NUCLEAR REACTOR REGULATION
AND
REGION IV VISIT TO
WOLF CREEK GENERATING STATION,
UNIT NO. 1

May 10, 1984

WOLF CREEK AGENDA

NRR/RIV VISIT

May 10, 1984

12:30 - Arrive at Wolf Creek

- Introductory Remarks - Admin Bldg

  •Koester
  •Denton
  •Collins

1:00 - 2:30 - KG&E Presentations

•Staffing and Experience - Rhodes

•Project Status - Duddy

- Construction
- Pre-Op Testing
- Projected Schedule for Completion of Construction and Testing
- Comparison with Callaway's Completed Milestones

•Benefits from Standardization and Standard Design Concept - Johnson

•Project Quality - Grant

•Other Regulatory and Technical Issues - Rathbun

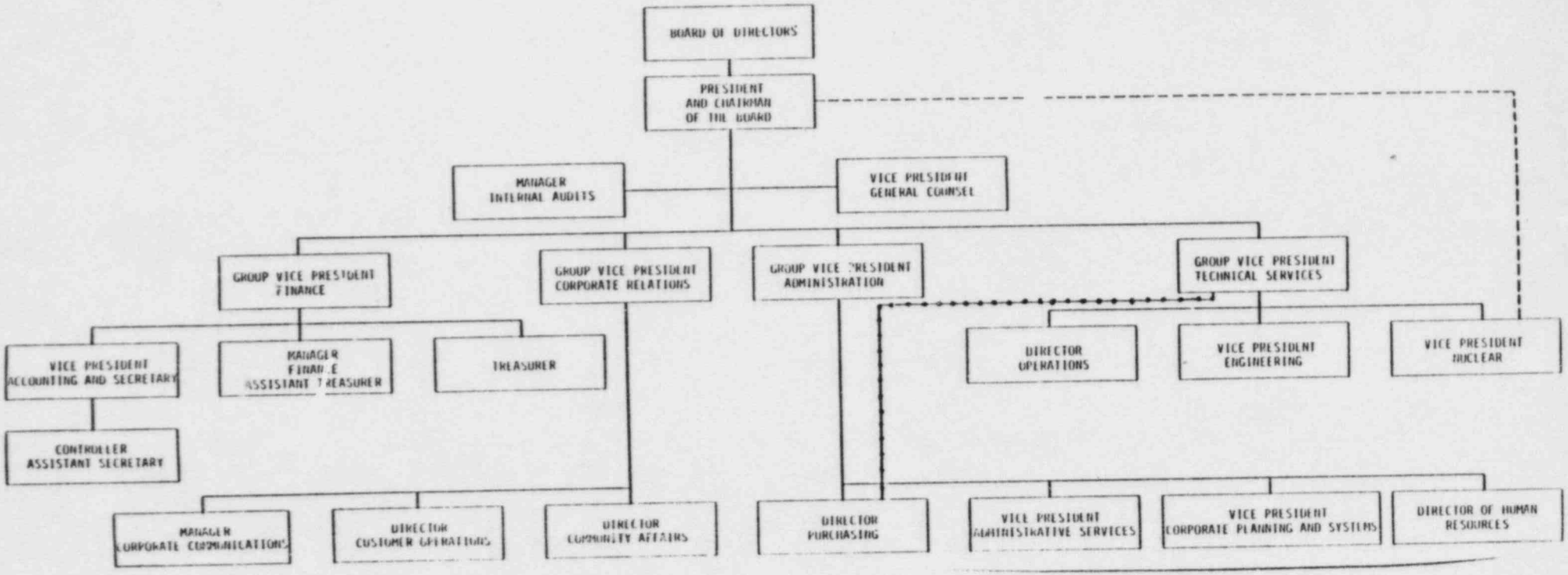
2:30 - 3:30 - Plant Tour - Fouts

3:30 - 4:00 - NRC Internal Discussion

4:00 - Closing Remarks

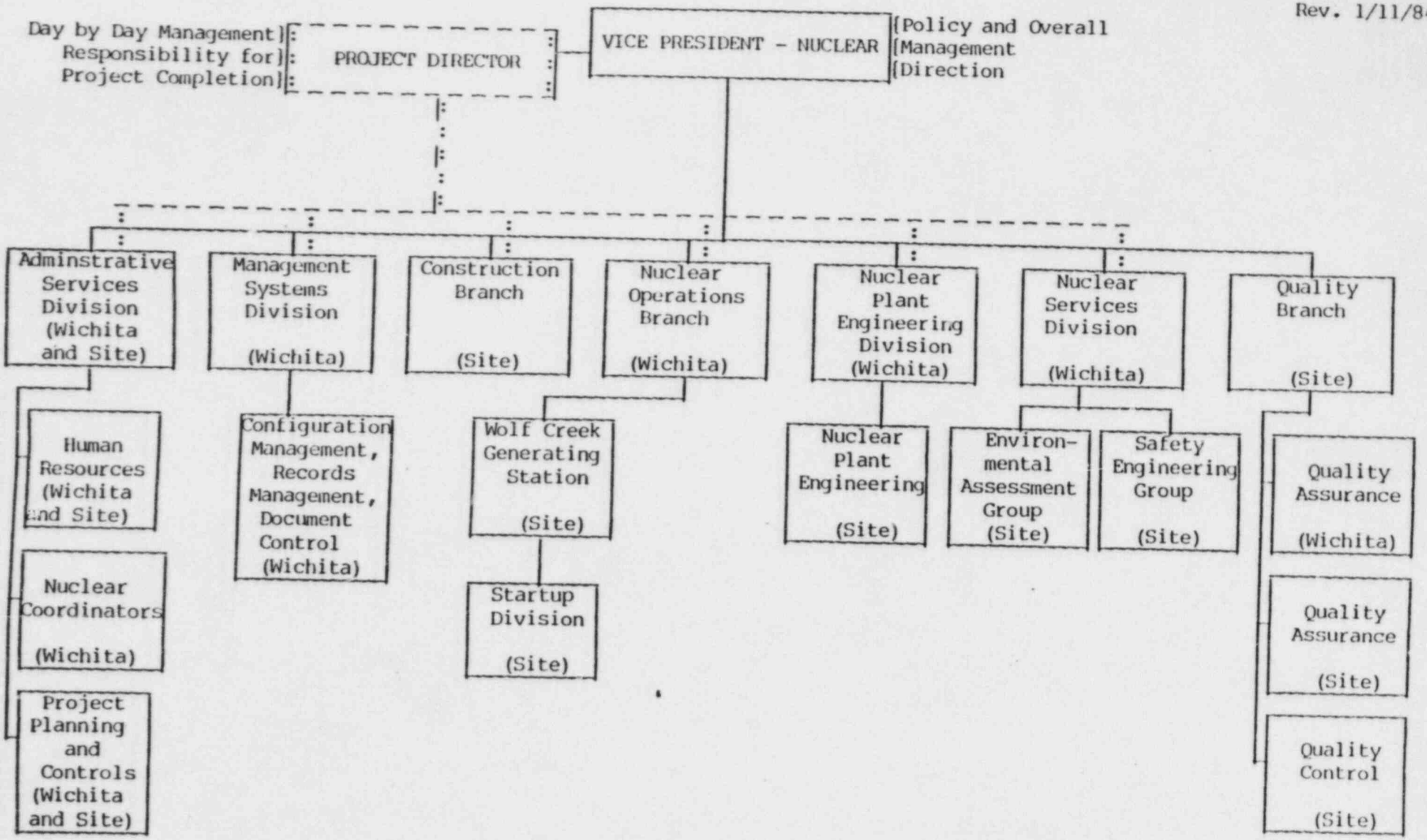
OVERVIEW

Glenn Koester


BOARD OF DIRECTORS
PRESIDENT AND CHAIRMAN OF THE BOARD
MANAGER INTERNAL AUDITS
VICE PRESIDENT GENERAL COUNSEL
GROUP VICE PRESIDENT FINANCE
GROUP VICE PRESIDENT CORPORATE RELATIONS
GROUP VICE PRESIDENT ADMINISTRATION
GROUP VICE PRESIDENT TECHNICAL SERVICES
VICE PRESIDENT ACCOUNTING AND SECRETARY
MANAGER FINANCE ASSISTANT TREASURER
TREASURER
DIRECTOR OPERATIONS
VICE PRESIDENT ENGINEERING
VICE PRESIDENT NUCLEAR
CONTROLLER ASSISTANT SECRETARY
MANAGER CORPORATE COMMUNICATIONS
DIRECTOR CUSTOMER OPERATIONS
DIRECTOR COMMUNITY AFFAIRS
DIRECTOR PURCHASING
VICE PRESIDENT ADMINISTRATIVE SERVICES
VICE PRESIDENT CORPORATE PLANNING AND SYSTEMS
DIRECTOR OF HUMAN RESOURCES

NUCLEAR DEPARTMENT ORGANIZATION

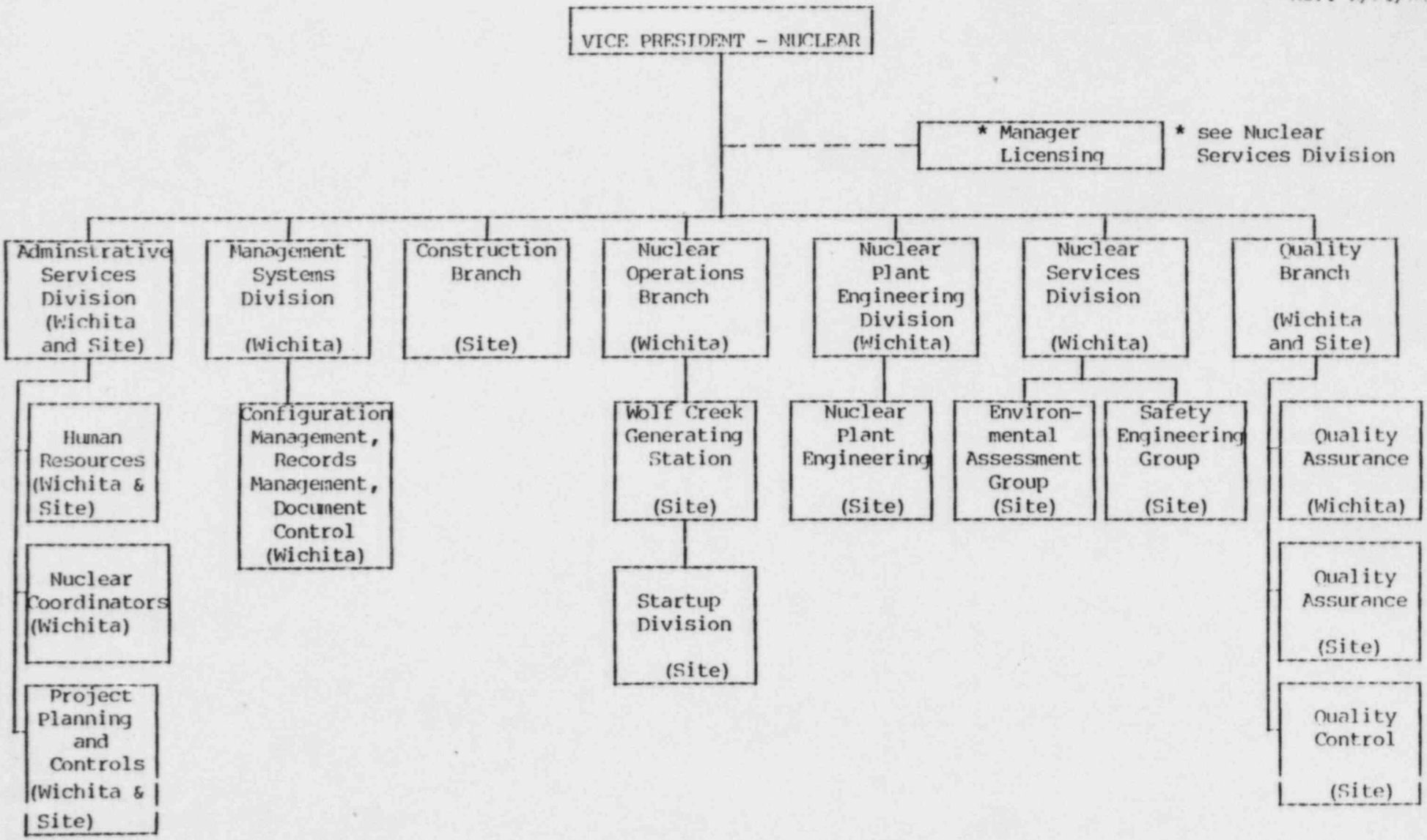
Rev. 1/11/84



Supersedes Organization Chart dated 12/12/83

NUCLEAR DEPARTMENT ORGANIZATION

Rev. 2/21/84



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Supersedes Organizational Chart dated 1/11/84

WICHITA BASED POSITIONS

Division/Branch	Authorized Prof.	& Clerk	= Total
HEADQUARTERS STAFF	1	1	2

ADMINISTRATIVE SERVICES HEADQUARTERS

Division/Branch	Authorized Prof.	& Clerk	= Total
Admin. Services Headquarters	-	-	-
Human Resources	1	1	2
Nuclear Coordinator	2	2	4
Proj. Plan and Controls	10	3	13
ADMIN. SERVICES HEADQUARTERS	**13**	**6**	**19**

MANAGEMENT SYSTEM

Division/Branch	Authorized Prof.	& Clerk	= Total
Management System	1	1	2
Configuration Management Control	10	-	10
Records Management	1	14	15
Document Control Section	2	29	31
MANAGEMENT SYSTEM	**14**	**44**	**58**

WICHITA BASED POSITIONS
(continued)

NUCLEAR PLANT ENGINEERING

Division/Branch	Prof.	Authorized & Clerk	= Total
Nuclear Plant Engineering	1	-	1
Administrative Support	4	8	12
Fluid Systems Engr.	13	-	13
Electrical Systems Engr.	18	-	18
Comp. &. Comm Systems Engr.	12	-	12
Facilities Engr. & Analysis	11	-	11
Nuclear Design	26	3	29
NUCLEAR PLANT ENGINEERING	**85**	**11**	**96**

NUCLEAR SERVICES

Division/Branch	Prof.	Authorized & Clerk	= Total
Nuclear Services	1	-	1
Licensing	14	1	15
Nuclear Safety	6	-	6
Nuclear Fuel Engr.	11	-	11
Radiological Environ. Asses.	11	8	19
NUCLEAR SERVICES	**43**	**9**	**52**

WICHITA BASED POSITIONS
(continued)

QUALITY BRANCH

Division/Branch	Authorized Prof.	& Clerk	= Total
Quality Branch	-	-	-
Quality Assurance Headquarters	9	2	11
QUALITY BRANCH	9	2	11

NUCLEAR OPERATIONS HEADQUARTERS

Division/Branch	Authorized Prof.	& Clerk	= Total
NUCLEAR OPERATIONS HEADQUARTERS	8	3	11

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TOTAL WICHITA BASED POSITIONS	178	76	254

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WOLF CREEK STATION POSITIONS (excluding Security)

Division/Branch	Authorized Prof.	& Clerk	= Total
PLANT HEADQUARTERS	1	1	2

OPERATIONS

Division/Branch	Authorized Prof.	& Clerk	= Total
Operations	1	1	2
Other Staff Supprot	4	-	4
SRO	13	-	13
RO	20	-	20
NSO	17	-	17
Cadet Tech.	6	-	6
Utility Helpers	7	-	7
OPERATIONS	68	1	69

MAINTENANCE

Division/Branch	Authorized Prof.	& Clerk	= Total
Maintenance	1	1	2
Other Staff Support	8	-	8
Mechanical	36	-	36
Building Service	6	-	6
Electrical	16	-	16
Utility Maintenance	4	-	4
Warehouse	8	-	8
MAINTENANCE	79	1	80

WOLF CREEK STATION POSITIONS (excluding Security)
(continued)

ADMINISTRATIVE SERVICES

Division/Branch	Prof.	Authorized & Clerk	= Total
Administrative Services	1	1	2
Other Staff Support	3	-	3
Administrative Section	1	2	3
Admin Processing	-	2	2
Funds & Exp Processing	-	2	2
PSRC/JTG	-	2	2
Reg. Invoice Ins Processing	-	2	2
Sta Admin Support	-	4	4
OPS/Site Support	-	11	11
Procedures & Word Processing	-	3	3
Record Management/Document Control	1	-	1
Record Management	-	16	16
Document Control	-	14	14
ADMINISTRATIVE SERVICES	**6**	**59**	**65**

TECHNICAL SERVICES

Division/Branch	Prof.	Authorized & Clerk	= Total
Technical Support	1	1	2
Instrument & Control	59	-	59
Chemistry	25	-	25
Health Physic	31	-	31
Computer	25	-	25
Reactor Engineering	3	-	3
TECHNICAL SUPPORT	**144**	**1**	**145**

WOLF CREEK STATION POSITIONS (excluding Security)
(continued)

PLANT SUPPORT

Division/Branch	Prof.	Authorized & Clerk	= Total
Plant Support	1	1	2
Fire Protection	1	-	1
Results Engineering	11	-	11
Startup Results Engineering	20	-	20
PLANT SUPPORT	**33**	**1**	**34**

TRAINING

Division/Branch	Prof.	Authorized & Clerk	= Total
Training	1	-	1
Simulator Training	3	-	3
	14	-	14
TRAINING	**18**	**-**	**18**

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TOTAL WOLF CREEK POSITION	**349**	**64**	**413**

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WICHITA SITE BASED POSITIONS

ADMINISTRATIVE SERVICES SITE

Division/Branch	Prof.	Authorized & Clerk	= Total
Admin. Services Site	1	-	1
Human Resources	1	4	5
Proj. Plan and Controls	7	1	8
ADMIN. SERVICES SITE	9	5	14

NUCLEAR PLANT ENGINEERING

Division/Branch	Prof.	Authorized & Clerk	= Total
Nuclear Plant Engineering	-	-	-
Nuclear Plant Engineering (Site)	6	-	6
NUCLEAR PLANT ENGINEERING	6	-	6

NUCLEAR SERVICES

Division/Branch	Prof.	Authorized & Clerk	= Total
Nuclear Services	-	-	-
Licensing	2	-	2
Nuclear Safety	5	-	5
Radiological Environ. Asses.	6	-	6
NUCLEAR SERVICES	13	-	13

WICHITA SITE BASED POSITIONS
(continued)

QUALITY BRANCH

Division/Branch	Prof.	Authorized & Clerk	= Total
Quality Branch	1	1	2
Quality Assurance (Site)	24	3	27
Quality Control (Site)	14	-	14
QUALITY BRANCH	39	4	43

NUCLEAR OPERATIONS SITE

Division/Branch	Prof.	Authorized & Clerk	= Total
NUCLEAR OPERATIONS SITE	-	1	1

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TOTAL WICHITA SITE BASED POSITION	67	10	77

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Division/Branch	Prof.	Authorized & Clerk	= Total
TOTAL NUCLEAR DEPARTMENT	594	150	744

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04/16/84
WOLF CREEK GENERATING STATION

—— 1977 to 1983 PROFESSIONAL EMPLOYEE TURNOVER RATES ——

Last 5 Years Average Annual Professional Employee TURNOVER RATE = 2.2%

YEAR	#EMPL	#TERM	% TO
1977	9	0	0.0%
1978	32	3	9.3%
1979	71	1	1.4%
1980	144	4	2.7%
1981	236	6	2.5%
1982	330	9	2.7%
1983	459	9	2.0%

PLANT COST ($ Billions)

DIRECT PLANT	1.82
AFC	0.85
TOTAL	2.67

Expended as of 3/1/84

2.00

PLANT COST ESCALATION

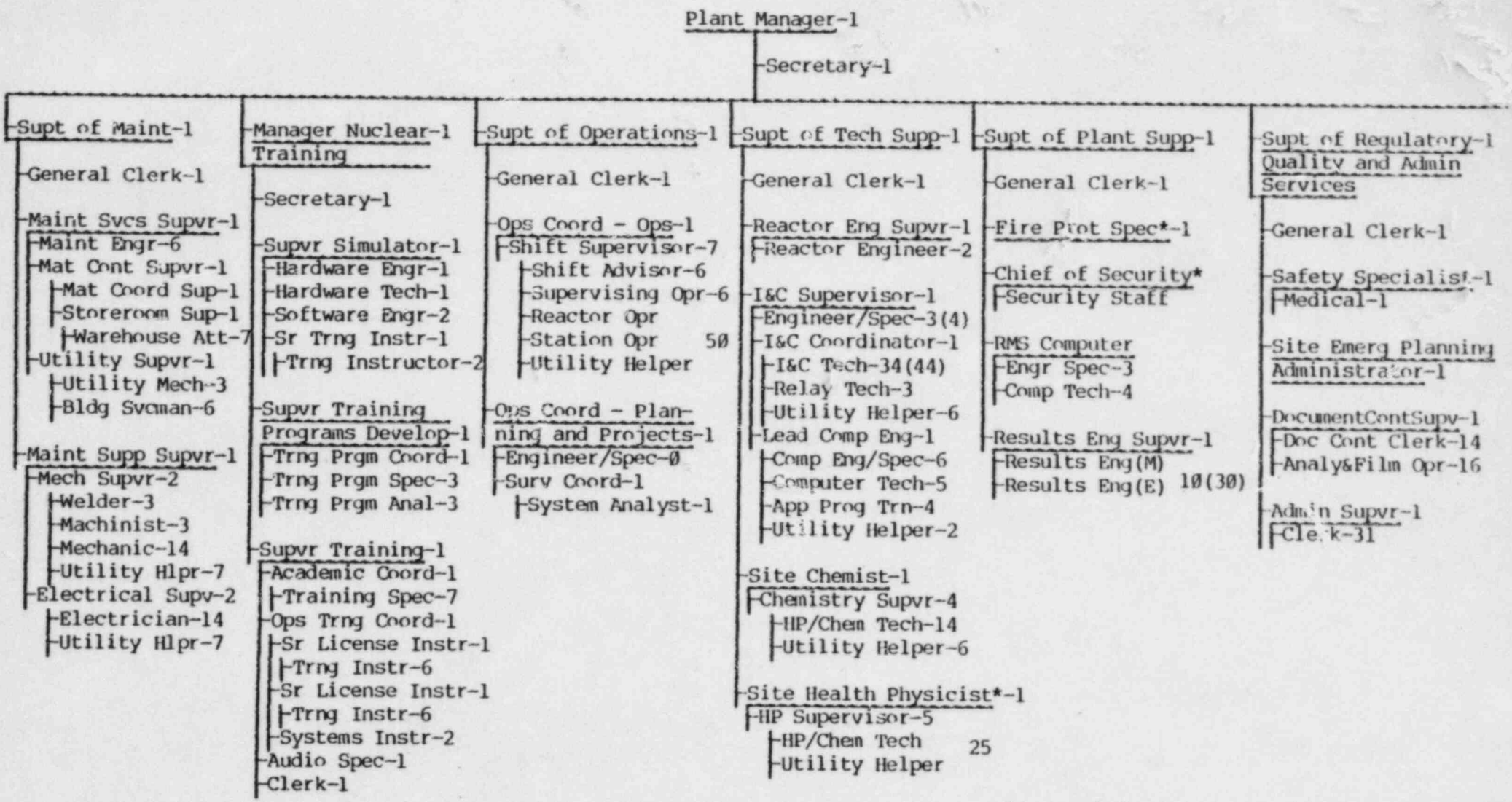
($ Billions)

SOURCE	1977	1983	% Inc.
Direct Plant	0.81	1.82	125
AFC	0.23	0.85	265
TOTAL	1.04	2.67	

STAFFING and EXPERIENCE

Forrest Rhodes

Plant Organization



*For technical matters of an immediate nature the respective individual reports directly to the Plant Manager.

( ) are totals inc over complement

Wolf Creek Generating Station
Revised Organization Chart 5-07-84
Supersedes Chart 5-03-84

ADMINISTRATION EXPERIENCE BASE

	Job Title	Commercial Nuclear Experience	Military Nuclear Experience	Job Related Experience	Wolf Creek Experience	Total
F. Rhodes	Plant Mgr	13.5	5.0		4.0	22.5
M. Williams	Supt Reg,Qual Admin Svc	14.0	4.0	4.0	2.5	24.5
R. Hoyt	QC Supv	7.0	8.0		2.5	17.5
B. Ernst	Safety Spec			5.5	7.5	13.0
D. McDaniel	DocCont Supv			7.0	6.5	13.5
J. Cherry	Admin Supv			1.0	6.0	7.0
TOTALS		34.5	17.0	17.5	29.0	98.0

TRAINING EXPERIENCE BASE

	Job Title	Commercial Nuclear Experience	Military Nuclear Experience	Job Related Experience	Wolf Creek Experience	Total
P. Turner	Trng Mgr	6.5	5.0	2.0	.5	14.0
A. Mah	Trng Supv		4.0		6.5	10.5
S. Hatch	Trng Coord	6.5	2.5		3.5	12.5
D. Fehr	Simulator Supv	4.0		.5	3.0	7.5
R. Russo	Ed & Accred Supv			10.0	1.0	11.0
B. Long	Sftwr Engr		3.0		1.0	4.0
TOTALS		17.0	14.5	12.5	15.5	59.5

TECHNICAL SUPPORT EXPERIENCE BASE

	Job Title	Commercial Nuclear Experience	Military Nuclear Experience	Job Related Experience	Wolf Creek Experience	Total
G. Boyer	SuptTechSupp			6.5	10.5	17.0
B. McKinney	I&C Supv	5.0			3.5	8.5
R. Wollum	I&C Coord	5.0		5.0	4.0	14.0
R. Klein	Sr Eng Spec	12.0	9.0		3.0	24.0
T. Graf	Sr Eng			10.0	1.0	11.0
D. Shekari	Sr Eng	4.0			0.5	4.5
Total I&C Technicians			37.0	70.0	57.0	164.0
B. Norton	Rx Eng	0.5			4.5	5.0
E. Lehmann	Eng III	0.25		4.0	2.5	6.75
W. Ryder	Eng II				1.0	1.0
M. Nichols	Hlth Physt	8.5			5.0	13.5
L. Breshears	HP Supv	4.5		2.0	4.0	10.5
H. Davis	HP Supv	2.0		2.5	3.5	8.0
J. Isom	HP Supv	7.0			2.5	9.5
J. Ives	HP Supv	5.0	8.0	6.0	0.5	19.5
Total HP Technicians		43.0	27.5	11.5	27.0	109.0
R. Logsdon	Chemist	10.0			0.5	10.5
S. Henry	Chem Supv	0.1			2.5	2.6
T. Morrill	Chem Supv	9.0		8.0	1.0	18.0
C. Palmer	Chem Supv	0.25			3.5	3.75
H. Stubby	Chem Supv	0.1	6.0		2.75	8.85
Total Chemistry Technicians		0.5	6.0	1.5	19.2	27.2
M. Hawk	Ld Comp Eng			8.5	4.0	12.5
S. Hopkins	Eng Spec III			7.0	5.0	12.0
R. Parker	Eng Spec III		6.0	4.0	3.0	13.0
W. Steiner	Eng Spec III			18.0	3.5	21.5
M. Shaffer	Eng Spec II				2.5	2.5
Total Computer Technicians				6.0	5.0	11.0
TOTALS		116.7	99.5	170.5	182.45	569.15

