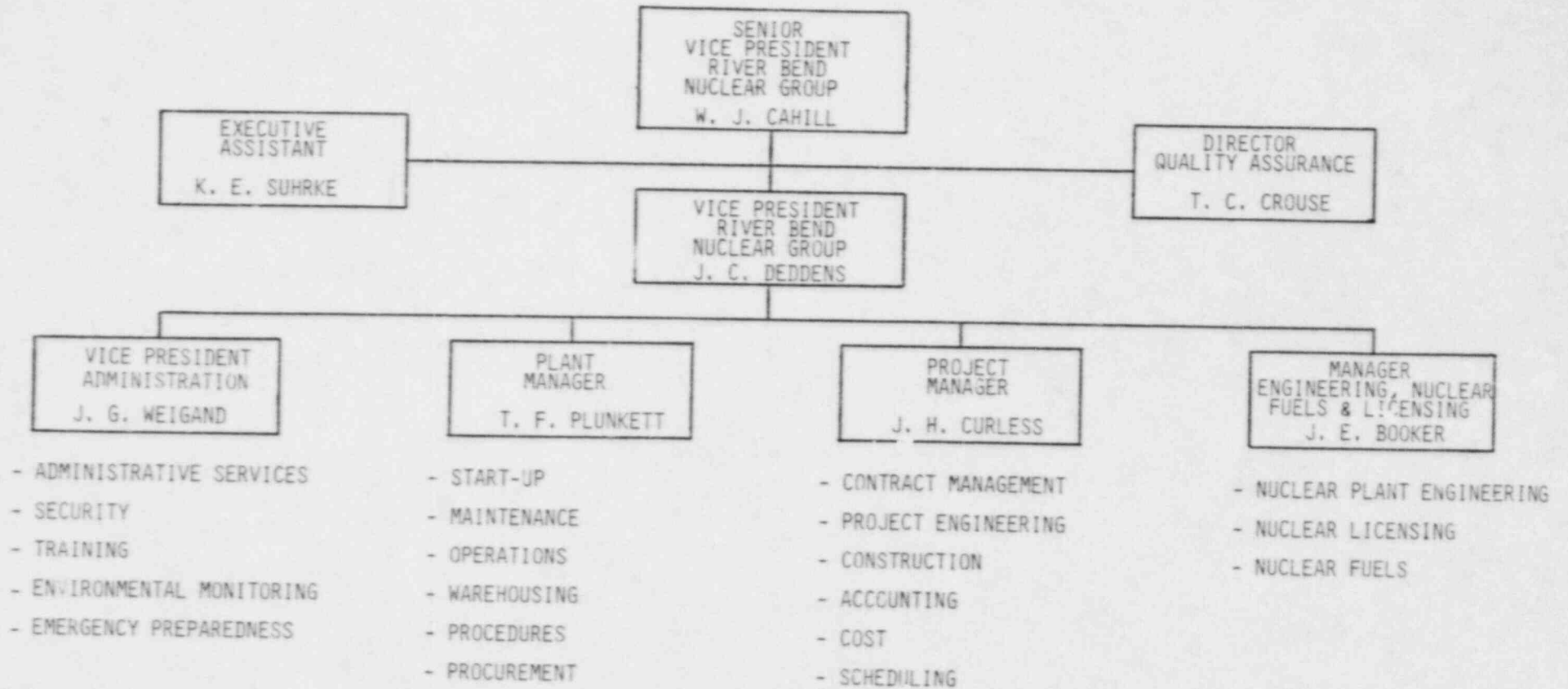


NUCLEAR REGULATORY COMMISSION  
CASE LOAD FORECAST PRESENTATION

DECEMBER 4, 5, 6, 1984

STATUS AS OF OCTOBER 31, 1984

- |       |   |                                |                         |
|-------|---|--------------------------------|-------------------------|
| I.    | - | NRC - OPENING STATEMENTS       | NRC                     |
| II.   | - | GSU INTRODUCTION               | J. H. CURLESS           |
| III.  | - | ENGINEERING/PROCUREMENT STATUS | R. W. HELMICK           |
| IV.   | - | CONSTRUCTION STATUS            | R. W. HELMICK           |
| V.    | - | SCHEDULE STATUS                | J. J. PRUITT            |
| VI.   | - | PLANT STAFF & TEST PROGRAM     | T. F. PLUNKETT          |
| VII.  | - | LICENSING                      | J. E. BOOKER/W. J. REED |
| VIII. | - | CLOSING SUMMARY                | J. H. CURLESS           |



