

NINE MILE POINT 2

CASELOAD FORECAST PANEL
SITE VISIT

Current Status Information on
Meeting Agenda Items

Prepared by Niagara Mohawk Power Corporation
October, 1984

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Forward

The enclosed information is provided as background and current status of items for discussion between Niagara Mohawk Power Corporation and the Nuclear Regulatory Commission's Caseload Forecast Panel. Each section contains one meeting agenda item and the background information associated with that topic. Any omissions or incomplete items are the result of the time limitation for compiling this information. Additional information will be available during the meeting.

ITEM:

Overview of project construction and preoperational testing schedule, including progress and major milestones completed, current problems and any anticipated problem areas that may impact the current projected fuel load date.

CURRENT STATUS:

See following pages for combined data for Items #1, #6 and #14.

(Refer to Item #8 for more detail.)

NRC CASELOAD
Site Visit
Nine Mile Point 2
Planning & Scheduling

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System

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SECTION I - OVERVIEW OF SCHEDULING SYSTEM

The Project Control Program at Nine Mile Point Unit 2 provides dynamic insight as to status of the project by use of a systematically developed series of schedules which enable management to direct and coordinate the various project organizations towards a common goal. The basic scheduling tools are the Milestone, Commodity Roll-Up, Area/System, Thirteen Week Look Ahead, Weekly work Plan and testing Schedules.

The Milestone Schedules are an overview of the status of the project. These networks provide goal oriented information for Construction as well as the test organization. The Commodity Roll-Up Schedules are the commodities required to be performed as represented by the Milestone Schedules, and may be found elsewhere in this report.

Area/System Schedules are developed by construction to provide for control of work within a physical area of the plant, (i.e., building, elevation, cubicle, etc.). These schedules are organized to provide information on the status of system completion within that area and they must meet the requirements of the Milestone Schedules.

Thirteen Week Look Ahead Schedules (TWLAS) are produced as system completion draws near. They provide a tool to focus attention on the particular problems and overall status of a system. The TWLAS are developed to meet the requirements of the Milestone and Area/System Schedules.

Weekly Work Plans (WWP) are developed as the foremen level working tool. The schedule indicates which specific commodities must be installed during the subject week. The WWP's are developed from the Area/System Schedules and the TWLAS, with the priority items being selected from the TWLAS.

The Test Schedules provide control of the project preliminary and pre-operational testing. These schedules are produced at various levels of detail and are developed in conjunction with the overall goals as provided for in the Milestone Schedules.

Sample of these schedule are attached in Section IV.

As difficult areas are encountered, special schedules are produced, examples are as follows:

1. Diesel Generator Milestone
2. Control Room
3. Main Steam System
4. Suppression Pool Fill, etc.

SECTION II - STATUS OF PROJECT

The project is presently on schedule for a February 1986 Fuel Load Date, and is an estimated 81.5% complete as of September 30, 1984.

The 4160 Milestone, although behind schedule, has seven (7) of the eight (8) busses energized. The testing priorities have been established to support critical testing requirements which has resulted in a delay of the 4160 Milestone completion; there should be no effect to any critical test activities.

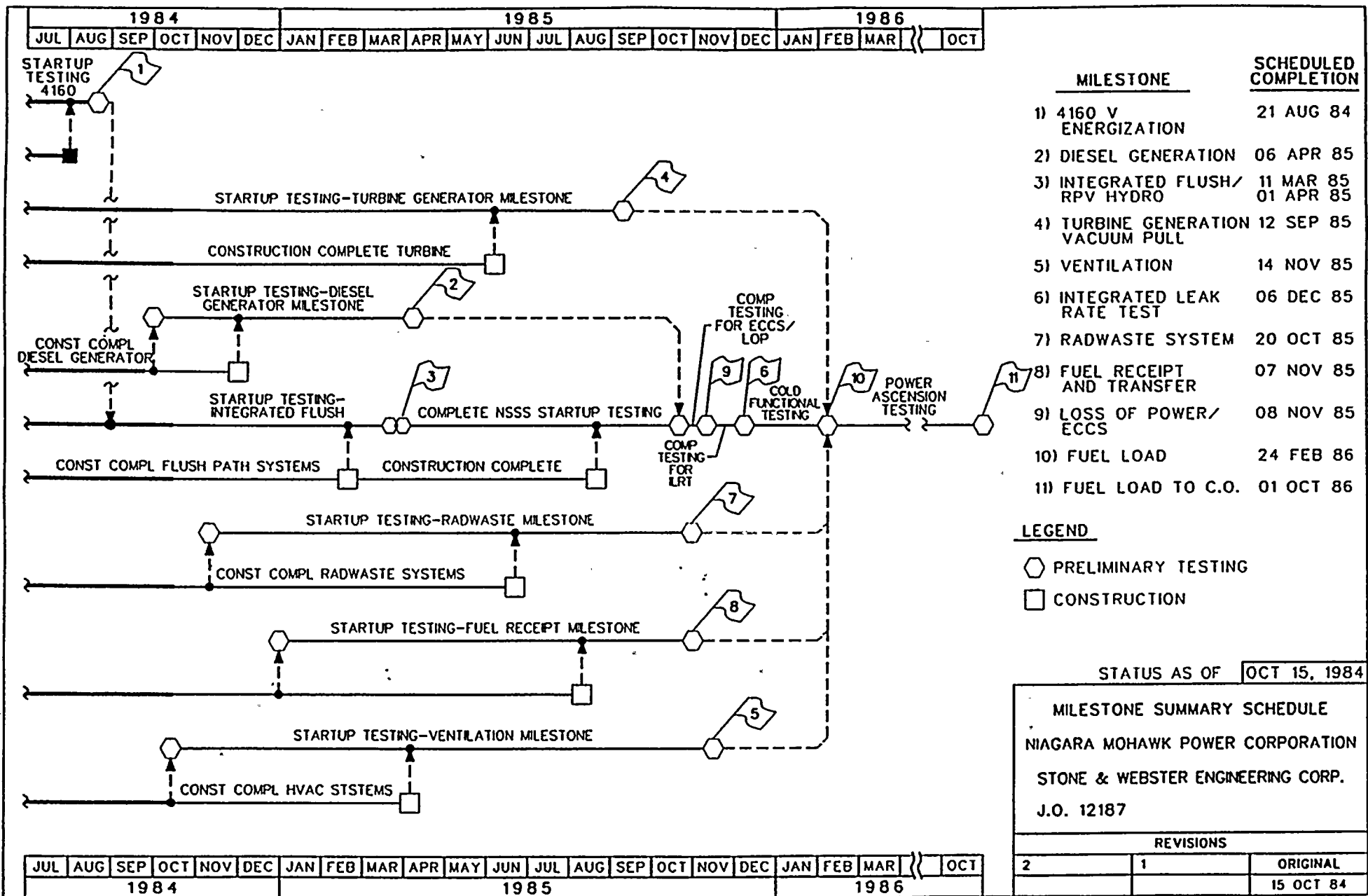
The Projects Diesel Generator Schedule attains operational diesel generators seven months prior to the first mandatory operational period. The construction progress is slightly behind this aggressive schedule.

The Integrated Flush Milestone falls on the critical path of the project. Thirty-one Flush Paths have been released to Start-Up & Test, with several ahead of schedule. One Flush Path is delinquent as of 12 Oct. 1984. The major concern with the Integrated Flush Schedule is the large number of releases per month to Start-Up & Test. Start-Up & Test in conjunction with construction, will develop work around plans as required.

The immediate concern is the aggressiveness of the Project Schedules. The installation rates of cable and pipe supports have not met planned rates. The rate of release of systems for testing is greater than the projects previously achieved rates. Efforts are in progress to improve the cable backlog for more efficient pulling and redirection of the piping work force to allow for greater production on the priority systems. The efforts to increase the production rates as well as the work around plans previously stated, should allow the project to meet the required schedules.

The prime future concern for the construction schedules is the result of the design reconciliation effort now on going in Engineering. The design reconciliation is now in the process of being scheduled by the project, as well as the support modifications as they are identified. Preliminary results of that process show no impact to the fuel load date.

The following Milestone Summary Schedule indicates the general overall status of the project.



SECTION III - MAJOR MILESTONE STATUS

<u>MILESTONE</u>	<u>COMPLETION DATE</u>
*Set upper Containment Cone	A 07May81
*Complete Concrete, Primary Containment to EL. 326-10"	A 12Oct81
*Set Fuel Pool Liner in place.	A 18Aug82
*Set Main PGCC Console.	A 25Mar83
*Ready to energize 115-KV switchyard	A 01Aug84
*Reactor Building Polar Crane Operational	A 29Apr83
*Makeup Demineralizer complete and ready for initial test.	A 19Mar84
*Reactor Building Enclosed.	A 19Dec83
4160 V Energization	Aug84
Diesel Generators	Apr85
Integrated Flush/RPV Hydro	Mar85/ Apr85
Turbine Generator/Vacuum Pull	Sep85
Ventilation	Nov85
Integrated Leak Rate Test	Dec85
Radwaste	Oct85
Fuel Receipt and Transfer	Nov85
Loss of Power/ECCS	Nov85
Fuel Load	Feb86
Fuel Load to C.O.	Oct86

NOTES: A = Actual Completion Date
 * = Contract Milestone



THIRTEEN WEEK LOOK AHEAD SCHEDULE

ITEM	QTY	DESCRIPTION	RESP	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5
1	P/W/V 59/6/12	LARGE BORE PPG.	AP														
2	NO. OF 48	LARGE BORE HGRS.	AP		27		21		20			6	5				
3	P/H 30/5	SMALL BORE PPG.	AP						7,6								
4	NO. OF	TRIM ITEMS TO SUPPORT JCI	AP														
5	NO. OF	CODE 99 HGRS (L.B.)	-1														
6	L.F. 24	SMALL BORE PPG.	-1														
7	NO. OF 78	SMALL BORE HGRS	-1						6A		6A	76	46				
8	NO. OF	MECHANICAL EQUIPMENT	-1														
9	NO. OF 23	INSTALL INSTRUMENTS	AR														
10	L.F. 878	INSTALL TUBING	AR									40	170				
11		PRESSURE TEST	AR														
12	NO. OF	ELECTRICAL EQUIPMENT	AT														
13	NO. OF	COMPLETE RACEWAY	AT														
14	NO. OF 5	CABLE PULLS	AT										5				
15	NO END to	TERMINATIONS	AT														
16		PGCC	AOD														
17		HEAT TRACING	AT														
18		PAINTING															
19		INSULATION	AQ														

SYS DESCRIPTION:
SERVICE WATER

SYS DESIGNATION:
SWP

FLUSH PACKAGE NO.
M.F. 011-001B

TURNOVER DATE:
5 NOV 84

PLANNER: W GREINER

STATUS AS OF: 10/11/84

NOTES: QTY = Remaining quantity to be installed
RESP = Contractor Code

ATTACHMENT C

SAMPLE THIRTEEN WEEK LOOK AHEAD SCHEDULE

SCHEDULER A. MARKS 4248

111 GRINNELL I.F.I.

SHEET 1 OF 2SUPERINTENDENT H. HENDRY

FOREMAN'S WEEKLY WORK PLAN

DATE ISSUED 10/14/84GEN. FOREMAN C. O'CONNORAREA SECONDARY CONTFOREMAN J. RUDZINSKI

S. WELDERS

* THIS WEEK * NEXT WEEK * PROJ. WEEK *

P, B, F	DFA	ISOM	ITEM ID	QTY	X	DIF	W/E 10/10	W/E 10/17	W/E 10/24	N-I
F							TH F M T W S	TH F M T W S	TH F M T W S	S B C
			BZ-513 EK (CAT III)	1	5X					C
	1B1	66-10	BZ-13 CK	1	4X	31.001				I
	1A2	66-24	BZ-71 ABT	2	4X	31.001A				I
			BZ-137 DD (CAT II)	1	5X					C
P	1A2	66-25	BZ-71 BG	1	2X	31.001C				I
	1B3	66-17	BZ-71 RE	1	2X	32.001A				I
	1A2	66-43	BZ-71 XC	1	4X	31.001F				I
	1A1	66-10	BZ-13 AL	1	2X	31.001B				I
	1A1	66-39	BZ-71 UN	2	1X	31.001A				
	1A1	66-13	BZ-71 AGC	1	1X	31.001B				
	1A1	66-10	BZ-13 AJ	1	2X	31.001B				
	1A1	66-37	BZ-71 QF	2	2X	31.001B				
	1B4	66-7	BZ-13 BD	1	3X					
	1A1	66-14	BZ-71 ZM	1	2X	31.001				
	1A1	66-13	BZ-71 KD	1	1X	31.001				
	1A3	66-46	BZ-71 AEX	1	2X					
↓	1A3	66-13	BZ-71 AFW	1	2X	31.001B				

ATTACHMENT D

SAMPLE WEEKLY WORK PLAN

PAGE 1 OF 2

2 OF 2

DATE ISSUED 101-41-84

AREA SECONDARY CONT.

	THIS WEEK	NEXT WEEK	PROJ. WEEK
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ATTACHMENT D
SAMPLE WEEKLY WORK PLAN
PAGE 2 of 2

AGENDA ITEM #2

ITEM:

Detailed review and current status of design and engineering effort (by major discipline), including any potential problems that may arise from necessary rework.

CURRENT STATUS:

See following pages.

2. General

Most divisions are experiencing involvement in calculation finalization, equipment qualification, and special multidiscipline efforts such as flooding evaluation resolution and the technical support center.

Divisional

Advisory Operations

This division continues a significant effort in developing loop calibration reports.

Controls

Efforts continue in completion of setpoints, support of panel deliveries, preparation of control panel modification packages, and process computer support activities.

Electrical

Cable routing, cable pull tickets, and from/to conduit efforts continue, and alternate access point security design efforts are getting underway.

Engineering Mechanics

Efforts for this division will be focused on engineering reconciliation of Category I large bore as-built drawings, completion of N-5 signoffs, Category II support reconciliation, penetration analysis, pipe rupture restraint structural load verification, and jet impingement evaluation.

Engineering Services

This group will continue its efforts in the specification and procurement of spare parts.

Licensing

This group continues to support final safety analysis and environmental report milestones while addressing additional NRC questions.

Nuclear Technology

Significant effort will be required by this group in moderate energy line crack analysis, leak detection, and ALARA walk-downs and calculations/problem resolutions.

Power

This group's effort will be spread over a number of areas including diagram updates for system turnover, P&ID development, stress reconciliation, preop test procedure review, piping component procurement, IE bulletin assessment, and MSIV problem resolution.

Structural

This division will devote itself to final load verification, embedment plate load verification, and door review and release.

DRAWINGS ISSUED FOR CONSTRUCTION WITH LATE ISSUE DATES PRIOR TO SEPTEMBER 30, 1984

<u>Discipline</u>	<u>Total No. Drawings Estimated For Project</u>	<u>Total No. Drawings Scheduled</u>	<u>Total No. Drawings Issued For Construction Of Those Scheduled</u>	<u>Total No. Drawings Issued at 90% Of Those Scheduled For Construction</u>	<u>Total No. Drawings Issued for Construction For Total Project</u>	<u>Total No. Drawings Issued at 90% For Construction For Total Project</u>
Architecture	108	108	108	108	108	108
Building Service LB	418	418	418	418	418	418
Concrete	843	843	843	843	843	843
*Electrical	2,161	2,153	2,153	2,153	2,153	2,153
Field Erection	25	25	25	25	25	25
Instrumentation	185	185	185	185	185	185
Small Bore Dks	1,749	1,743	1,743	1,743	1,743	1,743
Machine Location	122	112	112	112	112	112
Piping LB	615	607	607	607	607	607
*Small Bore DBs	322	322	322	322	322	322
*Small Bore DPs	1,654	1,642	1,642	1,642	1,642	1,642
Steel	465	464	464	464	464	464
Vessel	508	508	508	508	508	508
Civil	68	55	55	55	55	55
Pipe Supports	<u>539</u>	<u>539</u>	<u>539</u>	<u>539</u>	<u>539</u>	<u>539</u>
TOTALS	9,782	9,724	9,724	9,724	9,724	9,724

C3/12177/480/SYII

* Status of Drawings are based on baseline design as it existed in April of 1984. Small amounts of conduit, small bore piping and tubing added by Engineering Change Notices are not stated in this report.

POTENTIAL REWORK

a. Rework Associated With Structural Load Verification

The original design of structural steel members and their connections utilized hypothetical load allowances before actual loads were known from system attachments (such as piping, cable trays, conduits, ducts, etc). The final load verification program will demonstrate structural adequacy for these system loads.

The scope of rework is expected to be limited to primary containment steel since this is the most heavily loaded area and structural steel beams are not embedded in concrete. For other remaining Category I structures, the scope of rework will be minimal.

Attachment 1 shows the scope of expected rework and status of September 24, 1984, for primary containment steel.

b. Rework Associated With As-Built Stress Reconciliation

Modifications are anticipated as a result of finalization of design inputs and consideration for the cumulative effect of field changes. For large bore, the only significant issues are incorporation of final fluid transients, hazards analysis, and cumulative field changes. All pressure, temperature, seismic, hydrodynamic and building settlement conditions are incorporated in the calculations and, except in isolated cases, are being finalized with minor changes. For small bore, the only significant issue is the cumulative effect of field changes. Except for isolated cases all design inputs are being finalized with minor changes.

Estimated impacts are 10 percent for large bore and less than 5 percent for small bore.

c. EQUIPMENT QUALIFICATION

The potential exists that environmental equipment qualification could effect schedule. For example, if certain equipment is not capable of being qualified to the design environment identified three options exist to correct the discrepancy.

1. Relocate to a less severe environment
2. Redesign the equipment or the parameters
3. Replace with other equipment

We have identified some equipment which does not meet qualification requirements (see 10CFR50.55(e) list). However, the program is set up to alleviate potential schedule impacts, and is planned to be complete as described in 131.

STRUCTURAL LOAD VERIFICATION (AS OF 9/24/84)

I. 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			

II. CONTROL BUILDING FLOOR FRAMING

LOAD VERIFICATION ACTIVITY FOR FLOOR ELEVATIONS
237' & 261' COMPLETED AND NO HARDWARE FIXES
WERE REQUIRED



100

AGENDA ITEM #3

ITEM:

Detailed review and current status of procurement activities, including valves, pipe, instruments, cable, major components, spare parts, etc.

CURRENT STATUS:

See following pages.

NINE MILE POINT NUCLEAR STATION - UNIT 2

Electrical Discipline
Cable Procurement Status

<u>Cable Type</u>	<u>Ordered as of September 18, 1984</u>					<u>To Be Ordered</u>		
	<u>Estimated Total Quantity</u>	<u>Purchase Order Quantity</u>	<u>Delivered (as of 9/17/84)</u>	<u>Balance Due (as of 9/17/84)</u>	<u>Delivery Date (Latest)</u>	<u>Anticipated Quantity</u>	<u>Expected Order Date</u>	<u>Estimated Requir Delivery Date (Latest)</u>
15-kV Power Cable (E023A)	44,650	44,650	45,911	0	-	None	-	-
5-kV Power Cable (E023B)	70,050	70,050	71,094	0	-	None	-	-
600-V Power Cable (E023C)	1,222,500	1,222,500	1,166,574	49,390	10/12/84	None	-	-
1000-V Control Cable (E024A)	1,452,000	1,452,000	1,358,058	115,000	9/22/84 est.	None	-	-
600-V Control Cable (Includes Lighting and Communication Cables) (E024B)	6,621,748	6,409,748	6,678,232	220,339	9/21/84	212,000	9/28/84	12/7/84
300-V Instru- ment Cable (E024P)	1,452,000	1,452,000	1,489,238	4,799	10/1/84 est.	None	-	-
Thermocouple Cable (E024R)	371,000	371,000	385,139	2,143	12/7/84 est.	None	-	-
Coaxial Cables (E024B E0906)	315,000	315,000	268,438	44,506	10/1/84 est.	None	-	-
TOTALS	11,548,948	11,336,948	11,462,684	436,177		212,000		

STATUS OF INSTRUMENTS SUPPLIED BY CSD.

10/17/84

<u>Specification No.</u>	<u>Specification Title</u>	<u>Total Instruments on Purchase Order to Date</u>	<u>Anticipated Quantity of Instruments to be Added</u>
C001C	Hydrogen Gas Analyzers	30	-
C002C	Turbine Generator Hydrogen Monitoring System	41	-
C002D	Dewpoint Analyzers	12	-
C002V	Moisture Transmitters	4	-
C011M	Pipe Insert-Type Venturi Flow Sections	8	-
C011N	Orifice Plates	155	-
C012D	Sight Flow Glass	8	-
C012J	Rotameters	21	-
C012M	Pipe Insert-Type and Pressure Retaining-Type Venturi Flow Sections	16	-
C012N	Orifice Plates	143	-
C012R	Annubar Flow Elements	48	-
C012S	Positive Displacement Flowmeters	5	-
C021L	Level Switches	38	-
C022F	Level Glasses	26	-
C022L	Level Switches	183	-
C022R	Electronic Level Transmitters (Displacer Type)	29	-
C022S	Pneumatic Level Transmitters	44	-
C022U	Ultrasonic Level Transmitters	23	-
C032G	Manometers	9	-
C032M	Pressure Indicators	521	-
C032N	Differential Pressure Indicating Switches and Indicators - Category IIB	70	-
C032R	Pressure Switches - Category IIB	267	-
C042D	Resistance Temperature Detectors and Thermowells	180	-
C042D	Resistance Temperature Detectors with Thermowells and Test Walls	284	1 (10/30)

C3/12177/486/SYH



<u>Specification No.</u>	<u>Specification Title</u>	<u>Total Instruments on Purchase Order to Date</u>	<u>Anticipated Quantity of Instruments to be Added</u>
C042E	Thermocouples and Thermowells	73	-
C042K	Bimetallic-Type Thermometers with Thermowells	305	-
C042V	Temperature Switches	22	-
C051A	Safety and Relief Valves	130	1 (11/15/84)
C051G	Rupture Disc Assemblies ASME Code, Section III, Classes 2 and 3	2	-
C051H	Special Service Control Valves ASME Code, Section III, Classes 2 and 3	57	-
C052A	Safety and Relief Valves	293	-
C052B	Control Valves	252	-
C052M	Special Service Control Valves	58	-
C061G	Control Panels	129	20 (11/15/84)
C061P	Local Instrument Racks	53	-
C062G	Control Panels	94	-
C062P	Local Instrument Racks	97	-
C062V	Liquid Radwaste Control System	60	-
C071A	Heating, Ventilating, and Air Conditioning Instrumentation	126	-
C071L	Control Room Instrumentation and Racks	810	-
C071M	Electronic Transmitters	111	3 (10/30/84)
C071V	Flexible Metal Hose	*1577	-
C071W	Acoustic SRV Position Monitoring System	40	-
C072L	Control Room Instrumentation and Racks	664	-
C072M	Electronic Transmitters	189	-
C072P	Instrument Air Dryers	13	-
C072U	Vibration Monitoring System	177	-
C072V	Pneumatic Instruments	69	-
C072W	Loose Parts Monitoring System	26	-
C072X	Electronic Transmitters with Diaphragm Seals and Accessories	25	-
C072Y	Radwaste Sample Panels	141	-
C072Z	Heating, Ventilating, and Air Conditioning Instruments	659	-
C073U	Fire and Smoke Detection Systems	**2967	-
C074K	Level Differ	2	-
C151B	Instrument Valves	685	12 (10/30/8
C151C	Excess Flow Check Valves	252	1 (10/30/8

<u>Specification No.</u>	<u>Specification Title</u>	<u>Total Instruments on Purchase Order to Date</u>	<u>Anticipated Quantity of Instruments to be Added</u>
P272V	Sample Panels and Analyzing Equipment	1026	-
P281F	Digital Radiation Monitoring System	547	-
H070A	Material Spec	<u>30</u>	<u>200</u> (12/30/84)
TOTALS		13,957	237

*ONLY 18 ACTUAL EQUIPMENT ID NOS.

**ONLY 75 ACTUAL EQUIPMENT ID NOS.



LARGE BORE PIPE SPOOL STATUS
CURRENT AS OF OCTOBER 1, 1984

Total Estimated Scope	11,162 Spools
Delivered through October 1, 1984	11,149 Spools
Estimated for Completion	13 Spools

Status of Remaining Spools

In Fabrication	13 Spools
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Valves

All valves identified as required for NMP2 are ordered. A total of 12,950 valves are currently required. (10,800 small bore and 2,150 large bore). The majority of these valves have been shipped.

Presently 148 manual small bore valves (2 in. and smaller) are not delivered. The last valve will be shipped by March 1985.

In addition approximately 20 miscellaneous large bore or small bore actuated valves will be shipped by February 1985.

AGENDA ITEM #4

ITEM:

Actual and proposed craft work force (by major craft), craft availability, productivity, potential labor negotiations and problems.

CURRENT STATUS:

See following pages.



NINE MILE II CRAFTSMEN

OCTOBER 12, 1984

<u>CRAFT</u>	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>TOTAL</u>
Asbestos Workers	6	-0-	-0-	6
Boilermakers	64	10	-0-	74
Bricklayers	-0-	-0-	-0-	-0-
Carpenters	214	29	-0-	243
Cement Finishers	30	9	-0-	39
Electricians	760	135	20	915
Ironworkers	123	7	-0-	130
Laborers	332	80	49	461
Millwrights	61	-0-	-0-	61
Operating Engrs.	83	40	15	138
Painters	78	13	-0-	91
Pipefitters	1598	304	-0-	1902
Roofers	6	-0-	-0-	6
Sheetmetal Workers	149	-0-	-0-	149
Surveyors	52	30	-0-	82
Teamsters	79	15	4	98
Sprinklerfitters	16	-0-	-0-	16
Linemen	12	-0-	-0-	12
Plasters	2	-0-	-0-	2
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	3665	672	88	4425

CLASSIFICATION	PERIOD	JUL 6/18	AUG 7/16	SEPT 8/20	OCT 9/17	NOV 10/15	DEC 11/19	JAN 12/17	FEB 1/21	MAR 2/18	APR 3/18	MAY 4/15	JUN 5/20	JUL 6/17	AUG 7/15	SEP 8/19	OCT 9/16	NOV 10/14	DEC 11/18	JAN 12/16	FEB 1/20	MAR 2/17	APR 3/17	MAY 4/16	JUN 5/19	JUL 6/16	AUG 7/21	SEP 8/18	OCT 9/15
		7/15	8/19	9/16	10/14	11/18	12/16	1/20	2/17	3/17	4/14	5/19	6/16	7/14	8/18	9/15	10/13	11/17	12/15	1/19	2/16	3/16	4/15	5/18	6/15	7/20	8/17	9/14	10/11
	WEEKS	4	5	4	4	5	4	5	4	4	4	5	4	4	5	4	4	5	4	5	4	4	4	5	4	5	4	4	3
Pipefitters						1900	1900	1500	1100	750	650	600	500	450	350	300	250	200	175	150	135	125	100	75	50	25	20	15	10
Electricians						900	900	900	700	650	600	500	450	400	300	225	200	150	125	100	85	75	60	50	30	15	10	5	5
Total Crafts						4500	4500	4000	3000	2500	2000	1750	1450	1150	875	750	675	575	525	425	325	240	185	145	100	60	45	35	25



CASELOAD FORECAST

<u>CRAFT</u>	<u>CRAFT AVAILABILITY</u>	<u>EXPIRATION DATE</u>	<u>COMMENTS PROBLEMS</u>
Asbestos Workers	Poor (At Peak Manload)	4/30/85	No Problems
Boilermakers	Excellent	9/30/86	No Problems
Bricklayers	Excellent	5/31/85	No Problems
Carpenters/Millwrights	Excellent/Good	5/31/85	No Problems
Electricians	Good	7/31/85	No Problems
Ironworkers	Excellent	5/31/86	No Problems
Laborers	Excellent	5/31/85	No Problems
Operating Engineers	Excellent	5/31/85	No Problems
Painters	Excellent	6/30/85	No Problems
Pipefitters	PF - Fair to Good Welders - Poor	6/30/85	No Problems
Sheetmetal Workers	Good	6/30/85	No Problems
Teamsters	Excellent	5/31/85	No Problems



PRODUCTIVITY (As of Sept. 1984)

<u>ITEM</u>	<u>PLAN (UR)</u>	<u>ACTUAL (UR)</u>
SWEC - Small Bore Pipe	4.95	4.94
SWEC - Small Bore Pipe Supports	40.41	40.75
LKC - Conduit	1.10	1.08
LKC - Conduit Supports	17.18	17.13
LKC - Cable Termination	0.96	1.09
LKC - Cable Pulling	0.12	0.12
JCI - Seismic Supports	67.78	60.64
JCI - Instrument Tubing	1.73	1.75
ITT - Large Bore Pipe Supports	179.93	197.30

AGENDA ITEM #5

ITEM:

Detailed review and current status of all large and small bore pipe hangers, restraints, snubbers, etc., including design, rework, procurement, fabrication, delivery and installation.

CURRENT STATUS:

See following page.

(We will be prepared to discuss snubbers at the meeting. Information on restraints is in Item #7).

ITEM 5

LARGE AND SMALL BORE PIPE HANGER STATUS

A. Design - Essentially all initial Large Bore hanger designs are complete. There are 495 Cat I and 405 Cat II and III Small Bore hanger designs left to be completed. Revisions to both Large and Small Bore hangers may result due to final stress verification.

B. Hanger - The current status of hanger installation is as follows:

L.B. Hangers -	<u>Cat I</u>	<u>Cat II & III</u>
QC Accepted	2,838	Completed 10,924
To Go	<u>1,955</u>	To Go 2,514
	4,793	- 13,438
S.B. Hangers	<u>Cat I</u>	<u>Cat II & III</u>
QC Accepted	743	Completed 14,990
To Go	<u>6,051</u>	To Go 8,507
	6,794	23,497

The manhours to date to complete hangers has been 50 mh/ea for Cat I Large Bore, 25 mh/ea for Cat II & III Large Bore, 0.50 mh/ea for Cat I Small Bore and 2 mh/ea for Cat II & III Small Bore.

