS)



Quantities are reported as installed upon completion of construction installation. Final QC inspection and signoff is considered 100% complete and is also tracked. Quantities are verified by comparing actual reported quantities vs. iso-metric drawing takeoffs. L.B. Pipe Supports installed by the NSSS erector, Turbine erector, Fire Protection erector and Mechanical erector are not included. The estimated percent complete is 90%.

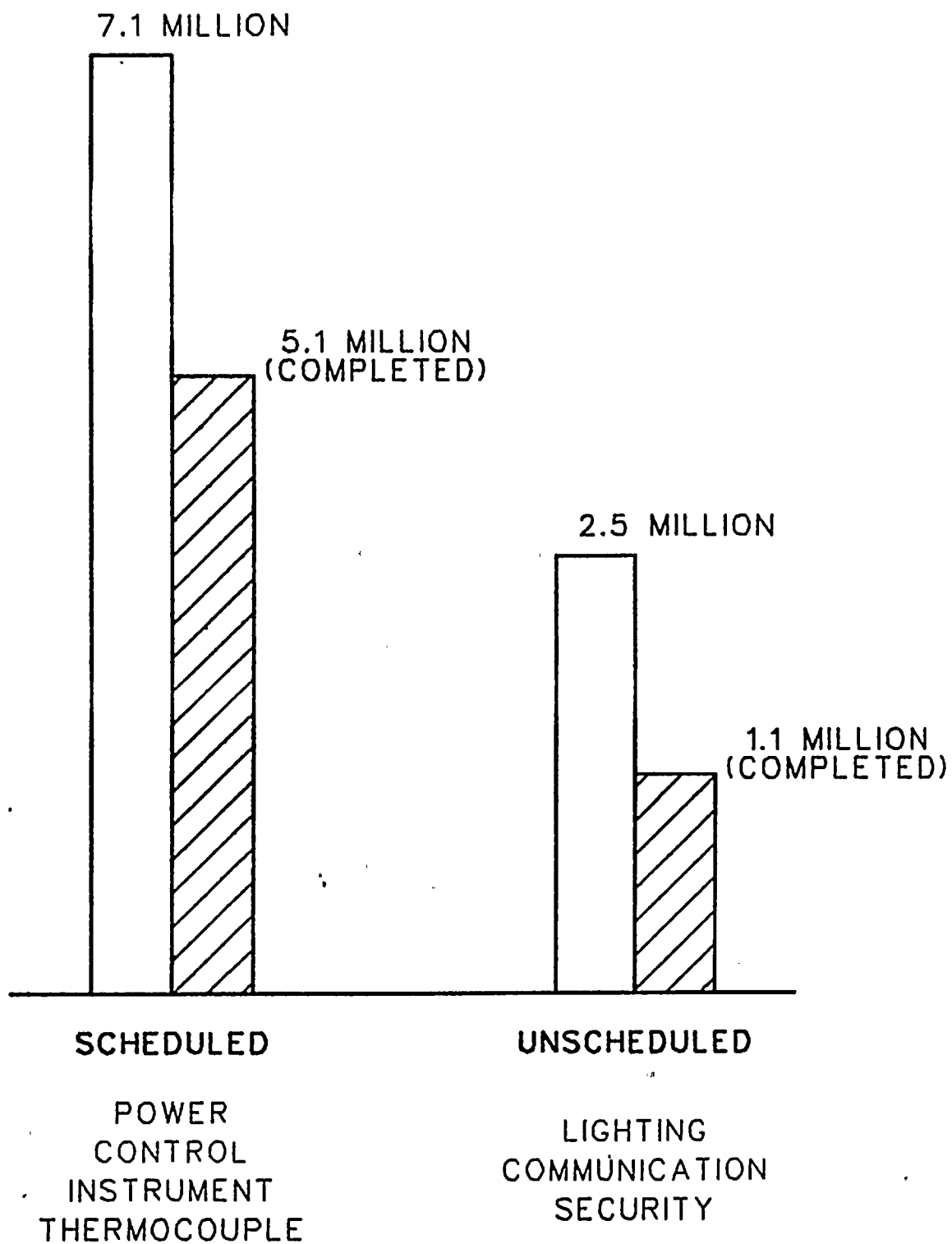
STEPS TO INCREASE HANGER INSTALLATION

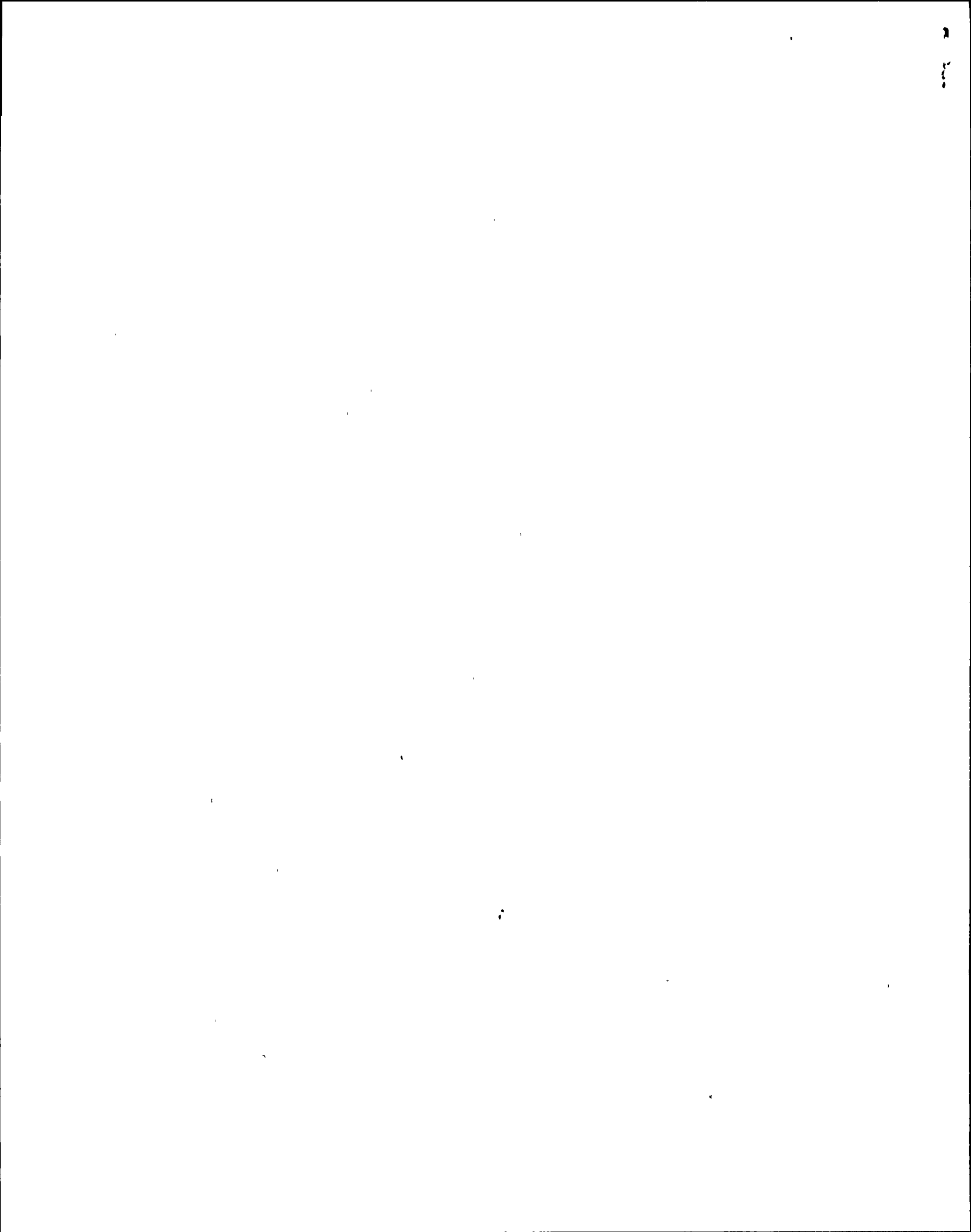
- HANGER ACTION COMMITTEE UNDER DIRECTION OF SWEC PROJECT DIRECTOR
- PLAN OF DAY MEETING TO RESOLVE HARDSPOTS
- ADDITIONAL SWEC ENGINEERING TO REDUCE BACKLOGS
- ITTG ENGINEERING ORGANIZATION AUGMENTED BY SWEC ENGINEERING
- CONSTRUCTIBILITY REVIEWS PRIOR TO HANGER INSTALLATION
- 4 - WEEK LOOKAHEAD SCHEDULE
- LEVELIZE OVERALL HANGER SCHEDULE
- DAILY N&D SIGN-OUT SESSION: SWEC AND ITTG
- HANGER RESTRAINT LIST

STEPS TO INCREASE HANGER QC ACCEPTANCE

- SPECIAL ASSESSMENT OF QC ACCEPTANCE RATES FOR ITTG HANGERS
- ITTG QA ORGANIZATION AUGMENTED BY SWEC QA
- ITTG PRE-INSPECTION OF HANGERS
- WEEKLY TRAINING PROGRAM FOR ITTG CONSTRUCTION SUPERVISION
- ITTG QUALITY ACCOUNTABILITY MEETINGS
- PLAN OF DAY MEETINGS UNDER DIRECTION OF SWEC PROJECT DIRECTOR

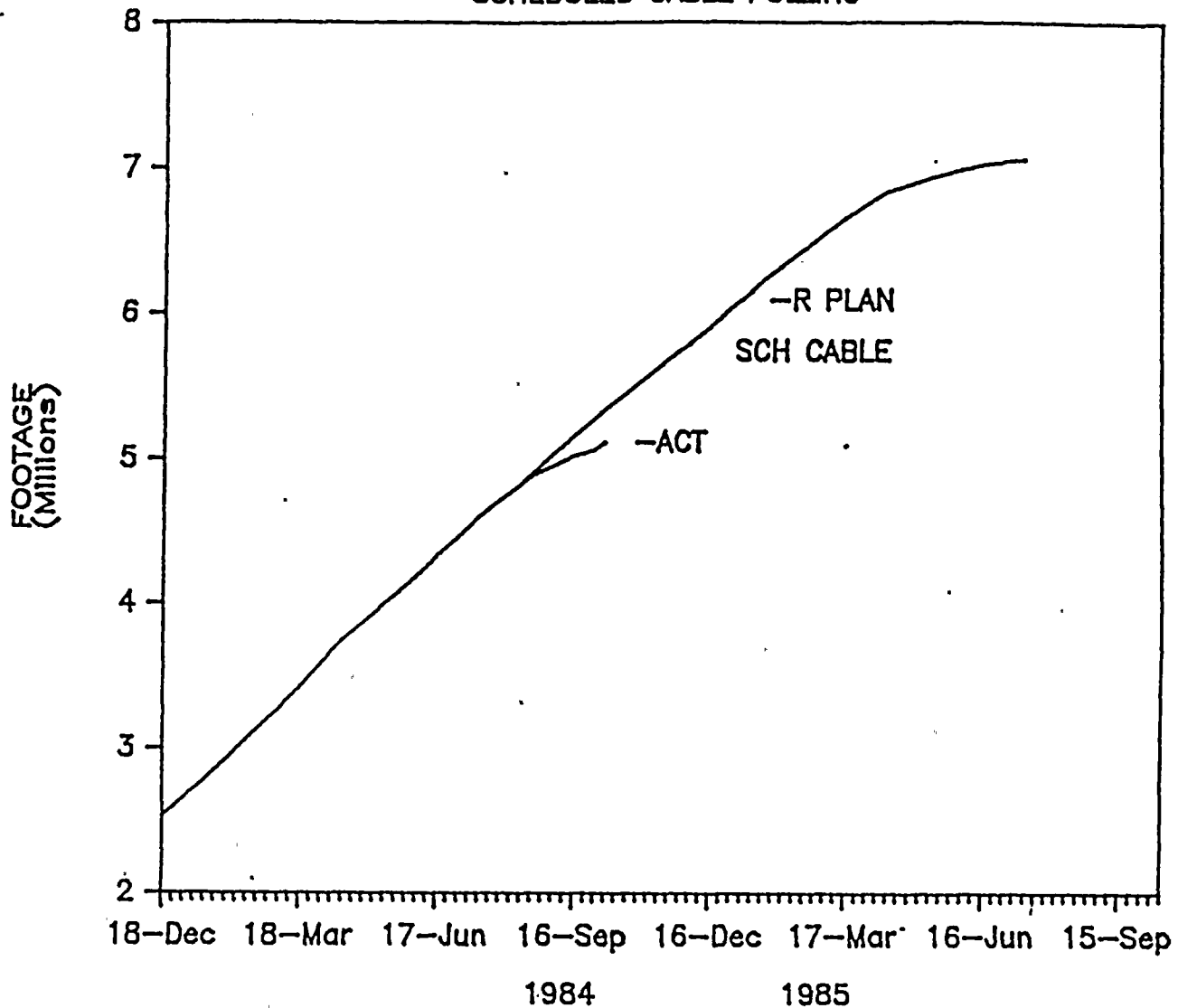
CABLE PULLING STATUS





PLAN VS ACT

SCHEDULED CABLE PULLING



Included on this graph are power, control, instrument and signal cables which are specifically identified in the engineers cable tracking system. Quantities are reported as installed to CMS when initial installation is complete. Quantities are verified through the use of cable reel cards. Final verification is performed through the use of the engineers cable tracking system. The estimated percent complete is 72 %.

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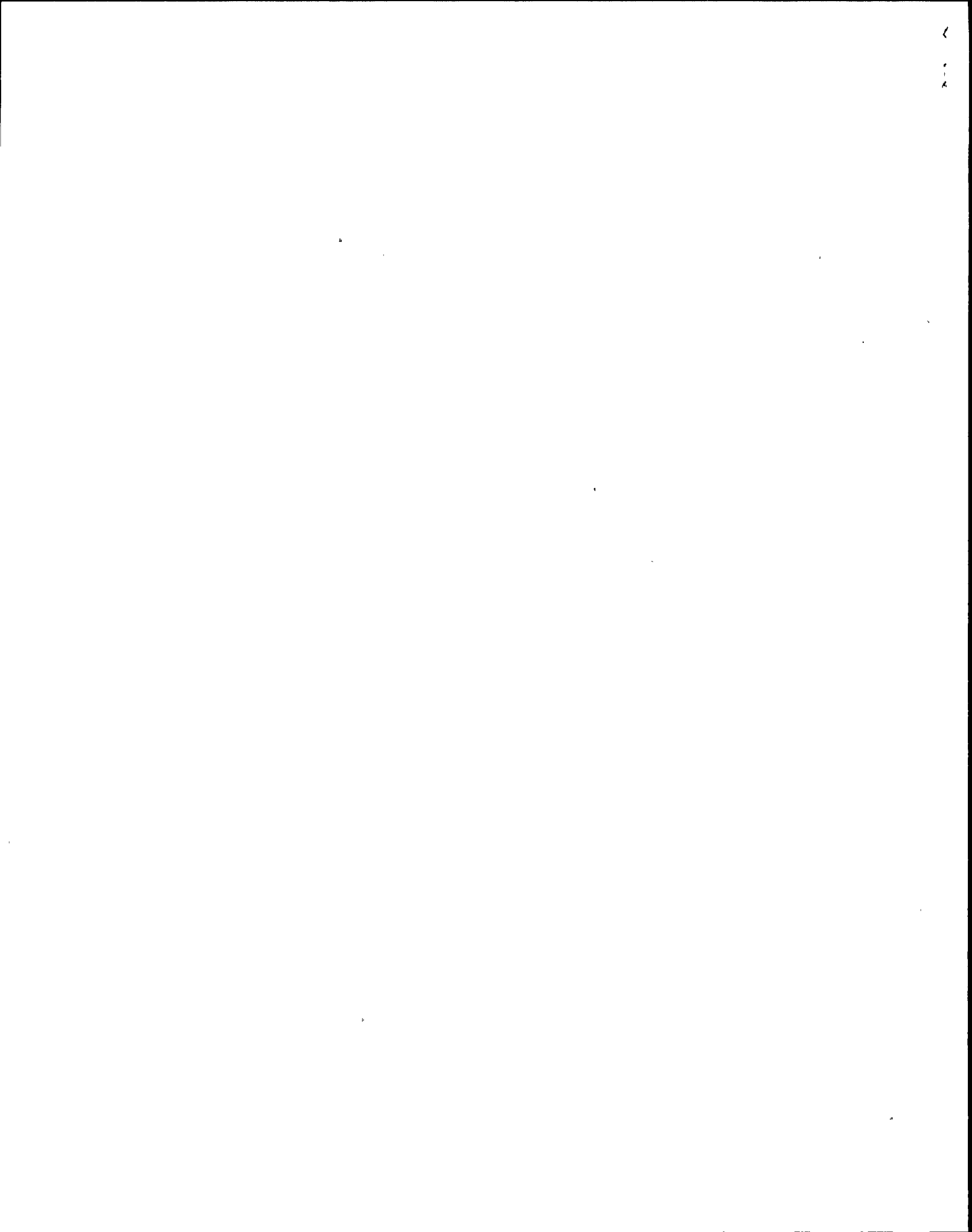
11

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STEPS TO INCREASE CABLE PULLING

- ESTABLISHED PROJECT TEAM TO INCREASE CABLE BACKLOG
- DAILY MEETINGS TO ASSIGN PRIORITIES & RESOLVE HARDSPOTS
- COMPUTERIZED LIST OF CABLE PULL PACKAGES
- LIST OF ALL RESTRAINTS TO RACEWAY COMPLETION:
 - ENGINEERING
 - CONDUIT INSTALLATION
 - QC INSPECTIONS
- ENGINEERING WALKDOWNS TO CLEAR RESTRAINTS



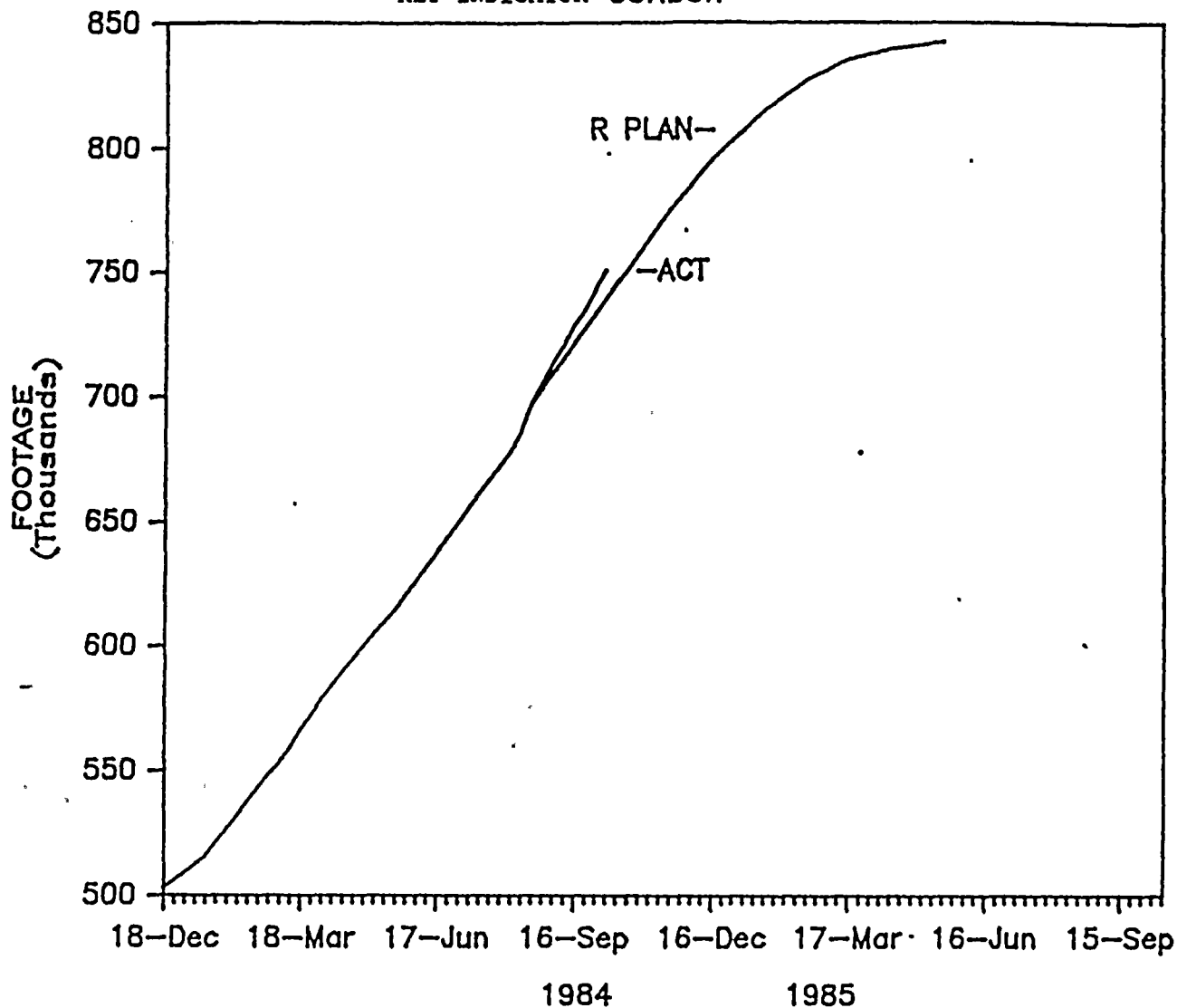
CABLE PULLING SUMMARY

HIGH CONFIDENCE THAT CABLE PULLING
SCHEDULE WILL BE ACHIEVED

- PRESENT CABLE PULL BACKLOG 113,000 FT.
- GOOD UNIT RATES FOR CONDUIT
AND CABLE INSTALLATION
- INSPECTION QUALITY INDICATORS FOR CONDUIT
AND CABLE ARE GOOD
- CONDUIT INSTALLATION AHEAD OF SCHEDULE

PLAN VS ACT

KEY INDICATOR CONDUIT



The conduit included on this graph are segregated from total conduit in that it represents more than 90% of the total project conduit estimated manhours. Types of conduit included are power, control, instrument, lighting, security and some communications (RSC). Quantities are reported as installed to CMS when securely in place and verified through physical audits and through the engineers conduit identification system. The estimated percent complete is 89%.

CONSTRUCTION APPRAISAL TEAM (CAT) INSPECTION

SCOPE

- . ELECTRICAL AND INSTRUMENTATION INSTRUCTION
- . MECHANICAL CONSTRUCTION
- . WELDING AND NONDESTRUCTIVE EXAMINATION
- . CIVIL AND STRUCTURAL CONSTRUCTION
- . MATERIAL TRACEABILITY, STORAGE AND MAINTENANCE
- . QC INSPECTOR EFFECTIVENESS
- . QUALITY ASSURANCE

RESULTS (CAT REPORT)

- . SIGNIFICANT PROBLEMS

- . RADIOGRAPHY
- . DOCUMENT CONTROL/DESIGN CHANGE CONTROL
- . SITE AUDITING/CORRECTIVE ACTION SYSTEMS/PROCUREMENT QA
- . ELECTRICAL/MECHANICAL QA/QC PROGRAMS
- . CONCRETE EXPANSION ANCHORS
- . PGCC

- . POTENTIAL ENFORCEMENT ACTIONS-8 APP. B CRITERIA
- . INDIVIDUAL DEFICIENCIES

ACTIONS TAKEN BASED ON CAT REPORT

- . 66 SPECIFIC ACTION PLANS DEVELOPED
BASED ON EXIT MEETING/CAT REPORT
- . 42 GENERIC ACTION PLANS DEVELOPED
BASED ON MANAGEMENT WORKSHOPS
- . CAT PROGRAM MANAGEMENT ORGANIZATION ESTABLISHED
TO MANAGE ACTION PLAN RESOLUTION
- . CURRENT STATUS - ALL ACTION PLANS COMPLETE

CAT ENFORCEMENT ACTION

SCOPE

- . NOTICE OF VIOLATION/ CIVIL PENALTY
 - . 8 APPENDIX B CRITERIA VIOLATIONS
 - . \$100,000 CIVIL PENALTY
- . ORDER
 - . INDEPENDENT REVIEW OF CAT, SALP AND LICENSEE - IDENTIFIED DEFICIENCIES
 - . QUALITY CONSTRUCTION PERFORMANCE INDICATORS
 - . INDEPENDENT MANAGEMENT APPRAISAL

ACTIONS TAKEN

- . NOTICE OF VIOLATION/CIVIL PENALTY

- . RESPONSE LETTER 5/4/84

- . CORRECTIVE/PREVENTIVE ACTIONS

- . COMMITMENTS

- . STATUS LETTER 7/27/84

- . UPDATE

- . NEW COMMITMENTS

- . ADDITIONAL INFORMATION LETTER 7/31/84

- . CLARIFICATIONS BASED ON MEETING WITH HQ/REGION

- . CURRENT STATUS

- . ALL COMMITMENTS WITH DATES WERE MET

- . SOME FOLLOW-UP COMMITMENTS REQUIRE COMPLETION
(LONG TERM)

ACTIONS TO BE TAKEN

NOTICE OF VIOLATION

- . PREPARE DOCUMENTATION PACKAGES TO SUPPORT CLOSURE OF
120 ISSUES BEING TRACKED BY NRC (INCLUDES VIOLATIONS
AND OTHER DEFICIENCIES)
- . 97 OF 120 DOCUMENTATION PACKAGES IN PRELIMINARY FORM
- . COMPLETE FOLLOW UP COMMITMENTS
- . 16 FOLLOW UP COMMITMENTS TO BE COMPLETED
- . SUBMIT TO NRC RESIDENT INSPECTOR FOR REVIEW AND CLOSURE

ACTIONS TAKEN:

. ORDER

. INDEPENDENT REVIEW

. MAC CONDUTING

. STATUS

	TOTAL	REVIEWED TO DATE	SAT*	SAT W/* REC	UNSAT
PHASE I	66/59	58	17	15	9
PHASE II VIOL.	28	25*	19	5	4
CDR	61	13*	12	1	0
PHASE III	216/200	182	125	40	3
PHASE IV	2500±	2131			46

*PUBLISHED IN INTERIM REPORTS, ALL OTHERS ARE CURRENT.

- . QPMP
 - . PROCEDURE
 - . IMPLEMENTED
 - . STATUS - ONGOING
- . INDEPENDENT MANAGEMENT APPRAISAL
 - . 4 BIDS RECEIVED

ACTIONS TO BE TAKEN

- . ORDER

- . INDEPENDENT REVIEW

- . RESPOND TO RECOMMENDATIONS
- . TRACK RESOLUTION OF DEFICIENCY DOCUMENTS
ISSUED
- . INCORPORATE RESULTS IN DOCUMENTATION PACKAGES
- . FOLLOW UP AREAS WHERE SAMPLING FAILED

- . QPMP - CONTINUE TO IMPLEMENT

- . INDEPENDENT MANAGEMENT APPRAISAL -
AWARD CONTRACT AND IMPLEMENT

1

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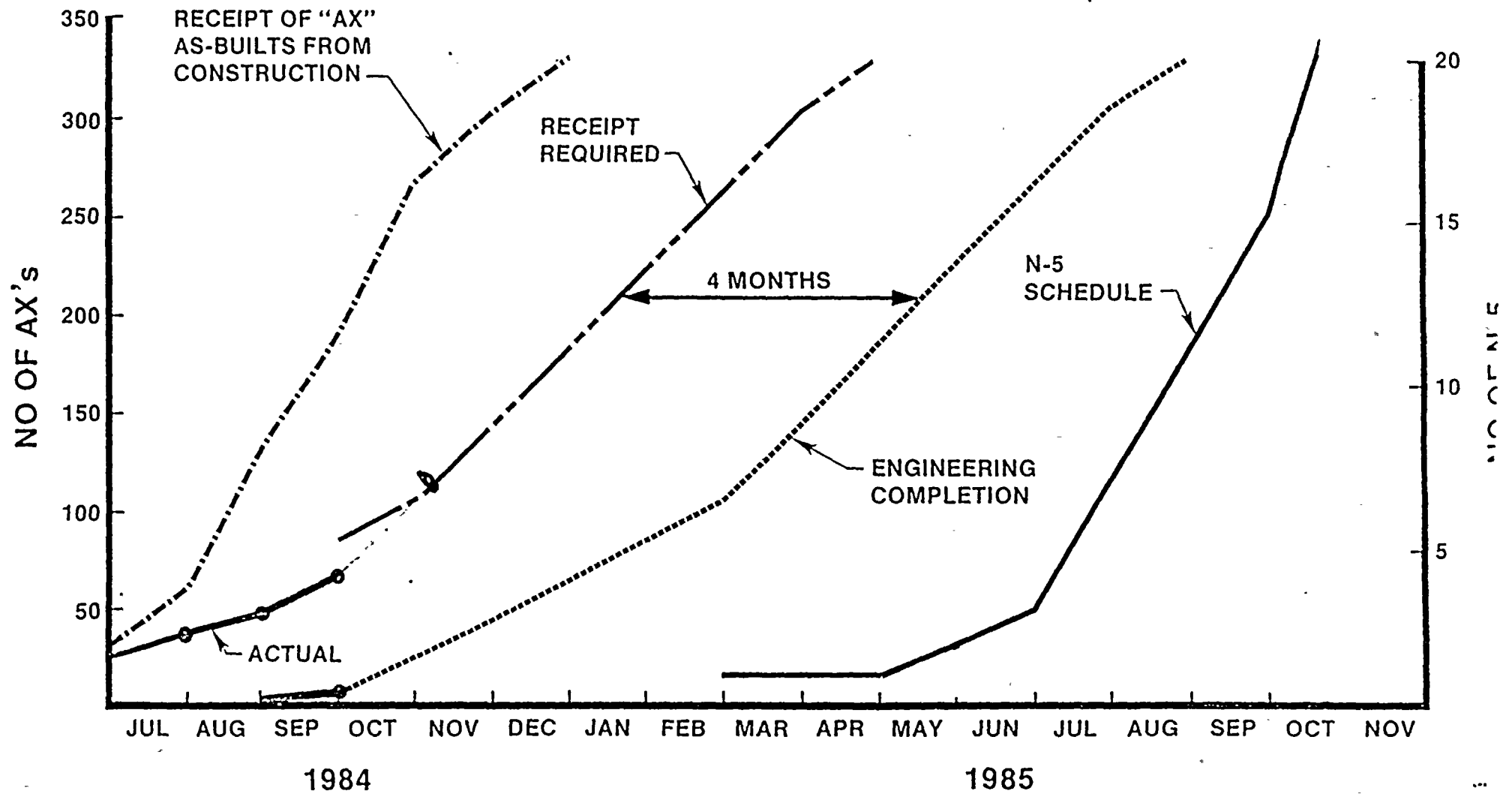
14

15

16

17

SCHEDULE



21

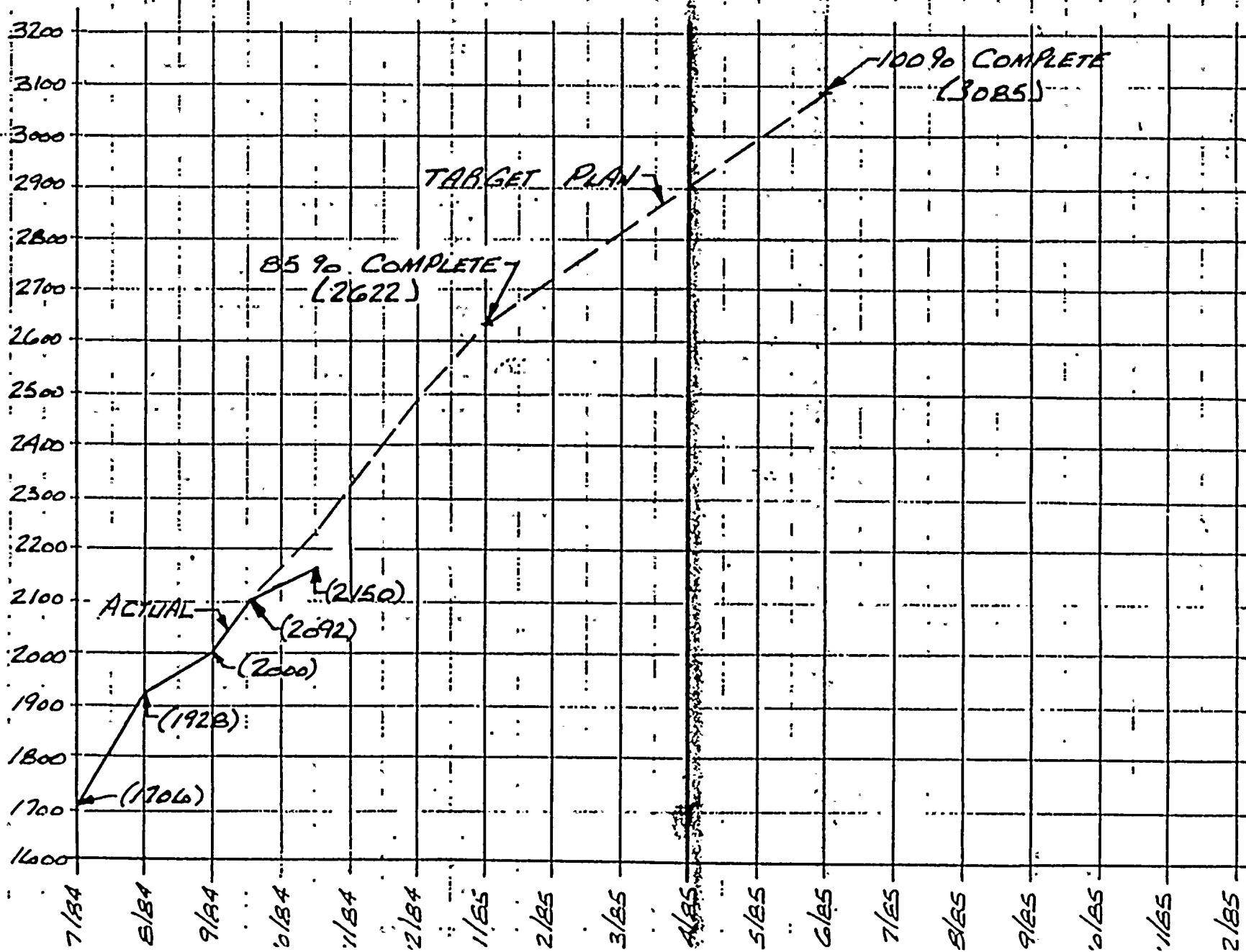
NUMBER OF COMPONENTS

SWEC
EQUIPMENT QUALIFICATION
(BOP - 1E & SEISMIC)

COMPLETION PROJECTION

TARGET PLAN
ACTUAL

NUMBER OF COMPONENTS



EQUIPMENT QUALIFICATION

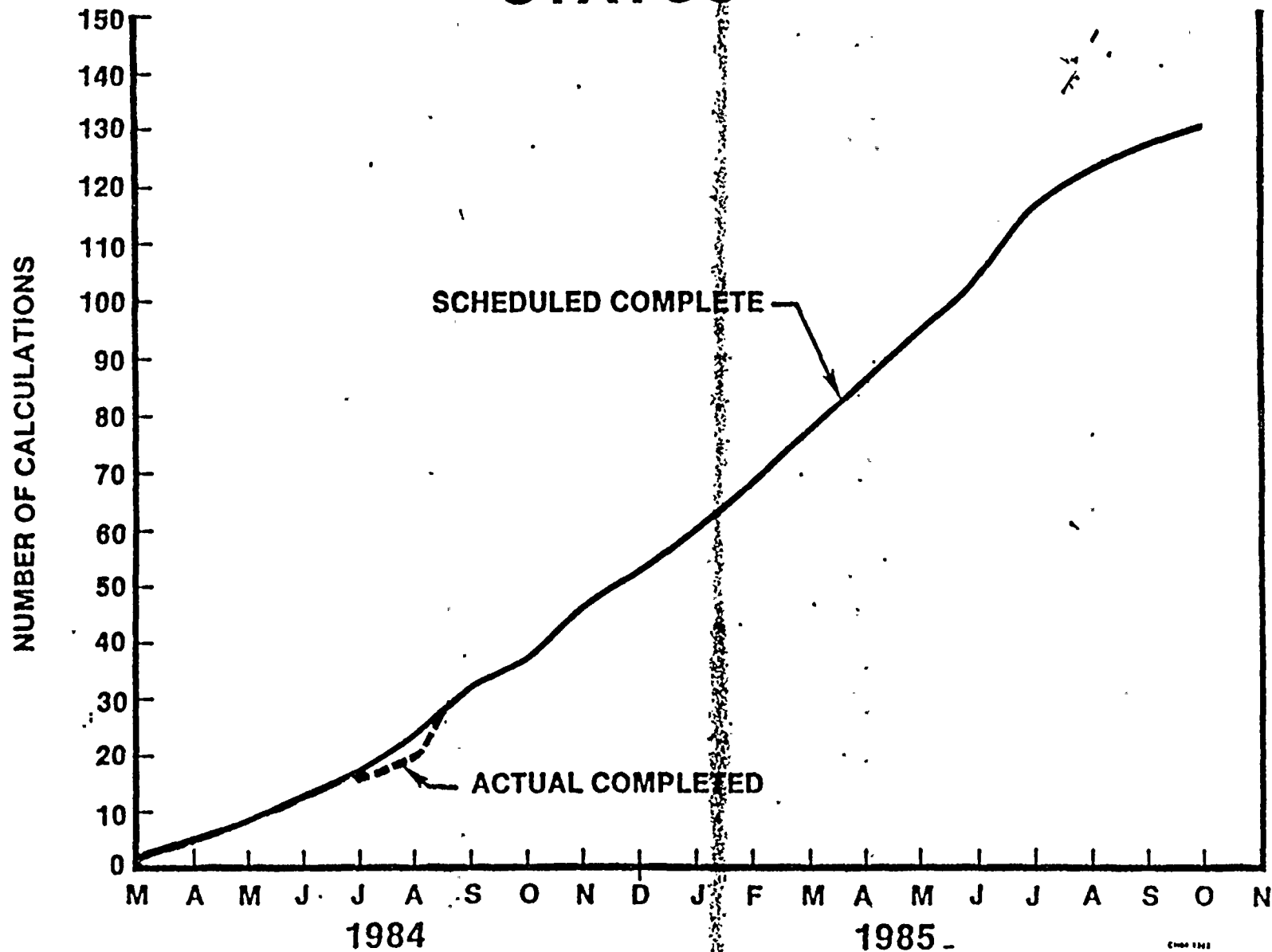
Number of Components

Status Thru 10/15/84

	<u>SWEC</u>		<u>GE</u>	
	<u>Required</u>	<u>Complete</u>	<u>Required</u>	<u>Complete</u> ¹
SEISMIC	2975	2254	348	148
ENVIRONMENTAL	2270	1665	628 ²	95
MECHANICAL	3281	2034	532	-0-

-
- Notes: 1. Reviewed and approved by SWEC
 2. Includes ATWS qualification

STRUCTURAL FINAL LOAD VERIFICATION STATUS

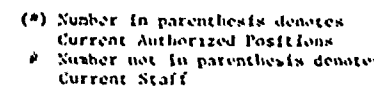


STRUCTURAL LOAD VERIFICATION

PRIMARY CONTAINMENT FLOOR FRAMING

ELEVATION	MEMBERS	PERCENTAGE HARDWARE FIXES		REMARKS
		ANTICIPATED	ACTUAL	
222'	70	20%	4%	1 BEAM, 2 CONN.
247'	180	20%		
261'	320	15%		
278'	160	10%		
288'	140	10%		
305'	110	7%		
TOTALS	980			

.



NOTE ON TITLES: UNIT 2 PEAK 75 -
ADDITIONAL TECHNICIANS SUPPLIED
BY THE ORGANIZATION CONTRACT
PERSONNEL.

11

GENERAL SUPERINTENDENT - NUCLEAR

PROJECTED AS OF 12/31/86

SECRETARY
ADMINISTRATIVE ASSISTANT
ADMINISTRATIVE ASSISTANT UNIT 11 SP. PROS.