OPERATIONS EXPERIENCE BASE

	Job Title	Commercial Nuclear Experience	Military Nuclear Experience	Job Related Experience	Wolf Creek Experience	Total
J. Zell	Supt of Ops	6.0			3.5	9.5
J. McKinstray	Ops Coord		6.0		6.5	12.5
M. Estes	Ops Coord	1.0			5.0	6.0
S. Austin	Shift Supv		6.0	5.0	6.0	17.0
L. Borders	Shift Supv			0.75	4.75	5.5
J. Houghton	Shift Supv		11.0	1.0	5.0	17.0
O. Korbelik	Shift Supv		18.0	2.5	3.75	24.25
D. Mosebey	Shift Supv	4.0		2.0	3.0	9.0
D. Naylor	Shift Supv				4.75	4.75
D. Neufeld	Shift Supv		8.0		4.75	12.75
W. Erbe	Supv Opr		6.0		4.75	10.75
P. Martin	Supv Opr		5.0		6.0	11.0
R. Miller	Supv Opr		5.5		4.25	9.75
S. Walgren	Supv Opr		10.0		3.0	13.0
J. Weeks	Supv Opr		5.0		4.5	9.5
R. Schmidt	Supv Opr		7.0		5.5	12.5
J. Hansen	Surv Coord		6.0		2.75	8.75
Total Reactor	Operators		62.0	3.5	28.75	94.25
Total Nuclear	Station Oprs		49.0	1.0	13.0	63.0
S. Armstrong	Consultant	8.0	7.0	1.5	1.0	17.5
B. Jurrus	Consultant	10.0	7.0		3.0	20.0
A. Ochs	Consultant	6.0			0.5	6.5
W. Molpus	Consultant	8.0		0.25	0.75	9.0
E. Sessoms	Consultant	14.0			0.75	14.75
R. Rathbone	Consultant	9.0	6.0	2.0	0.75	17.75
L. Wagner	Consultant	18.0		7.0	0.5	25.5
TOTALS		84.0	224.5	26.5	126.75	461.75

PLANT SUPPORT EXPERIENCE BASE

	Job Title	Commercial Nuclear Experience	Military Nuclear Experience	Job Related Experience	Wolf Creek Experience	Total
D. Smith	Supt Plt Supp		9.0	6.0	2.5	17.5
L. Blackwell	FireProtSpec			7.0	3.5	10.5
V. MacTaggart	Results Supv			18.0	3.0	21.0
S. Fellers	Sr Eng			10.0	6.25	16.25
J. Mah	Sr Eng		4.5		6.25	10.75
H. Meyer	Sr Eng			13.5	0.0	13.5
J. Stamm	Sr Eng			4.75	3.0	7.75
R. Sims	Eng III			2.0	4.0	6.0
K. Clair	Eng II				2.0	2.0
F. Gerardine	Eng II				2.0	2.0
T. Mitchell	Eng II				3.0	3.0
R. Saunderson	Eng II				1.75	1.75
R. Schultz	Eng II				2.0	2.0
T. Taylor	Eng II			6.0	1.0	7.0
M. VanDop	Eng II				1.75	1.75
Total of Engineer I				9.75	5.0	14.75
D.Breckenridge	Sr Eng			1.5	2.5	4.0
TOTALS			13.5	78.5	49.5	141.5

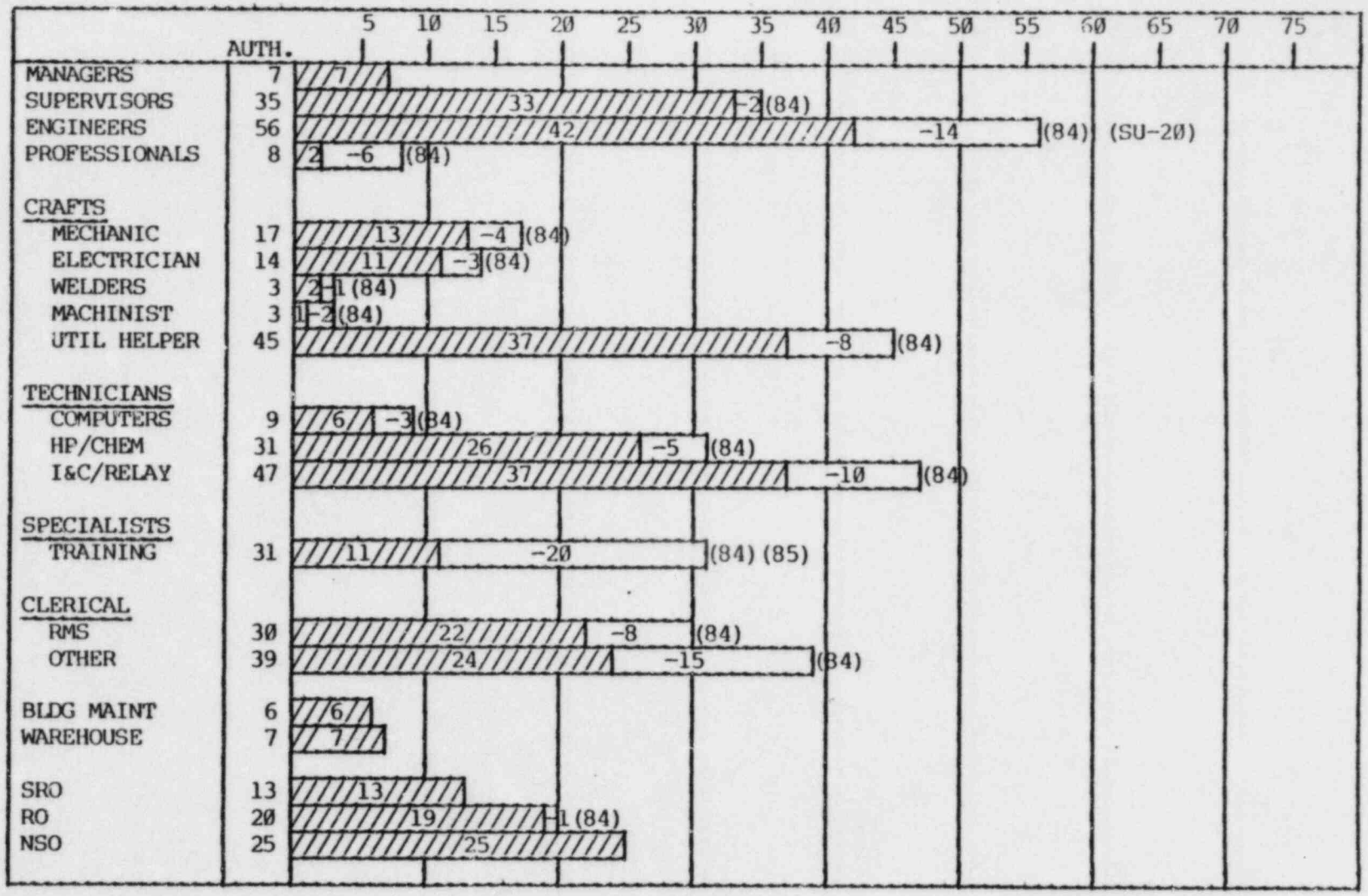
MAINTENANCE EXPERIENCE BASE

	Job Title	Commercial Nuclear Experience	Military Nuclear Experience	Job Related Experience	Wolf Creek Experience	Total
D. Rich	Supt of Maint			11.7	8.3	20.0
D. Walsh	Maint Svcs Supv		5.0		4.2	9.2
A. Scott	Maint Supp Supv			3.5	2.5	6.0
R. Connell	Maint Eng		4.6	4.6	0.1	9.3
J. Damet	Maint Eng			3.0	4.2	7.2
T. Foster	Maint Eng			19.0	0.5	19.5
D. Garman	Maint Eng			1.0	0.9	1.9
P. Waldrop	Maint Eng			3.0	2.0	5.0
A. Montague	Eng Spec			24.0	2.5	26.5
D. Goodlove	Mech Supv		9.5		4.2	13.7
G. Lawson	Mech Supv			7.5	2.7	10.2
Total Mechanics*				143.9	40.2	184.1
C. Minor	Elect Supv			15.0	3.7	18.7
L. Nobles	Elect Supv			12.0	2.3	14.3
Total Electricians**				147.5	20.1	167.6
R. Stump	Mat Cont Supv			15.0	4.2	19.2
B. Adams	Mat Coord Sup			3.0	7.0	10.0
R. Doty	Storerm. Supv				6.6	6.6
TOTALS			19.1	413.7	116.2	549.0

SUMMARY OF EXPERIENCE BASE

	Commercial Nuclear Experience	Military Nuclear Experience	Job Related Experience	Wolf Creek Experience	Total
Operations	84.Ø	224.5	26.5	126.75	461.75
Maintenance		19.1	413.7	116.2 -	549.Ø
Administration	34.5	17.Ø	17.5	29.Ø	98.Ø
Technical Support	116.7	99.5	17Ø.5	182.45	569.15
Plant Support		13.5	78.5	49.5	141.5
Training.	17.Ø	14.5	12.5	15.5	59.5
TOTALS	252.2	388.1	719.2	519.4	1878.9Ø

STAFFING REQUIREMENT BY 12/85 — WOLF CREEK - OPERATIONS — DATE: 5/07/84



TOTAL AUTH- 446 TOTAL ON THE JOB- 344 CONTRACTS - 440

OPENINGS 1984- 97 OPENINGS 1985- 5 SU - 20

▨ - EMPLOYED

□ - OPENINGS

WOLF CREEK GENERATING STATION

COLLEGE TRAINING PROGRAM

Emporia State University — Kansas State University

Course No.	Course Name	Hours
MA-112	Trigonometry	2
MA-110	College Algebra	3
CH-123 & 124	Chemistry I & Lab	4
CH-126 & 127	Chemistry II & Lab	4
MA-341	Descript Statistics	3
MA-315	Tech Calculus	3
MA-316	Tech Calculus II	3
PH-140 & 141	College Physics I & Lab	4
PH-143 & 144	College Physics II & Lab	4
PH-315	Applied Statics	3
MA-317	Diff. Equations	3
ET-410	Prop Eng Mat	2
ET-514	Energ Convers Tech	3
ET-530	Elect Circ Tech	4
ET-480	Mat Nuc Reac Sys	2
ET-583	Nuc Reat Tech	6
ET-584	Rad Det & Mon	3
ET-585	Nuc Reac Therm	3
ET-586	Rad Protect	2
ET-512	Mech of Fluids	3
ET-481	Nuc Eng Tech	3
	TOTAL	67 hours

PROJECT STATUS

Frank Duddy

BECHTEL SUMMARY OF ENGINEERING AND PROCUREMENT ACTIVITIES TO SUPPORT FUEL LOAD

Bechtel Engineering has completed the design of the power block. Only a few minor design changes will be issued to address problems that were experienced at Callaway during HFT and preoperational testing. The bulk of engineering activities is at the jobsite where Bechtel Site Engineering is resolving problems experienced during the construction and Startup of this facility.

For N-5 certification, the final stress review by Bechtel is 100% complete for all systems and has been reconciled to the as-built configuration as of April 1, 1984.

The total 79-14 evaluation program is 70% complete. The piping evaluation portion is 95% complete and the pipe support evaluation is 60% complete. The remaining 40% of the pipe support evaluation is being completed in accordance with the N-5 certification schedule.

All power block commodities such as cable, valves, hangers, pipe, structural and miscellaneous steels have been ordered, shipped and delivered. Procurement is presently processing field material requestions issued by the various site organizations to support job completion.

79-14 Pipe Hanger Status as of 05-07-84

	No. of Supports
Pipe supports required for evaluation	5193
Pipe supports released for walkdown	4314
Pipe supports not released for walkdown	879
Bechtel issued pipe support releases	3132
Bechtel issued Class I pipe support releases	425
Bechtel issued Class II and Class III pipe support releases	2707
Pipe supports released to Bechtel presently being evaluated	1182

of which 80 are Class I supports; 1102
are Class II and Class III supports
(Note: over 200 pipe supports will be issued on 5-8-84)

Total number of supports that still require evaluation by Bechtel (1182 + 879)=2061

Estimated completion date mid July, 1984 - On Target

Procurement Summary

Commodity	Required	Remarks
Cable Summary	7,761,088 feet	All cable shipped and delivered.
Valves (Mechanical)	11,151	All valves on order are shipped and delivered.
Valves (Control/Instrumentation)	500	All valves delivered.
Hangers	--------	100% complete.
Rebar, Structural Steel, Miscellaneous Steel	--------	100% complete.

Design Category	Remarks
Computer Software Changes	None
Plant Annunciation System Modification	1 work plan to be issued by 5-18-84.
Main Control Board and Auxiliary Shutdown Panel Modifications for Human Factors Findings	8 work plans to be issued by 5-18-84.

N-5 Certification

Preliminary Stress Review

Instrument and piping systems that require stress review. 56
(23) instrument lines and (33) piping lines.

100% Complete

TO GO
SYSTEM TURNOVER

MAY

HF4	SLW (Evaporator Package)
GX2	Cathodic Protection
HD	Decontamination
KD	Domestic Water
QJ3	Heat Trace
QN	Welding Receptacles
LA	Sanitary Drainage
SR	In-Core Neutron Monitoring

JUNE

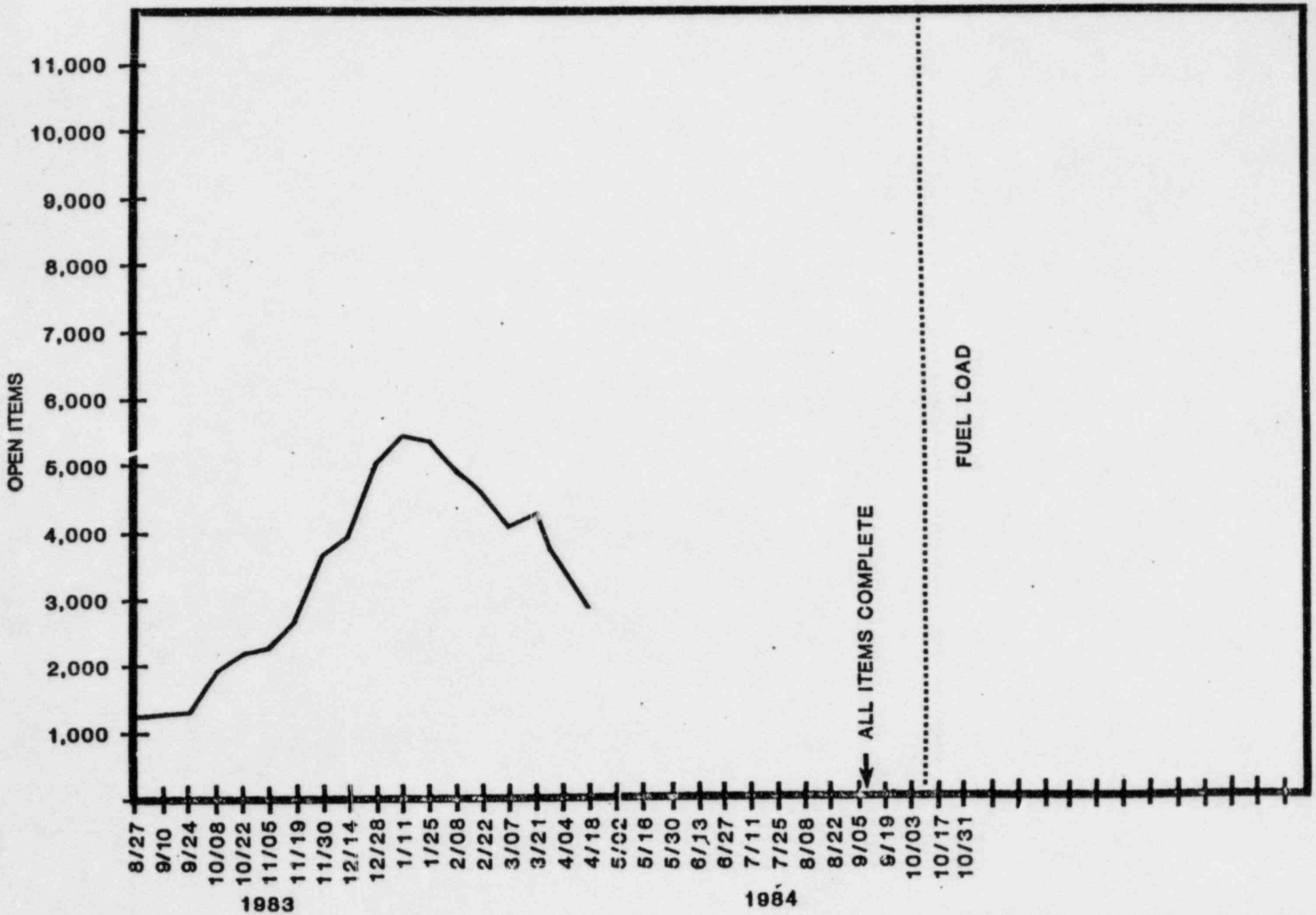
KF	Cranes, Hoists, Elevators
SD2	Area Radiation Monitoring (BOP)
SP	Process Radiation Monitoring
SG	Seismic Instrumentation
ST2	Sewage Treatment
KE3	Polar Crane

JULY

*LE	Oily Waste
*LF	Floor and Equipment Drains
*QA	Normal Lighting
*QB	Standby Lighting AC

* Are Released Per Building Turnover

CONSTRUCTION
OPEN ITEMS ON TURNED OVER SYSTEMS



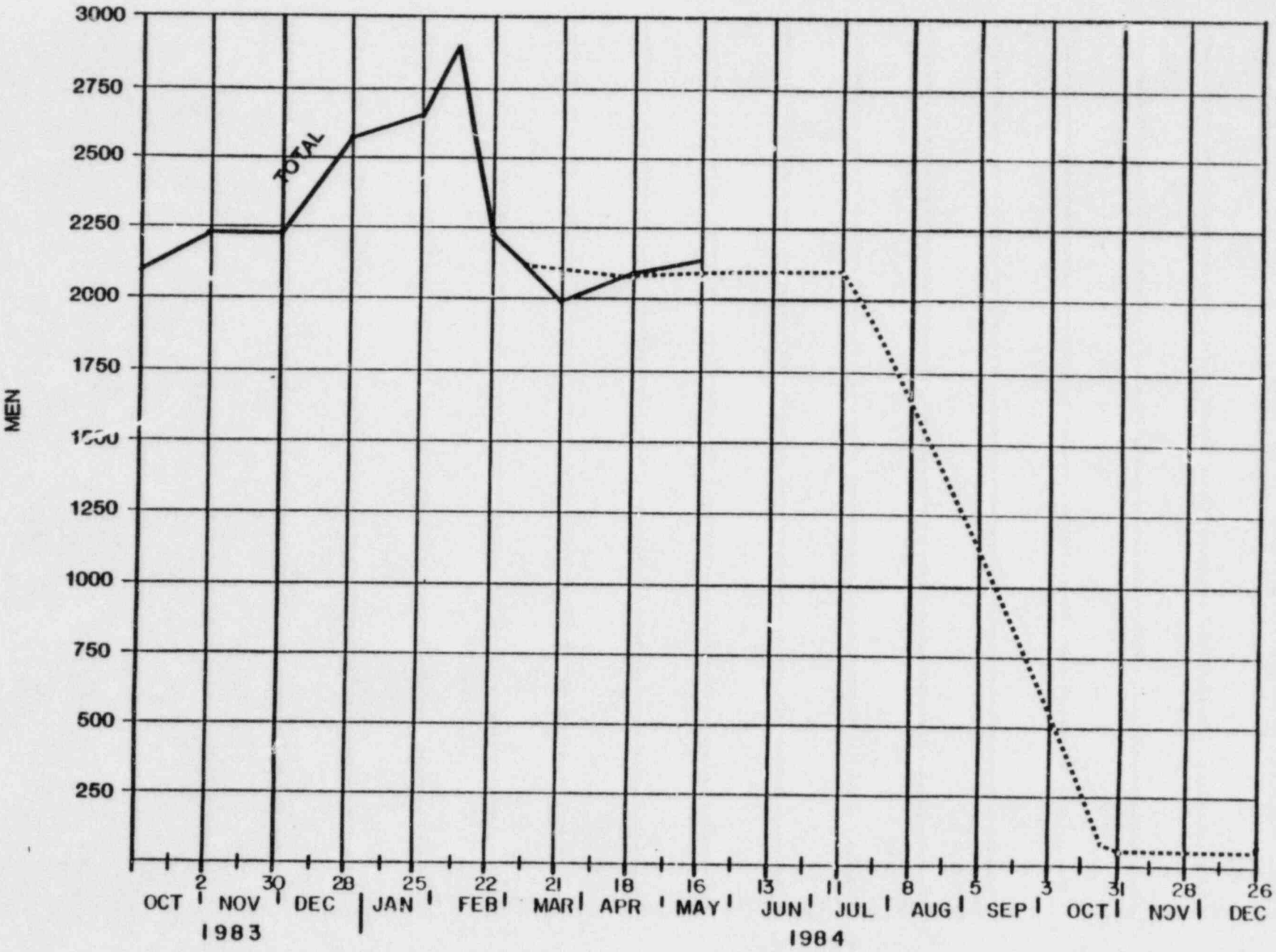
CONSTRUCTION OPEN ITEMS EXCL. HANGERS

AS OF 4/30/84	TOTAL	HARDWARE	SOFTWARE	BEING REVIEWED
ELECTRICAL	1457	450	518	489
MECHANICAL	209	17	128	64
PIPING	437	3	403	31
CIVIL	117	25	60	32
INSTRUMENTATION	709	142	319	248
TOTAL	2929	637	1428	864

CURRENT SITE CRAFT MANPOWER

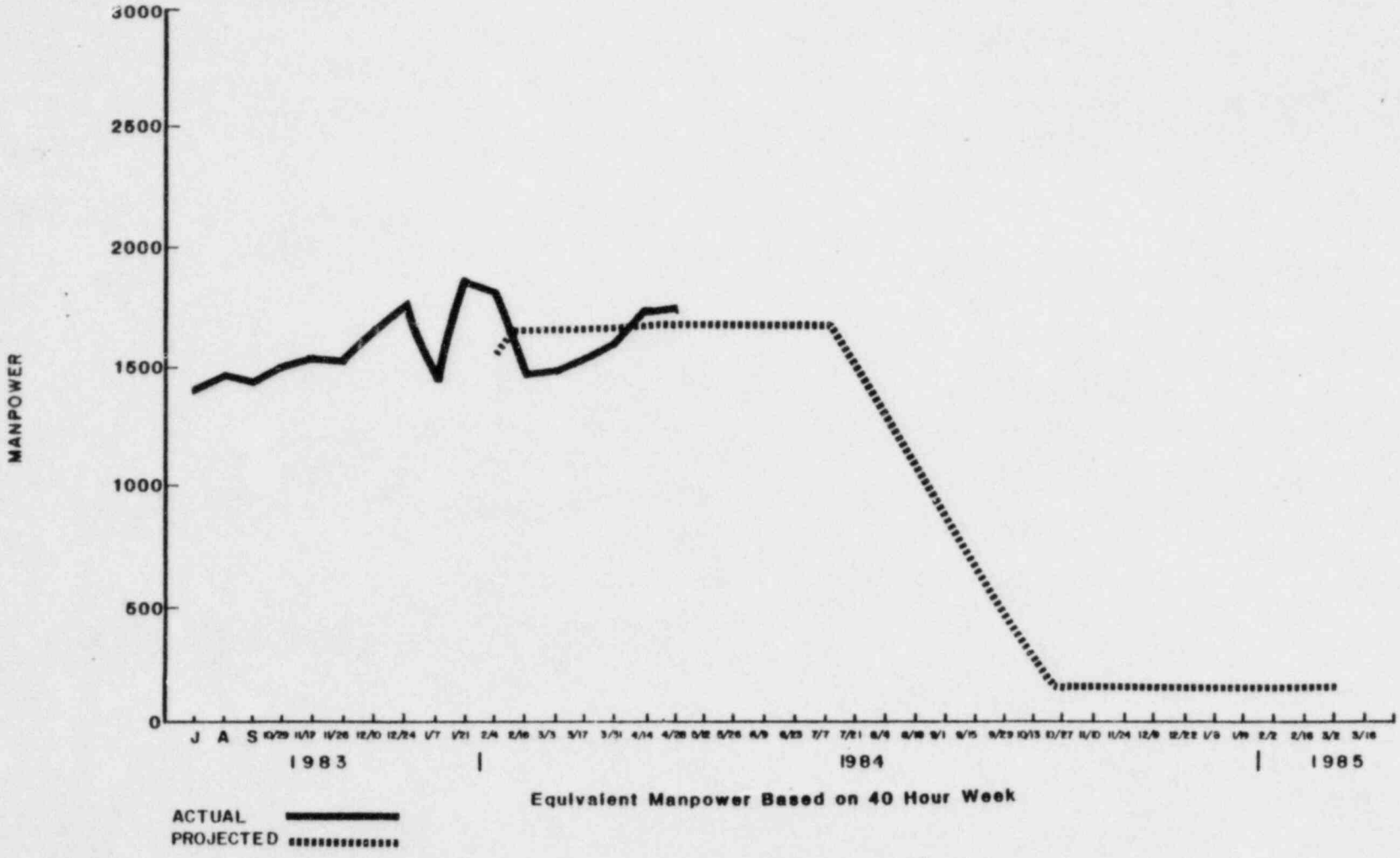
LABORERS	387
CEMENT FINISHERS	22
IRONWORKERS	90
BRICKLAYERS	19
CARPENTERS	119
PAINTERS	125
PIPEFITTERS	649
SHEET METAL	42
ELECTRICIANS	306
OPERATORS	31
INSULATORS	111
TOTAL	**1,901**