Using the to date experience results in an estimate of approximately 180,000 of rework will be required to complete hanger installations after initial construction reported completion. Also as stated above, changes due to final stress verifications will be required.

Hanger materials are procured and delivered directly to the site. The hangers are then fabricated to the extent possible and delivered to the field. The procurement status for all remaining hanger material is as follows:

Large Bore - There are currently a total of 70 shop orders at this time, of which twenty-six (26) are designated as priority to complete the primary containment. Priority orders are projected to be complete by November 15, 1984 and the balance of orders complete by January 31, 1985. Currently there are 259 hangers identified as being short of material.

Small Bore - A total of 2,200 supports and 250 special pipe clamps remain to be delivered on open purchase orders. Completion of shipments is projected to be December 15, 1984.

AGENDA ITEM #6

ITEM:

Detailed review of project schedule identifying critical path items, near critical items, amount of float for various activities, the current critical path to fuel loading, methods of implementation of corrective action for any activities with negative float, and provisions for contingencies. The estimated project percent complete as of September 30, 1984.

CURRENT STATUS:

See data for Item #1.

AGENDA ITEM #7

ITEM:

Detailed review and current status of bulk quantities, including current estimated quantities, quantities installed to date, quantities scheduled to date, current percent complete for each, actual versus forecast installation rates, in cubic yards/mo., linear feet/mo., or number/mo., and basis for figures. Also indicate what percentage has been QA inspected and accepted.

- a. Concrete (CY)
- b. Process Pipe (LF)
 - Large Bore Pipe (2 1/2" and larger)
 - Small Bore Pipe (2" and smaller)
- c. Yard Pipe (LF)
- d. Large Bore Pipe Hangers, Restraints, Snubbers (ea)
- e. Small Bore Pipe Hangers, Restraints (ea)
- f. Cable Tray (LF)
- g. Total Conduit (LF)
- h. Total Exposed Metal Conduit (LF)
- i. Cable (LF)
 - Power
 - Control
 - Security
 - Instrumentation
 - Plant Lighting
- j. Terminations (ea)
 - Power
 - Control
 - Security
 - Instrumentation
 - Plant Lighting
- k. Electrical Circuits (ea)
 - Power
 - Control
 - Security
- l. Instrumentation (ea)

CURRENT STATUS:

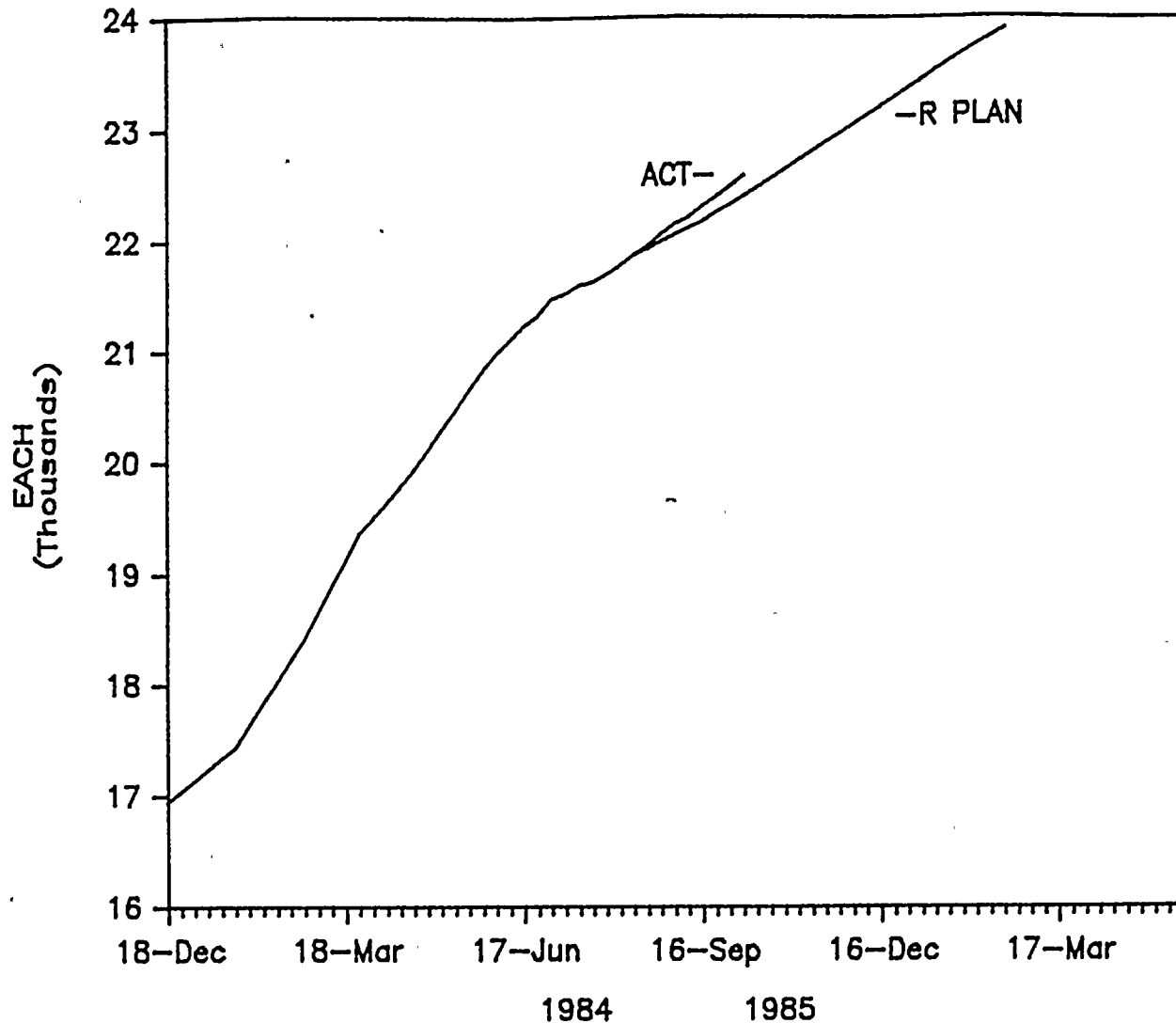
See following pages.

Item 7

The following curves and the Production Report are based upon the Engineers Construction Management System (CMS) which is the system used to collect and tabulate installed quantities. Since NMP#2 is a sub-contracted project not all project commodities are shown. Also, curves are provided to show complete visibility as to the plan, however, the to go planned rate per month shown on the production is the average rate of planned installation from now until the commodity reaches 90% complete.

PLAN VS ACT

L B WELDS

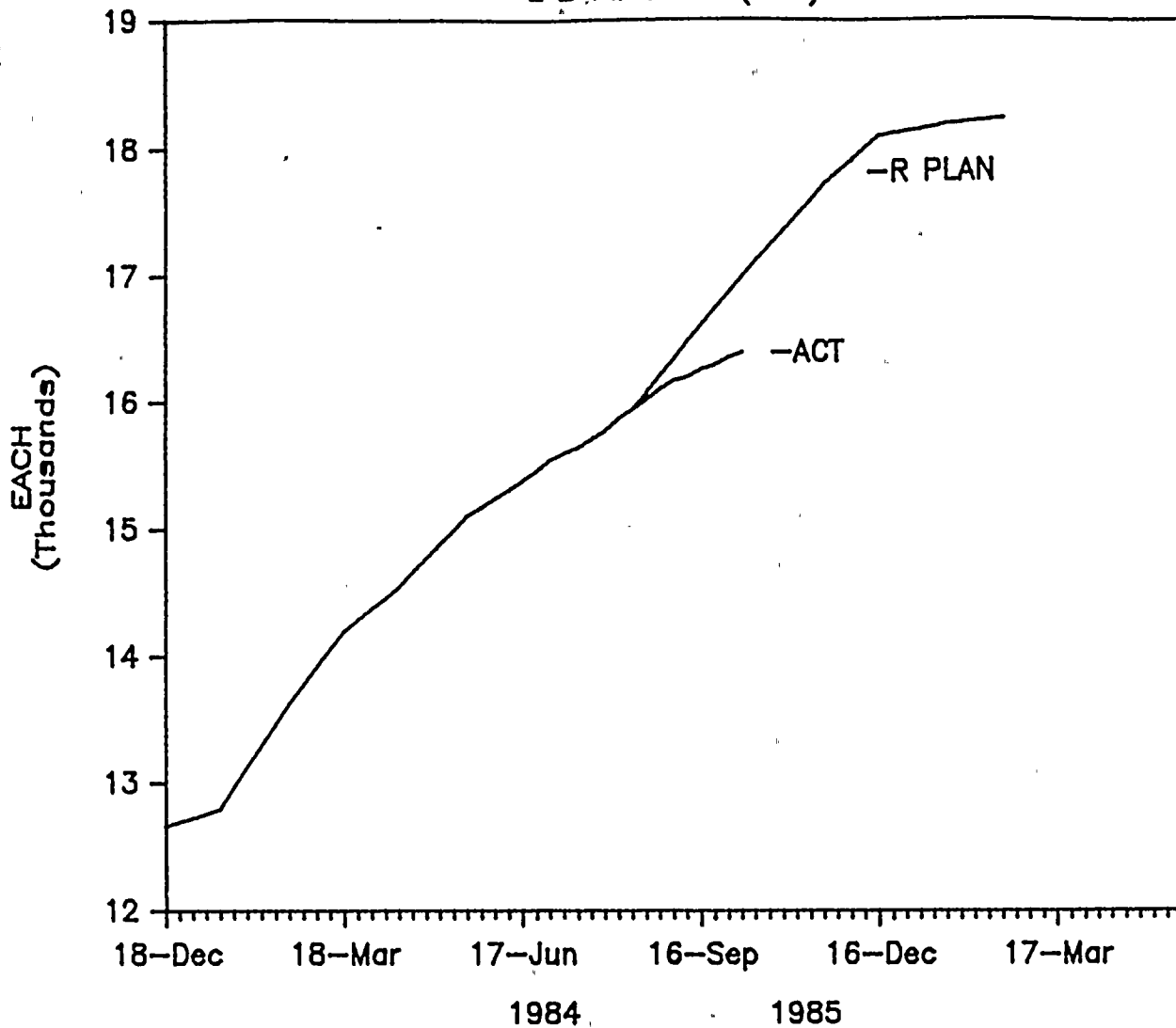


Quantities are reported as installed to CMS upon completion of the weld. Quantities are verified by comparing actual quantities reported vs. iso-metric drawing takeoffs. The L.B. Welds made by the NSSS erector, Turbine Generator erector and Fire Protection erector are not included. The estimated percent complete is 95%.



PLAN VS ACT

L B PIPE SPTS(POS)

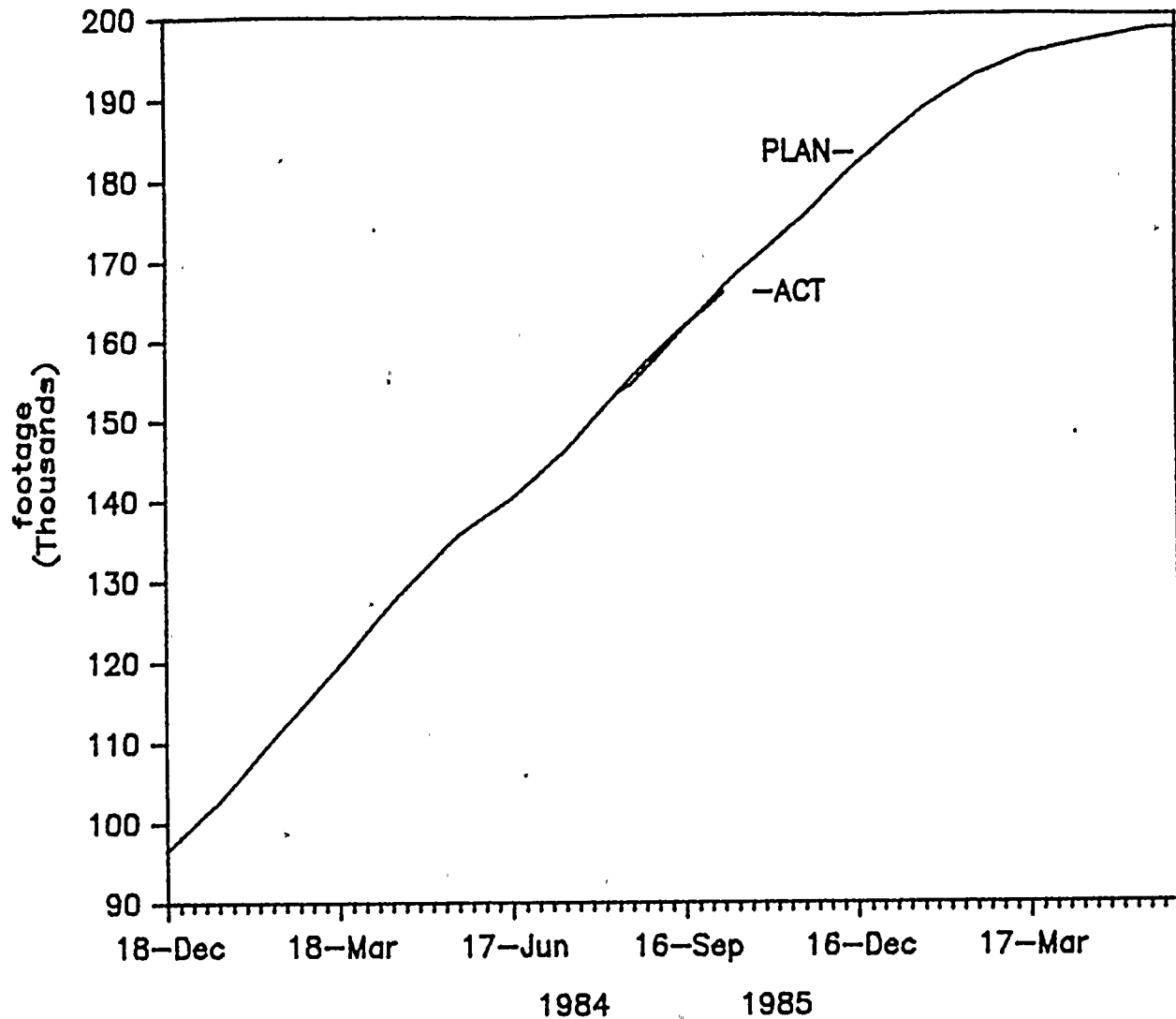


Quantities are reported as installed upon completion of construction installation. Final QC inspection and signoff is considered 100% complete and is also tracked. Quantities are verified by comparing actual reported quantities vs. iso-metric drawing takeoffs. L.B. Pipe Supports installed by the NSSS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



PLAN VS ACT

S B PIPE

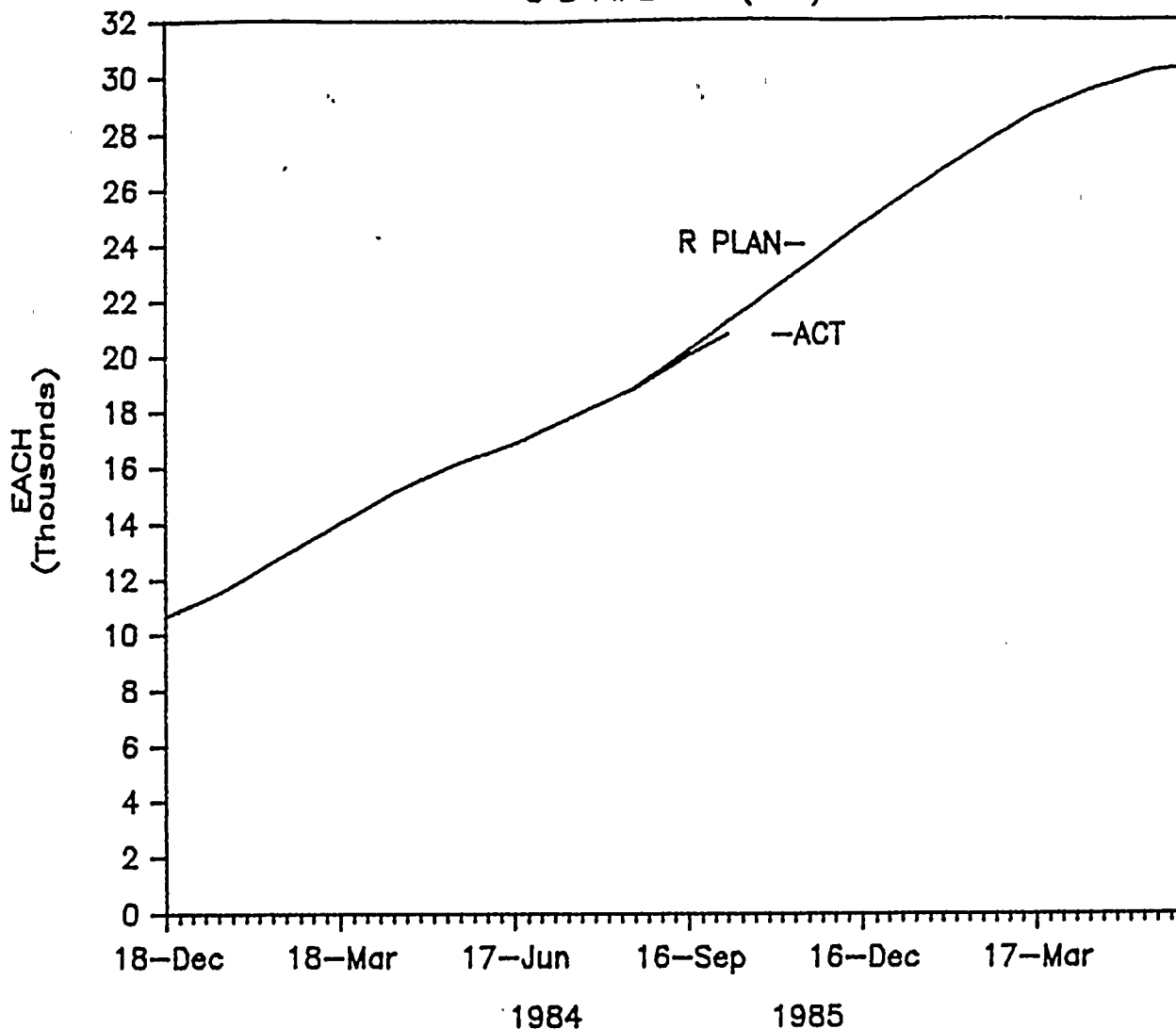


Quantities are reported installed to CMS when satisfactorily supported in place. Quantities are verified against iso-metric drawing takeoffs and physical field audits. The S.B. Pipe installed by the NSSS erector, Turbine Generator erector and Fire Protection erector are not included. The estimated percent complete is 84%.



PLAN VS ACT

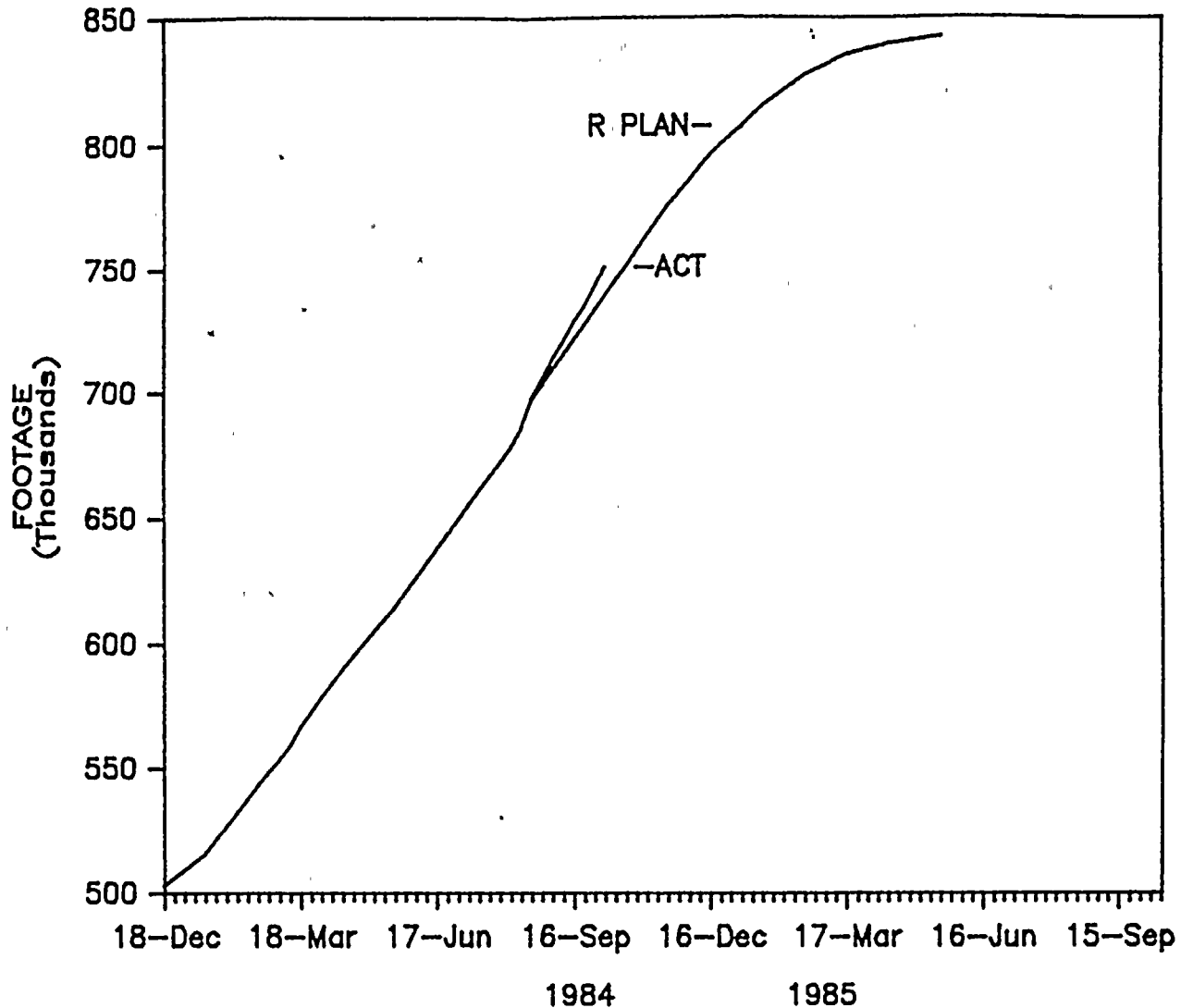
S B PIPE SPTS(POS)



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. S.B. Pipe Supports installed by the NSSS erector, Turbine erector, Fire Protection erector and Mechanical erector are not included. The estimated percent complete is 69%.

PLAN VS ACT

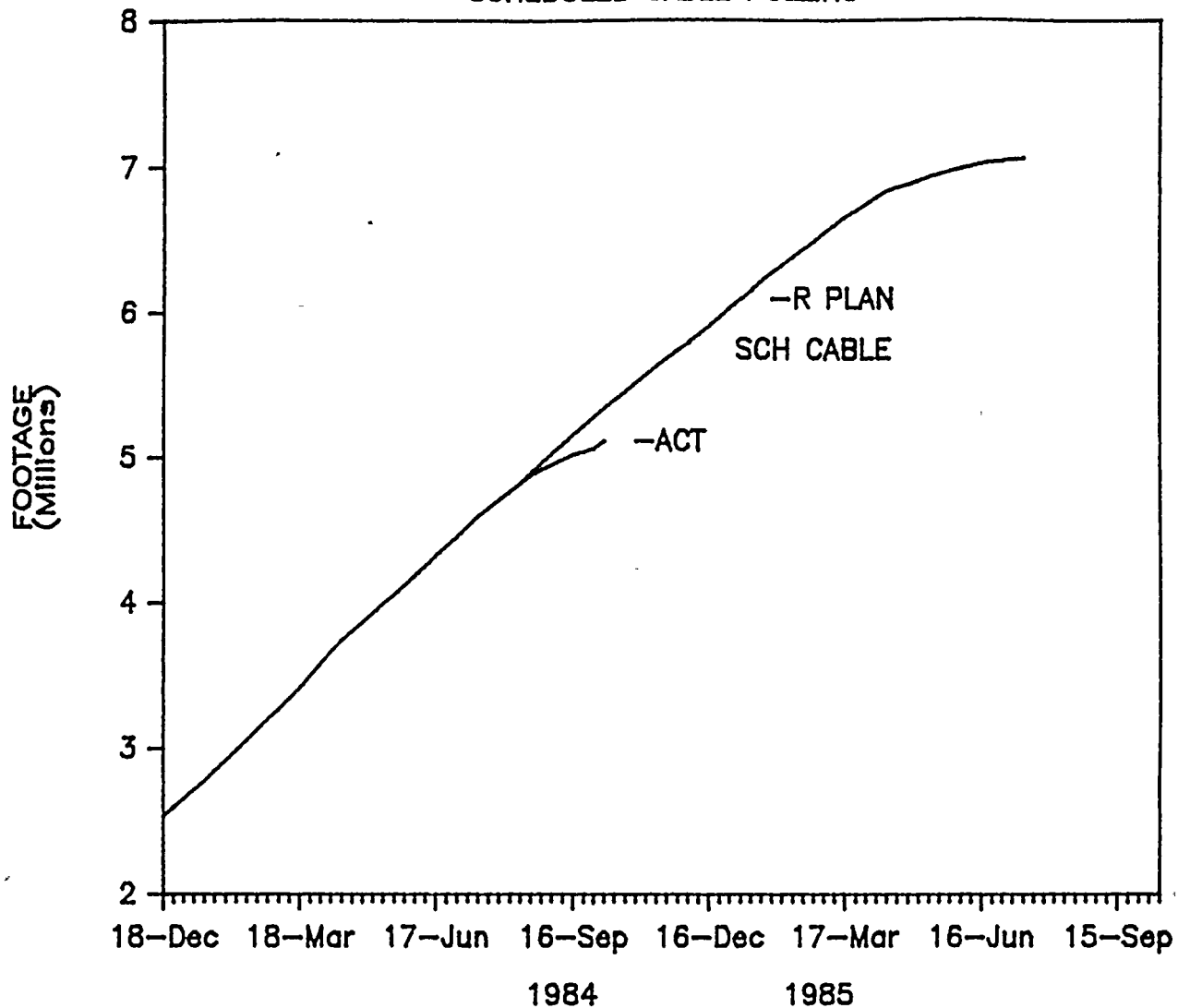
KEY INDICATOR CONDUIT



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%.