UNIT 1 STATION SUPERINTENDENT	TECHNICAL SUPERINTENDENT	SUPERINTENDENT(1)(S) CHEMISTRY/RADIATION MGT	SITE MAINTENANCE SUPERINTENDENT(S)(1)	SUPERINTENDENT (S) SUPERINTENDENT RECORD MANAGEMENT(1) TRAINING NUC(1)(S)	UNIT 11 STATION SUPERINTENDENT
ASSOC GEN. ENGINEER(1)	SUPERINTENDENT TECHNICAL SRVCS(1)(S)	SITE SUPERVISOR ADMINISTRATIVE SRVC(1)(S)	SUPVR CHEMISTRY & RADIATION PROT(1)	UNIT SUPV RECORD MANAGEMENT(2)***	
SUPERVISOR OPERATIONS NUC(1)	SUPERVISOR(1) INST AND CONTROL(S)	ASST SUPVR ADMIN SRVCS(2)(S)	SUPV INSTR. SUPPORT (1)(S)	CLERKS(46)	SUPERVISOR OPERATIONS(1)
			TECH SPEC INSTR SUPPORT (1)	ASST SUPT (S) TRAINING NUC(1)	ASST TO SUPVR OPER(1)
	UNIT SUPV I&C (2) ***		UNIT SUPV CHIM(2)***	SUPERVISOR *** TRAINING NUC(7)	SUPVR RAD WASTE OPER(1)
ASST TO SUPVR OPER(1)	ASST UNIT SUPVR I&C(3)***		TECH SPEC CHIM (2)*	ASST SUPVR *** TRAINING NUC(19)	ASST SUPVR RAD WASTE OP(1)
SUPVR RADWASTE OPERATIONS(1)	INST & CONT(1) COORDINATOR(S)	CLERKS(59)(S)	UNIT SUPV RAD(2)***	TRAINING SPECIALIST(7)(S)	ASST SUPVR OPERATIONS(2)
			TECH SPEC RAD (1)*	SUPERVISOR SIMULATOR(1)*	STATION SHIFT SUPERVISOR(9)
ASST SUPVR RADWASTE OPERATIONS(1)	I&C TECH(84)(S) SEE NOTE ON TECHS	PLANNING COORDINATOR(1)*	TECHNICIANS (65)	SITE MECHANICAL MAINT SPT(S)	ASSISTANT STA SH SUPV(9)
			SUPV RADIOLOGICAL SUPPORT (1)(S)	MECH MAINT ENGINEER(1)(S)	OPERATORS(82)
ASST SUPVR OPERATIONS(2)	SUPVR TECHNICAL SUPPORT(1)(S)	ASST PLANNING COORDINATOR(2)*	EMERGENCY PLANNING COOR(1)(S)	ASST SUPVR MECH MAINT(6)3*3**	SUPERVISOR TESTING(1)
STATION SHIFT SUPERVISOR(8)	ASST SUPV. (S) TECH SUPPORT(2)	INSERVICE INSPECTION SUPERINTENDENT(1)*	ASST EMER PLANNING COOR(1)(S)	MAINT MECH(106)(S)	TEST COORDINATOR(1)
ASST STATION SHIFT SUPVR(10)	SENIOR TECH ASSISTANT(4)(S)	UNIT SUPV ISI (2)**	ENVIRONMENTAL PROTECTION COOR(1)(S)	JANITORS(11)(S)	TEST ENGINEERS(33)
OPERATIONS(54)	TECHNICAL ASSISTANT(3)(S)	INSERVICE INSP. SPEC.(3)(S)	ASS1. ENV. PROT COORD (1)(S)	TOOL CUSTODIAN(1)(S)	SUPERVISOR PLANNING AND SCHEDULING(1)
	JUNIOR TECH ASSISTANT(6)4*2**	SUPVR FIRE PROTECTION(1)(S)	DOSIMETRY COOR (1)(S)	UTILITY MECHANICS(11)(S)	ASST SUPV PLANNING AND SCHEDULING(1)
	ENGINEER (S) COOP STUDENT(3)	ASST SUPVR FIRE PROT(2)***	ASST DOS COORD(1)(S)		TECHNICAL ASST TESTING(3)
	SUPVR COMPUTER OPER & MAINT(1)(S)	FIREFIGHTERS 27* 27**	RESPIRATORY PROTECTION COOR(1)(S)		ASSIGNED TO STARTUP ORGANIZATION
	ASST SUPVR COMP O & M(1)(S)	Jr Gen Engr 1	RADIOLOGICAL ENGINEER(1)(S)		
	SR TECH ASST (3)(S)		-ALARA COORD(1)(S)		
	TECH ASST COMP OPER(1)(S)		TECH SPEC ALARA(2)(S)		
	TECH ASST COMP MAINT(1)(S)				
	TECHNICIANS(10)(S)				
SUPERVISOR RX ANALYST(1)					
	UNIT SUPV REACTOR ANALYST (2) ***				
	TECHNICIANS(10)(S)				
	JR. GEN. ENGR. (2)(S)				

NOTE ON TECHS - UNIT 2 PEAK 75 -
ADDITIONAL TECHNICIANS SUPPLEMENTED
BY TEMPORARY AND/OR CONTRACT
PERSONNEL

S - Site
* - EMP Unit 1
** - EMP Unit 2
*** - 1 at Unit 1
2 at Unit 2

SCHEDULED LICENSE
CLASSES

QUESTION 19

Class I January 1985 - June 1985

12 RO Candidates
12 SRO Candidates

13 Currently Licensed RO
7 Currently Licensed SRO

Class II June 1985 - November 1985

12 RO Candidates
12 SRO Candidates

10 Currently Licensed RO
7 Currently Licensed SRO

Class III November 1985 - April 1986

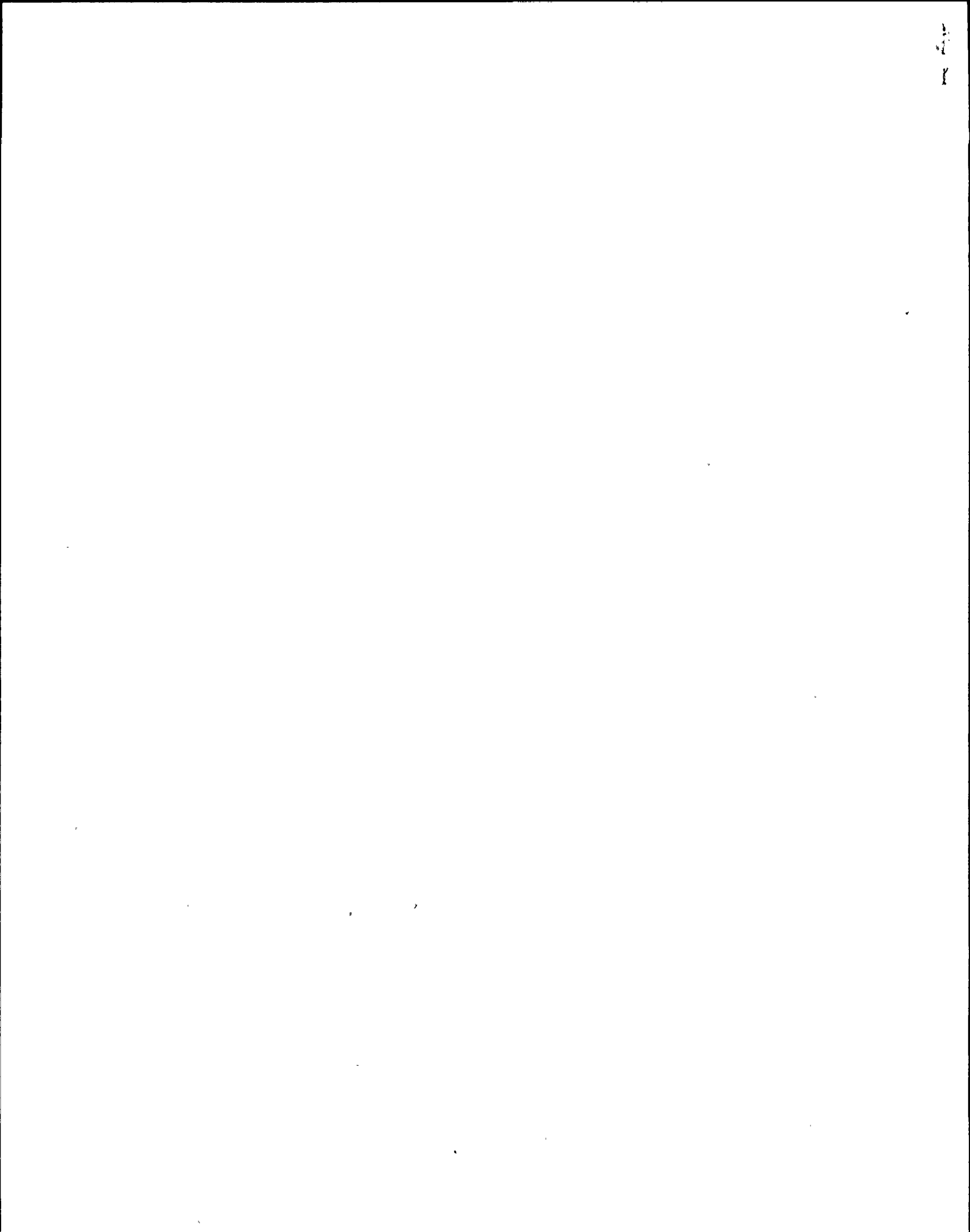
3 RO Candidates
9 SRO Candidates

4 Currently Licensed RO
4 Currently Licensed SRO

PROCEDURE STATUS

QUESTION 18

Procedure Type	No. Required	No. Not Started	No. In Prep/Approv.	No. Approved
Power Ascension Test Proc.	149	139	10	0
Chem/Chemistry Proc.	82	10	59	13
Technical Dept. Proc.	99	65	34	0
Maintenance Proc.	290	185	105	0
Surveillance Proc.	1180	1178	2	0
Site Administrative	80	0	60	20
Document Control	26	26	0	0
Operating Procedure	125	14	111	0
Fire Protection	58	54	4	0
Emergency Planning	14	14	0	0
Rad. Prot. Proc.	71	2	68	1
Environmental Proc.	16	2	11	3



2071091013
INTEROFFICE MEMORANDUM

▲ 040.26

SUBJECT SCHEDULED RELEASE DATES TO
START-UP AND TEST

J.O. OR
W.O. NO. 12187

DATE October 15, 1984

FROM B. Charlson


TO DISTRIBUTION

CC Central Files

The attached document reflects the currently scheduled release date to Start-Up and Test and the scheduled completion date for each major contractor. This document details the release date for all BIP "A" releases and the scheduled "B" releases.

Changes to scheduled release dates will be negotiated and agreed upon between SWEC Construction and NMPC Start-Up and Test and will be approved by Mr. D. L. Quamme and myself.

All Contractors are directed to put forth their best effort to achieve the scheduled release dates.


B. Charlson
Project Director

JEL: bgg
Attachment

DISTRIBUTION:

SWEC:

JGKappas
WBrown
RCO'Donnell
JPClemmens
RWHenn
RFero
RBudnar
RTrainham
BBaker
CECrocker
DWLockard
CGWhite
BGober (CHOC)
CCZappile (CHOC)
RTBurke
WRBoyea
CDobratz
JLaPoint
EPEichen
JECarter
TTarrington
JGWaggener
LAdams

KVazardarajan
PVisalli (CHOC)
RMiller (CHOC)
TJohnson
KEConrad
LTerry
→ T. MORAN

NMPC:

DLQuamme
RGibson
JPThomas
JPptak
RCohen
JVought
BYaeger
GAfflerback
CBeckham
J NIEZADYVOWSKI

CONTRACTORS:

JWhite (ITT)
BELam (ITT)
JOMundsen (ITT)
MDeWolfe (ITT)
AFallon (LKC)
RBrinley (LKC)
TDabello (LKC)
JMueck (LKC)
TBastyr (JCI)
LWelch (JCI)
DRoberts (JCI)
MLane (SPC)
TAutagne (RCI)
HEngleking (GE)

RECEIVED
J. O. NO. 12187

OCT 16 1984

STONE & WEBSTER
ENG. CORP.
CONTROL LEVEL 3

9999999999

15-Oct-84

BIPS & FLUSH PATHS CONST END DATES

UPDATE CURRENT THRU: 01-Oct-84

BIP NUMBER	ISYSID	SCHEDULED TURNOVER	CABLE	INSTR	AP PIPE	AP HGRS	SWEC PIPE	SWEC HGRS	CON M/S
001.001		31-Mar-85	18-Mar-85	11-Mar-85	04-Mar-85	11-Mar-85	25-Feb-85	18-Mar-85	9
001.001A		17-Dec-84			03-Dec-84	17-Dec-84	03-Dec-84	17-Dec-84	3
001.001B		25-Feb-85					11-Feb-85		3
001.002		31-Mar-85	18-Mar-85	11-Mar-85	04-Mar-85	11-Mar-85			9
001.003		31-Mar-85	18-Mar-85	11-Mar-85	18-Feb-85	25-Feb-85			9
001.003A		19-Nov-84			05-Nov-84	19-Nov-84	05-Nov-84		3
001.003B		19-Nov-84							3
002.001		26-Nov-84	19-Nov-84	12-Nov-84	05-Nov-84				4
002.002		26-Nov-84	19-Nov-84	12-Nov-84	05-Nov-84	12-Nov-84			4
003.001		A106-Aug-84	19-Nov-84	12-Nov-84	05-Nov-84				T/O
003.001A		A127-Aug-84	01-Oct-84		17-Sep-84	01-Oct-84			T/O
003.001B		A127-Aug-84	12-Nov-84						T/O
003.001C		12-Oct-84	08-Oct-84						3
003.001D		15-Oct-84	15-Oct-84						3
003.001E		29-Oct-84	29-Oct-84	22-Oct-84					3
003.001F		15-Oct-84	15-Oct-84		01-Oct-84	15-Oct-84			3
003.001G		12-Nov-84							3
003.001H		12-Nov-84							3
003.001I		12-Nov-84			29-Oct-84	12-Nov-84			3
003.001K		26-Nov-84	26-Nov-84						3
003.002		12-Nov-84	12-Nov-84	05-Nov-84					4
003.002A		A101-Oct-84	08-Oct-84						T/O
003.002B		A101-Oct-84	08-Oct-84						T/O
003.002C		A101-Oct-84	22-Oct-84						T/O
003.003		A116-Aug-84							T/O
004.001		A112-Jul-84	19-Nov-84	12-Nov-84	05-Nov-84	19-Nov-84			T/O
004.002		A111-Jul-84	19-Nov-84	12-Nov-84	05-Nov-84	19-Nov-84			T/O
004.002B		?			19-Nov-84	26-Nov-84	12-Nov-84	19-Nov-84	3
004.002C		19-Nov-84			05-Nov-84	19-Nov-84	05-Nov-84	19-Nov-84	3
004.002D		10-Dec-84						10-Dec-84	3
004.002E		103-Dec-84							3
004.002G		?							3
004.003		08-Dec-84		12-Nov-84					10
004.004		A126-Sep-84		01-Oct-84			24-Sep-84		T/O
005.001		14-Jan-85	14-Jan-85	07-Jan-85					4
005.001A		01-Oct-84	01-Oct-84	24-Sep-84		01-Oct-84			3
005.001B		29-Oct-84	29-Oct-84	22-Oct-84	15-Oct-84	29-Oct-84			3
005.002		14-Jan-85	14-Jan-85	07-Jan-85	17-Dec-84	24-Dec-84			4
005.003		14-Jan-85	14-Jan-85	07-Jan-85					4
006.001		18-Mar-85	18-Mar-85	11-Mar-85					10
006.001A		29-Oct-84	29-Oct-84	22-Oct-84	15-Oct-84	29-Oct-84			3
006.001B		12-Nov-84	12-Nov-84	05-Nov-84	29-Oct-84	12-Nov-84			3
006.001C		26-Nov-84	26-Nov-84	19-Nov-84	12-Nov-84	26-Nov-84			3
006.002		18-Mar-85	18-Mar-85	18-Feb-85	05-Nov-84				10
006.002A		24-Dec-84	24-Dec-84	17-Dec-84					3
006.002B		31-Dec-84	31-Dec-84	24-Dec-84		31-Dec-84			3
006.002C		07-Jan-85	07-Jan-85	31-Dec-84	24-Dec-84	07-Jan-85			3
006.002D		14-Jan-85	14-Jan-85	07-Jan-85	31-Dec-84	14-Jan-85			3
006.002E		21-Jan-85	21-Jan-85			21-Jan-85			3
006.002F		28-Jan-85		21-Jan-85					3
006.002G		04-Feb-85		28-Jan-85					3

15-Oct-84

BIPS & FLUSH PATHS CONST END DATES

UPDATE CURRENT THRU: 01-Oct-84

BIP NUMBER	SYS	SCHEDULED TURN OVER	CABLE	INSTR	AP PIPE	AP HGRS	SWEC PIPE	SWEC HGRS	CON M/S
006.003		18-Mar-85	18-Mar-85	11-Mar-85					10
006.003A		19-Nov-84	19-Nov-84	12-Nov-84	05-Nov-84				3
006.003B		03-Dec-84	03-Dec-84	26-Nov-84					3
006.003C		31-Dec-84	31-Dec-84	24-Dec-84					3
006.004		11-Mar-85		04-Mar-85					10
006.005		18-Mar-85	18-Mar-85	11-Mar-85					10
007.001		21-Jan-85	22-Oct-84	15-Oct-84					10
008.001		10-Jun-85	10-Jun-85	03-Jun-85					4
008.002		10-Jun-85	10-Jun-85	03-Jun-85	24-Dec-84	31-Dec-84			4
008.003		22-Apr-85	22-Apr-85	25-Mar-85	19-Nov-84	26-Nov-84			4
008.004		17-Jun-85	17-Jun-85	10-Jun-85	26-Nov-84	03-Dec-84			4
008.005		24-Jun-85	24-Jun-85	17-Jun-85					4
009.001		02-Mar-85	25-Feb-85	18-Feb-85	21-Jan-85	04-Feb-85			4
009.002		02-Mar-85		14-Jan-85		17-Dec-84			4
010.A01		A130-Jun-84							T/O
010.A01A		03-Dec-84	03-Dec-84	26-Nov-84	19-Nov-84	03-Dec-84			3
010.A01B		24-Dec-84	24-Dec-84	17-Dec-84	10-Dec-84	24-Dec-84			3
010.A01C		07-Jan-85	07-Jan-85	31-Dec-84	24-Dec-84	07-Jan-85		07-Jan-85	3
010.A01D		31-Dec-84	31-Dec-84						3
010.A02		A131-Aug-84	11-Mar-85		22-Oct-84	29-Oct-84	10-Sep-84	22-Oct-84	T/O
010.A03		11-Mar-85	11-Mar-85	04-Mar-85	14-Jan-85	04-Mar-85			4
010.B01		A102-Jul-84	22-Oct-84		15-Oct-84				T/O
010.B01A		A101-Oct-84	19-Nov-84		05-Nov-84	19-Nov-84			T/O
010.C01		26-Nov-84	26-Nov-84	19-Nov-84	05-Nov-84	26-Nov-84			4
010.C01A		26-Nov-84	26-Nov-84	19-Nov-84	12-Nov-84	26-Nov-84			3
010.C01B		10-Dec-84	10-Dec-84	03-Dec-84	26-Nov-84				3
011.001		21-Jan-85	21-Jan-85	14-Jan-85	07-Jan-85	21-Jan-85			9
011.001A		29-Oct-84	29-Oct-84	22-Oct-84	15-Oct-84	29-Oct-84	15-Oct-84	29-Oct-84	3
011.001B		05-Nov-84	05-Nov-84	29-Oct-84	22-Oct-84	05-Nov-84	22-Oct-84	05-Nov-84	3
011.001C		12-Nov-84	12-Nov-84	05-Nov-84	29-Oct-84	12-Nov-84	29-Oct-84	12-Nov-84	3
011.001D		26-Nov-84	26-Nov-84	19-Nov-84	12-Nov-84	26-Nov-84	12-Nov-84	26-Nov-84	3
011.001E		26-Nov-84	26-Nov-84	19-Nov-84	12-Nov-84	26-Nov-84	12-Nov-84	26-Nov-84	3
011.001F		17-Dec-84						17-Dec-84	3
011.001G		24-Dec-84			10-Dec-84		10-Dec-84	24-Dec-84	3
011.001H		24-Dec-84					10-Dec-84	31-Dec-84	3
011.001I		31-Dec-84							3
011.001J		31-Dec-84						31-Dec-84	3
011.001K		31-Dec-84							3
011.001L		31-Dec-84							3
011.001M		07-Jan-85					24-Dec-84		3
011.001N		31-Dec-84				31-Dec-84			3
011.001P		24-Dec-84			10-Dec-84	24-Dec-84	10-Dec-84	24-Dec-84	3
011.001Q		14-Jan-85						14-Jan-85	3
011.001T		14-Jan-85			31-Dec-84		31-Dec-84	14-Jan-85	3
011.001U		14-Jan-85	14-Jan-85	07-Jan-85					3
011.002		21-Jan-85	21-Jan-85	14-Jan-85	07-Jan-85	21-Jan-85	07-Jan-85	21-Jan-85	9
011.003		21-Jan-85	21-Jan-85	14-Jan-85	03-Sep-84	24-Dec-84	10-Dec-84	24-Dec-84	9
011.004		21-Jan-85	21-Jan-85	14-Jan-85					9
011.005		21-Jan-85	21-Jan-85	14-Jan-85					9
011.006		21-Jan-85	21-Jan-85	14-Jan-85					9
011.007		21-Jan-85	21-Jan-85		24-Dec-84		24-Dec-84		9

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BIPS & FLUSH PATHS CONST END DATES

UPDATE CURRENT THRU: 01-Oct-84

BIP NUMBER	SYSID	SCHEDULED TURN OVER	CABLE	INSTR	AP PIPE	AP HGRS	SWEC PIPE	SWEC HGRS	CON M/S
012.001	A	23-Jul-84	27-May-85	20-May-85					T/O
012.001A	A	27-Aug-84	29-Oct-84		15-Oct-84	29-Oct-84			T/O
012.001B	A	27-Aug-84	29-Oct-84						T/O
013.001	A	15-Apr-85	15-Apr-85	18-Mar-85	04-Mar-85		11-Mar-85	15-Apr-85	9
013.001A	A	22-Oct-84	22-Oct-84	15-Oct-84	08-Oct-84	22-Oct-84	08-Oct-84	22-Oct-84	3
013.001B	A	12-Nov-84				12-Nov-84			3
013.001C	A	12-Nov-84							3
013.001D	A	12-Nov-84					29-Oct-84	12-Nov-84	3
013.001E	A	19-Nov-84	19-Nov-84						3
013.001F	A	26-Nov-84	26-Nov-84		12-Nov-84	26-Nov-84	12-Nov-84	26-Nov-84	3
013.001G	A	03-Dec-84			19-Nov-84	03-Dec-84	19-Nov-84		3
013.001H	A	17-Dec-84						17-Dec-84	3
013.001I	A	03-Dec-84	03-Dec-84				19-Nov-84		3
013.001K	A	24-Dec-84					10-Dec-84	24-Dec-84	3
013.001L	A	17-Dec-84	17-Dec-84	10-Dec-84	03-Dec-84	17-Dec-84			3
013.001M	A	31-Dec-84	31-Dec-84		17-Dec-84	31-Dec-84			3
013.002	A	15-Apr-85	15-Apr-85	08-Apr-85					9
013.003	A	15-Apr-85	15-Apr-85	08-Apr-85		15-Apr-85	01-Apr-85	15-Apr-85	9
013.004	A	15-Apr-85	15-Apr-85	08-Apr-85					9
014.001	A	17-Aug-84	24-Dec-84		03-Dec-84	10-Dec-84	10-Dec-84		T/O
014.001A	A	27-Aug-84	24-Sep-84	24-Sep-84	10-Sep-84	24-Sep-84		24-Sep-84	T/O
014.001B	A	27-Aug-84	10-Sep-84		17-Sep-84				T/O
014.001C	A	27-Aug-84			19-Nov-84				T/O
014.001D	A	27-Aug-84							T/O
014.001E	A	27-Aug-84			22-Oct-84	29-Oct-84		29-Oct-84	T/O
014.002	A	30-Aug-84	17-Dec-84		03-Dec-84				T/O
015.001	A	18-Mar-84	03-Sep-84		08-Oct-84	17-Sep-84	27-Aug-84		T/O
015.002	A	19-Mar-84	20-Aug-84						T/O
016.001	A	29-Jun-84			27-Aug-84	01-Oct-84			T/O
016.001A	A	27-Aug-84							T/O
016.002	A	12-Nov-84			08-Oct-84	15-Oct-84	08-Oct-84	12-Nov-84	5
017.001	A	27-May-85	22-Apr-85	15-Apr-85					10
017.002	A	10-Jun-85	10-Jun-85	03-Jun-85	27-May-85	10-Jun-85		27-May-85	10
017.003	A	27-May-85	07-Jan-85	31-Dec-84			12-Nov-84	26-Nov-84	10
017.004	A	27-May-85	04-Feb-85	21-Jan-85					10
018.001	A	12-Nov-84			17-Sep-84	12-Nov-84			10
019.001	A	24-May-84	18-Feb-85	11-Feb-85					T/O
019.001A	A	08-Oct-84			18-Feb-85		04-Feb-85	18-Feb-85	T/O
019.001B	A	24-Sep-84		17-Sep-84	10-Sep-84	24-Sep-84	10-Sep-84	24-Sep-84	3
019.001C	A	24-Sep-84		17-Sep-84	10-Sep-84	24-Sep-84	10-Sep-84	24-Sep-84	3
019.001D	A	07-Jan-85	07-Jan-85				24-Dec-84	07-Jan-85	3
019.001E	A	07-Jan-85					24-Dec-84	07-Jan-85	3
019.001F	A	21-Jan-85	14-Jan-85			21-Jan-85	07-Jan-85	21-Jan-85	3
019.002	A	29-Oct-84						08-Oct-84	9
019.002A	A	24-Sep-84				24-Sep-84		24-Sep-84	3
019.002B	A	31-Dec-84				31-Dec-84			3
019.002C	A	08-Oct-84			24-Sep-84	08-Oct-84			3
019.002E	A	15-Oct-84							3
019.002F	A	10-Dec-84	10-Dec-84	03-Dec-84	26-Nov-84	10-Dec-84	26-Nov-84	10-Dec-84	3
019.002G	A	11-Feb-85	11-Feb-85	04-Feb-85	28-Jan-85	11-Feb-85	28-Jan-85	11-Feb-85	3
019.002H	A	05-Nov-84			22-Oct-84	05-Nov-84	22-Oct-84	05-Nov-84	3

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BIPS & FLUSH PATHS CONST EMO DATES

UPDATE CURRENT THRU: 01-Oct-84

BIP NUMBER	!SCHEDUL SYS:O!	!SCHEDUL TURN OVER	CABLE	INSTR	AP PIPE	AP HGRS	SWEC PIPE	SWEC HGRS	CON M/S
019.003	!A:	02-Aug-84				01-Oct-84		01-Oct-84	T/O
019.004	!	18-Feb-85	18-Feb-85	11-Feb-85			04-Feb-85	18-Feb-85	9
019.005	!	18-Feb-85	18-Feb-85		28-Jan-85	18-Feb-85	04-Feb-85	18-Feb-85	9
020.001	!	14-Jan-85		17-Sep-84	08-Oct-84	03-Sep-84	03-Sep-84		7
020.002	!	28-Jan-85	21-Jan-85	07-Jan-85	31-Dec-84	07-Jan-85	31-Dec-84	21-Jan-85	7
020.003	!	13-May-85			29-Apr-85	13-May-85	29-Apr-85	13-May-85	7
021.001	!	25-Mar-85	25-Feb-85	24-Dec-84	17-Dec-84	24-Dec-84			4
021.002	!	25-Mar-85	25-Feb-85	18-Feb-85	10-Dec-84				4
021.003	!	25-Mar-85	25-Feb-85	31-Dec-84	24-Dec-84	25-Feb-85			4
022.A01	!	15-Oct-84	15-Oct-84	01-Oct-84					4
022.A02	!	15-Oct-84	10-Sep-84	10-Sep-84					4
022.A03	!	15-Oct-84	27-Aug-84	27-Aug-84	15-Oct-84				4
022.B01	!A:	31-Aug-84	27-Aug-84	20-Aug-84	29-Oct-84	03-Sep-84			T/O
022.C01	!A:	30-Jun-84				27-Aug-84			T/O
023.001	!	24-Dec-84	24-Dec-84	17-Dec-84					4
024.001	!	13-May-85	13-May-85						10
025.001	!	24-Dec-84	24-Dec-84	17-Dec-84	10-Dec-84	24-Dec-84			4
025.002	!	24-Dec-84	24-Dec-84	17-Dec-84	10-Dec-84	17-Dec-84			4
025.002A	!	?			?	?			3
025.003	!	24-Dec-84	24-Dec-84	17-Dec-84	29-Oct-84	05-Nov-84			4
025.004	!	07-Jan-85	07-Jan-85	31-Dec-84	26-Nov-84	03-Dec-84			4
026.001	!	17-Jun-85	17-Jun-85	11-Mar-85					4
027.001	!	03-Jun-85	03-Jun-85	21-Jan-85	31-Dec-84	14-Jan-85			4
028.001	!	11-Mar-85	11-Mar-85	04-Mar-85			28-Jan-85	11-Mar-85	9
028.001A	!	21-Jan-85					07-Jan-85	21-Jan-85	3
028.001B	!	21-Jan-85		21-Jan-85			07-Jan-85	21-Jan-85	3
028.001C	!	28-Jan-85		28-Jan-85			14-Jan-85	28-Jan-85	3
029.001	!	15-Apr-85	15-Apr-85	01-Apr-85			25-Mar-85	15-Apr-85	9
029.001A	!	31-Dec-84	31-Dec-84				17-Dec-84	31-Dec-84	3
029.001B	!	07-Jan-85	07-Jan-85				24-Dec-84	07-Jan-85	3
029.001C	!	07-Jan-85	07-Jan-85	31-Dec-84	24-Dec-84		24-Dec-84	07-Jan-85	3
029.001D	!	14-Jan-85	14-Jan-85	07-Jan-85	31-Dec-84		31-Dec-84	14-Jan-85	3
029.002	!	15-Apr-85	15-Apr-85	01-Apr-85			25-Mar-85	15-Apr-85	9
029.003	!	08-Apr-85	08-Apr-85						9
029.004	!	08-Apr-85	08-Apr-85						9
030.001	!	11-Feb-85	11-Feb-85	04-Feb-85		04-Feb-85			9
030.001A	!A:	05-Oct-84			03-Sep-84	17-Sep-84		01-Oct-84	T/O
030.001B	!A:	05-Oct-84			21-Jan-85	04-Feb-85			T/O
030.001C	!A:	05-Oct-84	10-Sep-84	10-Sep-84		03-Sep-84			T/O
030.001D	!	14-Jan-85					31-Dec-84	14-Jan-85	3
030.001E	!	14-Jan-85	14-Jan-85	07-Jan-85	31-Dec-84		31-Dec-84	14-Jan-85	3
030.002	!	11-Feb-85	11-Feb-85	04-Feb-85					9
031.001	!	29-Apr-85	29-Apr-85	22-Apr-85	15-Apr-85	29-Apr-85	11-Mar-85	29-Apr-85	9
031.001A	!	19-Nov-84	19-Nov-84	12-Nov-84	05-Nov-84	19-Nov-84	05-Nov-84	19-Nov-84	3
031.001B	!	03-Dec-84	03-Dec-84	26-Nov-84	19-Nov-84	03-Dec-84	19-Nov-84	03-Dec-84	3
031.001C	!	24-Dec-84	24-Dec-84	17-Dec-84		24-Dec-84			3
031.001D	!	17-Dec-84	17-Dec-84						3
031.001E	!	31-Dec-84	31-Dec-84		17-Dec-84	31-Dec-84	17-Dec-84	31-Dec-84	3
031.001F	!	31-Dec-84	31-Dec-84		17-Dec-84	31-Dec-84			3
031.001G	!	04-Feb-85	04-Feb-85						3
031.001H	!	04-Feb-85	04-Feb-85			04-Feb-85			3

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BIPS & FLUSH PATHS CONST END DATES

UPDATE CURRENT THRU: 01-Oct-84

BIP NUMBER	SCHEDULED SYS:01 TURNOVER	CABLE	INSTR	AP PIPE	AP HGRS	SWEC PIPE	SWEC HGRS	CON M/S
031.001I	14-Jan-85	14-Jan-85			14-Jan-85	31-Dec-84	14-Jan-85	3
031.001J	14-Jan-85	14-Jan-85		31-Dec-84	14-Jan-85		14-Jan-85	3
031.001K	24-Dec-84	24-Dec-84		10-Dec-84	24-Dec-84			3
031.001L	11-Feb-85							3
031.001M	19-Nov-84			05-Nov-84	19-Nov-84	05-Nov-84	19-Nov-84	3
032.001	18-Feb-85	18-Feb-85	11-Feb-85			04-Feb-85		9
032.001A	03-Dec-84	03-Dec-84	26-Nov-84	19-Nov-84	03-Dec-84	19-Nov-84	03-Dec-84	3
032.001B	31-Dec-84				31-Dec-84			3
032.001C	11-Feb-85							3
032.001D	24-Dec-84						24-Dec-84	3
032.002	18-Feb-85	18-Feb-85	11-Feb-85	28-Jan-85	18-Feb-85			9
032.003	18-Feb-85	18-Feb-85	11-Feb-85			04-Feb-85	18-Feb-85	9
033.001	01-Apr-85	01-Apr-85	25-Mar-85					9
033.001A	19-Nov-84	19-Nov-84	12-Nov-84	05-Nov-84	19-Nov-84	05-Nov-84	19-Nov-84	3
033.001B	17-Dec-84	17-Dec-84	10-Dec-84	03-Dec-84	17-Dec-84	03-Dec-84	17-Dec-84	3
033.001C	28-Jan-85				28-Jan-85	14-Jan-85	28-Jan-85	3
033.001D	28-Jan-85							3
033.002	15-Apr-85	15-Apr-85	08-Apr-85		25-Mar-85	25-Mar-85	15-Apr-85	9
033.003	01-Apr-85	01-Apr-85	24-Mar-85					9
034.001	25-Mar-85	25-Mar-85	18-Mar-85			11-Mar-85	25-Mar-85	6
035.001	29-Apr-85	29-Apr-85	22-Apr-85	15-Apr-85	29-Apr-85	08-Apr-85	29-Apr-85	10
035.001A	24-Dec-84	24-Dec-84	17-Dec-84	10-Dec-84	24-Dec-84	10-Dec-84	24-Dec-84	3
035.001B	14-Jan-85	14-Jan-85		31-Dec-84	14-Jan-85	31-Dec-84	14-Jan-85	3
035.001C	21-Jan-85	21-Jan-85				07-Jan-85	21-Jan-85	3
035.001D	21-Jan-85							3
035.001E	11-Feb-85	11-Feb-85		28-Jan-85	11-Feb-85			3
035.001F	11-Feb-85			28-Jan-85	11-Feb-85	28-Jan-85	11-Feb-85	3
035.002	08-Apr-85	08-Apr-85						10
035.003	08-Apr-85	08-Apr-85						10
036.001	29-Apr-85	29-Apr-85	22-Apr-85	15-Apr-85	22-Apr-85	15-Apr-85	29-Apr-85	10
036.001A	14-Jan-85			31-Dec-84	14-Jan-85	31-Dec-84	14-Jan-85	3
036.001B	28-Jan-85	28-Jan-85	21-Jan-85	14-Jan-85		14-Jan-85	28-Jan-85	3
036.001C	18-Feb-85				18-Feb-85	04-Feb-85	18-Feb-85	3
037.001	10-Jun-85	10-Jun-85	03-Jun-85			27-May-85	10-Jun-85	9
037.001A	15-Oct-84	15-Oct-84	08-Oct-84	01-Oct-84	15-Oct-84	01-Oct-84	15-Oct-84	3
037.001B	24-Dec-84	24-Dec-84	17-Dec-84	10-Dec-84	24-Dec-84	10-Dec-84	24-Dec-84	3
037.001C	14-Jan-85	14-Jan-85		31-Dec-84	14-Jan-85	31-Dec-84	14-Jan-85	3
037.001D	11-Feb-85			28-Jan-85	11-Feb-85	28-Jan-85	11-Feb-85	3
037.002	10-Jun-85	10-Jun-85	03-Jun-85	27-May-85	13-May-85	27-May-85	10-Jun-85	9
038.001	04-Mar-85	04-Mar-85	18-Feb-85		10-Dec-84	11-Feb-85		10
038.001A	12-Nov-84	12-Nov-84	05-Nov-84	29-Oct-84	12-Nov-84	29-Oct-84	12-Nov-84	3
038.001B	17-Dec-84	17-Dec-84	10-Dec-84	03-Dec-84	17-Dec-84	03-Dec-84	17-Dec-84	3
038.001C	14-Jan-85	14-Jan-85	07-Jan-85	31-Dec-84	14-Jan-85	31-Dec-84	14-Jan-85	3
038.001D	14-Jan-85	14-Jan-85	07-Jan-85	31-Dec-84	14-Jan-85			3
038.001E	04-Feb-85							3
038.001F	11-Feb-85	11-Feb-85	04-Feb-85		11-Feb-85			3
038.001G	17-Dec-84	17-Dec-84	10-Dec-84	03-Dec-84	17-Dec-84	03-Dec-84	17-Dec-84	3
038.001H	21-Jan-85		14-Jan-85	07-Jan-85	14-Jan-85	07-Jan-85	14-Jan-85	3
038.002	04-Mar-85	04-Mar-85	18-Feb-85	11-Feb-85				10
038.003	04-Mar-85	04-Mar-85	25-Feb-85			11-Feb-85	25-Mar-85	10
038.004	11-Feb-85	11-Feb-85	04-Feb-85			04-Feb-85	11-Feb-85	10

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BIPS & FLUSH PATHS CONST END DATES

UPDATE CURRENT THRU: 01-Oct-84

BIP NUMBER	SYS	SCHEDULED TURNOVER	CABLE	INSTR	AP PIPE	AP HGRS	SWEC PIPE	SWEC HGRS	CON M/S
038.005		11-Feb-85	11-Feb-85	04-Feb-85					10
039.001		17-Dec-84	17-Dec-84						8
040.001		11-Mar-85	04-Feb-85	28-Jan-85	14-Jan-85	21-Jan-85	14-Jan-85	21-Jan-85	7
040.001A		?			?	?			3
040.002		11-Mar-85	04-Feb-85	28-Jan-85	14-Jan-85	21-Jan-85	31-Dec-84	21-Jan-85	7
040.003		11-Mar-85	28-Jan-85	21-Jan-85	14-Jan-85	07-Jan-85	10-Dec-84	28-Jan-85	7
040.004		11-Mar-85	11-Mar-85	04-Mar-85	10-Dec-84	31-Dec-84	18-Feb-85	25-Feb-85	7
040.005		11-Mar-85	14-Jan-85	31-Dec-84	24-Dec-84	07-Jan-85	26-Nov-84	14-Jan-85	7
040.006		15-Oct-84	15-Oct-84						7
040.007		11-Mar-85	07-Jan-85	24-Dec-84			17-Dec-84	31-Dec-84	7
041.001		01-Jul-85	01-Jul-85	24-Jun-85	13-May-85	27-May-85	13-May-85	01-Jul-85	7
042.001		28-Jan-85	28-Jan-85	21-Jan-85	14-Jan-85	28-Jan-85			4
042.002		28-Jan-85	28-Jan-85	21-Jan-85	14-Jan-85	28-Jan-85			4
042.003		28-Jan-85	28-Jan-85	21-Jan-85	24-Dec-84	31-Dec-84			4
042.004		28-Jan-85	28-Jan-85	21-Jan-85					4
043.001		A130-Sep-83	15-Oct-84						T/O
043.002		14-Jan-85	08-Oct-84						10
043.003		A110-Sep-84	17-Sep-84						T/O
043.004		14-Jan-85	27-Aug-84			10-Sep-84			10
043.005		14-Jan-85	01-Oct-84		17-Sep-84	08-Oct-84			10
043.006		14-Jan-85	14-Jan-85		03-Sep-84	03-Sep-84			10
043.007		14-Jan-85	08-Oct-84	01-Oct-84	03-Sep-84	08-Oct-84			10
043.008		08-Apr-85	08-Apr-85	01-Apr-85					10
044.001		21-Jan-85	29-Oct-84	22-Oct-84					10
044.002		21-Jan-85	29-Oct-84	22-Oct-84					10
044.003		21-Jan-85	29-Oct-84	22-Oct-84					10
045.001		28-Jan-85	05-Nov-84	29-Oct-84					10
045.002		28-Jan-85	05-Nov-84						10
046.001		12-Aug-85	15-Apr-85						10
046.002		12-Aug-85	12-Aug-85						10
046.003		12-Aug-85	12-Aug-85						10
047.001		A104-Aug-83							T/O
047.002		20-May-85	22-Oct-84	15-Oct-84					10
047.003		20-May-85	22-Oct-84						10
047.004		20-May-85	10-Sep-84						10
047.005		20-May-85	17-Sep-84						10
047.006		20-May-85	08-Oct-84						10
047.007		20-May-85	10-Sep-84	03-Sep-84					10
047.008		20-May-85	26-Nov-84	19-Nov-84					10
047.009		20-May-85	22-Apr-85						10
047.010		20-May-85	20-May-85						10
048.001		03-Nov-84	10-Sep-84		27-Aug-84	17-Sep-84			4
048.002		A122-Aug-84			27-Aug-84	17-Sep-84			T/O
048.003		03-Nov-84	03-Sep-84			08-Oct-84			4
048.004		A114-Aug-84	10-Sep-84		15-Oct-84	22-Oct-84			T/O
048.005		A110-Aug-84	24-Sep-84						T/O
049.001		24-Dec-84	01-Oct-84	24-Sep-84	24-Sep-84	29-Oct-84	10-Sep-84	08-Oct-84	5
049.002		24-Dec-84	24-Dec-84	17-Dec-84	26-Nov-84	24-Dec-84			5
049.003		24-Dec-84	29-Oct-84	22-Oct-84	10-Sep-84	29-Oct-84	10-Sep-84		5
049.004		24-Dec-84	26-Nov-84	19-Nov-84	05-Nov-84	19-Nov-84	19-Nov-84	26-Nov-84	5
050.001		A109-Dec-83							T/O