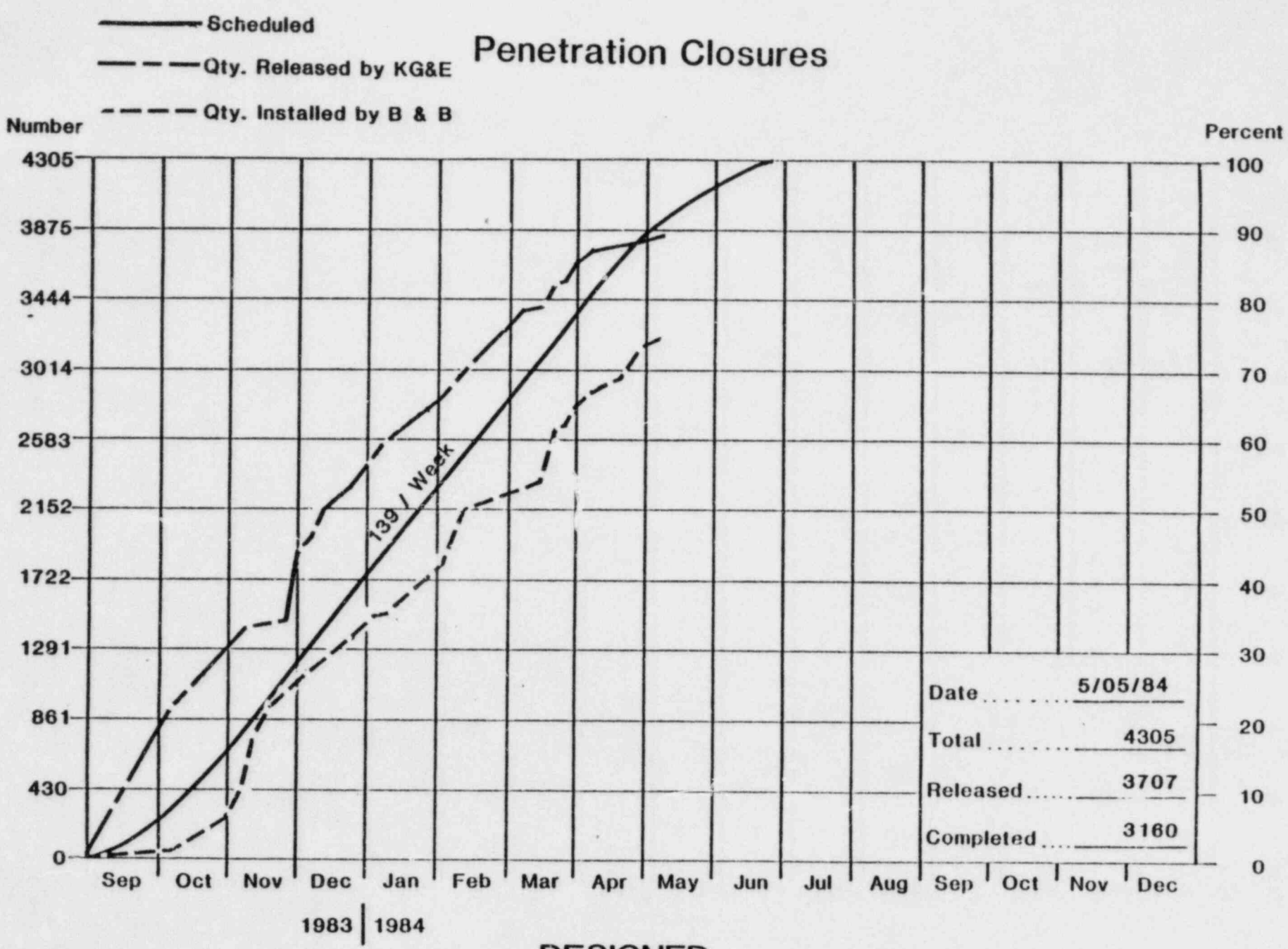
TOTAL CRAFT MANPOWER

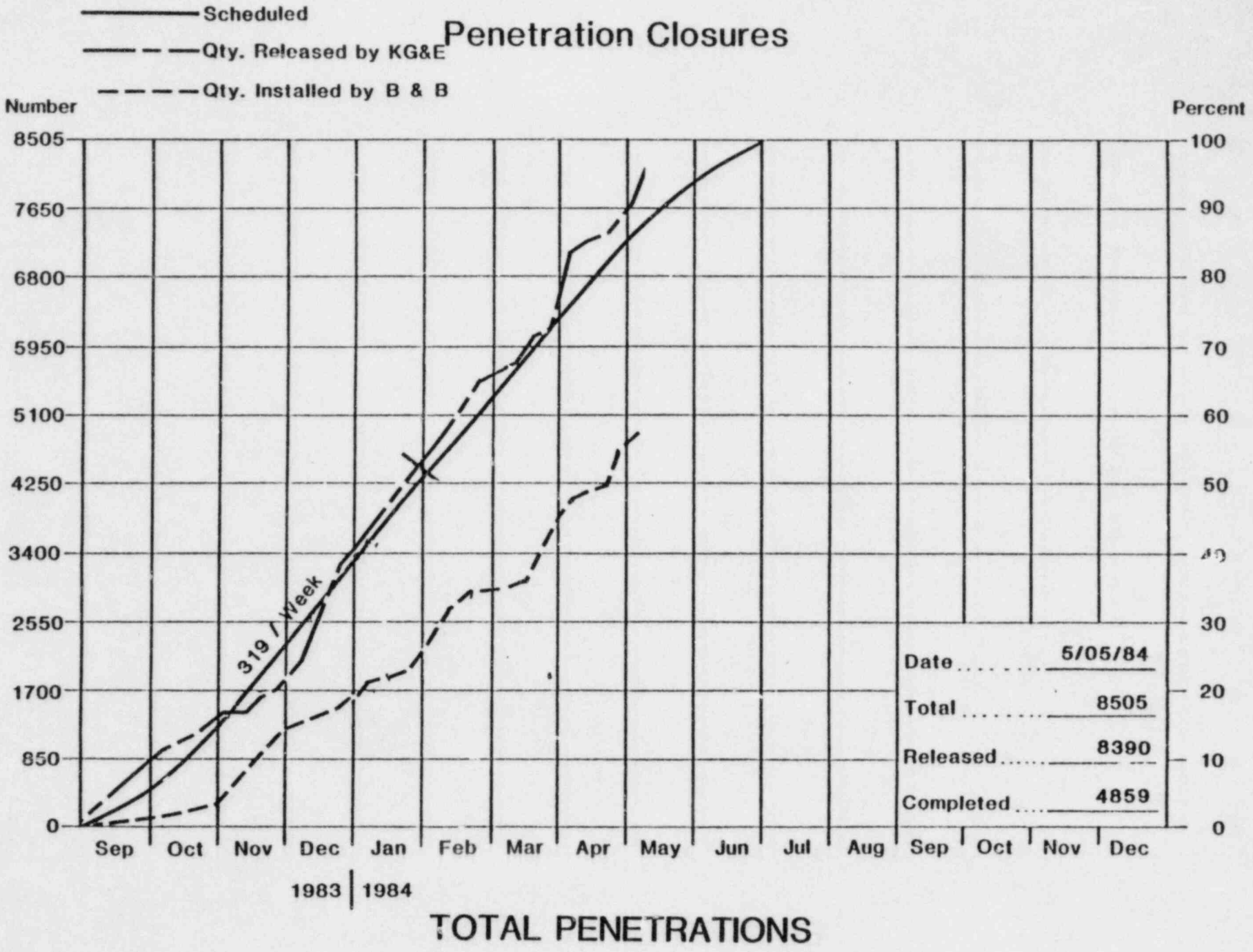


EQUIVALENT MANPOWER BASED ON 40 hr./wk.

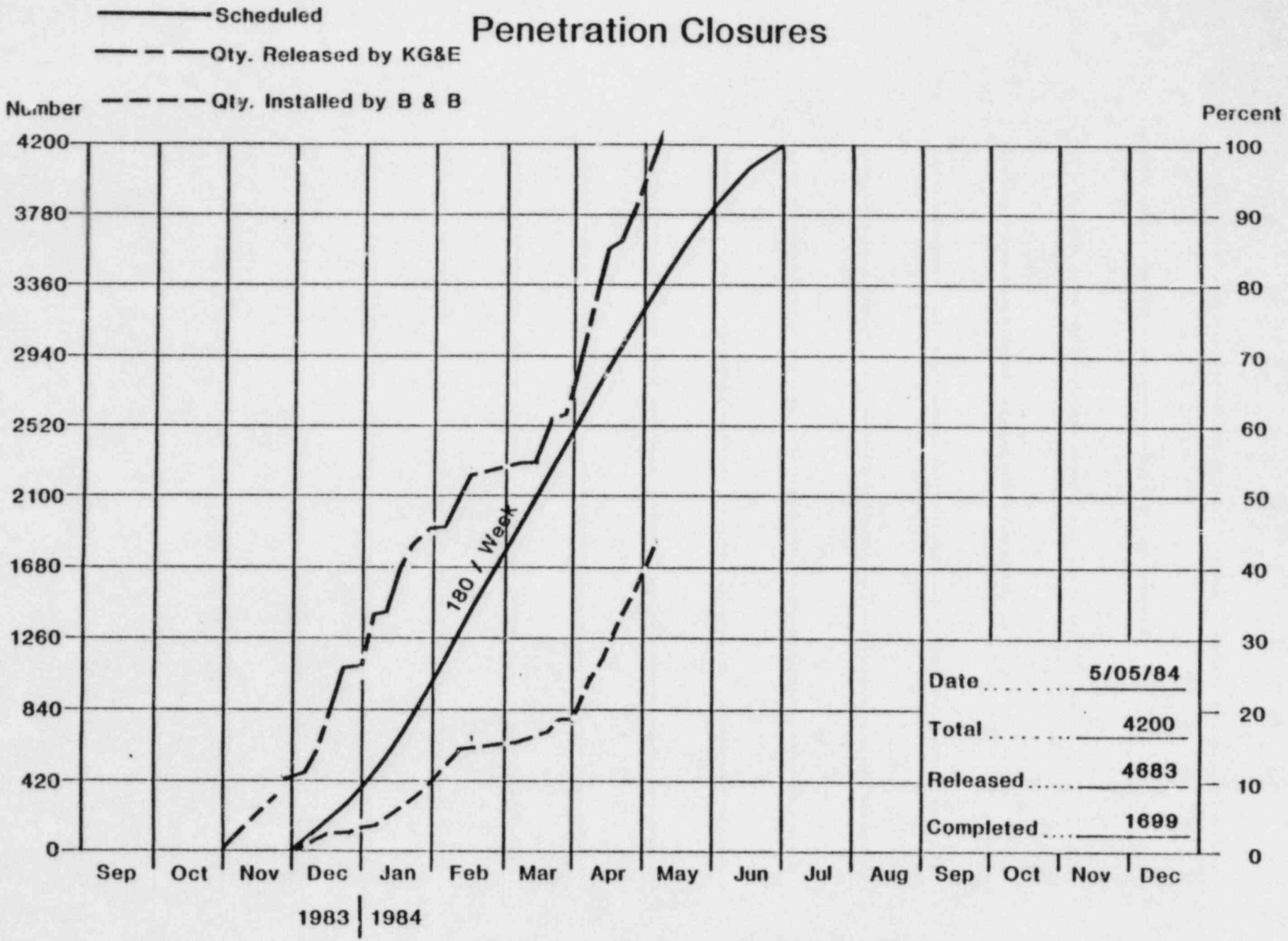
DIC
NON-MANUAL MANPOWER
1984 FORECAST vs ACTUAL

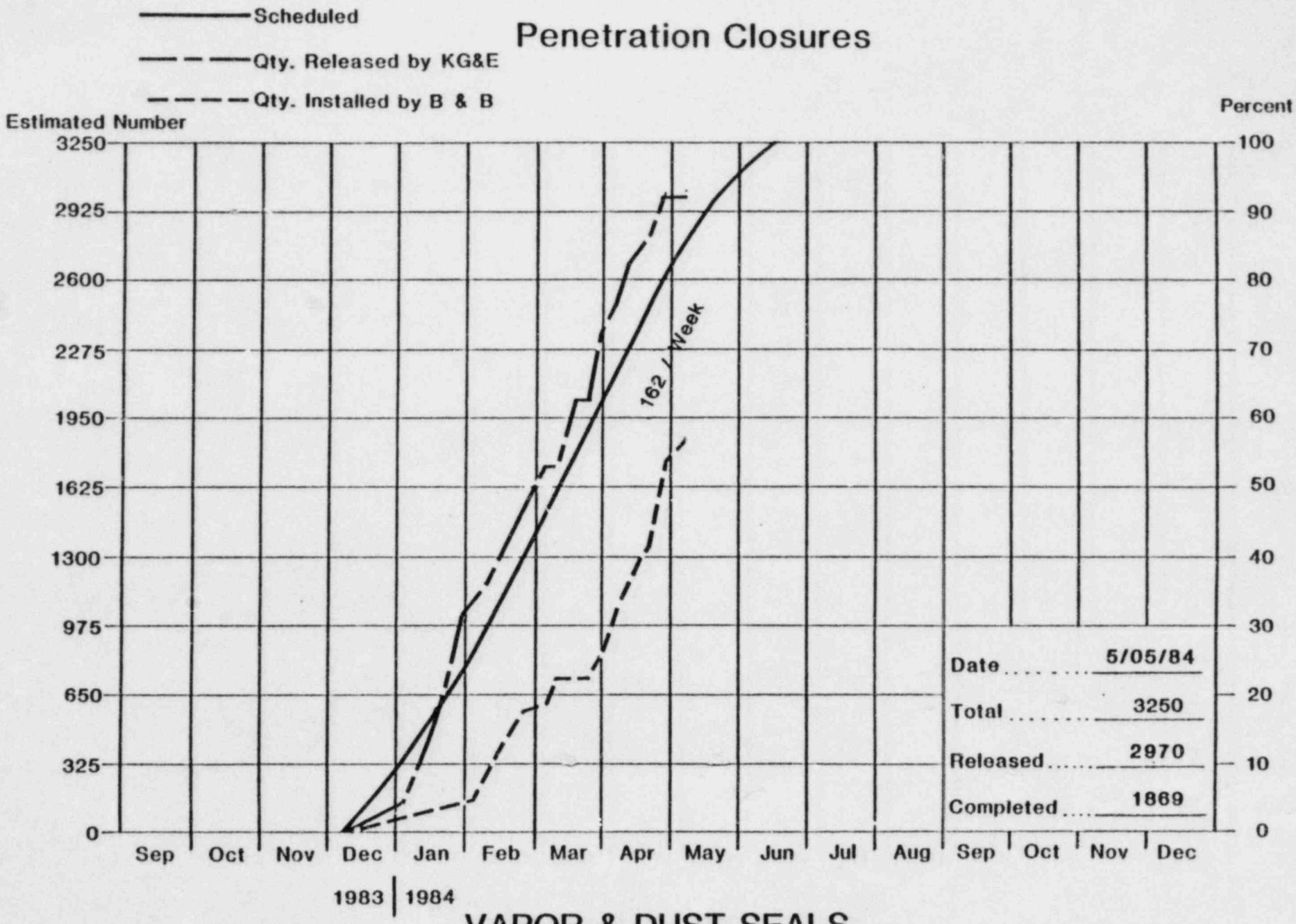



Scheduled
Qty. Released by KG&E
Qty. Installed by B & B
Penetration Closures
Number
Percent
4305
3875
3444
3014
2583
2152
1722
1291
861
430
0
100
90
80
70
60
50
40
30
20
10
0
139 / Week
Date 5/05/84
Total 4305
Released 3707
Completed 3160
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
1983
1984
DESIGNED


Scheduled
Qty. Released by KG&E
Qty. Installed by B & B
Penetration Closures
Number
Percent
8505
7650
6800
5950
5100
4250
3400
2550
1700
850
0
100
90
80
70
60
50
40
30
20
10
0
319 / Week
Date 5/05/84
Total 8505
Released 8390
Completed 4859
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
1983
1984
TOTAL PENETRATIONS

40


Scheduled
Qty. Released by KG&E
Qty. Installed by B & B
Penetration Closures
Number
Percent
4200
3780
3360
2940
2520
2100
1680
1260
840
420
0
100
90
80
70
60
50
40
30
20
10
0
180 / Week
Date 5/05/84
Total 4200
Released 4683
Completed 1699
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
1983
1984
SCHEDULED CONDUIT ENDS


Scheduled
Qty. Released by KG&E
Qty. Installed by B & B
Penetration Closures
Estimated Number
Percent
3250
2925
2600
2275
1950
1625
1300
975
650
325
0
100
90
80
70
60
50
40
30
20
10
0
162 / Week
Date 5/05/84
Total 3250
Released 2970
Completed 1869
Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1983 | 1984
VAPOR & DUST SEALS

STARTUP STATUS REPORT
May 8, 1984

OVERALL:

Includes Final Walkdowns, Turnovers from Construction to Startup, Flushes, Hydros, Preoperational tests, Mechanical, Electrical and Instrument Component testing. Currently we are 81.6% complete with a projected 87.5% completion at the start of Hot Functional Test. The remaining 12.5% will be performed between Hot Functional Testing and Fuel Load.

TURNOVERS:

Currently we are 91.1% complete for turnovers from Construction to Startup, for a total of 246 of 282 systems. The majority that remain include Radwaste, Floor and Equipment drains, and Reactor Protection systems. At the start of HFT we plan to be 96.2% complete with the remaining 3.8% to be performed between HFT and Fuel Load.

FLUSHES:

The Flush program is currently 86.8% complete with 485 sample points remaining to go to support HFT. The majority of these are included in the Liquid Radwaste, Oily Waste, and Floor Drain systems, which are not hard restraints to HFT. At the start of HFT we plan to be 97% complete with the remaining 3.0% to be performed between HFT and Fuel Load.

HYDROS:

The Hydro program is currently 76.2% complete with163 hydros remaining to be completed to support HFT. The majority of these are included in the Liquid Radwaste, Service Gases, Process and Nuclear Sampling, Chemical and Oily Waste and Floor Drain systems. At the start of HFT we plan to be 96% complete with the remaining 4% to be performed between HFT and Fuel Load.

ELECTRICAL COMPONENT TESTING:

The Electrical component testing program is currently 91.7% complete with 1221 electrical component tests remaining to go in support of HFT. The majority of the component testing includes Reactor Coolant, Control Building, Secondary Liquid Waste, Fire Protection, Oily Waste, Floor Drains, Normal and Standby Lighting systems. At the start of HFT we plan to be 95.9% complete with the remaining 4.1% to be performed between HFT and Fuel Load.

MECHANICAL COMPONENT TESTING:

The Mechanical component testing program is currently 83.5% complete. 721 mechanical component tests completed last week with 3379 tests remaining to be performed in support of HFT. The majority of this testing includes the Main Steam, Steam Generator Blowdown, Liquid Radwaste, Secondary Liquid Waste, Service Gases, Nuclear Sampling, Gaseous Radwaste and Boron Recycle systems. At the start of HFT we plan to be 90.9% complete with the remaining 9.1% testing to be performed between HFT and Fuel Load.

INSTRUMENT COMPONENT TESTING:

The Instrument component testing program is currently 87.1% complete. 240 instrument component tests completed last week leaving 1482 tests to go to support HFT. The majority of the testing includes Feedwater, Reactor Coolant, Secondary Liquid Waste, Gaseous Radwaste, Liquid Radwaste, and Floor Drain systems. At the start of HFT we will be 90.4% complete and the remaining 9.6% will be performed between HFT and Fuel Load.

PROCEDURE PREPARATION:

A total of 233 preoperational and acceptance test procedures have been identified for system startups. Of these procedures, 183 or 78.5% have been approved for implementation. The status of the remaining procedures shows 34 still in review, 8 being written, and 8 still not started.

Ninety-four of the approved procedures have been implemented with 82 tests completed.

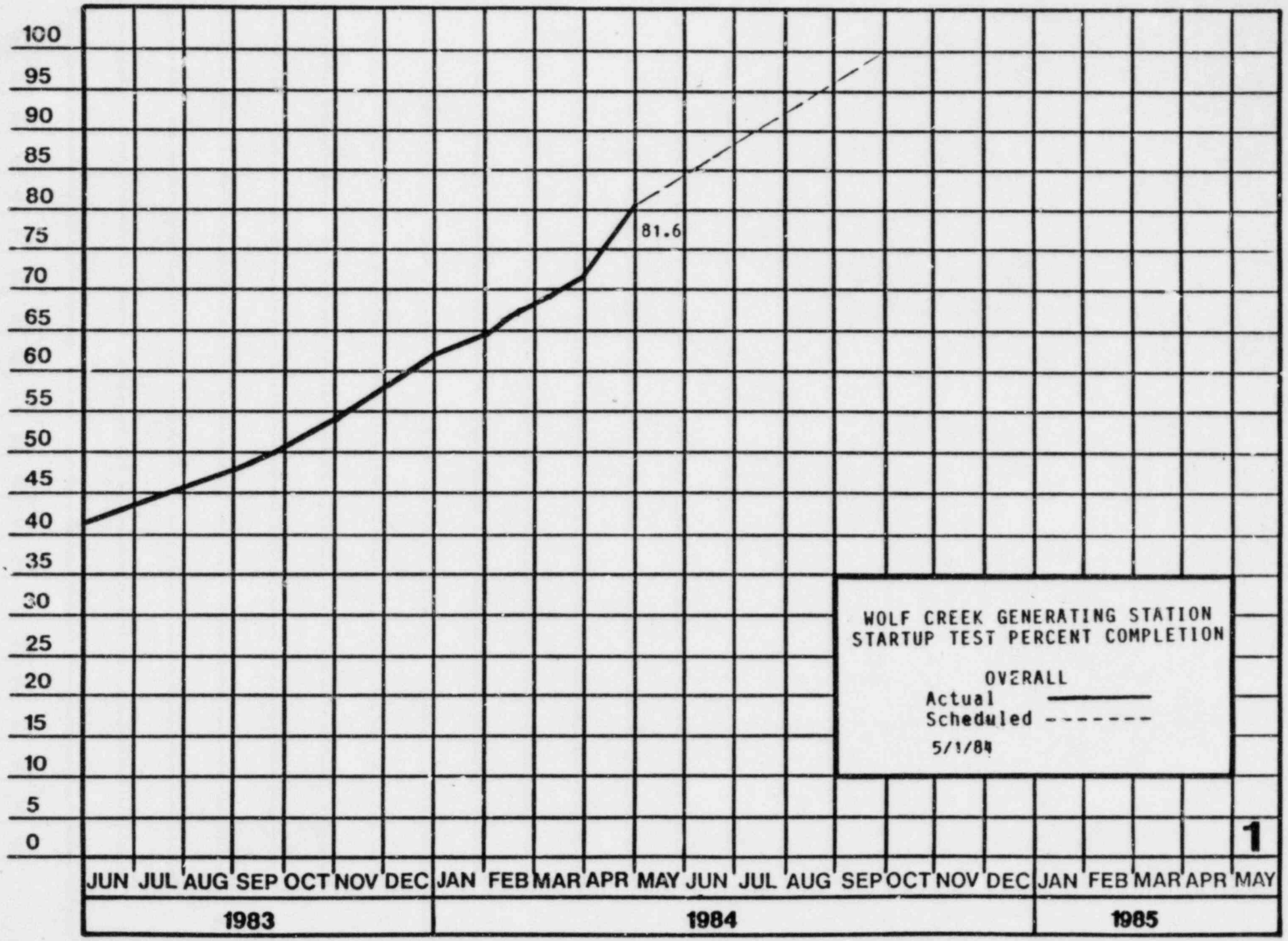
PREOPERATIONAL TESTING:

As of May 5, 1984 twelve preoperational tests were in progress. They are as follows:

SU3 A101: Aux. Feedwater Motor Pump Preop Test
SU4 CQ01: Site Security System Preop Test
SU4 EA01: Service Water Preop Test
SU3 EM01: Safety Injection System Cold Preop Test
SU4 GA01: Plant Heating System Preop Test
SU3 GG01: Fuel Building HVAC Preop Test
SU3 KE03: Polar Crane Load Preop Test
SU3 KE04: Fuel Transfer System Preop Test
SU4 NT01: Nitrogen System Preop Test
SU4 SK01: Plant Security System Preop Test

In addition six dynamic tests, including proof flushes, as applicable, are in progress. This is qualification testing of the procedure and system prior to the actual performance of the preoperational test. The systems include:

SU3 BG01: Seal Injection Test
SU3 BG03: Charging System Test
SU3 BG05: Boric Acid Blending Test
SU3 EJ01: Residual Heat Removal Cold Test
SU3 EP01: Accumulator Safety Injection Accumulator Test
SU3 KJ01: Diesel Generator Mechanical Test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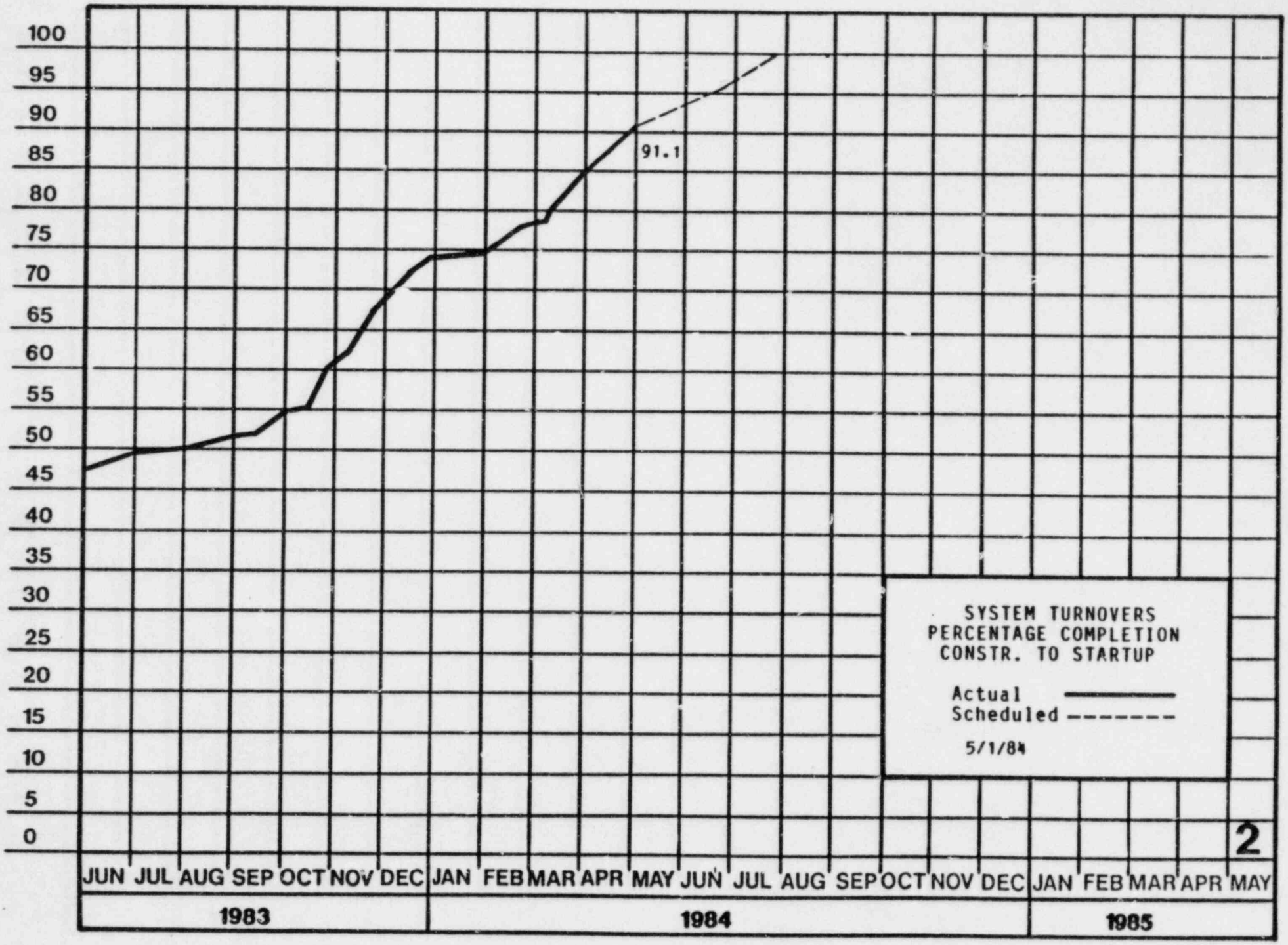
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
81.6
WOLF CREEK GENERATING STATION
STARTUP TEST PERCENT COMPLETION
OVERALL
Actual
Scheduled
5/1/84
1
JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY
1983
1984
1985