PLAN VS ACT

SCHEDULED CABLE PULLING

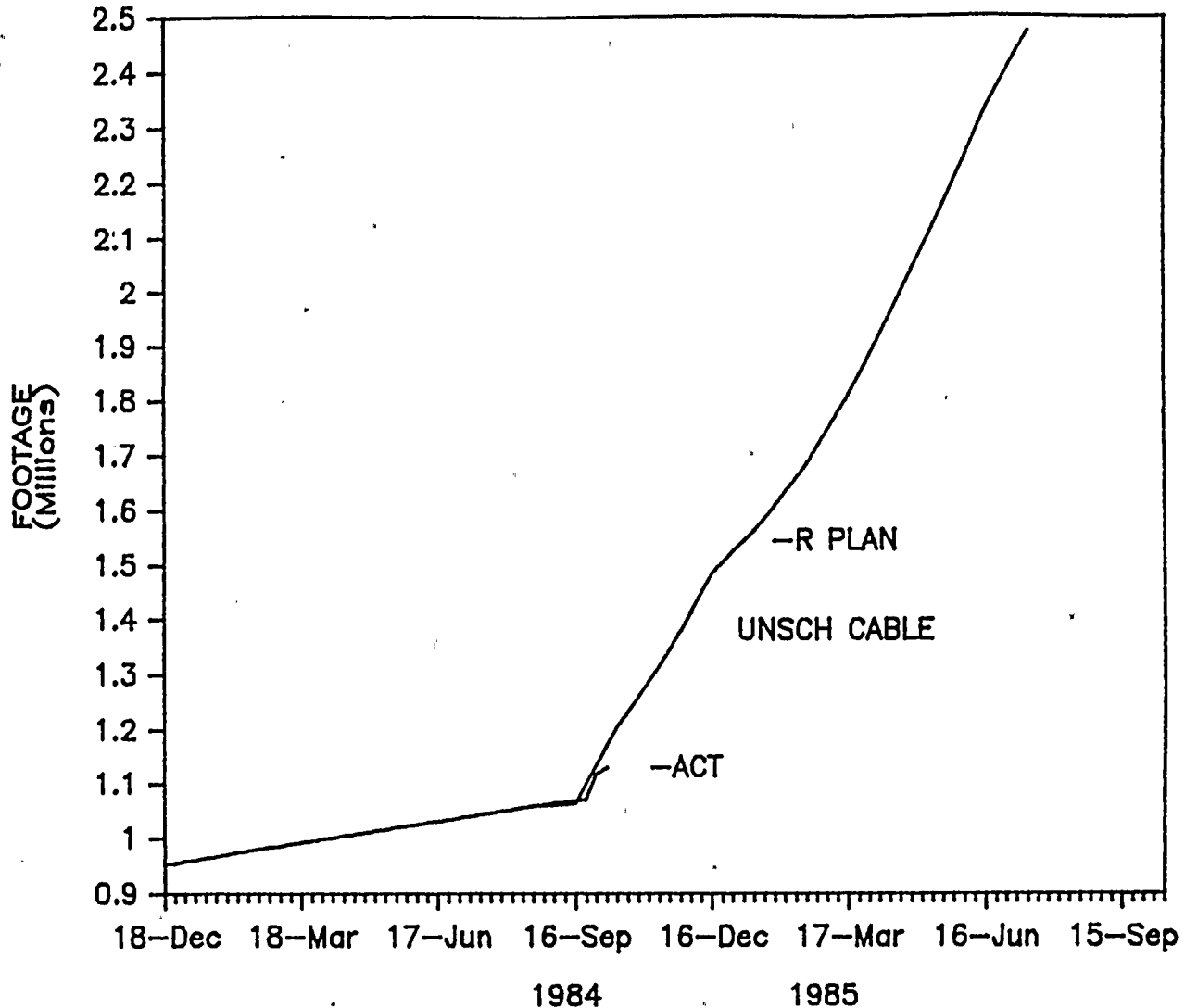


Included on this graph are power, control, instrument and signal cables which are specifically identified in the engineers cable tracking system. Quantities are reported as installed to CMS when initial installation is complete. Quantities are verified through the use of cable reel cards. Final verification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



PLAN VS ACT

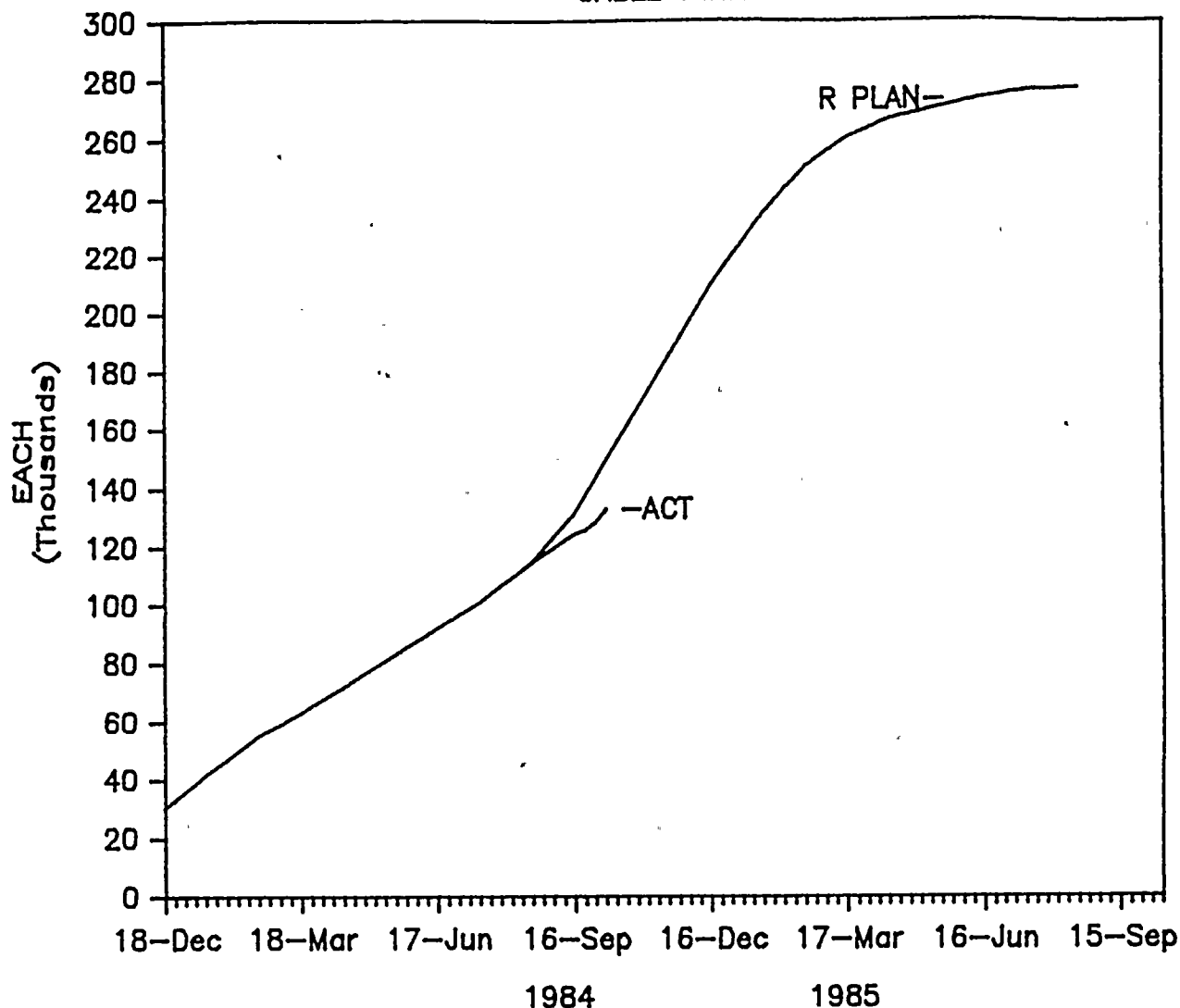
UNSCHEDULED CABLE PULLING



Lighting wire, communications, security and misc. power cables are reported into CMS when installation from point of origin to its final destination has been completed. Quantities are verified through audits of the cable reel cards which indicate the quantity and use of each cable pulled from the reel. The estimated percent complete is 46%.

PLAN VS ACT

CABLE TERM

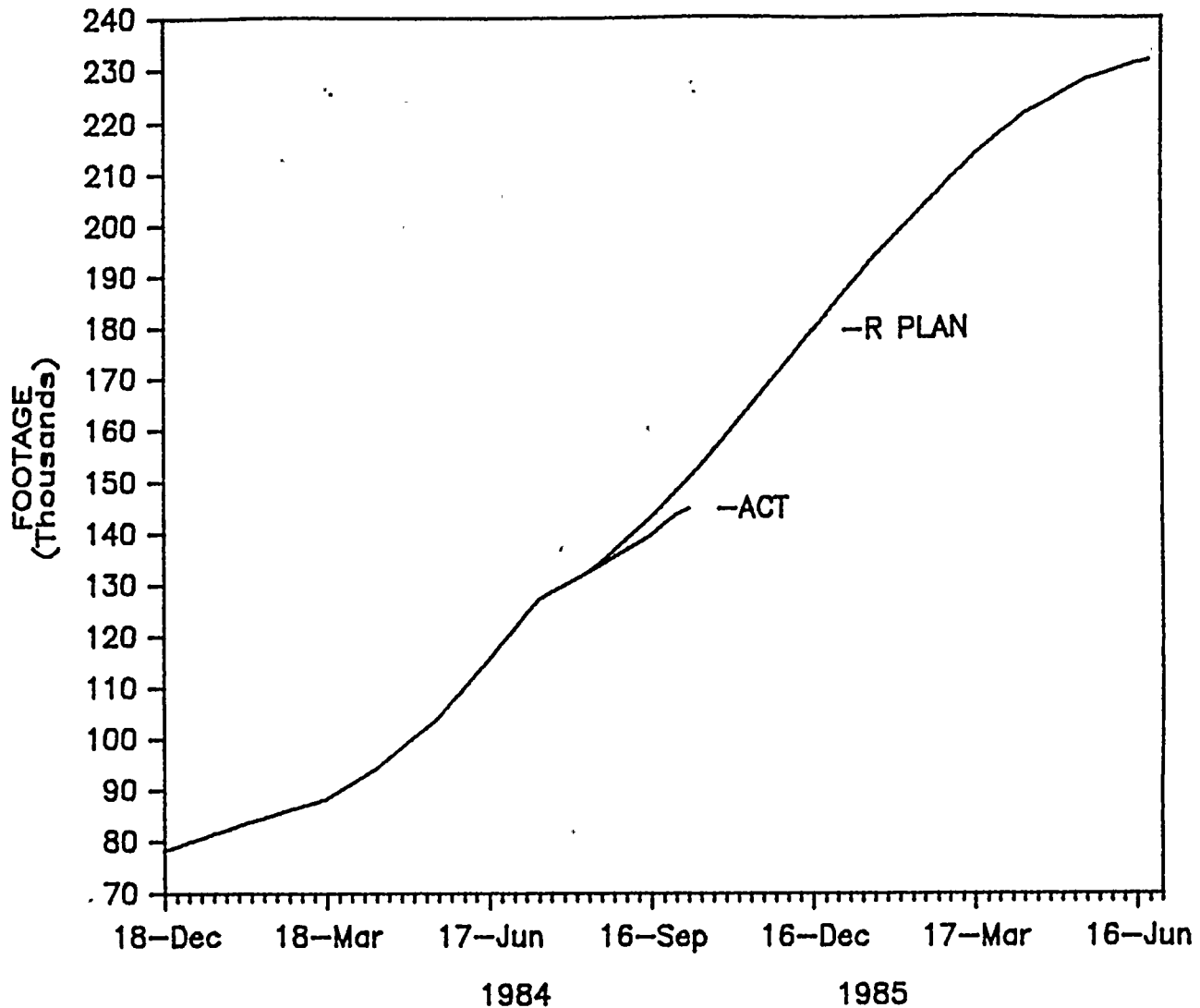


Power, Control, Instrument, Communications and Security Terminations are reported as complete after initial landing of the terminal lugs and the proper paperwork has been completed and turned over to project quality control. Quantities are collected in the construction management system (CMS) and verified through the Engineers Termination Program. The estimated percent complete is 48%.



PLAN VS ACT

INST. TUBING



Copper and Stainless Steel Tubing is reported installed to CMS when satisfactorily supported in place. Quantities are verified by physical walkdown audits. The estimated percent complete is 63%.

NMP#2
MONTHLY PRODUCTION REPORT

Period Ending 10/07/84

COMMODITY	U/M	ESTIMATE	INSTALLED TO DATE	SCH TO DATE	PHYSICAL % COMPLETE	TO GO PLANNED RATE (TO 90 % COM)	1984 TO DATE ACTUAL RATE	FINAL QA CAT 1 % ACCEPTED
1. Concrete	CY	270,258	268,258	N/A	99.26%	N/A	N/A	100%
2. Large Bore Pipe	LF	228,260	225,510	225,275	99.80%	N/A	2500/MO	N/A
3. S.B. Pipe	LF	198,331	166,126	166,633	83.76%	6,600/MO	7100/MO	N/A
4. Pipe Whip Restraint	UN	17,333	12,513	N/A	72.19%	N/A	N/A	N/A
5. Large Bore Valves	EA	2,200	2,011	N/A	91.78%	N/A	N/A	N/A
* 6. L.B. Hangers	EA	18,231	16,398	16,992	89.94%	400/MO	375/MO	59.90%
* 7. S.B. Hangers	EA	30,291	20,798	21,259	68.66%	1,440/MO	1090/MO	8.02%
8. Cable Tray	LF	119,286	116,444	N/A	97.62%	N/A	N/A	88.20%
9. Key Indicator Conduit	LF	842,716	751,369	739,783	89.16%	26,000/MO	25,600/MO	44.26%
10. Total Conduit	LF	990,676	871,423	N/A	87.96%	N/A	N/A	N/A
11. Scheduled Cable	LF	7,065,660	5,118,243	5,342,187	72.44%	240,000/MO	266,300/MO	29.78%
12. Unscheduled Cable	LF	2,473,198	1,130,958	1,170,467	45.73%	166,000/MO	18,100/MO	N/A
13. Cable Terminations	EA	276,663	132,862	149,808	48.02%	23,200/MO	10,600/MO	27.79%
14. Instrument Tubing	LF	231,854	144,984	150,897	62.53%	11,400/MO	6,900/MO	0.57%

*Includes final QA by Contractor only.

1. Concrete

Placing of structural concrete is essentially complete. The remaining placements are for equipment pads, blockouts etc. Quantities are reported when placements are made and verified through daily concrete pour tickets as submitted to FQC. The cooling tower, stack and intake & discharge tunnel concrete quantities are not included.

2. L.B. Pipe

Included is all large bore pipe 2½" or greater except for cast iron pipe and large bore pipe erected by the NSSS installer, and the Turbine Generator installer. Quantities are reported on a pipe spool percent complete basis as each activity during installation is completed. Quantities are verified by comparing actual reported vs. iso-metric drawing takeoffs.

4. Pipe Whip Restraints

The pipe whip restraints support structure is completely installed. The second phase of installation, the crushable sections etc. is ongoing. This activity is reported on a percent complete basis as each restraint is completed and accepted by FQC.

5. Large Bore Valves

Quantities are reported on a percent complete basis per valve. Quantities are verified by comparing actual reported vs. iso-metric drawing takeoffs.

8. Cable Tray

Cable Tray is essentially complete with work remaining being cleaning, marking and covering. These activities are ongoing to support cable pulling. Quantities are reported when the tray is satisfactorily supported awaiting final QC acceptance. Quantities reported are verified through red lining of drawings and through use of the engineers cable tray tracking system.

10. Total Conduit

Includes all key indicator conduit plus all PVC conduit and all other communication conduit (EMT). Quantities are reported the same way as the key indicator conduit.

AGENDA ITEM #8

ITEM:

Detailed review and current status of preparation of preop and acceptance test procedures, integration of preop and acceptance test activities with construction schedule, system turnover schedule identifying each system and status, preop and acceptance tests schedule identifying each test and status, current and proposed preop and acceptance tests program manpower.

- a. Total number of procedures required for fuel load.
- b. Number of draft procedures not started.
- c. Number of draft procedures being written.
- d. Number of procedures approved.
- e. Number of procedures in review.
- f. Total number of preop and acceptance tests required for fuel load identifying each.
- g. Number of preop and acceptance tests completed identifying each.
- h. Number of preop and acceptance tests currently in progress identifying each and status.
- i. Number of systems and/or subsystems turned over to start-up identifying each.
- j. Number of systems turned over to operations group identifying each and outstanding open items for each system.
- k. Number of retests expected, if any, identifying each and cause for retest.

CURRENT STATUS:

See following pages.

Answer to Question # 8

Detailed Review Process for Preparation of Preop & Acceptance Procedures.

See Attachment # 1

Current Status of Preparation of Preop & Acceptance Procedures.

See Attachment # 2 for overview

See Attachment # 3 for individual detailed

Integration of Preop & Acceptance Test Activities with the Construction Schedule.

See Attachment # 4

The Construction Schedule is integrated to the Startup & Test Operations Network Schedule by tying a construction completion activity 'A' Release (Attachment # 4) on the Construction Schedule to the start of Preliminary testing on the Startup & Test Operations Network Schedule.

System Turnover Schedule

See Attachment # 5

Preop & Acceptance Test Schedule

See Attachment # 6

Current and Proposed Preop & Acceptance Test Program Manpower

See Attachment # 7 & ~~X 14b~~ Item 19b

Total Number of Procedures Required for Fuel Load

Attachment #3

Number of Draft Procedures Not Started

Attachment #3

Number of Draft Procedures Being Written

Attachment #3

Number of Procedures Approved

Attachment #3

Number of Procedures in Review

Attachment #3

Total Number of Preop and Acceptance Tests Required for Fuel Load

Attachment #6

Number of Preop Acceptance Tests Completed

Zero

Number of Preop and Acceptance Tests Currently in Progress

Zero

Number of Systems Turned Over to Start-Up (AOD)

See Attachment #5

Zero

Number of Systems Turned Over to Operations Group

Zero

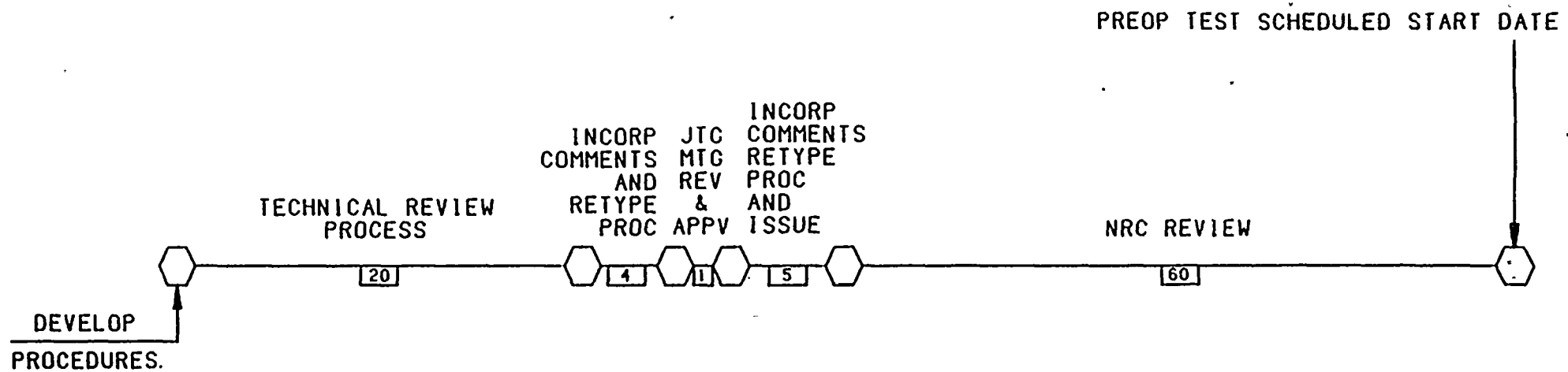
Number of Retests Expected

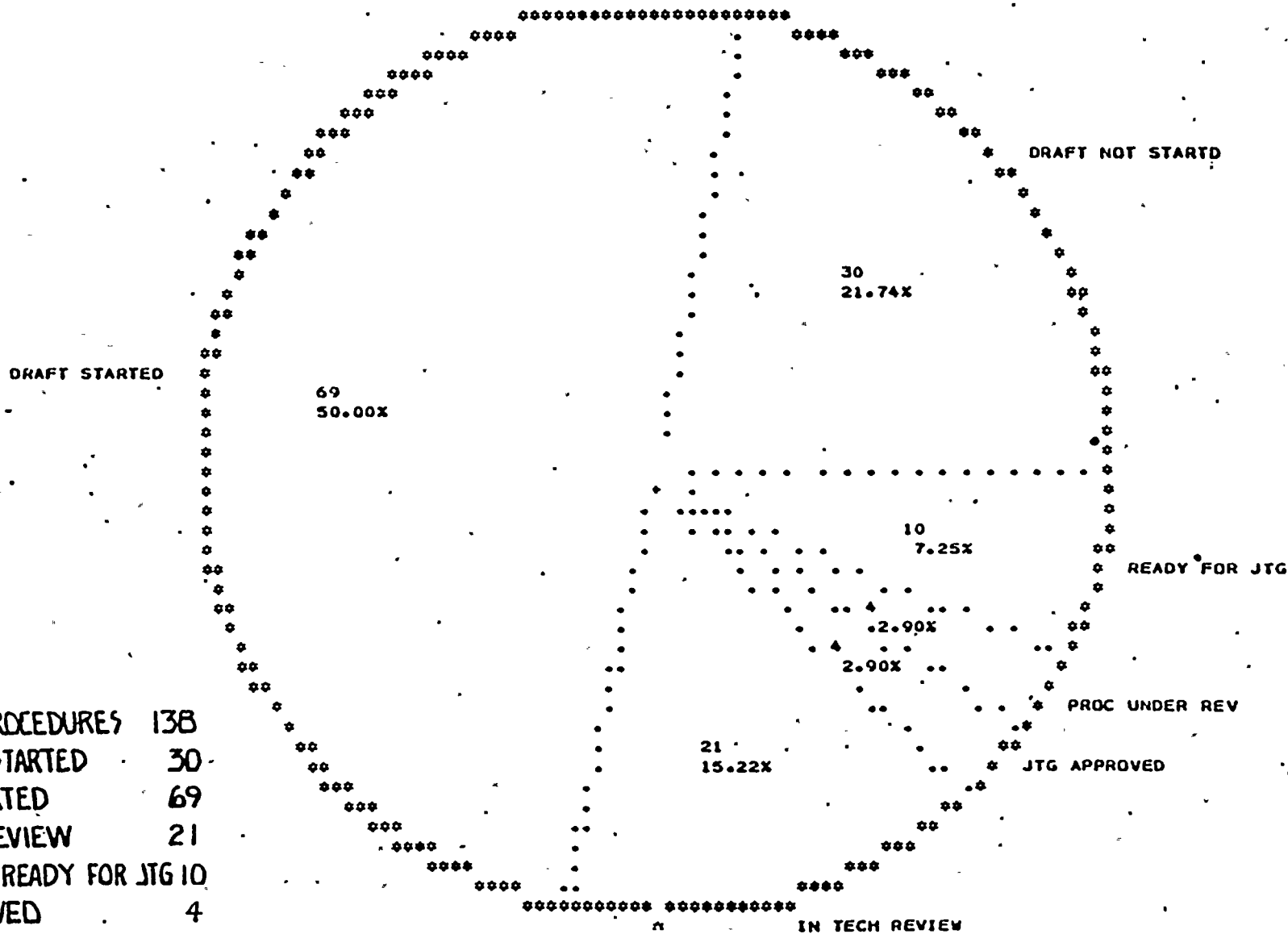
Zero



PREOPERATIONAL/ACCEPTANCE
PROCEDURE DEVELOPMENT
REVIEW CYCLE

10/17/84





TOTAL NO. PROCEDURES	138
DRAFT NOT STARTED	30
DRAFT STARTED	69
IN TECH REVIEW	21
PROCEDURE READY FOR JTG	10
JTG APPROVED	4
PROCEDURE UNDER REV	4



***** STARTUP AND TEST *****
 * PREOP AND ACCEPTANCE PROCEDURES *
 ***** SORTED BY STATUS *****
 ***** STATUS AS OF 15 OCT 84 *****

PROCEDURE NUMBER	PROCEDURE TITLE	STATUS	TEST DATE	ACCEPT PRE-OP
7.	FEEDWATER CONTROL SYSTEM	DRAFT NOT STARTED	15JUL1985	P
17.D	POST ACCIDENT SAMPLING SYSTEM	DRAFT NOT STARTED	12AUG1985	P
30.	CONTROL ROD DRIVE HYDRAULICS	DRAFT NOT STARTED	22JUL1985	P
34.	AUTOMATIC DEPRESSURIZATION SYSTEM	DRAFT NOT STARTED	13JUL1985	P
40.H	RADWASTE PROCESS COMPUTER	DRAFT NOT STARTED	01JUN1985	P
41.	SOLID RADWASTE SYSTEM	DRAFT NOT STARTED	21OCT1985	P
46.	FIRE PROTECTION HALON	DRAFT NOT STARTED	18OCT1985	P
53.C	CONTROL ROOM PRESSURE TEST	DRAFT NOT STARTED	15NOV1985	P
56.A	RADWASTE BUILDING VENTILATION	DRAFT NOT STARTED	16OCT1985	P
56.H	RADWASTE BLDG PRESSURE / FLOW TEST	DRAFT NOT STARTED	16OCT1985	P
61.C	SECONDARY CONT. LEAK TEST	DRAFT NOT STARTED	18SEP1985	P
62.	DIA HYDROGEN RECOMBINER	DRAFT NOT STARTED	08NOV1985	P
75.	STATION AND EMERGENCY LIGHTING	DRAFT NOT STARTED	18OCT1985	P
78	REMOTE SHUTDOWN	DRAFT NOT STARTED	04OCT1985	P
79.	AREA RADIATION MONITORING	DRAFT NOT STARTED	27MAY1985	P
80.	PROCESS AND AIRBORNE RADIATION MONITORS	DRAFT NOT STARTED	15JUL1985	P
83.	PRIMARY CONTAINMENT ISOLATION	DRAFT NOT STARTED	27MAY1985	P
91.	PROCESS COMPUTER	DRAFT NOT STARTED	04OCT1985	P
92.A	SOURCE RANGE MONITORING	DRAFT NOT STARTED	12AUG1985	P
92.H	INTERMEDIATE RANGE MONITORING	DRAFT NOT STARTED	12AUG1985	P
92.C	AVERAGE POWER RANGE MONITORING	DRAFT NOT STARTED	12AUG1985	P
94.	TRANSVERSING INCUR PROBE	DRAFT NOT STARTED	12AUG1985	P
95.H	ROD SEQUENCE CONTROL	DRAFT NOT STARTED	24JUN1985	P
96.	REACTOR MANUAL CONTROL & ROD POSITION INDICATION	DRAFT NOT STARTED	24JUN1985	P
97.	REACTOR PROTECTION	DRAFT NOT STARTED	27MAY1985	P
98.	TURBINE GENERATOR PROTECTION	DRAFT NOT STARTED	15OCT1985	A
101.A	TURBINE BLDG CRANE	DRAFT NOT STARTED	01DEC1985	A
101.D	RADWASTE BLDG CRANE	DRAFT NOT STARTED	18OCT1985	A
105.	GETARS	DRAFT NOT STARTED	04OCT1985	P
112.	STRUCTURAL INTEGRITY & ILRT	DRAFT NOT STARTED	08NOV1985	P
39.	FUEL HANDLING & REACTOR SERVICE EQUIPMENT	DRAFT STARTED	29APR1985	P
40.A	LIQUID RADWASTE SYSTEM	DRAFT STARTED	11SEP1985	P
42.	OFF GAS SYSTEM	DRAFT STARTED	15OCT1985	P
47.	SMOKE FLAME & TEMPERATURE DETECTION	DRAFT STARTED	26JUL1985	P
52.	REACTOR BLDG. HVAC	DRAFT STARTED	01JUL1985	P
53.A	CONTROL BUILDING HVAC	DRAFT STARTED	12MAY1985	P
53.H	CONTROL BLDG CHILLED WATER	DRAFT STARTED	28APR1985	P
69.	345KV TRANSFORMER	DRAFT STARTED	17JUN1985	P
76.	PLANT COMMUNICATIONS	DRAFT STARTED	12JUN1985	P
93.	ROD BLOCK MONITORING	DRAFT STARTED	24JUN1985	P
100.A	DIVISION 1 DIESEL GENERATOR	DRAFT STARTED	07APR1985	P
104.	SITE SECURITY	DRAFT STARTED	01APR1985	A
3.	CONDENSATE SYSTEM	1ST DRAFT FINISHED	09MAR1985	P
5.	CONDENSATE DEMIN & RLSIN REGEN.	1ST DRAFT FINISHED	23FEB1985	P
20.	BREATHING AIR	1ST DRAFT FINISHED	15OCT1985	A
24.	GENERATOR ISOLATED PHASE BUS DUCT COOLING	1ST DRAFT FINISHED	12JUL1985	A
27.	GENERATOR H2 & CO2 SYSTEM	1ST DRAFT FINISHED	11SEP1985	A
29.A	REACTOR RECIRC. SYSTEM	1ST DRAFT FINISHED	14JUN1985	P
29.H	REACTOR RECIRC. FLOW CONTROL SYSTEM	1ST DRAFT FINISHED	14JUN1985	P
43.	FIRE PROTECTION WATER	1ST DRAFT FINISHED	07JUN1985	P
64.H	TURBINE BUILDING FLOOR DRAINS	1ST DRAFT FINISHED	29MAR1985	P
66.H	MAIN TRANSFORMER AREA DRAINS	1ST DRAFT FINISHED	06SEP1985	A

***** STARTUP AND TEST *****
 * PREOP AND ACCEPTANCE PROCEDURES *
 ***** SORTED BY STATUS *****
 ***** STATUS AS OF 15 OCT 84 *****

PROCEDURE NUMBER	PROCEDURE TITLE	STATUS	TEST DATE	ACCEPT PRE-OP
66.C	DIESEL GENERATOR BLDG FLOOR DRAINS	1ST DRAFT FINISHED	06SEP1985	P
66.E	SERVICE BUILDING DRAINS	1ST DRAFT FINISHED	06SEP1985	P
66.J	MAIN STACK DRAINS	1ST DRAFT FINISHED	06SEP1985	P
66.K	REACTOR BUILDING MAT DRAINS	1ST DRAFT FINISHED	06SEP1985	A
67.	DRYWELL EQUIPMENT AND FLOOR DRAINS	1ST DRAFT FINISHED	24JUL1985	P
81.	CONTAINMENT LEAKAGE MONITORING	1ST DRAFT FINISHED	04OCT1985	P
82.	CONTAINMENT ATMOSPHERE MONITORING SYSTEM	1ST DRAFT FINISHED	18OCT1985	P
90.	SEISMIC MONITORING	1ST DRAFT FINISHED	06SEP1985	P
100.B	DIVISION 2 DIESEL GENERATOR	1ST DRAFT FINISHED	31MAR1985	P
102.	DECONTAMINATION SYSTEM	1ST DRAFT FINISHED	18MAR1985	A
110.	LOSS OF OFF SITE POWER TEST/ECCS FUNCTIONAL TEST	1ST DRAFT FINISHED	15SEP1985	P
54.B	LITHIUM BROMIDE CHILLED WATER	1ST DRAFT FINISHED & IN TYPING	01AUG1985	A
64.A	TURBINE BLDG EQUIP DRAINS	TEAM REVIEW	29MAR1985	P
95.A	ROD WORTH MINIMIZER	TEAM REVIEW	24JUN1985	P
1.	MAIN & AUX. STEAM	2ND DRAFT STARTED	13MAY1985	P
10.A	CIRCULATING WATER SYSTEM	2ND DRAFT STARTED	10MAY1985	P
11.	SERVICE WATER	2ND DRAFT STARTED	17MAR1985	P
17.A	TURBINE PLANT SAMPLING	2ND DRAFT STARTED	09AUG1985	P
17.C	RADWASTE PLANT SAMPLING	2ND DRAFT STARTED	09AUG1985	P
22.A	TURBINE GENERATOR LUBE OIL	2ND DRAFT STARTED	20FEB1985	A
23.	TURBINE E.H.C.	2ND DRAFT STARTED	01APR1985	P
28.	NUCLEAR BOILER INSTRUMENTATION	2ND DRAFT STARTED	18MAY1985	P
31.	RESIDUAL HEAT REMOVAL SYSTEM	2ND DRAFT STARTED	28JUN1985	P
32.	LOW PRESSURE CORE SPRAY	2ND DRAFT STARTED	01APR1985	P
33.	HIGH PRESSURE CORE SPRAY	2ND DRAFT STARTED	25MAY1985	P
35.	REACTOR CORE ISOLATION COOLING SYSTEM	2ND DRAFT STARTED	28JUN1985	P
36.	STANDBY LIQUID CONTROL	2ND DRAFT STARTED	29MAY1985	P
37.	REACTOR WATER CLEANUP SYSTEM	2ND DRAFT STARTED	09AUG1985	P
38.	FUEL POOL COOLING AND CLEANUP	2ND DRAFT STARTED	03MAY1985	P
45.	FIRE PROTECTION CO2	2ND DRAFT STARTED	12JUL1985	P
61.A	PRIMARY CONTAINMENT PURGE	2ND DRAFT STARTED	28AUG1985	P
61.B	STANDBY GAS TREATMENT	2ND DRAFT STARTED	14AUG1985	P
84.	REACTOR BUILDING POLAR CRANE	2ND DRAFT STARTED	17MAY1985	P
85.	REACTOR COOLANT AND ECCS LEAK DETECTION	2ND DRAFT STARTED	04OCT1985	P
88.	CONTAINMENT INERTING SYSTEM	2ND DRAFT STARTED	15OCT1985	P
106.	REDUNDANT REACTIVITY CONTROL	2ND DRAFT STARTED	15JUL1985	P
8.	FEEDWATER HEATERS & EXTRACTION STEAM	2ND DRAFT FINISHED	16SEP1985	P
9.	CONDENSER AIR REMOVAL	2ND DRAFT FINISHED	23AUG1985	P
49.C	RADWASTE BLDG HOT WATER & GLYCOL	2ND DRAFT FINISHED	02JUL1985	A
100.C	DIVISION 3 DIESEL GENERATOR	2ND DRAFT FINISHED	24MAR1985	P
17.B	REACTOR PLANT SAMPLING	2ND DRAFT FINISHED & IN TYPING	30AUG1985	P
6.	FEEDWATER SYSTEM	TEST ENGINEER CHECK	17MAY1985	P
19.B	LOSS OF PLANT AIR/N2	TEST ENGINEER CHECK	15JUL1985	P
26.	TURBINE GENERATOR STATOR COOLING WATER	TEST ENGINEER CHECK	16AUG1985	A
48.	AUXILIARY BOILER	TEST ENGINEER CHECK	26FEB1985	A
49.B	TURBINE BLDG HOT WATER & GLYCOL	TEST ENGINEER CHECK	05JUN1985	A
49.D	REACTOR BLDG HOT WATER & GLYCOL	TEST ENGINEER CHECK	10JUN1985	A
15.	MAKEUP WATER TREATING	OUT FOR TECH REVIEW	01NOV1984	A
19.A	INSTRUMENT & SERVICE AIR SYSTEM	OUT FOR TECH REVIEW	15JUL1985	P
25.	CLEAN STEAM REBOILER & AUXILIARY CONDENSATE	OUT FOR TECH REVIEW	11APR1985	A
49.A	HOT WATER HEATING SYSTEM	OUT FOR TECH REVIEW	05JUN1985	A
50.B	AUX. SERVICE BLDG & ELEC TUNNELS VENTILATION	OUT FOR TECH REVIEW	11JUL1985	P