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BIP NUMBER	SCHEDULED SYS:O: TURNOVER	CABLE	INSTR	AP PIPE	AP HGRS	SWEC PIPE	SWEC HGRS	CON M/S
050.002	A:15-May-84							T/O
050.003	111-Feb-85	17-Sep-84	17-Sep-84		05-Nov-84			5
050.004	A:27-Jul-84							T/O
051.001	111-Mar-85	27-Aug-84	15-Oct-84	25-Feb-85	04-Mar-85			5
052.001	113-Feb-85	14-Jan-85	24-Dec-84	10-Dec-84	17-Dec-84	10-Dec-84	14-Jan-85	5
052.002	101-Apr-85	01-Apr-85	28-Jan-85					5
053.001	104-Feb-85	21-Jan-85	31-Dec-84	17-Sep-84	21-Jan-85			5
053.002	104-Feb-85	28-Jan-85	21-Jan-85	17-Dec-84	21-Jan-85	17-Dec-84	28-Jan-85	5
054.001	109-Jan-85	24-Sep-84	24-Sep-84	15-Oct-84				5
054.002	109-Jan-85	08-Oct-84	24-Sep-84	17-Sep-84	05-Nov-84	10-Sep-84		5
054.003	109-Jan-85							5
055.001	110-Dec-84	10-Dec-84	03-Dec-84	26-Nov-84	10-Dec-84		10-Dec-84	5
055.002	110-Dec-84	10-Dec-84	03-Dec-84					5
055.003	110-Dec-84	10-Dec-84	03-Dec-84					5
056.001	115-Apr-85	15-Apr-85	08-Apr-85	08-Apr-85	15-Apr-85			5
056.002	115-Apr-85	25-Feb-85	18-Feb-85					5
057.001	108-Oct-84	08-Oct-84	01-Oct-84					5
057.002	115-Oct-84	15-Oct-84	08-Oct-84					5
057.003	115-Oct-84	15-Oct-84	08-Oct-84					5
057.004	108-Oct-84	08-Oct-84	01-Oct-84					5
058.001	A:29-Jun-84	20-Aug-84						T/O
058.002	126-Nov-84	26-Nov-84	22-Oct-84			15-Oct-84	26-Nov-84	5
058.003	A:09-Jan-84	20-Aug-84						T/O
059.A01	131-Dec-84	31-Dec-84	10-Dec-84		17-Dec-84			5
059.A02	131-Dec-84	31-Dec-84	24-Dec-84	17-Dec-84				5
059.B01	114-Jan-85	14-Jan-85	07-Jan-85					5
059.B02	114-Jan-85	10-Dec-84	03-Dec-84					5
059.C01	117-Dec-84	24-Sep-84	24-Sep-84		17-Dec-84			5
059.C02	117-Dec-84		01-Oct-84					5
059.C03	117-Dec-84	10-Sep-84	10-Sep-84					5
059.C04	117-Dec-84	17-Dec-84						5
059.C05	117-Dec-84	08-Oct-84	01-Oct-84					5
059.C06	117-Dec-84	08-Oct-84	01-Oct-84					5
059.C07	117-Dec-84		10-Dec-84					5
059.C08	117-Dec-84	10-Sep-84	10-Sep-84					5
059.C09	117-Dec-84		10-Dec-84					5
060.001	118-Feb-85	18-Feb-85	11-Feb-85		18-Feb-85	04-Feb-85	18-Feb-85	6
060.002	129-Apr-85	29-Apr-85	22-Apr-85			15-Apr-85	29-Apr-85	6
061.001	118-Mar-85	11-Mar-85	04-Mar-85	04-Feb-85	18-Feb-85	21-Jan-85	11-Mar-85	5
061.002	118-Mar-85	11-Mar-85	04-Mar-85	21-Jan-85	18-Feb-85			5
061.003	118-Mar-85	11-Mar-85	04-Mar-85	11-Feb-85	11-Mar-85	17-Dec-84	11-Mar-85	5
061.004	118-Mar-85	11-Mar-85						5
062.001	111-Mar-85	11-Mar-85		28-Jan-85	11-Feb-85	28-Jan-85	11-Mar-85	5
062.002	111-Mar-85	11-Mar-85		04-Feb-85	11-Feb-85	04-Feb-85	11-Feb-85	5
063.001	119-Nov-84	19-Nov-84	12-Nov-84	05-Nov-84	19-Nov-84	05-Nov-84	19-Nov-84	7
063.002	119-Nov-84	19-Nov-84	12-Nov-84	15-Oct-84	12-Nov-84	05-Nov-84	19-Nov-84	7
063.003	119-Nov-84	19-Nov-84	12-Nov-84	05-Nov-84				7
063.004	119-Nov-84	19-Nov-84	12-Nov-84					7
063.005	119-Nov-84	19-Nov-84	12-Nov-84		05-Nov-84			7
063.006	119-Nov-84	19-Nov-84	12-Nov-84					7
063.007	119-Nov-84	19-Nov-84	12-Nov-84	22-Oct-84	19-Nov-84	10-Sep-84		7

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BIP NUMBER	ISCHEDULED SYSID	TURNOVER	CABLE	INSTR	AP PIPE	AP HGRS	SWEC PIPE	SWEC HGRS	CON M/S
063.008	19-Nov-84	19-Nov-84	05-Nov-84				17-Sep-84		7
063.009	19-Nov-84	19-Nov-84	12-Nov-84						7
063.010	19-Nov-84	19-Nov-84	12-Nov-84						7
063.011	19-Nov-84		12-Nov-84	01-Oct-84	12-Nov-84				7
064.001	28-Jan-85	28-Jan-85	19-Nov-84	08-Oct-84	14-Jan-85		14-Jan-85		4
064.002	28-Jan-85	28-Jan-85	21-Jan-85	22-Oct-84	26-Nov-84				4
065.001	19-Nov-84	05-Nov-84	22-Oct-84		15-Oct-84	15-Oct-84	22-Oct-84		7
065.002	19-Nov-84	19-Nov-84	12-Nov-84			22-Oct-84			7
066.001	A:02-Jul-84	20-Aug-84							T/O
066.002	04-Mar-85	12-Nov-84	05-Nov-84		29-Oct-84				7
066.003	A:06-Jul-84	20-Aug-84							T/O
066.004	A:15-Sep-83								T/O
066.005	04-Mar-85	27-Aug-84	20-Aug-84	20-Aug-84	03-Sep-84				7
066.006	04-Mar-85	04-Mar-85			10-Sep-84				7
066.007	04-Mar-85	05-Nov-84		29-Oct-84					7
066.008	04-Mar-85	17-Sep-84	10-Sep-84						7
066.009	04-Mar-85	04-Mar-85	25-Feb-85	11-Feb-85	25-Feb-85				7
066.010	08-Jul-85	08-Jul-85		12-Nov-84	19-Nov-84				7
066.011	04-Mar-85								7
066.012	A:04-Sep-84								T/O
067.001	19-Nov-84	19-Nov-84	12-Nov-84	08-Oct-84	19-Nov-84	22-Oct-84	05-Nov-84		7
067.002	19-Nov-84	19-Nov-84	12-Nov-84	05-Nov-84	19-Nov-84	15-Oct-84	19-Nov-84		7
068.001	11-Feb-85	11-Feb-85							4
069.001	13-May-85	13-May-85							9
070.001	A:30-Nov-83	20-Aug-84							T/O
070.002	A:08-Dec-83	31-Dec-84							T/O
070.003	A:07-Dec-83								T/O
070.004	A:01-Dec-83								T/O
070.005	23-Sep-85	27-Aug-84							9
071.A01	A:03-May-84	27-Aug-84							T/O
071.A02	A:03-May-84	20-Aug-84							T/O
071.A03	A:03-May-84	20-Aug-84							T/O
071.A04	19-Nov-84	19-Nov-84							9
071.A05	19-Nov-84	19-Nov-84							9
071.A06	A:13-Mar-84								T/O
071.A07	A:13-Mar-84	20-Aug-84							T/O
071.A08	A:10-May-84	20-Aug-84							T/O
071.A09	A:16-Mar-84								T/O
071.A10	A:06-Jul-84	27-Aug-84							T/O
071.A11	A:06-Jul-84	03-Sep-84							T/O
071.B01	A:21-Jul-84	03-Sep-84							T/O
071.B02	A:02-Aug-84	10-Sep-84							T/O
071.B03	A:01-Jul-84	20-Aug-84							T/O
071.B04	A:05-Mar-84								T/O
071.B05	A:19-Jun-84								T/O
071.B06	A:19-Jun-84	20-Aug-84							T/O
071.B07	A:13-Mar-84								T/O
071.B08	A:08-Nov-83								T/O
071.B09	22-Oct-84	10-Sep-84							9
071.B10	A:10-Mar-84								T/O
071.B11	A:10-Mar-84								T/O

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BIP NUMBER	TSCHEDULED SYSID	TURN OVER	CABLE	INSTR	AP PIPE	AP HGRS	SWEC PIPE	SWEC HGRS	CDW M/S
071.812	A114-Mar-84								T/O
071.813	A106-Mar-84								T/O
071.814	A109-May-84	20-Aug-84							T/O
071.815	A110-Mar-84								T/O
071.816	A120-Apr-84								T/O
072.001	A129-Jun-84	27-Aug-84							T/O
072.002	A122-Oct-84	03-Sep-84							9
072.003	A118-Sep-84	03-Sep-84							T/O
072.004	A116-Aug-84								T/O
072.005	A118-Sep-84								T/O
072.006	A129-Oct-84	20-Aug-84							9
072.007	A125-Aug-84	03-Sep-84							T/O
072.008	A115-Sep-84	27-Aug-84							T/O
072.009	A122-Aug-84	20-Aug-84							T/O
072.010	A130-Aug-84	27-Aug-84							T/O
073.001	A116-Jan-84	27-Aug-84							T/O
073.002	A103-Nov-83								T/O
073.003	A103-Nov-83								T/O
073.004	A105-May-84								T/O
074.001	A105-May-84	27-Aug-84							T/O
074.002	A126-Jun-84	20-Aug-84							T/O
074.003	A121-May-84	20-Aug-84							T/O
075.001	A118-Feb-85	18-Feb-85							10
075.002	A118-Feb-85	18-Feb-85							10
075.003	A104-Feb-85	04-Feb-85							10
075.004	A118-Feb-85	18-Feb-85							10
075.005	A125-Mar-85	25-Mar-85							10
075.006	A111-Mar-85	11-Mar-85							10
075.007	A111-Mar-85	11-Mar-85							10
075.008	A111-Mar-85	11-Mar-85							10
075.009	A111-Mar-85	11-Mar-85							10
075.010	A118-Feb-85	18-Feb-85							10
075.011	A117-Dec-84	17-Dec-84							10
075.012	A111-Mar-85	11-Mar-85							10
076.001	A101-Apr-85	01-Apr-85							8
076.002	A101-Apr-85	01-Apr-85							8
076.003	A101-Apr-85	01-Apr-85							8
077.001	A108-Aug-83								T/O
077.002	A129-Apr-85								9
077.003	A129-Apr-85								9
077.004	A129-Apr-85								9
077.005	A129-Apr-85	29-Apr-85							9
077.006	A129-Apr-85								9
077.007	A129-Apr-85								9
077.008	A129-Apr-85								9
077.009	A129-Apr-85								9
077.010	A129-Apr-85	29-Apr-85							9
077.011	A129-Apr-85								9
077.012	A129-Apr-85								9
077.013	A129-Apr-85								9
077.014	A129-Apr-85								9

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BIP	ISCHEDULED	AP	AP	SWEC	SWEC	CON		
NUMBER	SYS:DI TURNOVER	PIPE	HGRS	PIPE	HGRS	M/S		
077.015	129-Apr-85					9		
077.016	129-Apr-85					9		
077.017	129-Apr-85					9		
077.018	129-Apr-85					9		
077.019	129-Apr-85					9		
077.020	129-Apr-85					9		
077.021	129-Apr-85					9		
077.022	129-Apr-85					9		
078.001	110-Jun-85	10-Jun-85	27-May-85			9		
079.001	118-Mar-85	18-Mar-85	11-Mar-85			10		
080.001	118-Mar-85	18-Mar-85	11-Mar-85			10		
080.002	111-Feb-85	11-Feb-85				10		
081.001	125-Mar-85	25-Mar-85	18-Mar-85	28-Jan-85	25-Mar-85	10		
082.001	104-Mar-85	04-Mar-85	25-Feb-85	18-Feb-85	26-Nov-84	04-Mar-85	6	
082.002	111-Mar-85	11-Mar-85	04-Mar-85		03-Dec-84	11-Mar-85	6	
084.001	117-Dec-84	17-Dec-84					8	
084.002	118-Mar-85	18-Mar-85					9	
084.003	121-Jan-85	21-Jan-85					9	
085.001	112-Nov-84	12-Nov-84	05-Nov-84	08-Oct-84	22-Oct-84		9	
086.001	103-Jun-85	03-Jun-85					10	
086.002	103-Jun-85	03-Jun-85					10	
088.001	117-Dec-84	29-Oct-84	22-Oct-84	15-Oct-84	29-Oct-84	15-Oct-84	29-Oct-84	5
090.001	108-Jul-85	08-Jul-85						10
091.001	111-Apr-84	20-Aug-84						T/O
092.001	127-May-85	27-May-85						10
094.001	110-Jun-85	10-Jun-85						10
096.001	115-Apr-85	15-Apr-85						9
096.002	115-Apr-85	15-Apr-85						9
097.001	118-Feb-85	18-Feb-85						9
100.A01	112-Nov-84	12-Nov-84	24-Sep-84	01-Oct-84	01-Oct-84			2
100.A02	101-Oct-84	01-Oct-84	24-Sep-84		24-Sep-84	22-Oct-84		2
100.A03	101-Oct-84	01-Oct-84	24-Sep-84	03-Sep-84	17-Sep-84	27-Aug-84		2
100.A04	129-Oct-84	29-Oct-84	22-Oct-84	03-Sep-84	17-Sep-84	27-Aug-84		2
100.A05	101-Oct-84	01-Oct-84						2
100.A06	101-Oct-84	01-Oct-84						2
100.B01	115-Oct-84	15-Oct-84	24-Sep-84		24-Sep-84	19-Nov-84		2
100.B02	105-Nov-84	05-Nov-84	15-Oct-84	20-Aug-84	17-Sep-84	17-Sep-84	01-Oct-84	2
100.B03	105-Nov-84	05-Nov-84						2
101.001	122-Apr-85	03-Dec-84						8
101.002	122-Apr-85	27-Aug-84						8
101.003	108-Jul-85	08-Jul-85						8
101.004	122-Apr-85	03-Dec-84						8
101.005	122-Apr-85	03-Dec-84						8
101.006	122-Apr-85	22-Apr-85						8
101.007	122-Apr-85	03-Dec-84						8
101.008	122-Apr-85	03-Dec-84						8
101.009	122-Apr-85	03-Dec-84						8
101.010	122-Apr-85	03-Dec-84						8
102.001	117-Dec-84	17-Dec-84			10-Dec-84	17-Dec-84		9
103.001	117-Oct-83	31-Dec-84	15-Oct-84					T/O
104.001	128-Jan-85	28-Jan-85						8

15-Oct-85

BIPS & FLUSH PATHS CONST END DATES

UPDATE CURRENT THRU: 01-Oct-84

BIP NUMBER	SYS:0	SCHEDULED TURNOVER	CABLE	INSTR	AP PIPE	AP HGRS	SWEC PIPE	SWEC HGRS	CON M/S
105.001	:	08-Jul-85	08-Jul-85						9
106.001	:	06-May-85	06-May-85						10
107.001	:	28-Apr-86							10
A01.121	:	19-Aug-85							8
A01.122	:	19-Aug-85							8
A01.123	:	19-Aug-85							8
A01.391	:	19-Aug-85							8
A01.421	:	19-Aug-85							8
A01.422	:	19-Aug-85							8
A01.560	:	19-Aug-85							8
A02.221	:	19-Aug-85							8
A02.222	:	19-Aug-85							8
A02.229	:	19-Aug-85							8
A02.810	:	19-Aug-85							8
A03.320	:	19-Aug-85	08-Jul-85						8
A03.328	:	19-Aug-85							8
A03.359	:	19-Aug-85							8
A03.363	:	19-Aug-85							8
A03.364	:	19-Aug-85	08-Jul-85						8
A03.390	:	19-Aug-85							8
A03.394	:	19-Aug-85							8
A03.395	:	19-Aug-85							8
A04.393	:	19-Aug-85							8
A04.710	:	19-Aug-85							8
A04.720	:	19-Aug-85							8
A04.730	:	19-Aug-85							8
A04.740	:	19-Aug-85							8
A05.223	:	19-Aug-85							8
A05.310	:	19-Aug-85							8
A05.341	:	19-Aug-85							8
A05.342	:	19-Aug-85							8
A05.353	:	19-Aug-85							8
A05.660	:	19-Aug-85							8

ITT GRINWELL		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	UOM	ESTIMATE	PERIOD TO COMPLETE	PERIOD PLANNED	PERIOD ACTUAL	Z CUMULATIVE	PLANNED ST HRS	PLANNED OT HRS	ACTUAL ST HRS	ACTUAL OT HRS	ESTIMATED HRS	ACTUAL HRS	Z EXPENDED	ESTIMATED UNIT RATE	TARGET UNIT RATE	PERIOD UNIT RATE	CUMULATIVE UNIT RATE	PLANNED HC	PLANNED % HC	ACTUAL HC	ACTUAL % HC	
SD PIPE	LF	28,336	-		252	23,146	81.682	-	-	1,640	206	169,944	137,332	80.812	5.997	3.290	7.325	5.933	-	-	41	4.72
SD HANGERS	EA	5,978	90		48	4,454	77.852	4,154	624	2,212	374	322,162	251,866	78.182	53.891	46.600	53.875	54.118	104	11.72	55	6.32
LD PIPE	LF	27,310	-		133	24,839	90.952	-	-	4,696	730	210,611	229,078	109.152	7.712	6.250	40.797	9.255	-	-	117	13.52
LD HANGERS	EA	5,800	120		44	3,765	64.912	17,031	2,554	15,480	2,910	111,043,573	776,774	74.432	179.926	163.460	417.955	206.314	426	47.92	387	44.42
CAT. I COMPLETED (4-5)	EA	-	-		117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LD WELDS	EA	6,546	81		95	5,980	91.352	1,761	264	2,624	397	169,263	153,652	90.782	25.857	-	31.800	25.694	44	5.02	66	7.52
REWORK	INH	-	-		-	-	-	-	-	1,985	270	310,081	237,749	76.672	-	-	-	-	-	-	50	5.72
PIPE WHIP RESTRAINTS	INH	-	-		-	-	-	-	-	0	0	222,418	146,942	66.062	-	-	-	-	-	-	0	0.02
OTHER DIRECTS	INH	-	-		-	-	-	-	-	3,381	425	223,409	182,869	81.852	-	-	-	-	-	-	85	9.72
WAREHOUSEMEN	INH	-	-		-	-	-	-	-	1,054	132	96,909	74,080	76.442	-	-	-	-	-	-	26	3.02
QUALIFYING WELDERS	INH	-	-		-	-	-	-	-	386	49	17,483	15,878	90.822	-	-	-	-	-	-	10	1.12
CLEAN UNSAT. MATL.	INH	-	-		-	-	-	-	-	0	0	23,625	19,141	81.022	-	-	-	-	-	-	0	0.02
OTHER DISTRIB.	INH	-	-		-	-	-	-	-	1,405	282	137,222	126,285	92.032	-	-	-	-	-	-	35	4.02
TOTAL		-	-		-	-	-	35,568	5,335	34,863	5,775	112,946,733	12,352,446	79.832	-	-	-	-	889	100	872	100
VARIANCE - PLAN vs. ACT.		-	-		-	-	-	-	-	705	(440)	-	-	-	-	-	-	-	-	-	18	-

LK CONSTOCK		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	UOM	ESTIMATE	PERIOD TO COMPLETE	PERIOD PLANNED	PERIOD ACTUAL	Z CUMULATIVE	PLANNED ST HRS	PLANNED OT HRS	ACTUAL ST HRS	ACTUAL OT HRS	ESTIMATED HRS	ACTUAL HRS	Z EXPENDED	ESTIMATED UNIT RATE	TARGET UNIT RATE	PERIOD UNIT RATE	CUMULATIVE UNIT RATE	PLANNED HC	PLANNED % HC	ACTUAL HC	ACTUAL % HC	
SCHEDULED CABLE PULL STUFF-IN	LF	4,528,169	57,757		46,040	2,687,348	59.352	5,851	907	4,540	677	532,121	316,160	59.422	0.118	0.103	0.113	0.118	146	22.22	114	16.52
UNSCHEDULED CABLE PULL	LF	1,519,183	28,000		11,346	192,551	12.672	1,818	282	769	115	112,362	12,726	11.332	0.074	-	0.078	0.056	45	6.92	19	2.82
CABLE TERMINATIONS -ALL	EA	246,247	6,000		3,325	109,804	44.592	4,675	725	1,978	295	237,427	115,211	48.522	0.964	1.034	0.684	1.049	117	17.82	49	7.22
CONDUIT	LF	339,808	6,000		5,708	261,333	76.912	5,678	880	5,549	827	372,567	277,436	74.472	1.096	1.072	1.117	1.062	142	21.62	139	20.12
CONDUIT SUPPORTS	EA	20,289	300		381																	
FIRE DETECTION	INH	-	-		-	-	-	-	-	968	144	105,164	58,129	55.272	-	-	-	-	-	-	24	3.52
IPGCC MODIFICATIONS	INH	-	-		-	-	-	-	-	1,487	222	167,466	72,539	43.522	-	-	-	-	-	-	37	5.42
REWORK	INH	-	-		-	-	-	-	-	1,436	215	203,227	105,020	51.682	-	-	-	-	-	-	36	5.22
UNLEAD & HANDLE	INH	-	-		-	-	-	-	-	537	80	80,707	49,294	61.082	-	-	-	-	-	-	13	1.92
345KV YARD WORK	INH	-	-		-	-	-	-	-	258	38	18,242	12,910	70.772	-	-	-	-	-	-	6	0.92
OTHER DIRECTS	INH	-	-		-	-	-	-	-	3,062	454	294,296	229,242	77.902	-	-	-	-	-	-	77	11.12
WAREHOUSEMEN	INH	-	-		-	-	-	-	-	465	69	45,977	36,212	76.762	-	-	-	-	-	-	12	1.72
QUALIFYING WELDERS	INH	-	-		-	-	-	-	-	508	76	32,840	29,658	90.342	-	-	-	-	-	-	13	1.62
OTHER DISTRIB.	INH	-	-		-	-	-	-	-	406	61	25,713	13,926	54.162	-	-	-	-	-	-	10	1.52
TOTAL		-	-		-	-	-	26,316	4,079	27,569	4,109	12,576,633	1,606,188	62.342	-	-	-	-	658	100	689	100
VARIANCE - PLAN vs. ACT.		-	-		-	-	-	-	-	(1,253)	(30)	-	-	-	-	-	-	-	-	-	(31)	-

JOHNSON CONTROLS		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS			UNIT RATES				PERIOD WORKFORCE			
CATEGORY	UO	ESTIMATE	PERIOD	PERIOD	Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	ACTUAL			
		TO COMPLETE	PLANNED	ACTUAL			CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	Z HC
TOTAL TUBING	ILF	152,805	2,904	2,012	69,859	45.722	4,449	778	4,493	761	264,343	132,280	50.042	1.730	2.500	2.611	1.894	111	40.42	112	45.72
SEISMIC SUPPORTS	IEA	3,853	62	32	1,878	48.742	3,857	675	2,737	463	261,157	116,646	44.672	67.780	40.000	100.000	62.112	96	35.02	68	27.92
INSTRUMENTS	IEA	3,778	-	28	1,125	29.782	-	-	150	25	43,046	11,857	27.542	11.394	-	6.250	10.540	-	-	4	1.52
TUBE TRAY	IMH	-	-	-	-	-	-	-	840	143	39,465	26,892	68.142	-	-	-	-	-	-	21	8.52
UNLOAD & HANDLE	IMH	-	-	-	-	-	-	-	221	37	12,748	7,964	62.472	-	-	-	-	-	-	6	2.22
OTHER DIRECTS	IMH	-	-	-	-	-	-	-	810	137	132,946	47,192	35.502	-	-	-	-	-	-	20	8.22
WAREHOUSEMEN	IMH	-	-	-	-	-	-	-	386	65	22,114	14,493	65.542	-	-	-	-	-	-	10	3.92
QUALIFYING WELDERS	IMH	-	-	-	-	-	-	-	133	23	6,113	4,556	74.532	-	-	-	-	-	-	3	1.42
OTHER DISTRIB.	IMH	-	-	-	-	-	-	-	56	10	5,872	3,858	65.702	-	-	-	-	-	-	1	0.62
TOTAL		-	-	-	-	-	11,016	1,928	9,826	1,664	787,604	365,738	46.422	-	-	-	-	275	1002	246	1002
VARIANCE - PLAN vs. ACT.		-	-	-	-	-	-	-	1,190	264	-	-	-	-	-	-	-	-	-	30	-
SMEC		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS			UNIT RATES				PERIOD WORKFORCE			
CATEGORY	UO	ESTIMATE	PERIOD	PERIOD	Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	ACTUAL			
		TO COMPLETE	PLANNED	ACTUAL			CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	Z HC
SD PIPE	ILF	72,960	1,156	1,356	49,003	67.162	5,069	710	4,887	1,165	361,030	247,871	68.662	4.948	5.000	4.463	5.058	127	10.02	122	9.32
SD HANGERS	IEA	13,463	247	245	6,534	48.532	8,667	1,213	6,363	1,517	544,024	265,306	48.772	40.409	40.000	32.163	40.604	217	17.12	159	12.12
CAT. 243 HRS - COMPLT	IEA	8,965	180	133	7,134	79.582	3,304	463	3,165	755	199,226	171,903	86.292	22.223	-	29.474	24.096	83	6.52	79	6.02
HAH/SUPPORT CRAFT	IMH	-	-	-	-	-	-	-	7,234	1,209	421,100	357,418	81.882	-	-	-	-	-	-	181	13.72
INISC. STEEL	IMH	-	-	-	-	-	-	-	1,700	114	119,036	83,521	70.162	-	-	-	-	-	-	43	3.22
MECHANICAL EQUIP.	IMH	-	-	-	-	-	-	-	1,854	430	128,624	127,434	99.072	-	-	-	-	-	-	46	3.52
REWORK	IMH	-	-	-	-	-	-	-	5,757	1,240	117,261	121,645	103.742	-	-	-	-	-	-	144	10.92
PREVENTIVE MAINTENANCE	IMH	-	-	-	-	-	-	-	728	178	97,546	34,405	35.272	-	-	-	-	-	-	18	1.42
HYDROTEST	IMH	-	-	-	-	-	-	-	617	147	160,870	35,280	21.932	-	-	-	-	-	-	15	1.22
OTHER DIRECTS	IMH	-	-	-	-	-	-	-	1,302	215	168,504	64,469	37.362	-	-	-	-	-	-	33	2.52
SURVEYORS	IMH	-	-	-	-	-	-	-	2,843	483	219,520	150,661	68.632	-	-	-	-	-	-	71	5.42
WAREHOUSEMEN	IMH	-	-	-	-	-	-	-	2,134	208	149,452	104,541	69.952	-	-	-	-	-	-	53	4.02
UNALLOCATED LABOR	IMH	-	-	-	-	-	-	-	1,752	293	121,790	93,011	76.372	-	-	-	-	-	-	44	3.32
JANITORS	IMH	-	-	-	-	-	-	-	2,418	101	140,738	100,724	71.572	-	-	-	-	-	-	60	4.62
SCAFFOLDING	IMH	-	-	-	-	-	-	-	10	2	263,359	2,504	0.952	-	-	-	-	-	-	0	.02
GENERAL CLEAN-UP	IMH	-	-	-	-	-	-	-	671	29	338,015	31,045	9.182	-	-	-	-	-	-	17	1.32
OTHER DISTRIB.	IMH	-	-	-	-	-	-	-	4,340	726	435,014	305,771	69.132	-	-	-	-	-	-	109	8.22
ADVISORY OPERATIONS	IMH	-	-	-	-	-	-	-	4,964	1,210	631,978	153,740	24.332	-	-	-	-	-	-	124	9.42
TOTAL		-	-	-	-	-	50,784	7,109	52,739	10,022	4,617,087	2,451,249	53.092	-	-	-	-	1,270	1002	1,318	1002
VARIANCE - PLAN vs. ACT.		-	-	-	-	-	-	-	(1,955)	(2,913)	-	-	-	-	-	-	-	-	-	(49)	-

LEGEND:

CATEGORIES: INCLUDE KEY INDICATORS PLUS ITEMS OF MAJOR WORK FOR REPORTING PERIOD.

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/84. (BASED ON RE-EVALUATED 8/31/84 FORECAST)
PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/31/84 FORECAST.
PERIOD ACTUAL: THE ACTUAL DATA FOR THE ONE WEEK PERIOD LISTED ABOVE.
CUMULATIVE: TOTAL TO DATE FROM 1/84.
PERCENT INSTALLED: "CUMULATIVE" DIVIDED BY "ESTIMATE TO COMPLETE".

WEEKLY HOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE WEEK PERIOD BASED ON THE 8/31/84 FORECAST.
ACTUAL STRAIGHT TIME / OVERTIME HOURS: ACTUAL HOURS EXPENDED FOR THE ONE WEEK PERIOD.

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/84 THROUGH 10/84. (BASED ON REEVALUATED 8/31/84 FORECAST)
ACTUAL HOURS: EXPENDED HOURS FROM 1/84 THROUGH PERIOD ENDING AS LISTED ABOVE.
PERCENT EXPENDED: "ACTUAL HOURS" DIVIDED BY "ESTIMATED HOURS".

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED HOURS" DIVIDED BY "ESTIMATED QUANTITIES" (BASED ON REEVALUATED 8/31/84 FORECAST)
TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN
PERIOD UNIT RATE: STRAIGHT TIME PLUS OVERTIME HOURS DIVIDED BY "PERIOD ACTUAL QUANTITIES".
CUMULATIVE UNIT RATE: "CUMULATIVE ACTUAL HOURS" DIVIDED BY "CUMULATIVE QUANTITIES".

PERIOD WORKFORCE: (EQUIVALENT)

PLANNED HEADCOUNT: BASED ON THE 8/31/84 FORECAST
PLANNED PERCENT HEADCOUNT: CATEGORIZED "PLANNED HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT"
ACTUAL HEADCOUNT: "STRAIGHT TIME HOURS" DIVIDED BY AVAILABLE STRAIGHT TIME WORKWEEK HOURS.
ACTUAL PERCENT HEADCOUNT: CATEGORIZED "ACTUAL HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT".

CATEGORIES:

ITT GRINNELL

CATEGORY 1 COMPLETED HANGERS (4-5x) : HANGERS WHICH ARE COMPLETED DURING THE REPORTING PERIOD. (i.e. UPGRADED FROM 4x TO 5x IN PPS)
THIS DATA IS SHOWN FOR INFORMATION ONLY AND IS INCLUDED IN THE DATA LINES FOR L.B. HANGERS.

LK CONSTOCK

SCHEDULED CABLE PULL : CABLE REPORTED IN CHS WHICH IS ENGINEERED IDENTIFIED CABLE IN THE ENGINEERS ECSIS SYSTEM.

CABLE STUFF-IN: MANHOURS EXPENDED IN THE PERIOD FOR THE FINAL PULLING OF PREVIOUSLY PULLED AND REPORTED SCHEDULED CABLE.
MANHOURS SHOWN ARE FOR INFORMATION ONLY AND ARE INCLUDED IN DATA LINE FOR SCHEDULED CABLE.

UNSCHEDULED CABLE PULL: OTHER CABLE SUCH AS LIGHTING, COMMUNICATIONS, SECURITY AND MISC. POWER THAT IS NOT REPRESENTED IN THE ENGINEERS ECSIS BUT REPORTED IN CHS.

JOHNSON CONTROLS

TOTAL TUBING: INCLUDES NON-SEISMIC STAINLESS STEEL, SEISMIC STAINLESS STEEL, AND COPPER TUBING.

VARIANCE - PLANNED vs. ACTUAL

VARIANCE EQUALS PLANNED MINUS ACTUAL. (NEGATIVE) INDICATES ACTUAL GREATER THAN PLANNED.

ITT GRINNELL		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	UOM	ESTIMATE	PERIOD	PERIOD	Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
		TO COMPLETE	PLANNED	ACTUAL		CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	PENDING	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	Z HC	HC	Z HC
ISB PIPE	LF	28,336	-	228	22,894	80.792	-	-	1,380	199	169,944	135,486	79.722	5.997	3,290	6.925	5.918	-	-	35	4.12	
ISB HANGERS	EA	5,978	90	45	4,606	77.052	4,154	624	2,334	296	322,162	249,280	77.382	53.891	46,600	58,444	54,121	104	11.72	58	6.92	
ILB PIPE	LF	27,310	-	146	24,706	90.472	-	-	4,097	528	210,611	224,452	106.572	7.712	6,250	31,678	9,085	-	-	102	12.12	
ILB HANGERS	EA	5,900	127	63	3,721	64.162	18,024	2,703	14,774	2,639	111,043,573	758,384	72.672	179.926	163,460	276,397	203,812	451	50.72	349	43.52	
1 CAT. I COMPLETED (4-5)	EA	-	-	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ILB WELDS	EA	6,546	75	126	5,885	89.902	1,630	245	2,327	343	169,263	150,631	88.992	25.657	-	21,190	25,596	41	4.62	58	6.82	
IREWORK	INH	-	-	-	-	-	-	-	2,836	376	310,088	235,494	75.952	-	-	-	-	-	-	71	8.32	
PIPE WHIP RESTRAINTS	INH	-	-	-	-	-	-	-	9	3	222,448	146,942	66.062	-	-	-	-	-	-	0	.02	
OTHER DIRECTS	INH	-	-	-	-	-	-	-	3,245	451	223,409	179,063	80.152	-	-	-	-	-	-	81	9.52	
WAREHOUSEMEN	INH	-	-	-	-	-	-	-	1,003	127	96,909	72,894	75.222	-	-	-	-	-	-	25	3.02	
QUALIFYING WELDERS	INH	-	-	-	-	-	-	-	552	70	17,483	15,443	88.332	-	-	-	-	-	-	14	1.62	
CLEAN UNSAT. MATL.	INH	-	-	-	-	-	-	-	9	0	23,625	19,141	81.022	-	-	-	-	-	-	0	.02	
OTHER DISTRIB.	INH	-	-	-	-	-	-	-	1,419	244	137,222	124,598	90.802	-	-	-	-	-	-	35	4.22	
TOTAL		-	-	-	-	-	35,568	5,335	33,985	5,276	112,916,733	12,311,808	78.452	-	-	-	-	889	1002	850	1002	

LK COMSTOCK		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	UOM	TO COMPLETE	PERIOD PLANNED	PERIOD ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	PENDING	UNIT RATE	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
SCHEDULED CABLE PULL	LF	4,528,189	60,030	60,556	2,611,308	58,332	6,081	943	4,539	800	532,121	310,943	58,432	0.118	0.103	0.688	0.118	152	23.12	113	16.62	
STUFF-IN	INH	-	-	-	-	-	-	-	911	160	-	-	-	-	-	-	-	-	-	-	-	
UNSCHEDULED CABLE PULL	LF	1,519,183	35,000	4,262	181,205	11,932	2,273	352	208	45	112,362	11,842	10,542	0.074	-	0.059	0.065	57	8.62	5	0.82	
CABLE TERMINATIONS -ALL	EA	246,247	6,000	4,033	106,479	43,242	4,675	725	2,099	356	237,427	112,938	47,572	0.944	1.034	0.609	1.061	117	17.82	52	7.72	
CONDUIT	LF	339,808	6,000	7,164	255,625	75,232	5,678	880	5,902	1,209	372,567	271,061	72,752	1.096	1.072	0.993	1.060	142	21.62	148	21.62	
CONDUIT SUPPORTS	EA	20,289	350	409	16,790	82,752	5,152	798	5,810	962	348,524	271,272	77,832	17.178	16,500	16,557	16,157	129	19.62	145	21.32	
FIRE DETECTION	INH	-	-	-	-	-	-	-	816	104	105,164	57,017	54,222	-	-	-	-	-	-	21	3.12	
PGCC MODIFICATIONS	INH	-	-	-	-	-	-	-	1,567	763	167,466	70,830	42,302	-	-	-	-	-	-	39	5.72	
IREWORK	INH	-	-	-	-	-	-	-	1,053	253	203,227	103,369	50,862	-	-	-	-	-	-	26	3.92	
UNLOAD & HANDLE	INH	-	-	-	-	-	-	-	625	117	80,707	48,677	60,312	-	-	-	-	-	-	16	2.32	
345KV YARD WORK	INH	-	-	-	-	-	-	-	421	52	18,242	12,614	69,152	-	-	-	-	-	-	11	1.52	
OTHER DIRECTS	INH	-	-	-	-	-	-	-	3,211	418	294,296	225,726	76,702	-	-	-	-	-	-	80	11.82	
WAREHOUSEMEN	INH	-	-	-	-	-	-	-	388	65	45,977	35,678	77,602	-	-	-	-	-	-	10	1.42	
QUALIFYING WELDERS	INH	-	-	-	-	-	-	-	577	94	32,840	29,088	88,562	-	-	-	-	-	-	14	2.12	
OTHER DISTRIB.	INH	-	-	-	-	-	-	-	54	105	25,713	13,459	52,342	-	-	-	-	-	-	1	0.22	
TOTAL	-	-	-	-	-	-	26,316	4,079	27,300	5,343	112,576,633	11,574,510	61,112	-	-	-	-	658	1002	683	1002	

18-Oct-84

COST PERFORMANCE REPORT--PERIOD 10/08-10/14 1984

JOHNSON CONTROLS		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS			UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD		%	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	%	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
CATEGORY	TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	% HC	HC	% HC	
TOTAL TUBING	1LF	152,805	2,536	1,256	67,847	44,402	3,885	680	4,847	810	264,343	127,026	48.05	1.730	2.500	4.504	1.872	97	36.3%	121	51.5%
SEISMIC SUPPORTS	1EA	3,853	56	47	1,846	47,912	3,446	603	2,290	383	261,157	113,446	43.44	67.780	40.000	56.872	61.455	86	32.2%	57	24.3%
INSTRUMENTS	1EA	3,778	-	8	1,097	29,042	-	-	35	6	43,046	11,682	27.14	11.394	-	5.125	10.649	-	-	1	0.4%
TUBE TRAY	1NH	-	-	-	-	-	-	-	506	85	39,465	25,909	65.65	-	-	-	-	-	13	5.4%	
UNLOAD & HANDLE	1NH	-	-	-	-	-	-	-	247	41	12,748	7,706	60.45	-	-	-	-	-	6	2.6%	
OTHER DIRECTS	1NH	-	-	-	-	-	-	-	948	158	132,946	46,245	34.78	-	-	-	-	-	24	10.1%	
WAREHOUSEMEN	1NH	-	-	-	-	-	-	-	386	65	22,114	14,042	63.50	-	-	-	-	-	10	4.1%	
QUALIFYING WELDERS	1NH	-	-	-	-	-	-	-	102	17	4,113	4,400	71.98	-	-	-	-	-	3	1.1%	
OTHER DISTRIB.	1NH	-	-	-	-	-	-	-	46	8	5,872	3,792	64.58	-	-	-	-	-	1	0.5%	
TOTAL	-	-	-	-	-	-	10,692	1,871	9,407	1,573	787,804	354,248	44.97	-	-	-	-	267	100%	235	100.0%

SWEC		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
ESTIMATE	PERIOD	PERIOD					PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL			ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL
CATEGORY	TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	% HC	HC	% HC
ISB PIPE	1LF	72,960	1,464	956	47,647	65,312	8,421	899	6,110	1,079	361,030	241,819	66,982	4,948	5,000	7,520	5,075	161	13.1%	153	12.0%	
ISB HANGERS	1EA	13,463	241	232	6,289	46,712	8,456	1,184	6,145	1,086	544,024	257,426	47,322	40,409	40,000	31,168	40,933	211	17.2%	154	12.0%	
CAT. 243 HRS - COMPLETION	1EA	8,965	170	127	7,001	78,092	3,120	437	3,237	571	199,226	167,983	84,322	22,223	-	29,984	23,994	78	6.4%	81	6.3%	
UNH/SUPPORT CRAFT	1NH	-	-	-	-	-	-	-	6,748	1,048	421,100	348,975	82,872	-	-	-	-	-	-	-	169	13.2%
MISC. STEEL	1NH	-	-	-	-	-	-	-	1,708	118	119,036	81,707	68,642	-	-	-	-	-	-	-	43	3.3%
MECHANICAL EQUIP.	1NH	-	-	-	-	-	-	-	2,122	376	128,624	125,150	97,302	-	-	-	-	-	-	-	53	4.2%
REWORK	1NH	-	-	-	-	-	-	-	2,789	478	117,261	114,648	97,772	-	-	-	-	-	-	-	70	5.5%
PREVENTIVE MAINTENANCE	1NH	-	-	-	-	-	-	-	792	171	97,546	33,499	34,342	-	-	-	-	-	-	-	20	1.6%
HYDROTEST	1NH	-	-	-	-	-	-	-	768	135	160,870	34,516	21,462	-	-	-	-	-	-	-	19	1.5%
OTHER DIRECTS	1NH	-	-	-	-	-	-	-	912	146	168,504	62,952	37,362	-	-	-	-	-	-	-	23	1.8%
SURVEYORS	1NH	-	-	-	-	-	-	-	2,853	435	219,520	147,335	67,122	-	-	-	-	-	-	-	71	5.6%
WAREHOUSEMEN	1NH	-	-	-	-	-	-	-	1,718	204	149,452	102,199	68,382	-	-	-	-	-	-	-	43	3.4%
UNALLOCATED LABOR	1NH	-	-	-	-	-	-	-	1,572	244	121,790	90,966	74,692	-	-	-	-	-	-	-	39	3.1%
WELDERS	1NH	-	-	-	-	-	-	-	2,319	104	140,738	98,205	69,782	-	-	-	-	-	-	-	58	4.5%
SCAFFOLDING	1NH	-	-	-	-	-	-	-	0	0	263,359	2,492	0,952	-	-	-	-	-	-	-	0	0.0%
GENERAL CLEAN-UP	1NH	-	-	-	-	-	-	-	873	39	338,015	30,345	6,982	-	-	-	-	-	-	-	22	1.7%
OTHER DISTRIB.	1NH	-	-	-	-	-	-	-	4,578	706	435,014	300,705	69,132	-	-	-	-	-	-	-	114	9.0%
ADVISORY OPERATIONS	1NH	-	-	-	-	-	-	-	5,791	1,259	631,978	147,566	23,352	-	-	-	-	-	-	-	145	11.3%
TOTAL	-	-	-	-	-	-	49,054	6,868	51,035	8,199	4,617,087	12,388,468	51,732	-	-	-	-	1,226	100%	1,276	100%	

LEGEND:

CATEGORIES: INCLUDE KEY INDICATORS PLUS ITEMS OF MAJOR WORK FOR REPORTING PERIOD.