SH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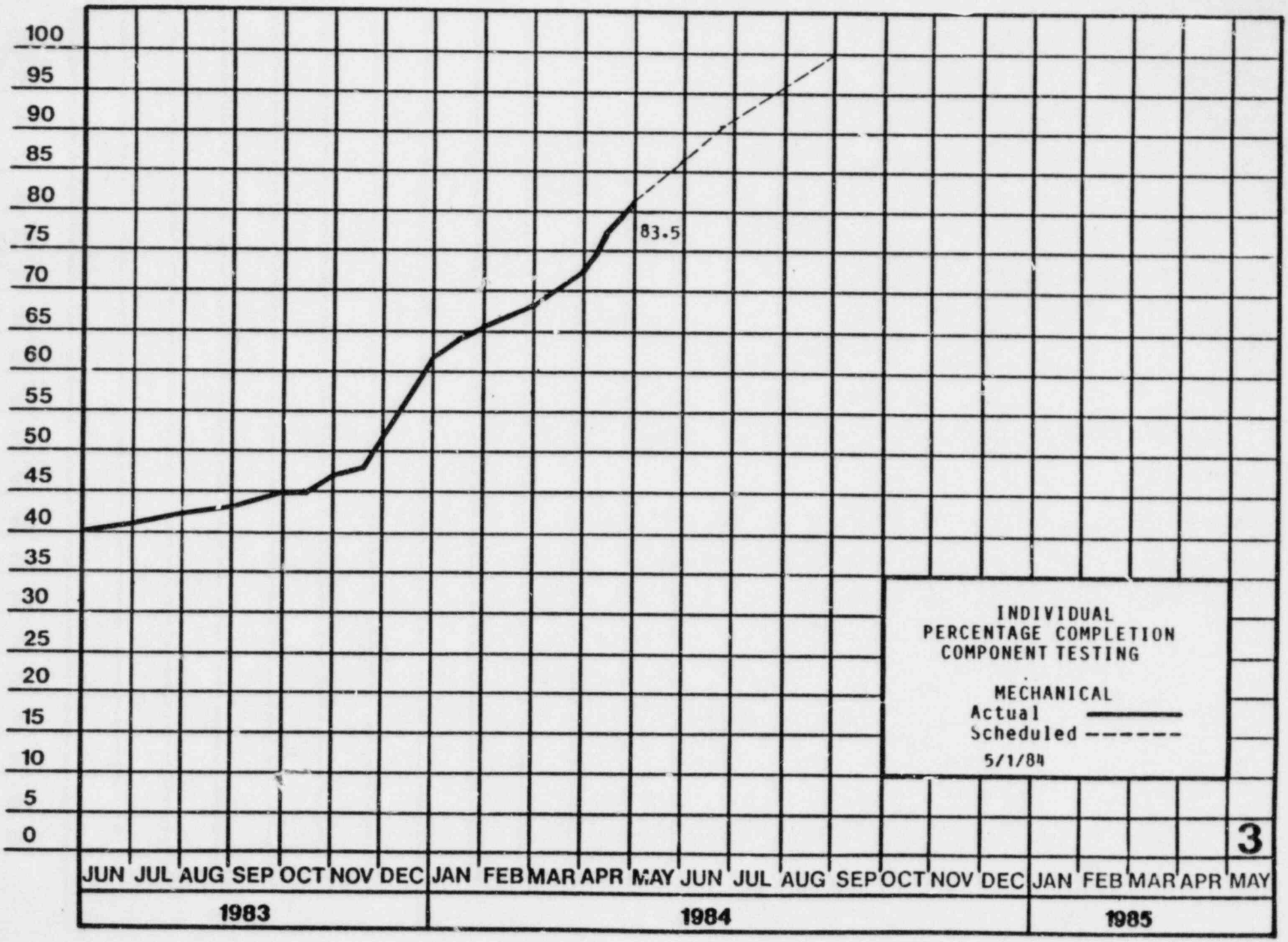
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
91.1
SYSTEM TURNOVERS
PERCENTAGE COMPLETION
CONSTR. TO STARTUP
Actual
Scheduled
5/1/84
2
JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY
1983
1984
1985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95
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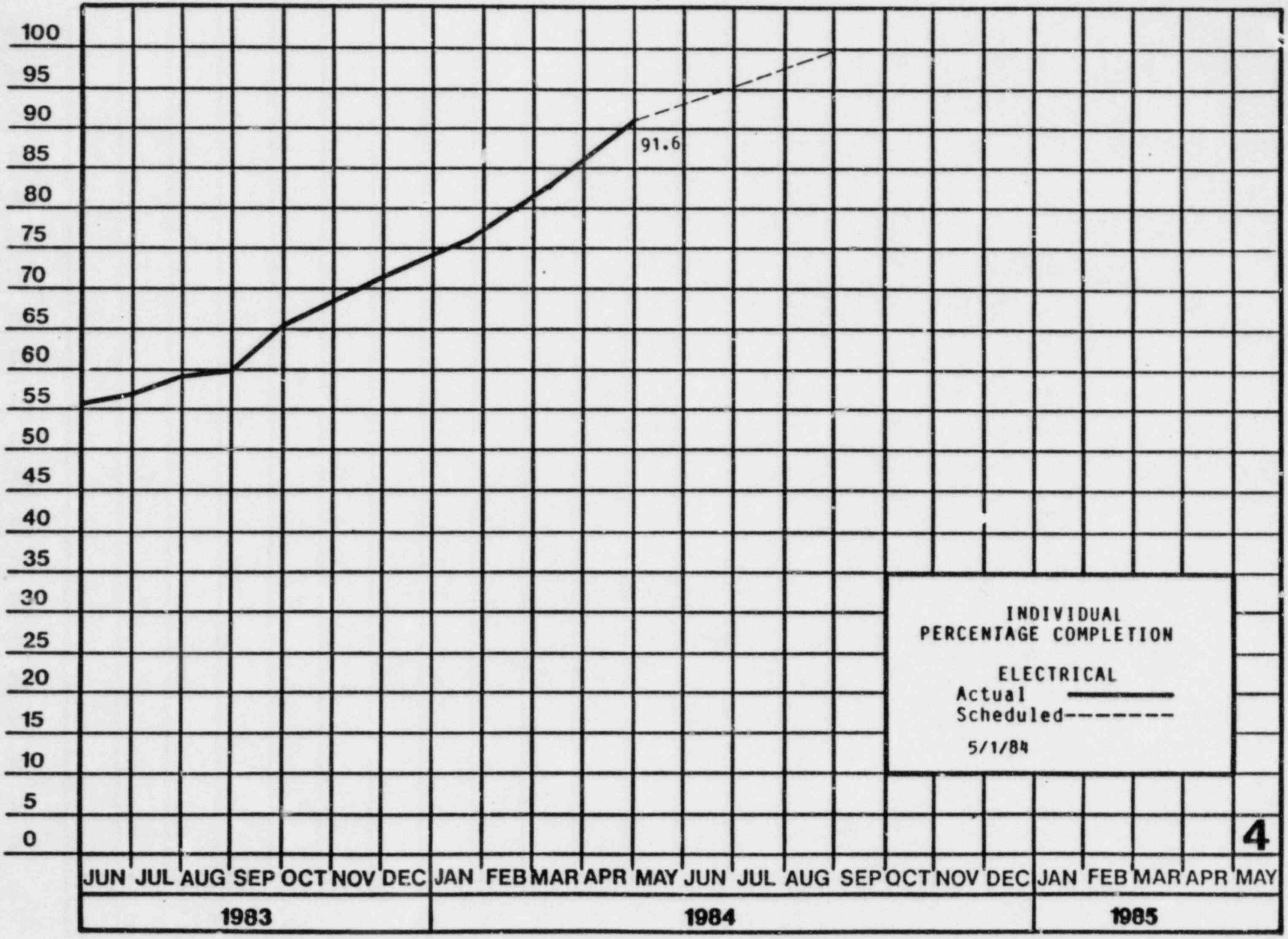
20
15
10
5
0
83.5
INDIVIDUAL
PERCENTAGE COMPLETION
COMPONENT TESTING
MECHANICAL
Actual
Scheduled
5/1/84
3
JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY
1983
1984
1985

47


100
95
90
85
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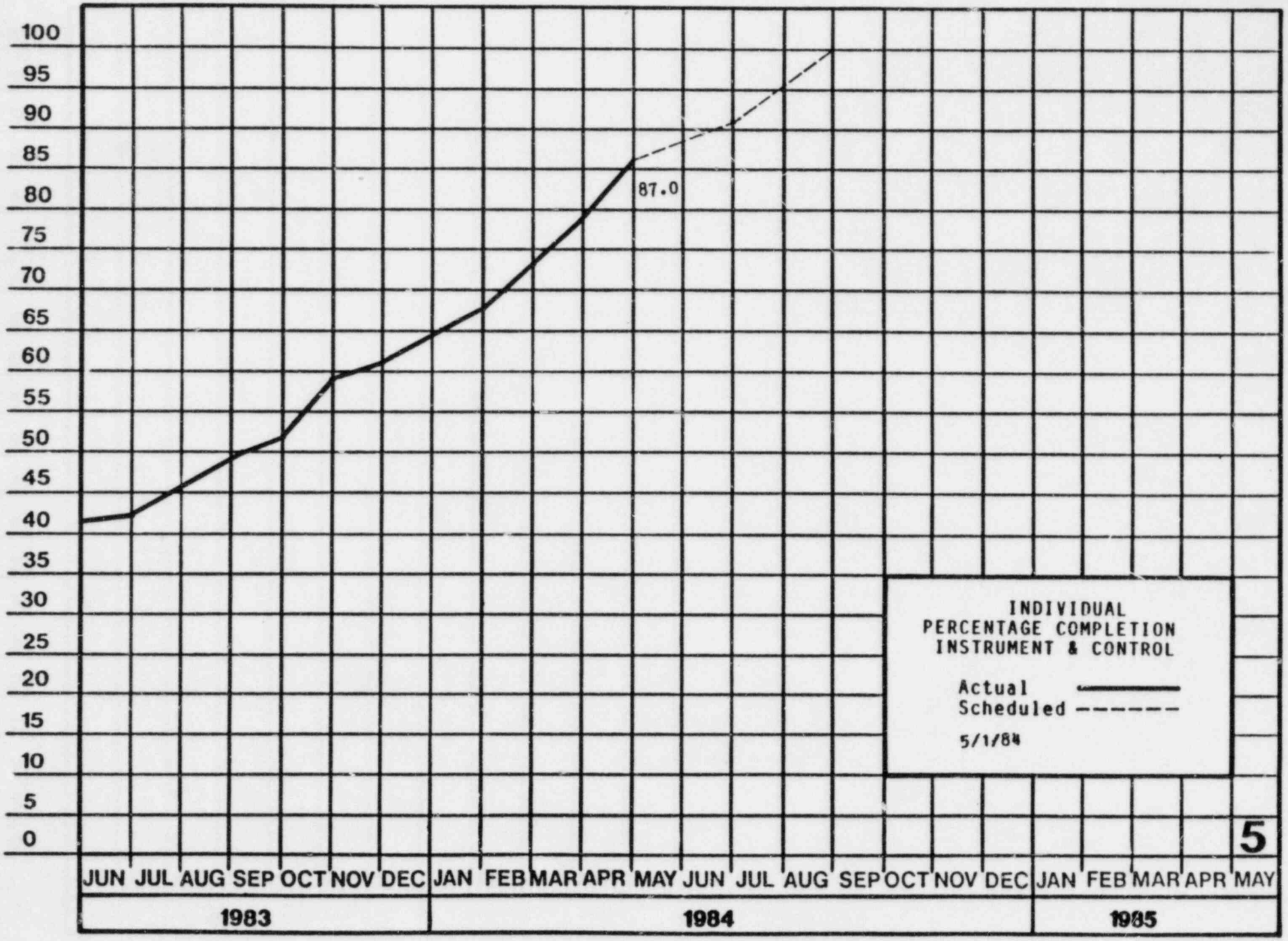
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
91.6
INDIVIDUAL
PERCENTAGE COMPLETION
ELECTRICAL
Actual
Scheduled
5/1/84
4
JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY
1983
1984
1985

9h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95
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65
60
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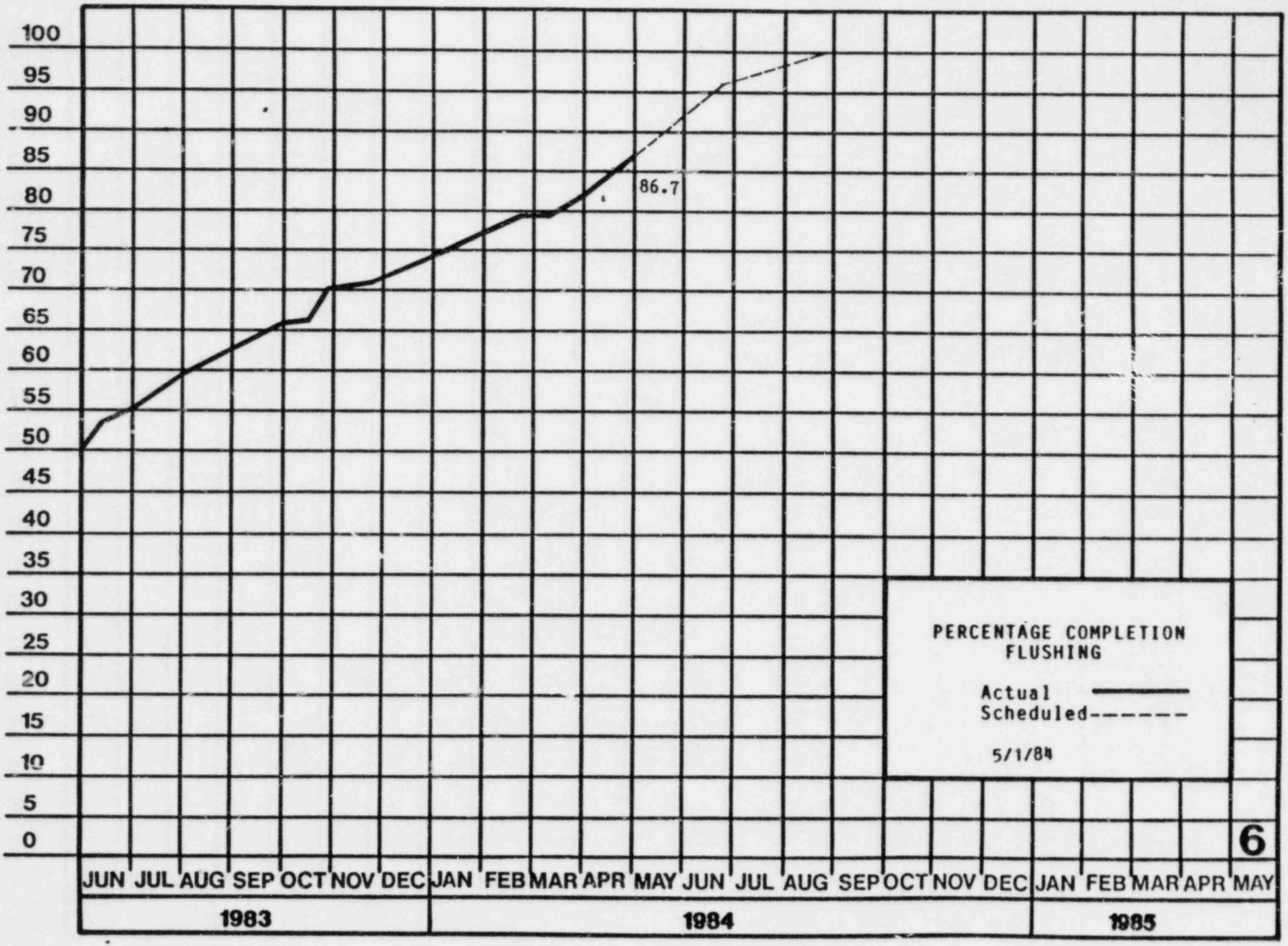
50
45
40
35
30
25
20
15
10
5
0
87.0
INDIVIDUAL
PERCENTAGE COMPLETION
INSTRUMENT & CONTROL
Actual
Scheduled
5/1/84
5
JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY
1983
1984
1985

49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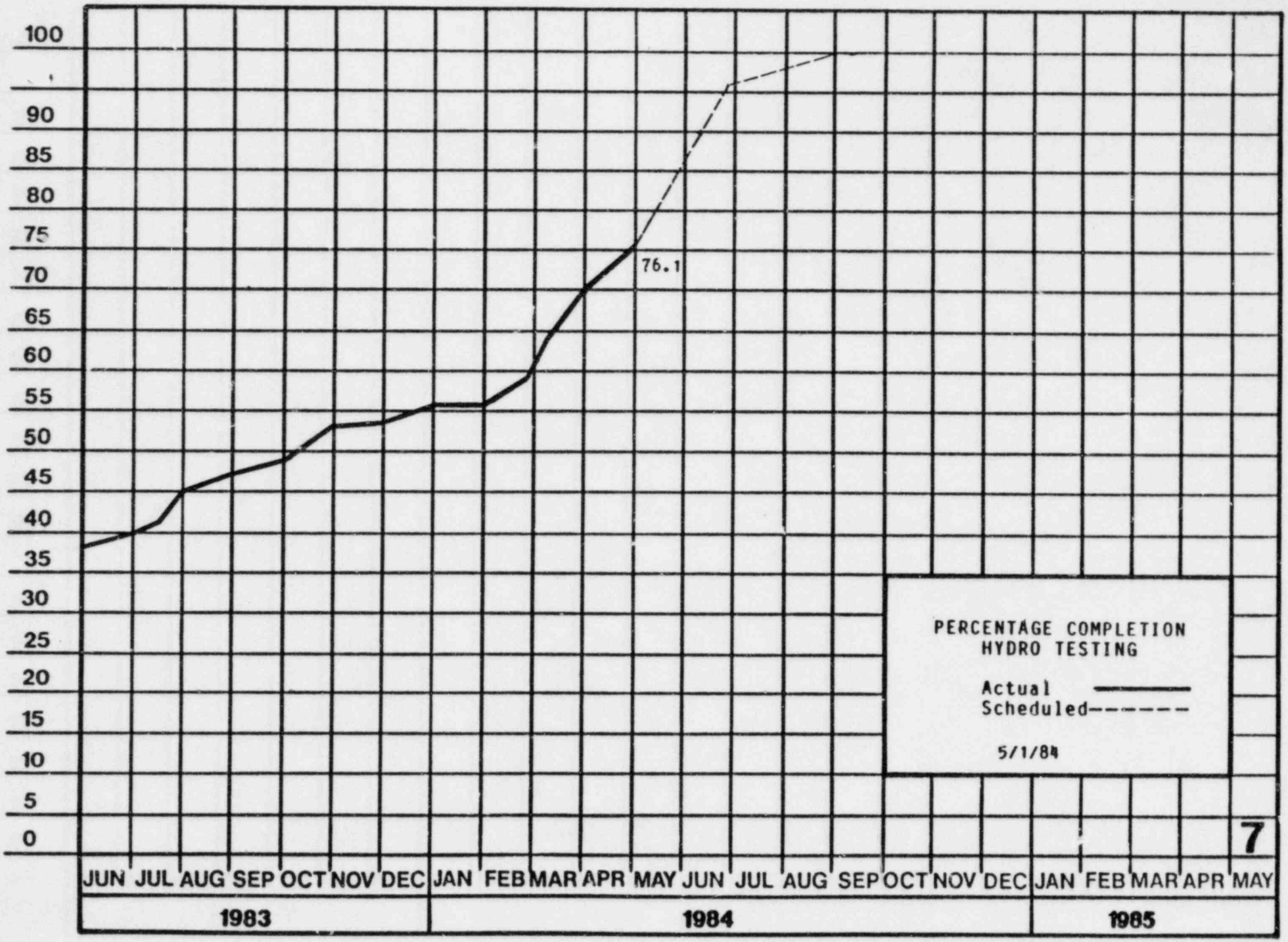
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
86.7
PERCENTAGE COMPLETION
FLUSHING
Actual
Scheduled
5/1/84
6
JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY
1983
1984
1985


100
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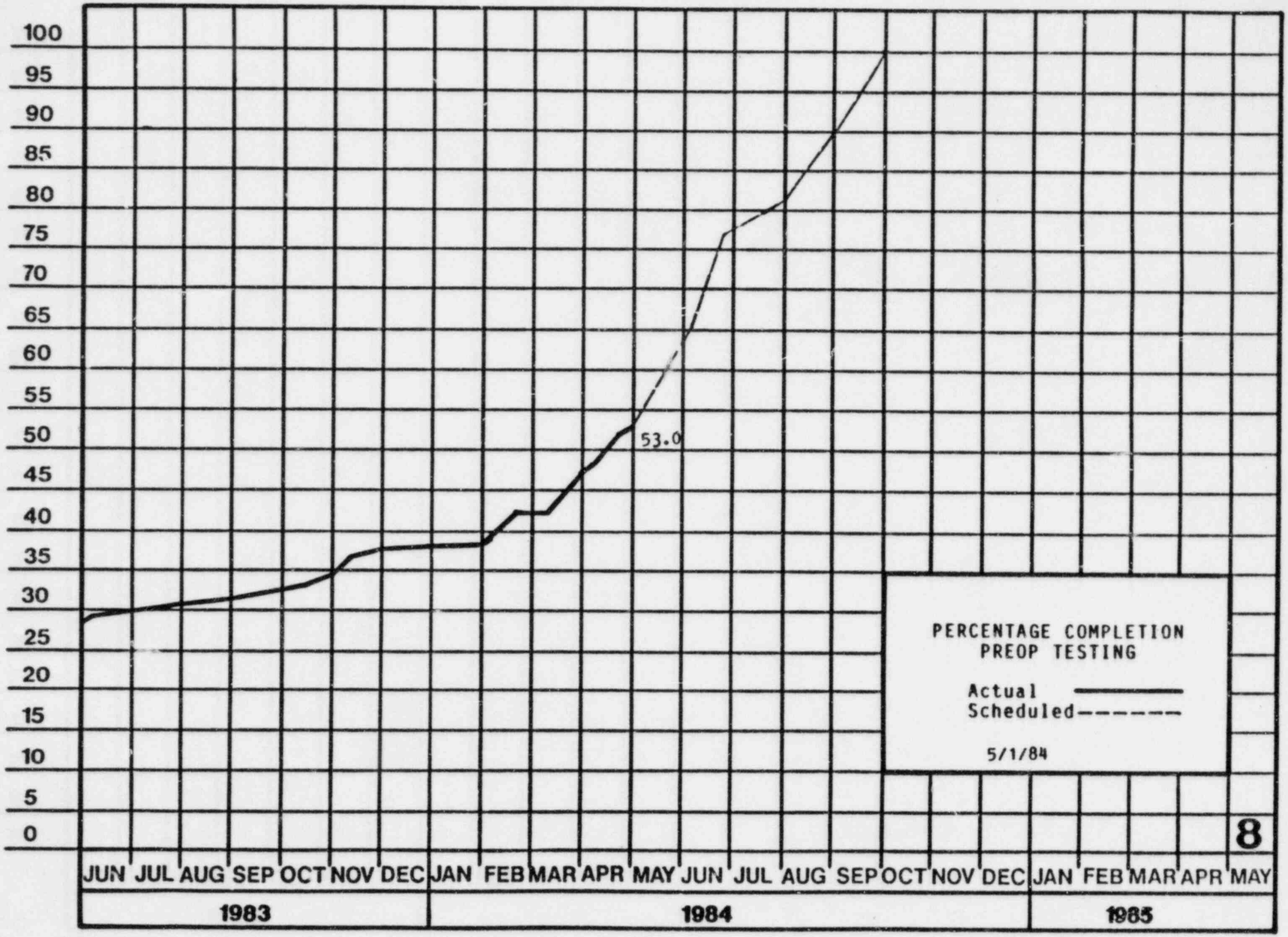
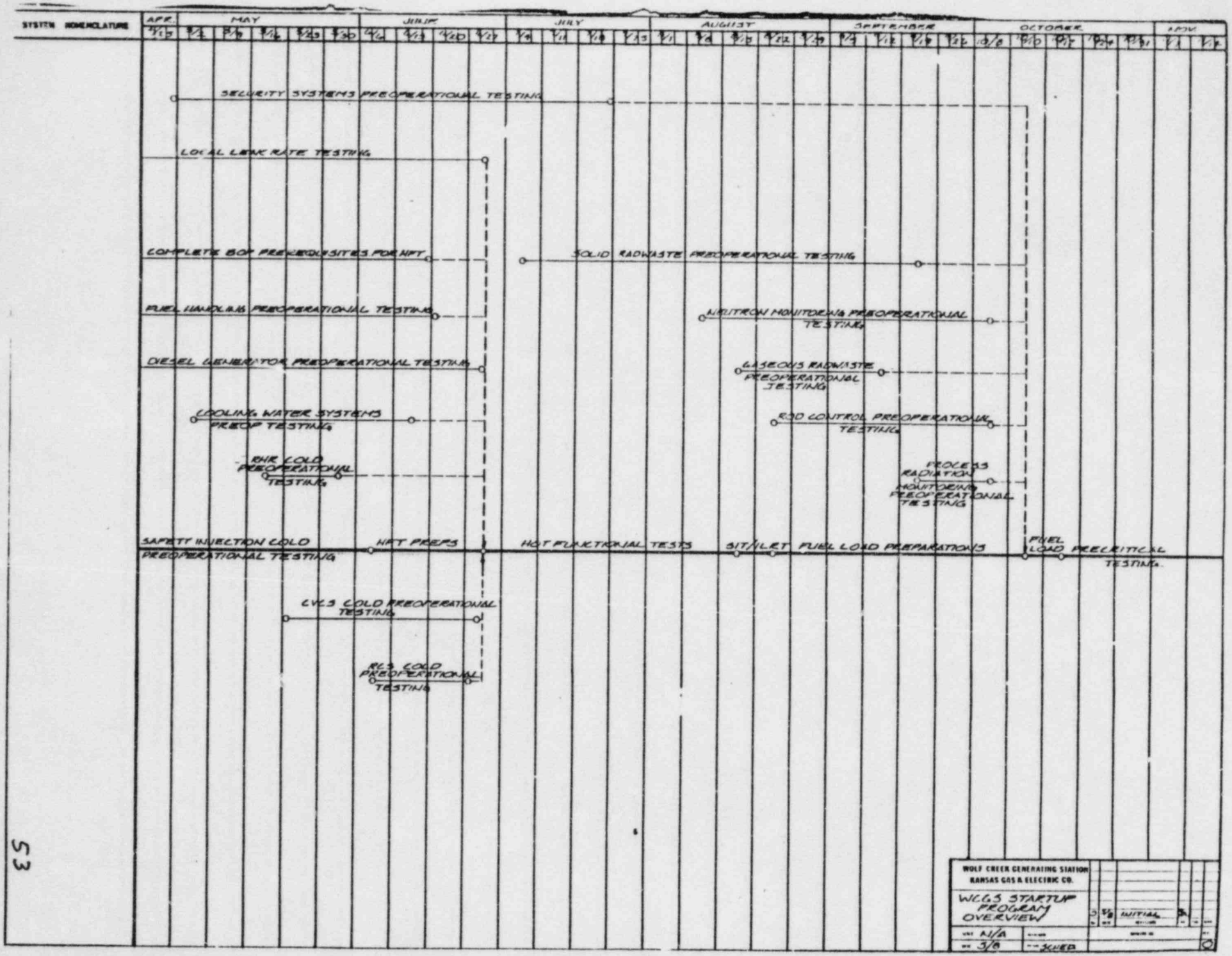
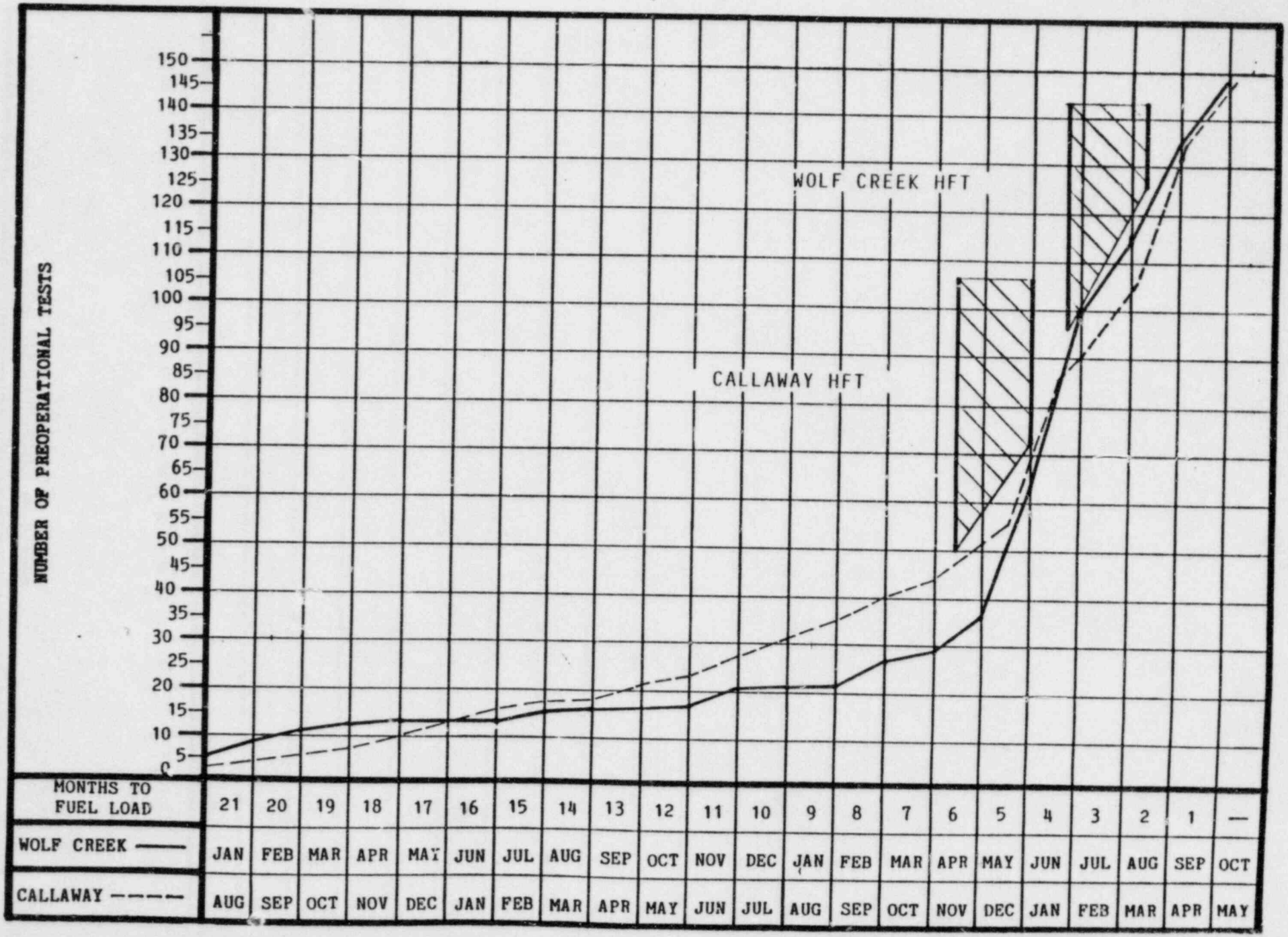
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
76.1
PERCENTAGE COMPLETION
HYDRO TESTING
Actual
Scheduled
5/1/84
7
JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY
1983
1984
1985