***** STARTUP AND TEST *****
 * PREP AND ACCEPTANCE PROCEDURES *
 ***** SORTED BY STATUS *****
 ***** STATUS AS OF 15 OCT 84 *****

PROCEDURE NUMBER	PROCEDURE TITLE	STATUS	TEST DATE	ACCEPT PRE-OP
60.	DRYWELL COOLING	OUT FOR TECH REVIEW	01NOV1985	P
66.F	CONTROL BUILDING DRAINS	OUT FOR TECH REVIEW	06SEP1985	A
2.	MOISTURE SEPARATORS/REHEATERS VENTS & DRAINS	INCORPORATING COMMENTS	26JAN1985	A
13.	REACTOR BUILDING CLOSED LOOP COOLING WATER	INCORPORATING COMMENTS	14JUN1985	P
14.	TURBINE BUILDING CLOSED LOOP COOLING WATER	INCORPORATING COMMENTS	17DEC1984	A
22.B	TURBINE LUBE OIL CONDITIONER & WASTE OIL	INCORPORATING COMMENTS	01JAN1985	A
22.C	GENERATOR SEAL OIL SYSTEM	INCORPORATING COMMENTS	20FEB1985	A
44.	FIRE PROTECTION FOAM	INCORPORATING COMMENTS	28JUN1985	P
54.A	NORMAL SWITCHGEAR BUILDING VENTILATION	INCORPORATING COMMENTS	01AUG1985	P
55.	TURBINE BLDG. VENTILATION	INCORPORATING COMMENTS	01OCT1985	P
58.A	SCREENWELL & (DIESEL FIRE PUMP) & MISC VENT	INCORPORATING COMMENTS	15FEB1985	P
58.C	AUX. BOILER & CHILLER BLDG VENTILATION	INCORPORATING COMMENTS	18JUL1985	P
63.A	REACTOR BUILDING EQUIPMENT DRAINS	INCORPORATING COMMENTS	24JUL1985	P
63.B	REACTOR BUILDING FLOOR DRAINS	INCORPORATING COMMENTS	24JUL1985	P
71.E-2	UPS 2VB1-UPS 2A 2B	INCORPORATING COMMENTS	01DEC1984	P
71.E-3	UPS 2VB1-UPS 3A 3B	INCORPORATING COMMENTS	24DEC1984	P
65.	RADWASTE BUILDING DRAINS	READY FOR JTG APPROVAL & IN TYPING	01SEP1985	P
66.H	CONDENSATE STORAGE TANK BUILDING DRAINS	READY FOR JTG APPROVAL & IN TYPING	06SEP1985	P
4.	CONDENSATE STORAGE & XFER.	READY FOR JTG APPROVAL	30DEC1984	P
10.B	ACID TREATMENT SYSTEM	READY FOR JTG APPROVAL	25DEC1984	A
10.C	HYPOCHLORITE SYSTEM	READY FOR JTG APPROVAL	23JAN1985	A
16.	MAKEUP WATER STORAGE & TRANSFER	READY FOR JTG APPROVAL	15NOV1985	P
50.	DOMESTIC WATER	READY FOR JTG APPROVAL	01JAN1986	A
57.	DIESEL GENERATOR BUILDING VENTILATION	READY FOR JTG APPROVAL	17MAR1985	P
66.A	RESERVE TRANSFORMER AREA DRAINS	READY FOR JTG APPROVAL	06SEP1985	A
66.D	SCREENWELL BUILDING DRAINS	READY FOR JTG APPROVAL	05OCT1985	A
12.	TRAVELING WATER SCREENS & WASH DISPOSAL	JTG APPROVED	26DEC1984	A
71.F-1	UPS 2VB1-UPS 1A 1B 1C 1D	JTG APPROVED	06JUL1985	P
73.A	125V NORMAL DC DISTRIBUTION	JTG APPROVED	01JUL1985	P
73.B	24/48 VOLT DC DISTRIBUTION	JTG APPROVED	15JUN1985	P
66.G	AUXILIARY BOILER BUILDING DRAINS	PROCEDURE UNDER REVISION	06SEP1985	P
74.A	125V EMERGENCY DC DISTRIBUTION DIV 1	PROCEDURE UNDER REVISION	17MAR1985	P
74.B	125V EMERGENCY DC DISTRIBUTION DIV 2	PROCEDURE UNDER REVISION	17MAR1985	P
74.C	125V EMERGENCY DC DISTRIBUTION DIV 3	PROCEDURE UNDER REVISION	10MAR1985	P

SURT CCODES E START

DATA DATE 10/03/84PAGE 3

MODE=0/FF

DESCRIPTION

DUR

START
SCH'D REP'DFINISH
SCH'D REP'D

ACTIVITY

A RELEASE 027.000 134444230	0	EVENT	6/02/85 884
A RELEASE 028.000 134444195	0	EVENT	3/10/85 800
A RELEASE 029.000 134444196	0	EVENT	4/14/85 835
A RELEASE 030.000 134444197	0	EVENT	2/10/85 772
A RELEASE 031.000 134444199	0	EVENT	4/28/85 849
A RELEASE 032.000 134444209	0	EVENT	2/18/85 780
A RELEASE 033.000 134444201	0	EVENT	4/14/85 835
A RELEASE 034.000 134444231	0	EVENT	3/24/85 814
A RELEASE 035.000 134444202	0	EVENT	4/28/85 849
A RELEASE 036.000 134444203	0	EVENT	4/28/85 849
A RELEASE 037.000 134444204	0	EVENT	6/09/85 891
A RELEASE 038.000 134444205	0	EVENT	3/03/85 793
C A RELEASE 039.000 134444232	0	EVENT	12/16/84 716
A RELEASE 040.000 134444233	0	EVENT	3/10/85 800
A RELEASE 041.000 134444234	0	EVENT	6/30/85 912
A RELEASE 042.000 134444235	0	EVENT	1/27/85 758



MODE=0/FE		DESCRIPTION	DUR	START	FINISH
ACTIVITY				SCH'D	SCH'D
				REP'D	REP'D
C	A RELEASE 043.000 134444236	0	EVENT	4/07/85 828	
	A RELEASE 044.000 134444237	0	EVENT	10/28/84 667	
	A RELEASE 045.000 134444238	0	EVENT	11/04/84 674	
	A RELEASE 046.000 134444239	0	EVENT	8/11/85 954	
	A RELEASE 047.000 134444240	0	EVENT	5/19/85 870	
	A RELEASE 048.000 134444241	0	EVENT	9/09/84 618	
	A RELEASE 049.000 134444242	0	EVENT	12/23/84 723	
	A RELEASE 050.000 134444243	0	EVENT	9/30/85 1004	
	A RELEASE 051.000 134444240	0	EVENT	5/31/85 882	
	A RELEASE 052.000 134444245	0	EVENT	3/31/85 821	
	A RELEASE 053.000 134444246	0	EVENT	1/27/85 758	
	A RELEASE 054.000 134444247	0	EVENT	5/31/85 882	
	A RELEASE 055.000 134444248	0	EVENT	12/09/84 709	
	A RELEASE 056.000 134444249	0	EVENT	4/14/85 835	
	A RELEASE 057.000 134444250	0	EVENT	10/14/84 653	
	A RELEASE 058.000 134444251	0	EVENT	11/25/84 695	

SHORT ECODS E START

DATA DATE 10/03/84 PAGE 4



MODE=0/FE		DESCRIPTION	DUR	START	FINISH
ACTIVITY				SCH'D	REP'D
A RELEASE 059.000 134444318	0	EVENT	12/30/84 730		
A RELEASE 059.000 134444317	0	EVENT	1/13/85 744		
A RELEASE 059.000 134444316	0	EVENT	12/16/84 716		
A RELEASE 060.000 134444254	0	EVENT	4/28/85 849		
A RELEASE 061.000 134444255	0	EVENT	3/10/85 800		
A RELEASE 062.000 134444256	0	EVENT	3/10/85 800		
A RELEASE 063.000 134444257	0	EVENT	11/18/84 688		
A RELEASE 064.000 134444258	0	EVENT	1/27/85 758		
A RELEASE 065.000 134444259	0	EVENT	11/18/84 688		
A RELEASE 066.000 134444260	0	EVENT	7/07/85 919		
A RELEASE 067.000 134444261	0	EVENT	11/18/84 688		
A RELEASE 068.000 134444314	0	EVENT	3/17/85 807		
A RELEASE 069.000 134444312	0	EVENT	5/12/85 863		
A RELEASE 070.000 134444264	0	EVENT	8/26/84 604		
A RELEASE 071.000 134444310	0	EVENT	11/18/84 688		
A RELEASE 071.000 134444266	0	EVENT	9/09/84 618		

SORT ECODES E START

DATA DATE 10/03/84 PAGE 6

MODE=OFFE
ACTIVITY DESCRIPTION

DUR

START
SCH'D REP'D

FINISH
SCH'D REP'D

A RELEASE 072.000
134444219

0

EVENT

9/17/84
626

A RELEASE 073.000
134444268

0

EVENT

5/04/84
490

A RELEASE 074.000
134444269

0

EVENT

6/25/84
542

A RELEASE 075.000
134444270

0

EVENT

7/24/85
814

A RELEASE 076.000
134444271

0

EVENT

4/02/85
823

A RELEASE 077.000
134444306

0

EVENT

4/28/85
849

A RELEASE 078.000
134444273

0

EVENT

6/09/85
891

A RELEASE 079.000
134444274

0

EVENT

3/17/85
807

A RELEASE 080.000
134444275

0

EVENT

3/17/85
807

A RELEASE 081.000
134444276

0

EVENT

3/25/85
815

A RELEASE 082.000
134444277

0

EVENT

3/11/85
801

A RELEASE 083.000
134444278

0

EVENT

3/27/85
817

C A RELEASE 084.000
134444279

0

EVENT

3/17/85
807

A RELEASE 085.000
134444280

0

EVENT

11/11/84
681

A RELEASE 086.000
134444281

0

EVENT

6/05/85
887

A RELEASE 087.000
134444308

0

EVENT

1/23/85
754

MODE=0/FF		DESCRIPTION	OUR	START	FINISH
ACTIVITY				SCH'D	REL'D
A RELEASE 088.000 134444283	0	EVENT	3/17/85 807		
A RELEASE 090.000 134444285	0	EVENT	7/07/85 914		
A RELEASE 091.000 134444286	0	EVENT	4/10/84 466		
A RELEASE 092.000 134444287	0	EVENT	5/26/85 877		
A RELEASE 093.000 134444288	0	EVENT	4/24/85 845		
A RELEASE 094.000 134444289	0	EVENT	6/11/85 893		
A RELEASE 095.000 134444290	0	EVENT	4/24/85 845		
A RELEASE 096.000 134444291	0	EVENT	4/14/85 835		
A RELEASE 097.000 134444292	0	EVENT	2/17/85 779		
A RELEASE 098.000 134444293	0	EVENT	8/15/85 958		
A RELEASE 100.000 DIV 1 134444211	0	EVENT	8/22/84 600		
A RELEASE 100.000 DIV 2 134444212	0	EVENT	8/22/84 600		
A RELEASE 100.000 MPSC 134444210	0	EVENT	10/13/84 652		
A RELEASE 101.000 134444294	0	EVENT	8/18/85 961		
A RELEASE 102.000 134444295	0	EVENT	12/16/84 716		
A RELEASE 103.000 134444327	0	EVENT	10/16/83 289		

MODE=D/FE		DESCRIPTION	DUR	START	FINISH
ACTIVITY				SCH'D	SCH'D
A	RELEASE 104.000 134444296	0	EVENT	1/27/85 758	
C	A RELEASE 105.000 134444297	0	EVENT	7/07/85 919	
A	RELEASE 106.000 134444298	0	EVENT	5/05/85 856	
C	A RELEASE 107.000 134444321	0	EVENT	2/07/86 1134	

RUN DATE 15OCT84 1000HRS.

WORKING SCHEDULE

PROJECT START 1/01/83

PROJECT BIGPUSH CONSTRUCTION RELEASE FOR TESTING

ORIGINAL COMPL. 3/07/86

		SORT	ECODES	L START		DATA DATE 10/03/84PAGE 1	
MODE=O/FE	DESCRIPTION	DUR	START		FINISH		
ACTIVITY			SCH'D	REP'D	SCH'D	REP'D	
A RELEASE 001.000 134444180		0	EVENT		3/17/85 807		
A RELEASE 002.000 134444214		0	EVENT		11/18/84 688		
A RELEASE 003.000 134444181		0	EVENT		11/10/84 680		
A RELEASE 004.000 134444183		0	EVENT		11/18/84 688		
A RELEASE 005.000 134444184		0	EVENT		1/13/85 744		
A RELEASE 006.000 134444185		0	EVENT		3/17/85 807		
A RELEASE 007.000 134444215		0	EVENT		10/21/84 660		
A RELEASE 008.000 134444216		0	EVENT		6/30/85 912		
A RELEASE 009.000 134444217		0	EVENT		6/23/85 905		
A RELEASE 010.A00 134444190		0	EVENT		3/10/85 800		
A RELEASE 010.B00 134444188		0	EVENT		7/01/84 548		
A RELEASE 010.C00 134444189		0	EVENT		11/23/84 693		
A RELEASE 011.000 134444182		0	EVENT		1/20/85 751		
A RELEASE 012.000 134444191		0	EVENT		11/25/84 695		



MODE=U/FE		DESCRIPTION	DUR	START		FINISH	
ACTIVITY				SCH'D	REP'D	SCH'D	REP'D
A RELEASE 013.000	134444192	0	EVENT			4/14/85	835
A RELEASE 014.000	134444193	0	EVENT			8/29/84	607
A RELEASE 015.000	134444218	0	EVENT			3/18/84	443
A RELEASE 016.000	134444198	0	EVENT			11/11/84	681
A RELEASE 017.000	134444219	0	EVENT			6/09/85	891
A RELEASE 018.000	134444299	0	EVENT			11/11/84	681
A RELEASE 019.000	134444194	0	EVENT			2/17/85	779
A RELEASE 020.000	134444221	0	EVENT			5/12/85	863
A RELEASE 021.000	134444300	0	EVENT			5/19/85	870
A RELEASE 022.000	134444223	0	EVENT			10/14/84	653
A RELEASE 022.1100	134444224	0	EVENT			8/30/84	608
A RELEASE 022.000	134444225	0	EVENT			6/29/84	546
A RELEASE 023.000	134444226	0	EVENT			12/23/84	723
A RELEASE 024.000	134444227	0	EVENT			5/12/85	863
A RELEASE 025.000	134444228	0	EVENT			1/06/85	737
A RELEASE 026.000	134444229	0	EVENT			6/16/85	898

RUN DATE: 15OCT84 1549HRS

WORKING SCHEDULE

PROJECT START 1/01/83

PROJECT JIGPUSH SYSTEM AVAILABLE FOR POT / A.T. TESTING

ORIGINAL COMPL. 3/07/86

		SHORT	ECODES	E	START	DATA DATE 10/03/84		PAGE 1
MODE=0/FE	DESCRIPTION	DUR	START		FINISH			
ACTIVITY	CODE		SCH'D	REP'D	SCH'D	REP'D		
C SYSTEM TURNOVER FOR POT/A.T. 112.		0	EVENT		11/07/85			
134444040	0				1042			
SYSTEM TURNOVER FOR POT/A.T. 001.		0	EVENT		5/12/85			
134444041	1000000				863			
SYSTEM TURNOVER FOR POT/A.T. 002.		0	EVENT		1/25/85			
134444042	2000000				756			
SYSTEM TURNOVER FOR POT/A.T. 003.		0	EVENT		3/04/85			
134444043	3000000				798			
SYSTEM TURNOVER FOR POT/A.T. 004.		0	EVENT		12/15/84			
134444044	4000000				715			
SYSTEM TURNOVER FOR POT/A.T. 005.		0	EVENT		2/22/85			
134444045	5000000				784			
SYSTEM TURNOVER FOR POT/A.T. 006.		0	EVENT		5/16/85			
134444046	6000000				867			
SYSTEM TURNOVER FOR POT/A.T. 007.		0	EVENT		7/14/85			
134444047	7000000				926			
SYSTEM TURNOVER FOR POT/A.T. 008.		0	EVENT		9/15/85			
134444048	8000000				989			
SYSTEM TURNOVER FOR POT/A.T. 009.		0	EVENT		8/22/85			
134444049	9000000				965			
SYSTEM TURNOVER FOR POT/A.T. 010.A		0	EVENT		5/04/85			
134444050	10100000				860			
SYSTEM TURNOVER FOR POT/A.T. 010.B		0	EVENT		12/24/84			
134444051	10200000				724			
SYSTEM TURNOVER FOR POT/A.T. 010.C		0	EVENT		1/22/85			
134444052	10300000				753			
SYSTEM TURNOVER FOR POT/A.T. 011.		0	EVENT		3/16/85			
134444053	11000000				806			
SYSTEM TURNOVER FOR POT/A.T. 012.		0	EVENT		12/25/84			
134444054	12000000				725			



SHORT ECODES E START

DATA DATE 10/03/84 PAGE 2

MODE=O/FE ACTIVITY	DESCRIPTION CODE	DUR	START SCH'D REP'D	FINISH SCH'D REP'D
SYSTEM TURNOVER FOR POT/A.T. 011. 134444055	13000000	0	EVENT	6/13/85 895
SYSTEM TURNOVER FOR POT/A.T. 014. 134444056	14000000	0	EVENT	12/16/84 716
SYSTEM TURNOVER FOR POT/A.T. 015. 134444057	15000000	0	EVENT	10/31/84 670
SYSTEM TURNOVER FOR POT/A.T. 016. 134444058	16000000	0	EVENT	11/14/85 1049
SYSTEM TURNOVER FOR POT/A.T. 017.A 134444060	17000000	0	EVENT	8/08/85 951
SYSTEM TURNOVER FOR POT/A.T. 017.B 134444059	17000000	0	EVENT	8/29/85 972
SYSTEM TURNOVER FOR POT/A.T. 018. 134444328	18000000	0	EVENT	1/10/85 741
SYSTEM TURNOVER FOR POT/A.T. 019.A 134444062	19000000	0	EVENT	7/14/85 926
SYSTEM TURNOVER FOR POT/A.T. 020. 134444063	20000000	0	EVENT	10/14/85 1018
SYSTEM TURNOVER FOR POT/A.T. 021.000 134444301	21000000	0	EVENT	8/11/85 954
SYSTEM TURNOVER FOR POT/A.T. 022.A 134444065	22100000	0	EVENT	2/19/85 781
SYSTEM TURNOVER FOR POT/A.T. 022.B 134444066	22200000	0	EVENT	12/31/84 731
SYSTEM TURNOVER FOR POT/A.T. 022.C 134444064	22300000	0	EVENT	2/19/85 781
SYSTEM TURNOVER FOR POT/A.T. 023. 134444067	23000000	0	EVENT	3/31/85 821
SYSTEM TURNOVER FOR POT/A.T. 024. 134444068	24000000	0	EVENT	7/11/85 923
SYSTEM TURNOVER FOR POT/A.T. 025. 134444069	25000000	0	EVENT	4/10/85 831



MODE=0/FE		DESCRIPTION	DUR	START	FINISH
ACTIVITY	CODE		SCH'D	REP'D	SCH'D
SYSTEM TURNOVER FOR POT/A.T. 026.	134444070	26000000	0	EVENT	8/15/85
					958
SYSTEM TURNOVER FOR POT/A.T. 027.	134444071	27000000	0	EVENT	9/12/85
					986
SYSTEM TURNOVER FOR POT/A.T. 028.	134444072	28000000	0	EVENT	5/16/85
					867
SYSTEM TURNOVER FOR POT/A.T. 029.A	134444074	29000000	0	EVENT	6/13/85
					895
SYSTEM TURNOVER FOR POT/A.T. 030.	134444075	30000000	0	EVENT	7/21/85
					933
SYSTEM TURNOVER FOR POT/A.T. 031.	134444076	31000000	0	EVENT	6/27/85
					909
SYSTEM TURNOVER FOR POT/A.T. 032.	134444077	32000000	0	EVENT	4/21/85
					842
SYSTEM TURNOVER FOR POT/A.T. 033.	134444078	33000000	0	EVENT	5/24/85
					875
SYSTEM TURNOVER FOR POT/A.T. 034.	134444079	34000000	0	EVENT	7/12/85
					924
SYSTEM TURNOVER FOR POT/A.T. 035.	134444080	35000000	0	EVENT	6/27/85
					909
SYSTEM TURNOVER FOR POT/A.T. 036.	134444081	36000000	0	EVENT	5/24/85
					879
SYSTEM TURNOVER FOR POT/A.T. 037.	134444082	37000000	0	EVENT	8/08/85
					951
SYSTEM TURNOVER FOR POT/A.T. 038.	134444083	38000000	0	EVENT	5/02/85
					853
C SYSTEM TURNOVER FOR POT/A.T. 039.	134444084	39000000	0	EVENT	4/28/85
					849
SYSTEM TURNOVER FOR POT/A.T. 040.H	134444085	40000000	0	EVENT	5/31/85
					882
SYSTEM TURNOVER FOR POT/A.T. 040.A	134444086	40000000	0	EVENT	9/10/85
					984

DATA DATE 10/03/84 PAGE 4

MODE=0/PE	DESCRIPTION	DUR	START	FINISH
ACTIVITY	CODE		SCH'D REP'D	SCH'D RLP'D
SYSTEM TURNOVER FOR POT/A.T. 041.	134444087 41000000	0	EVENT	10/20/85 1024
SYSTEM TURNOVER FOR POT/A.T. 042.	134444088 42000000	0	EVENT	10/14/85 1018
C SYSTEM TURNOVER FOR POT/A.T. 043.	134444089 43000000	0	EVENT	6/06/85 888
SYSTEM TURNOVER FOR POT/A.T. 044.	134444090 44000000	0	EVENT	6/27/85 904
SYSTEM TURNOVER FOR POT/A.T. 045.	134444091 45000000	0	EVENT	7/11/85 923
SYSTEM TURNOVER FOR POT/A.T. 046.	134444092 46000000	0	EVENT	10/17/85 1021
SYSTEM TURNOVER FOR POT/A.T. 047.	134444093 47000000	0	EVENT	7/24/85 937
SYSTEM TURNOVER FOR POT/A.T. 048.	134444094 48000000	0	EVENT	2/25/85 787
SYSTEM TURNOVER FOR POT/A.T. 049.A	134444095 49000000	0	EVENT	6/04/85 886
SYSTEM TURNOVER FOR POT/A.T. 049.B	134444096 49000000	0	EVENT	6/04/85 886
SYSTEM TURNOVER FOR POT/A.T. 049.D	134444097 49000000	0	EVENT	6/09/85 891
SYSTEM TURNOVER FOR POT/A.T. 049.C	134444098 49000000	0	EVENT	7/01/85 913
SYSTEM TURNOVER FOR POT/A.T. 050.	134444099 50000000	0	EVENT	12/31/85 1096
SYSTEM TURNOVER FOR POT/A.T. 051.000	134444123 51000000	0	EVENT	5/31/85 882
SYSTEM TURNOVER FOR POT/A.T. 052.	134444100 52000000	0	EVENT	7/02/85 914
SYSTEM TURNOVER FOR POT/A.T. 053.B	134444101 53000000	0	EVENT	4/27/85 848

MODE=D/FE		DESCRIPTION	DUR	START	FINISH
ACTIVITY	CODE		SCH'D	REP'D	SCH'D
SYSTEM TURNOVER FOR POT/A.T. 053.A	134444102	53000000	0	EVENT	5/11/85
					862
SYSTEM TURNOVER FOR POT/A.T. 053.C	134444103	53000000	0	EVENT	11/14/85
					1049
SYSTEM TURNOVER FOR POT/A.T. 054.A	134444104	54000000	0	EVENT	7/31/85
					943
SYSTEM TURNOVER FOR POT/A.T. 054.B	134444105	54000000	0	EVENT	7/31/85
					943
SYSTEM TURNOVER FOR POT/A.T. 055.A	134444106	55000000	0	EVENT	9/30/85
					1004
SYSTEM TURNOVER FOR POT/A.T. 056.A	134444107	56000000	0	EVENT	10/15/85
					1019
SYSTEM TURNOVER FOR POT/A.T. 056.B	134444172	56000000	0	EVENT	10/15/85
					1019
SYSTEM TURNOVER FOR POT/A.T. 057.A	134444108	57000000	0	EVENT	3/16/85
					806
SYSTEM TURNOVER FOR POT/A.T. 058.A	134444129	58000000	0	EVENT	12/20/84
					720
SYSTEM TURNOVER FOR POT/A.T. 059.A	134444111	59300000	0	EVENT	3/28/85
					818
SYSTEM TURNOVER FOR POT/A.T. 059.B	134444109	59200000	0	EVENT	4/06/85
					827
SYSTEM TURNOVER FOR POT/A.T. 059.C	134444110	59300000	0	EVENT	7/17/85
					929
C SYSTEM TURNOVER FOR POT/A.T. 060.A	134444112	60000000	0	EVENT	10/31/85
					1035
SYSTEM TURNOVER FOR POT/A.T. 061.B	134444113	61000000	0	EVENT	8/13/85
					956
SYSTEM TURNOVER FOR POT/A.T. 061.A	134444114	61000000	0	EVENT	8/27/85
					970
SYSTEM TURNOVER FOR POT/A.T. 061.C	134444030	61000000	0	EVENT	9/17/85
					991

SHORT ECODES & START

DATA DATE 10/03/84 PAGE 6

MODE=0/FE	DESCRIPTION	DUR	START	FINISH
ACTIVITY	CODE		SCH'D REP'D	SCH'D REP'D
SYSTEM TURNOVER FOR POT/A.T. 062.	134444115 62000000	0	EVENT 11/07/85 1042	
SYSTEM TURNOVER FOR POT/A.T. 063.A	134444117 63000000	0	EVENT 7/23/85 915	
SYSTEM TURNOVER FOR POT/A.T. 063.B	134444116 63000000	0	EVENT 7/23/85 935	
SYSTEM TURNOVER FOR POT/A.T. 064.B	134444118 64000000	0	EVENT 3/28/85 818	
SYSTEM TURNOVER FOR POT/A.T. 064.A	134444119 64000000	0	EVENT 3/28/85 818	
SYSTEM TURNOVER FOR POT/A.T. 065.	134444120 65000000	0	EVENT 8/31/85 974	
SYSTEM TURNOVER FOR POT/A.T. 066.C	134444122 66000000	0	EVENT 9/05/85 979	
SYSTEM TURNOVER FOR POT/A.T. 066.H	134444121 66000000	0	EVENT 9/05/85 979	
SYSTEM TURNOVER FOR POT/A.T. 066.D	134444127 66000000	0	EVENT 9/05/85 979	
SYSTEM TURNOVER FOR POT/A.T. 066.K	134444130 66000000	0	EVENT 9/05/85 979	
SYSTEM TURNOVER FOR POT/A.T. 066.F	134444125 66000000	0	EVENT 9/05/85 979	
SYSTEM TURNOVER FOR POT/A.T. 066.A	134444123 66000000	0	EVENT 9/05/85 979	
SYSTEM TURNOVER FOR POT/A.T. 066.G	134444126 66000000	0	EVENT 9/05/85 979	
SYSTEM TURNOVER FOR POT/A.T. 066.J	134444124 66000000	0	EVENT 9/05/85 979	
SYSTEM TURNOVER FOR POT/A.T. 066.E	134444128 66000000	0	EVENT 9/05/85 979	
SYSTEM TURNOVER FOR POT/A.T. 066.D	134444129 66000000	0	EVENT 10/04/85 1008	