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/86. (BASED ON RE-EVALUATED 8/31/84 FORECAST)

PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/31/84 FORECAST.

PERIOD ACTUAL: THE ACTUAL DATA FOR THE ONE WEEK PERIOD LISTED ABOVE.

CUMULATIVE: TOTAL TO DATE FROM 1/84.

PERCENT INSTALLED: "CUMULATIVE" DIVIDED BY "ESTIMATE TO COMPLETE".

WEEKLY MANHOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE WEEK PERIOD BASED ON THE 8/31/84 FORECAST.

ACTUAL STRAIGHT TIME / OVERTIME HOURS: ACTUAL HOURS EXPENDED FOR THE ONE WEEK PERIOD.

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/84 THROUGH 10/86. (BASED ON REEVALUATED 8/31/84 FORECAST)

ACTUAL HOURS: EXPENDED HOURS FROM 1/84 THROUGH PERIOD ENDING AS LISTED ABOVE.

PERCENT EXPENDED: "ACTUAL HOURS" DIVIDED BY "ESTIMATED HOURS".

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED MANHOURS" DIVIDED BY "ESTIMATED QUANTITIES" (BASED ON REEVALUATED 8/31/84 FORECAST)

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

PERIOD UNIT RATE: STRAIGHT TIME PLUS OVERTIME HOURS DIVIDED BY "PERIOD ACTUAL QUANTITIES".

CUMULATIVE UNIT RATE: "CUMULATIVE ACTUAL HOURS" DIVIDED BY "CUMULATIVE QUANTITIES".

PERIOD WORKFORCE: (EQUIVALENT)

PLANNED HEADCOUNT: BASED ON THE 8/31/84 FORECAST

PLANNED PERCENT HEADCOUNT: CATEGORIZED "PLANNED HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT"

ACTUAL HEADCOUNT: "STRAIGHT TIME HOURS" DIVIDED BY AVAILABLE STRAIGHT TIME WORKWEEK HOURS.

ACTUAL PERCENT HEADCOUNT: CATEGORIZED "ACTUAL HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT".

CATEGORIES:

ITT GRINNELL

CATEGORY 1 COMPLETED HANGERS (4-5x) : HANGERS WHICH ARE COMPLETED DURING THE REPORTING PERIOD. (I.e. UPGRADED FROM 4x TO 5x IN PPS)
THIS DATA IS SHOWN FOR INFORMATION ONLY AND IS INCLUDED IN THE DATA LINES FOR L.B. HANGERS.

LK CONSTOCK

SCHEDULED CABLE PULL : CABLE REPORTED IN CNS WHICH IS ENGINEERED IDENTIFIED CABLE IN THE ENGINEERS ECSIS SYSTEM.

CABLE STUFF-IN: MANHOURS EXPENDED IN THE PERIOD FOR THE FINAL PULLING OF PREVIOUSLY PULLED AND REPORTED SCHEDULED CABLE.

MANHOURS SHOWN ARE FOR INFORMATION ONLY AND ARE INCLUDED IN DATA LINE FOR SCHEDULED CABLE.

UNSCCHEDULED CABLE PULL: OTHER CABLE SUCH AS LIGHTING, COMMUNICATIONS, SECURITY AND MISC. POWER THAT IS NOT REPRESENTED IN THE ENGINEERS ECSIS BUT REPORTED IN CNS.

JOHNSON CONTROLS

TOTAL TUBING: INCLUDES NON-SEISMIC STAINLESS STEEL, SEISMIC STAINLESS STEEL, AND COPPER TUBING.

JIT GRIMMELL		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	ESTIMATE	PERIOD	PERIOD																			
	UNITO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST NRS	OT NRS	ST NRS	OT NRS	ST NRS	OT NRS	ST NRS	OT NRS	ST NRS	OT NRS	ST NRS	OT NRS	ST NRS	OT NRS	ST NRS	OT NRS	
ISB PIPE	ILF	28,336	-	190	22,666	79,992	-	-	941	119	169,944	133,907	78,792	5,997	3,290	5,579	5,908	-	-	24	2,721	
ISB HANGERS	IEA	5,978	90	44	4,561	76,302	4,154	624	2,696	339	322,162	246,650	76,562	53,891	46,600	68,977	54,078	104	11,721	67	7,921	
ILB PIPE	ILF	27,310	-	206	24,560	89,932	-	-	4,389	613	210,611	219,827	104,382	7,712	6,250	24,282	8,951	-	-	110	12,821	
ILB HANGERS	IEA	5,800	127	52	3,658	63,072	18,024	2,703	15,075	2,333	111,043,573	740,971	71,002	179,926	163,460	334,769	202,562	451	50,721	377	43,921	
CAT.1 COMPLETED (4-5)	IEA	-	-	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ILB WELDS	IEA	6,516	75	108	5,759	87,982	1,630	245	2,768	382	169,263	147,961	87,412	25,857	-	24,537	25,692	41	4,621	57	6,621	
IREWORK	IMH	-	-	-	-	-	-	-	2,915	379	310,084	232,282	74,912	-	-	-	-	-	-	73	8,521	
PIPE WHIP RESTRAINTS	IMH	-	-	-	-	-	-	-	0	0	222,448	146,930	66,052	-	-	-	-	-	-	0	0,021	
OTHER DIRECTS	IMH	-	-	-	-	-	-	-	2,666	378	223,409	175,367	78,502	-	-	-	-	-	-	67	7,821	
WAREHOUSEMEN	IMH	-	-	-	-	-	-	-	909	114	96,909	71,764	74,052	-	-	-	-	-	-	23	2,621	
QUALIFYING WELDERS	IMH	-	-	-	-	-	-	-	454	57	17,483	14,821	84,772	-	-	-	-	-	-	11	1,321	
CLEAN UNSAT. MATL.	IMH	-	-	-	-	-	-	-	21	0	23,625	19,132	80,982	-	-	-	-	-	-	1	0,121	
OTHER DISTRID.	IMH	-	-	-	-	-	-	-	1,969	296	137,222	122,935	89,592	-	-	-	-	-	-	49	5,721	
TOTAL	-	-	-	-	-	-	35,548	5,355	36,303	5,010	112,946,733	12,272,547	77,122	-	-	-	-	809	10021	658	10021	

LK CONSTOCK		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD		2	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	2	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
CATEGORY	UNITO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST NRS	OT NRS	ST NRS	OT NRS	NRS	NRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	MC	2 MC	MC	2 MC		
ISCHEDULED CABLE PULL	ILF	4,529,169	60,030	51,725	2,580,752	56,992	6,081	943	3,945	628	532,121	305,684	57,432	0.110	0.103	0.088	0.110	152	23,121	99	14,531	
STUFF-IN	IMH	-	-	-	-	-	-	-	881	140	-	-	-	-	-	-	-	-	-	-		
IUNSCHEDULED CABLE PULL	ILF	1,519,183	35,000	11,201	176,943	11,652	2,273	352	500	61	112,362	11,589	10,312	0.074	-	0.050	0.045	57	8,621	13	1,821	
ICABLE TERMINATIONS -ALL	IEA	246,247	6,000	4,349	102,446	41,602	4,675	725	2,098	337	237,427	110,483	46,532	0.964	1.036	0.560	1.078	117	17,821	52	7,721	
ICONDUIT	ILF	339,808	6,000	7,892	248,461	73,122	5,678	880	5,743	845	372,567	263,950	70,852	1.096	1.072	0.838	1.062	142	21,621	146	21,021	
ICONDUIT SUPPORTS	IEA	20,289	350	545	16,381	80,742	5,152	798	5,445	809	348,524	264,500	75,892	17.178	16.500	11.475	16.147	129	19,621	136	19,921	
IFIRE DETECTION	IMH	-	-	-	-	-	-	-	978	120	105,164	56,067	53,312	-	-	-	-	-	26	3,621		
IPGCC MODIFICATIONS	IMH	-	-	-	-	-	-	-	1,518	203	167,466	68,500	40,902	-	-	-	-	-	38	5,621		
IREWORK	IMH	-	-	-	-	-	-	-	1,550	190	203,227	182,063	50,222	-	-	-	-	-	39	5,721		
IRUNBAG & HAKOLE	IMH	-	-	-	-	-	-	-	801	120	80,707	47,935	59,392	-	-	-	-	-	20	2,921		
IRISKY YARD WORK	IMH	-	-	-	-	-	-	-	337	41	18,242	12,141	66,562	-	-	-	-	-	8	1,221		
IOther DIRECTS	IMH	-	-	-	-	-	-	-	3,179	434	294,296	222,097	75,472	-	-	-	-	-	79	11,621		
WAREHOUSEMEN	IMH	-	-	-	-	-	-	-	500	61	45,977	35,225	76,612	-	-	-	-	-	13	1,821		
IQualifying WELDERS	IMH	-	-	-	-	-	-	-	563	77	32,840	28,413	86,522	-	-	-	-	-	16	2,121		
IOther DISTRIB.	IMH	-	-	-	-	-	-	-	143	17	25,713	13,300	51,722	-	-	-	-	-	4	0,521		
TOTAL	-	-	-	-	-	-	26,316	4,079	27,300	3,963	112,576,633	11,541,867	59,842	-	-	-	-	658	10021	683	10021	

JOHNSON CONTROLS		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE				
CATEGORY	UO	ESTIMATE	PERIOD	PERIOD	Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL			
		TO COMPLETE	PLANNED	ACTUAL		CUMULATIVE	INSTALLED	ST MRS	OT MRS	ST MRS	OT MRS		MRS	MRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	MC	Z MC	MC	Z MC
TOTAL TUNING	ILF	152,805	2,536	1,154		44,591	43,582	3,085	680	4,153	680		264,343	121,349	45.912	1,730	2,500	4,188	1,023	97	36.321	104	45.521
MECHANICAL SUPPORTS	IEA	3,853	56	41		1,799	46,692	3,416	643	2,088	473		261,157	110,773	42.422	67,789	40,000	81,976	61,575	86	32.221	72	31.621
INSTRUMENTS	IEA	3,778	-	27		1,089	28,821	-	-	125	29		43,046	11,641	27.042	11,394	-	5,370	10,690	-	-	3	1.421
TIME TRAY	INH	-	-	-		-	-	-	-	517	90		39,465	25,318	64.132	-	-	-	-	-	-	16	6.021
UNLOAD & HANDLE	INH	-	-	-		-	-	-	-	215	35		12,748	7,418	58.192	-	-	-	-	-	-	5	2.421
OTHER DIRECTS	INH	-	-	-		-	-	-	-	617	101		132,946	45,139	33.952	-	-	-	-	-	-	15	6.021
WAREHOUSEMEN	INH	-	-	-		-	-	-	-	342	56		22,114	13,591	61.662	-	-	-	-	-	-	9	3.721
QUALIFYING WELDERS	INH	-	-	-		-	-	-	-	147	24		6,113	4,281	70.032	-	-	-	-	-	-	4	1.621
OTHER DISTRI.	INH	-	-	-		-	-	-	-	160	16		5,872	3,738	63.662	-	-	-	-	-	-	3	1.121
TOTAL		-	-	-		-	-	10,492	1,871	9,134	1,495		787,804	343,268	43.572	-	-	-	-	267	1002	228	100.021

SPEC	CATEGORY	QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
		ESTIMATE	PERIOD	PERIOD		Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
		TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	MC	Z MC	MC	Z MC	
ISO PIPE	ILF	72,960	1,461	1,296	46,691	64,002	8,421	899	5,933	1,030	361,030	234,630	64.992	4,948	5,000	5,374	5,025	161	13.121	148	11.421	
ISO HANGERS	IEA	13,463	241	172	4,057	46,992	8,456	1,184	6,683	1,160	544,024	250,195	45.992	40,409	40,000	45,599	41,307	211	17.221	167	12.921	
CAT. 263 MRS - COMPLT	IEA	8,965	170	140	4,874	76,682	3,120	437	3,195	554	199,226	164,175	82.412	22,223	-	26,779	23,883	78	6.421	80	6.221	
ISOLATION SUPPORT CRAFT	INH	-	-	-	-	-	-	-	6,928	1,009	421,100	341,179	81.022	-	-	-	-	-	-	173	13.321	
MISC. STEEL	INH	-	-	-	-	-	-	-	1,343	103	119,036	79,001	67.112	-	-	-	-	-	-	34	2.621	
MECHANICAL EQUIP.	INH	-	-	-	-	-	-	-	2,818	490	128,624	122,652	95.342	-	-	-	-	-	-	70	5.421	
IRONWORK	INH	-	-	-	-	-	-	-	2,431	408	117,261	111,381	94.992	-	-	-	-	-	-	61	4.721	
PREVENTIVE MAINTENANCE	INH	-	-	-	-	-	-	-	719	141	97,546	32,536	33.352	-	-	-	-	-	-	18	1.421	
HYDROTEST	INH	-	-	-	-	-	-	-	691	120	160,870	33,613	20.892	-	-	-	-	-	-	17	1.321	
OTHER DIRECTS	INH	-	-	-	-	-	-	-	1,043	77	160,504	61,894	36.732	-	-	-	-	-	-	26	2.021	
SURVEYORS	INH	-	-	-	-	-	-	-	2,851	415	219,520	144,047	65.622	-	-	-	-	-	-	71	5.521	
WAREHOUSE	INH	-	-	-	-	-	-	-	1,818	235	149,452	100,277	67.102	-	-	-	-	-	-	46	3.621	
UNALLOCATED LABOR	INH	-	-	-	-	-	-	-	1,689	246	121,790	89,150	73.202	-	-	-	-	-	-	42	3.321	
SKILLERS	INH	-	-	-	-	-	-	-	2,287	93	140,738	95,782	68.042	-	-	-	-	-	-	57	4.421	
SCAFFOLDING	INH	-	-	-	-	-	-	-	9	1	263,359	2,492	0.952	-	-	-	-	-	-	0	.021	
GENERAL CLEAN-UP	INH	-	-	-	-	-	-	-	901	37	338,015	29,433	8.712	-	-	-	-	-	-	23	1.721	
OTHER DISTRI.	INH	-	-	-	-	-	-	-	5,044	374	435,014	295,421	67.912	-	-	-	-	-	-	127	9.821	
ADVISORY OPERATIONS	INH	-	-	-	-	-	-	-	5,455	1,054	631,978	140,516	22.232	-	-	-	-	-	-	136	10.521	
TOTAL		-	-	-	-	-	49,054	8,868	51,912	7,557	114,617,087	12,329,254	50.452	-	-	-	-	1,226	1002	1,298	1002	

LEGEND:

CATEGORIES: INCLUDE KEY INDICATORS PLUS ITEMS OF MAJOR WORK FOR REPORTING PERIOD.

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/84. (BASED ON RE-EVALUATED 8/31/84 FORECAST)

PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/31/84 FORECAST.

PERIOD ACTUAL: THE ACTUAL DATA FOR THE ONE WEEK PERIOD LISTED ABOVE.

CUMULATIVE: TOTAL TO DATE FROM 1/84.

PERCENT INSTALLED: "CUMULATIVE" DIVIDED BY "ESTIMATE TO COMPLETE".

WEEKLY MANHOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE WEEK PERIOD BASED ON THE 8/31/84 FORECAST.

ACTUAL STRAIGHT TIME / OVERTIME HOURS: ACTUAL HOURS EXPENDED FOR THE ONE WEEK PERIOD.

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/84 THROUGH 10/84. (BASED ON REEVALUATED 8/31/84 FORECAST)

ACTUAL HOURS: EXPENDED HOURS FROM 1/84 THROUGH PERIOD ENDING AS LISTED ABOVE.

PERCENT EXPENDED: "ACTUAL HOURS" DIVIDED BY "ESTIMATED HOURS".

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED MANHOURS" DIVIDED BY "ESTIMATED QUANTITIES" (BASED ON REEVALUATED 8/31/84 FORECAST)

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

PERIOD UNIT RATE: STRAIGHT TIME PLUS OVERTIME HOURS DIVIDED BY "PERIOD ACTUAL QUANTITIES".

CUMULATIVE UNIT RATE: "CUMULATIVE ACTUAL HOURS" DIVIDED BY "CUMULATIVE QUANTITIES".

PERIOD WORKFORCE: (EQUIVALENT)

PLANNED HEADCOUNT: BASED ON THE 8/31/84 FORECAST

PLANNED PERCENT HEADCOUNT: CATEGORIZED "PLANNED HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT"

ACTUAL HEADCOUNT: "STRAIGHT TIME HOURS" DIVIDED BY AVAILABLE STRAIGHT TIME WORKWEEK HOURS.

ACTUAL PERCENT HEADCOUNT: CATEGORIZED "ACTUAL HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT".

CATEGORIES:

ITT GRIMMELL

CATEGORY 1 COMPLETED HANGERS (4-5x) : HANGERS WHICH ARE COMPLETED DURING THE REPORTING PERIOD. (I.e. UPGRADED FROM 4x TO 5x IN PPS)

THIS DATA IS SHOWN FOR INFORMATION ONLY AND IS INCLUDED IN THE DATA LINES FOR L.D. HANGERS.

LK CONSTOCK

SCHEDULED CABLE PULL : CABLE REPORTED IN CWS WHICH IS ENGINEERED IDENTIFIED CABLE IN THE ENGINEERS ECSIS SYSTEM.

CABLE STUFF-IN: MANHOURS EXPENDED IN THE PERIOD FOR THE FINAL PULLING OF PREVIOUSLY PULLED AND REPORTED SCHEDULED CABLE.

MANHOURS SHOWN ARE FOR INFORMATION ONLY AND ARE INCLUDED IN DATA LINE FOR SCHEDULED CABLE.

UNSCHEDULED CABLE PULL: OTHER CABLE SUCH AS LIGHTING, COMMUNICATIONS, SECURITY AND MISC. POWER THAT IS NOT REPRESENTED IN THE ENGINEERS ECSIS BUT REPORTED IN CWS.

JOHNSON CONTROLS

TOTAL TUBING: INCLUDES NON-SEISMIC STAINLESS STEEL, SEISMIC STAINLESS STEEL, AND COPPER TUBING.

JIT GRINNELL		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	UNITS TO COMPLETE	ESTIMATE	PERIOD	PERIOD	Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
						INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	NC	% NC	NC	% NC	
ISB PIPE	ILF	28,336	-	373	22,476	79,321	-	-	1,490	190	169,944	132,847	78.172	5.997	3.290	4.504	5.911	-	-	37	4.331	
ISB HANGERS	IEA	5,978	90	87	4,517	75,541	4,154	624	2,624	335	322,162	243,615	75.621	53.891	46.640	34.011	53.933	104	11.711	66	7.521	
ISB PIPE	ILF	27,310	-	195	24,354	89,182	-	-	3,305	421	210,611	214,825	102.002	7.712	6.250	24.039	8.021	-	-	83	9.521	
ISB HANGERS	IEA	5,800	127	60	3,604	62,172	10,024	2,703	15,529	2,287	1,043,573	723,563	69.341	179.926	163.460	296.933	200.653	451	50.721	388	44.621	
CAT. 1 COMPLETED (4-5)	IEA	-	-	96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ISB WELDS	IEA	4,546	75	86	5,651	86,332	1,630	245	2,497	332	169,263	145,311	85.852	25.857	-	32.895	25.714	41	4.621	62	7.221	
IREWORK	IMH	-	-	-	-	-	-	-	3,402	434	310,084	228,988	73.852	-	-	-	-	-	-	85	9.821	
PIPE WHIP RESTRAINTS	IMH	-	-	-	-	-	-	-	2	0	222,448	146,930	66.052	-	-	-	-	-	-	0	.021	
OTHER DIRECTS	IMH	-	-	-	-	-	-	-	3,250	444	223,409	172,323	77.132	-	-	-	-	-	-	81	9.321	
WAREHOUSEMEN	IMH	-	-	-	-	-	-	-	985	126	96,909	70,741	73.002	-	-	-	-	-	-	25	2.821	
UNWELDING WELDERS	IMH	-	-	-	-	-	-	-	228	29	17,483	14,310	81.852	-	-	-	-	-	-	6	0.721	
CLEAN UNSAT. MATL.	IMH	-	-	-	-	-	-	-	10	0	23,625	19,111	80.892	-	-	-	-	-	-	0	.021	
OTHER DISTRI.	IMH	-	-	-	-	-	-	-	1,523	235	137,222	120,670	87.942	-	-	-	-	-	-	38	4.421	
TOTAL		-	-	-	-	-	-	35,568	5,335	34,845	4,833	112,944,733	12,233,234	75.792	-	-	-	-	-	809	10021	

LK CONSTOCK	QUANTITIES						WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD		%	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	%	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
CATEGORY	(UNITS TO COMPLETE)	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	MC	% MC	MC	% MC		
SCHEDULED CABLE PULL	ILF	4,528,169	60,030	22,601	2,529,027	55.852	6,081	943	3,460	516	532,121	301,031	56.572	0.118	0.103	0.176	0.119	152	23.121	87	12.721	
STUFF-IN	IMH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UNSCHEDULED CABLE PULL	ILF	1,519,183	35,000	46,359	165,742	10.912	2,273	352	876	107	112,362	11,028	9.812	0.074	-	0.021	0.067	57	0.621	22	3.221	
	ILF	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CABLE TERMINATIONS -ALL	IEA	246,247	6,000	2,543	98,097	39.842	4,675	725	1,520	266	237,427	108,048	45.512	0.964	1.034	0.702	1.101	117	17.821	38	5.621	
	ILF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CONDUIT	ILF	339,808	6,000	8,397	240,579	70.802	5,678	880	5,843	830	372,567	257,342	69.072	1.096	1.072	0.795	1.070	142	21.621	146	21.421	
CONDUIT SUPPORTS	IEA	20,209	350	654	15,836	78.052	5,152	798	5,843	735	340,524	258,246	74.102	17.178	16.500	10.058	16.308	129	19.621	147	21.421	
FIRE DETECTION	IMH	-	-	-	-	-	-	-	955	116	105,164	54,969	52.272	-	-	-	-	-	-	24	3.521	
IPCC MODIFICATIONS	IMH	-	-	-	-	-	-	-	1,458	561	67,707	64,779	99.632	-	-	-	-	-	-	36	5.321	
IREWORK	IMH	-	-	-	-	-	-	-	1,244	152	203,227	100,323	49.362	-	-	-	-	-	-	31	4.521	
COILS & HANDLE	IMH	-	-	-	-	-	-	-	530	64	80,707	47,014	58.252	-	-	-	-	-	-	13	1.921	
345KV YARD WORK	IMH	-	-	-	-	-	-	-	539	66	10,242	11,763	64.482	-	-	-	-	-	-	13	2.021	
OTHER DIRECTS	IMH	-	-	-	-	-	-	-	3,763	485	294,296	218,484	74.242	-	-	-	-	-	-	94	13.821	
	ILF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
WAREHOUSEMEN	IMH	-	-	-	-	-	-	-	573	71	45,977	34,664	75.392	-	-	-	-	-	-	14	2.121	
UNWELDING WELDERS	IMH	-	-	-	-	-	-	-	580	79	32,840	27,773	84.572	-	-	-	-	-	-	15	2.121	
OTHER DISTRI.	IMH	-	-	-	-	-	-	-	139	18	25,713	13,140	51.102	-	-	-	-	-	-	3	0.521	
TOTAL		-	-	-	-	-	-	26,316	4,079	27,343	4,666	112,476,874	11,510,604	60.992	-	-	-	-	-	658	10021	

JORDISON CONTROLS		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS			UNIT RATES					PERIOD WORKFORCE				
CATEGORY	UNIT	ESTIMATE	PERIOD	PERIOD	Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL			
		TO COMPLETE	PLANNED	ACTUAL		CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS		HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	NC	Z NC	NC	Z NC
TOTAL TUBING	ILF	152,805	2,534	1,942		65,437	42,822	3,085	600	3,772	643		264,343	116,536	44,092	1,730	2,500	2,273	1,781	97	34.32	94	42.95
MECHANIC SUPPORTS	IEA	3,853	56	46		1,750	45,632	3,446	603	2,929	500		261,157	107,412	41,132	67,780	40,000	74,543	61,099	86	32.22	73	33.38
INSTRUMENTS	IEA	3,778	-	26		1,062	20,112	-	-	91	15		43,846	11,496	26,712	11,394	-	4,077	10,825	-	-	2	1.02
TUBE TRAY	IMH	-	-	-	-	-	-	-	-	506	86		39,465	24,681	62,542	-	-	-	-	-	13	5.82	
TUNLOAD & MAXILE	IMH	-	-	-	-	-	-	-	-	185	32		12,748	7,168	56,232	-	-	-	-	-	5	2.12	
OTHER DIRECTS	IMH	-	-	-	-	-	-	-	-	806	137		132,946	44,421	33,412	-	-	-	-	-	20	9.22	
WAREHOUSEMEN	IMH	-	-	-	-	-	-	-	-	378	64		22,114	13,193	59,662	-	-	-	-	-	9	4.32	
QUALIFYING WELDERS	IMH	-	-	-	-	-	-	-	-	86	15		6,113	4,110	67,232	-	-	-	-	-	2	1.02	
OTHER DISTRIB.	IMH	-	-	-	-	-	-	-	-	40	7		5,072	3,622	61,682	-	-	-	-	-	1	0.52	
TOTAL		-	-	-	-	-	-	10,692	1,871	8,793	1,499		787,804	332,639	42,222	-	-	-	-	267	100.21	220	100.02

SACC	CATEGORY	QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS			UNIT RATES					PERIOD WORKFORCE			
		ESTIMATE	PERIOD	PERIOD	1	2	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	1	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
		UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	NC	1 NC	1 NC	1 NC	
1SD PIPE	ILF	72,960	1,464	1,004	45,395	62,222	6,421	899	✓5,923	1,039	361,030	227,665	63,062	4,948	5,000	6,934	5,015	161	13.12	140	11.42	
1SD HANGERS	IEA	13,463	241	156	5,065	43,712	8,456	1,184	✓6,224	1,092	544,024	242,352	44,552	40,409	40,000	46,897	41,181	211	17.22	156	12.02	
CAT. 283 HRS - COMPLTN	IEA	8,965	170	143	6,734	75,112	3,120	437	✓3,224	545	199,226	160,426	80,522	22,223	-	26,497	23,823	78	6.42	81	6.22	
1M/H/SUPPORT CRAFT	IMH	-	-	-	-	-	-	-	✓7,927	1,114	344,715	333,242	91,372	-	-	-	-	-	-	198	15.22	
1MISC. STEEL	IMH	-	-	-	-	-	-	-	✓1,183	86	140,000	78,415	56,012	-	-	-	-	-	-	30	2.32	
1MECHANICAL EQUIP.	IMH	-	-	-	-	-	-	-	✓2,425	422	120,624	119,336	92,782	-	-	-	-	-	-	61	4.72	
1REWORK	IMH	-	-	-	-	-	-	-	✓3,530	574	113,000	100,542	96,052	-	-	-	-	-	-	80	6.82	
1PREVENTIVE MAINTENANCE	IMH	-	-	-	-	-	-	-	✓762	140	90,000	31,676	35,202	-	-	-	-	-	-	19	1.52	
1HYDROTEST	IMH	-	-	-	-	-	-	-	✓556	97	160,870	32,802	20,392	-	-	-	-	-	-	14	1.12	
1OTHER DIRECTS	IMH	-	-	-	-	-	-	-	✓743	106	286,534	60,774	21,212	-	-	-	-	-	-	19	1.62	
1SURVEYORS	IMH	-	-	-	-	-	-	-	✓2,811	408	186,593	140,781	75,452	-	-	-	-	-	-	71	5.52	
1WAREHOUSE	IMH	-	-	-	-	-	-	-	✓1,810	235	106,189	98,194	92,472	-	-	-	-	-	-	45	3.52	
1UNALLOCATED LABOR	IMH	-	-	-	-	-	-	-	✓1,650	253	100,607	87,215	80,302	-	-	-	-	-	-	41	3.22	
1JANITORS	IMH	-	-	-	-	-	-	-	✓2,279	107	120,429	93,402	77,562	-	-	-	-	-	-	57	4.62	
1SCAFFOLDING	IMH	-	-	-	-	-	-	-	✓5	1	263,359	2,482	0.942	-	-	-	-	-	-	0	.02	
1GENERAL CLEAN-UP	IMH	-	-	-	-	-	-	-	✓1,022	48	338,615	28,495	0.432	-	-	-	-	-	-	26	2.02	
1OTHER DISTRIB.	IMH	-	-	-	-	-	-	-	✓4,647	716	470,896	289,981	61,582	-	-	-	-	-	-	117	9.02	
1ADVISORY OPERATIONS	IMH	-	-	-	-	-	-	-	✓5,262	1,066	634,978	134,005	21,102	-	-	-	-	-	-	132	10.12	
TOTAL		-	-	-	-	-	49,054	6,868	52,033	8,069	14,617,087	12,269,785	49,162	-	-	-	-	1,226	100.21	1,301	100.02	

LEGEND:

CATEGORIES: INCLUDE KEY INDICATORS PLUS ITEMS OF MAJOR WORK FOR REPORTING PERIOD.

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/84. (BASED ON RE-EVALUATED 8/31/84 FORECAST)
PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/31/84 FORECAST.
PERIOD ACTUAL: THE ACTUAL DATA FOR THE ONE WEEK PERIOD LISTED ABOVE.
CUMULATIVE: TOTAL TO DATE FROM 1/84.
PERCENT INSTALLED: "CUMULATIVE" DIVIDED BY "ESTIMATE TO COMPLETE".

WEEKLY HOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE WEEK PERIOD BASED ON THE 8/31/84 FORECAST.
ACTUAL STRAIGHT TIME / OVERTIME HOURS: ACTUAL HOURS EXPENDED FOR THE ONE WEEK PERIOD.

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/84 THROUGH 10/84. (BASED ON REEVALUATED 8/31/84 FORECAST)
ACTUAL HOURS: EXPENDED HOURS FROM 1/84 THROUGH PERIOD ENDING AS LISTED ABOVE.
PERCENT EXPENDED: "ACTUAL HOURS" DIVIDED BY "ESTIMATED HOURS".

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED HOURS" DIVIDED BY "ESTIMATED QUANTITIES" (BASED ON REEVALUATED 8/31/84 FORECAST)
TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN
PERIOD UNIT RATE: STRAIGHT TIME PLUS OVERTIME HOURS DIVIDED BY "PERIOD ACTUAL QUANTITIES".
CUMULATIVE UNIT RATE: "CUMULATIVE ACTUAL HOURS" DIVIDED BY "CUMULATIVE QUANTITIES".

PERIOD WORKFORCE: (EQUIVALENT)

PLANNED HEADCOUNT: BASED ON THE 8/31/84 FORECAST
PLANNED PERCENT HEADCOUNT: CATEGORIZED "PLANNED HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT"
ACTUAL HEADCOUNT: "STRAIGHT TIME HOURS" DIVIDED BY AVAILABLE STRAIGHT TIME WORKWEEK HOURS.
ACTUAL PERCENT HEADCOUNT: CATEGORIZED "ACTUAL HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT".

CATEGORIES:

ITT GRINWELL

CATEGORY 1 COMPLETED HANGERS (4-5x) : HANGERS WHICH ARE COMPLETED DURING THE REPORTING PERIOD. (I.E. UPGRADED FROM 4x TO 5x IN PPS)
THIS DATA IS SHOWN FOR INFORMATION ONLY AND IS INCLUDED IN THE DATA LINES FOR L.B. HANGERS.

LK CONSTOCK

SCHEDULED CABLE PULL : CABLE REPORTED IN CYS WHICH IS ENGINEERED IDENTIFIED CABLE IN THE ENGINEERS ECSIS SYSTEM.

CABLE STUFF-IN: HOURS EXPENDED IN THE PERIOD FOR THE FINAL PULLING OF PREVIOUSLY PULLED AND REPORTED SCHEDULED CABLE.
HOURS SHOWN ARE FOR INFORMATION ONLY AND ARE INCLUDED IN DATA LINE FOR SCHEDULED CABLE.

UNSCHEDULED CABLE PULL: OTHER CABLE SUCH AS LIGHTING, COMMUNICATIONS, SECURITY AND MISC. POWER THAT IS NOT REPRESENTED IN THE ENGINEERS ECSIS BUT REPORTED IN CYS.

JOHNSON CONTROLS

TOTAL TUBING: INCLUDES NON-SEISMIC STAINLESS STEEL, SEISMIC STAINLESS STEEL, AND COPPER TUBING.