100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
53.0
PERCENTAGE COMPLETION
PREOP TESTING
Actual
Scheduled
5/1/84
8
JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY
1983
1984
1985


SYSTEM NOMENCLATURE
APR.
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOV.
SECURITY SYSTEMS PREOPERATIONAL TESTING
LOCAL LEAK RATE TESTING
COMPLETE BOP PREREQUISITES FOR HFT
SOLID RADWASTE PREOPERATIONAL TESTING
FUEL HANDLING PREOPERATIONAL TESTING
NEUTRON MONITORING PREOPERATIONAL TESTING
DIESEL GENERATOR PREOPERATIONAL TESTING
GASEOUS RADWASTE PREOPERATIONAL TESTING
COOLING WATER SYSTEMS PREOP TESTING
RMS CONTROL PREOPERATIONAL TESTING
RHR COLD PREOPERATIONAL TESTING
PROCESS RADIATION MONITORING PREOPERATIONAL TESTING
SAFETY INJECTION COLD PREOPERATIONAL TESTING
HFT PREPS
HOT FUNCTIONAL TESTS
SIT/ILRT
FUEL LOAD PREPARATIONS
FUEL LOAD PRECRITICAL TESTING
CVCS COLD PREOPERATIONAL TESTING
RCS COLD PREOPERATIONAL TESTING
WOLF CREEK GENERATING STATION
KANSAS GAS & ELECTRIC CO.
WCGS STARTUP PROGRAM OVERVIEW
INITIAL
N/A
3/8
XNED

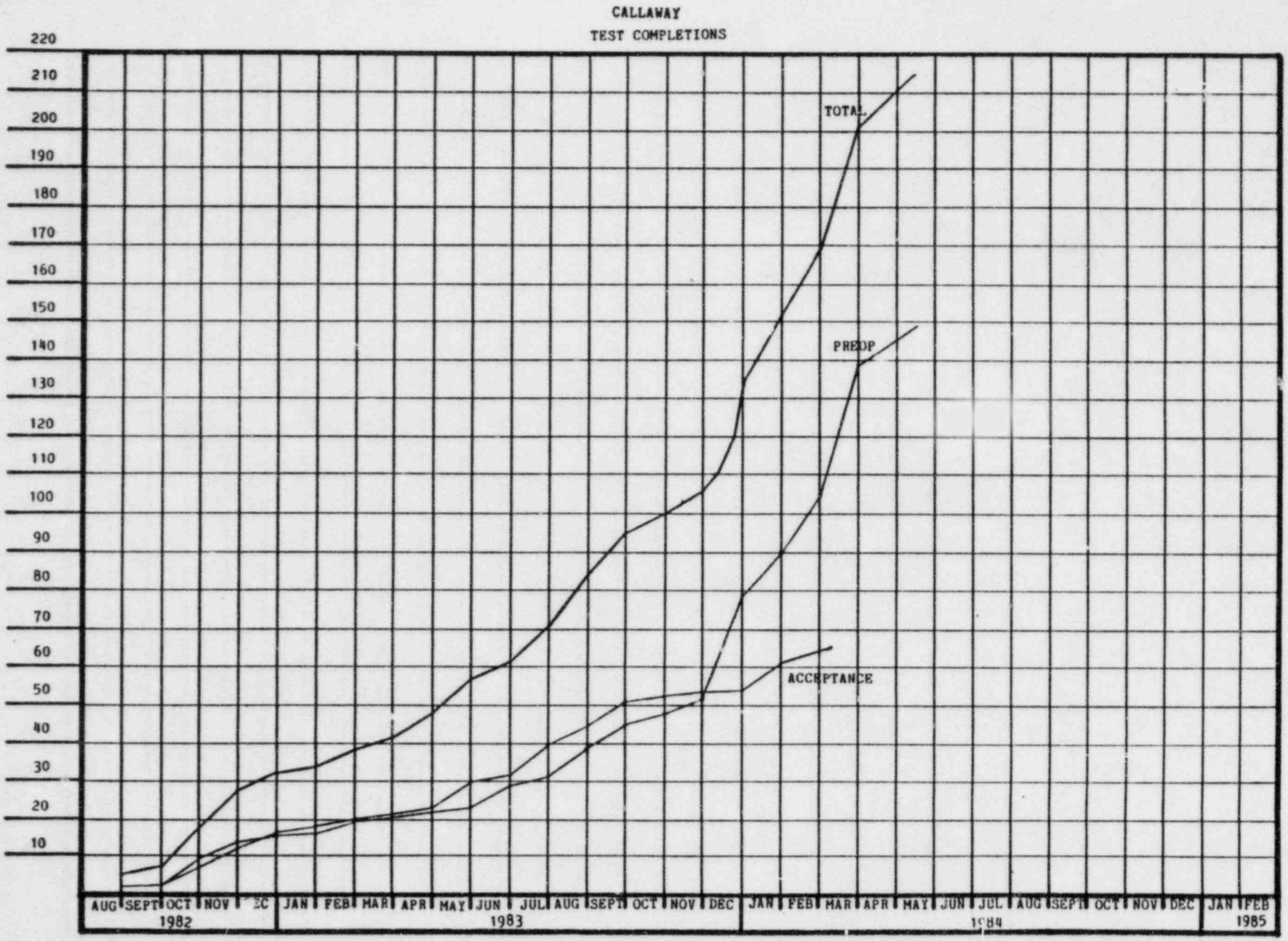

NUMBER OF PREOPERATIONAL TESTS
150
145
140
135
130
125
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
WOLF CREEK HFT
CALLAWAY HFT
MONTHS TO FUEL LOAD
21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 —
WOLF CREEK ——
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT
CALLAWAY – – – –
AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY

May 8, 1984

COMPARISON CHART
CALLAWAY/WOLF CREEK
PREOPERATIONAL AND ACCEPTANCE TEST PROCEDURES

	WOLF CREEK	CALLAWAY
Preoperational Tests	148	149
Acceptance Tests	70	65
SUBTOTAL	218	214
Energization Procedures (Wolf Creek ONLY)	15	
TOTAL TESTS	233	214

55


CALLAWAY
TEST COMPLETIONS
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
TOTAL
PREOP
ACCEPTANCE
AUG
SEPT
OCT
NOV
DEC
1982
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEPT
OCT
NOV
DEC
1983
JAN
FEB
MAR
APR
MAY
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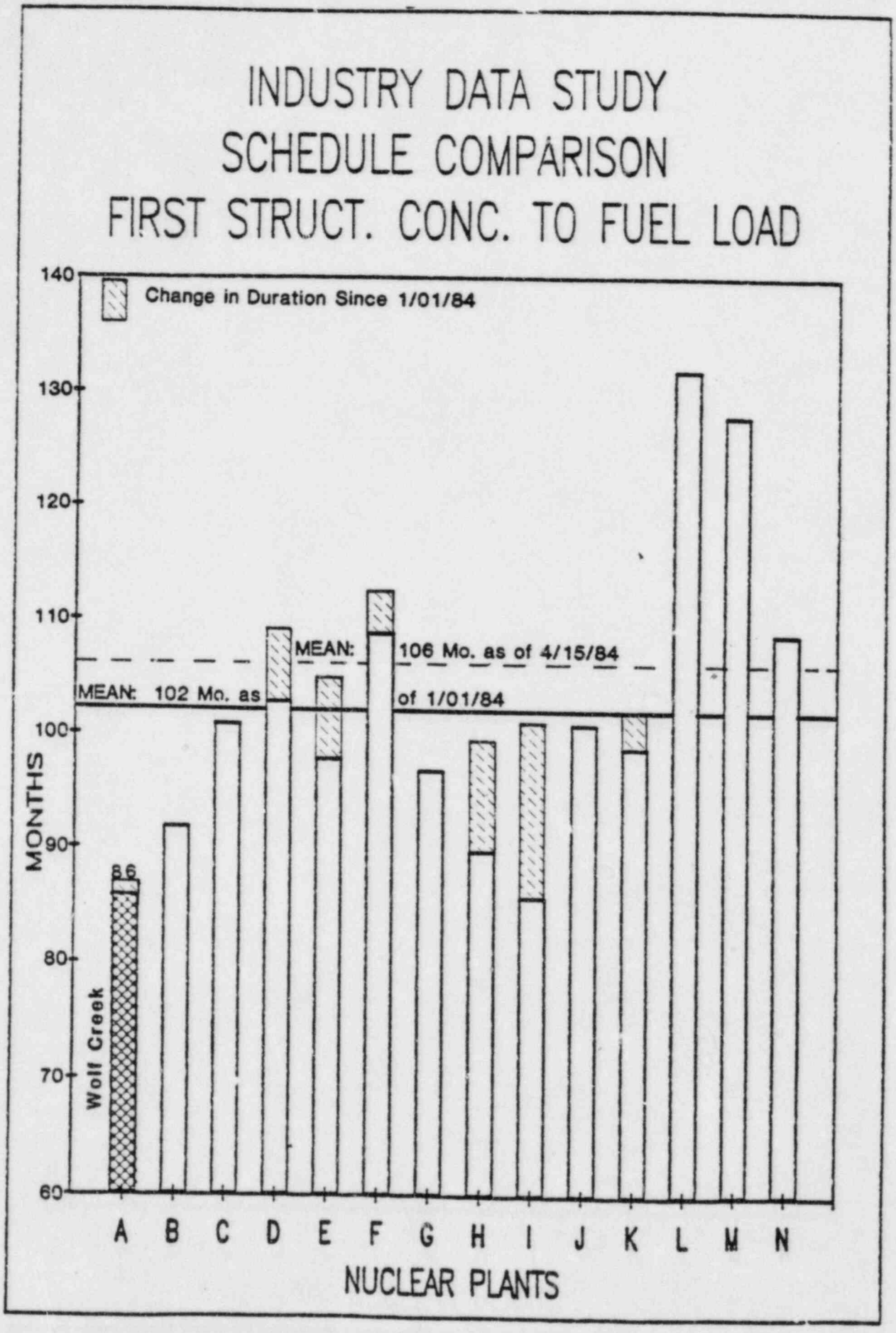
JUL
AUG
SEPT
OCT
NOV
DEC
1984
JAN
FEB
1985

EXHIBIT VI-13



BENEFITS FROM STANDARDIZATION

and

STANDARD DESIGN CONCEPT

Melvin Johnson

AEC POLICY STATEMENT (April 28, 1972)
ENCOURAGED STANDARDIZATION

- OPERATING RELIABILITY
- PUBLIC HEALTH & SAFETY
- ENVIRONMENTAL VALUES
- SAFETY-RELATED R & D
- AEC REVIEW

Figure 1

AEC STATEMENT (March 5, 1973) DESCRIBED ACCEPTABLE APPROACHES TO STANDARDIZATION

- REFERENCE SYSTEM
  RESAR-3, GESSAR, ETC.
- DUPLICATE PLANT
  SNUPPS, DUKE POWER CE "SIX-PACK"
- LICENSE TO MANUFACTURE
  OFFSHORE POWER SYSTEMS
- (REPLICATION)
  MILLSTONE 3/JAMESPORT

Figure 2

OPERATING RELIABILITY

Standard Plant Benefits

Envelope of 4 Sites provides extra conservatism

Multi-Utility
- Management
- Design Review
- Quality Assurance
- Procurement & Manufacturing
- Construction Planning
- Startup
- Spare Parts

Additional SNUPPS Benefits

- Modeling
- Engineering Detail

Public Health and Safety (Employee Safety)

Standard Plant Benefits

Same as for Reliability, plus

- Cooperation during emergencies
- Simulators at Zion, Pittsburgh, Wolf Creek, Callaway
- Operating information exchange
- Spare Parts Inventory

Environmental Values

Standard Plant Benefits

None identified

Additional SNUPPS Benefits

Radwaste System Design

Holdup Tank
Resins
Evaporators
Reverse Osmosis
Heat Exchangers
Filters

Other Systems

Sewage Treatment
Sludge Ponds
Oil Separators
Transformer Vaults
Preservation of Vegetation and Wildlife

Safety-Related R&D

Standard Plant Benefits

None Identified

Additional SNUPPS Benefits

Model Boiler Tests
Materials in Steam Generator and Secondary System
Instrumented Steam Generator
Cable Tray Support
Penetration Closure
Fire Retardant Electrical Cable
Wind-Generated Missle Damage
Screenhouse Intake Flow Modeling
Containment Sump Model Testing
Auxiliary Feedwater Pump Design

NRC Review

Standard Plant FSAR	11 Volumes
Site Addenda	5 Volumes

Lessons Learned Program

Part 21 and 50.55(e) Reporting Programs

Inspections

Cost and Schedule

Shared Design Cost

Licensing Cost

Quantity Purchase

Learning During Manufacturing and Construction

Constructibility Due to Modeling

Common Resolution of Field Problems

Use of Model in Work Planning

Shared Construction Equipment

Prefabricated Assemblies

Procedure Development

Callaway Experience Applied to Wolf Creek

Shared Spare Parts

Estimated Cost Savings: $200,000,000 +
(Independent of Schedule)

Estimated Schedule Savings: 1 - 2 years

Atomic Industrial Forum, Inc.
Public Affairs and
Information Program

3/12/84
H list

U.S. COMMERCIAL REACTORS UNDER CONSTRUCTION

IN ORDER BY ESTIMATED TOTAL CONSTRUCTION LEAD TIME - LEAST TO MOST

There are a total of 50 reactors with construction permits, representing 55,894 net MWe.

Of these 50 reactors, 42 are under construction and 8 are indefinitely delayed.

A breakdown by percent of reactor construction completed shows: 2 units = 1-24%, 10 units = 25-49%, 10 units = 50-74%, and 28 units 75-99%.

The number of reactors by type/manufacturer are: 36 PWR's / W-24, CE-7, B&W-5; and 14 BWR's / all GE.

Reactor	Utility	State	Net MWe	Type/ Mfr	CP Issued (mo/yr)	Est OL Issuance (mo/yr)	Est Total Constr (mos/yrs)	Current Constr Complete (%)
Wolf Creek	KG&E	KS	1,150	PWR/W	5/77	7/84	86/7.2	90
Harris 1	CP&L	NC	900	PWR/W	1/78	5/85	88/7.3	85
Perry 1	Cleve Elec Illum	OH	1,205	BWR/GE	5/77	11/84	90/7.5	92
Callaway 1	Union Electric	MO	1,150	PWR/W	4/76	3/84	95/7.9	95
Palo Verde 1	APS	AZ	1,270	PWR/CE	5/76	4/84	95/7.9	99
River Bend 1	Gulf States Util	LA	934	BWR/GE	3/77	4/85	97/8.1	80
Seabrook 1	PS Co of NH	NH	1,150	PWR/W	7/76	9/84	98/8.2	86
Byron 1	Commonwealth Ed	IL	1,120	PWR/W	12/75	2/84	98/8.2	90
Palo Verde 2	APS	AZ	1,270	PWR/CE	5/76	1/85	104/8.7	98
Catawba 1	Duke Power	SC	1,145	PWR/W	8/75	5/84	105/8.8	94
Braidwood 1	Commonwealth Ed	IL	1,120	PWR/W	12/75	4/85	112/9.3	69
Byron 2	Commonwealth Ed	IL	1,120	PWR/W	12/75	4/85	112/9.3	72
Waterford 3	LP&L	LA	1,104	PWR/CE	11/74	4/84	113/9.4	99
Comanche Peak 1	Texas Utilities	TX	1,150	PWR/W	12/74	7/84	115/9.6	97
Clinton 1	Illinois Power	IL	933	BWR/GE	2/76	12/85	118/9.8	88
Palo Verde 3	APS	AZ	1,270	PWR/CE	5/76	4/86	119/9.9	81

(continued)

Reactor	Utility	State	Net MWe	Type/ Mfr	CP Issued (mo/yr)	Est OL Issuance (mo/yr)	Est Total Constr (mos/yrs)	Current Constr Complete (%)
Susquehanna 2	PP&L	PA	1,050	BWR/GE	11/73	2/84	123/10.3	99
Braidwood 2	Commonwealth Ed	IL	1,120	PWR/W	12/75	4/86	124/10.3	53
Perry 2	Cleve Elec Illum	OH	1,205	BWR/GE	5/77	11/87	126/10.5	44
Limerick 1	Phila Elec	PA	1,055	BWR/GE	7/74	3/85	129/10.8	90
So Tx Project 1	Houston L&P	TX	1,250	PWR/W	12/75	12/86	132/11.0	50
Comanche Peak 2	Texas Utilities	TX	1,150	PWR/W	12/74	1/86	133/11.1	65
Shoreham	LILCO	NY	846	BWR/GE	4/73	5/84	133/11.1	99
Catawba 2	Duke Power	SC	1,145	PWR/W	8/75	10/86	134/11.2	62
Hope Creek 1	PSE&G	NJ	1,067	BWR/GE	11/74	1/86	134/11.2	76
Watts Bar 1	TVA	TN	1,177	PWR/W	1/73	3/84	134/11.2	97
Millstone 3	NE Utilities	CT	1,150	PWR/W	8/74	11/85	135/11.3	80
Beaver Valley 2	Duquesne Light	PA	836	PWR/W	5/74	12/85	139/11.6	76
Nine Mile Point 2	Niagara Mohawk	NY	1,080	BWR/GE	6/74	2/86	140/11.7	81
Enrico Fermi 2	Detroit Ed	MI	1,139	BWR/GE	9/72	6/84	141/11.8	95
Vogtle 1	Ga Power	GA	1,100	PWR/W	6/74	9/86	147/12.3	61
Watts Bar 2	TVA	TN	1,177	PWR/W	1/73	9/85	152/12.7	63
Bellefonte 1	TVA	AL	1,213	PWR/B&W	12/74	10/87	154/12.8	77
So Tx Project 2	Houston L&P	TX	1,250	PWR/W	12/75	12/88	156/13.0	25
Diablo Canyon 2	PG&E	CA	1,106	PWR/W	12/70	8/84	164/13.7	99
Midland 2	Consumers Power	MI	808	PWR/B&W	12/72	9/86	165/13.8	83
Vogtle 2	Ga Power	GA	1,100	PWR/W	6/74	3/88	165/13.8	20
Midland 1	Consumers Power	MI	425	PWR/B&W	12/72	5/87	174/14.5	83
Grand Gulf 2	MP&L	MS	1,250	BWR/GE	9/74	6/89	177/14.8	32
Bellefonte 2	TVA	AL	1,213	PWR/B&W	12/74	10/89	178/14.8	63
Limerick 2	Phila Elec	PA	1,055	BWR/GE	6/74	10/89	184/15.3	30
Hartsville A-1	TVA	TN	1,233	BWR/GE	5/77	indef	indef	44
Hartsville A-2	TVA	TN	1,233	BWR/GE	5/77	indef	indef	34
Seabrook 2	PS Co of NH	NH	1,150	PWR/W	7/76	indef	indef	28
WPPSS 1	WPPSS	WA	1,250	PWR/B&W	12/75	indef	indef	63
WPPSS 3	WPPSS	WA	1,240	PWR/CE	4/78	indef	indef	75
Yellow Creek 1	TVA	MS	1,285	PWR/CE	11/78	indef	indef	35
Yellow Creek 2	TVA	MS	1,285	PWR/CE	11/78	indef	indef	3

Sources: 1. AIF, "Nuclear Power Plants in the United States," January 1, 1984; and "Historical Profile of Nuclear Power Development," January 1, 1983.

2. NRC, "Quarterly Report" (of OL issuance schedule), January 25, 1984.

SUMMARY

Benefits of Standardization

Improved safety, reliability, maintainability, cost and schedule

Realized in:

- Design
- Manufacturing
- Construction
- Operation

PROJECT QUALITY

Richard Grant

FLOW CHART

QUALITY FIRST ACTION PLAN

METHODS USED TO CONTACT QI:

HOT LINE
WALK-INS
REDUCTION OF FORCE
QUITS

INTERVIEW PROCESS:

HARDWARE/DOCUMENTATION
INTIMIDATION/HARASSMENT

DRUGS/ALCOHOL/WEAPONS
MARITAL PROBLEMS
COST/SCHEDULE

INFORM RESPONSIBLE
MANAGEMENT AUTHORITY
AND/OR KG&E SECURITY

50.55(e)
REPORTABILITY
"PRELIMINARY"

INVESTIGATIVE PROCESS:

(CONFIDENTIAL)

HARDWARE/DOCUMENTATION
CONCERNS

INTIMIDATION/HARASSMENT
CONCERNS

VALID

- 50.55(e) - "Final"
- Surv. Rpt. Issued
- QPV/QPD Issued
- Resp. Organization Notified for Corrective Action
- Verification of Corrective Action
- Inform Allegor

INVALID

- Surv. Rpt. Issued
- Inform Allegor

VALID

- Severity Level Determined *
- 50.55(e) ?
- Appropriate KG&E Mgt. Informed
- Stop Work/Work Hold/ CAR/QPV Issued As Appro.
- Surv. Rpt. Issued
- Corrective Action Taken
- Verification of Corrective Action
- Inform Allegor

INVALID

- Surv. Rpt. Issued
- Inform Allegor

* Executive
Management
Supervision
Worker

OTHER REGULATORY and TECHNICAL ISSUES

Gene Rathbun

REVIEWS/ACTIVITIES
TO COMPLETE FUEL LOAD FOR WOLF CREEK

Bethesda - Washington

- SER Items - SSER #4 and #5
  - * 7 Open Items
  - *17 Confirmatory Items
  - * 6 License Conditions
- Board Notifications
- Generic Letters
- IDI/IDVP Response
- Management Readiness
- Commissioner Visit
- OL Including Tech Specs

Region IV

- Complete Required Inspections/Audits
- SER - Design Implementation
- 10CFR50.55(e) Closeout
- Bulletin Closeout
- Pre-Op Test
- Exception List
- Environmental Program
- Emergency Planning
- Security
- As-Builts
- CAT
- Region Letters to NRR

MARTIN

E. Johnson
R. Denise
W. Johnson (last)

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NRC (2)
McLaurin
Glover
Gardner
Flannigan -
OPS/KCPL

PREOP STATUS REPORT
07/25/84

Yesterday no (Ø) preop started.

Yesterday no (Ø) tests completed.

Twenty-nine (29) tests are in progress:

SU3 ABØ3 - MAIN STEAM ISOLATION VALVE
Section 7

SU4 ACØ3 - TURBINE SYSTEM COLD TEST
Section 7, on hold for resolution of turning gear vibration problem

SU3 BBØ5 - REACTOR COOLANT SYSTEM HOT PREOP
Section 6

SU3 BGØ4 - LETDOWN SYSTEM PREOP
Section 7

SU4 CQØ1 - SITE SECURITY PREOP
Section 7

SU4 EAØ1 - SERVICE WATER PREOP
On hold for SU3 EFØ1

SU3 ECØ1 - SPENT FUEL POOL COOLING PURIF. PREOP
Fuel building portion is complete; balance after HFT

SU3 GKØ1 - CONTROL BLDG HVAC PREOP
Section 7

SU3 GNØ1 - CONTAINMENT COOLING SYSTEM PREOP
Section 7

SU8 GPØ1 - LLRT
Intermittent

SU4 KCØ1B- FIRE PROTECTION POWER BLOCK WET PIPING PREOP
Section 7, on hold for SFR on wiring/indicator problem

SU4 KCØ2 - FIRE PROTECTION SYSTEM HALON PREOP
Section 7

SU4 KCØ3 - FIRE PROTECTION SYSTEM DETECTION & ALARMS
Section 7

SU8 KEØ3 - LOAD TEST POLAR CRANE
Section 7

SU3 KEØ5 - REFUELING MACHINE CHANGE FIXTURE
Section 7, on hold for HFT

SU3 KEØ6 - REFUELING MACHINE INDEXING TEST
On hold for HFT

SU3 KEØ7 - PREOP INTEGRATED OPERATION OF FUEL HANDLING SYSTEM
Portion on Fuel Bldg side complete; balance after HFT

SU4 KHØ2 - SERVICE GASES
Section 7

SU3 KJØ1 - DIESEL GENERATOR MECHANICAL PREOP
"B" train complete; "A" train Section 6

SU3 NBØ1 - 4160 V CLASS IE SYSTEM PREOP
On hold

SU3 NGØ1 - 480 V CLASS IE SYSTEM PREOP
On hold

Preops in progress - continued

SU8 RJØ1 - PLANT COMPUTER POINT VERIFICATION
Intermittent
SU8 RJØ2 - PLANT COMPUTER (NSSS) ACCEPTANCE TEST
On hold
SU3 SAØ1 - ENG'D SAFEGUARDS FEATURES STATUS PANEL
Section 7
SU8 SAØ1 - ENG'D SAFEGUARDS DATA VERIFICAION
Intermittent
SU4-SKØ1 - PLANT SECURITY SYSTEM
Section 7
SU3 ØØØ4 - POWER CONVERSION & ECCS THERMAL EXPANSION TEST
Section 7
SU8 ØØØ5 - HVAC AIR BALANCE INSTRUCTIONS
Intermittent
SU8 ØØØ8 PZR LEVEL INDICATION CROSS COMPARISON
Section 7

Dynamic testing including proof flushing as applicable is currently in progress on two (2) preop.

SU4 BMØ1 - STEAM GENERATOR BLOWDOWN
SU3 EFØ1 - ESSENTIAL SERVICE WATER SYSTEM PREOP

PREOP STATUS REPORT
July 12, 1984

Yesterday no preops started.

Yesterday two (2) preops completed.