MODE=07FE		SHORT	PCODES	START	DATA DATE 10/03/84PAGE 7	
ACTIVITY	DESCRIPTION	DUR	SCH'D	START REP'D	FINISH SCH'D	REP'D
SYSTEM TURNOVER FOR POT/A.T. 067.	134444131 67000000	0	EVENT		7/23/85	935
SYSTEM TURNOVER POT/A.T. 068.000	134444132 68000000	0	EVENT		9/12/85	986
SYSTEM TURNOVER POT/A.T. 069.000	134444133 69000000	0	EVENT		7/11/85	923
C SYSTEM TURNOVER FOR POT/A.T. 070.	134444132 70000000	0	EVENT		3/07/86	1162
SYSTEM TURNOVER POT/A.T. 071.A00	134444131 71100000	0	EVENT		1/17/85	748
SYSTEM TURNOVER FOR POT/A.T. 071.B	134444127 71200000	0	EVENT		1/13/85	744
SYSTEM TURNOVER FOR POT/A.T. 072.	134444126 72000000	0	EVENT		11/16/84	686
SYSTEM TURNOVER FOR POT/A.T. 073.B	134444136 73000000	0	EVENT		6/14/85	896
SYSTEM TURNOVER FOR POT/A.T. 073.A	134444173 73000000	0	EVENT		6/10/85	912
SYSTEM TURNOVER FOR POT/A.T. 074.C	134444137 74000000	0	EVENT		3/09/85	799
SYSTEM TURNOVER FOR POT/A.T. 074.A	134444139 74000000	0	EVENT		3/16/85	806
SYSTEM TURNOVER FOR POT/A.T. 074.B	134444138 74000000	0	EVENT		3/16/85	806
C SYSTEM TURNOVER FOR POT/A.T. 075.	134444140 75000000	0	EVENT		10/17/85	1021
SYSTEM TURNOVER FOR POT/A.T. 076.	134444141 76000000	0	EVENT		6/11/85	893
SYSTEM TURNOVER POT/A.T. 077.000	134444107 77000000	0	EVENT		6/27/85	909
C SYSTEM TURNOVER FOR POT/A.T. 078.	134444142 78000000	0	EVENT		10/01/85	1007

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MODE=0/FF		DESCRIPTION	DUR	START		FINISH	
ACTIVITY	CODE			SCH'D	REP'D	SCH'D	REP'D
SYSTEM TURNOVER FOR POT/A.T. 079.	134444143	79000000	0	EVENT		5/26/85	877
SYSTEM TURNOVER FOR POT/A.T. 080.	134444144	80000000	0	EVENT		7/14/85	926
C SYSTEM TURNOVER FOR POT/A.T. 081.	134444145	81000000	0	EVENT		10/03/85	1007
C SYSTEM TURNOVER FOR POT/A.T. 082.	134444146	82000000	0	EVENT		10/17/85	1021
SYSTEM TURNOVER FOR POT/A.T. 081.	134444039	83000000	0	EVENT		5/26/85	877
C SYSTEM TURNOVER FOR POT/A.T. 084.	134444147	84000000	0	EVENT		5/16/85	867
C SYSTEM TURNOVER FOR POT/A.T. 085.	134444148	85000000	0	EVENT		10/03/85	1007
SYSTEM TURNOVER FOR POT/A.T. 086.	134444149	86000000	0	EVENT		9/05/85	979
SYSTEM TURNOVER POT/A.T. 087.000	134444300	87000000	0	EVENT		3/24/85	814
SYSTEM TURNOVER FOR POT/A.T. 088.	134444150	88000000	0	EVENT		10/14/85	1018
SYSTEM TURNOVER FOR POT/A.T. 090.	134444151	90000000	0	EVENT		9/05/85	979
C SYSTEM TURNOVER FOR POT/A.T. 091.A	134444151	91000000	0	EVENT		10/03/85	1007
SYSTEM TURNOVER FOR POT/A.T. 092.C	134444154	92000000	0	EVENT		8/11/85	954
SYSTEM TURNOVER FOR POT/A.T. 092.B	134444155	92000000	0	EVENT		8/11/85	954
SYSTEM TURNOVER FOR POT/A.T. 092.A	134444156	92000000	0	EVENT		8/11/85	954
SYSTEM TURNOVER FOR POT/A.T. 091.	134444157	93000000	0	EVENT		6/23/85	905

SORT ECODES = START

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MODE=O/FE	DESCRIPTION	DUR	START	FINISH
ACTIVITY	CODE		SCH'D REP'D	SCH'D REP'D
SYSTEM TURNOVER FOR POT/A.T. 094.		0	EVENT	8/11/85
134444158	94000000			954
SYSTEM TURNOVER FOR POT/A.T. 095.A		0	EVENT	6/23/85
134444160	95000000			905
SYSTEM TURNOVER FOR POT/A.T. 095.B		0	EVENT	6/23/85
134444159	95000000			905
SYSTEM TURNOVER FOR POT/A.T. 096.		0	EVENT	6/23/85
134444161	96000000			905
SYSTEM TURNOVER FOR POT/A.T. 097.		0	EVENT	5/26/85
134444162	97000000			877
SYSTEM TURNOVER FOR POT/A.T. 098.		0	EVENT	10/14/85
134444163	98000000			1018
SYSTEM TURNOVER FOR POT/A.T. 100.A DSL 3		0	EVENT	3/30/85
134444164	100100000			820
SYSTEM TURNOVER FOR POT/A.T. 100.A DSL 1		0	EVENT	4/06/85
134444165	100100000			827
SYSTEM TURNOVER FOR POT/A.T. 100.B DSL 2		0	EVENT	3/23/85
134444166	100200000			813
SYSTEM TURNOVER FOR POT/A.T. 101.B		0	EVENT	10/17/85
134444168	101000000			1021
SYSTEM TURNOVER FOR POT/A.T. 101.A		0	EVENT	11/10/85
134444167	101000000			1065
SYSTEM TURNOVER FOR POT/A.T. 102.		0	EVENT	3/17/85
134444169	102000000			807
SYSTEM TURNOVER FOR POT/A.T. 101.000		0	EVENT	8/11/85
134444125	103000000			954
SYSTEM TURNOVER FOR POT/A.T. 104.		0	EVENT	3/11/85
134444170	104000000			821
C SYSTEM TURNOVER FOR POT/A.T. 105.		0	EVENT	10/03/85
134444152	105000000			1007
SYSTEM TURNOVER FOR POT/A.T. 106.		0	EVENT	7/14/85
134444171	106000000			926



MODE=U/FE		DESCRIPTION	DUR	START		FINISH	
ACTIVITY	CDDr			SCH'D	REP'D	SCH'D	REP'D
C	SYSTEM TURNOVER FOR POT/A.T. 107.000		0	EVENT		2/07/86	
	134444324	107000000				1134	



RUN DATE 15OCT84 0740HRS

WORKING SCHEDULE

PROJECT START 1/01/83

PROJECT DIGPUSH PREOP AND ACCEPTANCE TESTING SCHEDULE

ORIGINAL COMPL. 3/07/86

		SURT	ECODES	E START	DATA DATE 10/03/84PAGE 1	
MODE=U/FE	DESCRIPTION	DUR	START		FINISH	
ACTIVITY			SCH'D	REP'D	SCH'D	REP'D
C	COLD FUNCTIONAL TST OPS MASTER PUNCH LIST 129977001	63	12/06/85 1071		2/06/86 1133	
C	POT PRIMARY CONTAINMENT LEAK RATE TEST C SIT 112 99974001	28	11/08/85 1043		12/05/85 1070	
	PREOP MAIN & AUX STEAM 001.000 98725001	21	5/13/85 864		6/02/85 884	
	A.T. MOISTURE SEPERATOR REHEAT VENT & DRAIN 002. 78748001	28	1/26/85 757		2/22/85 784	
	PREOP CONDENSATE SYS 003.000 98651001	21	3/09/85 799		3/29/85 819	
	POT COND STORAGE & XFER 004.000 28626001	21	12/16/84 716		1/05/85 736	
	POT CONDENSATE DEMINS & RESIN REGEN 005.000 97090001	14	2/23/85 785		3/08/85 798	
	PREOP FEEDWATER SYS 006.000 98653001	21	5/17/85 868		6/06/85 888	
	PREOP FEED WATER CONTROL 007.000 98849001	14	7/15/85 927		7/28/85 940	
	POT FEEDWATER HEATERS & EXTRACTION 008.000 78790001	21	9/16/85 990		10/06/85 1010	
	POT CONDENSER AIR REMOVAL 009.000 139090001	14	8/23/85 966		9/05/85 979	
	POT CIRCULATING WATER 010.A00 138774001	21	5/10/85 861		5/30/85 881	
	A.T. ACID TREATMENT 10.B 28594001	14	12/25/84 725		1/07/85 738	
	ACCEPT TEST HYPOCHLORITE SYS 010.C00 138716001	14	1/23/85 754		2/05/85 767	
	POT SERVICE WATER 011.000 38817001	56	3/17/85 807		5/11/85 862	



SHORT ENCODES E START

DATA DATE 10/03/84 PAGE 2

MODE=0/FE ACTIVITY	DESCRIPTION	DUR	START SCH'D REP'D	FINISH SCH'D REP'D
POT TRAV H2O SCREENS AND WASH DISP 012.000 38770001		7	12/26/84 726	1/01/85 732
POT RUCLCW 013.000 68268001		14	6/14/85 896	6/27/85 909
POT TST TURNING COMPONET COOLING WATER 014.000 75424001		45	12/17/84 717	1/30/85 761
ACCEPT TEST MAKEUP WATER TREATING SYS 015.000 138676001		21	11/01/84 671	11/21/84 691
POT- MAKEUP WTR STORAGE & TRANSFER 016.000 28958001		28	11/15/85 1050	12/12/85 1077
POT PROCESS SAMPLING 17.A 68168001		28	8/09/85 952	9/05/85 979
POT POST ACCIDENT SAMPLING 17.B 119984001		14	8/30/85 973	9/12/85 986
PREOP INSTRUMENT & SERVICE AIR 19.A 98998001		21	7/15/85 927	8/04/85 947
POT LOSS OF PLANT AIR 19.B 134444002		28	7/15/85 927	8/11/85 954
ACCEPTANCE TEST BREATHING AIR 020.000 98141001		14	10/15/85 1019	10/28/85 1032
A.T. GENERATOR SEAL OIL 22.C 134444001		14	2/20/85 782	3/05/85 795
A.T. TURN GENERATOR LUBE OIL 22.A 79114001		14	2/20/85 782	3/05/85 795
A.T. TURBINE LUBE OIL CONDITIONER & WASTE OIL 02 79126001		14	1/01/85 732	1/14/85 745
PREOP P-HC SYSTEM 023.000 79310001		56	4/01/85 822	5/26/85 877
A.T. GEN ISO PHASE HUS DUCT COOLING 024.000 129170001		7	7/12/85 924	7/18/85 930
A.T. CLEAN STEAM HEATERS 25 139106001		14	4/11/85 812	4/24/85 845



MODE=D/F/E		DESCRIPTION	DUR	START		FINISH	
ACTIVITY				SCH'D	REP'D	SCH'D	REP'D
A.T.	TEST TURB GENER STATOR COOLING WTR 026.000	79076001	14	8/16/85		8/29/85	
				959		972	
A.T.	GENERATOR H2 & CO2 SYS 027.000	79058001	21	9/13/85		10/03/85	
				987		1007	
PREOP	NUCLEAR H0ILER INST 028.000	98848001	7	5/17/85		5/23/85	
				868		874	
POT	RX RECIRC SYS 29.A	68498001	14	6/14/85		6/27/85	
				896		909	
POT	RX RECIRC FLOW CTRL 29.B	134444016	21	6/14/85		7/04/85	
				896		916	
PREOP	CAD HYDRAULICS 030.000	98372012	35	7/22/85		8/25/85	
				934		968	
POT	RESIDUAL HEAT REMOVAL 031.000	68302001	35	6/28/85		8/01/85	
				910		944	
POT	LPCS 032.000	68560001	7	4/22/85		4/28/85	
				843		849	
POT	MPCS 033.000	68528001	14	5/25/85		6/07/85	
				876		889	
POT	AUTOMATIC DEPRESSURIZATION 034.000	138756001	28	7/13/85		8/09/85	
				925		952	
POT	HCIC 035.000	68404001	21	6/28/85		7/18/85	
				910		930	
POT	STDBY LIQUID CTRL 036.000	68432001	14	5/29/85		6/11/85	
				880		893	
POT	RX WATER CLEANUP 037.000	68463001	14	8/09/85		8/22/85	
				952		965	
POT	FULL POOL COOLING 3H	118731001	21	5/03/85		5/23/85	
				854		874	
C	POT RX HLOG SRV & FUEL HANDLING EQUIP 039.000	118221001	21	4/29/85		5/19/85	
				850		870	
POT	RADWASTE COMPUTER 40.B	134444013	14	6/01/85		6/14/85	
				883		896	

MODE=0/FE		DESCRIPTION	DUR	START SCH'D	REP'D	FINISH SCH'D	REP'D
	POT LIQUID RADWASTE SYS 40.A	1080H4001	35	9/11/85	985	10/15/85	1019
	PREOP SOLID RADWASTE 041.000	108106001	42	10/21/85	1025	12/01/85	1066
	POT OFF GAS 042.000	1390B2001	14	10/15/85	1019	10/28/85	1032
C	POT FIRE PROTECTION WATER 043.000	129075001	21	6/07/85	889	6/27/85	909
	POT FOAM FIRE PROTECTION 044.000	79046001	14	6/28/85	910	7/11/85	923
	POT CO2 FIRE PROTECTION 045.000	89552001	14	7/12/85	924	7/25/85	937
	POT FIRE PROTECTION HALON 046.000	89057001	28	10/18/85	1022	11/14/85	1049
	POT FIRE DETECTION & COMPUTER 47.0	129021001	84	7/26/85	938	10/17/85	1021
	A.T. AUX BOILER 48.0	88520001	14	2/26/85	788	3/11/85	801
	A.T. TURBINE BLDG HOT WATER & GLYCOL 49.B	134444025	14	6/05/85	887	6/18/85	900
	A.T. HOT WATER HEATING 49.A	88150001	21	6/05/85	887	6/25/85	907
	A.T. RX BLDG HOT WATER & GLYCOL 49.D	134444027	14	6/10/85	892	6/23/85	905
	A.T. RADWASTE BLDG HOT WATER & GLYCOL 49.C	134444026	14	7/02/85	914	7/15/85	927
	ACCEPT DOMESTIC WATER 050.000	139477001	14	1/01/86	1097	1/14/86	1110
	POT REACTOR BLDG VENT 052.000	89162001	14	7/03/85	915	7/16/85	928
	POT CTRL BLDG CHILLED WATER 53.B	134444029	14	4/28/85	849	5/11/85	862



MODE=0/RE		SURT	ECODES	E START	DATA DATE 10/03/84PAGE 5	
ACTIVITY	DESCRIPTION	DUR	SCH'D	START REP'D	FINISH SCH'D	REP'D
POT CTRL BLDG HVAC 53.A 134444020		21	5/12/85 863		6/01/85 883	
POT CTRL RM PRESSURE TST 53.C 88882001		14	11/15/85 1050		11/28/85 1063	
A.T. NORML SWG BLDG HVAC 54.A 89307001		14	8/01/85 944		8/14/85 957	
A.T. LITHIUM BROMIDE 54.B 134444030		21	8/01/85 944		8/21/85 964	
POT TURN BLDG VENT 055.000 88822001		28	10/01/85 1005		10/28/85 1032	
POT RADWASTE BLDG PRESSURE TEST 56.B 134444031		14	10/16/85 1020		10/29/85 1033	
POT RADWASTE HVAC 56.A 88118001		14	10/16/85 1020		10/29/85 1033	
POT DSL GENERATOR HVAC 057.000 89120001		21	3/17/85 807		4/06/85 827	
POT AUX SERVICE BLDG/ELEC TUNNEL HVAC 58.B 88900001 HIPS 059.A01-2,59.B01-2 POT PROCEDURE 058.000		28	7/18/85 930		8/14/85 957	
A.T. SCHWELLED FIRE PROTECT VENT 58.A 88862001 POT PROCEDURE 058.A00(58.001-3,59.C02,C04-C06)		21	2/07/85 769		2/27/85 789	
A.T. AUX BOILER & CHILLER BLDG HVAC 58.C 88590001 POT PROCEDURE 058.C00(59.C01,59.C03)		7	7/18/85 930		7/24/85 936	
C POT DRYWELL COOLING 60.0 88051001		14	11/01/85 1036		11/14/85 1049	
POT PRIMARY CONTAINMENT PURGE 61.B 88026001		14	8/14/85 957		8/27/85 970	
POT STANDBY GAS TREATMENT 61.A 88026003		21	8/28/85 971		9/17/85 991	
POT SECONDARY CONTAINMENT LEAK TEST 61C 131027001		14	9/18/85 992		10/01/85 1005	



MODE=U/FE		SHORT	ECODES	E	START	DATA DATE 10/03/84PAGE 6	
ACTIVITY	DESCRIPTION	OUR	SCH'D	START	REP'D	SCH'D	FINISH
POT DDA H2 RECOMBINER 062.000 88158001		14	11/08/85 1043			11/21/85 1056	
POT RX BLDG FLOOR DRAINS 63.0 98012001		21	7/24/85 936			8/13/85 956	
POT RX BLDG EQUIP DRAINS 63.A 98012001		42	7/24/85 936			9/03/85 977	
POT TURBINE BLDG EQUIP DRAINS 64.A 78016001		21	3/29/85 819			4/18/85 839	
POT TURBINE BLDG FLOOR DRAINS 64.0 134444032		21	3/29/85 819			4/18/85 839	
PREOP RW BLDG DRAINS 065.000 102356001		21	9/01/85 975			9/21/85 995	
A.T. RESERVE TRANSFORMER AREA DRAINS 66.A 18017001		14	9/06/85 980			9/19/85 993	
POT CONDENSATE STORAGE BLDG DRAINS 66.0 28397001		14	9/06/85 980			9/19/85 993	
A.T. AUX BOILER DRAINS 66.G 88097001		14	9/06/85 980			9/19/85 993	
POT DSL GENERATOR FLOOR DRAINS 66.C 49047001		14	9/06/85 980			9/19/85 993	
A.T. RX MAT DRAINS 66.K 99360001		14	9/06/85 980			9/19/85 993	
A.T. CONTROL BLDG TUNNEL DRAINS 66.I 88947001		14	9/06/85 980			9/19/85 993	
A.T. MAIN TRANSFORMER AREA DRAINS 66.B 129019001		14	9/06/85 980			9/19/85 993	
A.T. SERVICE BLDG DRAINS 66.L 88357001		14	9/06/85 980			9/19/85 993	
POT MAIN STACK DRAINS 66.J 88717001		14	9/06/85 980			9/19/85 993	
A.T. SCHEFFEL BLDG DRAINS 66.D 38667001		14	10/05/85 1007			10/18/85 1022	



MODE=0/FF		DESCRIPTION	DUR	START SCH'D	REP'D	FINISH SCH'D	REP'D
		PREOP DRYWELL FL & EQ DRAINS 067.000 97086001	14	7/24/85 936		8/06/85 949	
C		POT LOP/ECCS FUNCTIONAL 070.000 129978001	21	10/18/85 1022		11/07/85 1042	
		POT UPS 2A,B 71E-2 129560001	14	12/01/84 701		12/14/84 714	
		POT UPS 3A,B 71E-3 129560003	14	12/24/84 724		1/06/85 737	
		POT UPS 1A,B,C,D,G 71E-1 129560005	14	7/06/85 918		7/19/85 931	
		POT 24 48 V DC BATTERY 73.B 139282001	21	6/15/85 897		7/05/85 917	
		POT 125 V BATTERY 73.A 19150001	28	7/01/85 913		7/28/85 940	
		POT DIV 3 BATTERY 74.C 134444004	14	3/10/85 800		3/23/85 813	
		POT DIV 1 BATTERY 74.A 19040001	14	3/17/85 807		3/30/85 820	
		POT DIV 2 BATTERY 74.B 134444003	14	3/17/85 807		3/30/85 820	
C		POT STATION AND EMERGENCY LIGHTING 075.000 129152001	21	10/18/85 1022		11/07/85 1042	
		POT PLNT COMMUNICATION 076.000 128272001	21	6/12/85 894		7/02/85 914	
C		POT REMOTE SHUTDOWN PANEL 078.000 128830003	14	10/04/85 1008		10/17/85 1021	
		POT AREA RADIATION MONITORING 79.0 119370001	21	5/27/85 878		6/16/85 898	
		POT PROCESS RAD MONITORING 080.000 118067001	42	7/15/85 927		8/25/85 968	
C		PREOP CONT LEAK MONITORING 081.000 94782001	35	10/04/85 1008		11/07/85 1042	

MODE=0/FE		DESCRIPTION	DUR	SORT	ECODES	E START	DATA DATE 10/03/84	PAGE 8
ACTIVITY					SCH'D	REP'D	SCH'D	REP'D
C	PREOP CONT ATMOSPHERE MONITORING SYS 082.000	99405001	35		10/18/85		11/21/85	
					1022		1056	
	PNT PRIMARY CONTAINMENT ISOLATION NSSSS 03	98628005	21		5/27/85		6/16/85	
					87H		89H	
C	PREOP POLAR CRANE 084.000	59017001	14		5/17/85		5/30/85	
					86H		881	
C	PREOP LEAK DETECTION 085.000	97094001	35		10/04/85		11/07/85	
					100H		1042	
	PNT VIB MONITORING RPV 086.	69988014	14		9/06/85		9/19/85	
					980		993	
	PREOP CONTAINMENT & INERTING SYS 088.000	99297001	14		10/15/85		10/28/85	
					1019		1032	
	PNT SEISMIC MONITORING SYS 090.000	13900H001	7		9/06/85		9/12/85	
					980		986	
C	PNT PROCESS COMPUTER 91.A	98994001	84		10/04/85		12/26/85	
					100H		1091	
	PNT APRMS 92.C	139504001	14		8/12/85		8/25/85	
					955		968	
	PNT GRMS 92.A	134444010	14		8/12/85		8/25/85	
					955		968	
	PNT IRMS 92.B	134444011	14		8/12/85		8/25/85	
					955		968	
	PNT ROD BLOCK MONITORING 093.000	139374001	14		6/24/85		7/07/85	
					906		919	
	PNT TIP SYS 094.000	138690001	28		8/12/85		9/08/85	
					955		982	
	PNT ROD NORTH MINIMIZER 95.A	138469001	21		6/24/85		7/14/85	
					906		926	
	PNT ROD SEQUENCE CTRL 95.B	134444033	21		6/24/85		7/14/85	
					906		926	
	PNT ROD POSITION INDICATION & RX MNL CTRL 096.00	138439001	28		6/24/85		7/21/85	
					906		933	

DATA DATE 10/03/84 PAGE 9

MODE=0/FE	DESCRIPTION	DUR	START SCH'D	FINISH REL'D
POT RX PROTECTION 097.000 128964001	21	5/27/85 874	6/16/85 898	
A.T. TURBINE GENERATOR PROTECTION 98.0 79330001	14	10/15/85 1019	10/28/85 1032	
POT STDRY DSL GENERATOR DIV 2 100.A 49147001	30	3/31/85 821	4/29/85 850	
POT STDRY DSL GENERATOR DIV 1 100.A 49147003	30	4/07/85 820	5/06/85 857	
POT WPCS DSL DIV 3 100.B 49364001	28	3/24/85 814	4/20/85 841	
A.T. RADWASTE BLOC CRANE 101.B 134444035	14	10/18/85 1022	10/31/85 1035	
A.T. TURBINE BLOC CRANE 101.A 134444034	14	12/01/85 1066	12/14/85 1079	
A.T. ACCEPT DECONTAMINATION 102.000 118922014	14	3/18/85 808	3/31/85 821	
A.T. SITE SECURITY SYS 104.0 138276001	28	4/01/85 822	4/28/85 849	
C POT GETARS 105. 134444015	21	10/04/85 1008	10/24/85 1028	
PREOP REDUNDANT REACTIVITY CNL SYS 106.000 99484001	28	7/15/85 927	8/11/85 954	

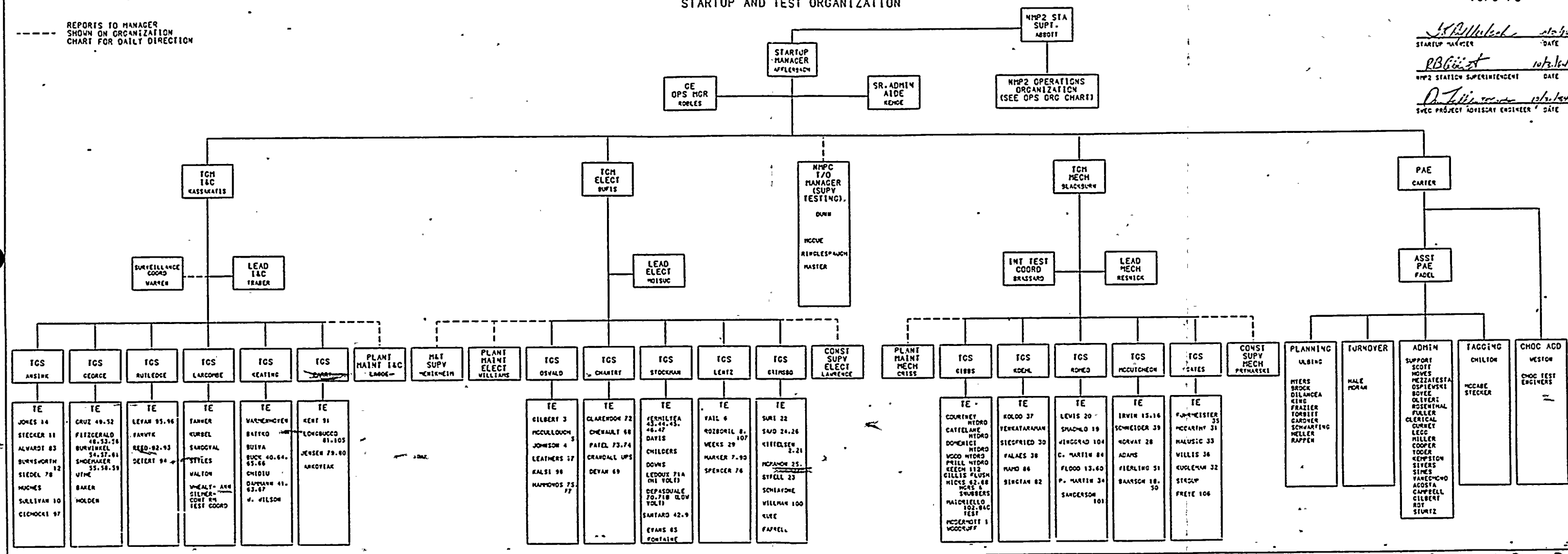
TI APERTURE CARD

10/04/84

STARTUP AND TEST ORGANIZATION

REPORTS TO MANAGER
SHOWN ON ORGANIZATION
CHART FOR DAILY DIRECTION

J. P. Hulse 10/2/84
STARTUP MANAGER DATE
R. B. Gier 10/2/84
NMP2 STATION SUPERINTENDENT DATE
D. J. Jones 10/2/84
SPEC PROJECT ADVISORY ENGINEER DATE



8411150106-0

Also Available On
Aperture Card

100

2000

1000

AGENDA ITEM #9

ITEM:

Detailed discussion of potential schedular influence due to changes attributed to NUREG-0737 and other recent licensing requirements.

CURRENT STATUS:

NUREG 0737, ATWS and Appendix R requirements have been incorporated in the project schedule. The resolution of some licensing open items may result in additional design or construction work. Open items that could have an impact are:

- a. Diesel Generator Air Driers
- b. Break-exclusion zone for Reactor Water Clean-up System piping.

(See Item #13 a & b for more detail)

AGENDA ITEM #10

ITEM:

Discussion of schedular impact, if any, regarding potential deficiencies reported in accordance with 10 CFR 50.55(e).

CURRENT STATUS:

See following pages.



10.

50.55(e) Items, Reported
To The NRC, Having Potential For
Schedular Impact

1. Main Steam Isolation Valve - PWHT Qualification
2. Hydrogen Recombiners Qualification
3. Impact Testing of Check Valves Supplied by Anchor Darling Company
4. PGCC Electrical Separation
5. Feedwater Block Valves Supplied by Velan Valve Corporation.

ITEM

Main Steam Isolation Valve (MSIV) - PWHT Qualification (55.55(e) No. T8.3.2.115)

PROBLEM

Material test specimen for the body of one MSIV, mark No. 2MSS*HYV7A, was not subjected to simulated postweld heat treatment (PWHT) prior to testing as required by the applicable ASME Code. This problem was reported to the NRC under 10CFR50.55(e) on June 15, 1984.

EQUIPMENT SUPPLIER

Gulf & Western/Fluid Systems Division

PROPOSED SOLUTION

Engineering evaluation, justifying the use of MSIV as is, has been developed. NMPC is informally discussing it with the NRC. NRC's informal decision is expected by October 15, 1984.

However, contingency plan has been developed in case the NRC does not concur with our justification. This plan would cause hardship but the existing valve can be replaced without affecting the fuel load.