177 BRINDELL	CATEGORY	QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE				
		ESTIMATE	PERIOD	PERIOD	2	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	2	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL			
		THRU	TO	COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	2 HC	HC	2 HC
150 PIPE	ILF	28,336	-	-	333	22,103	78,002	-	-	2,030	266	169,944	131,167	77,182	5,997	3,290	6,895	5,934	-	-	51	5,621	
150 HANGERS	IEA	5,976	90	-	124	4,430	74,112	4,154	824	4,322	545	322,162	240,656	74,702	53,891	46,600	39,411	54,324	104	11,721	108	12,421	
150 PIPE	ILF	27,310	-	-	172	24,199	88,612	-	-	3,588	485	210,611	211,099	100,232	7,712	6,250	23,680	8,723	-	-	90	10,321	
150 HANGERS	IEA	5,800	127	-	41	3,516	81,141	18,024	2,703	12,349	1,828	1,043,573	705,747	67,632	179,926	163,460	316,268	199,026	451	50,721	309	35,421	
CAT. I COMPLETED (4-5)	IEA	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
150 WELDS	IEA	6,516	75	-	90	5,565	85,012	1,630	245	2,585	338	169,263	142,482	84,182	25,857	-	32,478	25,655	41	4,621	65	7,421	
WELDER	IMH	-	-	-	-	-	-	-	-	4,013	680	310,084	225,152	72,612	-	-	-	-	-	-	100	11,521	
PIPE WHIP RESTRAINTS	IMH	-	-	-	-	-	-	-	-	0	0	222,448	146,928	66,052	-	-	-	-	-	-	0	0,021	
OTHER DIRECTS	IMH	-	-	-	-	-	-	-	-	3,288	460	223,409	168,629	75,482	-	-	-	-	-	-	82	9,421	
WAREHOUSEMEN	IMH	-	-	-	-	-	-	-	-	1,206	158	96,909	69,630	71,852	-	-	-	-	-	-	39	3,421	
QUALIFYING WELDERS	IMH	-	-	-	-	-	-	-	-	0	0	17,193	14,053	80,382	-	-	-	-	-	-	0	0,021	
CLEAN UNSAT. MATL.	IMH	-	-	-	-	-	-	-	-	34	4	23,625	19,101	80,852	-	-	-	-	-	-	1	0,121	
OTHER DISTRIB.	IMH	-	-	-	-	-	-	-	-	1,531	233	137,222	118,912	86,662	-	-	-	-	-	-	38	4,421	

LK CONSTOCK	QUANTITIES					WEEKLY HOURS					CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD	2	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	2	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL			
CATEGORY	THRU	TO	COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	2 HC	HC	2 HC
SCHEDULED CABLE PULL	ILF	4,528,169	60,030	15,414	2,566,426	55,352	6,081	943	3,392	501	532,121	297,055	55,822	6,118	6,103	0,253	0,119	152	23,121	85	12,221	
STUFF-IN	IMH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UNCHEDULED CABLE PULL	ILF	1,519,183	35,600	2,314	119,363	7,862	2,273	352	1,148	142	112,362	10,045	8,942	0,074	-	0,557	0,084	57	8,621	29	4,121	
CABLE TERMINATIONS -ALL	IEA	246,247	6,000	1,376	95,554	38,602	4,675	725	2,856	371	237,427	106,262	44,762	0,364	1,034	2,322	1,112	117	17,821	71	10,221	
CONDUIT	ILF	339,808	6,000	6,016	232,162	68,332	5,678	880	6,136	873	372,567	250,469	67,282	1,096	1,072	1,166	1,080	142	21,621	153	22,021	
CONDUIT SUPPORTS	IEA	20,289	350	392	15,180	74,822	5,152	798	5,368	693	318,524	251,649	72,202	17,178	16,500	15,462	16,578	129	19,621	134	19,321	
FIRE DETECTION	IMH	-	-	-	-	-	-	-	897	111	105,164	53,898	51,252	-	-	-	-	11	-	22	3,221	
SPCC MODIFICATIONS	IMH	-	-	-	-	-	-	-	1,535	481	67,707	44,740	95,652	-	-	-	-	38	-	38	5,521	
WELDER	IMH	-	-	-	-	-	-	-	1,520	205	203,227	98,927	48,682	-	-	-	-	38	-	38	5,521	
UNLOAD & HANDLE	IMH	-	-	-	-	-	-	-	556	49	80,707	46,420	57,522	-	-	-	-	14	-	14	2,021	
SKY YARD WORK	IMH	-	-	-	-	-	-	-	591	73	18,242	11,158	61,172	-	-	-	-	15	-	15	2,121	
OTHER DIRECTS	IMH	-	-	-	-	-	-	-	2,708	387	294,296	214,236	72,802	-	-	-	-	68	-	68	9,721	
WAREHOUSEMEN	IMH	-	-	-	-	-	-	-	531	66	45,977	34,020	73,992	-	-	-	-	13	-	13	1,921	
QUALIFYING WELDERS	IMH	-	-	-	-	-	-	-	602	74	32,810	27,114	82,562	-	-	-	-	15	-	15	2,221	
OTHER DISTRI.	IMH	-	-	-	-	-	-	-	43	26	25,713	12,983	50,492	-	-	-	-	1	-	1	0,221	
TOTAL		-	-	-	-	-	-	26,316	4,079	27,883	4,072	112,476,874	11,479,195	59,722	-	-	-	658	1001	697	1001	

JOHNSON CONTROLS		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	UNIT TO COMPLETE	ESTIMATE	PERIOD PLANNED	PERIOD ACTUAL	PERIOD CUMULATIVE	PERIOD INSTALLED	PLANNED ST HRS	PLANNED OT HRS	ACTUAL ST HRS	ACTUAL OT HRS	ESTIMATED HRS	ACTUAL HRS	EXPENDED HRS	UNIT RATE	TARGET PERIOD	CUMULATIVE PERIOD	PLANNED PERIOD	PLANNED PERIOD	ACTUAL PERIOD	ACTUAL PERIOD		
TOTAL TUBING	LF	152,805	2,536	2,060	63,495	41,552	3,005	600	3,932	700	264,343	112,121	42,412	1.730	2.500	2.252	1.766	97	36,371	98	44,371	
SEISMIC SUPPORTS	EA	3,853	56	40	1,712	48,431	3,446	603	2,201	396	261,157	103,903	39,822	67.780	40.000	64.925	60.738	84	32,271	55	24,831	
INSTRUMENTS	EA	3,770	-	53	1,034	27,421	-	-	210	30	43,046	11,390	26,462	11.394	-	4.830	10.994	-	-	5	2,521	
TUBING TRAY	HM	-	-	-	-	-	-	-	480	80	39,415	24,089	61,042	-	-	-	-	-	-	12	5,531	
UNLOAD & HANDLE	HM	-	-	-	-	-	-	-	199	34	12,740	6,951	54,532	-	-	-	-	-	-	5	2,271	
OTHER DIRECTS	HM	-	-	-	-	-	-	-	1,305	250	132,916	43,470	32,702	-	-	-	-	-	-	35	15,631	
WAREHOUSEMEN	HM	-	-	-	-	-	-	-	349	63	22,114	12,751	57,642	-	-	-	-	-	-	9	3,921	
QUALIFYING WELDERS	HM	-	-	-	-	-	-	-	79	14	6,113	4,009	65,502	-	-	-	-	-	-	2	0,921	
OTHER DISTRI.	HM	-	-	-	-	-	-	-	20	4	5,072	3,573	60,802	-	-	-	-	-	-	1	0,231	
TOTAL		-	-	-	-	-	10,692	1,071	8,071	1,597	707,044	322,317	40,922	-	-	-	-	267	10021	222	100,921	

SMC		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	UNIT TO COMPLETE	ESTIMATE	PERIOD PLANNED	PERIOD ACTUAL	PERIOD CUMULATIVE	PERIOD INSTALLED	PLANNED ST HRS	PLANNED OT HRS	ACTUAL ST HRS	ACTUAL OT HRS	ESTIMATED HRS	ACTUAL HRS	EXPENDED HRS	UNIT RATE	TARGET PERIOD	CUMULATIVE PERIOD	PLANNED PERIOD	PLANNED PERIOD	ACTUAL PERIOD	ACTUAL PERIOD		
150 PIPE	LF	72,960	1,464	973	44,391	60,842	6,421	899	5,407	848	341,030	220,703	61,132	4.948	5.000	6.531	4.972	161	13,121	137	10,621	
150 HANGERS	EA	13,463	241	147	5,729	42,552	8,456	1,104	6,551	1,034	541,024	235,034	43,202	40.409	40.000	51.612	41.026	211	17,221	164	12,721	
CAT. 213 HRS - COMPTN	EA	8,965	170	120	6,591	73,522	3,120	437	3,339	528	199,226	156,637	70,621	22.223	-	30.211	23.745	70	6,421	83	6,521	
TURN/SUPPORT CRAFT	HM	-	-	-	-	-	-	-	7,735	1,139	344,715	324,201	80,092	-	-	-	-	-	-	193	15,021	
INISC. STEEL	HM	-	-	-	-	-	-	-	1,476	94	140,000	77,144	55,102	-	-	-	-	-	-	37	2,921	
MECHANICAL EQUIP.	HM	-	-	-	-	-	-	-	2,367	453	120,621	116,489	90,572	-	-	-	-	-	-	59	4,621	
REWORK	HM	-	-	-	-	-	-	-	2,944	514	113,000	104,438	92,472	-	-	-	-	-	-	74	5,721	
PREVENTIVE MAINTENANCE	HM	-	-	-	-	-	-	-	775	177	90,000	30,774	34,192	-	-	-	-	-	-	19	1,521	
HYDROTEST	HM	-	-	-	-	-	-	-	505	80	160,070	32,149	19,902	-	-	-	-	-	-	13	1,021	
OTHER DIRECTS	HM	-	-	-	-	-	-	-	1,271	187	204,534	59,925	20,912	-	-	-	-	-	-	32	2,511	
SURVEYORS	HM	-	-	-	-	-	-	-	2,919	300	106,593	137,532	73,712	-	-	-	-	-	-	73	5,721	
WAREHOUSE	HM	-	-	-	-	-	-	-	1,764	235	106,189	96,149	99,532	-	-	-	-	-	-	44	3,421	
UNLOCATED LABOR	HM	-	-	-	-	-	-	-	1,897	290	100,607	85,312	70,552	-	-	-	-	-	-	47	3,721	
WELDERS	HM	-	-	-	-	-	-	-	2,270	148	120,429	91,016	75,502	-	-	-	-	-	-	57	4,421	
SCAFFOLDING	HM	-	-	-	-	-	-	-	4	0	263,359	2,476	0,942	-	-	-	-	-	-	0	0,021	
GENERAL CLEAN-UP	HM	-	-	-	-	-	-	-	494	32	330,015	27,425	8,112	-	-	-	-	-	-	12	1,021	
OTHER DISTRI.	HM	-	-	-	-	-	-	-	4,608	470	470,014	284,590	60,442	-	-	-	-	-	-	115	8,921	
ADVISORY OPERATIONS	HM	-	-	-	-	-	-	-	5,242	1,194	634,970	127,677	20,112	-	-	-	-	-	-	131	10,121	
TOTAL		-	-	-	-	-	49,054	6,848	51,648	8,023	114,617,007	12,209,683	47,843	-	-	-	-	1,226	10021	1,291	10021	

LEGEND:

CATEGORIES: INCLUDE KEY INDICATORS PLUS ITEMS OF MAJOR WORK FOR REPORTING PERIOD.

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/84. (BASED ON RE-EVALUATED 8/31/84 FORECAST)

PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/31/84 FORECAST.

PERIOD ACTUAL: THE ACTUAL DATA FOR THE ONE WEEK PERIOD LISTED ABOVE.

CUMULATIVE: TOTAL TO DATE FROM 1/84.

PERCENT INSTALLED: "CUMULATIVE" DIVIDED BY "ESTIMATE TO COMPLETE".

WEEKLY MANHOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE WEEK PERIOD BASED ON THE 8/31/84 FORECAST.

ACTUAL STRAIGHT TIME / OVERTIME HOURS: ACTUAL HOURS EXPENDED FOR THE ONE WEEK PERIOD.

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/84 THROUGH 10/84. (BASED ON REEVALUATED 8/31/84 FORECAST)

ACTUAL HOURS: EXPENDED HOURS FROM 1/84 THROUGH PERIOD ENDING AS LISTED ABOVE.

PERCENT EXPENDED: "ACTUAL HOURS" DIVIDED BY "ESTIMATED HOURS".

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED MANHOURS" DIVIDED BY "ESTIMATED QUANTITIES" (BASED ON REEVALUATED 8/31/84 FORECAST)

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

PERIOD UNIT RATE: STRAIGHT TIME PLUS OVERTIME HOURS DIVIDED BY "PERIOD ACTUAL QUANTITIES".

CUMULATIVE UNIT RATE: "CUMULATIVE ACTUAL HOURS" DIVIDED BY "CUMULATIVE QUANTITIES".

PERIOD WORKFORCE: (EQUIVALENT)

PLANNED HEADCOUNT: BASED ON THE 8/31/84 FORECAST

PLANNED PERCENT HEADCOUNT: CATEGORIZED "PLANNED HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT"

ACTUAL HEADCOUNT: "STRAIGHT TIME HOURS" DIVIDED BY AVAILABLE STRAIGHT TIME WORKWEEK HOURS.

ACTUAL PERCENT HEADCOUNT: CATEGORIZED "ACTUAL HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT".

CATEGORIES:

ITT GRIMMELL

CATEGORY 1 COMPLETED HANGERS (4-5x) : HANGERS WHICH ARE COMPLETED DURING THE REPORTING PERIOD. (I.E. UPGRADED FROM 4x TO 5x IN PPS)

THIS DATA IS SHOWN FOR INFORMATION ONLY AND IS INCLUDED IN THE DATA LINES FOR L.D. HANGERS.

LK CONSTOCK

SCHEDULED CABLE PULL : CABLE REPORTED IN CYS WHICH IS ENGINEER IDENTIFIED CABLE IN THE ENGINEERS ECSS SYSTEM.

CABLE STUFF-IN: MANHOURS EXPENDED IN THE PERIOD FOR THE FINAL PULLING OF PREVIOUSLY PULLED AND REPORTED SCHEDULED CABLE.

MANHOURS SHOWN ARE FOR INFORMATION ONLY AND ARE INCLUDED IN DATA LINE FOR SCHEDULED CABLE.

UNSCHEDULED CABLE PULL: OTHER CABLE SUCH AS LIGHTING, COMMUNICATIONS, SECURITY AND MISC. POWER THAT IS NOT REPRESENTED IN THE ENGINEERS ECSS BUT REPORTED IN CYS.

WIREMAN CONTROLS

TOTAL TUBING: INCLUDES NON-SEISMIC STAINLESS STEEL, SEISMIC STAINLESS STEEL, AND COPPER TUBING.

20-Sep-84

COST PERFORMANCE REPORT--PERIOD 9/10-9/16 1984

ITT GRINNELL		QUANTITIES					WEEKLY HANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	UOM	TO COMPLETE	PERIOD PLANNED	PERIOD ACTUAL	CUMULATIVE	INSTALLED	PLANNED ST HRS	PLANNED OT HRS	ACTUAL ST HRS	ACTUAL OT HRS	ESTIMATED HRS	ACTUAL HRS	EXPENDED	UNIT RATE	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
15B PIPE	LF	28,336	-	475	21,351	75,352			3,353	456	169,944	126,405	74,382	5.997	3.290	8.019	5.920			84	8.71	
15B HANGERS	EA	5,978	90	116	4,261	71,282			4,511	604	322,162	230,670	71,602	33.891	46.600	44.353	54.133			114	11.82	
15B PIPE	LF	27,310	-	402	26,080	91,832			4,180	626	210,611	201,976	95,902	7.712	6.250	11.935	8.053			105	10.92	
15B HANGERS	EA	5,800	134	64	3,490	60,172			12,066	1,590	1,043,573	677,147	64,952	179.926	163.460	213.375	194.226			302	31.52	
CAT. I COMPLETED (4-5x)	EA	-	-	66	-	-			-	-	-	-	-	-	-	-	-			-	-	
15B WELDS	EA	6,516	59	106	5,127	78,322			2,116	277	169,263	136,255	80,502	25.857	-	22.858	26.576			54	5.61	
REWORK	MM	-	-	-	-	-			3,730	490	310,084	212,135	68,412	-	-	-	-			93	9.72	
PIPE WHIP RESTRAINTS	MM	-	-	-	-	-			0	0	222,418	146,615	65,912	-	-	-	-			0	0.02	
OTHER DIRECTS	MM	-	-	-	-	-			5,443	778	223,409	182,700	81,782	-	-	-	-			136	14.22	
WAREHOUSEMEN	MM	-	-	-	-	-			1,285	156	96,909	64,711	68,842	-	-	-	-			32	3.42	
QUALIFYING WELDERS	MM	-	-	-	-	-			116	14	17,483	13,892	79,402	-	-	-	-			3	0.32	
CLEAN UNSAT. MAIL	MM	-	-	-	-	-			0	0	23,625	18,792	80,392	-	-	-	-			0	0.02	
OTHER DISTRIB.	MM	-	-	-	-	-			1,468	464	137,222	100,609	73,322	-	-	-	-			37	3.82	
TOTAL		-	-	-	-	-	35,568	5,335	38,328	5,455	112,946,733	12,114,797	71,772	-	-	-	-	889	100%	958	100%	

LK CONSTOCK		QUANTITIES					WEEKLY HANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	UOM	TO COMPLETE	PERIOD PLANNED	PERIOD ACTUAL	CUMULATIVE	INSTALLED	PLANNED ST HRS	PLANNED OT HRS	ACTUAL ST HRS	ACTUAL OT HRS	ESTIMATED HRS	ACTUAL HRS	EXPENDED	UNIT RATE	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
SCHEDULED CABLE PULL	LF	4,528,169	66,631	41,214	2,459,329	54,292			3,501	552	532,121	292,465	54,952	0.118	0.103	0.098	0.119			88	12.71	
STUFF-IN	MM	-	-	-	-	-			-	-	-	-	-	-	-	-	-			-	-	
UNSCHEDULED CABLE PULL	LF	1,519,183	1,250	2,138	89,941	7,242			297	37	113,939	6,766	5,912	0.075	-	0.156	0.062			7	1.12	
CABLE TERMINATIONS -ALL	EA	246,247	4,200	2,267	91,897	37,322			2,080	394	237,427	100,306	42,252	0.964	1.034	1.091	1.092			52	7.62	
CONDUIT	LF	339,808	6,000	9,366	216,722	63,792			6,127	1,113	372,567	236,979	63,472	1.096	1.072	0.773	1.091			153	22.32	
CONDUIT SUPPORTS	EA	20,289	350	802	13,974	68,872			5,833	859	348,524	239,349	68,682	17.178	16.500	8.344	17.128			146	21.22	
FIRE DETECTION	MM	-	-	-	-	-			897	120	105,164	51,001	48,502	-	-	-	-			22	3.72	
PCCC MODIFICATIONS	MM	-	-	-	-	-			1,587	218	67,707	61,810	90,112	-	-	-	-			40	5.82	
REWORK	MM	-	-	-	-	-			1,642	240	203,227	96,051	47,262	-	-	-	-			42	6.02	
UNLOAD & HANDLE	MM	-	-	-	-	-			639	79	80,707	44,369	55,002	-	-	-	-			16	2.32	
34SKV YARD WORK	MM	-	-	-	-	-			382	47	18,242	10,633	55,002	-	-	-	-			10	1.42	
OTHER DIRECTS	MM	-	-	-	-	-			3,331	578	292,719	204,711	68,572	-	-	-	-			83	12.12	
WAREHOUSEMEN	MM	-	-	-	-	-			543	84	45,977	32,187	71,312	-	-	-	-			18	2.82	
QUALIFYING WELDERS	MM	-	-	-	-	-			563	93	32,840	25,774	78,482	-	-	-	-			14	2.82	
OTHER DISTRIB.	MM	-	-	-	-	-			86	11	25,713	15,158	58,952	-	-	-	-			2	0.32	
TOTAL		-	-	-	-	-	29,240	4,532	27,518	4,421	112,476,874	11,405,809	56,762	-	-	-	-	731	100%	688	100%	

20-Sep-84

COST PERFORMANCE REPORT--PERIOD 9/10-9/16 1984

JOHNSON CONTROLS		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	UOM	ESTIMATE	PERIOD TO COMPLETE	PERIOD PLANNED	PERIOD ACTUAL	PERIOD CUMULATIVE	PLANNED ST HRS	PLANNED OT HRS	ACTUAL ST HRS	ACTUAL OT HRS	ESTIMATED HRS	ACTUAL HRS	EXPENDED HRS	ESTIMATED UNIT RATE	TARGET UNIT RATE	PERIOD UNIT RATE	CUMULATIVE UNIT RATE	PLANNED HC	PLANNED 2 HC	ACTUAL HC	ACTUAL 2 HC	
TOTAL TUBING	LF	152,805		2,174	1,553	61,436	40,212		4,173	845	264,343	107,735	40,762	1,730	2,500	3,231	1,754			104	47,271	
SEISMIC SUPPORTS	EA	3,853		41	51	1,674	43,452		2,702	542	261,157	101,624	38,912	67,789	40,000	63,608	60,707			68	30,621	
INSTRUMENTS	EA	3,778			10	985	26,072		74	15	43,016	11,152	25,912	11,394		0,900	11,322			2	0,821	
TUBE TRAY	PM	-							645	135	39,465	23,465	59,462							17	7,521	
UNLAD & HANDLE	PM	-							141	28	12,748	6,717	52,692							4	1,621	
OTHER DIRECTS	PM	-							696	147	132,916	41,352	31,102							17	7,921	
WAREHOUSEMEN	PM	-							337	68	22,114	12,239	55,352							8	3,821	
QUALIFYING WELDERS	PM	-							37	7	6,113	3,917	64,082							1	0,421	
OTHER DISTRIB.	PM	-							10	2	5,872	1,044	17,782							0	0,121	
TOTAL		-		-	-	-	9,792	1,714	8,835	1,789	787,804	309,245	39,252	-	-	-	-	245	10021	221	100,821	

SMC		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	UOM	ESTIMATE	PERIOD TO COMPLETE	PERIOD PLANNED	PERIOD ACTUAL	PERIOD CUMULATIVE	PLANNED ST HRS	PLANNED OT HRS	ACTUAL ST HRS	ACTUAL OT HRS	ESTIMATED HRS	ACTUAL HRS	EXPENDED HRS	ESTIMATED UNIT RATE	TARGET UNIT RATE	PERIOD UNIT RATE	CUMULATIVE UNIT RATE	PLANNED HC	PLANNED 2 HC	ACTUAL HC	ACTUAL 2 HC	
SD PIPE	LF	72,960		1,292	1,101	43,572	59,722		4,978	824	341,030	214,325	59,342	4,948	5,000	5,270	4,919			124	9,821	
SD HANGERS	EA	13,463		234	154	5,553	41,252		4,136	1,016	544,024	227,091	41,742	40,409	40,000	46,442	40,895			133	12,121	
CAT. 263 HGRS - COMPL	EA	8,965		170	134	6,463	72,092		3,362	536	199,226	152,772	76,682	22,223		29,239	23,638			84	6,621	
UAW/SUPPORT CRANT	PM	-							7,923	1,258	344,715	315,542	84,522							198	15,621	
MISC. STEEL	PM	-							1,225	78	140,000	74,957	53,542							31	2,421	
MECHANICAL EQUIP.	PM	-							2,236	386	128,624	113,954	88,592							56	4,421	
REWORK	PM	-							2,624	316	113,000	99,027	87,632							64	5,271	
PREVENTIVE MAINTENANCE	PM	-							673	165	90,000	29,910	33,272							17	1,321	
HYDROTEST	PM	-							860	142	160,870	34,911	21,702							22	1,721	
OTHER DIRECTS	PM	-							1,120	119	286,534	55,561	19,392							28	2,271	
SURVEYORS	PM	-							2,864	398	186,593	138,232	74,082							72	5,721	
WAREHOUSE	PM	-							1,768	262	106,189	94,110	88,622							44	3,521	
UNALLOCATED LABOR	PM	-							1,747	266	108,607	82,988	76,412							44	3,421	
JANITORS	PM	-							2,218	126	120,429	88,623	73,592							56	4,421	
SCAFFOLDING	PM	-							77	12	263,359	2,571	0,982							2	0,271	
GENERAL CLEAN-UP	PM	-							1,143	64	338,015	28,426	8,412							29	2,321	
OTHER DISTRIB.	PM	-							4,684	457	470,894	273,928	58,172							117	9,271	
ADVISORY OPERATIONS	PM	-							4,974	1,284	634,978	121,818	19,182							124	9,821	
TOTAL		-		-	-	-	49,054	6,868	50,442	7,731	114,617,087	12,148,776	46,542	-	-	-	-	1,226	10021	1,264	10021	

20-Sep-81

COST PERFORMANCE REPORT--PERIOD 9/10-9/16 1981

LEGEND:

CATEGORIES: INCLUDE KEY INDICATORS PLUS ITEMS OF MAJOR WORK FOR REPORTING PERIOD.

QUANTITIES:

- ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/86. (BASED ON RE-EVALUATED 8/31/84 FORECAST)
- PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/31/84 FORECAST.
- PERIOD ACTUAL: THE ACTUAL DATA FOR THE ONE WEEK PERIOD LISTED ABOVE.
- CUMULATIVE: TOTAL TO DATE FROM 1/84.
- PERCENT INSTALLED: "CUMULATIVE" DIVIDED BY "ESTIMATE TO COMPLETE".

WEEKLY MANHOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE WEEK PERIOD BASED ON THE 8/31/84 FORECAST.
ACTUAL STRAIGHT TIME / OVERTIME HOURS: ACTUAL HOURS EXPENDED FOR THE ONE WEEK PERIOD.

CUMULATIVE HOURS:

- ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/84 THROUGH 10/86. (BASED ON REEVALUATED 8/31/84 FORECAST)
- ACTUAL HOURS: EXPENDED HOURS FROM 1/84 THROUGH PERIOD ENDING AS LISTED ABOVE.
- PERCENT EXPENDED: "ACTUAL HOURS" DIVIDED BY "ESTIMATED HOURS".

UNIT RATES:

- ESTIMATED UNIT RATE: "ESTIMATED MANHOURS" DIVIDED BY "ESTIMATED QUANTITIES" (BASED ON REEVALUATED 8/31/84 FORECAST)
- TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN
- PERIOD UNIT RATE: STRAIGHT TIME PLUS OVERTIME HOURS DIVIDED BY "PERIOD ACTUAL QUANTITIES".
- CUMULATIVE UNIT RATE: "CUMULATIVE ACTUAL HOURS" DIVIDED BY "CUMULATIVE QUANTITIES".

PERIOD WORKFORCE: (EQUIVALENT)

PLANNED HEADCOUNT: BASED ON THE 8/31/84 FORECAST
PLANNED PERCENT HEADCOUNT: CATEGORIZED "PLANNED HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT"
ACTUAL HEADCOUNT: "STRAIGHT TIME HOURS" DIVIDED BY AVAILABLE STRAIGHT TIME WORKWEEK HOURS.
ACTUAL PERCENT HEADCOUNT: CATEGORIZED "ACTUAL HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT".

CATEGORIES:

III GRINNELL

CATEGORY 1 COMPLETED HANGERS (4-5x) : HANGERS WHICH ARE COMPLETED DURING THE REPORTING PERIOD. (I.e. UPGRADED FROM 4x TO 5x IN PPS)
THIS DATA IS SHOWN FOR INFORMATION ONLY AND IS INCLUDED IN THE DATA LINES FOR L.D. HANGERS.

LX CONSTOCK

SCHEDULED CABLE PULL : CABLE REPORTED IN CHS WHICH IS ENGINEERED IDENTIFIED CABLE IN THE ENGINEERS ECSIS SYSTEM.

CABLE STUFF-IN: MANHOURS EXPENDED IN THE PERIOD FOR THE FINAL PULLING OF PREVIOUSLY PULLED AND REPORTED SCHEDULED CABLE.
MANHOURS SHOWN ARE FOR INFORMATION ONLY AND ARE INCLUDED IN DATA LINE FOR SCHEDULED CABLE.

UNSCHEDULED CABLE PULL: OTHER CABLE SUCH AS LIGHTING, COMMUNICATIONS, SECURITY AND MISC. POWER THAT IS NOT REPRESENTED IN THE ENGINEERS ECSIS BUT REPORTED IN CHS.

JOHNSON CONTROLS

TOTAL TUBING: INCLUDES NON-SEISMIC STAINLESS STEEL, SEISMIC STAINLESS STEEL, AND COPPER TUBING.

COST PERFORMANCE REPORT--PERIOD 9/3-9/9 1984

IT ORINELL		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD		Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	Z HC	HC	Z HC		
11LB PIPE	1LF	21,354		478	21,351	99.99211			2,745	686	71,577	126,405	169,50211	3.492	3.290	7.178	5.791	4		84	9.221	
11LB WIGGERS	1EA	4,995		67	4,261	85.31211			3,761	707	116,358	230,670	198,24211	23.295	46.600	66.687	53.297	4		118	12.521	
11LB PIPE	1LF	25,793		200	25,080	97.24211			4,831	825	130,049	201,976	155,31211	5.642	6.250	2.828	6.994	4		151	16.121	
11LB WIGGERS	1EA	5,702		36	3,490	61.21211			10,044	1,609	811,136	677,847	83,57211	142.255		323.694	192.242	4		314	33.521	
11LB WELDS	1EA	5,938		62	5,127	86.34211			1,933	290	137,243	136,255	99,26211	23.113		35.855	26.258	4		60	6.421	
11BEND	1NM	-	-	-	-	-			2,716	392	255,523	212,135	83,02211	-	-	-	-			85	9.121	
11PIPE WHIP RES.	1NM	-	-	-	-	-			0	0	363,687	146,615	40,31211	-	-	-	-			0	0.021	
11OTHER DIRECTS	1NM	-	-	-	-	-			1,495	260	626,774	182,700	29,15211	-	-	-	-			47	5.021	
11BENDHOUSE	1NM	-	-	-	-	-			1,108	145	133,483	66,711	49,98211	-	-	-	-			35	3.721	
11BENDHOUSE	1NM	-	-	-	-	-			221	29	44,407	13,682	31,26211	-	-	-	-			7	0.721	
11CLEAN WIGGERS	1NM	-	-	-	-	-			0	0	46,378	18,992	40,95211	-	-	-	-			0	0.021	
11BENDHOUSE	1NM	-	-	-	-	-			1,139	531	140,670	100,609	71,52211	-	-	-	-			36	3.821	
TOTAL	-	-	-	-	-	-	0	0	29,993	5,494	2,680,285	12,114,797	73,42211	-	-	-	-	0	021	937	10021	

LK CONSTOCK		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
ESTIMATE	PERIOD	PERIOD		%	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	%	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL			
CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	% HC	HC	% HC		
11CCP CABLE	1LF	5,817,077		28,770	2,471,895	42.492		3,238	388	532,788	292,791	54,952	0.692	0.103	0.126	0.118			101	13.12		
11CCP TERS	1EA	246,247		2,051	91,897	37.322		1,967	314	213,236	100,306	47,642	0.866	1.034	1.112	1.092			61	7.92		
11CONDUIT	1LF	339,808		5,552	216,772	63.792		5,328	1,035	365,714	236,479	64,662	1.076	1.072	1.146	1.091			167	21.51		
11CONDUIT SUPS.	1EA	14,283		392	13,974	97.842		5,413	650	195,389	239,349	122,502	13.680	16.500	15.487	17.128			169	21.82		
11SEC/FINE DET.	1NM	-	-	-	-	-		982	118	196,849	50,971	25,892	-	-	-	-			31	4.02		
11PCC MOD	1NM	-	-	-	-	-		1,220	918	67,707	61,010	90,112	-	-	-	-			38	4.92		
11BEND	1NM	-	-	-	-	-		1,416	243	244,000	96,051	39,372	-	-	-	-			45	5.92		
11BEND	1NM	-	-	-	-	-		710	86	101,000	44,389	43,952	-	-	-	-			22	2.92		
11BEND YARD MK	1NM	-	-	-	-	-		293	36	26,417	10,033	37,982	-	-	-	-			9	1.22		
11BEND JUNCTIONS	1NM	-	-	-	-	-		3,305	428	455,405	200,711	44,072	-	-	-	-			103	13.32		
11BEND	1NM	-	-	-	-	-																
11BEND	1NM	-	-	-	-	-		404	58	32,061	32,787	102,262	-	-	-	-			13	1.62		
11BEND	1NM	-	-	-	-	-		466	64	28,588	25,774	90,162	-	-	-	-			15	1.92		
11BEND	1NM	-	-	-	-	-		24	43	25,713	15,156	58,952	-	-	-	-			1	0.12		
TOTAL	-	-	-	-	-	-	0	0	24,756	4,369	2,484,867	11,405,609	56,572	-	-	-	0	02	775	1062		

12-Sep-84

COST PERFORMANCE REPORT--PERIOD 9/3-9/9 1984

JOHNSON CONTROLS		QUANTITIES				WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD		Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL		
CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	1/2 HC	HC	1/2 HC	
11M-S SS TUBING ILF	56,389		552	16,383	29,052			925	263	89,106	27,629	31,342	1.562		2.152	1.686			29	13,421	
11SEIS.SS TUBING ILF	53,654		398	13,155	24,522			1,189	339	105,715	41,287	39,062	1.970		3.839	3.139			37	17,221	
11COPPER TUBING ILF	41,765		598	30,345	72,662			1,040	296	32,890	33,801	102,772	0.788		2.234	1.114			33	15,121	
11SEISMIC SUPPS. IEA	3,853		38	1,623	42,122			2,081	593	161,133	98,380	61,042	41,820		70,368	60,616			65	30,221	
11INSTRUMENTS IEA	3,778		13	975	25,812			153	44	20,301	11,063	54,492	5.373		15,154	11,347			5	2,221	
11TUBE TRAY IMH	-	-	-	-	-			448	128	23,919	22,665	94,762	-	-	-	-			14	6,321	
11UNLOAD & HNDL IMH	-	-	-	-	-			88	25	4,500	6,548	145,512	-	-	-	-			3	1,321	
11OTHER DIRECTS IMH	-	-	-	-	-			698	197	91,681	40,509	44,182	-	-	-	-			22	10,121	
11WAREHOUSEMEN IMH	-	-	-	-	-			230	65	10,193	11,834	116,102	-	-	-	-			7	3,321	
11QUAL. WELDERS IMH	-	-	-	-	-			34	9	2,696	3,873	143,662	-	-	-	-			1	0,521	
11OTHER DISTRIB. IMH	-	-	-	-	-			8	3	2,836	1,032	36,392	-	-	-	-			0	0,121	
TOTAL	-	-	-	-	-			6,894	1,962	543,970	298,621	54,902	-	-	-	-	0	021	215	10021	

SMEC		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD		Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
	CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	1/2 HC	HC	1/2 HC	
11SD PIPE	ILF	48,475		805	42,471	62,022			4,098	637	489,226	208,523	42,712	7,130	5,000	5,882	4,910			128	9,421	
11SD HANGERS	IEA	12,255		144	5,399	44,062			4,991	776	484,963	219,939	45,352	39,573	40,000	40,049	40,737			156	11,821	
11CAT 263 HRS.	IEA	7,600		64	6,329	83,282			2,864	447	154,466	148,854	96,372	20,324		51,734	23,519			90	6,621	
11URH/SUPT	IMH	-	-	-	-	-			6,972	1,085	231,059	306,361	132,592	-	-	-	-			218	16,021	
11MISC. STL.	IMH	-	-	-	-	-			1,452	85	161,709	73,654	45,552	-	-	-	-			45	3,321	
11MECH. EQUIP.	IMH	-	-	-	-	-			1,779	277	128,624	111,332	86,562	-	-	-	-			56	4,121	
11REWORK	IMH	-	-	-	-	-			1,900	270	117,029	96,087	82,112	-	-	-	-			59	4,421	
11PREV. MAINT.	IMH	-	-	-	-	-			567	108	165,695	29,102	17,562	-	-	-	-			18	1,321	
11HYDROTEST	IMH	-	-	-	-	-			763	119	160,870	33,909	21,082	-	-	-	-			24	1,821	
11OTHER DIRECTS	IMH	-	-	-	-	-			671	105	317,495	54,322	17,112	-	-	-	-			21	1,521	
11SURVEYORS	IMH	-	-	-	-	-			2,574	362	186,593	134,970	72,332	-	-	-	-			80	5,921	
11WAREHOUSE	IMH	-	-	-	-	-			1,548	271	91,467	92,080	100,672	-	-	-	-			48	3,621	
11UNALLOCATED	IMH	-	-	-	-	-			1,339	209	108,607	80,975	74,562	-	-	-	-			42	3,121	
11JANITORS	IMH	-	-	-	-	-			1,812	137	156,530	86,249	55,102	-	-	-	-			57	4,221	
11SCAFFOLDING	IMH	-	-	-	-	-			32	5	289,680	2,482	0,862	-	-	-	-			1	0,121	
11GEN. CLEAN-UP	IMH	-	-	-	-	-			823	62	370,514	27,219	7,352	-	-	-	-			26	1,921	
11OTHER DISTRIB.	IMH	-	-	-	-	-			4,839	754	516,168	268,787	52,072	-	-	-	-			151	11,121	
11ADVISORY OPER.	IMH	-	-	-	-	-			4,500	867	696,028	115,558	16,662	-	-	-	-			141	10,321	
TOTAL		-	-	-	-	-			43,524	6,576	4,824,723	2,090,463	17,332	-	-	-	-	0	021	1,360	10021	

LEGEND:

CATEGORIES: INCLUDE KEY INDICATORS PLUS ITEMS OF MAJOR WORK FOR REPORTING PERIOD.

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/86.

PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/1/84 FORECAST.

PERIOD ACTUAL: THE ACTUAL DATA FOR THE ONE WEEK PERIOD LISTED ABOVE.

CUMULATIVE: TOTAL TO DATE FROM 1/84.

PERCENT INSTALLED: "CUMULATIVE" DIVIDED BY "ESTIMATE TO COMPLETE".

WEEKLY MANHOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE PERIOD WEEK BASED ON THE 8/1/84 FORECAST.

ACTUAL STRAIGHT TIME / OVERTIME HOURS: ACTUAL HOURS EXPENDED FOR THE ONE WEEK PERIOD.

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/84 THROUGH 10/86.

ACTUAL HOURS: EXPENDED HOURS FROM 1/84 THROUGH PERIOD ENDING AS LISTED ABOVE.

PERCENT EXPENDED: "ACTUAL HOURS" DIVIDED BY "ESTIMATED HOURS".

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED MANHOURS" DIVIDED BY "ESTIMATED QUANTITIES"

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

PERIOD UNIT RATE: STRAIGHT TIME PLUS OVERTIME HOURS DIVIDED BY "PERIOD ACTUAL QUANTITIES".

CUMULATIVE UNIT RATE: "CUMULATIVE ACTUAL HOURS" DIVIDED BY "CUMULATIVE QUANTITIES".

PERIOD WORKFORCE:

PLANNED HEADCOUNT: BASED ON THE 8/84 FORECAST

PLANNED PERCENT HEADCOUNT: CATEGORIZED "PLANNED HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT"

ACTUAL HEADCOUNT: "STRAIGHT TIME HOURS" DIVIDED BY AVAILABLE STRAIGHT TIME WORKWEEK HOURS.

ACTUAL PERCENT HEADCOUNT: CATEGORIZED "ACTUAL HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT".

07-Sep-84

COST PERFORMANCE REPORT--PERIOD 8/27-9/2 1984

177 GRIMMELL		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS			UNIT RATES				PERIOD WORKFORCE			
ESTIMATE	PERIOD	PERIOD	Z	PLANNED	ACTUAL	PLANNED	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	ACTUAL					
CATEGORY	TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE					
11LB PIPE	1LF	21,354		355	20,873	97.752		2,918	719	74,577	122,974	164,902	3.492		10.245	5.892					
11LB HANGERS	1EA	4,995		134	4,194	83.962		4,669	1,150	116,358	226,202	194,402	23.295		43.425	53.935					
11LB PIPE	1LF	25,793		324	24,880	96.462		3,941	971	130,049	196,320	150,962	5.042		15.160	7.891					
11LB HANGERS	1EA	5,702		70	3,454	60.582		11,597	2,856	811,136	666,196	82,132	142.255		206.471	192.876					
11LB WELDS	1EA	5,938		96	5,065	85.302		2,467	608	137,243	134,032	97,662	23.113		32.031	26.462					
REWORK	1XH	-	-	-	-	-		3,156	773	255,523	209,027	81,802	-	-	-	-					
PIPE WHIP RES.	1XH	-	-	-	-	-		64	16	363,687	146,615	40,312	-	-	-	-					
OTHER DIRECTS	1XH	-	-	-	-	-		2,636	649	626,774	180,925	28,872	-	-	-	-					
WAREHOUSEMEN	1XH	-	-	-	-	-		1,114	274	133,483	65,458	49,042	-	-	-	-					
DUAL WELDERS	1XH	-	-	-	-	-		696	172	44,407	13,632	30,702	-	-	-	-					
CLEAN UNSAT. RT	1XH	-	-	-	-	-		10	1	46,378	18,992	40,952	-	-	-	-					
OTHER DISTRIB.	1XH	-	-	-	-	-		1,730	431	140,670	98,939	70,332	-	-	-	-					
TOTAL		-	-	-	-	-	0	0	34,998	8,620	112,880,285	12,079,310	72.192	-	-	-					

LK CONSTOCK		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
ESTIMATE	PERIOD	PERIOD	2	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	2	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL				
CATEGORY	UNO	TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	NRS	NRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	MC	2 MC	MC	2 MC	
11DCP CABLE	1LF	5,817,077		53,076	2,443,125	42,002			4,108	1,005	532,788	289,165	54.272	0.092	0.103	0.096	0.118			128	14.22	
11DCP TERMS	1EA	246,247		3,068	89,846	36,492			2,183	534	213,236	98,025	45.972	0.846	1.034	0.886	1.091			68	7.62	
11CONDUIT	1LF	339,808		8,135	211,220	62,162			6,265	1,532	365,714	230,116	62.922	1.076	1.072	.858	1.089			196	21.72	
11CONDUIT SUPTS.	1EA	14,283		575	13,582	95,092			6,181	1,511	195,389	233,278	119.392	13.680	16.500	13.377	17.176			193	21.42	
11SEC/FIRE DET.	1MH	-	-	-	-	-			942	230	196,849	49,871	25.332	-	-	-	-			29	3.32	
11SEC MOD	1MH	-	-	-	-	-			1,206	295	67,707	58,872	86.952	-	-	-	-			38	4.22	
11REWORK	1MH	-	-	-	-	-			1,782	435	244,000	94,362	38.672	-	-	-	-			56	6.22	
11U&H	1MH	-	-	-	-	-			576	140	101,000	43,593	43.162	-	-	-	-			18	2.02	
114SKV YARD WK	1MH	-	-	-	-	-			364	89	26,417	9,704	36.732	-	-	-	-			11	1.32	
11OTHER DIRECTS	1MH	-	-	-	-	-			4,119	1,008	455,405	196,978	43.252	-	-	-	-			129	14.32	
11WAREHOUSEMEN	1MH	-	-	-	-	-			446	109	32,061	32,325	100.822	-	-	-	-			14	1.52	
11QUAL. WELDERS	1MH	-	-	-	-	-			489	120	29,508	25,244	88.302	-	-	-	-			15	1.72	
11OTHER DISTRI8	1MH	-	-	-	-	-			181	45	25,713	15,091	58.692	-	-	-	-			6	0.62	
TOTAL	-	-	-	-	-	-	0	0	28,845	7,653	2,484,867	1,376,624	55.402	-	-	-	-	0.2	02	901	1002	

07-Sep-84

COST PERFORMANCE REPORT--PERIOD 8/27-9/2 1984

JOHNSON CONTROLS		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS			UNIT RATES				PERIOD WORKFORCE			
ESTIMATE	PERIOD	PERIOD		%	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	%	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
CATEGORY	UNITO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	% HC	HC	% HC	
11M-S SS TUBING 1LF	54,388		239	15,831	28.082			725	184	88,106	26,441	30.012	1.562		3.803	1.670		23	8.92		
11SETS.SS TUBING 1LF	53,454		494	12,757	23.782			1,504	382	105,715	39,759	37.612	1.970		2.718	3.117		47	18.52		
11COPPER TUBING 1LF	41,765		290	29,747	71.222			1,002	254	32,890	32,445	98.712	0.788		4.331	1.091		31	12.32		
11SEISMIC SPTS. 1EA	3,853		56	1,585	41.142			3,180	807	161,133	95,706	59.402	41.820		71.196	60.382		99	39.02		
11INSTRUMENTS 1EA	3,778		11	962	25.462			137	21	20,301	10,866	53.522	5.373		14.344	11.295		4	1.72		
11TUBE TRAY 1MH	-	-	-	-	-			608	154	23,919	22,089	92.352	-	-	-	-		19	7.52		
11UNLOAD & HNDL 1MH	-	-	-	-	-			140	36	4,500	6,435	143.002	-	-	-	-		4	1.72		
11OTHER DIRECTS 1MH	-	-	-	-	-			561	156	91,681	39,614	43.212	-	-	-	-		18	6.92		
11WAREHOUSEMEN 1MH	-	-	-	-	-			265	67	10,193	11,539	113.212	-	-	-	-		8	3.32		
11QUAL. WELDERS 1MH	-	-	-	-	-			18	5	2,696	3,838	142.882	-	-	-	-		1	0.22		
11OTHER DISTRIB. 1MH	-	-	-	-	-			10	2	2,836	1,021	36.002	-	-	-	-		0	0.12		
TOTAL	-	-	-	-	-			8,150	2,068	513,970	289,765	53.272	-	-	-	-	0	0%	255	100%	
SMCC		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS			UNIT RATES				PERIOD WORKFORCE			
ESTIMATE	PERIOD	PERIOD		%	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	%	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
CATEGORY	UNITO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	% HC	HC	% HC	
11SD PIPE 1LF	68,475		1,585	41,666	60.852			5,305	1,204	488,226	203,788	41.742	7.130		4.107	4.891		166	10.22		
11SD HANGERS 1EA	12,255		195	5,255	42.882			6,123	1,389	484,963	214,172	44.162	39.573		38.523	40.756		191	11.82		
11CAT 243 HRS. 1EA	7,600		138	4,265	82.432			3,228	733	154,466	145,543	94.222	20.324		28.703	23.231		101	6.22		
11UM/SUPT 1MH	-	-	-	-	-			5,397	884	231,059	294,674	127.532	-	-	-	-		169	10.42		
11MISC. STL. 1MH	-	-	-	-	-			1,885	133	161,709	72,117	44.602	-	-	-	-		59	3.62		
11MECH. EQUIP. 1MH	-	-	-	-	-			2,004	434	128,624	109,276	84.962	-	-	-	-		63	3.92		
11NETWORK 1MH	-	-	-	-	-			2,056	406	117,029	93,917	80.252	-	-	-	-		84	4.02		
11PREV. MAINT. 1MH	-	-	-	-	-			719	164	165,495	28,427	17.162	-	-	-	-		22	1.42		
11HYDROTEST 1MH	-	-	-	-	-			838	189	160,870	33,027	20.532	-	-	-	-		26	1.62		
11OTHER DIRECTS 1MH	-	-	-	-	-			4,971	814	317,495	57,176	18.012	-	-	-	-		155	9.62		
11SURVEYORS 1MH	-	-	-	-	-			3,219	796	184,593	132,034	70.762	-	-	-	-		101	6.22		
11WAREHOUSE 1MH	-	-	-	-	-			2,111	232	91,467	90,261	98.682	-	-	-	-		66	4.12		
11UNALLOATED 1MH	-	-	-	-	-			1,745	286	108,607	79,427	73.132	-	-	-	-		55	3.42		
11JANITORS 1MH	-	-	-	-	-			2,162	24	156,530	84,300	53.862	-	-	-	-		68	4.22		
11SCAFFOLDING 1MH	-	-	-	-	-			17	3	288,680	2,445	0.852	-	-	-	-		1	.02		
11GEN. CLEAN-UP 1MH	-	-	-	-	-			682	7	370,514	26,334	7.112	-	-	-	-		21	1.32		
11OTHER DISTRIB. 1MH	-	-	-	-	-			4,866	797	516,169	263,194	50.992	-	-	-	-		152	9.42		
11ADVISORY OPER. 1MH	-	-	-	-	-			4,617	1,048	696,820	110,191	15.832	-	-	-	-		144	8.92		
TOTAL	-	-	-	-	-			51,945	9,563	4,824,723	12,040,303	42.292	-	-	-	-	0	0%	1,623	100%	

LEGEND:

CATEGORIES: INCLUDE KEY INDICATORS PLUS ITEMS OF MAJOR WORK FOR REPORTING PERIOD.