SU3 EJØ1
SU4 GBØ1

Twenty four (24) preops are in progress:

SU4 ABØ1 - Section 7
SJ3 ABØ3 - Section 7
SU4 ACØ3 - Section 7, on hold for resolution of turning gear vibration problem
SU3 BGØ3 - Section 7
SU3 BGØ5 - Section 7
SU4 CQØ1 - Section 7
SU4 EAØ1 - On hold for SU3 EFØ1
SU3 ECØ1 - Fuel building portion is complete; balance after HFT
SU3 EMØ4 - Section 7
SU3 GKØ1 - Section 7
SU8 GPØ1 - Intermittent
SU4 KCØ1B- Section 7, on hold for SFR on wiring/indicator problem
SU4 KCØ2 - Section 7
SU4 KCØ3 - Section 6
SU3 KEØ5 - Section 7, on hold for HFT
SU3 KEØ7 - Portion on Fuel Bldg side complete; balance after HFT
SU3 KJØ1 - Section 7
SU8 RJØ1 - Intermittent
SU8 RJØ2 - Section 7
SU3 SAØ1 - Section 7
SU8 SAØ1 - Intermittent
SU4-SKØ1 - Section 7

APPROVED BY: _____

REVISION 10

ISSUE DATE 07/16/84

DATA DATE

JUL	AUG	SEP	OCT	NOV	DEC

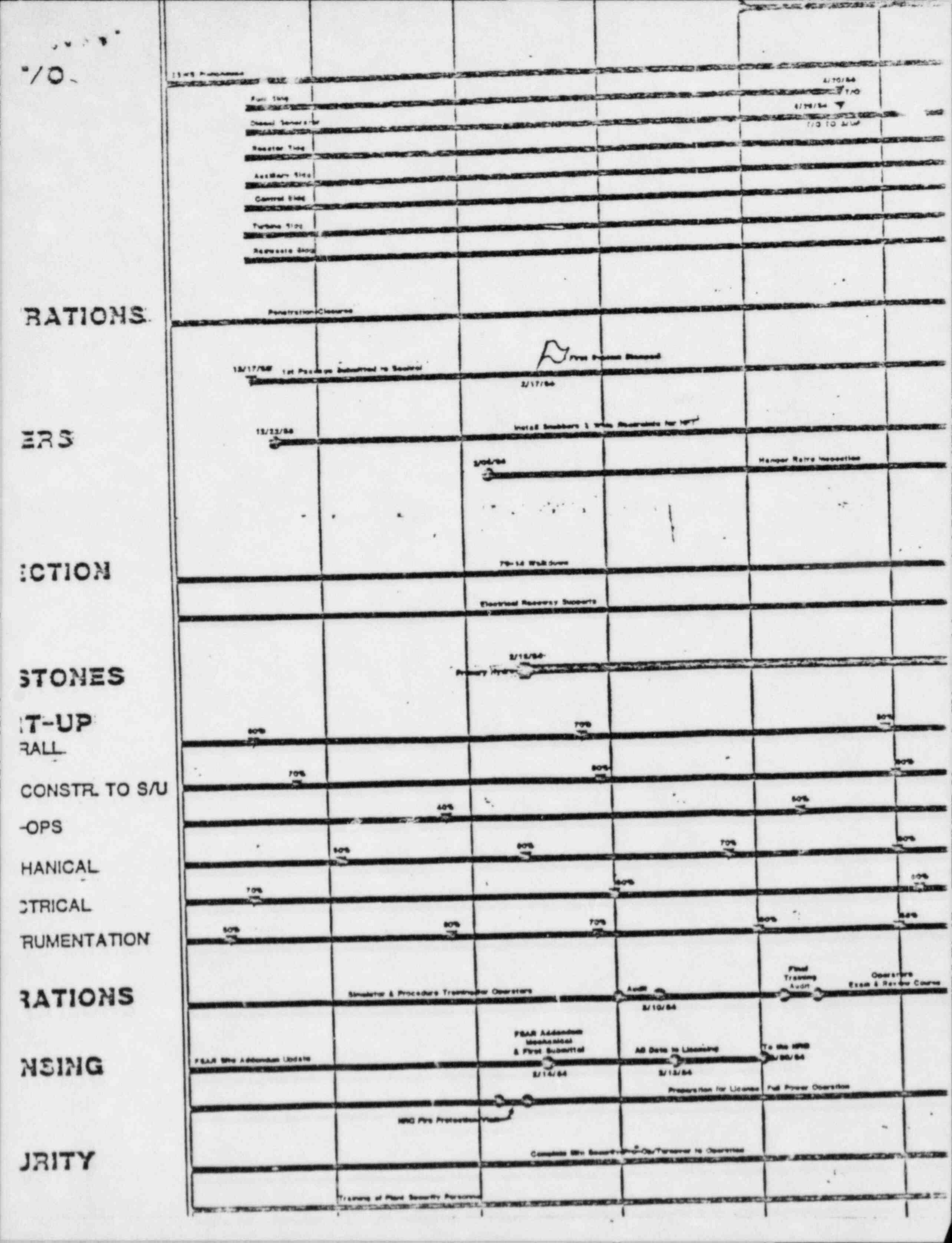
SCHEDULE PROGRESS

MILESTONES	SCHEDULED (AS OF MID. 1983)	Forecast * (AS OF 7/16/84)
SEC. HYDRO	10/14/83	8/06/83 A
PRI. HYDRO	3/23/84	2/13/84 A
START HFT	7/24/84	7/16/84 A
SIT/ILRT	9/21/84	9/09/84
LOAD FUEL	10/31/84	11/01/84
SYNC. WITH GRID (10% PWR.) (115 MW)	8 Month Generic	1/07/85
COMPLETE 50% PWR. TESTING		2/12/85 Commercial Operation
COMPLETE 100% PWR. TESTING	5/01/85	3/22/85
CONTINGENCY TO 5/01/85	—	+ 5 Weeks

* FORECAST MILESTONE DATES WILL BE UPDATED MONTHLY

Fuel Load

Commercial Operation



T/O
RATIONS
Penetration Closures
1st Package Submitted to Sequoia
First Package Stamped
2/17/84
ERS
Install Snubbers & ... for HFT
Hanger Retro Inspection
ECTION
79-14 Walkdown
Electrical Raceway Supports
STONES
2/15/84
Primary Hydro
T-UP
RALL
CONSTR. TO S/U
-OPS
HANICAL
CTRICAL
RUMENTATION
RATIONS
Simulator & Procedure Training for Operators
Audit
Final Training Audit
Operators Exam & Review Course
NSING
FSAR Addendum Update
FSAR Addendum Mechanical & First Submittal
All Data to Licensing
To the NRC
Preparation for License Full Power Operation
NRC Fire Protection Visit
JRITY
Complete Site Security Pre-Op/Turnover to Operations
Training of Plant Security Personnel

F. Xia

McLaurin
Glover
Gardner
Flannigan -
OPS/KCPL

PREOP STATUS REPORT
July 24, 1984

Yesterday one (1) preop started.

SU3 GN01 - CONTAINMENT COOLING PREOP

Yesterday no (0) tests completed.

Twenty-nine (29) tests are in progress:

SU3 AB03 - MAIN STEAM ISOLATION VALVE
Section 7

SU4 AC03 - TURBINE SYSTEM COLD TEST
Section 7, on hold for resolution of turning gear vibration problem

SU3 BB05 - REACTOR COOLANT SYSTEM HOT PREOP
Section 6

SU3 BG04 - LETDOWN SYSTEM PREOP
Section 7

SU4 CQ01 - SITE SECURITY PREOP
Section 7

SU4 EA01 - SERVICE WATER PREOP
On hold for SU3 EF01

SU3 EC01 - SPENT FUEL POOL COOLING PURIF. PREOP
Fuel building portion is complete; balance after HFT

SU3 GK01 - CONTROL BLDG HVAC PREOP
Section 7

SU3 GN01 - CONTAINMENT COOLING SYSTEM PREOP
Section 7

SU8 GP01 - LLRT
Intermittent

SU4 KC01B- FIRE PROTECTION POWER BLOCK WET PIPING PREOP
Section 7, on hold for SFR on wiring/indicator problem

SU4 KC02 - FIRE PROTECTION SYSTEM HALON PREOP
Section 7

SU4 KC03 - FIRE PROTECTION SYSTEM DETECTION & ALARMS
Section 7

SU8 KE03 - LOAD TEST POLAR CRANE
Section 7

SU3 KE05 - REFUELING MACHINE CHANGE FIXTURE
Section 7, on hold for HFT

SU3 KE06 - REFUELING MACHINE INDEXING TEST
On hold for HFT

SU3 KE07 - PREOP INTEGRATED OPERATION OF FUEL HANDLING SYSTEM
Portion on Fuel Bldg side complete; balance after HFT

SU4 KH02 - SERVICE GASES
Section 7

SU3 KJ01 - DIESEL GENERATION MECHANICAL PREOP
"B" train complete; "A" train Section 6

SU3 NB01 - 4160 V CLASS IE SYSTEM PREOP
On hold

SU3 NG01 - 480 V CLASS IE SYSTEM PREOP
On hold

Preops in progress - continued

SU8 RJ01 - PLANT COMPUTER POINT VERIFICATION
Intermittent
SU8 RJ02 - PLANT COMPUTER (NSSS) ACCEPTANCE TEST
On hold
SU3 SA01 - ENG'D SAFEGUARDS FEATURES STATUS PANEL
Section 7
SU8 SA01 - ENG'D SAFEGUARDS DATA VERIFICAION
Intermittent
SU4-SK01 - PLANT SECURITY SYSTEM
Section 7
SU3 0004 - POWER CONVERSION & ECCS THERMAL EXPANSION TEST
Section 7
SU8 0005 - HVAC AIR BALANCE INSTRUCTIONS
Intermittent
SU8 0008 PZR LEVEL INDICATION CROSS COMPARISON
Section 6

Dynamic testing including proof flushing as applicable is currently in progress on one (1) preop.

SU3 EF01 - ESSENTIAL SERVICE WATER SYSTEM PREOP

SYSTEMS TURNED OVER TO STARTUP

Systems by Sort
Systems by Date

8/07/84

DISTRIBUTION:

GARDNER
GLOVER
HANDFINGER
ELLISON
CAMERON
McLAURIN

CRAWFORD
MILLER
CREEL

HILL
KICHTON

BENNETT
SCHOEFER

ARNWINE
FOSTER
BUNDY (NRC)
~~NRC #62~~
ZELL

CARDEN
BISHOP
BROWN
HERBST
HOLLAWAY
KVETON
SMITH, J.H. B
BAILEY (NPE)
JOHNSON, M. (NPE)

S.T.S
OP.S.S.

30 total

*** W O L F C R E E K T R A C K I N G S Y S T E M ***

SYSTEM TURNED OVER TO STARTUP
SORT BY SYSTEM
AUGUST 4, 1984

SYS DES	SYSTEM DESCRIPTION	T/O DATE	OPS T/O DATE	G./. N.	AGE
1 AB-1	MAIN STEAM (SEC HYDRO BOUNDRIES)	830721		Q	B
2 AB-2	MAIN STEAM (BALANCE OF SYST.)	840221		N	B
3 AC-1	MAIN TURBINE (GE SCOPE)	831001		N	B
4 AC-2	MAIN TURBINE (BECHTEL SCOPE)	831201		N	B
5 AD	CONDENSATE	830107	840420	N	B
6 AE	MAIN FEEDWATER	830128		Q	B
7 AF-1	HEATER DRAIN PUMPS & TANK	821214		N	B
8 AF-2	MISC PIPING TANKS,HX,ETC.	840203		N	B
9 AK	MAIN COND PIPING	821112	840531	N	B
10 AL	AUXILIARY FEEDWATER	821123		Q	B
11 AN-1	STORAGE TANKS & TRANSFER SYSTEM	820614	840427	N	B
12 AN-2	DEGASSIFIER & DEGASSIFIER PUMPS	820507	840427	N	B
13 AP	CONDENSATE TRANSFER & STORAGE	820527	821230	N	B
14 AQ	CONSDENSATE & FEEDWATER CHEM. CONTROL	830301	840531	N	B
15 AX-1	ACID FEED (CWDH)	840824		N	SSL
16 AX-2	ACID FEED (COND. DEMIN)	820423	840427	N	SSL
17 BB	REACTOR COOLANT	840127		Q	B
18 BG-1	BORON ADDITION TO CHG PUMP SUCTION	831122		Q	B
19 BG-2	CHARGING & LETDOWN	831122		Q	B
20 BG-3	BORON THERMAL REGENERATION	840403		Q	B
21 BL	REACTOR MAKEUP WATER	821019	840420	Q	B
22 BM	STEAM GENERATOR BLOWDOWN	830202		Q	B
23 BN	REFUELING WATER STORAGE	831127		Q	B
24 CA-1	STEAM SEALS (GE SCOPE)	830810	840412	N	B
25 CA-2	STEAM SEALS (BECHTEL SCOPE)	821230	840410	N	B
26 CB	MAIN TURBINE & GENERATOR LUBE. OIL	820614	840416	N	B
27 CC	GENERATOR HYDROGEN	820813		N	B
28 CD	GENERATOR SEAL OIL	820614	840412	N	B
29 CE	STATOR COOLING	820427	840412	N	B
30 CF	LUBE OIL STORAGE,TRANSFER & PURIF.	820614		N	B
31 CG	CONDENSER AIR REMOVAL	830829	840412	N	B
32 CH	MAIN TURBINE CONTROL OIL	820614		N	B
33 CL-1	CHLORINE	820929	840613	N	SSL
34 CL-2	CHLORINATION SYSTEM	821130	840613	N	SSL
35 CO	CARBON DIOXIDE	830722	840725	N	SSL
36 CQ-1	SITE SECURITY (SSL)	831117		N	SSL
37 CQ-2	SITE SECURITY (ROAD)	840413		N	SSL
38 CS-1	SITE COMMUNICATION-TELEPHONE	810819	811009	N	SSL
39 CS-2	SITE COMMUNICATION-ADMIN. BLDG.	810720	811009	N	SSL
40 CS-3	SITE COMMUNICATIONS-SHOP BLDG	811019	820921	N	SSL
41 CS-4	SITE COMM.-CHLOR. HOUSE & F.O. PMPHOUSE	811019	820818	N	SSL
42 CS-5	SITE COMM.-CIRCUL WATER SCREEN HOUSE	811027	820930	N	SSL
43 CS-6	SITE COMM-MKUP SCREEN HOUSE	810810	810909	N	SSL
44 CS-7	SITE COMM.-SEWAGE TREATMENT PLANT	820309	820818	N	SSL
45 CS-9	SITE COM.-H/Z , CL/2 STORAGE AREA	820309	820818	N	SSL
46 CS10	SITE COMMUNICATION-BLDG.INTERCONNECT.	820323	820916	N	SSL

48	CW	CIRC WATER SYSTEM	831003	840531	N	S	SL
49	CZ	CAUSTIC HANDLING	820331		N	S	SL
50	DA	CIRCULATING WATER	820928	840427	N	S	SL
51	DC-1	BATTERY & DC DIST (MUSH)	821029		N	B	
52	DC-2	BATTERY & DC DIST (SHOP ADMIN, CWSH)	800319	800908	N	S	SL
53	DX-1	EQUIP & FLOOR DRAINS (MUSH)	811013	820716	N	S	SL
54	DX-2	EQUIP & FLOOR DRAINS (SHOP BLDG)	801222	810416	N	S	SL
55	DX-3	EQUIP & FLOOR DRAINS (CWSH)	820111	820219	N	S	SL
56	DX-4	EQUIP & FLOOR DRAINS (FUEL OIL BLDG)	820831	820921	N	S	SL
57	DZ	DIESEL FIRE PUMP FUEL OIL	811221	820215	N	S	SL
58	EA	SERVICE WATER	820305	840525	Q	S	SL
59	EB	TURBINE BLDG CLOSED COOLING WATER	820814		N	B	
60	EC-1	SPENT FUEL POOL,PUMPS,ETC.	820716	821223	N	B	
61	EC-2	REFUEL POOL	831111	840711	Q	B	
62	EC-3	FUEL TRANSFER TUBE & GRINDING MACHINE	831111		Q	B	
63	EF-1	ESW (PIPING)	831118	840720	Q	B	
64	EF-2	ESW (PUMPS)	831105		Q	B	
65	EG	COMPONENT COOLING WATER	831109		Q	B	
66	EJ	RESIDUAL HEAT REMOVAL	831206		Q	B	
67	EM-1	HIGH PRESSURE INJECTION	831202		Q	B	
68	EM-2	BORON INJECTION	831202		Q	B	
69	EN	CONTAINMENT SPRAY	831126		Q	B	
70	EP	ACCUMULATOR SAFETY INJECTION	840330		Q	B	
71	FA	AUXILIARY STEAM GENERATOR	831206		Q	B	
72	FB-1	AUX BOILER FEEDWATER SYSTEM	820707		N	B	
73	FB-2	MISC PIPING	820830		Q	B	
74	FB-3	REBOILER	820520		N	B	
75	FC-1	AUXILIARY FEED PUMP TURBINES	820630		N	B	
76	FC-2	STEAM GENERATOR FEED PUMP TURBINE	831124		Q	B	
77	FC-3	AUX. TURBINES (SGFP TURBINES A&B)	830714	840612	N	B	
78	FE	AUXILARY STEAM CHEMICAL ADDITION	831005	840612	N	B	
79	FO	FUEL OIL	820210	840607	N	B	
80	FP1A	FIRE PROTECTION (ADMIN)	820316	821110	N	S	SL
81	FP1B	FIRE PROTECTION (SHOP)	810624	821230	N	S	SL
82	FP2A	FIRE PROTECTION PUMPS	821202	821230	N	S	SL
83	FP3B	FIRE PROTECTION (MAINS AND HYDRANTS)	821029	840511	Q	S	SL
84	FP-4	FUEL OIL FOAM	840203		Q	S	SL
85	GA	PLANT HEATING	820213	830621	N	S	SL
86	GB	CENTRAL CHILLED WATER	820409		N	B	
87	GD	ESW PUMPHOUSE BLDG HVAC	830803	840726	N	B	
88	GE	TURBINE BLDG HVAC	820827	840427	Q	B	
89	GF-1	AUXILIARY BOILER AIR	830722	840719	Q	B	
90	GF-2	TENDON ACCESS	840209	830111	N	B	
91	GF-3	MAIN STEAM ENCLOSURE	830804	840427	N	B	
92	GF-4	AUXILIARY FEEDWATER PUMP ROOM COOLERS	830929	840516	N	B	
93	GF-5	MISC UNIT HEATERS	820714	840427	Q	B	
94	GG	FUEL HANDLING BLDG HVAC	821005	830111	N	B	
95	GH	RADWASTE BUILDING HVAC	830808	840501	Q	B	
96	GK	CONTROL BUILDING HVAC	840501		N	B	
97	GL	AUXILIARY BLDG HVAC	820929		Q	B	
98	GM	DIESEL BLDG HVAC	821001	840726	Q	B	
99	GN-1	CONTAINMENT COOLING	830928	840410	Q	B	
100	GN-2	H2 MIXING AND CRDM COOLERS	840312		Q	B	
101	GP	ILRT/SIT	840725		Q	B	
102	GR	CONTAINMENT ATMOSPHERE	840522		Q	B	
103	GS	CONTAINMENT HYDROGEN CONTROL	840501				
104	GT	CONTAINMENT AIR PURIFICATION & CLEANUP	840618		N	B	
105	GY-1	GROUNDING	840928		Q	B	
106	HA	GASEOUS RADWASTE	840511		N	S	SL
			840510		Q	B	

108	HB-2	WASTE EVAPORATOR AND BALANCE	831205		Q	B
109	HB-3	CHEMICAL DRAIN TANKS AND PUMPS	840503		Q	B
110	HB-4	REVERSE OSMOSIS UNIT	840427		Q	B
111	HC-1	RESIN CHARGING TANKS	840326		Q	B
112	HC-2	SPENT RESIN TANKS AND PUMPS	840330		Q	B
113	HC-3	DECANTING, DRUMMING AND COMPACTOR	840301		Q	B
114	HD	DECONTAMINATION	840323		Q	B
115	HE	BORON RECYCLE	840613		Q	B
116	HF-1	TDS TANKS AND PUMPS	840330		Q	B
117	HF-2	WASTE MONITOR TANKS AND PIPING	820928		Q	B
118	HF-3	DRAIN COLLECTOR TANKS	820929		Q	B
119	HF-4	SECONDARY LIQUID WASTE EVAPORATOR	820930		Q	B
120	HT-1	HEAT TRACING- CIRC. WTR SCREEN HOUSE	840726		Q	B
121	HT-2	HEAT TRACING-SHOP BLDG	830426	840228	N	S&L
122	HX-1	HOISTS,CRANES & ELEVATORS(SHOP & ADMIN)	830426	840228	N	S&L
123	HX-2	HOISTS,CRANES & ELEVATORS (CWSH)	820622	820702	N	S&L
124	HY	HYDROGEN	820826	830511	N	S&L
125	JE	EMERGENCY FUEL OIL	830722	840719	N	S&L
126	KA-1	AIR COMPRESSORS AND DRYERS	831026		Q	B
127	KA-2	INSTRUMENT AIR PIPING	820518	840423	Q	B
128	KA-3	PLANT SERVICE AIR PIPING	820812		Q	B
129	KB	CONTAINMENT BREATHABLE AIR	820325	840719	Q	B
130	KC1A	FIRE PROTECTION WET SYS.TURB.& COMM.COR	840509		Q	B
131	KC1B	F.P. WET-SYS. REMAINDER OF POWER BLOCK	821230	840516	N	B
132	KC-2	TRAN.DEL.,XME01,XME02,XPB03,XPB04,XMR01	840313		Q	B
133	KC2A	FIRE PROTECTION (MULTIPLEXERS)	820930	840516	N	B
134	KC-3	FIRE PROTECTION (DETECTORS AND ALARMS)	820416		Q	B
135	KC-4	F.P. SYS-HALON 1301(COMPUTER RM)	840220		Q	B
136	KC-5	F.P. SYS-HALON 1301 (LD CENTRMG SET RM)	820422		N	B
137	KC-6	F.P. SYS-HALON 1301(ELECT PENE RM NO.1)	831219		Q	B
138	KC-7	F.P. SYS-HALON 1301(ELECT PENE RM NO.2)	840405		Q	B
139	KC-8	F.P. SYS-HALON 1301(SWITCHGEAR RMS)	840417		Q	B
140	KC-9	F.P.SYS-HALON 1301(ESF SWTCH RM NO 1&2)	840323		Q	B
141	KC10	F.P.SYS-HALON 1301 CONT.RM.CBL.TRENCHES	840322		Q	B
142	KD	DOMESTIC WATER (POWER BLOCK)	840413		Q	B
143	KE-1	FUEL HANDLING SYSTEM	840720		N	B
144	KE-2	REACTOR VESSEL SERVICE	830923	840720	Q	B
145	KE-3	REACTOR BLDG. POLAR CRANE	831026		Q	B
146	KH	SERVICE GASES	840704		Q	B
147	KJ	STANDBY DIESEL ENGINES	831215		N	B
148	LA	SANITARY DRAINAGE	831122		Q	B
149	LD	CHEMICAL WASTE	840627		N	B
150	LE	OILY WASTE	840320		N	B
151	LL-1	LIGHTING (MUSH)	840626		Q	B
152	LL2A	LIGHT (ADMIN)	800323	810416	N	S&L
153	LL2B	LIGHTING (SHOP)	810311	810515	N	S&L
154	LL-3	LIGHTING (CWSH)	811123	820215	N	S&L
155	LL-4	LIGHTING (FENCE & ROADWAY)	811119	820528	N	S&L
156	LL-5	LIGHTING (CHLORINE BLDG)	830415	840508	N	S&L
157	LL-6	LIGHTING (GUARDHOUSE)	810708	820215	N	S&L
158	LV-1	LOW VOLTAGE (MUSH)	830927	840524	N	
159	LV2A	LOW VOLTAGE (ADMIN)	800323	810416	N	S&L
160	LV2B	LOW VOLTAGE (SHOP)	810310	810515	N	S&L
161	LV-3	LOW VOLTAGE (CWSH)	811123	820218	N	S&L
162	MA-1	MAIN GENERATOR (GE SCOPE)	811119	820528	N	S&L
163	MA-2	MAIN GENERATOR	831011		N	B
164	MB-1	EXCITATION & VOLTAGE REGUL.(GE SCOPE)	840103		N	B
165	MB-2	EXCITATION & VOLT. REGULATION	831013	840516	N	B
166	MR	STARTUP TRANSFORMER	831103	840516	N	B
			810720	821022	N	B

168	NE	STANDBY GENERATION	840414	880117	Q	B	
169	NF	LOAD SHEDDING & EMERGENCY LOAD SEQUENCE	881024		Q	B	
170	NG	LOW VOLTAGE SYSTEM (IE)	881123		Q	B	
171	NK	125 VOLT DC	820503	820915	Q	B	
172	NV	INSTRUMENT AC (IE)	810729		Q	B	
173	NT	NITROGEN	820311	820930	Q	B	
174	OX	OXYGEN	880301		N	S&L	
175	PA	HIGHER MEDIUM VOLTAGE 13.8 KV	880719	840607	N	S&L	
176	PB	LOWER MEDIUM VOLTAGE 4.16KV	810729	821022	N	B	
177	PG	LOW VOLTAGE SYSTEM	811209	821004	N	B	
178	PJ	260 VOLT DC	820122	821007	Q	B	
179	PK-1	125 VOLT DC	880430		Q	B	
180	PK-2	125 VOLT DC (COMM CORRIDOR)	810816	840622	Q	B	
181	PN	INSTRUMENT AC POWER	840501		Q	B	
182	PQ	UNINTERRUPTABLE AC	810729	820716	Q	B	
183	QD	STANDBY LIGHTING DC	820223	821110	Q	B	
184	QE	TELEPHONE SYSTEM	840405	840612	Q	B	
185	QF-1	PUBLIC ADDRESS SYSTEM-MAINT.JACKS	880825	880906	N	B	
186	QF-2	INTERCOM-PUBLIC ADDRESS SYSTEM	821110	840612	N	B	
187	QF-3	ESW PUMP HOUSE-PUBLIC ADDRESS SYS.	840330	840612	N	B	
188	QJ-1	HEAT TRACE (FREEZE PROTECTION)	821027	840612	N	B	
189	QJ-2	HEAT TRACE (DOPON)	880729	840427	Q	B	
190	QN	WELDING RECEPTICAL	840412		Q	B	
191	RC	RAD CHEMISTRY COMPUTER	840606		N	B	
192	RD	METEOROLOGICAL INST	840312	840424	N	B	
193	RG-1	ADMIN BLDG A/C AND HUMID	840425	840425	N	B	
194	RG-2	SHOP BLDG A/C AND HUMID	810220	810515	N	S&L	
195	RJ-1	PLANT COMPUTER (BOP)	810414	810909	N	S&L	
196	RJ-2	PLANT COMPUTER (NSSS)	820629	840607	N	B	
197	RK	PLANT ANNUNCIATOR	820907	840622	N	B	
198	RL-1	MAIN CONTROL BRD (INTERNALS)	810720	840622	N	B	
199	RL-2	MAIN CONTROL BRD (EXTERNALS)	810717		Q	B	
200	RM	PROCESS SAMPLING	840320		Q	B	
201	RP-1	MISCELLANEOUS CONTROL PANELS	880901		Q	B	
202	RP-2	MISCELLANEOUS CONTROL PANELS	810805		Q	B	
203	RR	RRIS COMPUTER SYSTEM	820415		Q	B	
204	RT	ERFIS COMPUTER SYSTEM	840113	840613	N	B	
205	SA	ENGINEERED SAFETY FEATURE ACTUATION	831114	840531	N	B	
206	SB	REACTOR PROTECTION	820922		Q	B	
207	SC	REACTOR INSTRUMENTATION	821222		Q	B	
208	SD-1	AREA RAD MONIT (FUEL BLDG) COMPLETE T/O	880825	840516	Q	B	
209	SD-2	AREA RAD MONIT (BOP)	840126	840410	Q	B	
210	SE-1	NEUTRON MONITORING (EX-CORE)	840921		Q	B	
211	SE-2	NEUTRON MONITORING (EX-CORE)	840319		Q	B	
212	SF	REACTOR CONTROL	840423				
213	SG	SEISMIC INSTRUMENTATION	840430		Q	B	
214	SJ	NUCLEAR SAMPLING	840726		Q	B	
215	SK	PLANT SECURITY	840516		Q	B	
216	SL-1	SITE AUX POWER (MUSH/MUDS)	831228		Q	B	
217	SL-2	SITE AUX POWER (BDDG)	880429	881028	N	S&L	
218	SL-3	SITE AUX POWER (SHOP AND ADMIN)	880523	810416	N	S&L	
219	SL-4	SITE AUX POWER (FUEL OIL PUMPHOUSE)	810122	811022	N	S&L	
220	SL-5	SITE AUX POWER (CNSH)	810909	820219	N	S&L	
221	SP	PROCESS RADIATION MONITORING	811012	821022	N	S&L	
222	SQ	LOOSE PARTS MONITORING	840727		Q	B	
223	SR	IN-CORE NEUTRON MONITORING	831123	840510	Q	B	
224	ST-1	SEWAGE TREATMENT (SHOP , ADMIN.)	840822		Q	B	
225	SW-1	SCREEN WASH (MUSH)	881019	881018	N	S&L	
226	SW-2	SCREEN WASH (D.BH)	880726	811016	N	S&L	
			820215	850128	N	S&L	