RIVER BEND STATION

UNIT I

FUEL LOAD	APRIL 1985
COMMERCIAL OPERATION	DECEMBER 1985

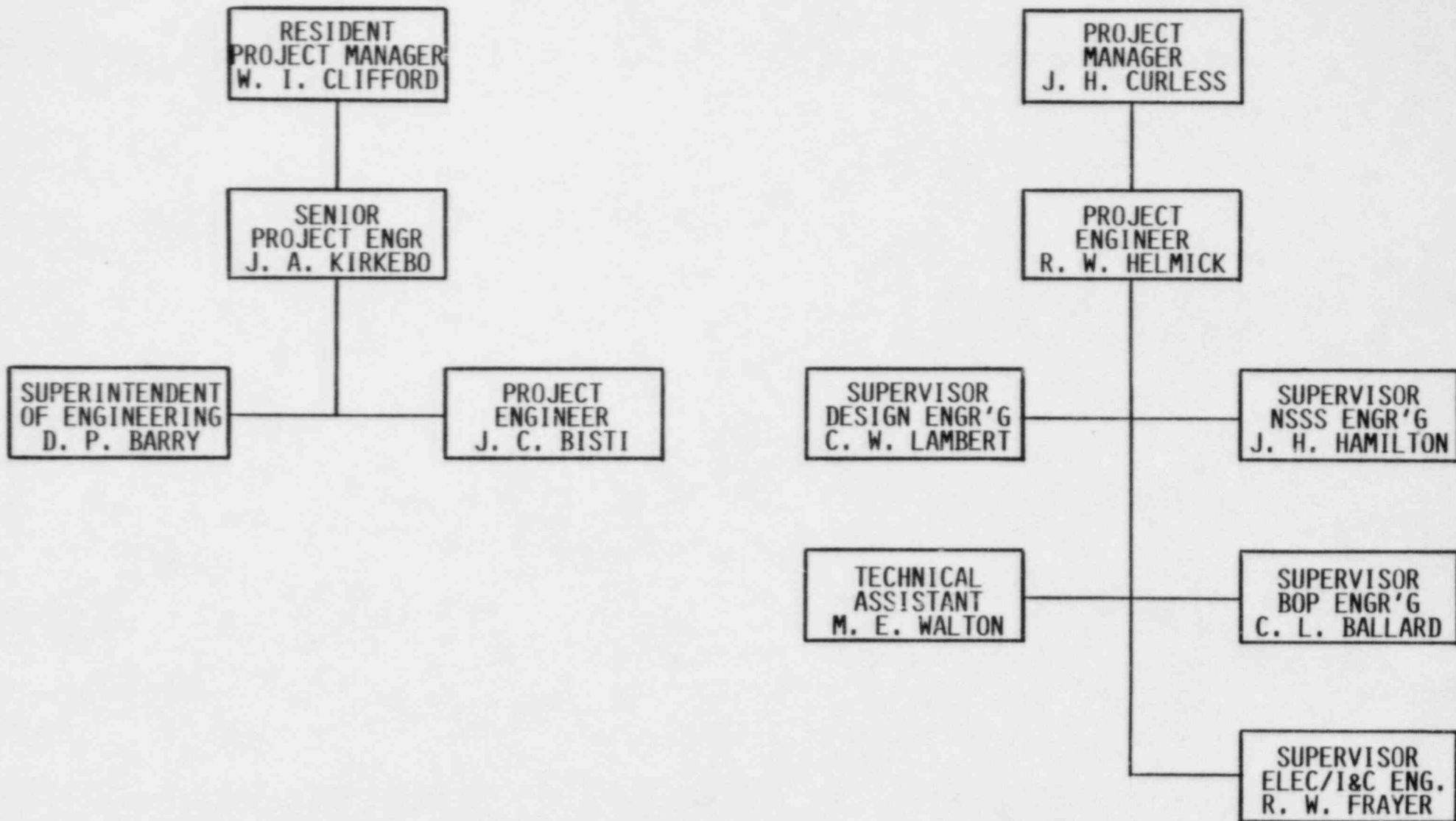
PERCENT COMPLETE

ENGINEERING	91.3%	(10/31/84)
CONSTRUCTION	93.0%	(11/15/84)
TEST PROGRAM	45.2%	(11/15/84)