RESPONSIBLE ENGINEER

J. T. Sullivan/T. B. Madden

ITEM

Hydrogen Recombiners Qualification

PROBLEM

Initially, various components of hydrogen recombiners failed to pass qualification tests. Subsequently, vendor indicated that he does not have adequate documentation for all the components of the equipment. The problem was reported to the NRC under 10CFR50.55(e) by NMPC on August 9, 1983. The vendor also reported problems with the components to the NRC under 10CFR21.

EQUIPMENT SUPPLIER

Rockwell International

PROPOSED SOLUTION

The vendor has indicated that the equipment will be qualified to IEEE 323-1974 by mid - 1985.

ITEM

Impact Testing of Check Valves Supplied by Anchor Darling Valve Company.

PROBLEM

Material test specimens for various components of the subject valves were not impact tested as required by the applicable ASME Code. This problem was reported by NMPC to the NRC under 10CFR50.55(e) on September 7, 1984.

PROPOSED SOLUTION

The matter is still being investigated. At this point it is not known if the vendor has material specimens or the number of valves, if any, that would have to be cut out/replaced.

RESPONSIBLE ENGINEER

J. McDonough/T. B. Madden

ITEM

PGCC Electrical Separation

PROBLEM

PGCC Wiring did not conform to the divisional and subdivisinal separation criteria of Reg. Guide 1.75. A 50.55(e) final report was submitted by NMPC to the NRC on August 9, 1984.

PROPOSED SOLUTION

The corrective action are scheduled for completion by December 31, 1984.

RESPONSIBLE ENGINEER

K.Varadarajan

ITEM

Feedwater Block Valves Supplied by Velan Valve Corporation.

PROBLEM

Material test specimens for the valve were not subjected to simulated post-weld heat treatment (PWHT) prior to testing as required by the applicable ASME Code. An interim report was submitted by NMPC to the NRC under 10CFR50.55(e) on July 6, 1984.

PROPOSED SOLUTION

1. A contract is being negotiated with Power Cutting Corporation to remove material from the bottom of the valves for testing. Cameron Iron works, forging supplier to velan will perform testing. Testing is expected to be completed by December 1984.
2. If the test results from (1) above are found to be unsatisfactory, the valve will have to be replaced. Replacement of the valve with a new valve may be completed by December 85. However, an attempt will be made to locate an acceptable valve already fabricated, in which case the replacement could be accomplished by February 1985.

RESPONSIBLE ENGINEER

J. Ventre/T. B. Madden

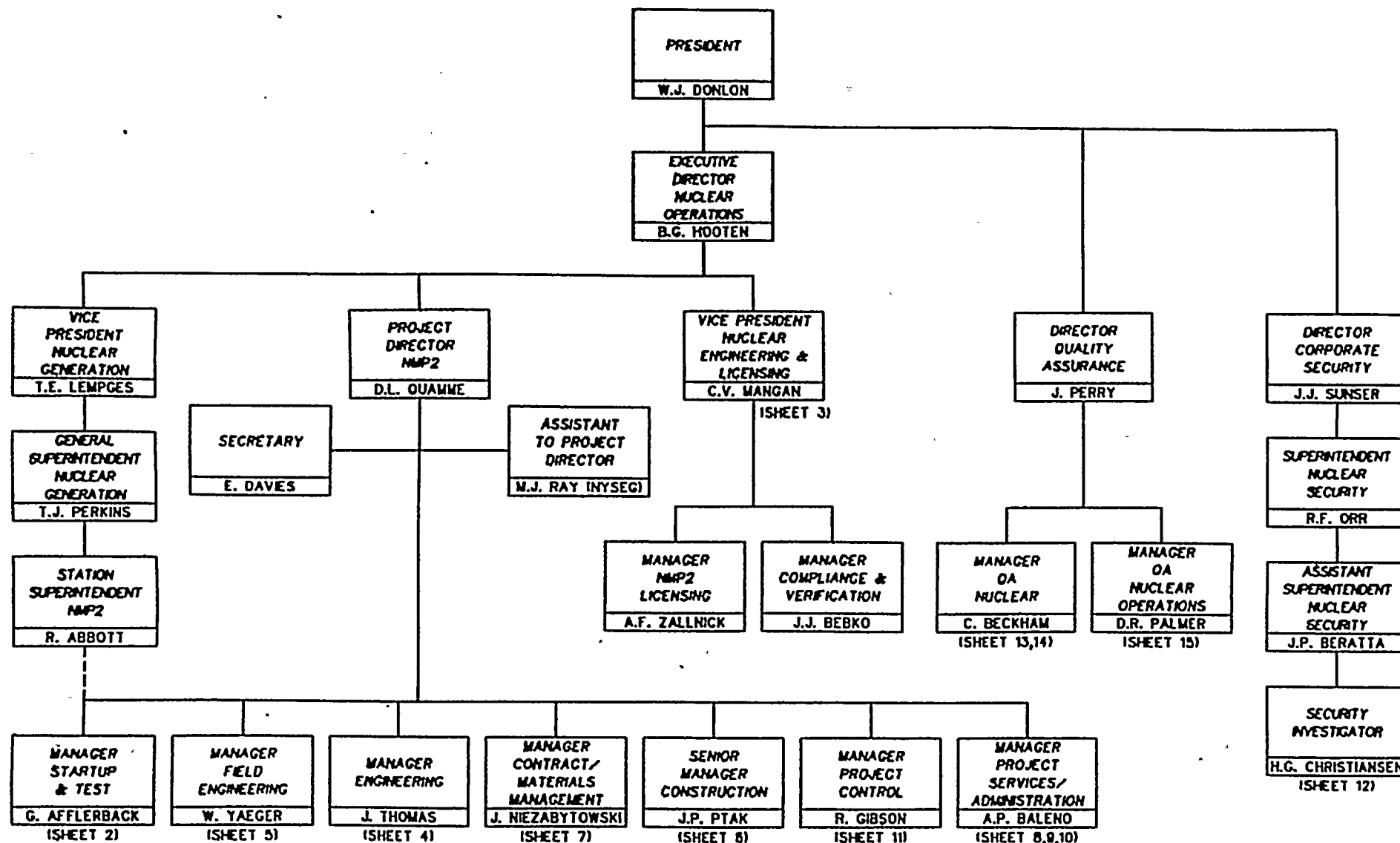
AGENDA ITEM #11

ITEM:

A detailed discussion of the recent management organization changes and impact on construction, pre-op testing and startup. Include discussion of how the management organization will be changed for the operational period and effect on startup. Discuss interfaces between MAC, NMPC and SWEC.

CURRENT STATUS:

The project reorganization was basically completed during the first quarter of this year. The current project organization chart is attached. The goal of the reorganization was to improve the management of construction and startup activities. There has been no significant change to our operating organization, other than the assignment of Mr. Hooten and Mr. Perry. Niagara Mohawk believes that these management organization changes have had a positive impact on the construction and startup schedules. These management changes have resulted in Niagara Mohawk exercising more direct control of project activities, although Stone & Webster is still the architect/engineer and construction manager and is responsible for day-to-day direction of the project. The MAC individuals assigned to the project act as Niagara Mohawk personnel and fill positions in the Niagara Mohawk organization. Except for Mr. Hooten and Mr. Perry, there are no MAC personnel filling positions in the operating organization. Additional information on the operating organization can be found in FSAR Chapter 13, and additional information on the startup program can be found in FSAR Chapter 14.



— PROJECT DIRECTION
 --- FUNCTIONAL DIRECTION ONLY

LOCATION KEY

LESS OTHERWISE NOTED — NMP2 SITE
 CHOC — CHERRY HILL (N.J.) OPERATIONS CENTER

C.G. MORGAN, NMP2 CH

APPROV _____ DATE _____

NINE MILE POINT NUCLEAR STATION UNIT-2 NIAGARA MOHAWK POWER CORPORATION NINE MILE POINT UNIT #2 PROJECT ORGANIZATION CHART	
MANAGEMENT	
DATE 10/1/84	SP 1 OF 15

AGENDA ITEM #12

ITEM:

Overview of current construction and startup management organization showing interfaces between the two.

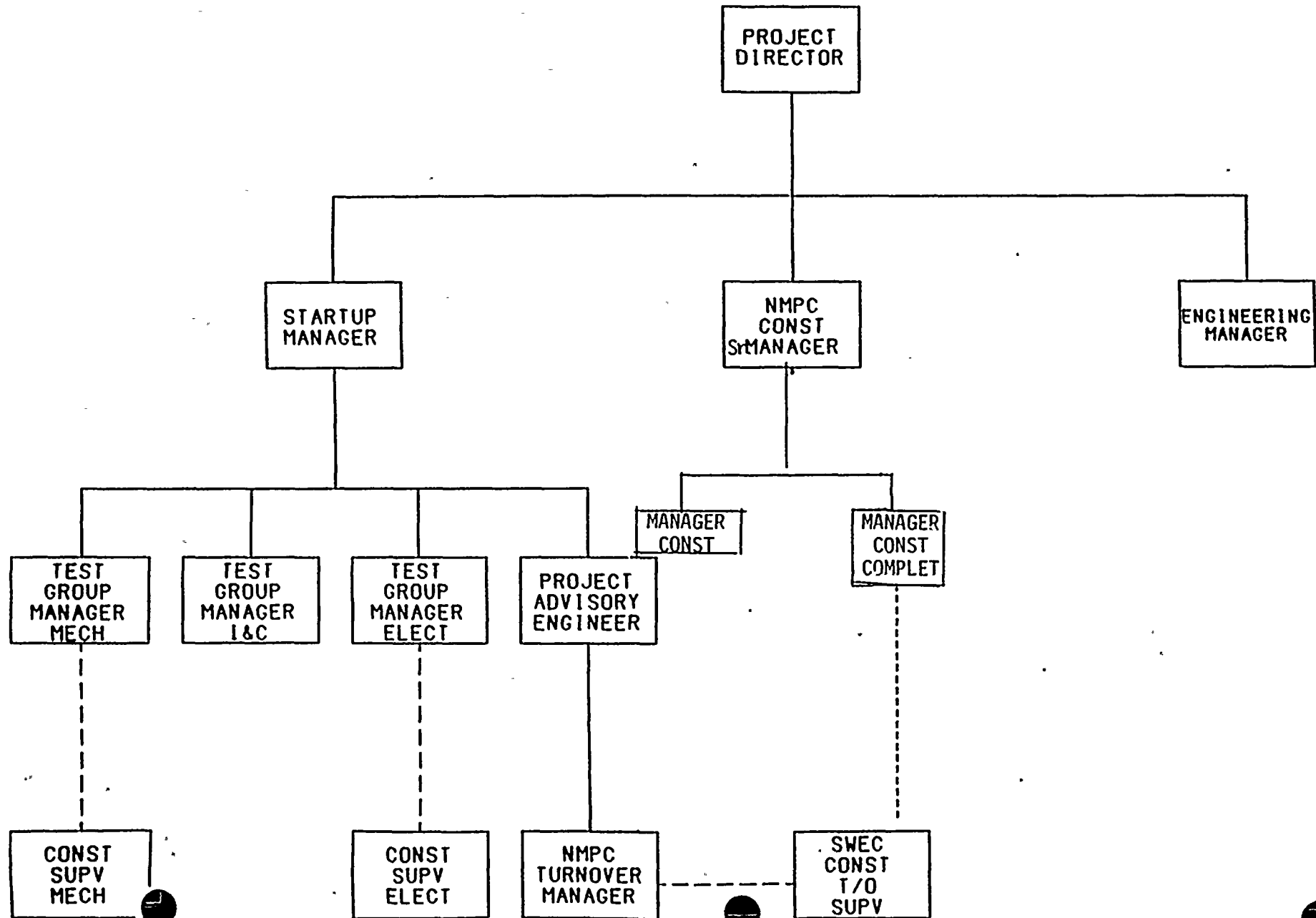
CURRENT STATUS:

See following page.



CONSTRUCTION AND STARTUP
MANAGEMENT ORGANIZATION
INTERFACE

10/17/84





AGENDA ITEM #13

ITEM:

Detailed review and current status of design, engineering and construction effect including quantities, work-off rates, current status and schedule for completion for:

- a. ATWS-3A Design Changes
- b. Appendix R Design Implementation
- c. NSSS Loads Adequacy Evaluation
- d. High Energy Line Break (HELB)
- e. Moderate Energy Line Breaks (MELB)
- f. Control Rod Drive System
- g. Primary and Secondary Containment
- h. Control Room Panel Modifications (PGCC)
- i. Pipe Stress (as-build)
- j. N-Stamp Certification Program
- k. Updating Drawings and Specifications to as-Build Condition
- l. Environmental Qualification of Safety-Related Equipment
- m. Seismic Qualification of Safety-Related Equipment
- n. Hanger Reconciliation Program

CURRENT STATUS:

See following pages.

The NMP2 implementation of the ATWS-3A upgrade consists of nine specific system modifications as follows:

- a. Standby Liquid Control System 86GPM capacity upgrade
- b. Redundant Reactivity Control System addition
- c. Alternate Rod Injection
- d. Recirculation Pump Trip
- e. Feedwater Runback
- f. Automatic Standby Liquid Control Injection
- g. Average Power Range Monitor Downscale Trip
- h. Reactor Water Clean-up Isolation
- i. Nuclear Boiler Instrumentation Transmitter Replacement

Engineering and Construction requirements have been incorporated into the SWEC and GE documents needed to support construction.

All major equipment is delivered and in place.

Installation of the required design changes is continuing in accordance with the applicable system completion schedule.

The status of the Nine Mile Point Nuclear Station - Unit 2 Appendix R implementation is as follows:

All changes resulting from the Appendix R evaluation have been agreed to by Niagara Mohawk Power Corporation. The most significant changes which have to be made involve the control room fire. The description and schedule for accomplishing these changes are listed below.

1. Modifications to the control design of the remote shutdown panel 2CES*PNL405 are in process and scheduled to be completed by October 26, 1984 for input to Electrical.
2. Markups of SWEC elementary diagrams are in process and scheduled to be completed by October 19, 1984. Drafting of the completed SWEC elementary markups are in process and scheduled to be completed by October 26, 1984. All SWEC elementaries are scheduled to be issued by November 2, 1984.
3. Design of the two disconnect panels 2CES*PNL415 and 2CES*PNL416 is in process and scheduled to be completed by November 2, 1984.
4. The GE elementaries which require changes have not been marked up. However, these elementaries are scheduled to be completed by October 26, 1984, for transmittal to GE.
5. ECNs implementing all changes resulting from Appendix R are in process and scheduled for completion by October 19, 1984. Appendix R ECNs are scheduled to be signed out by October 26, 1984.
6. Engineering design for the emergency lighting is in process and scheduled to be completed by February 28, 1985.
7. The safe shutdown problem cables have been rerouted and are in the process of being installed.
8. Cable changes resulting from the Appendix R Control Room Fire Study will be routed as soon as the ESKs are reissued.

NSSS NEW LOADS ADEQUACY EVALUATION

The NSSS New Loads Adequacy Evaluation provides an evaluation of NSSS safety related equipment subjected to hydrodynamic loads as required by NUREG 0808. Two phases of this evaluation have been defined.

1. Dynamic Analysis - Development of loadings on RPV and equipment due to hydrodynamic loads.
2. Equipment Adequacy Evaluation - Assessment of each piece of safety related equipments adequacy when subjected to the loads developed in the first phase.

STATUS

1. Dynamic Analysis - Complete
2. Equipment Adequacy Evaluation

A. Reactor Pressure Vessel

Evaluation complete. No hardware modifications required. Adequacy has been assured, however, use of new orificed fuel support testing results is required.

B. Other Equipment

Thirty items required evaluation. Final adequacy evaluation for equipment is complete except for:

<u>Item</u>	<u>Completion Scheduled</u>
ECCS Pumps	10/26/84
SLC Tank	10/26/84
HCU	11/30/84
RCIC Turbine	11/30/84
Fuel Prep Machine*	10/17/84
Recirculation Piping	
Analysis	12/31/84
Report	3/1/85

*Minor physical changes to the fuel prep machine will be required.

13 d.

HIGH ENERGY LINE BREAKS

Systems, structures and components related to safety have been protected from the unrestrained motion of pipe, jet impingement and temperature/pressure effects of high energy line breaks (HELB).

STATUS

1. Engineering

- A. Identification of systems, structures and components affected by HELBs - Complete
- B. Design for pressure/temperature effects - Complete
- C. Pipe Rupture Restraint Design - Complete Verification - 12/85
- D. Jet Impingement Evaluation
 - 1. Structures - Complete
 - 2. Piping - 10/85 50% Complete
 - 3. Equipment - 6/85 60% Complete

2. Construction

Pipe Rupture Restraints and Jet Shield Installation

Restraint Supports - Complete

Restraints - 6/85 100% Fabricated 20% Installed

Jet Shields - 6/85 100% Fabricated 0% Installed



High Energy Line Break

All high energy breaks have been postulated at fittings and high stress points.

190 pipe whip restraints have been designed and most have been installed.

Structures have been designed to withstand sprays.

Equipment targets have been identified and 2 shields have been designed.

We are currently identifying other type targets; tubing, small bore pipe, and conduit. This will be complete by February, 1985.

Analysis will then proceed to evaluate whether any of the targets must be protected.

We expect no more than 8 additional shields. If they are required they will be designed and installed by September, 1985.

A baseline study of the effects of Moderate Energy Piping Breaks (cracks) was completed in July 1984 resulting in the preparation of FSAR sections 3C.4 and 3C.5.

The baseline study resulted in 47 Cat. I zones being identified as requiring flood detection capability, spray shields and/or other changes to assure safe shutdown capability is maintained coincident with a moderate energy line crack. FSAR sections 3C.4 and 3C.5 commit to resolution of these deficiencies. Due to licensing schedule constraints, the baseline study used conservative and simplifying assumptions. The extent of identified design changes needs to be reviewed accounting for realistic conditions and minimizing impact on the existing completion schedule.

The 47 Cat. I zones requiring further evaluation are contained in seven areas (Control Bldg., Reactor Bldg., North Aux. Bay, South Aux. Bay, Screenwell Bldg., Diesel Generator Bldg. and tunnels). Worksheets have been developed to assure documentation of and consistency in the evaluation process.

The specific zone evaluations are scheduled to commence in late October 1984 with an average of 15 zones to be addressed each month thereafter, the review of zones will require about two months to complete. Identification of required fixes for the first group of zones (Control Bldg.) is scheduled for mid-December 1984 and all fixes by mid-February 1985.

13f.

Engineering And Construction Status ForControl Rod Drive Hydraulic System

A summary of the Engineering and Construction status through August 1984, for the control rod drive hydraulic system (CRDHS) is shown below:

DESCRIPTION	% COMP ENG'RG	% COMP CONSTR	% COMP AS-BUILT
-------------	------------------	------------------	--------------------

Inside Containment

Enterprise			
90°	100	95	0
270°	100	95	0
Piping			
Under Vessel	100	100	0
SP5 to Contain.	100	95	0
Supports			
Sliding Conn.	100	100	0
Supports SP3 & SP4	100	100	0

Outside Containment

Multi-function			
90°	95	95	0
270°	95	95	0
Intermediate Supports	100	90	0
I & W Piping			
90°	100	95	0
270°	100	95	0
Pump to Contr. Sta.	100	85	0
Control Sta.	100	85	0
Supply Lines	100	70	0
Vent Lines	100	0	0
Drain Lines	95	0	0
Scram Hdrs.	100	60	0
Scram Drops	100	10	0
Scram Tank	95	70	0

The scheduled completion dates for Engineering, Construction and As-Built Verification are as follows:

	COMP ENG'RG	COMP CONSTR	COMP AS-BUILT
Inside Containment	-	11/84	5/85
Outside Containment	11/84	3/84	9/85

PRIMARY AND SECONDARY CONTAINMENT

Design, engineering and construction activities for primary containment and secondary containment are complete. Engineering for these structures is now ongoing to verify design adequacy with actual system loads.

STATUS

<u>STRUCTURE</u>	<u>ORIGINAL DESIGN COMPLETE</u>	<u>CONSTRUCTION COMPLETE</u>	<u>LOAD VERIFICATION COMPLETE</u>	<u>STATUS OF VERIFICATION</u>
Primary Containment Wall	10/79	10/81	5/84	100%
Secondary Containment Wall	1/80	12/82	2/85	40%
Pedestal & Drywell Floor	12/79	9/80	4/84	100%
Biological Shield Wall	9/79	7/80	6/85	0%
Primary Containment Liner	11/76	10/81	11/84	10%
Equipment Hatch	9/77	-	12/84	0%
Reactor Mat	12/73	6/77	2/84	100%
1 Pool Area	6/82	2/83	7/85	0%
Primary Containment Steel	6/81	2/82	4/85	33%
Secondary Containment Steel	9/81	6/83	6/85	5%

Design and construction of the above structures is 100% complete.

13h.

Control Room Panel Modifications (PGCC)

The Power Generation Control Complex (PGCC) is a series of General Electric finished control panels that when assembled provide all the control room functions.

PHASE I

Start of PGCC Mid 1973 to April 1979

This was considered the base PGCC. This phase incorporated fire protection and separation requirements for all panels except P606, P608 and P633 for the Reactor Protection and Neutron Monitoring Systems. SWEC issued the "G" series drawings for fabrication of the baseline PGCC design freeze.

PHASE II

April 1979 to April 1982

GE reconstructed and completed the Phase I work.

Four design packages were issued in December 1981 to modify the PGCC; specific design changes were issued from December 1981 to April 1982 to incorporate additional PGCC features. This phase incorporated most TMI items on a best effort basis and represents what was delivered in January 1983. SWEC issued Design Change Notices to the base PGCC design.

PHASE III

April 1982 to Present

This represents the work performed in the field from Design Change Notices.

(Phase IIIA 4/82 - 12/6/83)

Continued implementing SWEC design changes to the base PGCC design.

(Phase IIIB 12/7/83 - 3/1/84)

Incorporated specific SWEC design changes into the base PGCC design.

(ECN-CCP-008, 016	ECN-EGS-002)
(ECN-HVP-014	ECN-CCL-009)

(Phase IIIC 3/1/84 - 6/1/84)

Merged the base PGCC fabrication ("G" series) drawings and SWEC design changes into one set of SWEC Project drawings.

SWEC issued 6000 and 7000 series Design Change Notices for additional design changes.

(Phase IIID 6/1/84 - 9/1/84)

Reviewed SWEC and GE drawings for design consistency (Boundary Identification Package) and issued resulting design changes.

(Phase IIIE 6/1/84 - Present, BOP only)

Issued past Phase IIIC changes to the balance of plant panels.

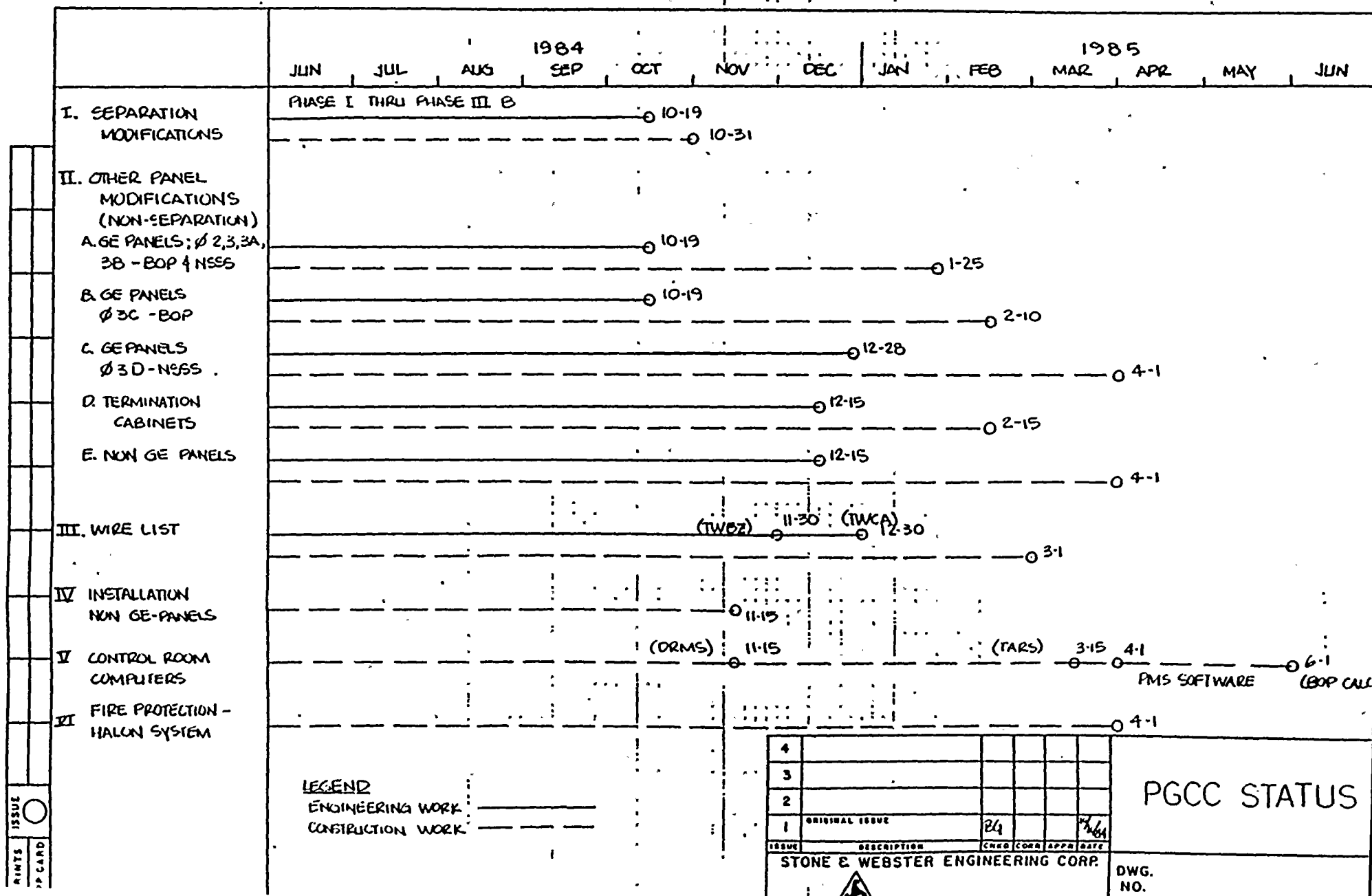
(Phase IIIF 9/1/84 - Present, NSSS only)

No changes implemented.

All design changes are minimal and will be implemented by Phase IIIE or IIIF.

300000

100000



ISSUE
RINTS
P CARD



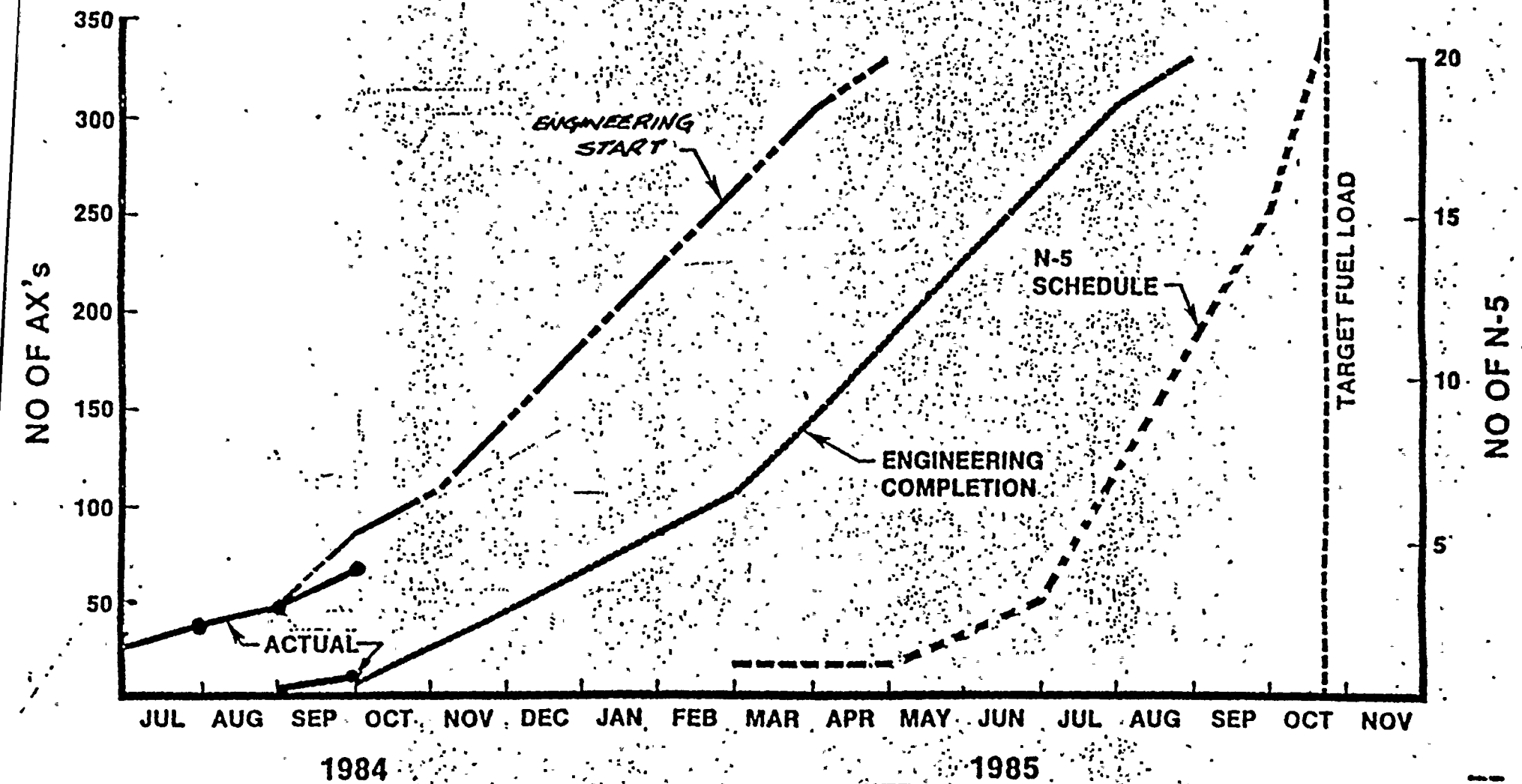
Pipe Stress (As-Built) and Hanger Reconciliation Program

An as-built reconciliation program and engineering work plan has been developed to perform the final stress and support reconciliation based on field verification of the as-built configuration of the Category I piping installations.