226	SZ-1	SERVICE AIR (PUSH)	810729	821006	N	S&L
229	SZ-2	SERVICE AIR (C.SH)	800717	810304	N	S&L
230	SZ-3	SERVICE AIR (SHOP BLDG)	820122	820913	N	S&L
231	UU-1	SUPERVISORY SYSTEM (PUSH, RADW, EDDG)	810729	821109	N	S&L
232	UU-2	SUPERVISORY SYSTEM (C.SH)	800922	830107	N	S&L
233	UU-3	SUPERVISORY SYSTEM (SHIELD WALL)	820829	830107	N	S&L
234	VH-1	HEATING & VENTILATION (PUSH)	810724	830107	N	S&L
235	VH-2	HEATING & VENTILATION (C.SH)	800424	810416	N	S&L
236	VJ	HEATING & VENTILATION (TURBINE SHOP)	820715	831017	N	S&L
237	VL	HEATING & VENTILATION (SHOP BLDG OFFICE)	810513	820317	N	S&L
238	VJ	HEATING & VENTILATION (ADMIN. BLDG)	810414	810929	N	S&L
239	VV-1	HEATING & VENTILATION (EDDS)	810220	810515	N	S&L
240	VV-2	HEAT & VENT(SHOP BLDG WATER TREAT AREA)	800714	810416	N	S&L
241	VV-3	HEAT & VENT (FUEL OIL PUMPHOUSE)	810501	820310	N	S&L
242	WD-1	DOMESTIC WATER ADMIN BLDG	810909	820215	N	S&L
243	WD-2	DOMESTIC WATER SHOP	810416	810515	N	S&L
244	WG	GLAND WATER	820630	830128	N	S&L
245	WL-1	COOL. LAKE MU (FOR UHS FILL)	820305	821210	N	S&L
246	WL-2	COOL. LK MU & BLOWDOWN	800430	810416	N	S&L
247	WM-1	DEMINERALIZED WATER	800925	810416	N	S&L
248	WM-2	DEMINERALIZED WATER	830502	810304	N	S&L
249	WS	SERVICE WATER	810317	830128	N	S&L
250	WZ	RADIOACTIVE LIQUID RELEASE	830504	840719	N	S&L
251	ZA	ULT. HEAT SINK & ESWS DISCH STRUCTURE	830405	830428	N	S&L
252	ZB	BLOWDOWN DISCHARGE STRUCTURE	820426	820706	Q	S&L
253	ZC	CIRC WATER SCREENHOUSE	810115	820304	N	S&L
254	ZD	CIRC WATER DISHCARGE STRUCTURE	820331	820920	N	S&L
255	ZE	ESWS PUMPHOUSE	820413	820513	N	S&L
256	ZH	FO PUMPHOUSE	840409	840531	Q	B
257	ZK	MAKEUP DISCHARGE STRUCTURE	820416	821022	N	S&L
258	ZL	LAKE AND SLUDGE POND	810113	810304	N	S&L
259	ZM	MAKEUP SCREENHOUSE	810121	810304	N	S&L
260	ZA	ADMINISTRATION BUILDING	810119	810423	N	S&L
261	ZP-1	SHOP BUILDING	810403	810515	N	S&L
262	ZP-2	CHLORINE BLDG	810617	810630	N	S&L
263	ZR	SITE RAILROAD	811221	820213	N	S&L
264	Z-5	DIESEL GENERATOR BUILDING	830325	810304	N	S&L
265	Z-6	FUEL BUILDING	840423		Q	B
			840315	840410	Q	B

*** W O L F C R E E K T R A C K I N G S Y S T E M ***

SYSTEM TURNED OVER TO STARTUP
SORT BY T/C DATE
AUGUST 4, 1984

SYS DES	SYSTEM DESCRIPTION	T/O DATE	OPS T/C DATE	G. /. BASE
1 DC-1	BATTERY & DC DIST (MUSH)	800319	800908	N S&L
2 LV-1	LOW VOLTAGE (MUSH)	800320	810416	N S&L
3 LL-1	LIGHTING (MUSH)	800320	810416	N S&L
4 VH-1	HEATING & VENTILATION (MUSH)	800424	810416	N S&L
5 SL-1	SITE AUX POWER (MUSH/MUDS)	800425	810308	N S&L
6 RL-1	COOL. LAKE MU (FOR UHS FILL)	800430	810416	N S&L
7 WW-1	DEMINERALIZED WATER	800502	810304	N S&L
8 SL-2	SITE AUX POWER (EDDS)	800523	810416	N S&L
9 VV-1	HEATING & VENTILATION (EDDS)	800714	810416	N S&L
10 SZ-1	SERVICE AIR (MUSH)	800717	810304	N S&L
11 SW-1	SCREEN WASH (MUSH)	800724	810416	N S&L
12 ZR	SITE RAILROAD	800823	810304	N S&L
13 UU-1	SUPERVISORY SYSTEM (MUSH, MUDS, EDDS)	800922	830107	N S&L
14 WL-2	COOL. LK MU & BLOWDOWN	800925	810416	N S&L
15 DM-1	EQUIP & FLOOR DRAINS (MUSH)	801222	810416	N S&L
16 ZB	BLOWDOWN DISCHARGE STRUCTURE	810113	820304	N S&L
17 ZK	MAKEUP DISCHARGE STRUCTURE	810113	810304	N S&L
18 ZM	MAKEUP SCREENHOUSE	810119	810423	N S&L
19 ZL	LAKE AND SLUDGE POND	810121	810304	N S&L
20 SL-3	SITE AUX POWER (SHOP AND ADMIN)	810122	810922	N S&L
21 VS	HEATING & VENTILATION (ADMIN BLDG)	810220	810515	N S&L
22 RS-1	ADMIN BLDG A/C AND HUMID	810220	810515	N S&L
23 LV2A	LOW VOLTAGE (ADMIN)	810310	810515	N S&L
24 LL2A	LIGHT (ADMIN)	810311	810515	N S&L
25 ZA	ADMINISTRATION BUILDING	810403	810515	N S&L
26 VL	HEATING & VENTILATION(SHOP BLDG OFFICE)	810414	810909	N S&L
27 RS-2	SHOP BLDG A/C AND HUMID	810414	810909	N S&L
28 WD-1	DOMESTIC WATER ADMIN BLDG	810418	810515	N S&L
29 VV-2	HEAT & VENT(SHOP BLDG WATER TREAT AREA)	810501	820318	N S&L
30 VJ	HEATING & VENTILATION (MACHING SHOP)	810513	820317	N S&L
31 FP1A	FIRE PROTECTION (ADMIN)	810523	821230	N S&L
32 ZP-1	SHOP BUILDING	810517	810630	N S&L
33 CS-6	SITE COMM-MKUP SCREEN HOUSE	810518	810909	N S&L
34 CS-1	SITE COMMUNICATION-TELEPHONE	810513	810909	N S&L
35 PK-1	125 VOLT DC	810618	840622	Q B
36 LL-5	LIGHTING (CHLORINE BLDG)	810708	820315	N S&L
37 RL-1	MAIN CONTROL BRD (INTERLKS)	810717		Q B
38 RK	PLANT ANNUNCIATOR	810720	840622	N B
39 PN	INSTRUMENT AC POWER	810723	820716	Q B
40 UU-3	SUPERVISORY SYSTEM (SWITCHYARD)	810724	830107	N S&L
41 CS-2	SITE COMMUNICATION-ADMIN. BLDG.	810728	810909	N S&L
42 RK	125 VOLT DC	810729		Q B
43 SZ-3	SERVICE AIR (SHOP BLDG)	810729	821109	N S&L
44 SY	SITE AUX POWER (SWITCHYARD)	810729	821006	N S&L
45 PA	HIGHER MEDIUM VOLTAGE 1..8KV	810729	821022	N B
46 YR	STARTUP TRANSFORMER	810729	821022	N B
47 RP-1	MISCELLANEOUS CONTROL PANELS	810805		Q B

49	SL-4	SITE AUX POWER (FUEL OIL PUMPHOUSE)	810317	830120	N	S&L
50	VV-3	HEAT & VENT (FUEL OIL PUMPHOUSE)	810909	820215	N	S&L
51	DC-2	BATTERY & DC DIST (SHOP ADMIN., CWSH)	810909	820215	N	S&L
52	SL-3	SITE AUX POWER (CWSH)	811012	820716	N	S&L
53	ST-1	SEWAGE TREATMENT (SHOP & ADMIN.)	811012	821022	N	S&L
54	CS-3	SITE COMMUNICATIONS-SHOP BLDG	811019	820218	N	S&L
55	CS-4	SITE COMM.-CHLOR. HOUSE & F.O. PMPHOUSE	811019	820921	N	S&L
56	CS-5	SITE COMM.-CIRCUL WATER SCREEN HOUSE	811019	820818	N	S&L
57	LL-3	LIGHTING (CWSH)	811027	820930	N	S&L
58	LV-3	LOW VOLTAGE (CWSH)	811119	820526	N	S&L
59	LV29	LOW VOLTAGE (SHOP)	811119	820528	N	S&L
60	LL29	LIGHTING (SHOP)	811123	820218	N	S&L
61	PS	LOWER MEDIUM VOLTAGE 4.16KV	811123	820215	N	S&L
62	ZP-2	CHLORINE BLDG	811209	821004	N	B
63	DR-4	EQUIP & FLOOR DRAINS (FUEL OIL BLDG)	811221	820218	N	S&L
64	DR-2	EQUIP & FLOOR DRAINS (SHOP BLDG)	811221	820215	N	S&L
65	SI-2	SERVICE AIR (CWSH)	820111	820218	N	S&L
66	PG	LOW VOLTAGE SYSTEM	820122	820913	N	S&L
67	GF-1	AUXILIARY BOILER AIR	820122	821007	Q	B
68	CS-7	SITE COMM.-SEWAGE TREATMENT PLANT	820209	830111	N	B
69	CS-9	SITE COMM.-H/Z & CO/Z STORAGE AREA	820209	820318	N	S&L
70	FE	AUXILARY STEAM CHEMICAL ADDITION	820309	820218	N	S&L
71	FP-4	FUEL OIL FOAM	820212	840607	N	B
72	SW-2	SCREEN WASH (CWSH)	820313	830621	N	S&L
73	PQ	UNINTERRUPTABLE AC	820316	830128	N	S&L
74	WG	GLAND WATER	820323	821110	Q	B
75	NW	INSTRUMENT AC (IE)	820325	821210	N	S&L
76	FO	FUEL OIL	820311	820930	Q	B
77	CS10	SITE COMMUNICATION-BLDG.INTERCONNECT.	820316	821110	N	S&L
78	UD-2	SUPERVISORY SYSTEM (CWSH)	820329	820918	N	S&L
79	ZD	CIRC WATER DISCHARGE STRUCTURE	820329	830107	N	S&L
80	NS	LOWER MEDIUM VOLTAGE (IE) 4.1 KV	820413	820513	N	S&L
81	ZH	FO PUMPHOUSE	820414	830107	Q	B
82	RP-2	MISCELLANEOUS CONTROL PANELS	820415	821022	N	S&L
83	KC2A	FIRE PROTECTION (MULTIPLEXING)	820415		Q	B
84	KC-4	F.P. SYS-HALON 1301(COMPUTER RM)	820415		Q	B
85	ZA	ULT. HEAT SINK & ESWS DISCH STRUCTURE	820422		N	B
86	CE	STATOR COOLING	820426	820706	Q	S&L
87	PJ	250 VOLT DC	820427	840612	N	B
88	NS	LOW VOLTAGE SYSTEM (IE)	820430		Q	B
89	DO	DIESEL FIRE PUMP FUEL OIL	820503	820913	Q	B
90	AN-2	DEGASSIFIER & DEGASSIFIER PUMPS	820505	840525	Q	S&L
91	RJ-2	PLANT COMPUTER (NSSS)	820507	840427	N	B
92	KA-1	AIR COMPRESSORS AND DRYERS	820507	840622	N	B
93	FB-2	MISC PIPING	820513	840423	Q	B
94	AP	CONDENSATE TRANSFER & STORAGE	820520		N	B
95	WS	SERVICE WATER	820527	821230	N	B
96	EA	SERVICE WATER	820604	840719	N	S&L
97	AN-1	STORAGE TANKS & TRANSFER SYSTEM	820614		N	B
98	CB	MAIN TURBINE & GENERATOR LUBE. OIL	820614	840427	N	B
99	CH	MAIN TURBINE CONTROL OIL	820614	840416	N	B
100	CF	LUBE OIL STORAGE,TRANSFER & PURIF.	820614		N	B
101	CD	GENERATOR SEAL OIL	820614		N	B
102	HX-1	HOISTS,CRANES & ELEVATORS(SHOP & ADMIN)	820614	840412	N	B
103	RJ-1	PLANT COMPUTER (HOP)	820622	820702	N	S&L
104	FB-3	REBOILER	820629	840607	N	B
105	FW-1	AUX BOILER FEEDWATER SYSTEM	820630		N	B
106	WD-1	DOMESTIC WATER SHOP	820630		Q	B
107	FA	AUXILIARY STEAM GENERATOR	820705	830120	N	S&L
			820707		N	B

109	VH-2	HEATING & VENTILATION (CWSH)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
110	EB	TURBINE BLDG CLOSED COOLING WATER	820715	831017	N	S&L	
111	KA-2	INSTRUMENT AIR PIPING	820715	821223	N	B	
112	AA-2	ACID FEED (COND. DEMIN)	820812		Q	B	
113	AA-1	ACID FEED (CWSH)	820823	840427	N	S&L	
114	KA-3	PLANT SERVICE AIR PIPING	820824		N	S&L	
115	HK-2	HOISTS,CRANES & ELEVATORS (CWSH)	820825	840719	Q	B	
116	SJ	ESW PUMPHOUSE BLDG HVAC	820826	830511	N	S&L	
117	DK-3	EQUIP & FLOOR DRAINS (CWSH)	820827	840427	Q	B	
118	CA	CIRC WATER SYSTEM	820831	820901	N	S&L	
119	ZC	CIRC WATER SCREENHOUSE	820831		N	S&L	
120	GA	PLANT HEATING	820831	820920	N	S&L	
121	SA	ENGINEERED SAFETY FEATURE ACTUATION	820907		N	B	
122	HF-1	TDS TANKS AND PUMPS	820920		Q	B	
123	CZ	CAUSTIC HANDLING	820922		Q	B	
124	CL-1	CHLORINE	820926	840427	N	S&L	
125	HF-2	WASTE MONITOR TANKS AND PIPING	820929	840613	N	S&L	
126	KC-2	TRANSFER,XNB01,XNB02,XPB03,XPB04,XNB01	820929		Q	B	
127	HF-3	DRAIN COLLECTOR TANKS	820930	840516	N	B	
128	GF-5	MISC UNIT HEATERS	820930		Q	B	
129	BL	REACTOR MAKEUP WATER	821005	830111	N	B	
130	QF-5	ESW PUMP HOUSE-PUBLIC ADDRESS SYS.	821019	840420	Q	B	
131	BN	REFUELING WATER STORAGE	821027	840612	N	B	
132	DA	CIRCULATING WATER	821027		Q	B	
133	FP3A	FIRE PROTECTION PUMPS	821029		N	B	
134	QF-1	PUBLIC ADDRESS SYSTEM-MAINT.JACKS	821029	840511	Q	S&L	
135	AK	MAIN COND PIPING	821110	840612	N	B	
136	CQ-1	SITE SECURITY (S&L)	821112	840531	N	B	
137	AL	AUXILIARY FEEDWATER	821117		N	S&L	
138	CL-2	CHLORINATION SYSTEM	821124		Q	B	
139	FP1B	FIRE PROTECTION (SWPP)	821130	840613	N	S&L	
140	AF-1	HEATER DRAIN PUMPS & TANK	821202	821230	N	S&L	
141	SJ	REACTOR PROTECTION	821210		N	B	
142	KC1A	FIRE PROTECTION WET SYS.TURB., CCAW,CCR	821210		Q	B	
143	CA-2	STEAM SEALS (BECHTEL SCOPE)	821230	840516	N	B	
144	AD	CONDENSATE	821230	840410	N	B	
145	AE	MAIN FEEDWATER	830107	840420	N	B	
146	FP3B	FIRE PROTECTION (MAINS AND HYDRANTS)	830120		Q	B	
147	BM	STEAM GENERATOR BLOWDOWN	830203		Q	S&L	
148	CC	GENERATOR HYDROGEN	830207		Q	B	
149	SC	REACTOR INSTRUMENTATION	830215		N	B	
150	WZ	RADIOACTIVE LIQUID RELEASE	830325	840516	Q	B	
151	LL-4	LIGHTING (FENCE & ROADWAY)	830405	830428	N	S&L	
152	HT-1	HEAT TRACING- CIRC. WTR SCREEN HOUSE	830416	840508	N	S&L	
153	HT-2	HEAT TRACING-SHOP BLDG	830426	840228	N	S&L	
154	RM	PROCESS SAMPLING	830426	840228	N	S&L	
155	OX	OXYGEN	830523		Q	B	
156	CO	CARBON DIOXIDE	830719	840607	N	S&L	
157	HY	HYDROGEN	830722	840725	N	S&L	
158	AB-1	MAIN STEAM (SEC HYDRO BOUNDARIES)	830722	840719	N	S&L	
159	AQ	CONDENSATE & FEEDWATER CHEM. CONTROL	830722		Q	B	
160	NT	NITROGEN	830801	840531	N	B	
161	GF-2	TENDON ACCESS	830801		N	S&L	
162	GB	CENTRAL CHILLED WATER	830804	840427	N	B	
163	GG	FUEL HANDLING BLDG HVAC	830805	840726	N	B	
164	CA-1	STEAM SEALS (GE SCOPE)	830810	840501	Q	B	
165	GE	TELEPHONE SYSTEM	830810	841412	N	B	
166	CJ	CONDENSER AIR REMOVAL	830825	830906	N	B	
167	FC-2	STEAM GENERATOR FEED PUMP TURBINE	830929	840412	N	B	
			830914	840612	N	B	

169	KE-1	FUEL HANDLING SYSTEM	830922	840719	Q	B	
170	GM	DIESEL BLDG HVAC	830923	840720	Q	B	
171	LL-5	LIGHTING (GUARDHOUSE)	830926	840410	Q	B	
172	GJ-1	HEAT TRACE (FREEZE PROTECTION)	830927	840524	N		
173	GK	CONTROL BUILDING HVAC	830929	840427	Q	B	
174	GP-3	MAIN STEAM ENCLOSURE	830929		Q	B	
175	GL	AUXILIARY BLDG HVAC	830929	840516	N	B	
176	AC-1	MAIN TURBINE (GE SCOPE)	831001	840726	Q	B	
177	C311	SITE COMP.-GUARDHOUSE & SECUR. D/G BLD.	831001		N	B	
178	PC-3	AUX. TURBINES (GSFP TURBINES ACC.)	831003	840531	N	S&L	
179	MA-1	MAIN GENERATOR (GE SCOPE)	831006	840612	N	B	
180	MB-1	EXCITATION & VOLTAGE REGUL.(GE SCOPE)	831013		N	B	
181	PC-1	AUXILIARY FEED PUMP TURBINES	831013	840516	N	B	
182	NE	STANDBY GENERATION	831024		Q	B	
183	KC-2	REACTOR VESSEL SERVICE	831024		Q	B	
184	JE	EMERGENCY FUEL OIL	831026		Q	B	
185	MB-2	EXCITATION & VOLT. REGULATION	831026		Q	B	
186	EF-1	ESW (PIPING)	831103	840516	N	B	
187	EF-2	ESW (PUMPS)	831103		Q	B	
188	EC-1	SPENT FUEL POOL,PUMPS,ETC.	831109		Q	B	
189	EC-2	REFUEL POOL	831111	840711	Q	B	
190	RT	ERFIS COMPUTER SYSTEM	831111		Q	B	
191	EC-3	FUEL TRANSFER TUBE & SPENDING MACHINE	831114	840531	N	B	
192	BG-1	BORON ADDITION TO CHG PUMP SUCTION	831113	840720	Q	B	
193	BG-2	CHARGING & LETDOWN	831122		Q	B	
194	KJ	STANDBY DIESEL ENGINES	831122		Q	B	
195	SA	LOOSE PARTS MONITORING	831122		Q	B	
196	NF	LOAD SHEDDING & EMERGENCY LOAD SEQUENCE	831123	840510	Q	B	
197	EM-2	BORON INJECTION	831124		Q	B	
198	AC-2	MAIN TURBINE (BECHTEL SCOPE)	831123		Q	B	
199	EJ	RESIDUAL HEAT REMOVAL	831201		N	B	
200	EM-1	HIGH PRESSURE INJECTION	831202		Q	B	
201	HB-1	REACTOR COOLANT DRAIN TANKS	831202		Q	B	
202	EG	COMPONENT COOLING WATER	831206		Q	B	
203	EP	ACCUMULATOR SAFETY INJECTION	831206		Q	B	
204	KH	SERVICE GASES	831206		Q	B	
205	KC-5	F.P. SYS-HALON 1301 (LD CENTRIG SET RM)	831215		N	B	
206	SK	PLANT SECURITY	831219		Q	B	
207	MA-2	MAIN GENERATOR	831225		Q	B	
208	RR	RRIS COMPUTER SYSTEM	840106		N	B	
209	SD-1	AREA RAD MONIT (FUEL BLDG) COMPLETE T/C	840113	840613	N	B	
210	BB	REACTOR COOLANT	840125	840410	Q	B	
211	AF-2	MISC PIPING TANKS,HTR,ETC.	840127		Q	B	
212	CQ-2	SITE SECURITY (ROAD)	840203		N	B	
213	KC-3	FIRE PROTECTION (DETECTORS AND ALARMS)	840215		N	S&L	
214	AB-2	MAIN STEAM (BALANCE OF SYST.)	840220		Q	B	
215	GN-1	CONTAINMENT COOLING	840221		N	B	
216	RC	RAD CHEMISTRY COMPUTER	840312		Q	B	
217	KC13	F.P. WET-SYS. REMAINDER OF POWER BLOCK	840312	840424	N	B	
218	Z-6	FUEL BUILDING	840313		Q	B	
219	SE-1	NEUTRON MONITORING (EX-CORE)	840315	840410	Q	B	
220	LD	CHEMICAL WASTE	840319		Q	B	
221	KC-9	F.P.SYS-HALON 1301(ESF WATER RM NO 102)	840320		N	B	
222	RL-2	MAIN CONTROL BRD (EXTERNALS)	840322		Q	B	
223	KC-8	F.P. SYS-HALON 1301(SWITCHGEAR RM)	840323		Q	B	
224	HC-3	DECANTING, DRUMMING AND COMPACTOR	840323		Q	B	
225	HB-4	REVERSE OSMOSIS UNIT	840323		Q	B	
226	EY	CONTAINMENT SPRAY	840325		Q	B	
227	QF-2	INTERCOM-PUBLIC ADDRESS SYSTEM	840330		Q	B	
			840330	840612	N	B	

229	HC-1	RESIN CHARGING TANKS	[illegible]			Q	B
230	BG-3	BORON THERMAL REGENERATION	840330			Q	B
231	KC-6	F.P. SYS-HALON 1301(ELECT PENE RM NO.1)	840405			Q	B
232	QD	STANDBY LIGHTING DC	840405			Q	B
233	ZE	ESWS PUMPHOUSE	840405	840612		Q	B
234	QJ-2	HEAT TRACE (BORON)	840409	840531		Q	B
235	KC-7	F.P. SYS-HALON 1301(ELECT PENE RM NO.2)	840412			Q	B
236	KC10	F.P.SYS-HALON 1301 CONT.P.C.C.. TRENCHES	840417			Q	B
237	Z-5	DIESEL GENERATOR BUILDING	840418			Q	B
238	SE-2	NEUTRON MONITORING (EX-CORE)	840420			Q	B
239	RD	METEOROLOGICAL INST	840426				
240	HB-3	CHEMICAL DRAIN TANKS AND PUMPS	840425	840425		N	B
241	SF	REACTOR CONTROL	840427			Q	B
242	HC-2	SPENT RESIN TANKS A.D PUMPS	840430			Q	B
243	GH	RADWASTE BUILDING HVAC	840501			Q	B
244	GR	CONTAINMENT ATMOSPHERE	840501			N	B
245	PK-2	125 VOLT DC (COMM CORRIDOR)	840501				
246	HB-2	WASTE EVAPORATOR AND BALANCE	840501			Q	B
247	KB	CONTAINMENT BREATHABLE AIR	840502			Q	B
248	GX-1	GROUNDING	840509			Q	B
249	HA	GASEOUS RADWASTE	840515			N	SIL
250	SJ	NUCLEAR SAMPLING	840516			Q	B
251	QV	WELDING RECEPTICAL	840516			Q	B
252	SR	IN-CORE NEUTRON MONITORING	840605			N	B
253	GP	ILRT/SIT	840606			Q	B
254	HD	DECONTAMINATION	840608			Q	B
255	GS	CONTAINMENT HYDROGEN CONTROL	840615			Q	B
256	SD-2	AREA RAD MONIT (EOP)	840618			Q	B
257	LE	OILY WASTE	840621			Q	B
258	LA	SANITARY DRAINAGE	840626			Q	B
259	GT	CONTAINMENT AIR PURIFICATIO. . CLEANUP	840627			N	B
260	SP	PROCESS RADIATION MONITORING	840629			Q	B
261	KE-3	REACTOR BLDG. POLAR CRANE	840703			Q	B
262	KD	DOMESTIC WATER (POWER BLOCK)	840706			Q	B
263	SG	SEISMIC INSTRUMENTATION	840720			N	B
264	GN-2	H2 MIXING AND CROM COOLERS	840725			Q	B
265	HF-4	SECONDARY LIQUID WASTE EVAPORATOR	840725			Q	B
		***** END REPORT *****	840726			Q	B

PREOP RESTRAINT MEETING AGENDA
August 6, 1984

DISTRIBUTION:

*GARDNER
*GLOVER
*HANDFINGER
*ELLISON
*SUBRAMANIAN
*CAMERON
*QUIGGLE
*ARNOLD
*MAYES
*FAIST
*MURPHY
*ANTONINICH (5)
*HARRELL #86
*CAMPBELL #100
*McLAURIN #100
MILLER OPS/KCPL

*EARLY (8) #55
HILL #55
*KICHTON (2)#97

*ANDERSEN
*GEORGE
*HADDER
*COSTELLO

*OAKLEY
*SEMMES
*KURTZ
*LECROY

*GUIMBELLOT HVAC
*VAUX F/H
*JAMIESON (4) F/H
*WHITE F/H
REEKIE QA

*McKINNEY I&C
*ROBERTSON (8) I&C
*ORIOLE/WESTBROOK Maint.(2)

*KOZKOWSKI (3) EL.T.
HAWK #65

*SCHEDULERS (10)
S.T.S.
OP.S.S.

*PETERSON, DIC Adm
*HELWIG, KG&E Const
*WELLS/CHOQUETTE, W-DIC (3)
*HERBST, (B) in DIC Bldg
*MONDI, (B)
*BAILEY, NPE #89

*BIGGI (KGE RBC'G) upstairs

*CORCORAN, W
*KELTNER, W
*GLASBERGEN, W
*WHEELER, W

SYSTEM ENGINEERS:

Scott (HE01,HE02) } B
Reynolds (EP01)
Gerardine (EN01,EN02)
George (EM01)
Guarino (HB01,HB02)
Gabriel (AE01)
Armstrong (SE01)

Saunderson (EP01,SJ01)
Bugos (EG01) } C
Featherson (NB01,NG01)
Trickovic (SU3 0004, BB06)
Combs

Polese (GN01,GN02) } HVAC

Lerma (NE01) } F/H
Thuet (GP01)

BERRA, J. (DIC) (2)
BISHOP, KCP&L, DIC

STEVENS (TS)
LATTA (SJ01) #65
ZELL (OPS-SE)
BURDT
NRC #62

HFT DIRECTOR

*hand deliver
TOTAL 110

SU3 AB01: FEEDWATER (Arnold/Pike)
Preop scheduled for 8/1 to 8/7/84.
Major restraints:
Gardn/Mondi 44) FMR-SU-2070. Anchor Darling limit switch. ~~BSD 9/17~~. DDD 8/15. ESD 8/15. NEED TO EXPEDITE.
Gardn/Mondi 46) FMR-SU-2040, air/oil pump & access. ESD 10/5. DDD 8/15. NEED TO EXPEDITE.

SU3 BM01: STEAM GENERATOR BLOWDOWN (Arnold/Pike)
Preop scheduled from 7/5 to 8/15/84.
Major Restraints:
Gardn/Mondi 1) FMR-SU-1774, handwh. nuts & washers. ESD 8/17.