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/86.

PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/1/84 FORECAST.

PERIOD ACTUAL: THE ACTUAL DATA FOR THE ONE WEEK PERIOD LISTED ABOVE.

CUMULATIVE: TOTAL TO DATE FROM 1/84.

PERCENT INSTALLED: "CUMULATIVE" DIVIDED BY "ESTIMATE TO COMPLETE".

WEEKLY MANHOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE PERIOD WEEK BASED ON THE 8/1/84 FORECAST.

ACTUAL STRAIGHT TIME / OVERTIME HOURS: ACTUAL HOURS EXPENDED FOR THE ONE WEEK PERIOD.

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/84 THROUGH 10/86.

ACTUAL HOURS: EXPENDED HOURS FROM 1/84 THROUGH PERIOD ENDING AS LISTED ABOVE.

PERCENT EXPENDED: "ACTUAL HOURS" DIVIDED BY "ESTIMATED HOURS".

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED MANHOURS" DIVIDED BY "ESTIMATED QUANTITIES"

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

PERIOD UNIT RATE: STRAIGHT TIME PLUS OVERTIME HOURS DIVIDED BY "PERIOD ACTUAL QUANTITIES".

CUMULATIVE UNIT RATE: "CUMULATIVE ACTUAL HOURS" DIVIDED BY "CUMULATIVE QUANTITIES".

PERIOD WORKFORCE:

PLANNED HEADCOUNT: BASED ON THE 8/84 FORECAST

PLANNED PERCENT HEADCOUNT: CATEGORIZED "PLANNED HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT"

ACTUAL HEADCOUNT: "STRAIGHT TIME HOURS" DIVIDED BY AVAILABLE STRAIGHT TIME WORKWEEK HOURS.

ACTUAL PERCENT HEADCOUNT: CATEGORIZED "ACTUAL HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT".

86-Sep-84

COST PERFORMANCE REPORT—PERIOD 8/28-8/26 1984

11 ITT GRIMMELL		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
11 CATEGORY	11 UNITS COMPLETE	11 PERIOD PLANNED	11 PERIOD ACTUAL	11 CUMULATIVE	11 % INSTALLED	11 PLANNED ST HRS	11 PLANNED OT HRS	11 ACTUAL ST HRS	11 ACTUAL OT HRS	11 ESTIMATED HRS	11 ACTUAL HRS	11 % EXPENDED	11 UNIT RATE	11 UNIT RATE	11 UNIT RATE	11 UNIT RATE	11 PERIOD HC	11 % HC	11 PERIOD HC	11 % HC		
11SD PIPE	ILF	21,354		419	28,518	96.09%		2,151	783	74,577	119,337	168.02%	3.492		7.062	5.816			54	5.8%		
11SD HANGERS	1EN	4,993		140	4,068	81.28%		6,176	1,717	116,358	228,383	189.48%	23.295		53.331	54.282			154	16.6%		
11LB PIPE	ILF	25,793		236	24,556	95.28%		4,649	1,701	138,849	191,408	147.18%	5.042		26.907	7.795			116	12.5%		
11LB HANGERS	1EN	5,782		83	3,384	59.35%		12,394	3,636	811,136	651,741	80.35%	142.255		193.133	192.595			318	33.3%		
11LB WELDS	1EN	5,938		99	4,969	83.68%		2,809	785	137,243	138,957	95.42%	23.113		36.383	26.355			78	7.6%		
11NETWORK	11M	-	-	-	-	-		3,254	668	255,523	285,098	88.27%	-	-	-	-			81	8.7%		
11PIPE WHIP RES. 11M	11M	-	-	-	-	-		62	16	363,687	146,535	40.29%	-	-	-	-			2	0.2%		
11OTHER DIRECTS 11M	11M	-	-	-	-	-		2,298	678	626,774	177,648	28.34%	-	-	-	-			57	6.2%		
11INAREHOUSEMEN 11M	11M	-	-	-	-	-		1,266	328	133,483	64,078	48.00%	-	-	-	-			32	3.4%		
11QUAL. WELDERS 11M	11M	-	-	-	-	-		357	92	44,487	12,764	28.74%	-	-	-	-			9	1.0%		
11OLEUM LINEAT. 11M	11M	-	-	-	-	-		7	2	46,378	18,981	40.93%	-	-	-	-			8	0.8%		
11OTHER DISTRIB. 11M	11M	-	-	-	-	-		1,779	586	148,678	96,778	68.08%	-	-	-	-			44	4.8%		
11TOTAL		-	-	-	-	-	0	0	37,282	11,192	112,688,285	12,835,692	78.68%	-	-	-	-	0	0%	938	100%	
11 LK CONSTOCK		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
11 CATEGORY	11 UNITS COMPLETE	11 PERIOD PLANNED	11 PERIOD ACTUAL	11 CUMULATIVE	11 % INSTALLED	11 PLANNED ST HRS	11 PLANNED OT HRS	11 ACTUAL ST HRS	11 ACTUAL OT HRS	11 ESTIMATED HRS	11 ACTUAL HRS	11 % EXPENDED	11 UNIT RATE	11 UNIT RATE	11 UNIT RATE	11 UNIT RATE	11 PERIOD HC	11 % HC	11 PERIOD HC	11 % HC		
1110CP CABLE	ILF	5,817,877		24,848	2,398,849	41.09%		4,864	1,435	532,788	284,052	53.31%	0.092	0.183	0.254	0.119			122	15.4%		
1110CP TURNS	1EA	246,247		2,313	86,778	35.24%		2,823	845	213,236	95,388	44.78%	0.066	1.034	1.586	1.098			71	9.8%		
11CONDUIT	ILF	339,888		8,218	283,885	59.76%		6,284	1,888	365,714	222,319	68.79%	1.076	1.072	0.994	1.095			157	19.9%		
11CONDUIT SUPPLS. 1EA	1EA	14,283		438	13,887	97.87%		6,129	1,833	195,389	225,586	115.45%	13.688	16.588	18.516	17.343			153	19.3%		
11ELEC/FIRE DET. 11M	11M	-	-	-	-	-		1,425	427	196,849	44,699	24.74%	-	-	-	-			36	4.3%		
11ELEC WIR 11M	11M	-	-	-	-	-		1,293	387	67,787	57,371	84.73%	-	-	-	-			32	4.1%		
11MEMOR 11M	11M	-	-	-	-	-		1,332	398	244,888	92,145	37.76%	-	-	-	-			33	4.2%		
11ELEC 11M	11M	-	-	-	-	-		953	285	181,888	42,877	24.43%	-	-	-	-			24	3.0%		
1134KV YARD 11M	11M	-	-	-	-	-		458	137	26,417	9,251	35.82%	-	-	-	-			11	1.5%		
11OTHER DIRECTS 11M	11M	-	-	-	-	-		4,487	1,342	455,485	191,851	42.13%	-	-	-	-			112	14.2%		
11INAREHOUSEMEN 11M	11M	-	-	-	-	-		399	188	32,861	31,778	99.89%	-	-	-	-			15	1.9%		
11QUAL. WELDERS 11M	11M	-	-	-	-	-		664	358	28,588	24,635	86.17%	-	-	-	-			17	2.1%		
11OTHER DISTRIB. 11M	11M	-	-	-	-	-		198	58	25,713	14,862	57.88%	-	-	-	-			5	0.6%		
11TOTAL		-	-	-	-	-	0	0	31,581	9,425	112,484,867	11,348,726	53.96%	-	-	-	-	0	0%	788	100%	

[illegible][illegible]

86-Sep-84

COST PERFORMANCE REPORT—PERIOD 8/28-8/26 1984

LEGEND:

CATEGORIES: INCLUDE KEY INDICATORS PLUS ITEMS OF MAJOR WORK FOR REPORTING PERIOD.

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/86.

PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/1/84 FORECAST.

PERIOD ACTUAL: THE ACTUAL DATA FOR THE ONE WEEK PERIOD LISTED ABOVE.

CUMULATIVE: TOTAL TO DATE FROM 1/84.

PERCENT DISTILLED: "CUMULATIVE" DIVIDED BY "ESTIMATE TO COMPLETE".

WEEKLY MANHOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE PERIOD WEEK BASED ON THE 8/1/84 FORECAST.

ACTUAL STRAIGHT TIME / OVERTIME HOURS: ACTUAL HOURS EXPENDED FOR THE ONE WEEK PERIOD.

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/84 THROUGH 10/86.

ACTUAL HOURS: EXPENDED HOURS FROM 1/84 THROUGH PERIOD ENDING AS LISTED ABOVE.

PERCENT EXPENDED: "ACTUAL HOURS" DIVIDED BY "ESTIMATED HOURS".

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED MANHOURS" DIVIDED BY "ESTIMATED QUANTITIES"

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

PERIOD UNIT RATE: STRAIGHT TIME PLUS OVERTIME HOURS DIVIDED BY "PERIOD ACTUAL QUANTITIES".

CUMULATIVE UNIT RATE: "CUMULATIVE ACTUAL HOURS" DIVIDED BY "CUMULATIVE QUANTITIES".

PERIOD WORKFORCE:

PLANNED HEADCOUNT: BASED ON THE 8/84 FORECAST

PLANNED PERCENT HEADCOUNT: CATEGORIZED "PLANNED HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT"

ACTUAL HEADCOUNT: "STRAIGHT TIME HOURS" DIVIDED BY AVAILABLE STRAIGHT TIME WORKWEEK HOURS.

ACTUAL PERCENT HEADCOUNT: CATEGORIZED "ACTUAL HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT".

23-Aug-81

* REVISED COPY

COST PERFORMANCE REPORT--PERIOD 8/13-8/17 1981

11 ITT GRINNELL		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS			UNIT RATES				PERIOD WORKFORCE			
		ESTIMATE	PERIOD	PERIOD		2	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	2	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL
11 CATEGORY		UNIT TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	2 HC	HC	2 HC
1150 PIPE		1LF	21,354		358	20,500	96.00%		2,329	680	74,577	109,888	147,351	3.492			0.405	5.360		58	6.27
1150 HANGERS		1EA	4,995		103	3,930	78.68%		6,172	1,804	116,358	213,239	183,261	23.295			77.437	54.259		154	16.63
11LD PIPE		1LF	25,793		285	22,609	87.64%		4,398	1,286	130,049	174,973	134,542	5.042			19.944	7.739		110	11.81
11LD HANGERS		1EA	5,702		74	3,328	58.37%		12,785	3,739	811,136	637,207	78,561	142.255			223.297	191.468		320	34.31
11LD WELDS		1EA	5,938		82	4,959	83.51%		2,064	604	137,243	125,211	91,231	23.113			32.537	25.249		52	5.51
11REWORK		1MH	-	-	-	-	-	-	3,626	1,109	255,523	260,976	78,651	-	-	-	-	-		91	9.71
11PIPE WHIP RES.		1MH	-	-	-	-	-	-	70	21	363,687	146,457	40,271	-	-	-	-	-		2	0.21
11OTHER DIRECTS		1MH	-	-	-	-	-	-	2,558	806	626,774	195,210	29,551	-	-	-	-	-		64	6.91
11WAREHOUSEMEN		1MH	-	-	-	-	-	-	1,168	382	133,483	12,476	46,801	-	-	-	-	-		29	3.11
11QUAL. WELDERS		1MH	-	-	-	-	-	-	201	60	44,407	12,315	27,731	-	-	-	-	-		5	0.51
11CLEAN UNSAT.MT		1MH	-	-	-	-	-	-	0	0	46,378	19,972	40,912	-	-	-	-	-		0	0.02
11OTHER DISTRIB.		1MH	-	-	-	-	-	-	1,904	647	140,670	21,422	57,881	-	-	-	-	-		48	5.11
11																					
11																					

LK CONSTACK		QUANTITIES				WEEKLY MANHOURS				CUMULATIVE HOURS			UNIT RATES				PERIOD WORKFORCE					
ESTIMATE	PERIOD	PERIOD		Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL			
CATEGORY	UNIT TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	MC	Z MC	MC	Z MC		
111COP CABLE	1LF	5,817,077		41,162	2,365,209	40.66%		4,391	1,317	532,788	277,607	52.10%	0.692		0.139	0.117			110	14.01		
111COP TERMS	1EA	246,247		3,532	84,494	34.31%		2,216	675	213,236	91,424	42.87%	0.866		0.827	1.082			54	7.21		
111CONDUIT	1LF	339,808		12,057	194,949	57.37%		7,083	2,125	365,714	213,033	58.25%	1.076		0.764	1.093			177	22.61		
111CONDUIT SUPTS.	1EA	14,283		606	12,601	88.22%		6,315	1,895	195,389	217,631	111.38%	13.680		13.548	17.271			158	20.21		
111SEC/FIRE DET.	1MH	-	-	-	-	-	-	1,410	423	196,849	46,817	23.80%	-	-	-	-			35	4.51		
111PGCC MON	1MH	-	-	-	-	-	-	1,217	365	67,707	55,691	82.25%	-	-	-	-			30	3.91		
111REMOXY	1MH	-	-	-	-	-	-	1,915	575	246,006	86,999	35.64%	-	-	-	-			48	6.11		
111TUM	1MH	-	-	-	-	-	-	748	225	101,000	41,639	41.23%	-	-	-	-			19	2.41		
111315KV YARD MC	1MH	-	-	-	-	-	-	476	143	26,417	8,656	32.77%	-	-	-	-			12	1.51		
111OTHER DIRECTS	1MH	-	-	-	-	-	-	3,904	1,169	455,405	193,892	42.58%	-	-	-	-			98	12.51		
111WAREHOUSEMEN	1MH	-	-	-	-	-	-	587	176	32,061	30,956	96.55%	-	-	-	-			15	1.91		
111QUAL. WELDERS	1MH	-	-	-	-	-	-	669	200	28,583	23,781	83.19%	-	-	-	-			17	2.11		
111OTHER DISTRIB.	1MH	-	-	-	-	-	-	322	96	25,713	11,877	46.19%	-	-	-	-			8	1.01		
TOTAL		-	-	-	-	-	-	0	0	31,283	9,384	112,484,847	11,790,633	52.32%	-	-	-	-	0	01	782	1002

* REVISED COPY

JOHNSON CONTROLS		QUANTITIES				WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
ESTIMATE	PERIOD	PERIOD		%	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	%	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	% HC	HC	% HC	
W-S SS TUBING	LF	54,388	617	14,743	26.15%			879	301	88,106	23,804	27.02%	1.562		1.912	1.615			22	9.9%	
SEIS. SS TUBING	LF	53,654	557	11,676	21.76%			1,447	498	105,715	36,906	34.91%	1.970		3.492	3.161			36	16.3%	
COPPER TUBING	LF	41,765	695	29,186	69.88%			1,376	473	32,890	28,614	87.00%	0.788		2.660	0.980			34	15.5%	
SEISMIC SUPPLS.	EA	3,853	61	1,469	38.13%			2,511	862	161,133	87,854	54.52%	41.820		55.295	59.805			63	28.4%	
INSTRUMENTS	EA	3,778	51	950	25.15%			287	99	20,301	10,413	51.29%	5.373		7.569	10.961			7	3.2%	
TUBE TRAY	INH	-	-	-	-			566	195	23,919	20,287	84.82%	-	-	-	-			14	6.4%	
UNLOAD & HODL	INH	-	-	-	-			162	56	4,500	6,188	135.73%	-	-	-	-			4	1.8%	
OTHER DIRECTS	INH	-	-	-	-			1,316	453	91,681	37,996	41.44%	-	-	-	-			33	14.9%	
WAREHOUSEMEN	INH	-	-	-	-			224	77	10,193	10,785	105.81%	-	-	-	-			6	2.5%	
QUAL. WELDERS	INH	-	-	-	-			61	21	2,696	3,777	140.10%	-	-	-	-			2	0.7%	
OTHER DISTRIB.	INH	-	-	-	-			24	8	2,334	3,476	122.57%	-	-	-	-			1	0.3%	

SMC		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD		%	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	%	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
	CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	% HC	HC	% HC	
SB PIPE	LF	68,475		2,519	38,819	56.69%			5,262	1,450	488,226	189,918	38.90%	7.130		2.665	4.892			132	10.4%	
SB HANGERS	EA	12,255		140	4,959	40.47%			5,671	1,562	481,963	199,196	41.07%	39.573		51.644	40.169			142	11.2%	
CAT263 HGRS.	EA	7,600		178	6,009	79.07%			3,299	908	154,466	136,679	88.48%	20.324		23.635	22.746			82	6.5%	
U/H/SUP	INH	-	-	-	-	-			7,496	1,657	231,059	276,265	119.56%	-	-	-	-			187	14.8%	
MISC. STL.	INH	-	-	-	-	-			1,590	94	161,709	68,169	42.16%	-	-	-	-			40	3.1%	
MECH. EQUIP.	INH	-	-	-	-	-			2,304	605	128,624	103,903	80.78%	-	-	-	-			58	4.6%	
REWORK	INH	-	-	-	-	-			2,177	578	117,029	87,668	74.91%	-	-	-	-			54	4.3%	
PREV. MAINT.	INH	-	-	-	-	-			824	259	165,695	26,645	16.08%	-	-	-	-			21	1.6%	
HYDROTEST	INH	-	-	-	-	-			1,049	289	160,870	26,787	16.65%	-	-	-	-			26	2.1%	
OTHER DIRECTS	INH	-	-	-	-	-			1,499	125	317,495	58,990	18.58%	-	-	-	-			37	3.0%	
SURVEYORS	INH	-	-	-	-	-			3,025	1,112	186,593	123,990	66.45%	-	-	-	-			76	6.0%	
WAREHOUSE	INH	-	-	-	-	-			1,688	228	91,467	85,567	93.55%	-	-	-	-			42	3.3%	
UNALLOCATED	INH	-	-	-	-	-			1,824	402	108,407	75,214	69.28%	-	-	-	-			46	3.6%	
MANITORS	INH	-	-	-	-	-			2,240	132	156,530	79,840	51.01%	-	-	-	-			56	4.4%	
SCAFFOLDING	INH	-	-	-	-	-			32	7	288,680	2,359	0.82%	-	-	-	-			1	0.1%	
GEN. CLEAN-UP	INH	-	-	-	-	-			560	33	370,514	24,345	6.57%	-	-	-	-			14	1.1%	
OTHER DISTRIB.	INH	-	-	-	-	-			5,850	492	516,448	250,744	48.58%	-	-	-	-			146	11.6%	
ADVISORY OPER.	INH	-	-	-	-	-			4,115	1,306	696,028	96,995	13.94%	-	-	-	-			103	8.1%	
TOTAL		-	-	-	-	-			50,505	11,239	114,824,723	11,913,344	39.64%	-	-	-	-	0	0%	1,263	100%	

LEGEND:

CATEGORIES: INCLUDE KEY INDICATORS PLUS ITEMS OF MAJOR WORK FOR REPORTING PERIOD.

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/86.

PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/1/84 FORECAST.

PERIOD ACTUAL: THE ACTUAL DATA FOR THE ONE WEEK PERIOD LISTED ABOVE.

CUMULATIVE: TOTAL TO DATE FROM 1/84.

PERCENT INSTALLED: "CUMULATIVE" DIVIDED BY "ESTIMATE TO COMPLETE".

WEEKLY HOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE PERIOD WEEK BASED ON THE 8/1/84 FORECAST.

ACTUAL STRAIGHT TIME / OVERTIME HOURS: ACTUAL HOURS EXPENDED FOR THE ONE WEEK PERIOD.

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/84 THROUGH 10/86.

ACTUAL HOURS: EXPENDED HOURS FROM 1/84 THROUGH PERIOD ENDING AS LISTED ABOVE.

PERCENT EXPENDED: "ACTUAL HOURS" DIVIDED BY "ESTIMATED HOURS".

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED HOURS" DIVIDED BY "ESTIMATED QUANTITIES"

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

PERIOD UNIT RATE: STRAIGHT TIME PLUS OVERTIME HOURS DIVIDED BY "PERIOD ACTUAL QUANTITIES".

CUMULATIVE UNIT RATE: "CUMULATIVE ACTUAL HOURS" DIVIDED BY "CUMULATIVE QUANTITIES".

PERIOD WORKFORCE:

PLANNED HEADCOUNT: BASED ON THE 8/84 FORECAST

PLANNED PERCENT HEADCOUNT: CATEGORIZED "PLANNED HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT"

ACTUAL HEADCOUNT: "STRAIGHT TIME HOURS" DIVIDED BY AVAILABLE STRAIGHT TIME WORKWEEK HOURS.

ACTUAL PERCENT HEADCOUNT: CATEGORIZED "ACTUAL HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT".

11 LX COMSTOCK	QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
11	ESTIMATE	PERIOD	PERIOD	2	11 PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	2	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
11 CATEGORY	(UNITS COMPLETE)	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	11 HRS	11 HRS	(EXPENSE)	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	11 MC	12 MC	1 MC	2 MC	
111CCP CABLE	1LF	5,817,077		53,816	2,324,047	39.952		6,110	1,662	11	532,788	271,899	51.032	0.092		0.144	0.117		153	19.12	
111CCP TURNS	1EA	246,247		2,777	80,962	32.082		2,378	646	11	213,236	88,503	41.502	0.866		1.689	1.093		59	7.42	
111COMMIT	1LF	339,808		7,372	182,892	53.822		6,579	1,790	11	365,714	203,825	55.732	1.076		1.135	1.114		164	20.62	
111COMMIT SUPTS.	1EA	14,283		462	11,995	83.982		5,930	1,613	11	195,389	209,421	107.182	13.680		16.327	17.459		148	18.62	
111SEC/FME DET.	1MM	-	-	-	-	-		151	41	11	196,819	45,014	22.872	-	-	-	-		4	0.52	
111PCC MIB	1MM	-	-	-	-	-		1,281	348	11	67,707	54,169	79.922	-	-	-	-		32	4.02	
111TRENCH	1MM	-	-	-	-	-		1,484	398	11	241,000	84,509	34.632	-	-	-	-		37	4.62	
111TUM	1MM	-	-	-	-	-		951	258	11	101,000	40,666	40.262	-	-	-	-		24	3.02	
111TASCV YARD MC	1MM	-	-	-	-	-		561	152	11	26,417	8,037	30.422	-	-	-	-		14	1.82	
111OTHER DIRECTS	1MM	-	-	-	-	-		4,973	1,360	11	455,465	188,819	41.462	-	-	-	-		124	15.62	
111HOUSEHOLD	1MM	-	-	-	-	-		572	155	11	32,061	30,193	94.172	-	-	-	-		14	1.82	
111QUAL WELDERS	1MM	-	-	-	-	-		528	143	11	28,588	22,912	80.152	-	-	-	-		13	1.72	
111OTHER DISTRI.	1MM	-	-	-	-	-		447	121	11	25,713	11,459	44.572	-	-	-	-		11	1.42	
11TOTAL		-	-	-	-	-	0	0	31,925	8,687	112,484,867	11,259,366	50.682	-	-	-	-	0	02	798	1002

JOHNSON CONTROLS		QUANTITIES					WEEKLY		MANHOURS		CUMULATIVE HOURS		UNIT RATES					PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD		Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	Z HC	HC	Z HC	
CLASS TUBING	ILF	151,807		757	53,734	35,402		3,196	850	226,711	84,242	37,162	1,493		5,345	1,568			80	36,621	
SEISMIC SUPTS.	IEA	3,853		31	1,400	36,542		2,631	700	161,133	84,481	52,432	41,820		107,452	60,001			46	30,121	
INSTRUMENTS	IEA	3,778		33	899	23,062		354	94	20,301	10,027	49,392	5,373		13,576	11,154			9	4,021	
TUBE TRAY	INH	-	-	-	-	-	-	743	198	23,919	19,526	81,632	-	-	-	-			19	8,521	
UNLOAD & WDM	INH	-	-	-	-	-	-	172	46	4,500	5,890	130,892	-	-	-	-			4	2,081	
OTHER DIRECTS	INH	-	-	-	-	-	-	1,331	353	91,681	36,227	39,512	-	-	-	-			33	15,221	
WAREHOUSEMEN	INH	-	-	-	-	-	-	193	52	10,193	10,484	102,852	-	-	-	-			5	2,221	
QUAL. WELDERS	INH	-	-	-	-	-	-	69	20	2,696	3,695	137,052	-	-	-	-			2	0,821	
OTHER DISTRI.	INH	-	-	-	-	-	-	55	14	2,836	3,444	121,412	-	-	-	-			1	0,621	
TOTAL		-	-	-	-	-	-	8,744	2,327	543,970	258,016	47,432	-	-	-	-	0	0	219	10021	
SHEC		QUANTITIES					WEEKLY		MANHOURS		CUMULATIVE HOURS		UNIT RATES					PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD		Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	Z HC	HC	Z HC	
SD PIPE	ILF	48,475		1,440	36,300	53,012		5,796	1,522	488,226	183,206	37,522	7,130		4,462	5,047			145	11,421	
SD WANGERS	IEA	12,255		105	4,819	39,322		4,454	1,170	484,963	191,963	39,582	39,573		53,562	39,835			111	0,821	
CAT223 WERS.	IEA	7,600		153	5,831	76,722		4,340	1,140	154,466	132,472	85,762	20,324		35,817	22,719			109	0,621	
TUM/SUPT	INH	-	-	-	-	-	-	7,706	1,501	231,059	267,112	115,402	-	-	-	-			193	15,221	
ISC. STL.	INH	-	-	-	-	-	-	1,442	135	161,709	66,485	41,112	-	-	-	-			36	2,021	
MECH. EQUIP.	INH	-	-	-	-	-	-	2,270	592	128,624	100,994	78,522	-	-	-	-			57	4,521	
IRONWORK	INH	-	-	-	-	-	-	1,111	276	117,029	84,913	72,562	-	-	-	-			28	2,221	
PREV. MAINT.	INH	-	-	-	-	-	-	649	168	165,695	25,562	15,432	-	-	-	-			16	1,321	
TEST	INH	-	-	-	-	-	-	1,013	265	160,870	25,449	15,822	-	-	-	-			25	2,021	
OTHER DIRECTS	INH	-	-	-	-	-	-	2,742	85	317,495	57,366	18,072	-	-	-	-			69	5,421	
SURVEYORS	INH	-	-	-	-	-	-	3,133	936	186,593	119,853	64,232	-	-	-	-			78	6,221	
WAREHOUSE	INH	-	-	-	-	-	-	1,564	186	91,467	83,451	91,452	-	-	-	-			39	3,121	
UNALLOCATED	INH	-	-	-	-	-	-	1,779	346	168,607	73,018	67,232	-	-	-	-			44	3,521	
WELDERS	INH	-	-	-	-	-	-	2,260	164	156,330	77,468	49,492	-	-	-	-			97	4,521	
SCAFFOLDING	INH	-	-	-	-	-	-	12	2	288,680	2,320	0,802	-	-	-	-			0	,021	
GEN. CLEAN-UP	INH	-	-	-	-	-	-	543	39	370,514	23,752	6,412	-	-	-	-			14	1,121	
OTHER DISTRI.	INH	-	-	-	-	-	-	5,990	186	516,168	244,462	47,352	-	-	-	-			150	11,821	
ADVISORY OPER.	INH	-	-	-	-	-	-	3,094	1,010	696,028	91,576	13,162	-	-	-	-			97	7,721	
TOTAL		-	-	-	-	-	-	50,698	9,723	114,824,723	11,851,568	38,382	-	-	-	-	0	0	1,267	10021	

LEGEND:

CATEGORIES: INCLUDE KEY INDICATORS PLUS ITEMS OF MAJOR WORK FOR REPORTING PERIOD.

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/84.

PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/1/84 FORECAST.

PERIOD ACTUAL: THE ACTUAL DATA FOR THE ONE WEEK PERIOD LISTED ABOVE.

CUMULATIVE: TOTAL TO DATE FROM 1/84.

PERCENT INSTALLED: "CUMULATIVE" DIVIDED BY "ESTIMATE TO COMPLETE".

WEEKLY MANHOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE PERIOD WEEK BASED ON THE 8/1/84 FORECAST.

ACTUAL STRAIGHT TIME / OVERTIME HOURS: ACTUAL HOURS EXPENDED FOR THE ONE WEEK PERIOD.

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/84 THROUGH 10/84.

ACTUAL HOURS: EXPENDED HOURS FROM 1/84 THROUGH PERIOD ENDING AS LISTED ABOVE.

PERCENT EXPENDED: "ACTUAL HOURS" DIVIDED BY "ESTIMATED HOURS".

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED MANHOURS" DIVIDED BY "ESTIMATED QUANTITIES"

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

PERIOD UNIT RATE: STRAIGHT TIME PLUS OVERTIME HOURS DIVIDED BY "PERIOD ACTUAL QUANTITIES".

CUMULATIVE UNIT RATE: "CUMULATIVE ACTUAL HOURS" DIVIDED BY "CUMULATIVE QUANTITIES".

PERIOD WORKFORCE:

PLANNED HEADCOUNT: BASED ON THE 8/84 FORECAST

PLANNED PERCENT HEADCOUNT: CATEGORIZED "PLANNED HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT"

ACTUAL HEADCOUNT: "STRAIGHT TIME HOURS" DIVIDED BY AVAILABLE STRAIGHT TIME WORKWEEK HOURS.

ACTUAL PERCENT HEADCOUNT: CATEGORIZED "ACTUAL HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT".

08-Aug-84

COST PERFORMANCE REPORT--PERIOD 7/30-8/5 1984

ITT GRIMMELL		QUANTITIES					WEEKLY MANHOURS		CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD	2	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	2	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	2 HC	HC	2 HC
11SD PIPE	ILF	21,354		521	19,719	92.342		1,913	850	74,577	103,696	139,312	3.492		7.223	5.269			73	7.921
11SD HANGERS	EA	4,995		144	3,695	73.972		1,501	1,605	116,358	197,528	169,762	23.295		49.354	53.458			138	14.921
11LD PIPE	ILF	25,793		372	21,891	84.872		4,550	1,329	130,049	164,198	126,267	5.042		15.804	7.501			114	12.321
11LD HANGERS	EA	5,702		78	3,183	55.622		12,269	3,603	811,136	603,777	74,447	142.255		203.487	189.688			307	33.221
11LD WELDS	EA	5,938		84	4,779	80.482		2,660	776	137,243	119,174	86,832	23.113		40.905	24.937			67	7.221
11REWORK	INH	-	-	-	-	-		2,587	830	255,523	192,457	75,322	-	-	-	-			65	7.021
11PIPE WHIP RES.	INH	-	-	-	-	-		367	107	383,687	146,066	40,162	-	-	-	-			9	1.021
11OTHER DIRECTS	INH	-	-	-	-	-		2,528	738	626,774	178,266	28,442	-	-	-	-			63	6.821
11WAREHOUSEKEN	INH	-	-	-	-	-		1,192	374	133,483	59,190	44,342	-	-	-	-			30	3.221
11QUAL WELDERS	INH	-	-	-	-	-		173	50	44,407	11,765	26,542	-	-	-	-			4	0.521
11CLEAN UNSAT.MT	INH	-	-	-	-	-		8	2	46,376	16,958	40,832	-	-	-	-			0	.021
11OTHER DISTRIB.	INH	-	-	-	-	-		2,171	670	140,676	75,355	54,062	-	-	-	-			54	5.921
11TOTAL		-	-	-	-	-	0	0	32,919	10,935	112,889,385	11,271,245	64,972	-	-	-	0	021	923	10021

LX CONSTOCK		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
ESTIMATE	PERIOD	PERIOD	2	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	2	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL				
CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	2 HC	HC	2 HC		
11CCP CABLE	ILF	5,817,077		69,633	2,270,221	39,632		5,902	1,692	532,766	264,127	49,572	0.692		0.126	0.116			173	22.22		
11CCP TURNS	EA	246,247		2,845	78,185	31,752		2,359	642	213,236	85,479	40,092	0.866		1.055	1.093			59	7.62		
11CONDUIT	ILF	339,868		6,113	175,526	51,652		5,266	1,435	365,714	195,455	53,452	1.076		1.096	1.114			132	17.02		
11CONDUIT SUPTS.	EA	14,293		414	11,533	80,752		5,841	1,592	195,389	201,878	103,322	13.680		17.954	17.504			146	18.82		
11SEC/FIRE DET.	INH	-	-	-	-	-		1,187	323	196,649	44,922	22,772	-	-	-	-			30	3.82		
11PCCC MOD	INH	-	-	-	-	-		1,172	320	67,707	52,480	77,512	-	-	-	-			29	3.82		
11REWORK	INH	-	-	-	-	-		966	262	244,006	82,547	33,672	-	-	-	-			24	3.12		
11UHM	INH	-	-	-	-	-		776	211	101,000	39,457	39,072	-	-	-	-			19	2.52		
11345KV YARD WK	INH	-	-	-	-	-		435	118	26,417	7,324	27,722	-	-	-	-			11	1.42		
11OTHER DIRECTS	INH	-	-	-	-	-		4,556	1,247	455,405	162,493	40,072	-	-	-	-			114	14.72		
11WAREHOUSEMEN	INH	-	-	-	-	-		534	145	32,051	29,466	91,912	-	-	-	-			13	1.72		
11QUAL WELDERS	INH	-	-	-	-	-		546	149	28,598	22,241	77,802	-	-	-	-			14	1.82		
11OTHER DISTRIB.	INH	-	-	-	-	-		494	135	25,713	10,891	42,362	-	-	-	-			12	1.62		
TOTAL		-	-	-	-	-	0	0	21,930	8,456	112,484,667	11,218,754	49,652	-	-	-	0	02	776	1002		

08-Aug-84

COST PERFORMANCE REPORT--PERIOD 7/30-8/5 1984

JOHNSON CONTROLS		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD		Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
CATEGORY	TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	Z HC	HC	Z HC		
CROSS TUBING	ILF	151,807		1,284	52,979	34.90%		3,340	915	226,711	80,196	35.37%	1.493		3.314	1.514			84	38.4%		
SEISMIC SUPTS.	EA	3,853		43	1,377	35.74%		2,818	772	161,133	81,156	50.36%	41.820		83.488	58.932			70	32.4%		
INSTRUMENTS	EA	3,778		23	866	22.92%		170	47	20,301	9,579	47.18%	5.373		9.435	11.061			4	2.0%		
TUBE TRAY	INH	-	-	-	-	-		535	174	23,919	18,585	77.70%	-	-	-	-			16	7.3%		
UNLOAD & HNDL	INH	-	-	-	-	-		206	56	4,500	5,672	126.04%	-	-	-	-			5	2.4%		
OTHER DIRECTS	INH	-	-	-	-	-		1,239	331	91,681	38,513	37.68%	-	-	-	-			30	13.9%		
WAREHOUSEMEN	INH	-	-	-	-	-		256	70	10,193	10,239	100.45%	-	-	-	-			6	2.9%		
EQUAL. WELDERS	INH	-	-	-	-	-		46	12	2,676	3,666	133.75%	-	-	-	-			1	0.5%		
OTHER DISTRIB.	INH	-	-	-	-	-		14	4	2,836	3,375	119.01%	-	-	-	-			0	0.2%		
TOTAL		-	-	-	-	-		8,695	2,381	543,976	246,945	45.40%	-	-	-	-	0	0%	217	100%		

SNEC		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD		Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
CATEGORY	TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	Z HC	HC	Z HC		
ISB PIPE	ILF	68,475		1,687	35,191	51.39%		5,200	1,424		488,226	175,688	36.03%	7.130		3.926	4.998			130	10.2%	
ISB HANGERS	EA	12,255		101	4,853	39.60%		4,567	1,250		484,963	184,339	38.42%	39.573		57.594	38.397			114	9.0%	
CAT283 HGRS.	EA	7,600		201	5,678	74.71%		3,737	1,023		154,466	126,992	82.21%	20.324		23.682	22.366			93	7.4%	
UHM/SUPT	INH	-	-	-	-	-		8,257	1,620		231,659	257,905	111.62%	-	-	-	-			266	16.3%	
MISC. STL.	INH	-	-	-	-	-		1,818	162		161,709	64,908	40.14%	-	-	-	-			45	3.6%	
MECH. EQUIP.	INH	-	-	-	-	-		2,275	622		128,624	98,132	76.29%	-	-	-	-			57	4.5%	
KEWORK	INH	-	-	-	-	-		1,467	358		117,029	83,526	71.37%	-	-	-	-			37	2.9%	
PREV. MAINT.	INH	-	-	-	-	-		708	192		185,695	24,745	14.93%	-	-	-	-			18	1.4%	
HYDROTEST	INH	-	-	-	-	-		810	222		160,870	24,171	15.03%	-	-	-	-			26	1.6%	
OTHER DIRECTS	INH	-	-	-	-	-		2,765	164		317,475	54,519	17.18%	-	-	-	-			73	5.7%	
SURVEYORS	INH	-	-	-	-	-		2,982	650		166,593	115,784	62.65%	-	-	-	-			75	5.9%	
WAREHOUSE	INH	-	-	-	-	-		1,691	217		91,467	81,501	89.04%	-	-	-	-			42	3.3%	
UNALLOCATED	INH	-	-	-	-	-		1,936	369		166,697	76,593	45.22%	-	-	-	-			50	3.9%	
JANITORS	INH	-	-	-	-	-		2,334	122		156,536	75,644	47.94%	-	-	-	-			58	4.6%	
SCAFFOLDING	INH	-	-	-	-	-		155	31		288,680	2,366	0.80%	-	-	-	-			4	0.3%	
GEN. CLEAN-UP	INH	-	-	-	-	-		442	23		370,514	23,176	6.25%	-	-	-	-			11	0.9%	
OTHER DISTRIB.	INH	-	-	-	-	-		5,917	355		516,168	238,226	46.15%	-	-	-	-			148	11.7%	
ADVISORY OPER.	INH	-	-	-	-	-		3,529	954		676,028	86,670	12.45%	-	-	-	-			68	6.9%	
TOTAL		-	-	-	-	-		50,734	9,558		4,654,723	1,791,139	37.12%	-	-	-	-	0	0%	1,276	100%	

LEGEND:

CATEGORIES: INCLUDE KEY INDICATORS PLUS ITEMS OF MAJOR WORK FOR REPORTING PERIOD.

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/86.

PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/1/84 FORECAST.

PERIOD ACTUAL: THE ACTUAL DATA FOR THE ONE WEEK PERIOD LISTED ABOVE.

CUMULATIVE: TOTAL TO DATE FROM 1/84.

PERCENT INSTALLED: "CUMULATIVE" DIVIDED BY "ESTIMATE TO COMPLETE".

WEEKLY MANHOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE PERIOD WEEK BASED ON THE 8/1/84 FORECAST.