### CONSTRUCTION MILESTONES

	<u>SCH.</u>	<u>ACTUAL</u>
REACTOR MAT CONCRETE COMPLETE	2/80	1/80
TURBINE GENERATOR PEDESTAL	1/81	7/80
CONTROL BLDG. CONCRETE TO EL. 136'	4/81	11/80
DRYWELL CONCRETE TO EL. 157'	7/81	3/81
SET R.P.V.	7/81	7/81
T/O NORMAL BATTERIES (SWGR BLDG)	1/83	12/82
T/O PREFERRED TRANSFORMER & PROTECTION (SWGR)	1/83	12/82
AUXILIARY BLDG. ROOF SLAB EL. 170'	1/83	12/82
REACTOR OPERATING FLOOR SLAB EL. 186'	2/83	2/83
FUEL BLDG. ROOF SLAB EL. 170'	2/83	2/83
POLAR CRANE OPERATIONAL	3/83	1/83
COMPLETE FOUNDATION SERVICE BLDG.	6/83	4/83
T/O 480V TRANSFORMER & LOAD CENTER	6/83	5/83
PGCC TURNOVER	7/83	3/83
T/O NORMAL SERVICE WATER	8/83	8/83
COMPLETE FUEL POOL & REACTOR CAVITY LINER	9/83	8/83
T/O TURBINE BLDG. COMPONENT COOLING WATER	9/83	8/83
SET CONTAINMENT VESSEL DOME	10/83	3/83
T/O REACTOR BLDG. COMPONENT COOLING WATER	12/83	11/83
START FEEDWATER RECIRCULATION	2/84	1/84
START RPV OUTFLUSH	3/84	2/84
RPV HYDRO STATION TEST	5/84	5/84
START STRUCTURAL INTEGRITY TEST	2/85	
START INTEGRATED ECCS TEST	1/85	
FUEL LOAD	4/85	

RIVER BEND STATION - UNIT I  
PROJECT ENGINEERING ORGANIZATION



HEADQUARTERS % COMPLETE

BY

MAJOR WORK GROUP

	<u>ACTUAL %</u>
CONSTRUCTION SUPPORT	98
STARTUP SUPPORT	62
REGULATORY	92
VERIFICATION	49
PROJECT UNIQUE	85
PROJECT SERVICES	95
MANAGEMENT AND ADMINISTRATION	92

DRAWING STATUS  
CONSTRUCTION DRAWINGS

CIVIL/STRUCTURAL

	<u>TOTAL REQUIRED</u>	<u>ACTUAL ISSUED</u>	<u>% COMPLETE</u>
ARCHITECTURAL	135	131	97.0
CIVIL	54	53	98.1
CONCRETE	618	615	99.5
STEEL	324	318	98.1
MACHINE DESIGN	280	279	99.6
	—	—	—
TOTAL	1411	1396	98.9

	<u>TOTAL REQUIRED</u>	<u>ACTUAL ISSUED</u>	<u>% COMPLETE</u>
SPECIFICATIONS	119	117	98.3

DRAWING STATUS  
CONSTRUCTION DRAWINGS

MECHANICAL

	<u>TOTAL REQUIRED</u>	<u>ACTUAL ISSUED</u>	<u>% COMPLETE</u>
PIPING	589	589	100
BUILDING SERVICE	325	325	100
LARGE BORE SUPPORT DRAWINGS	16,402	16,402	100
	————	————	——
TOTAL	17,316	17,316	100

SMALL BORE SUPPORT DRAWING EFFORT - 100% COMPLETE

	<u>TOTAL REQUIRED</u>	<u>ACTUAL ISSUED</u>	<u>% COMPLETE</u>
SPECIFICATIONS	172	172	100



DRAWING STATUS  
CONSTRUCTION DRAWINGS

ELECTRICAL

	<u>TOTAL REQUIRED</u>	<u>ACTUAL ISSUED</u>	<u>% COMPLETE</u>
INSTRUMENTATION	218	216	100
ELECTRICAL	1,756	1,754	99.9
CONDUIT	172	172	100
	—	—	—
TOTAL	2,146	2,144	99.9

	<u>TOTAL REQUIRED</u>	<u>ACTUAL ISSUED</u>	<u>% COMPLETE</u>
SPECIFICATIONS	112	112	100

## ENGINEERING ACTIVITIES

- AS-BUILT DESIGN VERIFICATION (PIPING, PIPE SUPPORTS,  
DUCT SUPPORTS)
- STRUCTURAL VERIFICATION
- BIP SUPPORT PLANS AND STARTUP PROGRAM SUPPORT
- EQUIPMENT QUALIFICATION (IEEE-323)
- WIRING TERMINATION DIAGRAMS
- LICENSING SUPPORT
- TECHNICAL SPECIFICATION PREPARATION

HEADQUARTERS PURCHASE ORDERS

	<u>TOTAL REQUIRED</u>	<u>TOTAL ISSUED</u>
STRUCTURAL	42	42
MECHANICAL	17	17
ELECTRICAL	54	52
POWER	119	119
CONTROLS	61	61
	—	—
TOTAL	293	291

## LICENSING

- \* DISCUSS IMPLEMENTATION OF ANY TMI ACTION ITEMS THAT MAY AFFECT THE CURRENTLY PROJECTED FUEL LOAD DATE.