SU3 EN02: CONTAINMENT SPRAY (WET TEST) (Arnold/Pike)
The preop SU3 EN02 scheduled for 8/3 to 8/14/84.
Major Restraints:
Gardner 16) Complete EN flush, F/C 8/6.

SU4 GH01: RADWASTE BUILDING VENTILATION (Arnold/Pike)
Preop scheduled 8/31 to 9/27/84.
No major restraints

SU3 GP01: INTEGRATED LEAK RATE TEST AND SU3 GP02: STRUCTURAL INTEGRITY TEST (Mayes/Waldo)
Preop SU3 GP01 scheduled 8/26 - 8/30. Preop SU3 GP02 scheduled 8/22 - 8/25.
Major restraints:
Early 1) CWP-GP-28E, install ILRT equipment. F/C 8/15. DDD 7/27. NEED TO EXPEDITE.
Herb/Handf/Mon 7) FMR-BPC-E075, cable adaptors. NEED TO EXPEDITE. ESD 9/7 restrains 73 TOE items. (Evaluating alternatives.)
Mondi 9) FMR-SU-2110, 3 pin connector for RTDs, 1000' cable V114 for Dewcells; 3000' cable V138 for RTDs. Need 8/20 ESD 8/20.
Oriole 11) MR-849, Atlas-Copco deliver compressors, (PO#45707) filters and dryers to site 8/22. F/C 8/22.
~~Oriole a) Atlas Copco to provide dimensions by 8/9. F/C 8/9.~~
Mondi 13) Keys for Volumetrics panels, 8/10. F/C 8/10.
Oriole 14) Extensiometers and calibration data sheets. DDD 8/22. F/C 8/22.
Oriole 15) PO[illegible], Bechtel supply 8 crack mappers. Need on site 9/3. F/C 9/3.
Early 16) Erect scaffolding or crane in crack mapping areas. Need 8/30. F/C 8/30.
Herbst/Oriole 17) Bechtel to supply info on power supply & signal conditioner for extensiometers per PO#[illegible]. Need 8/3. F/C 8/13.
Oriole 18) FMR ___, power supply and signal conditioner for extensiometers. (Restrained by #17.) Need additional info. Need ESD.
Early 19) Install temp. power supply to dryer skids. Need 8/24. NEED CWP F/C 8/24
Oriole 20) Bechtel ILRT rep. on site. Need on site 8/3. F/C 8/13. PO#88970 SU2L
Mondi 21) FMR-SU-2116, CB&I vendor on site to repair emergency escape hatch door. Need 8/14. ESD 8/14.
Mondi 22) FMR-SU-2113, spare parts for air locks. Need 9/3. Need ESD.
Early 23) CWP-GP-28, install temp. cable to SIT instruments. Need 8/25. Need F/C date. Restrained by items 9 & 10.
Mondi 24) FMR-SU-2114, volumetrics to assist with final calibration on site. Need 8/27. F/C 8/27.
Early 25) CWP-SE-62, jumpers in electrical penetrations. Need work complete 8/15. F/C 8/15

GT: CONTAINMENT PURGE (Arnold/Pike)
Preop scheduled for 9/2 to 9/17/84.
No Major Restraints:

SU4 HA01: GASEOUS RADWASTE (Mayes/Waldo)
Preop SU4 HA01 scheduled for 7/17 to 10/16/84.
Major Restraints:
Gardn/Matt 2) FMR-SU-1776, ref. CWP-HA-9E, replace broken terminal block. Ref. P.O. 27000-13-011. ESD 9/12. NEED TO EXPEDITE. DDD 8/15.
~~Mondi~~ ANTOMINICM 3) ~~FMR-SU-1956, ref.~~ CWP-HA-23E, replace starter interlock for aux. contact breaker. NEED F/C DATE (MCR 23356)
Gardner/Handf 6) Flush & hydro activities restrain all mechanical testing. F/C 8/18.

SU4 HB01 & SU4 HB02: LIQUID RADWASTE (Arnold/Pike)
Preop SU4 HB01 scheduled for 8/12 - 8/26/84. SU4 HB02 scheduled 8/27 to 9/4/84.
Major Restraints:
Gardn/Handf 12) Completion of flushes, F/C 8/19. Hydro F/C 8/11.
Matt 27) FMR-SU-1744, P.I.-340, restrains CWP-HB-120I. (Blanket order 27000-13-003, PO506937). ~~BSD 9/15~~. DDD 8/15. ESD 8/30.
MONDI 28) FMR-SU-2129 GASKET MATERIAL RESTRAINS SUBMEIO HB15 NEED ESD
HERBST 29) SPR-HB-___ FILTER ELEMENTS NEED F/C DATE

Gardner/Mondi 28) FMR-SU-1994, tag #PI0001. Restrains CWP-HB-215I. (16 weeks - NEED TO EXPEDITE.) DDD 8/21. (Evaluate repair - vendor response by 8/6 -Need return ESD.)
Oriole/Mondi 29) FMR-SU-2054, nuts and bolts. ESD 8/6.

SU4 HC01/SU4 HC03: SOLID RADWASTE (Arnold/Pike)
Preop SU4 HC01 scheduled for 10/5. SU4 HC03 scheduled for 8/21 to 9/14/84.
Major Restraints:
Mondi/Gardn 1) FMR-BPC-J062 (CWP-HC-53E), temp switch changeout, will need set points and completion of component testing after switch installation. F/C 9/16.
Mondi/Early 2) CWP-HC-36P, implement IDCP-M-120P (DCX), restrains flush & hydro in subscope HC-3. (M135 resin sample station internals.) Material ESD 8/3, 8/10.
~~Antoninich 4) CWP-HC-18I, ref. rejected item RC-IC-1454-HC, replace pressure gage. Need F/C date.~~
~~Antoninich 5) CWP-HC-19I, ref. rejected item RC-IC-1458-HC, replace pressure gages. Need F/C date.~~
MONDI/ANTON 6) CWP-HC-20I; ref. rejected items RC-IC-1455, 1456 & 1457-HC. Replace gages. Need F/C date. REVISE FMR-SU-1633 FOR NEW GAUGES MATERIAL F/C 8/7
Gard/Anton 8) CWP-HC-33M, ref. RCET-2898-HC. Troubleshoot DPHC05 high vibration. (On going.)
Early 9) CWP-HC-60P, repair strainers, ref. SFR-HC-21. FCN 10510/CWP-HC-29-32P, change out pump suction flow screen in THC08. F/C 8/8.
Gardn/Handf 11) Flush & hydro restrains pump runs and MEs. F/C 8/24.

SU4 HE01/HE02: BORON RECYCLE (Arnold/Pike)
Preop SU4 HE01 scheduled for 7/30 to 8/20/84. SU4 HE02 scheduled 8/20 to 9/2/84.
Major restraints:
Gardn/Handf 15) Flush completion, F/C 8/13. Hydro completion F/C ~~8/5~~, 9/1. UNACCEPTABLE.
HERBST 16) SFR-HE-23 FLANGE ALIGNMENT RESTRAINS SUB ME10 ME13 NEED F/C DATE

SU3 NN01: INSTRUMENT AC SYSTEM CLASS IE PREOP (Mayes/Waldo)
Preop scheduled for 8/27/84 to 9/1/84.
Major restraints:
Oriole 1) PO 44501, transformer and wire. F/C date wire - 8/3, transformer 8/10. WIRE F/C
Matt 2) PO 27000-13-291, capacitors. NEED TO EXPEDITE. Electrolyte OOD new order required, status by 8/8.

SU4 PK02: 125 V DC SYSTEM (Mayes/Waldo)
Preop scheduled 6/18 to 6/26/84.
Major restraint:
Mondi 5) FMR-SU-1961, cards. ESD 8/17.

SU8 SE01: NEUTRON MONITORING (ex-core) (Andersen/Schoefer)
Preop SU8 SE01 scheduled 9/17 to 9/23.
Major Restraints:
~~Handf/Oriole 1) P.O. 437976, W, SE Source Range Preamps. (2 from Braidwood). F/C 8/4. (Emery 23383). Release F/C 8/3.~~ (MRR 96795)
Corcoran 3) FCN 10670, connectors. ESD 8/30.
Mondi 10) FMR-SU-1702, rev. 1, 2066, rev. 1 - permanent material. ESD 8/17. (5 temp. parts available.)

SU3 SJ01: NUCLEAR SAMPLING (Oakley/Sapp)
Preop scheduled for 7/16 to 8/5/84.
Major Restraints:
Oriole 3) PO 44863, SJ-PI-30, out of spec. gauge. ESD 8/6.
Gardner/Mondi 4) FMR-SU-2089, hoists and dewars. Crane and base, ESD 8/6. EDD 8/7.

SU3 SP01: PROCESS RADIATION MONITORING (Andersen/Sapp)
Preop scheduled 9/18 to 9/30/84.
Major restraints:
Gardn/Mondi 2) FMR-SU-1853, (General Atomic) trans. & regs. Partial on site. Balance due ~~ESD 11/9~~, DDD 8/27. ESD 8/17.
Mondi 3) FMR-SU-1975, (GE) relays. ESD 8/17.
~~Mondi 4) FMR-SU-2053, plate seal & detector. DDD 8/30. ESD 10/15. NEED TO EXPEDITE. ESD 8/10. Ship 8/2. EDD 8/4.~~ (MRR 23346)
Mondi 5) FMR-SU-2062, rotameter. DDD 8/20. ESD 9/1, 8/20. NEED TO EXPEDITE.
Mondi 6) FMR-SU-2067, aluminum foil. F/C 8/10. Ship 8/2, EDD 8/4.
Mondi 7) FMR-SU-2069, test equipment. F/C 8/10. Ship 8/2, EDD 8/4.
Mondi/Oriole 8) FMR-SU-1796, spare boards and subassemblies. (80% of order to ship by 8/10.) (REC'D PARTIAL - MRR 23358)
Mondi/Early 9) FMR-BPC-E-056, connectors. ESD 9/24. Restrains DCP-E-104.
Gardn/Early 11) CWP-SP-90E, restrains TOE 190, 191. F/C 8/6.

SU4 SG#1: SEISMIC INSTRUMENT (Andersen/Sapp)
Preop scheduled 9/14 to 9/23/84.
No major restraints.

GENERAL SECTION

Matt/Early 156) (EM) CWP-EM-133M, replace cap screw (FMR-SU-1602, need change notice F/C 8/4.) Need F/C date.. (MRR 23101)

Mondi 157) (HF) FMR-BPC-M038, stem and disc assembly. ESD 9/15. (acceptable)

Mondi 158) (BG) FMR-SU-1678, Borg-Warner check valves. ESD 9/30. NEED TO EXPEDITE. (Have one spare on site.)

Matt 174) (BB) ~~FMR-WE-068~~, replacement TEs. (27000-13022, PO#506994) FMR-SU-1833, (27000-11763, PO#500783) and FMR-WE-065, (27000-13021, PO#500783) spare RTDs, ESD 8/27.

Mondi 175) (GT) FMR-1740, limit switch for containment isolation valves. ESD ~~8/3.~~ 8/10

Early/Gardner 183) (KC) Implement IDCP-A-22,1,3,4,6,7, ref. SFR-SU-94. F/C ~~7/11~~. 8/13. (acceptable)

Mondi/Oriole 208) (NE) FMR-BPC-E065, contacts, F/C 9/30.

Matt 212) (BB) FMR-SU-1936, TCCM parts. (PO#27000-11704, W.I. 52769.) Need partial shipments. ESD 7/31 continuing thru til September.

Mondi 213) (BM) FMR-SU-1935, BMV153 valve. ESD 11/18. Restrains ~~CWP-BM-269~~. NEED TO EXPEDITE.

Matt 221) (EP) ~~FMR-SU-1880~~, limitorque, EP 8808D. ESD 10/4. (Blanket order 27000-13025, PO#507024.)

Mondi 224) (EG) FMR-SU-1979, wedge for EG-V071, cracked seat, restrains CWP-EG-431M. ESD 11/16.

Corcoran 227) (HB) FDR-10405, PO#504735, mounting bolts, F/C 8/15. NEED TO EXPEDITE.

~~Mondi 229) (QB) FMR-SU-2037, 2 breakers IPB Gould #HB3B030-001, 30 amp 120V DC control power. BSD 7/27. 8/3. Ship 8/3. EDD 8/6.~~ MRR 23354

Matt 231) (HE) FMR-SU-1930, code tube, ~~ESD 7/21. EDD 8/1.~~ ESD 8/3. EDD 8/6.

Oriole 232) (SE) PO#457?7, spare source range preamps (3) ESD 11/20.

Corcoran 233) (SB) Reactor Trip Switchgear:

Corcoran a) FCN 10630, undervoltage trip attachments for DS-416 breakers. PO#490012, 490084. ESD 7/30. ~~EDD 7/31~~. EDD 8/10.

To be worked with:

Corcoran d) FCN 10680, installation of shunt trip device. PO# 500414. Need ESD for qualified coil. Need 8/1. ESD 7/30. EDD ~~7/31~~. 8/10.

~~Antoninich~~ CORCORAN e) ~~CWP-SB-170, ref.~~ FDR 10394, ~~install~~ seismic positioners on DS-416 breakers. ~~F/C 8/6.~~ COMPLETE, CLOSE FDR. NEED F/C DATE

Antoninich f) CWP-SB-___, ref. FCN 10661, install shunt coil test panels. Material on site, MRR 93849. (On hold for completion of SA preop.)

Handf/Corc 234) (BB) FDR-11009, missing shim plates. PO 506409 need ESD.

Corcoran 235) (BB) PO#500568, incore isolation valves. DDD 8/20. ESD 11/15. NEED TO EXPEDITE.

Corcoran 236) (BB) WI-52870, (ref. 27000-13031), 24 level "B" Rosemount transmitters. ESD 10/1. NEED TO EXPEDITE.

Mondi 240) (SA) FMR-SU-2047, 10 additional power supplies. ESD 10/15. NEED TO EXPEDITE.

nondit 241) (EC) FMR-BPC-M-039, ship pump to Gould, return ESD 8/24.

Hand/Corc 242) (BB) FDR-11020, broken T/C connectors. PO 506410 WILL ADVISE 8/8

Mondi/Early 244) (HF) FMR-BM-452, gaskets SH 8-3, restrains ~~CWP-HF-204M~~. ~~BSD 8/3.~~ EDD 8/4

Gar/Mer/Earl 245) (LF) After HFT, Need W to install LFLE9B & 10B, restrains DCP-E-104.

Mondi 254) (AE) FMR-SU-1908, Rosemount Transmitter (spare) ESD 10/31.

Mondi 255) (EF) FMR-SU-1348, Rosemount level transmitter (spare). ESD 8/31.

Mondi 256) (SE) FMR-SU-1855, permanent jacks for Triax penetrations. ESD 9/30.

Mondi 259) (HF) FMR-SU-1952, switch. ESD 8/17.

Mondi 260) (EF) FMR-SU-1512R1, covers for switch. ESD 10/1. DDD 8/20. Material F/C 10/5. NEED TO EXPEDITE.

Herbst 261) (GK) Workplan 1-FJ-110-017, restrains SFR-1-GK-50, two cards. DDD 8/20. Material F/C 10/5. NEED TO EXPEDITE. F/C ~~8/3~~. 8/8.

Mondi 262) (GK) FMR-SU-1588, transmitter. Need FMR rev. for repair DDD 8/20. ESD 11/16. NEED TO EXPEDITE. Card returned for repair DDD 8/20. Need ESD.

~~Mondi 264) (QA) FMR-SU-2075, breaker 52PG11REP1. Need date 7/30. F/C 8/10. BSD 8/3.~~ (MRR 23357)

Matt 266) (SR) FMR-SU-2034, triax cable end. PO 27000-13-283). ESD 9/4.

Matt 267) (SR) FMR-SU-2055, triax cable plug. (PO 27000-13-284). ESD 9/4.

Mondi 271) (LF) FMR-BE-1185, power cable. ESD 9/14.
Mondi 272) (EG) FMR-SU-2051, limit switch. ESD 8/3, 8/10.
~~Mondi 274) (EG) FMR-SU-1645, relief valve (Mid States). Ship 7/30. EDD 7/31. EDD 8/3. Material on site. Need release.~~ (MRL 23317)
Mondi 275) (EG) FMR-SU-1699, protectors & covers. F/C 8/15.
Mondi 276) (EG) FMR-SU-1715, stem prot. & dust cp. F/C 8/15.
Mondi 277) (EG) FMR-SU-2013, wedge disc. F/C 8/24.
Mondi 278) (EG) FMR-SU-2042, wedges pin & stem. ESD 9/7.
Oriole 279) (EG) MR-613, solenoid valves. F/C 8/27.
Mondi/Early 280) (EG) PO#223C-1, rel#10, gaskets, restrains TOE 2845. ESD 8/17.
Mondi 281) (EG) FMR-SU-2072, bonnet gaskets. F/C 8/24.
Mondi/Early 283) (VAR) FMR-BPC-045, clips. DDD 8/1. Evaluate alternatives, F/C 9/7. NEED TO EXPEDITE.
Herbst 284) (HB) Gasket material/leaking flange. NEED ADDITIONAL INFO SEE HB-49 REVISE HB15
Herbst 285) (BM) SFR-BM-45, instrument operation. F/C 8/7

PREOPS IN PROGRESS

N/A 22) SU4 CQ01 and SU4 SK01, started 4/24. Major Restraints:
Mondi/Herbst b) Vendor supplied software (ALMSTK) per SMR-150, 151 & 152 for VWP-EJ-133A-004, vendor on site to resolve situation by 8/8.
Mondi f) FMR-SU-1992, latch mod kit & mounting bracket, Need ASAP. EDD 10/5. NEED TO EXPEDITE.
N/A 32) SU4 AC03, started 5/14. No major restraints.
N/A 36) SU3 KE07, started 5/22. On hold: post HFT
N/A 41) SU3 AB03, started 5/30. No major restraints:
Mondi a) FMR-SU-2018, solenoid. NEED TO EXPEDITE. ~~BDD 7/27~~. ESD 10/1. DDD 8/10.
Mondi c) FMR-SU-2097, oil mister. ESD 8/31. NEED TO EXPEDITE.
N/A 45) SU4 KC02, started 6/2. No major restraints:
N/A 51) SU3 EC01, started 6/20. On hold: post HFT.
Mondi 52) SU4 KC01B, started 6/19. No major restraints:
N/A 53) SU3 KJ01, started 7/4. Major restraints:
Mondi b) FMR-SU-2091, cable for water jacket. Need EDD. ESD 8/17.
Mondi c) FMR-SU-2064, heater element. Need EDD. ESD 8/17.
N/A 55) SU3 GK01, started 6/29. Major restraints:
Gardn/Mondi b) FMR-GK-2082, wedge seals. Need 8/1. ESD 8/3. EDD 8/4.
Matt 56) SU3 KE05. started 6/28. Major restraints:
Gard/Matt a) FMR-SU-1824, indicator light. (W.I. 52859)
N/A 57) SU4 KC03, started 6/29. Major restraints:
Gardner/Earlya) TOEs 4,70,72 workplan FM-651-002, rev. F2, ref. OITS KC3-57,58, install 3500 ft of protectowire in Rx building. Post HFT. Restrains preop completion.
Handf/Herbst d) SFR-KC-97. Need 7/20. F/C 7/20. Will advise vendor problem. Interim disposition NEED F/C DATE
Herbst e) SFR-KC-103, CP-31 control module. Need 7/30. Interim disposition NEED F/C DATE
N/A 62) SU3 BB05: HFT, started 7/17. Major restraints:
Handf/Corc d) SFR-BB-150, evaluation of discrepancies in RTD computer program which provides temp. vs resistance. (Current paper gives 3 resistance for one temp.) F/C 7/10. F/C 7/19. NOT ACCEPTABLE - NEED TO EXPEDITE. (Restrains BB16) F/C 7/21. Ship 1 inst., back to vendor for evaluation 7/21. Interim response complete 8/2.
Handfinger g) Reactor Building Z2 turnover at S/U.
Handfinger h) Insulation installation. F/C ~~7/30, 8/1, 8/2~~ 8/5
Mondi i) FMR-SU-2096, 90° used elbow for AL system. Need pipe class. ~~BDD 8/10~~, EDD 8/4
Handf/Corc j) NCR-ISN 18177P, need W response to NCR change sheet. Need ASAP. (Flanged thermal weld certification - 2 welds)
N/A 66) SU3 0004, started 7/19. No major restraints.
Oriole a) MR-1052, Selesco Lanyards. 40 additional, EDD 8/10. (Spares) NEED TO EXPEDITE.
N/A 67) SU4 GN01, started 7/23 and SU3 GN02. No major restraints:
N/A 68) SU3 NE01: started 7/25. No major restraints.
Mondi a) FMR-SU-2092, terminal block. Need 7/30. ESD 8/17.
Mondi c) FMR-SU-1975, synch check relay, new or repaired from Canada. ESD 8/17. NEED TO EXPEDITE.
N/A 69) SU3 BG01, started 7/15. No major restraints.
N/A 70) SU4 EA01, started 1/18. Major restraint - held for completion of EF.
N/A 71) SU8 GP01, started 9/2/83. No major restraints.
N/A 72) SU8 KE03, started 7/16. No major restraints.

N/A 73) SU3 KE06, started 10/27/83. Major restraint - held for HFT.
N/A 75) SU8 RJ01, started 6/11. No major restraints.
N/A 76) SU8 RJ02, started 6/6. No major restraints.
N/A 78) SU8 0005, as required. No major restraints.
N/A 79) SU8 0008, started 7/21. No major restraints.
N/A 80) SU3 EG01, started 7/31. No major restraints.
N/A 81) SU8 0010, started 7/27. No major restraints.
N/A 82) SU3 SA02, started 8/1. No major restraints.
N/A 83) SU3 EF01, started 8/2. No major restraints.
Mondi 84) SU3 0009, started 7/31. Major restraints:

Mondi a) FMR-SU-2120 MASONEILAN VALVE PARTS (KH REGULATORS) NEED 8/6 (NEED ADDITIONAL INFO) NEED TO EXPEDITE NEED ESD

KANSAS GAS AND ELECTRIC COMPANY

GLENN L. KOESTER
VICE PRESIDENT - NUCLEAR

December 23, 1983

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

KMLNRC 83-168
Re: Docket No. STN 50-482
Ref: Letter dated 12/16/83 from BJYoungblood, NRC, to GLKoester, KG&E
Subj: Facility Staffing Survey

Dear Mr. Denton:

The Reference requested information on facility staffing for the Wolf Creek Generating Station. Attached is the completed staffing questionnaire that was provided to Mr. Joe Holonich on December 12, 1983.

Yours very truly,

Kent R Brown

for Glenn L. Koester
Vice President - Nuclear

GLK:bb
Attach
cc: JHolonich (2), w/a
BYoungblood, w/a
WSchum, w/a

B001
1/1

201 N. Market — Wichita, Kansas — Mail Address: P.O. Box 208 / Wichita, Kansas 67201 — Telephone: Area Code (316) 261-6451

FACILITY STAFFING SURVEY

PLANT Wolf Creek Generating Station
Burlington, Kansas

Anticipated Licensing Date 8/15/84

A. OPERATING SHIFT

1. No. of Shifts [6]

2. No. of ROs Assigned to Shift Work [18]

No. of Yrs. of Commercial RO Experience on Hot Plants (post-initial criticality)	BWR	PWR
	[0]	[1]

3. No. of SROs Assigned to Shift Work [12]

No. of Yrs. of Commercial RO Experience on Hot Plants	BWR	PWR
	[0]	[0]

No. of Yrs. of Commercial SRO Experience on Hot Plants	BWR	PWR
	[0]	[0] *

4. No. of SROs with 4-Yr Degrees — Non-Engineering [1] Engineering [4]

5. No. of Shift Supervisors (SS) — Non-Engineering [1] Engineering [4]

6. Total USN Military Experience — SRO's 88 1/2 Years**

7. Total USN Military Experience — RO's 59 Years**

8.

No. of Shift Consultants Assigned Per Shift	1
No. with Previous SRO	4
No. with Previous RO	2
No. of Years of Commercial SRO Experience	4
No. of Years of Commercial RO Experience	13

*One Shift Supervisor (SRO) had 4 1/2 years at S1W (PWR) Employed by Westinghouse as Plant Operations SS

**This is Station Personnel and Excludes Shift Consultants.

ON-SITE MANAGEMENT

	STA	Superintendent of Operations	Supt of Reg, Quality Adm. Services	Plant Mgr.	Supt of Maintenance	Q.C. Supervisor
To have license at time of OL	Yes	Yes	No	No	No	No
Previously licensed						
RO/SRO	No	SRO	SRO	SRO	No	SRO
Type Plant		PWR	PWR*1	PWR*2		PWR*3
No. Years		6	16	20 1/2		17
No. Years "Hot" Exp.		1 1/2	9	10		11
Degreed	See *4	Yes	No	Yes	Yes	No
Type [Discipline (s)]		Nuclear		USN Academy Engineering	EE	
Level (A/B/M/D)		BS		BS	BS	

*1: 4 Years Navy Nuclear Hot. 3 Years Navy New Construction
*2: 2 Years Navy Nuclear Hot. 3 1/2 Years Navy New Construction
*3: 7 Years Navy Nuclear Hot. 2 Years Navy New Construction

*4: STAs - 1 - BS Electrical Eng
1 - BS Mechanical Eng
1 - BS Math
1 - BA Physics
1 - BS Nuclear Eng, MA Agr
2 - Non-Degreed

CORPORATE NUCLEAR EXPERIENCE
(i.e., "Off-Site" Management)

POSITION	NAME	NUC NAVY (Yrs)	Operator Lic. (if ever held) RO/SRO/None	Yrs. at Oper. Nuc. Stations (On--Site) (Indicate whether BWR or PWR)	Yrs. at Other Nuc. Support/ Management Position (Off-Site) (Indicate whether BWR or PWR)	Degrees Level (A/B/M/D)	Discipline(s
VP	Group V.P. Technical Services K.R. Brown				9 PWR 7 HTGR	BS	Mechanical Eng
DIV VP	V.P. Nuclear G.L. Koester					BS	Mathematics
TECH SERV Mgr	Manager Nuclear Services R.C. Hagan	4			7 PWR	BS MS, PhD	Eng. Physics Nuclear Eng.
MAINT Mgr	Mgr. Mechanical Engineering J.A. Bailey	4		3 PWR	1 PWR	BS	Nuclear Eng.
OPER Mgr	DIR NUCL OPS Wes Hartley**	8	SRO	10 PWR	6 PWR	BS	Management
	Nuclear Coordinator Technical E.W. Creel					BS	Electrical Eng
NUC ENG Mgr	Manager Nuclear Plant Engineering M.L. Johnson				16 PWR	BS, MS	Mechanical Eng
DIR NUC FUEL SER	Manager Nuclear Fuel Engineering R.M. Cherry					BS MS	Eng. Physics Mechanical Eng

CORPORATE NUCLEAR EXPERIENCE
(i.e., "Off-Site" Management)

POSITION	NAME	NUC NAVY (Yrs)	Operator Lic. (if ever held) RO/SRO/None	Yrs. at Oper. Nuc. Stations (On--Site) (Indicate whether BWR or PWR)	Nuc. Support/ Management Position (Off-Site) (Indicate whether BWR or PWR)	Yrs. at Other Degrees Level (A/B/M/D)	Discipline(s
DIR NUC LIC	Manager Licensing G P Rathbun		SRO*	3 PWR	5 PWR	BS, MS	Nuclear Eng
QC/QA Mgr	Director Quality R.M. Grant			4 PWR	4 PWR	AA	Industrial Management
OTHER	Manager Nuclear Safety M.A. Stewart	4	SRO*	2 PWR	3 PWR	BS	Aerospace
OTHER	Technical Staff Specialist - Corp. Operations W.L. Mutz	7	SRO	10 PWR		BS	Business Science

*Navy Nuclear EOOW Qualified.

**KG&E is actively pursuing the filling of this position with a full time KG&E employee. Presently a consultant from MAC is filling this position on approximately a one-half time basis.