ACTUAL STRAIGHT TIME / OVERTIME HOURS: ACTUAL HOURS EXPENDED FOR THE ONE WEEK PERIOD.

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/84 THROUGH 10/86.

ACTUAL HOURS: EXPENDED HOURS FROM 1/84 THROUGH PERIOD ENDING AS LISTED ABOVE.

PERCENT EXPENDED: "ACTUAL HOURS" DIVIDED BY "ESTIMATED HOURS".

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED MANHOURS" DIVIDED BY "ESTIMATED QUANTITIES"

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

PERIOD UNIT RATE: STRAIGHT TIME PLUS OVERTIME HOURS DIVIDED BY "PERIOD ACTUAL QUANTITIES".

CUMULATIVE UNIT RATE: "CUMULATIVE ACTUAL HOURS" DIVIDED BY "CUMULATIVE QUANTITIES".

PERIOD WORKFORCE:

PLANNED HEADCOUNT: BASED ON THE 8/84 FORECAST

PLANNED PERCENT HEADCOUNT: CATEGORIZED "PLANNED HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT"

ACTUAL HEADCOUNT: "STRAIGHT TIME HOURS" DIVIDED BY AVAILABLE STRAIGHT TIME WORKWEEK HOURS.

ACTUAL PERCENT HEADCOUNT: CATEGORIZED "ACTUAL HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT".

11T GRIMMELL	QUANTITIES					WEEKLY HOURS		CUMULATIVE HOURS		UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD	%	PLANNED	PLANNED	ACTUAL	ESTIMATED	ACTUAL	%	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL
CATEGORY	UNIT	COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE
1SD PIPE	1LF	21,354		493	19,198	89,902			3,657	963	74,577	100,127	134,262	3.492		9.371	5.215
1SD HANGERS	1EA	4,995		169	3,551	71,092			4,656	1,321	116,358	196,421	183,652	23.295		54.835	53.625
1LD PIPE	1LF	25,793		262	21,519	83,432			4,682	1,224	130,049	158,319	121,742	5.042		26.267	7.357
1LD HANGERS	1EA	5,702		66	3,105	54,451			12,250	3,285	811,136	587,905	72,482	142.255		235.379	189.341
1LD WELDS	1EA	5,938		83	4,695	79,072			2,595	1,040	137,243	115,738	84,332	23.113		43.795	24.651
REWORK	1HM	-		-	-	-			2,465	673	255,523	189,040	73,982	-		-	-
1PIPE W/UP RES. 1HM	-	-		-	-	-			538	139	363,687	145,592	40,032	-		-	-
1OTHER DIRECTS 1HM	-	-		-	-	-			2,464	672	626,774	175,000	27,922	-		-	-
1WAREHOUSEMEN	1HM	-		-	-	-			1,518	392	133,483	57,624	43,172	-		-	-
1QUAL. WELDERS	1HM	-		-	-	-			457	118	44,407	11,563	26,042	-		-	-
1CLEAN UNSAT. RT 1HM	-	-		-	-	-			16	4	46,378	16,948	40,862	-		-	-
1OTHER DISTRI. 1HM	-	-		-	-	-			3,460	1,125	140,670	73,114	51,982	-		-	-
TOTAL	-	-		-	-	-	0	0	38,238	10,956	112,880,285	11,823,391	63,312	-		-	-

1LK CONSTOCK	QUANTITIES					WEEKLY HOURS		CUMULATIVE HOURS		UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD	%	PLANNED	PLANNED	ACTUAL	ESTIMATED	ACTUAL	%	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL
CATEGORY	UNIT	COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE
11CCP CABLE	1LF	5,817,077		66,360	2,200,598	37,832			6,423	1,596	532,788	255,343	47,932	0.092		0.121	0.116
11CCP TIE	1EA	246,247		2,477	75,340	30,602			2,209	576	213,234	82,478	38,682	0.866		1.124	1.095
1CONDUIT	1LF	339,668		5,566	169,407	49,851			3,934	1,211	345,714	188,755	51,612	1.076		0.930	1.114
1CONDUIT W/UP 1EA	1EA	14,283		316	11,119				5,262	1,450	195,389	194,445	99,522	13.680		21.241	17.488
1SEC/FLEX DET. 1HM	-	-		-	-	-			1,275	316	196,849	43,312	22,092	-		-	-
1PCC BOA 1HM	-	-		-	-	-			1,096	272	67,707	50,968	75,312	-		-	-
1REWORK 1HM	-	-		-	-	-			1,607	443	244,000	81,425	33,372	-		-	-
1MAN 1HM	-	-		-	-	-			746	186	101,000	38,468	38,092	-		-	-
134KV YARD MC 1HM	-	-		-	-	-			401	99	26,417	6,771	25,632	-		-	-
1OTHER DIRECTS 1HM	-	-		-	-	-			4,310	1,219	455,405	176,688	38,802	-		-	-
1WAREHOUSEMEN 1HM	-	-		-	-	-			1,368	340	32,661	28,787	89,792	-		-	-
1QUAL. WELDERS 1HM	-	-		-	-	-			525	145	28,588	21,546	75,372	-		-	-
1OTHER DISTRI. 1HM	-	-		-	-	-			1,966	473	25,713	10,262	39,912	-		-	-
TOTAL	-	-		-	-	-	0	0	31,002	8,356	112,484,867	11,179,248	47,462	-		-	-

JOHNSON CONTROLS		QUANTITIES					WEEKLY HOURS		CUMULATIVE HOURS			UNIT RATES				PERIOD WORKFORCE			
ESTIMATE	PERIOD	PERIOD	PERIOD	PERIOD	PERIOD	PERIOD	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL
CATEGORY	UNITS	COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	% HC
CLASS TUBING	LF	151,807		983	51,695	34,051			2,751	720	226,711	75,941	33,502	1.493		3.531	1.469		69
HEATING SUPPLY	EA	3,853		37	1,334	34,621			2,277	596	161,133	77,560	48,132	41.820		77.649	58.141		57
INSTRUMENTS	EA	3,778		55	845	22,311			248	70	20,301	9,342	46,122	5.373		6.145	11.106		7
TIME TRAY	INH	-		-	-	-			345	95	23,919	17,775	74,312	-		-	-		9
WELDING & MISC.	INH	-		-	-	-			221	58	4,500	5,410	120,221	-		-	-		6
OTHER DIRECTS	INH	-		-	-	-			1,355	355	91,681	33,003	34,002	-		-	-		34
MANPOWER	INH	-		-	-	-			489	128	10,193	9,913	97,252	-		-	-		12
WELDING	INH	-		-	-	-			24	6	2,876	3,548	131,602	-		-	-		1
OTHER DISTRI.	INH	-		-	-	-			694	182	2,836	3,357	118,372	-		-	-		17
TOTAL		-		-	-	-			8,444	2,210	543,970	235,849	43,342	-		-	-	0	0%

SHEC		QUANTITIES					WEEKLY HOURS		CUMULATIVE HOURS			UNIT RATES				PERIOD WORKFORCE			
ESTIMATE	PERIOD	PERIOD	PERIOD	PERIOD	PERIOD	PERIOD	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL
CATEGORY	UNITS	COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	% HC
S&B PIPE	LF	48,475		843	33,504	48,932			5,209	1,511	488,226	169,264	34,672	7.130		8.066	5.052		132
S&B HANGERS	EA	12,255		115	4,752	38,781			3,926	1,122	484,963	180,522	37,222	39.573		43.896	37.989		98
ICAT243 HORS.	EA	7,400		227	5,477	72,071			3,808	1,088	154,466	122,232	79,132	20.324		21.568	22.317		95
ISAM/SUP	INH	-		-	-	-			7,575	1,527	231,059	248,028	107,342	-		-	-		189
MISC. STL.	INH	-		-	-	-			1,806	98	161,709	62,928	38,912	-		-	-		45
MECH. EQUIP.	INH	-		-	-	-			1,975	560	128,624	95,235	74,042	-		-	-		49
NEWORK	INH	-		-	-	-			1,800	444	117,029	81,701	69,812	-		-	-		45
PREV. MAINT.	INH	-		-	-	-			824	231	165,695	23,845	14,392	-		-	-		21
HYDRA TEST	INH	-		-	-	-			898	257	160,870	23,139	14,382	-		-	-		22
OTHER DIRECTS	INH	-		-	-	-			2,432	216	317,495	51,450	16,202	-		-	-		61
SURVEYORS	INH	-		-	-	-			3,023	1,040	186,593	111,952	60,602	-		-	-		76
WAREHOUSE	INH	-		-	-	-			2,150	263	91,467	79,993	87,462	-		-	-		54
UNALLOCATED	INH	-		-	-	-			1,946	372	108,407	68,518	63,092	-		-	-		49
SCAFFOLDING	INH	-		-	-	-			2,307	124	156,530	72,588	46,372	-		-	-		58
SCAFFOLDING	INH	-		-	-	-			23	5	288,680	2,116	0.731	-		-	-		1
SCAFFOLDING	INH	-		-	-	-			449	24	370,514	22,705	6,132	-		-	-		11
OTHER DISTRI.	INH	-		-	-	-			7,232	408	516,168	231,954	44,942	-		-	-		181
LABORATORY OPER.	INH	-		-	-	-			3,320	932	496,028	82,187	11,812	-		-	-		83
TOTAL		-		-	-	-			50,783	10,242	4,824,723	1,730,357	35,841	-		-	-	0	0%

LEGEND:

CATEGORIES: INCLUDE KEY INDICATORS PLUS ITEMS OF MAJOR WORK FOR REPORTING PERIOD.

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/84.

PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/1/84 FORECAST.

PERIOD ACTUAL: THE ACTUAL DATA FOR THE ONE WEEK PERIOD LISTED ABOVE.

CUMULATIVE: TOTAL TO DATE FROM 1/84.

PERCENT INSTALLED: "CUMULATIVE" DIVIDED BY "ESTIMATE TO COMPLETE".

WEEKLY MANHOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE PERIOD WEEK BASED ON THE 8/1/84 FORECAST.

ACTUAL STRAIGHT TIME / OVERTIME HOURS: ACTUAL HOURS EXPENDED FOR THE ONE WEEK PERIOD.

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/84 THROUGH 10/84.

ACTUAL HOURS: EXPENDED HOURS FROM 1/84 THROUGH PERIOD ENDING AS LISTED ABOVE.

PERCENT EXPENDED: "ACTUAL HOURS" DIVIDED BY "ESTIMATED HOURS".

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED MANHOURS" DIVIDED BY "ESTIMATED QUANTITIES"

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

PERIOD UNIT RATE: STRAIGHT TIME PLUS OVERTIME HOURS DIVIDED BY "PERIOD ACTUAL QUANTITIES".

CUMULATIVE UNIT RATE: "CUMULATIVE ACTUAL HOURS" DIVIDED BY "CUMULATIVE QUANTITIES".

PERIOD WORKFORCE:

PLANNED HEADCOUNT: BASED ON THE 8/84 FORECAST

PLANNED PERCENT HEADCOUNT: CATEGORIZED "PLANNED HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT"

ACTUAL HEADCOUNT: "STRAIGHT TIME HOURS" DIVIDED BY AVAILABLE STRAIGHT TIME WORKWEEK HOURS.

ACTUAL PERCENT HEADCOUNT: CATEGORIZED "ACTUAL HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT".

26-Jul-81

COST PERFORMANCE REPORT--PERIOD 7/16-7/22 1981

ITT GRIMMELL		QUANTITIES					WEEKLY HOURS		CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE					
CATEGORY	ESTIMATE	PERIOD	PERIOD				PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL		ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
	UNITO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	MC	MC	MC	MC
150 PIPE	1LF	21,354		538	18,705	87.592			2,712	1,117	74,577	95,507	128,042	3.492		7.117	5.104			68	7.421	
150 HANGERS	1EA	4,995		104	3,442	68.912			4,833	1,594	116,358	184,444	158,512	23.295		60.651	53.584			121	13.221	
1LB PIPE	1LF	25,793		284	21,317	82.652			3,849	1,208	130,049	153,013	117,642	5.042		24.087	7.178			97	18.521	
1LB HANGERS	1EA	5,702		64	3,039	53.302			11,176	3,647	811,134	572,378	70,542	142.255		224.591	188,342			279	30.421	
1LB MELBS	1EA	5,938		45	4,612	77.672			1,762	525	137,243	112,103	81,682	23.113		50.822	24.307			44	4.821	
1WORK	1MH	-		-	-	-			2,251	734	255,523	183,549	71,832	-		-	-			56	6.121	
1PIPE W/HP RES.	1MH	-		-	-	-			505	150	343,687	144,774	39,812	-		-	-			13	1.421	
1OTHER DIRECTS	1MH	-		-	-	-			3,272	1,075	626,774	174,278	27,812	-		-	-			82	8.921	
1WAREHOUSEMEN	1MH	-		-	-	-			4,315	1,301	133,483	55,716	41,742	-		-	-			108	11.721	
1WELDERS	1MH	-		-	-	-			510	152	44,407	18,995	24,762	-		-	-			13	1.421	
1CLEAN UNSAT. RT	1MH	-		-	-	-			4	1	46,378	18,934	40,832	-		-	-			0	.021	
1OTHER DISTRIB.	1MH	-		-	-	-			1,515	503	140,670	68,514	48,712	-		-	-			38	4.121	
1TOTAL	-	-	-	-	-	-	0	0	34,724	12,009	112,880,285	11,774,197	61,602	-	-	-	-	0	021	918	10021	

LK CONSTOCK		QUANTITIES					WEEKLY HOURS		CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE					
CATEGORY	ESTIMATE	PERIOD	PERIOD				PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL		ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
	UNITO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	MC	MC	MC	MC
1COCP CABLE	1LF	5,817,077		40,060	2,134,238	36.692			6,577	1,415	532,788	247,324	46,422	0.092		0.133	0.116			164	20.021	
1COCP TERS	1EA	246,247		2,181	72,863	29.592			2,251	524	213,236	79,693	37,372	0.866		1.272	1.094			56	6.821	
1CONDUIT	1LF	339,800		5,296	163,841	48.222			4,906	1,475	365,714	183,580	50,202	1.076		1.205	1.120			123	14.921	
1CONDUIT SUPS.	1EA	24,283		335	10,803	11			4,675	1,088	195,389	187,733	96,082	13.680		17.283	17.378			117	14.221	
1SPEC BOD	1MH	-		-	-	-			1,620	350	194,049	41,721	21,192	-		-	-			41	4.921	
1WORK	1MH	-		-	-	-			1,257	270	67,787	49,620	73,292	-		-	-			31	3.821	
1WELDERS	1MH	-		-	-	-			1,432	452	244,000	79,375	32,532	-		-	-			41	5.021	
1WELDERS	1MH	-		-	-	-			657	141	181,000	37,534	37,162	-		-	-			16	2.021	
1WELDERS	1MH	-		-	-	-			243	52	26,417	6,271	23,742	-		-	-			6	0.721	
1OTHER DIRECTS	1MH	-		-	-	-			4,344	990	453,685	171,159	37,582	-		-	-			109	13.221	
1WAREHOUSEMEN	1MH	-		-	-	-			3,857	990	32,061	27,139	84,652	-		-	-			96	11.721	
1WELDERS	1MH	-		-	-	-			521	112	28,588	20,826	73,072	-		-	-			13	1.621	
1OTHER DISTRIB.	1MH	-		-	-	-			334	72	25,713	7,883	30,642	-		-	-			8	1.021	
1TOTAL	-	-	-	-	-	-	0	0	32,874	7,931	112,484,867	11,139,910	45,872	-	-	-	-	0	021	822	10021	

JOHNSON CONTROLS		QUANTITIES					WEEKLY HOURS		CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE					
CATEGORY	UNITS TO COMPLETE	ESTIMATE	PERIOD PLANNED	PERIOD ACTUAL	CUMULATIVE	2" INSTALLED	PLANNED ST HRS	PLANNED OT HRS	ACTUAL ST HRS	ACTUAL OT HRS	ESTIMATED MRS	ACTUAL MRS	EXPENDED	ESTIMATED UNIT RATE	TARGET UNIT RATE	PERIOD UNIT RATE	CUMULATIVE UNIT RATE	PLANNED MC	2" MC	ACTUAL MC	2" MC	
MASS TUNING	ILF	151,807		1,702	49,672	32,721			3,437	1,129	226,711	71,326	31,462	1.493		2.683	1.436			84	40.72	
SEISMIC SUPS.	IEA	3,853		42	1,009	20,261			2,271	698	161,133	74,548	46,282	41.820		70.690	48.474			57	26.92	
INSTRUMENTS	IEA	3,770		46	788	20,842			233	192	20,301	9,023	44,452	5.373		9.239	11.451			6	2.82	
STUDY TRAY	IMH	-		-	-	-			444	205	23,919	16,592	69,372	-		-	-			11	5.32	
UNLOAD & HURL	IMH	-		-	-	-			188	49	4,500	5,134	114,132	-		-	-			5	2.22	
OTHER DIRECTS	IMH	-		-	-	-			776	528	91,681	33,273	36,292	-		-	-			19	9.22	
MANHOUSEMEN	IMH	-		-	-	-			1,002	497	10,193	9,302	91,262	-		-	-			25	11.92	
IMM. WELDERS	IMH	-		-	-	-			62	16	2,696	3,521	130,601	-		-	-			2	0.72	
OTHER DISTRIB.	IMH	-		-	-	-			30	8	2,834	2,472	87,172	-		-	-			1	0.42	
TOTAL		-		-	-	-			8,443	3,322	543,970	225,213	41,402	-		-	-		0	02	211	1002

SNEC	CATEGORY	ESTIMATE (UNITS TO COMPLETE)	QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
			PERIOD PLANNED	PERIOD ACTUAL	PERIOD CUMULATIVE	% INSTALLED	PLANNED ST HRS	PLANNED OT HRS	ACTUAL ST HRS	ACTUAL OT HRS	ESTIMATED MRS	ACTUAL MRS	% EXPENDED	ESTIMATED UNIT RATE	TARGET UNIT RATE	PERIOD UNIT RATE	CUMULATIVE UNIT RATE	PLANNED MC	% NC	PLANNED MC	ACTUAL MC	% NC	
SD PIPE	ILF	68,475		1,307	32,641	47.70211			4,799	1,456	488,226	162,444	33.28211	7.130		4.784	4.974			120	9.421		
SD HANGERS	IEA	12,255		159	4,637	37.84211			3,730	1,132	484,963	175,474	36.18211	39.573		30.579	37.842			93	7.321		
ICAT263 MGRS.	IEA	7,600		195	5,250	69.08211			4,114	1,248	154,466	117,336	75.96211	20.324		27.497	22.350			103	8.021		
IMM/SUP	IMH	-		-	-	-			8,634	1,898	231,059	238,926	103.40211	-		-	-			216	16.821		
INISC.STL.	IMH	-		-	-	-			1,619	140	161,709	61,024	37.74211	-		-	-			40	3.221		
IMECH.EQUIP.	IMH	-		-	-	-			2,047	503	128,624	92,700	72.07211	-		-	-			52	4.021		
IMEDRINK	IMH	-		-	-	-			2,015	490	117,029	79,457	67.90211	-		-	-			50	3.921		
IMPREV.MAINT.	IMH	-		-	-	-			668	201	165,695	22,790	13.75211	-		-	-			17	1.321		
IMHYDROTEST	IMH	-		-	-	-			785	238	160,870	21,984	13.67211	-		-	-			20	1.521		
IMOTHER DIRECTS	IMH	-		-	-	-			1,390	72	317,495	48,802	15.37211	-		-	-			35	2.721		
ISURVEYORS	IMH	-		-	-	-			3,008	1,010	186,593	107,089	57.82211	-		-	-			75	5.921		
IMMENSAGE	IMH	-		-	-	-			4,461	981	91,467	77,500	84.82211	-		-	-			112	8.721		
IMMALLOCATED	IMH	-		-	-	-			1,949	429	108,667	66,180	60.94211	-		-	-			49	3.821		
IMMATTING	IMH	-		-	-	-			2,249	145	156,330	70,157	44.82211	-		-	-			56	4.421		
IMCAFFOLDING	IMH	-		-	-	-			75	11	200,600	2,000	8.72211	-		-	-			2	0.121		
IMEX.CLEAN-UP	IMH	-		-	-	-			400	26	370,516	22,232	6.00211	-		-	-			10	0.821		
IMOTHER DISTRIB.	IMH	-		-	-	-			5,908	290	516,168	224,316	40.73211	-		-	-			150	11.721		
IMADVISORY OPER.	IMH	-		-	-	-			3,329	1,001	496,020	77,935	11.20211	-		-	-			83	6.521		
TOTAL		-		-	-	-			51,290	11,271	114,824,723	11,649,332	34.31211	-		-	-	0	02	1,282	10021		

LEGEND:

CATEGORIES: INCLUDE KEY INDICATORS PLUS ITEMS OF MAJOR WORK FOR REPORTING PERIOD.

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/86.

PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/1/84 FORECAST.

PERIOD ACTUAL: THE ACTUAL DATA FOR THE ONE WEEK PERIOD LISTED ABOVE.

CUMULATIVE: TOTAL TO DATE FROM 1/84.

PERCENT INSTALLED: "CUMULATIVE" DIVIDED BY "ESTIMATE TO COMPLETE".

WEEKLY MANHOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE PERIOD WEEK BASED ON THE 8/1/84 FORECAST.

ACTUAL STRAIGHT TIME / OVERTIME HOURS: ACTUAL HOURS EXPENDED FOR THE ONE WEEK PERIOD.

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/84 THROUGH 10/86.

ACTUAL HOURS: EXPENDED HOURS FROM 1/84 THROUGH PERIOD ENDING AS LISTED ABOVE.

PERCENT EXPENDED: "ACTUAL HOURS" DIVIDED BY "ESTIMATED HOURS".

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED MANHOURS" DIVIDED BY "ESTIMATED QUANTITIES"

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

PERIOD UNIT RATE: STRAIGHT TIME PLUS OVERTIME HOURS DIVIDED BY "PERIOD ACTUAL QUANTITIES".

CUMULATIVE UNIT RATE: "CUMULATIVE ACTUAL HOURS" DIVIDED BY "CUMULATIVE QUANTITIES".

PERIOD WORKFORCE:

PLANNED HEADCOUNT: BASED ON THE 8/84 FORECAST

PLANNED PERCENT HEADCOUNT: CATEGORIZED "PLANNED HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT"

ACTUAL HEADCOUNT: "STRAIGHT TIME HOURS" DIVIDED BY AVAILABLE STRAIGHT TIME WORKWEEK HOURS.

ACTUAL PERCENT HEADCOUNT: CATEGORIZED "ACTUAL HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT".

20-Jul-81

COST PERFORMANCE REPORT--PERIOD 7/9-7/15 1981

JTY BRIMWELL		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	UNITS TO COMPLETE	PERIOD PLANNED	PERIOD ACTUAL	CUMULATIVE	INSTALLER	%	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	%	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
							ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	%	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	MC	% MC	MC	% MC
150 PIPE	1LF	21,354		385	18,262	85.5411			3,311	798	74,577	91,595	122.8211	3.492		10.673	5.014			83	8.721	
180 HANGERS	1EA	4,995		82	3,349	67.0511			5,707	1,211	116,358	177,777	152.7811	23.295		84.732	53.084			143	15.021	
150 PIPE	1LF	25,703		435	21,693	84.1011			3,296	794	130,649	148,311	114.0411	5.042		9.402	6.837			82	8.721	
150 HANGERS	1EA	5,702		48	2,983	52.3111			12,902	2,764	811,136	556,502	68.6111	142.255		326.375	186.558			323	34.021	
150 WELDS	1EA	5,930		76	4,695	79.0711			1,950	418	137,243	109,251	79.6011	23.113		31.158	23.270			49	5.121	
REWORK	1MH	-		-	-	-			3,102	645	253,323	180,564	70.6611	-	-	-	-			78	8.221	
PIPE W/TP RES.	1MH	-		-	-	-			839	179	343,687	144,119	39.6311	-	-	-	-			21	2.271	
OTHER DIRECTS	1MH	-		-	-	-			3,876	950	626,776	171,978	27.4411	-	-	-	-			97	10.221	
WAREHOUSEMEN	1MH	-		-	-	-			1,178	372	133,483	50,100	37.5311	-	-	-	-			29	3.121	
DUAL WELDERS	1MH	-		-	-	-			191	61	44,407	10,333	23.2711	-	-	-	-			5	0.521	
CLEAN OHSAT.	1MH	-		-	-	-			12	4	46,378	18,929	40.8111	-	-	-	-			0	.021	
OTHER DISTRIB.	1MH	-		-	-	-			1,594	504	140,670	67,343	47.8711	-	-	-	-			40	4.221	
TOTAL	-	-	-	-	-	-	0	0	37,958	8,750	12,880,285	11,726,002	59.95211	-	-	-	-	0	01	949	1001	

LX CONSTOCK		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
ESTIMATE	PERIOD	PERIOD	%	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	%	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	ACTUAL						
CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	MC	% MC	MC	% MC		
100P CABLE	1LF	5,817,077		90,123	2,074,178	35.6611			7,241	1,939	532,788	241,112	45.2511	0.092		0.102	0.116			181	22.921	
100P TURNS	1EA	246,247		2,827	70,716	28.7211			2,140	574	213,236	78,716	36.9111	0.846		0.960	1.113			54	6.621	
CONDUIT	1LF	339,808		7,510	158,529	46.6511			5,374	1,440	365,714	177,285	48.4811	1.076		0.907	1.118			134	16.621	
CONDUIT SUPTS.	1EA	14,283		332	10,453	73.2411			5,332	1,428	195,389	165,941	84.9311	13.680		20.341	15.875			133	16.521	
SEC/FIRE DET.	1MH	-		-	-	-			2,161	578	196,819	39,019	19.8211	-	-	-	-			54	6.721	
SPGCC MOD	1MH	-		-	-	-			1,260	338	67,707	48,105	71.0511	-	-	-	-			32	3.921	
REWORK	1MH	-		-	-	-			2,323	623	244,060	77,267	31.6711	-	-	-	-			58	7.221	
TURN	1MH	-		-	-	-			680	181	101,060	36,737	36.3711	-	-	-	-			17	2.121	
345PV YARD MC	1MH	-		-	-	-			167	45	5,600	2,710	48.3911	-	-	-	-			4	0.521	
OTHER DIRECTS	1MH	-		-	-	-			4,135	1,108	476,222	182,290	38.2811	-	-	-	-			103	12.821	
WAREHOUSEMEN	1MH	-		-	-	-			656	175	32,061	22,291	69.5311	-	-	-	-			16	2.021	
DUAL WELDERS	1MH	-		-	-	-			598	161	28,588	28,263	70.8111	-	-	-	-			15	1.821	
OTHER DISTRIB.	1MH	-		-	-	-			266	71	25,713	7,547	29.3511	-	-	-	-			7	0.821	
TOTAL	-	-	-	-	-	-	0	0	32,333	8,661	12,484,867	11,099,263	44.2411	-	-	-	-	0	01	808	1002	

20-Jul-84

COST PERFORMANCE REPORT--PERIOD 7/1-7/15 1984

JOHNSON CONTROLS		QUANTITIES					WEEKLY HOURS		CUMULATIVE HOURS			UNIT RATES				PERIOD WORKFORCE				
	ESTIMATE	PERIOD	PERIOD			PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL		ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL
CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	17 MC	2 MC	MC	2 MC
CLASS TUNING	LF	151,807	3,511	48,012	31,637			3,220	1,760	224,711	44,914	29,522	1.413		1.418	1.394			81	42.72
MECHANIC SUPTS.	EA	3,853	48	1,254	32,552			2,434	1,331	161,133	71,727	44,512	41.820		78.479	57.199			61	32.37
INSTRUMENTS	EA	3,778	16	742	19,642			347	168	20,341	8,510	42,312	5.373		29.688	11.577			8	4.12
STONE TINY	MM	-	-	-	-			521	284	23,919	16,887	78,602	-		-	-			13	6.92
SUNDAY & MOON	MM	-	-	-	-			187	102	4,500	4,894	108,762	-		-	-			5	2.52
OTHER DIRECTS	MM	-	-	-	-			613	336	91,681	31,115	33,942	-		-	-			15	8.12
WAREHOUSEMEN	MM	-	-	-	-			207	113	10,193	7,802	76,542	-		-	-			5	2.72
QUAL. WORKERS	MM	-	-	-	-			28	16	2,676	3,443	127,712	-		-	-			1	0.42
OTHER DISTRI.	MM	-	-	-	-			24	13	2,836	3,122	110,082	-		-	-			1	0.32
TOTAL	-	-	-	-	-			7,513	4,123	543,970	214,494	39,432	-		-	-	0	02	189	1002

SPEC		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD		Σ	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Σ	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	MC	Σ MC	MC	Σ MC		
SB PIPE	LF	48,475		790	31,354	45,792		5,229	1,508	488,226	156,663	32,091	7.130		8.528	4.997			131	10.22		
SB HANGERS	EA	12,255		161	4,481	34,562		4,590	1,324	484,963	171,076	35,282	39.573		34.733	38.178			115	9.02		
CAT243 HRS.	EA	7,640		175	5,055	66,512		4,335	1,250	154,466	113,347	73,382	20.324		31.914	22.423			108	8.52		
GRU/SUPT	MM	-	-	-	-	-	-	9,047	1,809	231,059	228,138	98,742	-	-	-	-			227	17.72		
MISC. STL.	MM	-	-	-	-	-	-	2,320	114	161,709	59,242	34,632	-	-	-	-			58	4.52		
MECH. EQUIP.	MM	-	-	-	-	-	-	2,312	498	128,624	90,074	70,832	-	-	-	-			58	4.52		
NEWORK	MM	-	-	-	-	-	-	2,610	427	117,029	76,981	65,782	-	-	-	-			66	5.22		
PREV. MAINT.	MM	-	-	-	-	-	-	514	159	165,695	21,705	13,102	-	-	-	-			15	1.22		
WIND TEST	MM	-	-	-	-	-	-	485	197	160,870	20,900	12,992	-	-	-	-			17	1.32		
OTHER DIRECTS	MM	-	-	-	-	-	-	1,858	84	317,495	55,409	17,452	-	-	-	-			46	3.62		
SURVEYORS	MM	-	-	-	-	-	-	3,018	870	186,593	99,871	53,522	-	-	-	-			75	5.92		
WAREHOUSE	MM	-	-	-	-	-	-	1,878	268	91,467	72,123	78,652	-	-	-	-			47	3.72		
UNALLOCATED	MM	-	-	-	-	-	-	1,837	366	108,647	63,802	58,752	-	-	-	-			46	3.62		
JANITORS	MM	-	-	-	-	-	-	2,110	141	156,530	67,763	43,292	-	-	-	-			54	4.22		
SCAFFOLDING	MM	-	-	-	-	-	-	79	17	288,680	1,916	6,462	-	-	-	-			2	0.22		
GEN. CLEAN-UP	MM	-	-	-	-	-	-	459	92	370,514	20,279	5,472	-	-	-	-			11	0.92		
OTHER DISTRIB.	MM	-	-	-	-	-	-	5,133	230	516,168	234,199	45,762	-	-	-	-			128	10.02		
ADVISORY OPER.	MM	-	-	-	-	-	-	2,919	845	496,028	73,580	18,372	-	-	-	-			75	5.92		
TOTAL	-	-	-	-	-	-	-	51,281	10,219	4,824,723	1,629,008	35,772	-	-	-	-	0	02	1,280	1002		

LEGEND:

CATEGORIES: INCLUDE KEY INDICATORS PLUS ITEMS OF MAJOR WORK FOR REPORTING PERIOD.

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/84.

PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/1/84 FORECAST.

PERIOD ACTUAL: THE ACTUAL DATA FOR THE ONE WEEK PERIOD LISTED ABOVE.

CUMULATIVE: TOTAL TO DATE FROM 1/84.

PERCENT INSTALLED: "CUMULATIVE" DIVIDED BY "ESTIMATE TO COMPLETE".

WEEKLY MANHOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE PERIOD WEEK BASED ON THE 8/1/84 FORECAST.

ACTUAL STRAIGHT TIME / OVERTIME HOURS: ACTUAL HOURS EXPENDED FOR THE ONE WEEK PERIOD.

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/84 THROUGH 10/84.

ACTUAL HOURS: EXPENDED HOURS FROM 1/84 THROUGH PERIOD ENDING AS LISTED ABOVE.

PERCENT EXPENDED: "ACTUAL HOURS" DIVIDED BY "ESTIMATED HOURS".

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED MANHOURS" DIVIDED BY "ESTIMATED QUANTITIES"

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

PERIOD UNIT RATE: STRAIGHT TIME PLUS OVERTIME HOURS DIVIDED BY "PERIOD ACTUAL QUANTITIES".

CUMULATIVE UNIT RATE: "CUMULATIVE ACTUAL HOURS" DIVIDED BY "CUMULATIVE QUANTITIES".

PERIOD WORKFORCE:

PLANNED HEADCOUNT: BASED ON THE 8/84 FORECAST

PLANNED PERCENT HEADCOUNT: CATEGORIZED "PLANNED HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT"

ACTUAL HEADCOUNT: "STRAIGHT TIME HOURS" DIVIDED BY AVAILABLE STRAIGHT TIME WORKWEEK HOURS.

ACTUAL PERCENT HEADCOUNT: CATEGORIZED "ACTUAL HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT".

12-Jul-84

COST PERFORMANCE REPORT--PERIOD 1/2-7/8 1984

ITT GRIMMELL		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS			UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD		Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
CATEGORY	UNITO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	MC	Z MC	MC	Z MC	
150 PIPE	1LF	21,354		184	17,882	83.74211			1,866	467	74,577	87,486	117.31211	3.492		12.679	4.892		58	8.121	
150 HANGERS	1EA	4,995		70	3,267	65.41211			2,680	721	116,358	170,829	146.81211	23.295		51.443	52.289		90	12.521	
150 PIPE	1LF	25,793		192	21,258	82.42111			2,584	647	130,049	144,221	110.90211	5.042		16.828	6.784		81	11.221	
150 HANGERS	1EA	5,702		55	2,935	51.47211			7,471	1,871	811,136	540,836	66.68111	142.255		169.655	184.271		233	32.321	
150 WELDS	1EA	5,938		54	4,543	76.51211			1,294	324	137,243	106,883	77.68111	23.113		29.963	23.527		40	5.611	
10000 DIRECTS	1MH										111,245,984	487,050	39.09211								
10000 WORK	1MH							1,925	482										60	8.321	
10000 PIPE W/TP RES. 1UM								478	120										15	2.121	
10000 OTHERS	1MH							2,185	548										68	9.521	
10000 DISTRIBUTABLES 1MH								2,418	606	364,938	142,789	39.13211							76	10.521	

LK CONSTACK		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
		ESTIMATE	PERIOD	PERIOD		Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
CATEGORY	UNITO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	MC	Z MC	MC	Z MC		
1100P CABLE	1LF	5,817,077		53,349	1,984,055	34.11211			4,563	1,078	532,788	231,932	43.53211	0.092		0.104	0.117			143	22.621	
1100P TERS	1EA	214,247		2,049	67,889	27.57211			1,483	393	213,236	76,002	35.64211	0.866		0.916	1.120			46	7.421	
1000BUIIT	1LF	339,808		5,138	151,019	44.44211			3,522	847	345,714	170,471	46.61211	1.076		0.850	1.129			110	17.521	
1000R DIRECTS	1MH										111,286,767	531,710	41.32211									
1000BUIIT SUPTS.	1EA			288					3,457	816						14.837				108	17.221	
1000G/FIRE DET.	1MH								1,165	275										36	5.821	
1000GCC MOB	1MH								690	163										22	3.421	
1000REWORK	1MH								1,101	381										34	5.521	
1000UH	1MH								407	96										13	2.021	
1000SKV YARD WK	1UM								488	123										15	2.421	
1000OTHERS	1MH								2,180	583										68	10.821	
1000DISTRIBUTABLES	1MH								1,098	253	84,362	48,154	55.76211							34	5.421	
TOTAL							0	0	20,154	4,998	112,484,867	11,050,269	42.59211					0	02	430	10021	

12-Jul-81

COST PERFORMANCE REPORT--PERIOD 772-778 1981

JOHNSON CONTROLS		QUANTITIES					WEEKLY MANHOURS		CUMULATIVE HOURS		UNIT RATES				PERIOD WORKFORCE						
	ESTIMATE	PERIOD	PERIOD		%	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	%	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
	CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	% HC	HC	% HC
	CLASS TUBING	ILF	151,807	2,248	44,459	29.29%			2,483	483	224,711	61,934	27.32%	1.493		1.484	1.393			84	47.92%
	SEISMIC SUPPLS.	IEA	3,853	30	1,204	31.30%			1,807	460	161,133	67,960	42.18%	41.820		75.567	56.352			56	32.32%
	OTHER DIRECTS.	IMH									140,401	58,968	42.00%								
	TUBE TRAY	IMH		164					334	85						2.524				10	6.02%
	UNLOAD & HNDL.	IMH							176	45										6	3.12%
	OTHERS	IMH							350	90										11	6.32%
	DISTRIBUTABLES	IMH							246	63	15,725	13,966	88.81%							8	4.42%

SMEC		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD		Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	Z HC	HC	Z HC		
SD PIPE	ILF	48,475		1,090	30,564	44.64%		3,470	847	488,226	149,928	30.71%	7.130		3.961	4.905			108	9.72%		
SD HANGERS	IEA	12,255		115	4,320	35.25%		3,044	743	484,963	165,162	34.06%	39.573		32.930	38.232			95	8.52%		
CATZUS WERS.	IEA	7,600		127	4,880	64.21%		2,899	708	154,466	107,762	69.76%	20.324		28.402	22.082			91	8.12%		
OTHER DIRECTS	IMH									111,282,481	529,685	41.30%										
UNL/SMT	IMH							6,047	1,141										189	16.92%		
INISC. STL.	IMH							1,593	138										50	4.42%		
INCDL. EQUIP.	IMH							1,476	362										46	4.12%		
REWORK	IMH							1,616	349										51	4.52%		
PREV. MAINT.	IMH							590	144										18	1.62%		
HYDROTEST	IMH							583	142										18	1.62%		
OTHERS	IMH							1,375	259										43	3.82%		
DISTRIBUTABLES	IMH									11,718,559	545,397	31.74%										
SURVEYORS	IMH							2,397	605										75	6.72%		
WAREHOUSE	IMH							1,428	225										45	4.02%		
UNALLOCATED	IMH							1,499	283										47	4.22%		
AMITORS	IMH							1,646	85										51	4.62%		
INCR CL2 EQUIP.	IMH							1,221	131										38	3.42%		
OTHERS	IMH							2,798	528										87	7.82%		
ADVISORY OPER.	IMH							2,126	528	494,028	69,734	10.02%							64	5.92%		
TOTAL								35,808	7,218	4,824,723	1,567,668	32.49%					0	0%	1,119	100%		

LEGEND:

CATEGORIES: INCLUDE KEY INDICATORS PLUS ITEMS OF MAJOR WORK FOR REPORTING PERIOD.

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/86.

PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/1/84 FORECAST.

PERIOD ACTUAL: THE ACTUAL DATA FOR THE ONE WEEK PERIOD LISTED ABOVE.

CUMULATIVE: TOTAL TO DATE FROM 1/84.

PERCENT INSTALLED: "CUMULATIVE" DIVIDED BY "ESTIMATE TO COMPLETE".

WEEKLY MANHOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE PERIOD WEEK BASED ON THE 8/1/84 FORECAST.

ACTUAL STRAIGHT TIME / OVERTIME HOURS: ACTUAL HOURS EXPENDED FOR THE ONE WEEK PERIOD.

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/84 THROUGH 10/86.

ACTUAL HOURS: EXPENDED HOURS FROM 1/84 THROUGH PERIOD ENDING AS LISTED ABOVE.

PERCENT EXPENDED: "ACTUAL HOURS" DIVIDED BY "ESTIMATED HOURS".

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED MANHOURS" DIVIDED BY "ESTIMATED QUANTITIES"

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

PERIOD UNIT RATE: STRAIGHT TIME PLUS OVERTIME HOURS DIVIDED BY "PERIOD ACTUAL QUANTITIES".

CUMULATIVE UNIT RATE: "CUMULATIVE ACTUAL HOURS" DIVIDED BY "CUMULATIVE QUANTITIES".

PERIOD WORKFORCE:

PLANNED HEADCOUNT: BASED ON THE 8/84 FORECAST

PLANNED PERCENT HEADCOUNT: CATEGORIZED "PLANNED HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT"

ACTUAL HEADCOUNT: "STRAIGHT TIME HOURS" DIVIDED BY AVAILABLE STRAIGHT TIME WORKWEEK HOURS.

ACTUAL PERCENT HEADCOUNT: CATERGORIZED "ACTUAL HEADCOUNT" DIVIDED BY "TOTAL HEADCOUNT".