The large bore portion of this effort involves 330 AX stress analysis for the 20 piping systems to be qualified. Field submittal of as-built data commenced in July 1984, and engineering completion of the reconciliation effort is scheduled for the end of August 1985.

The status and schedule for completion of this effort is indicated on the attachment. As of September 28, 1984; twenty percent of the reconciliation effort has been initiated with 3 percent being completed.

SCHEDULE



13 j.

N-Stamp Certification Program

The SWEC Quality Assurance and Control Manual - ASME Section III establishes the project requirements for the ASME III N-Stamp Certification Program.

Currently there are 31 ASME III systems requiring N-Stamp certification, as indicated on Attachment 1. The schedule for completion of the N-5 data reports associated with the 20 major systems is indicated on Attachment 2. The additional 11 ASME systems, not shown, require a less extensive effort (i.e., contractor-designed systems, penetrations, small bore only). The first N-5 data report is scheduled to be signed out in February 1985.

N-5 CERTIFICATION

MAJOR SYSTEMS

20

SMALL BORE ONLY

5

CONTRACTOR DESIGNED

2

PENETRATIONS

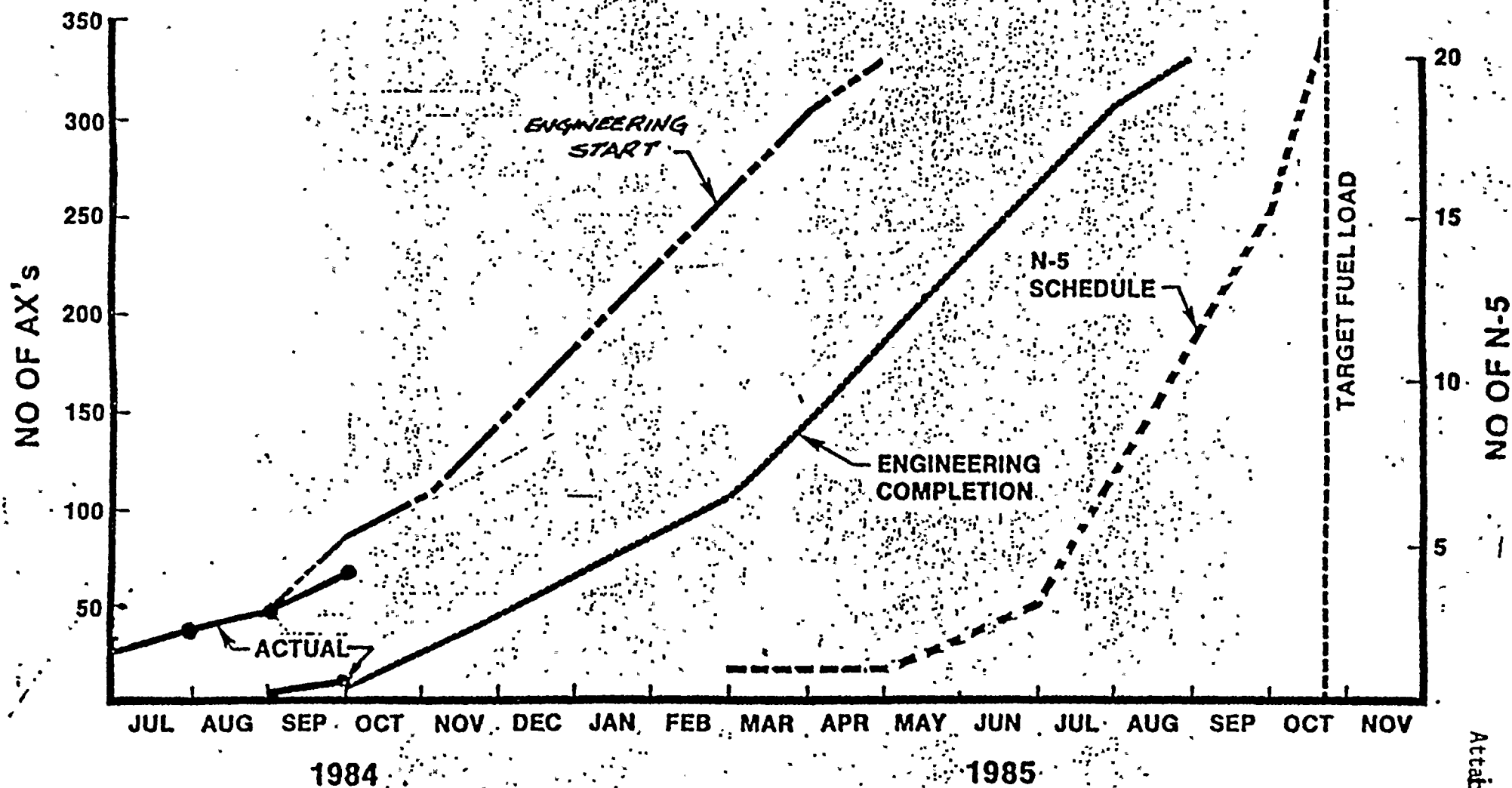
4

TOTAL FOR N-5

31



SCHEDULE



13 k.

As-Built Drawings

Commitment to as-built drawings and documents is addressed in Project Guideline 22 (SWEC Drawings/Documents) and Project Guideline 46 (GE-NSSS Drawings/Documents). These documents are currently in the review and signout cycle.

In summary, the as-built drawing policy is as follows.

Update documents in three phases: at start of preoperational testing (system turnover update - STU); prior to fuel load (fuel load update - FL); and after plant turnover (plant turnover update - PT).

The as-built updates consist of incorporation of issued change documents (E&DCR, N&D, ACNs, etc) into the base document. For STU the scope of document update applies essentially to key engineering diagrams. The FL update scope applies to all QA Category I and Category II Seismic Design drawings (except BZs). The PT update addresses the balance of drawings/documents at the discretion of NMPC.

Scheduling of the STU update has been completed and is in the 1985 workplan. The balance of the as-built drawing effort is in the process of being scheduled.

13. 1 & m Environmental & Seismic Qualification

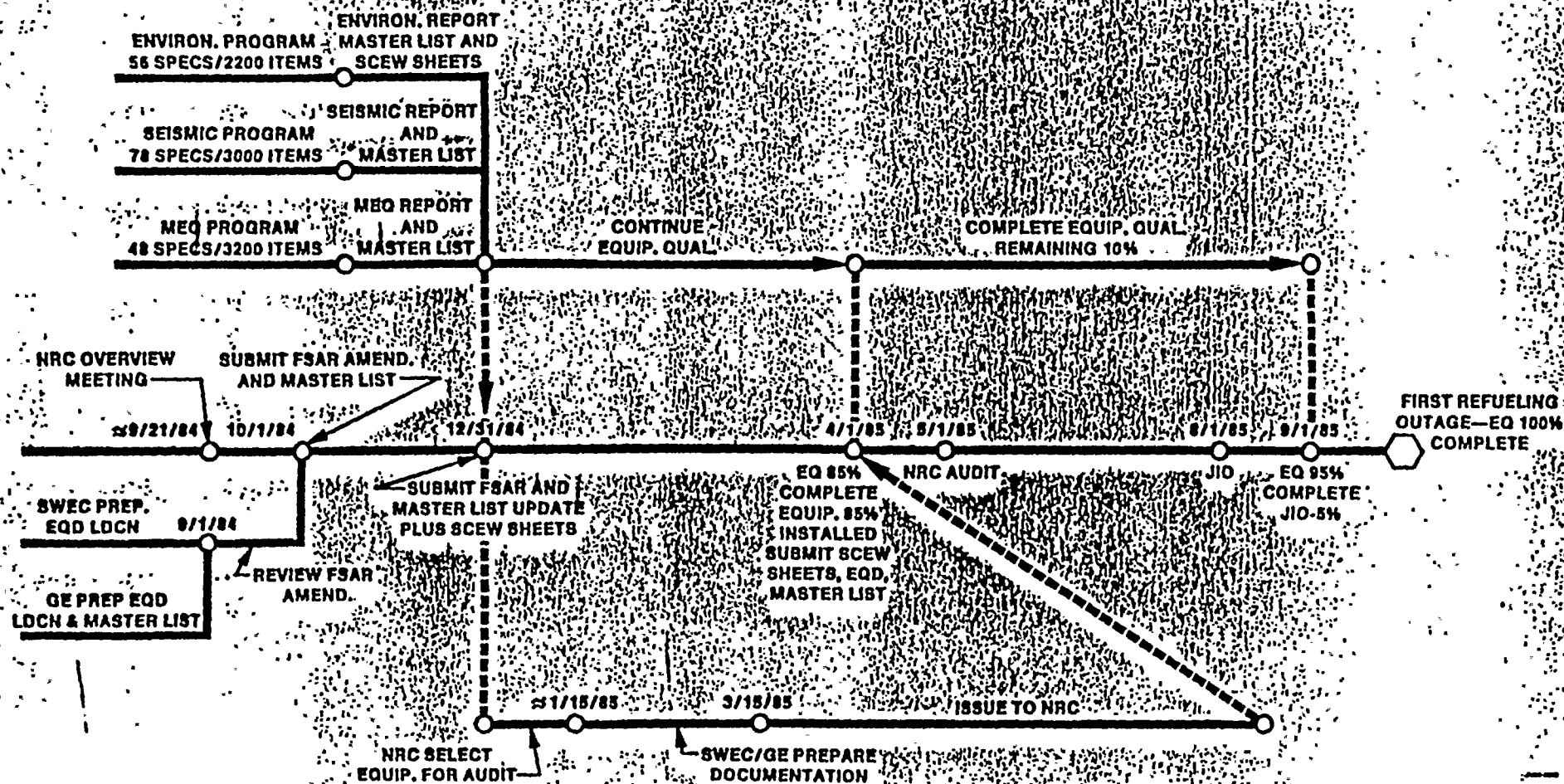
Environmental & Seismic Qualification continues to proceed in accordance with the requirements of the major EQ milestone schedule (Attachment A).

Progress is monitored on an individual specification basis and, more meaningfully, by total component count of components actually qualified versus components required to be qualified; Attachment B shows that status as of August 1, 1984. Attachment C shows the SWEC target plan versus NRC component quantity requirements.

Supportive of the NRC audit of EQ, it is necessary to demonstrate capability to be 85 percent complete with installation of components requiring EQ. Engineering is currently interfacing with Construction to assess an acceptable method of statusing completion of equipment installation from an EQ standpoint.

The potential exists that several components may not have their qualification programs completed by fuel load, and it is expected that these items will be addressed by use of justification for Interim Operation process.

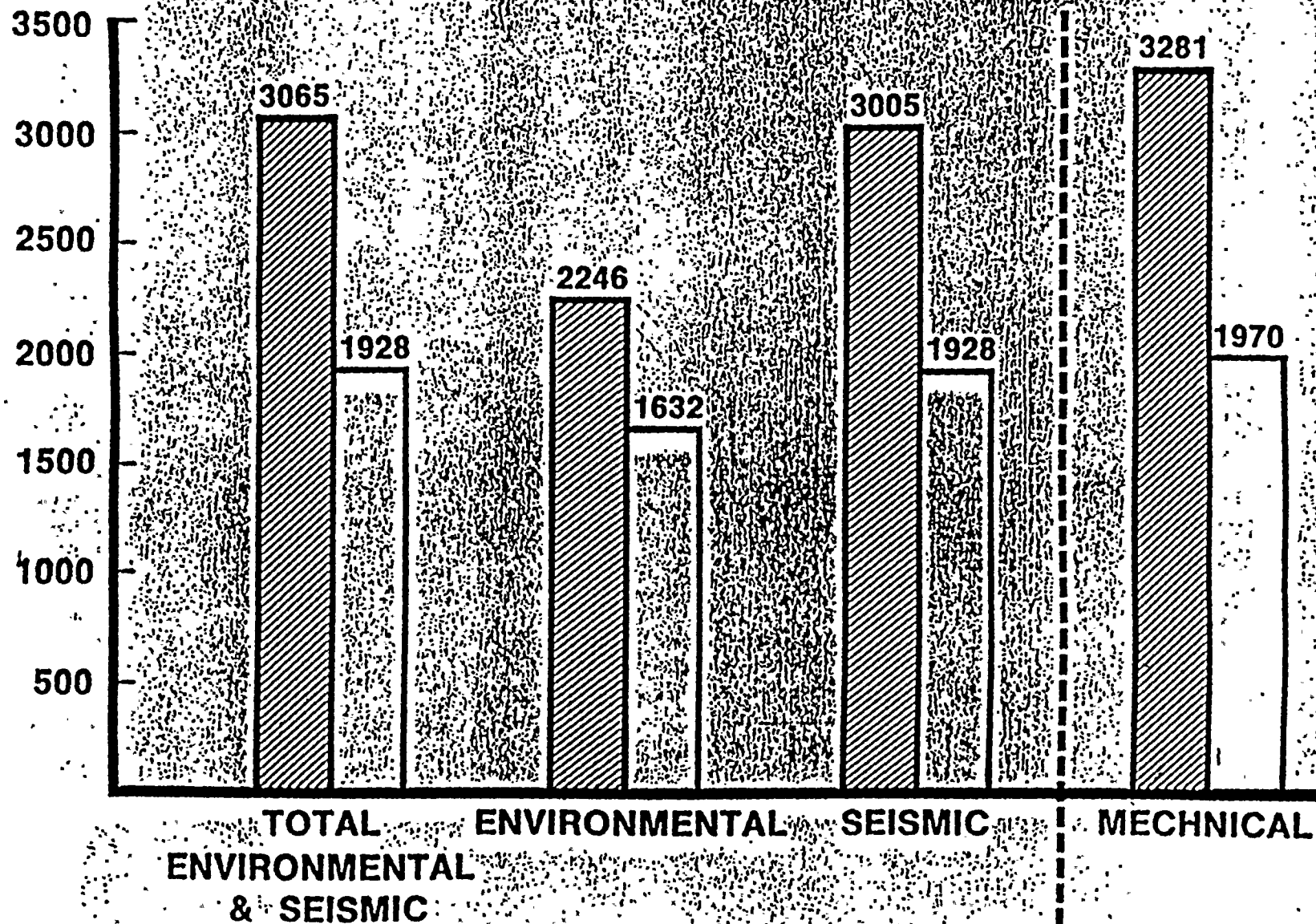
EQUIPMENT QUALIFICATION SUMMARY SCHEDULE



NINE MILE POINT NUC EAR STATION — UNIT 2

EQUIPMENT QUALIFICATION STATUS

SUMMARY AS OF 8/1/84



Attachment B

NUMBER OF COMPONENTS

EQUIPMENT QUALIFICATION

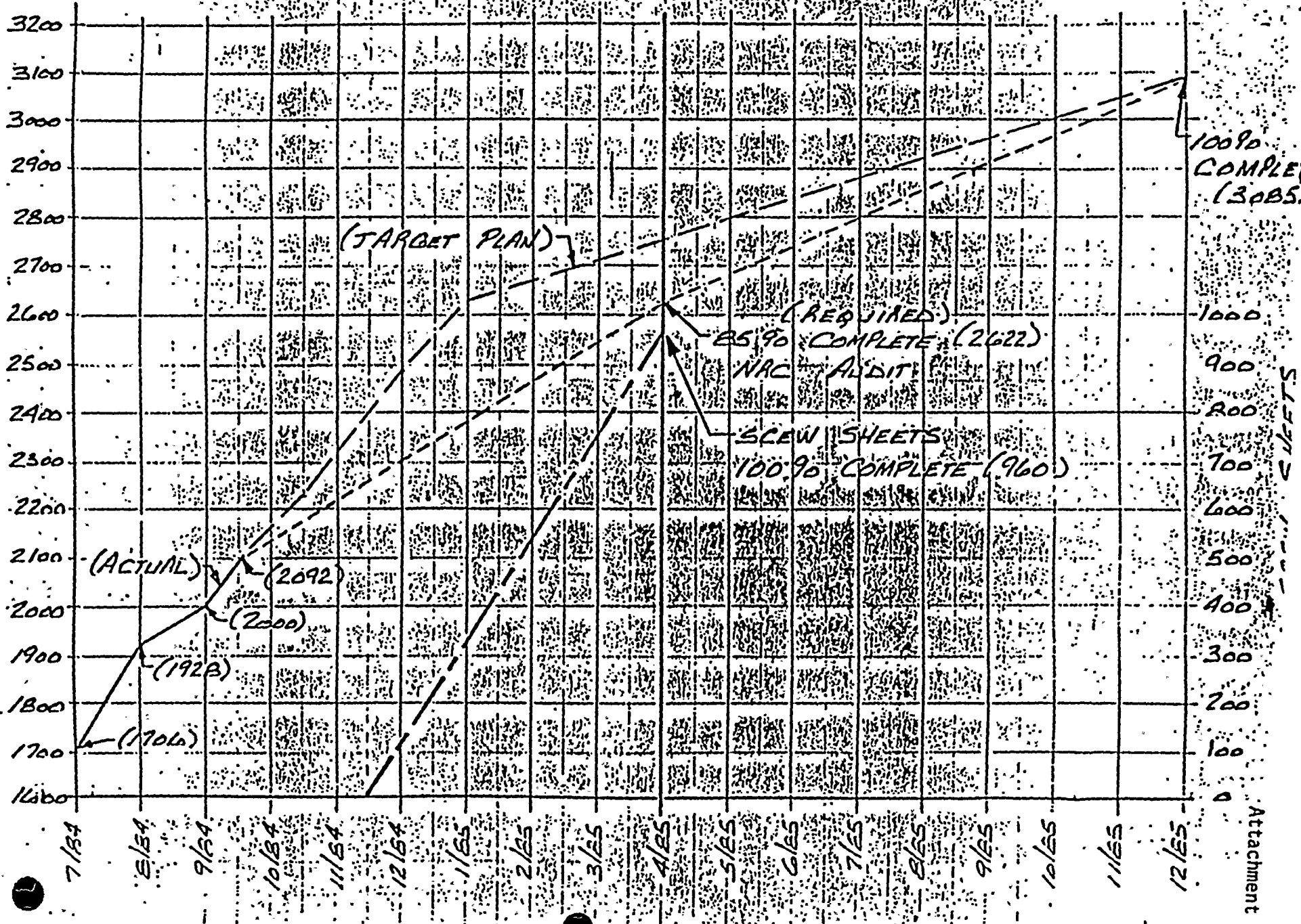
COMPLETION PROJECTION

REQUIRED

Attachment C

--- REQUIRED
--- TARGET PLAN
--- ACTUAL

NUMBER OF COMPONENTS



AGENDA ITEM #14

ITEM:

Detailed review of room/area turnover schedule and status.

CURRENT STATUS:

See data for Item #1.

AGENDA ITEM #15

ITEM:

Projected requests for relief of incomplete items, systems, or test completions at the time of Unit 2 licensing, identifying each.

CURRENT STATUS:

At this time, there is no projection for requests for relief of systems or test completions at the time of Unit #2 licensing.

In regards to incomplete items, at the completion of the test program prior to licensing there will be a list of incomplete and deficient conditions with the plants systems/equipment. These items will be maintained and statused on the Master Work List with their required completion date/milestone. These items will be negotiated with NRC Region I and Resident Inspectors and will become an attachment to the license.

AGENDA ITEM #16

ITEM:

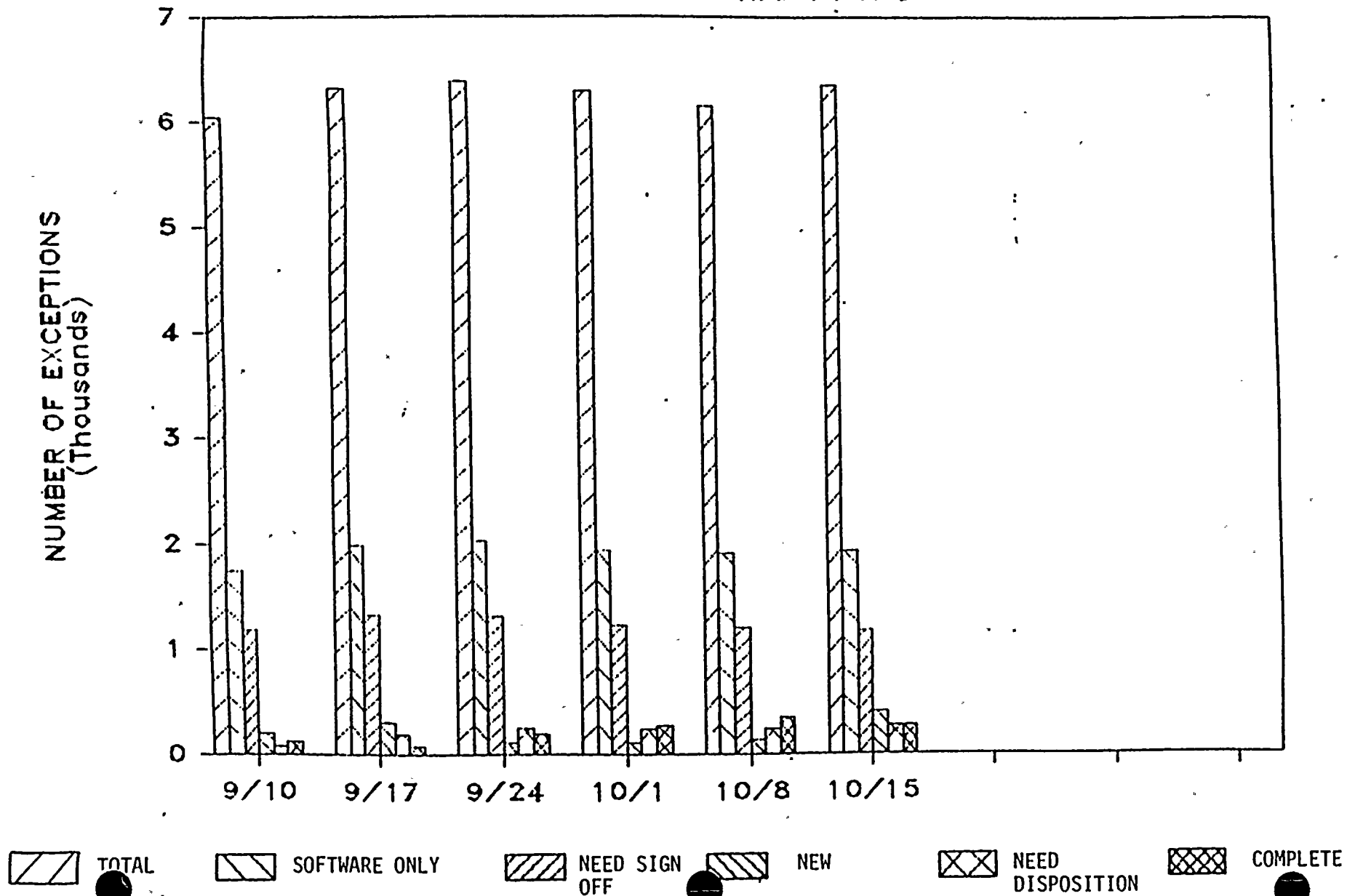
Review of open punch list items by category (hardware/paperwork)
identifying each and work-off rate vs add on rate.

CURRENT STATUS:

See following pages.

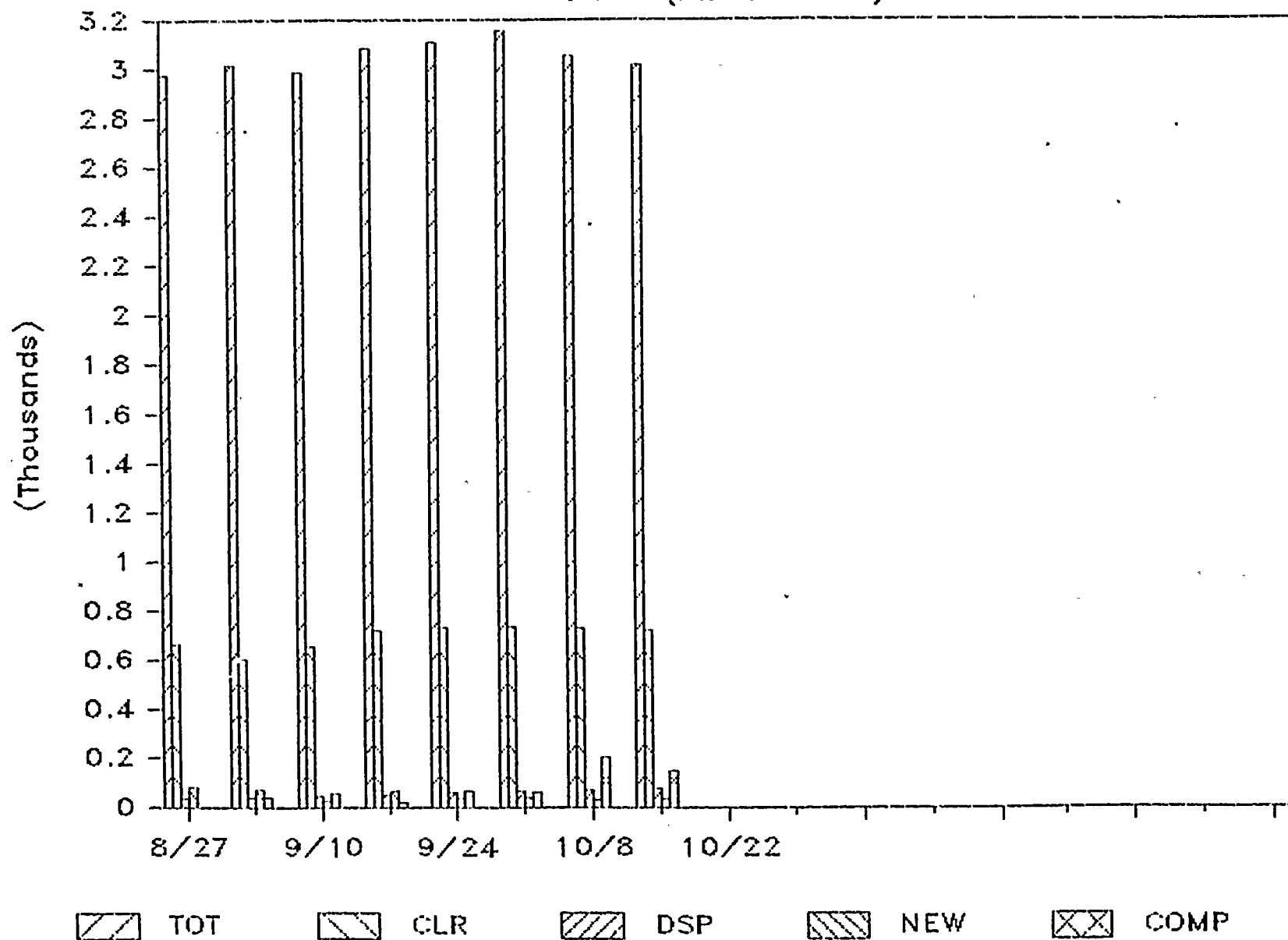
APROVED EXCEPTIONS as of 10/15

81 BIPs OWNED BY AOD



APPROVED EXCEPTIONS as of 10/15

PGCC (BIP 103.001)



PLLOT DATE	9/10	9/17	9/24	10/1	10/8	10/15
TOTAL	6050	6321	6381	6288	6144	6347
NEW	201	297	103	111	127	393
NEED DISPOSITION	71	184	234	230	223	264
NEED SIGN OFF	1182	1310	1305	1218	1186	1167
COMPLETED	115	75	184	267	342	266
TOTAL BIPS OWNED	75	76	78	79	81	81
SOFTWARE ONLY	1736	1977	2022	1931	1892	1914

AGENDA ITEM #17

ITEM:

Status and schedule for Seismic II/I review.

CURRENT STATUS:

See following pages.

The Nine Mile Point 2 Project established a policy of seismically analyzing and supporting non-safety related components in nuclear safety-related areas back in May 1975. A decision was made in June 1977 that all large bore piping in the Primary and Secondary Containment would be designed seismically. Additionally, components in other safety-related areas would be evaluated to determine if they could present a hazard to safety-related items. This policy was formally documented via the issuance of Project Procedure 84 in March 1983 and subsequently revised in June 1984.

The procedure;

1. Defines the boundaries of the safety-related areas
2. Lists the various types of components whose failure must be considered
3. Describes failure methods and assumptions
4. Establishes a method of documenting evaluations resulting in non-seismic design
5. Establishes a check-list of components versus buildings and the corresponding determination
6. Provides for a method of final verification of as-built designs against seismic/non-seismic designs

Not all types of components in each area are seismically pre-designed. In certain cases, for example, sprinkler piping, sanitary and plumbing systems, etc., a decision is made to perform a walk through of the building to determine if seismic supports and/or restraints should be added. These systems cannot be economically initially designed seismically because the contractors are generally responsible for the final routing in the field and changes generally occur during construction, testing and Inspection Agencies' Reviews. The final walk throughs have been initiated; they will be completed prior to building turnovers in the last quarter of 1985. This late finalization is necessary to ensure no non-seismic design components are introduced into safety-related areas without an evaluation being made.

ATTACHMENT 1

GENERAL SEISMIC DESIGN APPROACH FOR CATEGORIES II AND III COMPONENTS IN SAFETY-RELATED AREAS

Codes: S - Seismic Design or Evaluated E - Evaluate Later NA - Not Applicable	Primary Containment	Reactor Building and Aux Bays	Control Room Building	Diesel Generator Building	Screen- well Building (See Attach- ments 5 and 6)	Service Water Tunnels (Att 7)	Main- Steam Tunnels	Elect Tun- nels and Auxiliary Service Building Below 261'	Standby Gas Treatment Building (Attach- ment 8)	Main Stack	Turb Bldg Portion of sl (277'-6") Slab (see Attach- ment 2)
Large Bore Piping	S	S	E	E	E	E	S	E	E	S	E
Fire Protection - Mains and Hose Stations	S	S	E	E	E	NA	NA	NA	E	NA	E
Fire Protection - Sprinkler Piping	E	E	E	E	NA	NA	NA	E	E	NA	E
Fire Protection - CO ₂ or Halon Piping	NA	E	E	NA	NA	NA	NA	NA	NA	NA	E
Domestic Water and Sanitary Piping	NA	NA	E	NA	NA	NA	NA	NA	NA	NA	E
Floor and Equipment Drainage	S	S	E	E	NA	NA	NA	E	E	S	E
Roof Drainage Piping	NA	S	E	E	NA	NA	NA	NA	E	NA	E

Codes: S - Seismic Design or Evaluated E - Evaluate Later NA - Not Applicable	Primary Containment	Reactor Building and Aux Bays	Control Room Building	Diesel Generator Building	Screen- well Building (See Attach- ments 5 and 6)	Service Water Tunnels (Alt 7)	Main- Steam Tunnels	Elect Tun- nels and Auxiliary Service Building Below 261'	Standby Gas Treatment Building (Attach- ment 8)	Main Stack	Turb Bldg Portion of cl (277'-6") Slab (see Attach- ment 2)
Small Bore Piping, Tubing, and Conduit	S	S	S	S	S	S	S	S	S	S	S
Sampling System Tubing	NA	P-Aux Bays E-Balance	NA	NA	NA	NA	NA	NA	NA	NA	E
Ductwork	S	S	S	S	S	NA	*S/E	S	NA	S	E
Hanging Equipment, e.g., unit heaters, lights, coolers	S	S	S	S	S	NA	NA	NA	S	S	E
Cable Trays	S	S	S	S	S	NA	NA	S	S	NA	E
Instrument Panels and Racks	S	S	S	S	S	S	S	S	S	S	S
Structural Components, e.g., platforms, ceilings, partitions, walls, ladders	S	S	S	S	S	S	S	S	S	S	S
Floor-Mounted Equip- ment, e.g., pumps, tanks, HTECHRS, MCCs, SWGR	S	E	E	E	E	NA	NA	E	E	NA	S

*S - East of Impingement Wall

AGENDA ITEM #18

ITEM:

Detailed review and current status of power accession testing procedures and operational procedures.

A. Power ascension test procedures including safety-related and nonsafety-related.

1. Number required
2. Number not started
3. Number in preparation and approval process
4. Number approved.

B. Operating procedures required for fuel loading: including station administrative, station operational, surveillance (e.g., technical specification), maintenance and emergency procedures.

1. Number required
2. Number not started
3. Number in preparation and approval process
4. Number approved

CURRENT STATUS:

See following pages.

QUESTION 18A POWER ASCENSION TEST PROCEDURES - STATUS

<u>Procedure Type</u>	<u>No. Required</u>	<u>No. Not Started</u>	<u>No. In Prep/Approv.</u>	<u>No. Approved</u>
NSSS-Startup Test Proc..	126	116	10	0
BOP-Startup Test Proc.	20	20	0	0
Piping Vib/Therm Expansion Proc.	3	3	0	0

QUESTION 18B OPERATIONAL PROCEDURES - STATUS

<u>Procedure Type</u>	<u>No. Required</u>	<u>No. Not Started</u>	<u>No. In Prep/Approv.</u>	<u>No. Approved</u>
Chem Analysis Procedure	34	2	29	3
Instrument Procedure	20	0	11	9
Counting Rm. Procedure	6	5	1	0
Computer Oper. Procedure	7	7	0	0
Electrical Maint. Procedure	40	40	0	0
Electrical P/M Procedure	55	55	0	0
Electrical Surv. Procedure	10	10	0	0
Fuel Handling Procedure	15	15	0	0
Rx Analysis Procedure	22	22	0	0
I & C Surv. Procedure	780	780	0	0
Oper Surv. Procedure	225	225	0	0
In Service Insp. Procedure	150	150	0	0
Administrative Procedure	33	0	31	2
Tech. Dept. Procedure ISI	30	2	28	0
Startup Admin. Procedure	29	0	24	5

QUESTION 18B OPERATIONAL PROCEDURES - cont.

<u>Procedure Type</u>	<u>No. Required</u>	<u>No. Not Started</u>	<u>No. In Prep/Approv.</u>	<u>No. Approved</u>
Office Instructions	30	0	30 ²⁸	2
Document Cntrl. Instructions	18	18	0	0
Document Cntrl. Computer Proc.	8	8	0	0
Training APNs	17	0	1	16
Operating Procedures	100	13	87	0
Emerg. Oper. Procedures	23	1	22	0
Op's Fire Prot. Procedures	2	0	2	0
Emerg. Plan Proc.	14	14	0	0
Rad. Protection Procedures	11	0	11	22 0
Rad. Tech. Procedures	58	2	55	1
Equip Oper & Calibration Proc.	2	0	2	0
Envir. Proc.	16	2	11	3
Fire Prot. & Detection Proc.	58	54	4	0
Inst. Maint. Procedure	25	19	6	0
Proc. Surv. Procedure	11	0	11	0

QUESTION 18B OPERATIONAL PROCEDURES - cont.

<u>Procedure Type</u>	<u>No. Required</u>	<u>No. Not Started</u>	<u>No. In Prep/Approv.</u>	<u>No. Approved</u>
Sampling Procedure .	11	3	7	1
Maint. Proc.	135	35	100	0
Prev. Maint. Procedure	60	55	5	0
Maint. Surv. Procedure	15	13	2	0

AGENDA ITEM #19

ITEM:

Detailed review and current status of permanent station and support staffing, training and licensing.

- a. Staffing for Unit 2 operation, including presently employed, projected and authorized for each group reporting to the Vice President Nuclear.
- b. Staffing of Nine Mile Point (Unit 2) station organization including presently employed or contracted, projected, and authorized for each organizational subgroup.
- c. Training program: outstanding training courses required prior to fuel load; identifying job titles, numbers of personnel, and projected completion.
- d. Operator and senior operator licenses presently onsite, contracted, projected, and required for fuel loading.

CURRENT STATUS:

See following pages.



- 19a. Nuclear Engineering and Licensing - Staffing for Unit 2 operation, including presently employed, projected and authorized.

Presently there are approximately ninety (90) full-time engineers employed by Niagara Mohawk that are assigned to the design, licensing, construction and start up of Nine Mile Point Unit 2. As the need for this support tapers off, most of these engineers will be transferred to the Engineering Department or Operations Department for permanent responsibilities in support of Unit 2 operation.

A comprehensive 10 year plan has also been developed for expanding the Nuclear Engineering and Licensing Department staff for Unit 2 operation support. The plan is to build up our in-house engineering staff to support 30 percent of the Unit 2 project workload by 1988 and 50 percent by 1993. This plan is approved by Niagara Mohawk top management.

The capability of the Engineering staff for Unit 2 operation will cover the full spectrum of disciplines including licensing, fuels, operations assessment, scheduling, cost control, project management, health physics and senior engineering specialists of various disciplines. A substantial design group is also planned and will include multi-disciplined groups of engineers, designers and drafting technicians.

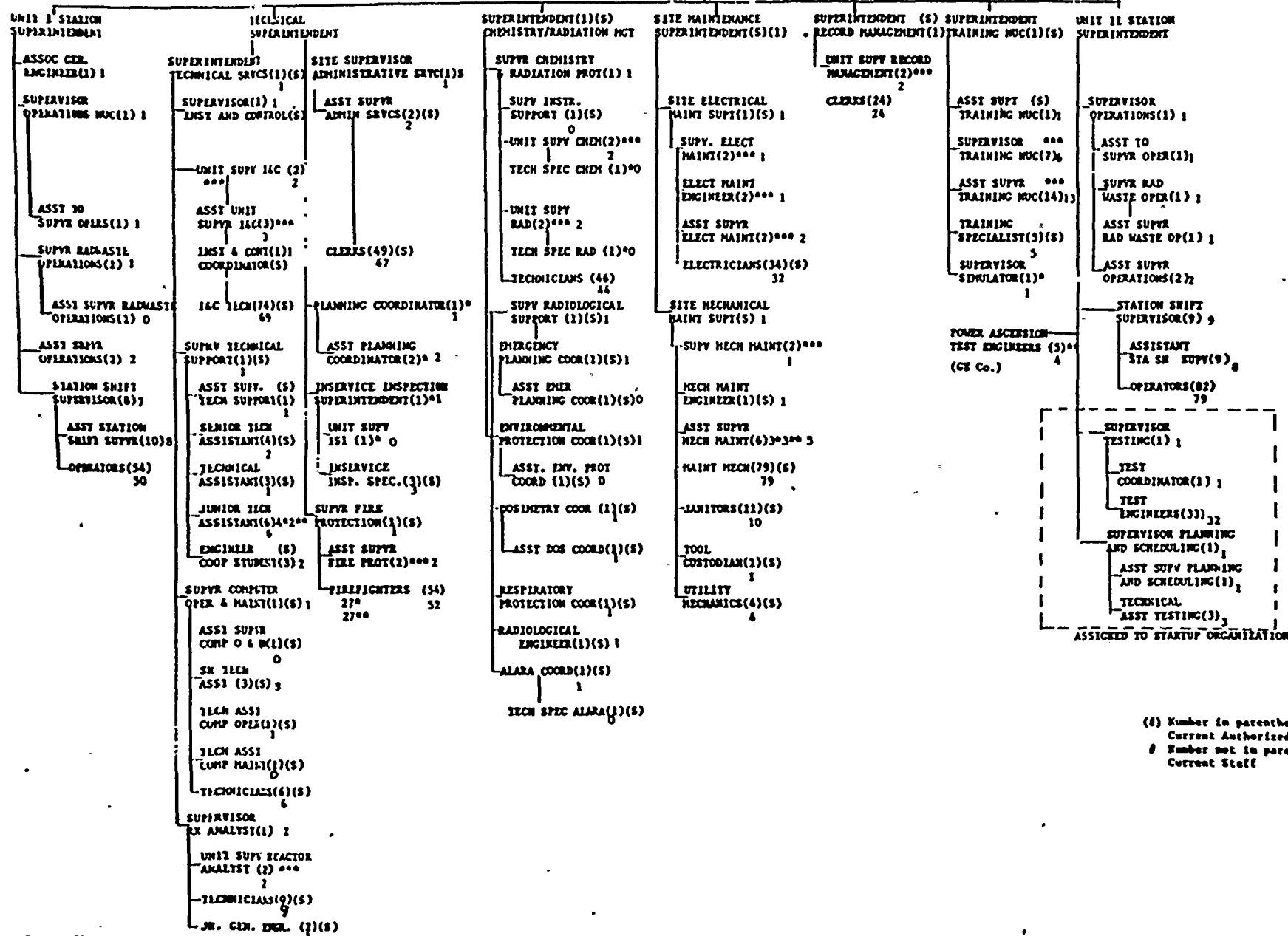
As in the past, Niagara Mohawk will continue the use of outside consultants and architect/engineering firms to supplement the in-house staff as required to support Unit 2 operations.

TRIAL SUPERINTENDENT - NUCLEAR

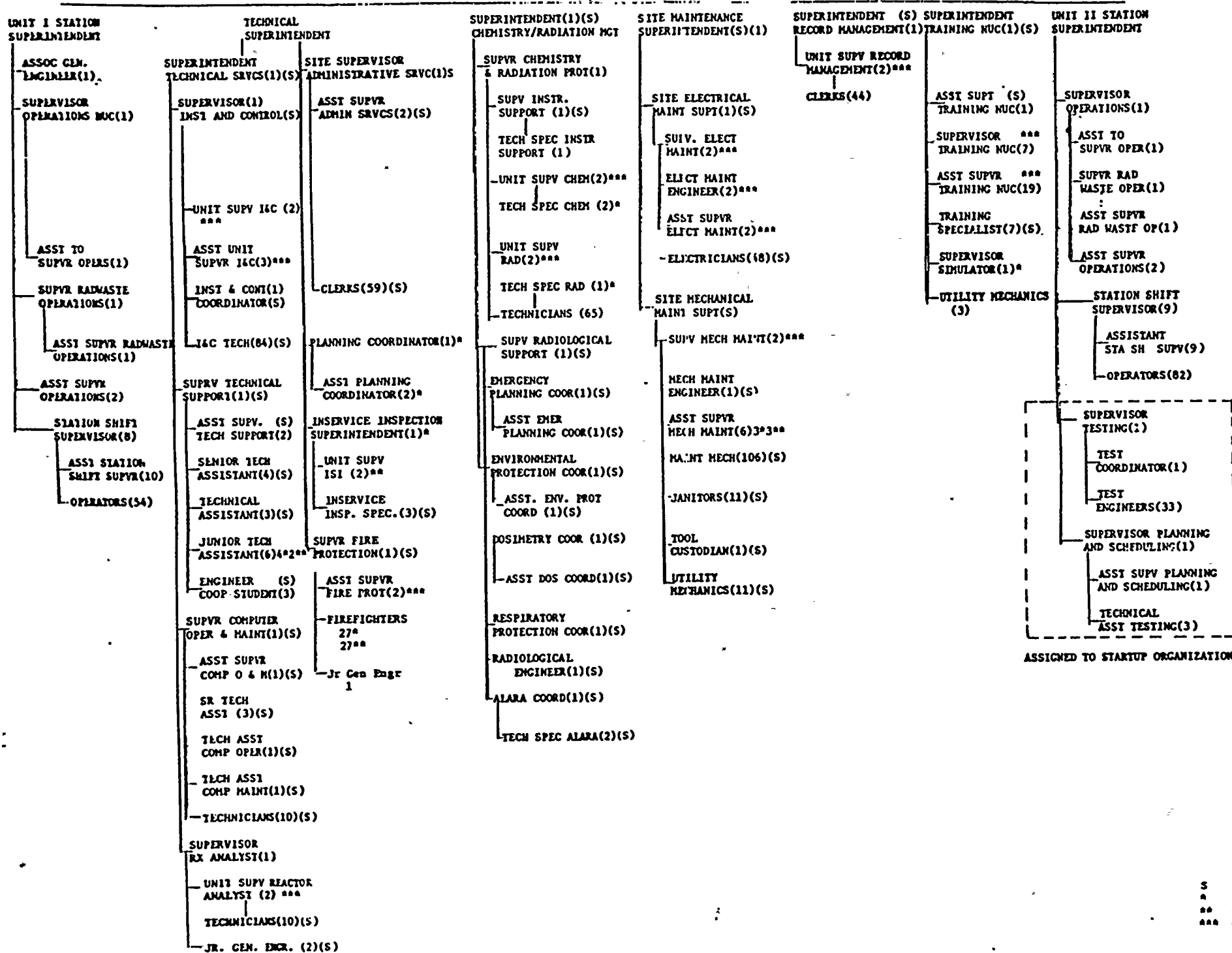
SECRETARY

ADMINISTRATIVE ASSISTANT

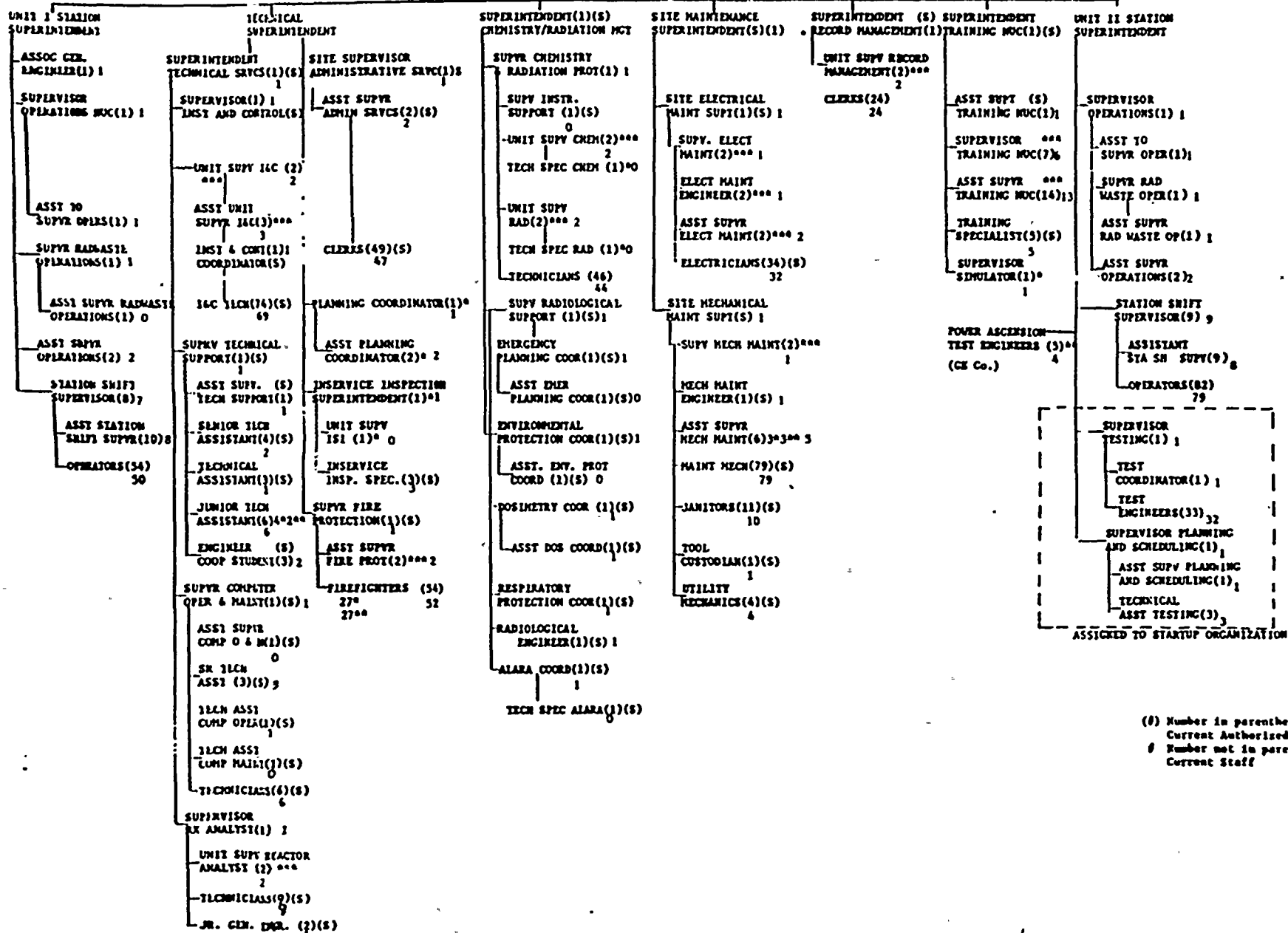
ADMINISTRATIVE ASSISTANT UNIT 11 SP. PROS.



(1) Number in parenthesis denotes
Current Authorized Positions
0 Number not in parenthesis denotes
Current Staff



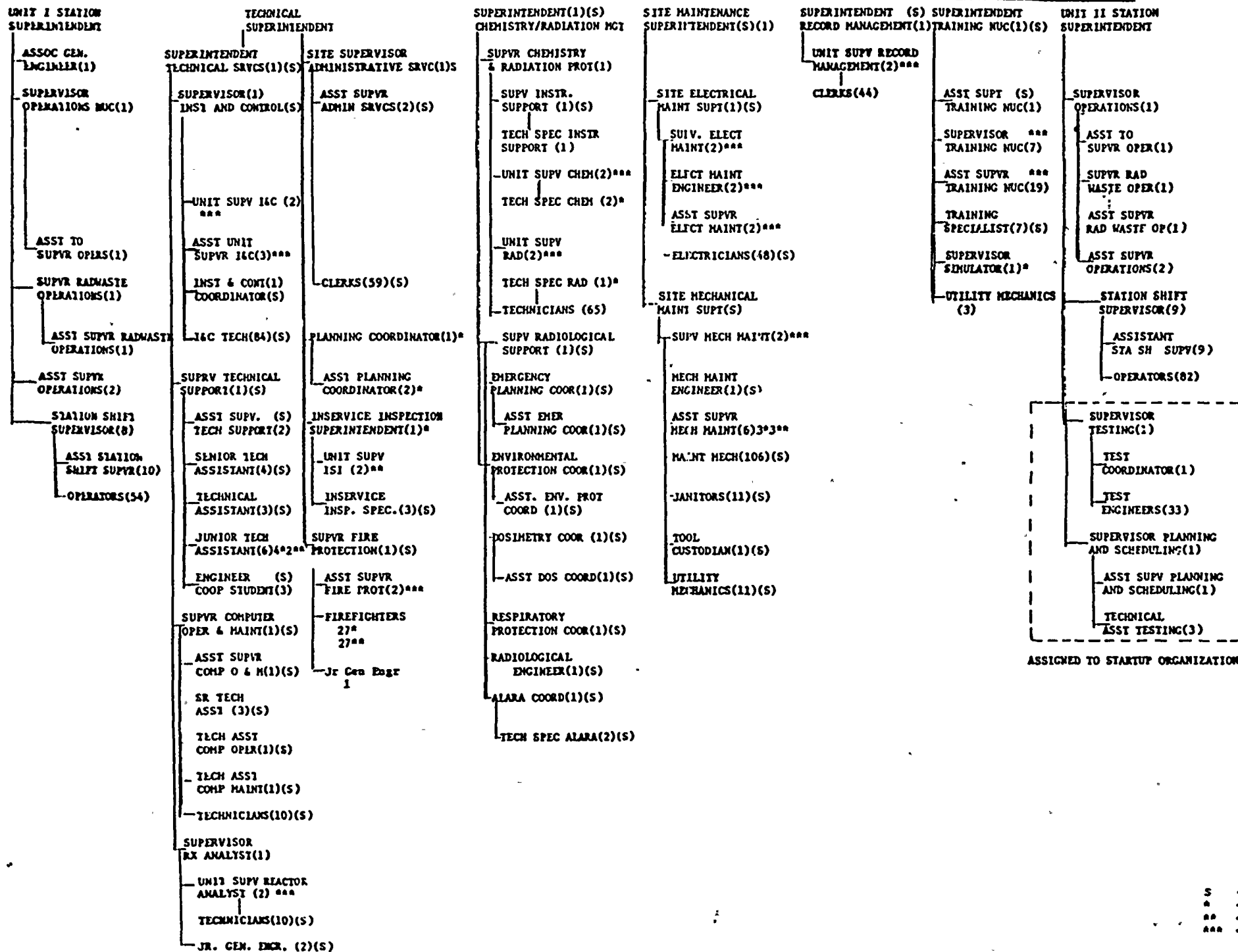
GENERAL SUPERINTENDENT - NUCLEAR
 SECRETARY
 ADMINISTRATIVE ASSISTANT
 ADMINISTRATIVE ASSISTANT UNIT II SP. PROS.



(S) Number in parenthesis denotes
 Current Authorized Positions
 # Number not in parenthesis denotes
 Current Staff

S - Site
 0 - KNP Unit 1
 00 - KNP Unit 2
 000 - 1 at Unit 1
 2 at Unit 2





QUESTION 19C TRAINING PROGRAMS REQUIRED FOR FUEL LOAD

1. Reactor Operator/Senior Reactor Operator Licensing Program

See Question 19d.

2. General Employee Training

General Employee Training (GET) will be conducted for all site personnel when the Site Security Plan (extension of 9MP#1) is implemented. The date of implementation is not yet determined.

GET will be conducted for those personnel with access to nuclear fuel when it is delivered to the Site (mid 1985).

3. Fuel Handling Training

- a. Training in fuel receipt, inspection and storage will be conducted for Maintenance mechanics (approximately 20) and Radiation Protection technicians (approximately 10) prior to receipt of nuclear fuel.
- b. Training in in-core detector installation and maintenance will be conducted for Instrument and Control technicians (approximately 35). The schedule for this training is not yet determined.
- c. Training in fuel handling and loading will be conducted for Operations personnel as part of the licensed operator training program.

4. Fire Protection Training

The Fire Protection training program commenced in August 1984 and will continue to April 1985. This program is being conducted for 27 nuclear fire-fighters, and includes all aspects of 9MP2 commitments to Appendix R training requirements.

CURRENTLY SCHEDULED COLD LICENSE CLASSES

CLASS 1 - JANUARY 1985

REACTOR OPERATOR

1. D RICHARDS	CSO *
2. M GARRUS	CSO *
3. J BURR	CSO *
4. R GREEN	CSO *
5. R MURRAY	CSO *
6. D. KINNEY	CSO *
7. F CONAWAY	CSO *
8. W WITHERELL	CSO *
9. J MCANDREW	AOE *
10 M CHURILLA	AOE *
11 R BERGENSTOCK	AOE *
12 R BIGELOW	AOE *

SENIOR OPERATOR

1. A ANDERSEN	SSS	**
2. M COLOMB	SSS	**
3. M JONES	OS	**
4. J HELKER	ASSS	
5. J KIBBE	SSS	**
6. A DEGRACIA	SSS	*
7. J CONWAY	OXANAL	**
8. H BARRET	TECSEK	**
9. W DREWS	TECSEK	**
10 G WEIMER	TRAIN	
11 J KAMINSKI	TRAIN	
12 D WILSON	ASSS	

CLASS 2 - JUNE 1985

REACTOR OPERATOR

1. R SPOONER	AOE *
2. D NEWMAN	AOE *
3. E DAVIS	AOB
4. R BULLOCK	AUF *
5. D LOMDER	AOE *
6. D HOLT	AOE *
7. B TESORIERO	AOE *
8. M CARSON	AOE *
9. M CONWAY	AOE *
10 J GRAFF	AOE *
11 J LAWRENCE	AOB
12 R BOUTELL	AOE *

SENIOR OPERATOR

1. E TOWNSEND	SSS	**
2. G MOYER	SSS	**
3. R GAYNE	AOS	**
4. D TIPLEY	SSS	**
5. B BOUCIER	ASSS	**
6. A DENNY	ASSS	*
7. G SANFORD	ASSS	**
8. G CORBIN	TRAIN	
9. D FITCH	TRAIN	
10 M DOOLEY	TRAIN	
11 H COLLINS	TRAIN	
12 R SMITH	RXANA	**

CLASS 3 - NOVEMBER 1985

REACTOR OPERATOR

1. G PITTS	AOB *
2. D RATHBUN	AOE *
3. S DAVIS	AOE *

SENIOR OPERATOR

1. W DAVEY	SSS	**
2. J MANCUSO	ATOS	*
3. J POINDEXTER	SSS	**
4. W WAMBSGAN	AOS	**
5. D CARSON	ASSS	
6. D RANALLI	ASSS	
7. E GENOVA	ASSS	
8. K ZOLLITSCH	TRAIN	**
9. W PICCIRILLI	ASSS	

* CURRENT RO LICENSE-NMP UNIT 1
 ** CURRENT SRO LICENSE-NMP UNIT 1
 # SRO CERTIFICATION GE 3#R

MINIMUM REQUIRED LICENSES FOR FUEL LOAD - 5 SHIFT ROTATION

RO - 10
 SRO - 11

AGENDA ITEM #20

ITEM:

Detailed review and current status of work to be performed in response to the CAT audit concerns (include actions in response to ORDER).

CURRENT STATUS:

See following pages.

NRC Caseload Forecast
Agenda Item #20 - CAT Audit

I. Action Plans - Licensee

A. All Action Plans (i.e. Corrective/Preventive Action) completed including:

1. Specific Action Plans (NRC Identified Items)
2. Generic Action Plans (NMPC/SWEC Management)
3. Response Commitments
4. Verifications
 - a. NM QA
 - b. NM NCV

B. Closure

1. Preparation of Documentation Packages to support NRC CAT Report Item breakdown.
 - a. 120 issues being tracked by NRC
 - b. 97 packages in preliminary form
 - c. Work remaining
 1. Review/complete packages
 2. Evaluation and verification as required.
2. Submitted to NRC Resident Inspector for review and closure.

II. Actions in Response to Order

A. (MAC) Independent Assessment

1. Three interim phase reports issued.
 - a. Phase I - CAT audit findings
 - b. Phase II - SALP Report findings
 - c. Phase III - NMPC findings

2. Final report due on or before 12/18/84.
 - a. Complete assessment of each phase including Phase IV - Contractor findings
 - b. Summary and Conclusions to tie the four phases together.
3. Assessment Ratings/Status
 - a. Satisfactory - item complete, no further activity required.
 - b. Satisfactory with Recommendations - item complete with recommendations for more effective courses of action.
 - c. Unsatisfactory - item incomplete or corrective action ineffective, and a deficiency document issued.
 - d. Status

	<u>Total*</u>	<u>Reviewed to date</u>	<u>Sat</u>	<u>Sat w/Rec.</u>	<u>Unsat</u>
Phase I	66/59	38	17	15	6
Phase II Viol.	28	25	19	5	1
CDR	61	13	12	1	0
Phase III	216/200	169	125	40	4

*Actual total/number to be reviewed - Certain items in the "actual total" may be non-safety related, duplicated by or combined with another item and will not be reviewed.

4. NMPC activity required.
 - a. Respond to recommendations made
 - b. Track resolution of deficiency documents (issued based on Unsatisfactory ratings)
 - c. Incorporate results of a) and b) in Documentation packages as appropriate for presentation to NRC Resident Inspector (Phase I and II only)
5. Follow up on areas where sampling failed.

B. Quality Construction Performance Monitoring

1. PG 91 drafted "Quality Performance Management Program Implementation"
2. Program implemented
3. Process ongoing

C. Independent Third Party Appraisal - Future