1	2	3	4	5			6			7			8			9			10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124
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LK CONSTRUCT		QUANTITIES					WEEKLY HOURS					CUMULATIVE HOURS			UNIT RATES				PERIOD WORKFORCE			
ESTIMATE	PERIOD	PERIOD	1	2	3	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	1	2	ESTIMATED	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
CATEGORY	UNITS COMPLETED	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	BY MRS	BY MRS	BY MRS	BY MRS	BY MRS	MRS	MRS	MRS	RESPONDED	UNIT RATE	UNIT RATE	UNIT RATE	MC	Σ MC	MC	Σ MC	
1000 CP CABLE	1LF	5,817,677		70,940	1,930,706	33.19211			8,310	2,161	532,780	226,291	42.47211	0.092	0.140	0.117			208	25.521		
1000 CP TURNS	1EA	244,247		2,675	65,840	26.74211			3,054	781	213,236	74,126	34.76211	0.846	1.434	1.126			76	9.421		
1000 CP UNIT	1LF	339,808		6,952	145,681	42.93211			5,641	1,595	345,714	166,102	45.42211	1.076	1.041	1.139			141	17.321		
1000 OTHER DIRECTS	1NM										111,286,767	519,795	40.40211									
1000 CP UNIT SUPPS.	1EA			497					5,512	1,494					14.499				138	16.921		
1000 CP/FINE DET.	1NM								1,709	479									43	5.221		
1000 CPCC	1NM								1,227	149									31	3.821		
1000 REMARK	1NM								1,321	521									33	4.121		
1000 TANK	1NM								794	177									20	2.421		
1000 TANK TRANSF	1NM								166	304									4	0.521		
1000 OTHERS	1NM								3,031	922									74	9.321		
1000 DISTRIBUTABLES	1NM								1,813	409	84,342	46,083	54.19211						45	5.621		
TOTAL							0	0	32,378	9,192	112,484,847	11,633,117	41.58211				0	021	814	10021		

JACKSON CONTROLS		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD		2	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	2	ESTIMATED	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL			
CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	PERIOD	UNIT RATE	UNIT RATE	UNIT RATE	MC	2 MC	MC	2 MC	
CLASS TUBING	1LF	151,807		2,821	42,191	27,792			3,410	1,225		226,711	58,568	25,831	1,493	1,654	1,388				84	40,421
SEISMIC SUPPLS	1EA	3,853		71	1,176	30,522			2,913	1,036		161,133	45,493	40,772	41,820	55,620	55,841				73	34,221
OTHER DIRECTS	1NM											140,481	57,890	41,232								
TUBE TRAY	1NM			341				427	223							2,355					16	7,421
INSTRUMENTS	1EA			53				304	108							7,491					8	3,621
INWORK	1NM							302	107												8	3,521
OTHERS	1NM							544	192												16	6,421
DISTRIBUTABLES	1NM							390	141	15,725	13,457	84,852									10	4,621
TOTAL								8,520	3,032	543,970	195,008	34,602							6	621	213	10021

GMEC		QUANTITIES										WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
ESTIMATE	PERIOD	PERIOD	2	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	2	ESTIMATED	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL										
CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS										
ISO PIPE	1LF	48,475	1,447	29,474	43,042			5,027	1,577	480,226	145,611	29,822	7,130	4,544	4,940												
ISO HANDBARS	1EA	12,255	196	4,205	34,312			5,512	1,729	484,963	161,375	33,282	39,573	36,944	38,377												
CAT233 HRS.	1EA	7,400	224	4,755	62,542			4,419	1,386	154,466	104,155	67,432	20,324	25,686	21,914												
OTHER DIRECTS	1NM									111,282,481	513,870	40,072															
UNAL/DPT	1NM							9,228	1,530																		
DRIC STL	1NM							2,340	296																		
MECH EQUIP.	1NM							2,243	496																		
INWORK	1NM							2,136	463																		
PREV. MAINT.	1NM							579	152																		
HYDROTEST	1NM							724	226																		
OTHERS	1NM							1,162	194																		
DISTRIBUTABLES	1NM									111,718,559	532,551	30,997															
SURVEYORS	1NM							3,040	1,032																		
WAREHOUSE	1NM							1,781	325																		
UNALLOCATED	1NM							1,982	331																		
MANITORS	1NM							2,059	202																		
MAA CL2 EQUIP.	1NM							1,536	241																		
OTHERS	1NM							4,631	533																		
ADVISORY OPER.	1NM							2,995	918	696,028	67,080	9,642															
TOTAL								51,408	11,979	110,824,723	11,524,642	31,682															

TIT GRINWELL		QUANTITIES				WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES			PERIOD WORKFORCE			
ESTIMATE		PERIOD	PERIOD		Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
CATEGORY	TO UNITS TO COMPLETES	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	PERCENTAGE	UNIT RATE	UNIT RATE	UNIT RATE	MC	Z MC	MC	Z MC	
50 PIPE	ILF	21,354		395	17,372	81.3511		2,594	737	74,577	82,290	110.3511	3.492	0.433	4.737			65	7.121	
50 WANGERS	SEA	4,995		78	3,089	61.8411		4,391	1,158	116,358	161,262	158.5911	23.295	71.141	52.205			110	11.921	
50 PIPE	ILF	26,713		420	20,711	77.4211		3,872	1,043	130,049	135,963	104.5511	4.854	11.750	6.554			97	10.521	
50 WANGERS	SEA	5,762		74	2,792	48.9711		13,858	3,790	811,136	513,635	63.3211	142.255	238.446	183.967			346	37.721	
50 WELDS	SEA	5,938		110	4,344	73.4911		2,231	631	137,243	102,958	75.0711	23.113	26.018	23.593			27	2.921	
OTHER DIRECTS	SUM									111,245,984	472,401	37.9111								
REWORK	SUM							2,843	842									72	7.811	
PIPE WHIP RES.	SUM							1,318	421									33	3.621	
OTHERS	SUM							3,708	1,053									93	10.121	
DISTRIBUTABLES	SUM							3,119	843	344,938	135,241	37.0421						78	8.521	
TOTAL								37,954	10,538	112,060,785	11,643,758	55.6811						929	10021	

LK CONDUIT		QUANTITIES				WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES			PERIOD WORKFORCE			
ESTIMATE		PERIOD	PERIOD		Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
CATEGORY	TO UNITS TO COMPLETES	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	PERCENTAGE	UNIT RATE	UNIT RATE	UNIT RATE	MC	Z MC	MC	Z MC	
100CP CABLE	ILF	5,817,077		59,754	1,859,766	31.9711		7,250	2,179	532,708	214,778	40.3111	0.092	0.150	0.115			181	22.321	
100CP TEES	SEA	244,247		1,277	63,145	25.6521		2,337	597	213,234	69,390	32.5411	0.046	2.298	1.999			58	7.221	
CONDUIT	ILF	339,808		4,198	138,929	40.8821		5,489	1,533	345,714	150,452	43.3821	1.076	1.673	1.142			137	16.921	
OTHER DIRECTS	SUM									111,286,767	503,771	39.1511								
CONDUIT SUPPS.	SEA			245				5,335	1,573					29.012				138	17.121	
RECEIVE DET.	SUM							1,421	325									41	5.021	
IPCC HOD	SUM							1,283	347									32	4.021	
REWORK	SUM							1,451	449									41	5.121	
THAN	SUM							786	142									18	2.221	
FUNCTION NOT	SEA			31				737	201					30.250				10	2.321	
TRAIN TRANSF	SUM							251	231									6	0.821	
OTHERS	SUM							3,850	1,096									96	11.921	
DISTRIBUTABLES	SUM							1,735	482	84,362	44,496	51.5211						43	5.321	
TOTAL								32,415	9,075	112,484,867	991,087	39.8811						811	10021	

JOHNSON CONTROLS		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	PERIOD	%	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	%	ESTIMATED	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	NC	% NC	NC	% NC
CATEGORY	UNITS TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	PERCENT	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	
CLASS TUNING	1LF	151,807		3,138	39,370	25,931		3,346	685	226,711	53,903	23.78	1.493	1.285	1.349			84		34.92		
SEISMIC SUPPS	1EA	3,853		59	1,105	20,681		3,250	663	161,133	61,744	38.32	41.820	44.119	55.877			81		33.81		
OTHER DIRECTS	1NM									140,401	55,483	39.52										
STONE TRAY	1UN			547				630	129					1.300				56		6.62		
INSTRUMENTS	1EA			56				632	130					13.607				66		6.62		
REWORK	1NM							500	104									13		5.32		
OTHERS	1NM							676	130									17		7.12		
DISTRIBUTABLES	1NM							557	114	15,725	12,445	79.14						14		5.82		
															</							

13-Jul-84

COST PERFORMANCE REPORT--PERIOD 6/4-6/17 1984

IT GRINWELL		QUANTITIES				WEEKLY MANHOURS		CUMULATIVE HOURS				UNIT RATES			PERIOD WORKFORCE				
ESTIMATE						PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL
CATEGORY	UNITS TO COMPLETE	PERIOD	CUMULATIVE	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	MC	Z MC	MC	Z MC
ISB PIPE	ILF	21,354	249	17,694				6,800	1,092	74,577	80,445	107.072	3.492	34.908	4.546			80	8.92
ISB HANGERS	IEA	4,995	154	3,234				9,588	2,773	116,358	155,986	134.062	23.295	80.266	48.233			114	12.62
ILB PIPE	ILF	26,793	486	20,466				6,037	1,700	130,049	130,702	100.502	4.054	15.920	6.386			72	7.92
ILB HANGERS	IEA	5,702	136	3,053				24,017	6,678	811,136	497,382	61.322	142.255	225.699	162.916			284	31.43
ILB WELDS	IEA	5,938	278	4,330				4,247	1,273	137,243	100,335	73.112	23.113	19.856	23.172			51	5.62
OTHER DIRECTS	IMH									868,718	457,886	52.712							
TRENCH	IMH							6,335	1,801									75	8.32
PIPE WIP RES. LUM			273					4,937	2,425					26.967				68	7.52
HYDROTEST	IMH																		
OTHERS	IMH							6,952	2,026									83	9.22
DISTRIBUTABLES	IMH							6,209	2,152	364,938	132,220	36.232						77	8.52
TOTAL						0	0	75,122	22,720	112,503,019	11,554,956	62.122				0	02	906	1002

LK CONDUIT		QUANTITIES				WEEKLY MANHOURS		CUMULATIVE HOURS				UNIT RATES			PERIOD WORKFORCE				
ESTIMATE						PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL
CATEGORY	UNITS TO COMPLETE	PERIOD	CUMULATIVE	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	MC	Z MC	MC	Z MC
ICCP CABLE	ILF	5,817,077	172,082	1,801,010				15,045	5,651	532,788	205,507	38.572	0.092	0.120	0.114			195	24.32
ICCP TUBES	IEA	246,247	5,521	61,859				4,649	1,343	213,236	66,082	30.992	0.866	1.085	1.068			57	7.02
CONDUIT	ILF	341,760	16,449	134,503				10,116	2,994	365,714	150,938	41.272	1.070	0.797	1.122			124	15.42
OTHER DIRECTS	IMH									111,286,767	484,708	37.672							
CONDUIT SUPPLS.	IEA		881					10,037	2,932					14.721				122	15.22
SEC/FIRE DET.	IMH							3,805	1,844									46	5.72
IPCC NCB	IMH							2,302	678									28	3.52
TRENCH	IMH							4,759	1,384									58	7.22
LUM	IMH							1,992	430									23	2.82
OTHERS	IMH							8,767	2,487									106	13.22
DISTRIBUTABLES	IMH							3,372	1,331	86,362	42,402	49.182						44	5.52
TOTAL						0	0	64,644	20,294	112,484,867	949,657	38.222				0	02	803	1002

JOHNSON CONTROLS		QUANTITIES			WEEKLY MANHOURS		CUMULATIVE HOURS			UNIT RATES			PERIOD WORKFORCE				
	ESTIMATE		PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	%	ESTIMATED	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
CATEGORY	HOURS TO COMPLETE	PERIOD	CUMULATIVE	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	MC	% MC	MC	% MC
CLASS TUBING	LF	151,807	5,010	29,848		3,809	471	226,711	42,944	18.94%	1.493	0.854	1.438			49	26.51%
EARTHQ SUPTS.	EA	3,853	74	940		5,432	671	161,133	52,292	32.45%	41.820	82.473	54.471			70	37.92%
OTHER DIRECTS	MH							140,401	47,255	33.66%							
REWORK	MH					700	86									9	4.92%
TUBE TRAY	LM		1,798			1,737	215									22	12.13%
OTHERS	MH					1,654	204									21	11.53%
DISTRIBUTABLES	MH					1,017	126	15,725	10,384	66.03%						13	7.12%
TOTAL						14,349	1,773	543,970	152,075	28.10%				0	0%	105	100%

SNEC	QUANTITIES				WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
	ESTIMATE	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	ESTIMATED	ACTUAL	ESTIMATED	ACTUAL	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
CATEGORY	UNIT TO COMPLETE			ST HRS	OT HRS	ST HRS	OT HRS	MRS	MRS	MRS	PERCENT	UNIT RATE	UNIT RATE	UNIT RATE	MC	% MC	MC	% MC		
150 PIPE	1LF	56,185	2,155	26,785			8,241	2,419	404,334	132,303	32.722	7.196	4.947	4.939				117	8.521	
150 HANGERS	1EA	11,901	287	3,847			9,241	2,712	470,753	145,313	30.872	39.556	41.648	37.773				131	9.521	
1CAT263 HRS.	1EA	7,600	430	4,310			7,274	2,137	154,444	99,545	58.632	20.324	21.884	21.013				103	7.521	
1OTHER DIRECTS	1MH								111,281,977	444,498	36.232									
1TUN/SUPT	1MH						15,765	3,648										213	15.421	
1MISC.BTL.	1MH						4,608	586										54	4.121	
1MECH.EQUIP.	1MH						4,598	1,250										64	4.621	
1TOWER	1MH						3,783	1,004										52	3.821	
1CONDENSER	1MH						487	113										9	0.621	
1HYDROTEST	1MH						1,763	518										25	1.821	
1OTHERS	1MH						5,360	682										66	4.821	
1DISTRIBUTABLES	1MH								111,718,559	496,605	28.902									
1SURVEYORS	1MH						5,982	2,089										88	6.421	
1WAREHOUSE	1MH						4,609	857										60	4.321	
1UNALLOCATED	1MH						3,543	820										48	3.521	
1JANITORS	1MH						3,859	445										50	3.621	
1MMA CL2 EQUIP.	1MH						2,327	416										30	2.221	
1OTHERS	1MH						13,765	1,753										170	12.321	
1ADVISORY OPER.	1MH						6,718	2,034	696,028	50,793	8.432							96	7.021	
TOTAL							102,115	23,625	114,726,117	11,340,677	29.872				0	021	1,377	10021		

COST PERFORMANCE REPORT--PERIOD 5/21-6/3 1964

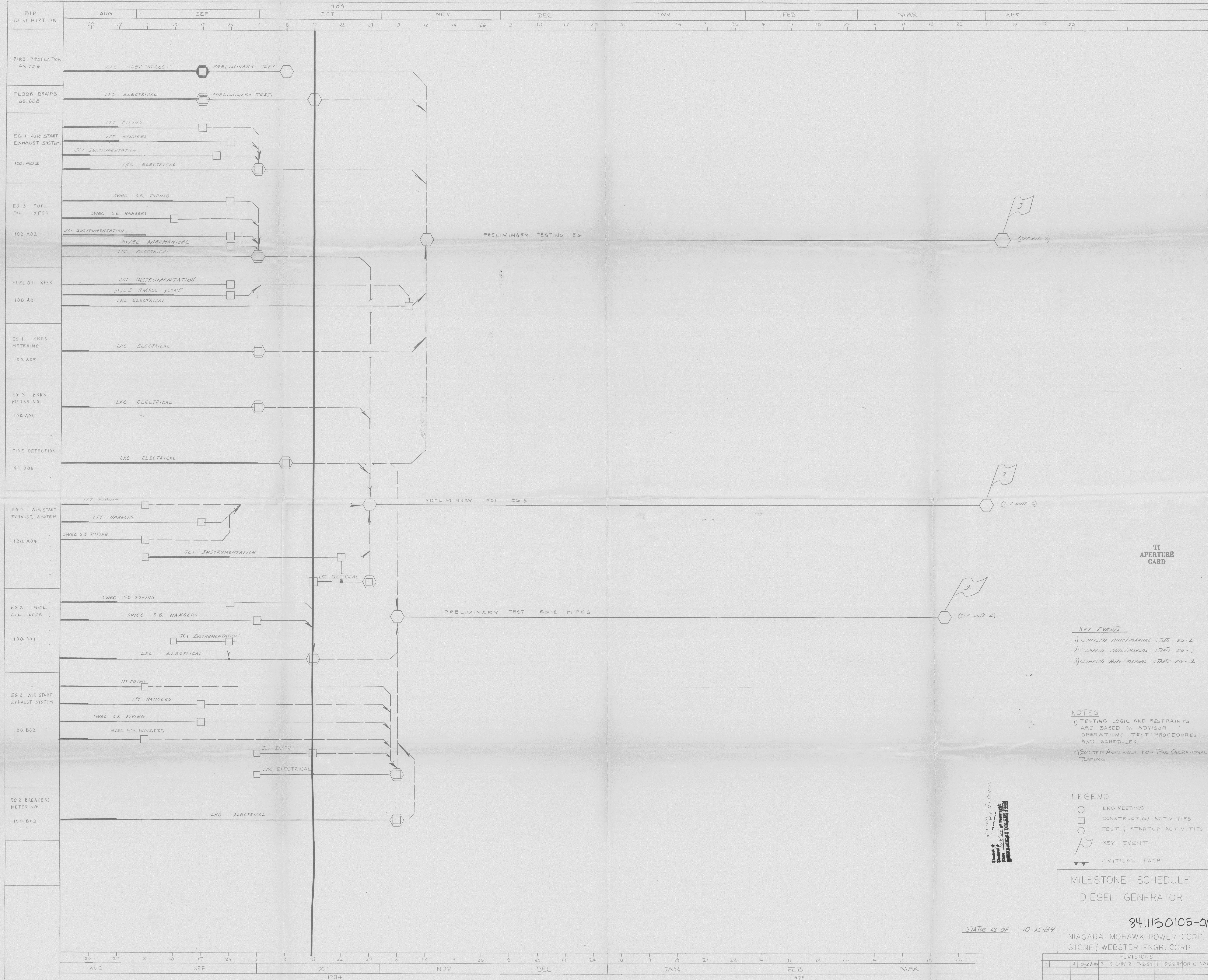
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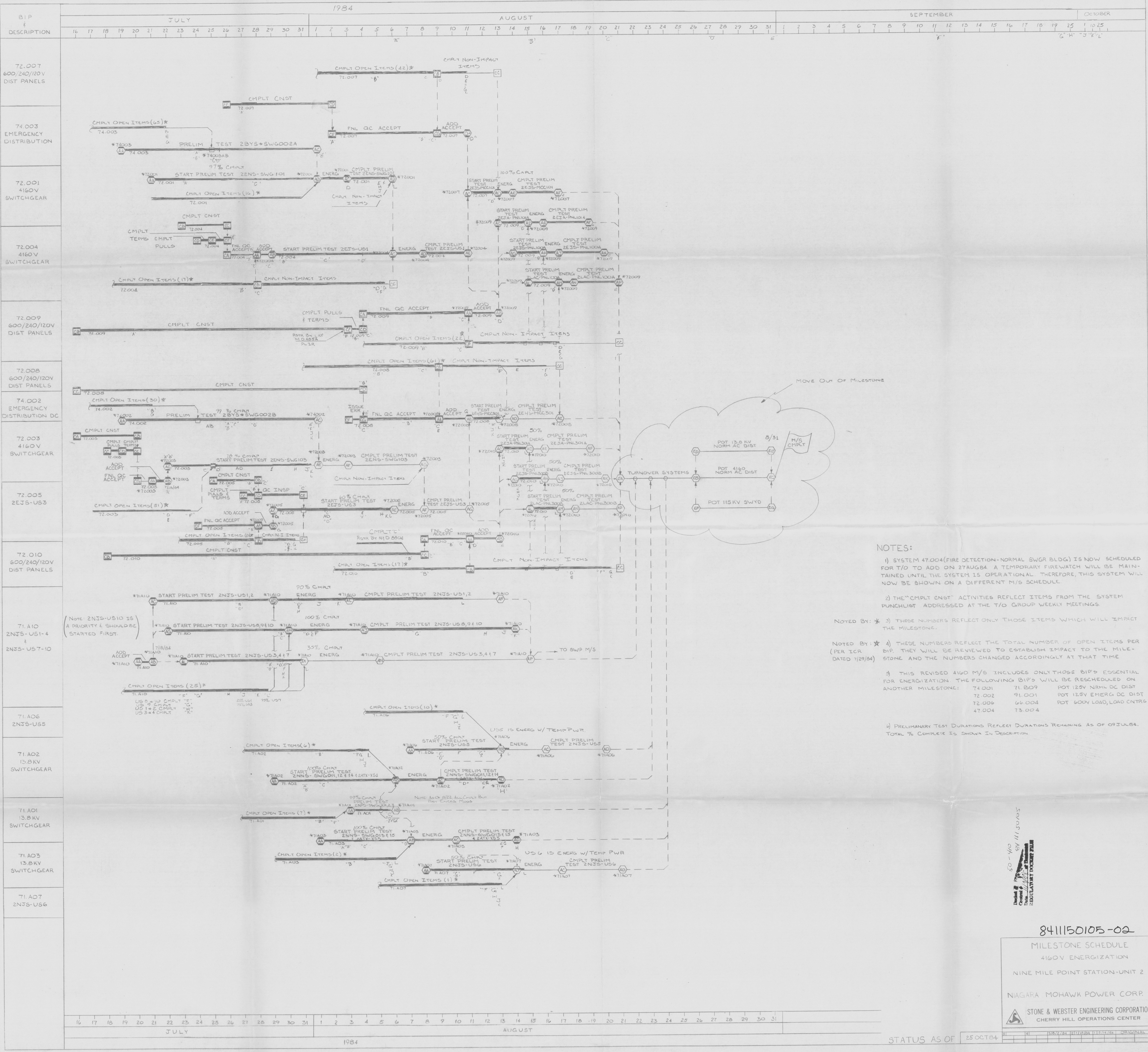
12-Jun-84

COST PERFORMANCE REPORT--PERIOD 5/21-6/3 1984

JOHNSON CONTROLS		QUANTITIES				WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
ESTIMATE						PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL			ESTIMATED	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
CATEGORY	UNITS TO COMPLETE	PERIOD	CUMULATIVE	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
CLASS TUBING 1LF	151,007	5,010	29,848					3,049	471	226,711	42,911	18,912	1,493	0.054	1,438				49	26,521	
ISOLATIC SUPPS. 1EA	3,853	76	960					5,432	671	161,133	52,292	32,452	41,820	02.473	54.471				70	37,921	
OTHER DIRECTS 1MM										140,401	47,255	33,642									
TRENCH 1MM								700	86										9	4,921	
STONE TRAY 1MM		1,770						1,737	215										22	12,121	
OTHERS 1MM								1,454	204										31	11,521	
DISTRIBUTABLES 1MM								1,017	124	15,725	10,341	44,032							13	7,121	
TOTAL								14,349	1,773	543,970	152,875	20,102					0	61	185	1002	

SHEC		QUANTITIES				WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
ESTIMATE						PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL			ESTIMATED	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
CATEGORY	UNITS TO COMPLETE	PERIOD	CUMULATIVE	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
ISO PIPE 1LF	54,185	1,730	21,430					7,775	946	444,334	121,643	30,002	7,196	5.041	4,939				106	8,521	
ISO HANGERS 1EA	11,941	219	3,540					8,372	1,021	470,753	133,340	20,332	39,556	37.003	37.441				115	9,221	
ICAT253 HRS. 1EA	7,640	334	3,000					4,448	707	154,144	81,154	52,541	20,321	21.722	20,916				30	7,121	
OTHER DIRECTS 1MM										111,281,977	420,221	32,702									
ISOL/SUPP 1MM								12,611	1,283										169	13,521	
ISOL. STL. 1MM								4,169	231										54	4,321	
TRENCH/PIPE 1MM								4,136	519										57	4,521	
TRENCH 1MM								3,012	341										41	3,321	
ISOL/RESEAL 1MM								2,122	425										31	2,521	
HYDROTEST 1MM								1,442	242										23	1,071	
OTHERS 1MM								8,319	442										107	8,671	
DISTRIBUTABLES 1MM										111,710,559	455,910	26,532									
SURVEYORS 1MM								4,322	977										89	7,121	
INARCHOUSE 1MM								3,797	375										51	4,121	
UNALLOCATED 1MM								3,581	344										48	3,021	
EXAMINATORS 1MM								3,713	157										47	3,021	
ISOL CL2 EQUIP. 1MM								1,932	80										25	2,021	
OTHERS 1MM								9,130	512										118	9,421	
ADVISORY OPER. 1MM								4,045	752	470,020	50,041	7,172							83	6,621	
TOTAL								93,210	9,482	116,726,117	11,262,337	26,712				0	61	1,252	1002		





NOTES:

1) SYSTEM 47.004 (FIRE DETECTION-NORMAL SWGR BLDG) IS NOW SCHEDULED FOR T/O TO ADD ON 27AUG84. A TEMPORARY FIREWATCH WILL BE MAINTAINED UNTIL THE SYSTEM IS OPERATIONAL. THEREFORE, THIS SYSTEM WILL NOW BE SHOWN ON A DIFFERENT M/S SCHEDULE.

2) THE "CMPLT CNST" ACTIVITIES REFLECT ITEMS FROM THE SYSTEM PUNCHLIST ADDRESSED AT THE T/O GROUP WEEKLY MEETINGS.

NOTED BY: * 3) THESE NUMBERS REFLECT ONLY THOSE ITEMS WHICH WILL IMPACT THE MILESTONE.

NOTED BY: * 4) THESE NUMBERS REFLECT THE TOTAL NUMBER OF OPEN ITEMS PER BIP. THEY WILL BE REVIEWED TO ESTABLISH IMPACT TO THE MILESTONE AND THE NUMBERS CHANGED ACCORDINGLY AT THAT TIME.

5) THIS REVISED 4160V M/S INCLUDES ONLY THOSE BIP'S ESSENTIAL FOR ENERGIZATION. THE FOLLOWING BIP'S WILL BE RESCHEDULED ON ANOTHER MILESTONE:

74.001	71.009	POT 120V NRML DC DIST
72.002	91.001	POT 120V EMERG DC DIST
72.006	66.004	POT 600V LOAD, LOAD CNTRS
47.004	73.004	

6) PRELIMINARY TEST DURATIONS REFLECT DURATIONS REMAINING AS OF 09JUL84. TOTAL % COMPLETE IS SHOWN IN DESCRIPTION.

50-410
BY 11/5/85
STONE & WEBSTER ENGINEERING CORPORATION
CHERRY HILL OPERATIONS CENTER

8411150105-02

MILESTONE SCHEDULE

4160V ENERGIZATION

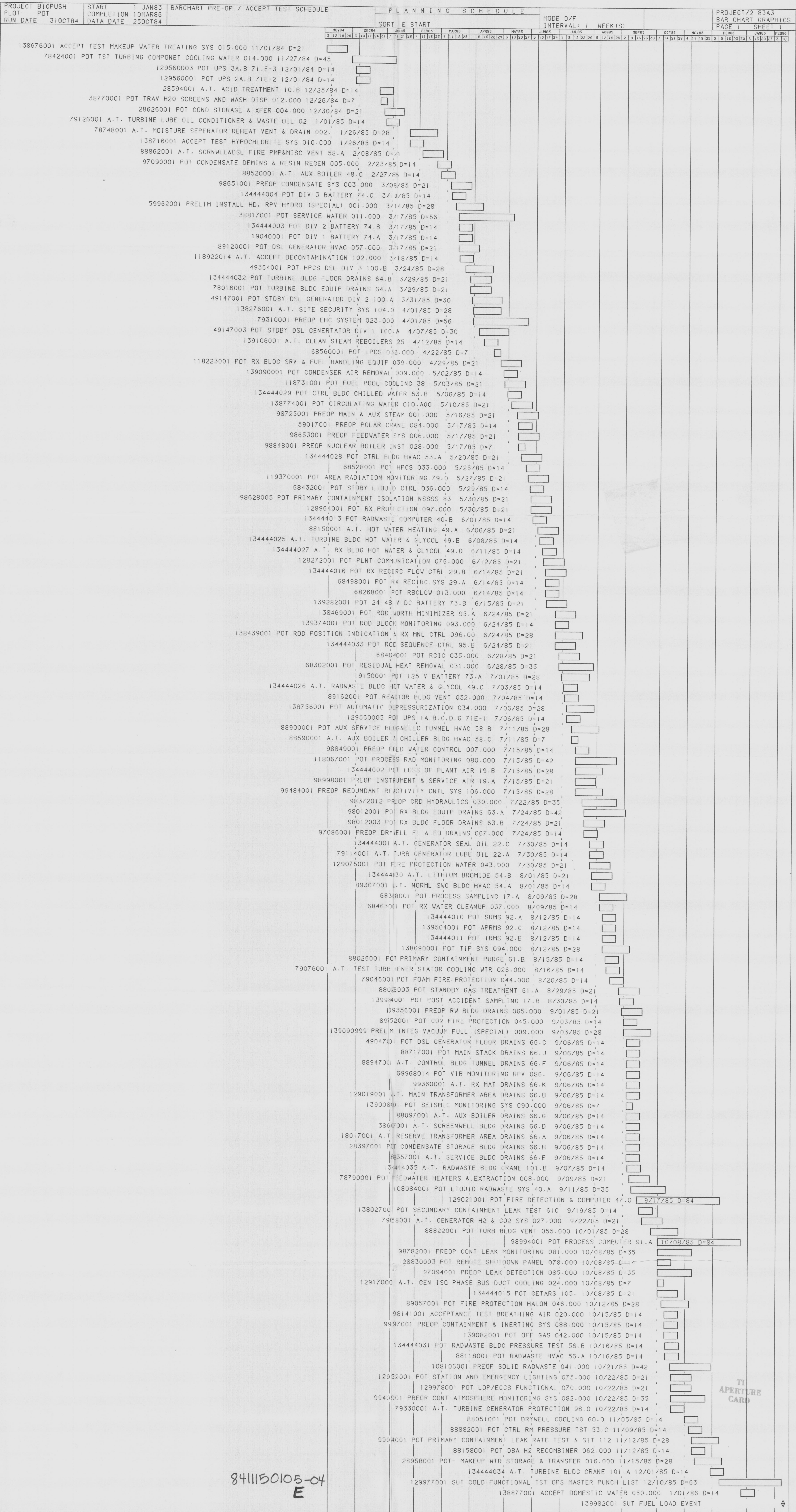
NINE MILE POINT STATION-UNIT 2

NIAGARA MOHAWK POWER CORP.

STONE & WEBSTER ENGINEERING CORPORATION
CHERRY HILL OPERATIONS CENTER



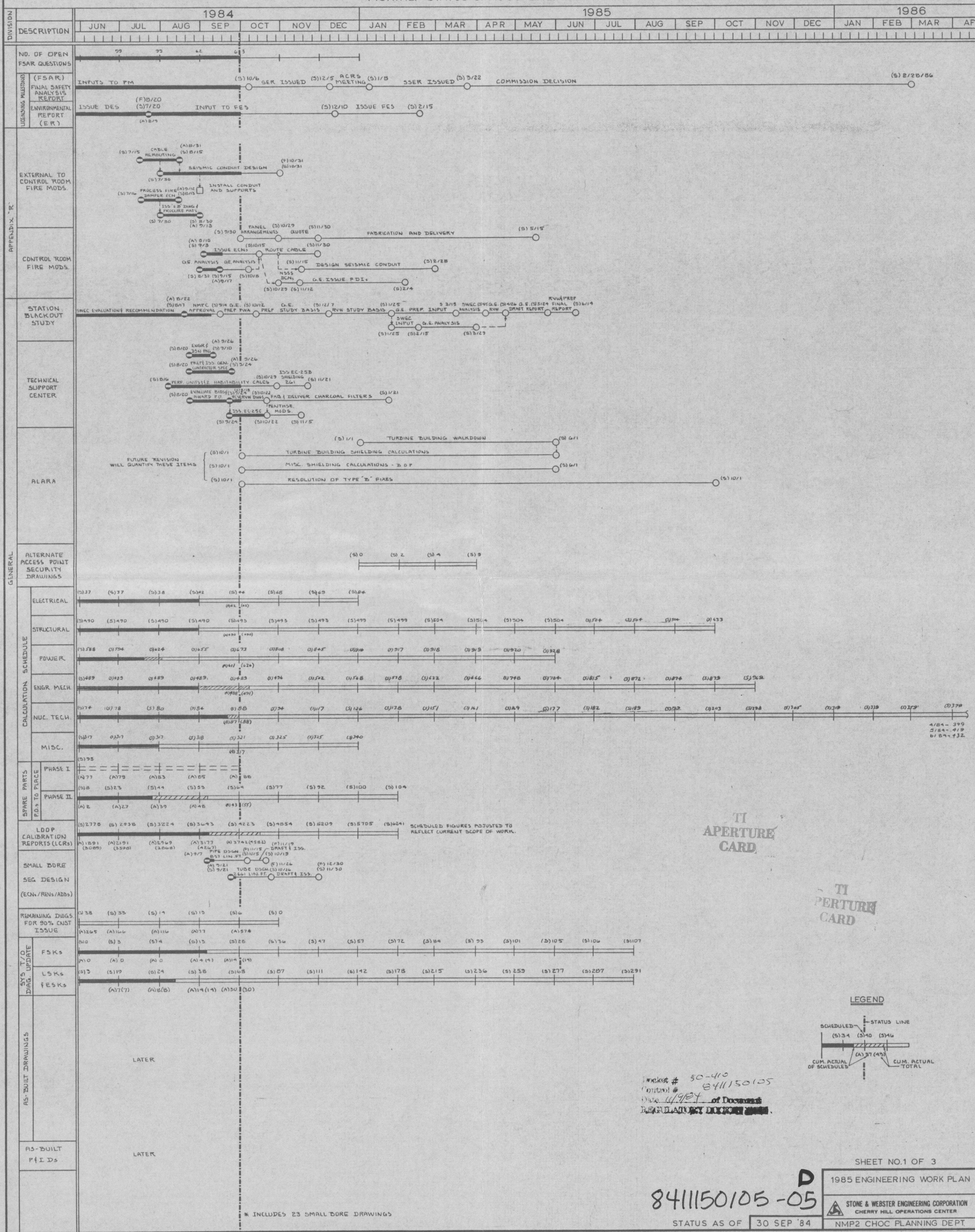
MILESTONE SCHEDULE
TURBINE
GENERATOR
VACUUM PULL
841150105-03 E
NIAGARA MOHAWAK POWER CORP.
STONE WEBSTER ENGR. CORP.



8411150105-04
E

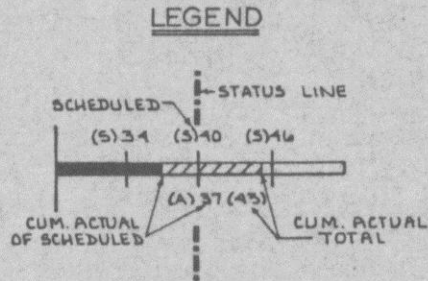
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MONTHLY STATUS OF 1985 ENGINEERING WORK PLAN



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CARD



Project # 50-410
Control # 841150105
Date 11/9/84 of Document
REGULATORY DOCUMENT

SHEET NO.1 OF 3

1985 ENGINEERING WORK PLAN

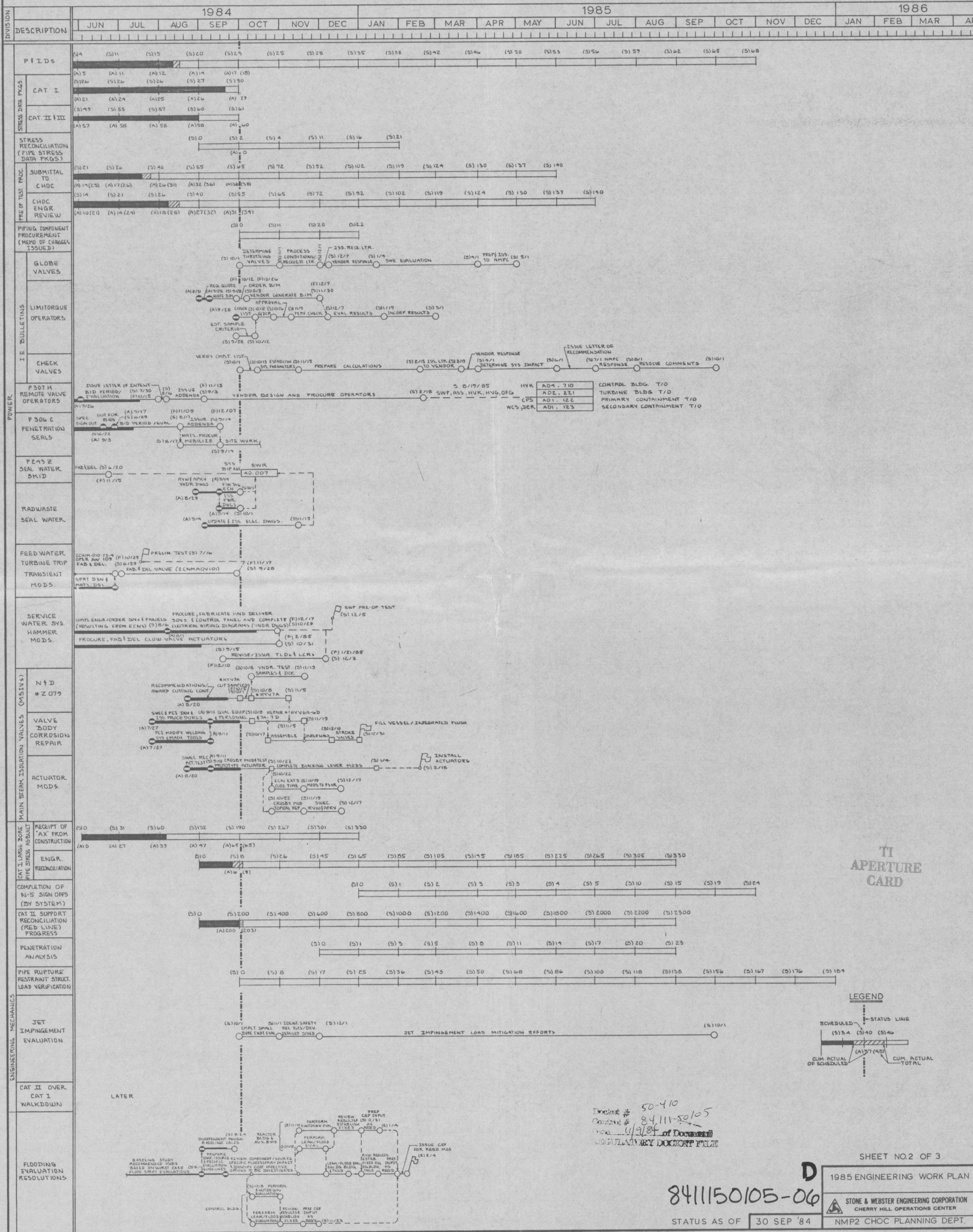
STONE & WEBSTER ENGINEERING CORPORATION
CHERRY HILL OPERATIONS CENTER
NMP2 CHOC PLANNING DEPT.

841150105-05

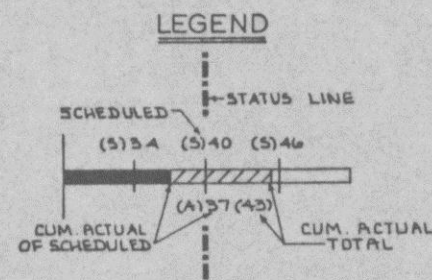
STATUS AS OF 30 SEP '84

* INCLUDES 23 SMALL BORE DRAWINGS

MONTHLY STATUS OF 1985 ENGINEERING WORK PLAN



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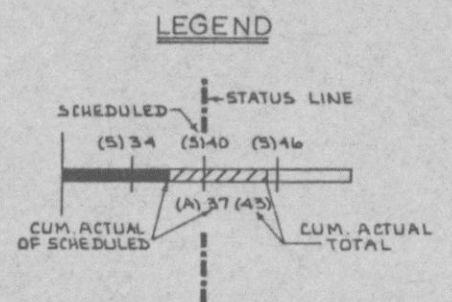


Project # 50-410
Contract # 84111-50105
Date 9/28/84 of Document
REGULATORY DOCUMENT FILE

MONTHLY STATUS OF 1985 ENGINEERING WORK PLAN

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SHEET NO. 3 OF 3

1985 ENGINEERING WORK PLAN

STONE & WEBSTER ENGINEERING CORPORATION
CHERRY HILL OPERATIONS CENTER

STATUS AS OF 30 SEP '84