TMI ACTION ITEMS HAVE BEEN IDENTIFIED TO THE NRC STAFF IN APPENDIX 1A OF THE FSAR. IMPLEMENTATION OF THESE ITEMS IS NOT EXPECTED TO ADVERSELY AFFECT THE PROJECTED FUEL LOAD DATE.

- \* DISCUSS ANY 10CFR50.55(e) REPORTABLE DEFICIENCIES THAT MAY AFFECT THE CURRENTLY PROJECTED FUEL LOAD DATE.

OF THE 10CFR50.55(e) REPORTABLE DEFICIENCIES TO DATE, NONE ARE EXPECTED TO REPRESENT AN ADVERSE IMPACT ON THE CURRENTLY PROJECTED FUEL LOAD DATE.

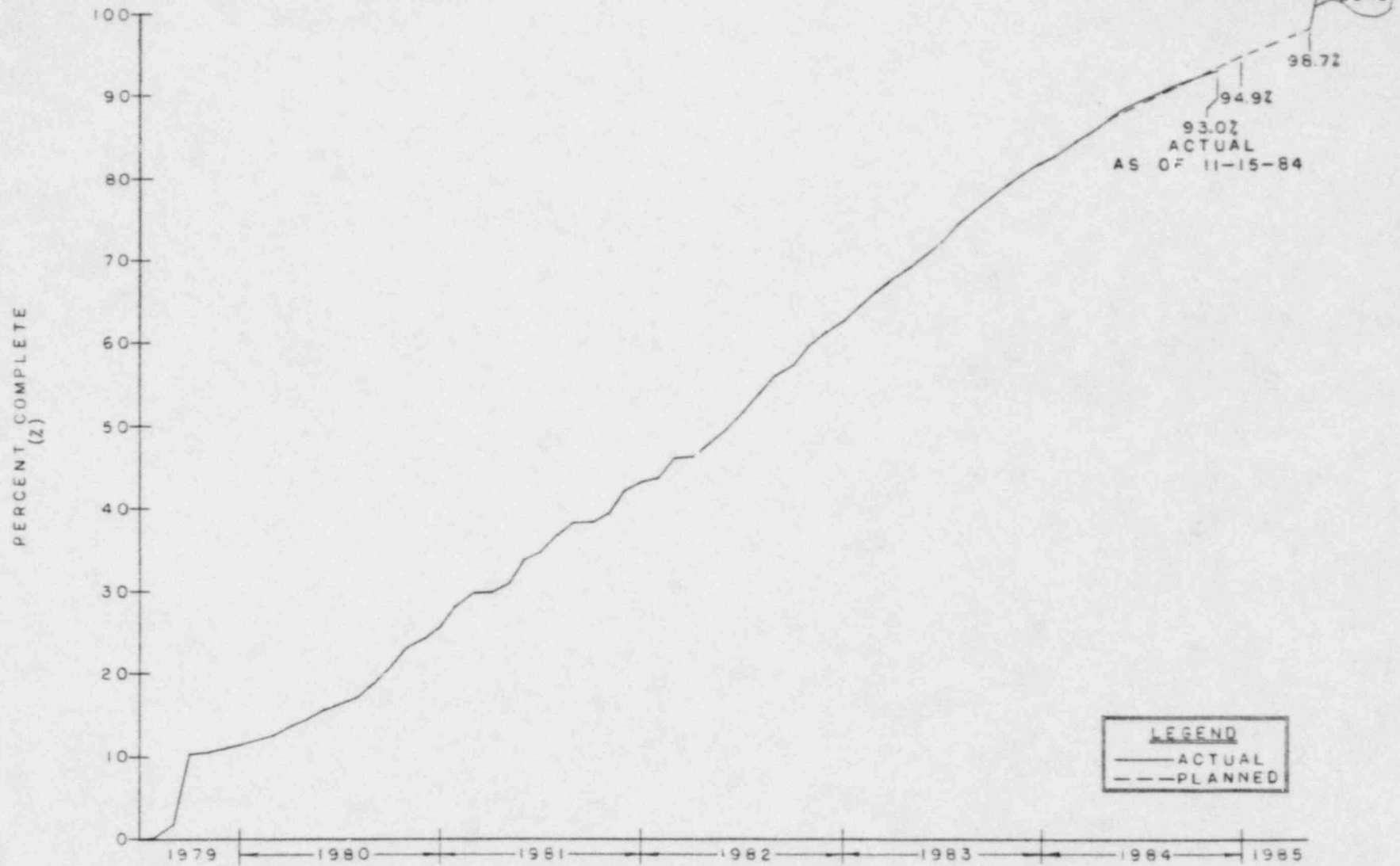
CRAFT MANHOURS

MILLIONS

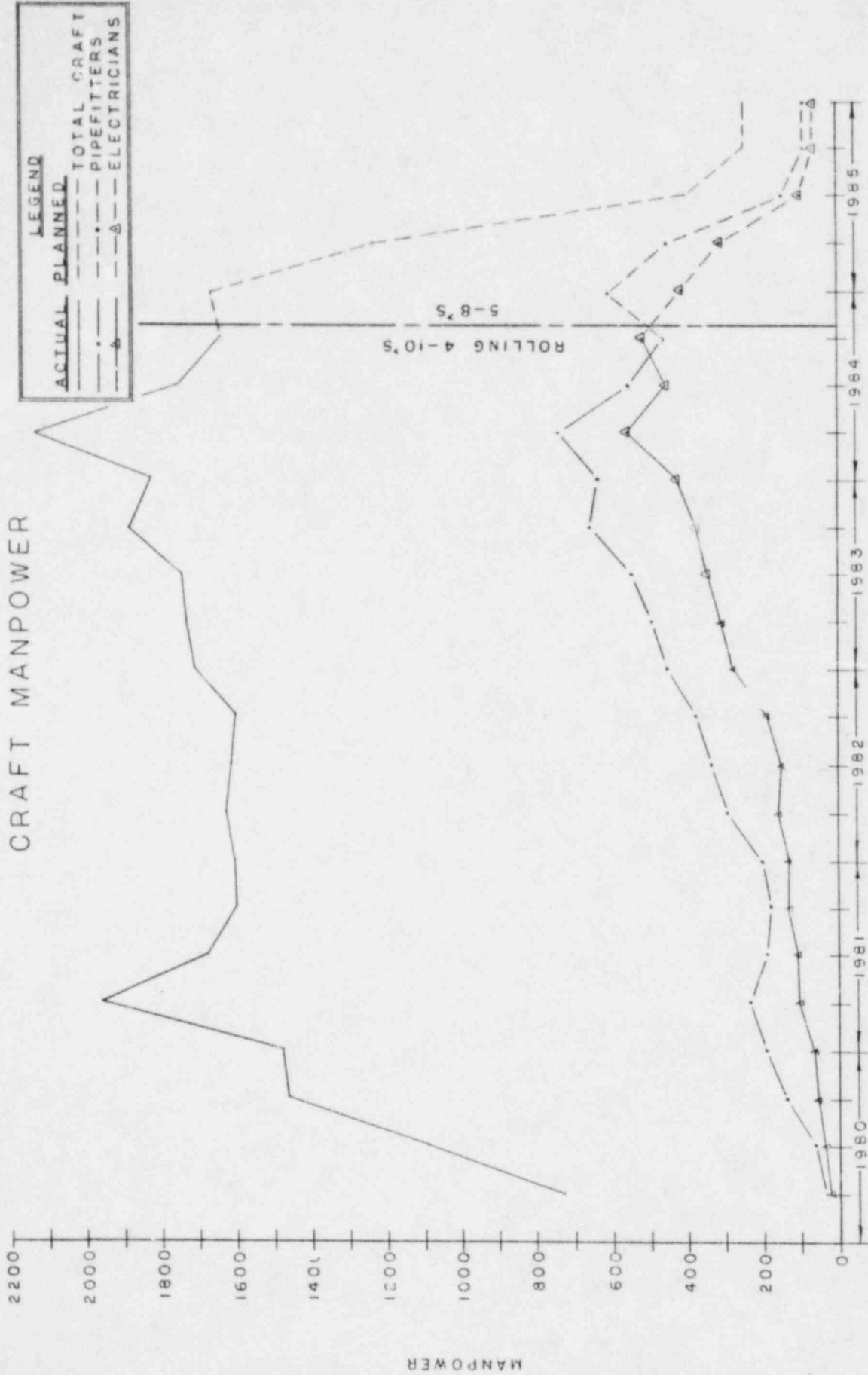
TOTAL PROJECT (SWEC & CONTRACTS)

	<u>TOTAL</u>
EXPENDED THRU 1984 (10/84)	32.6
REMAINING 1984	1.1
1985	2.3
1986	<u>0.1</u>
TOTAL	36.1

# CONSTRUCTION PERCENT COMPLETE



# CRAFT MANPOWER



NRC CASE LOAD FORECAST

ESTIMATED QUANTITIES

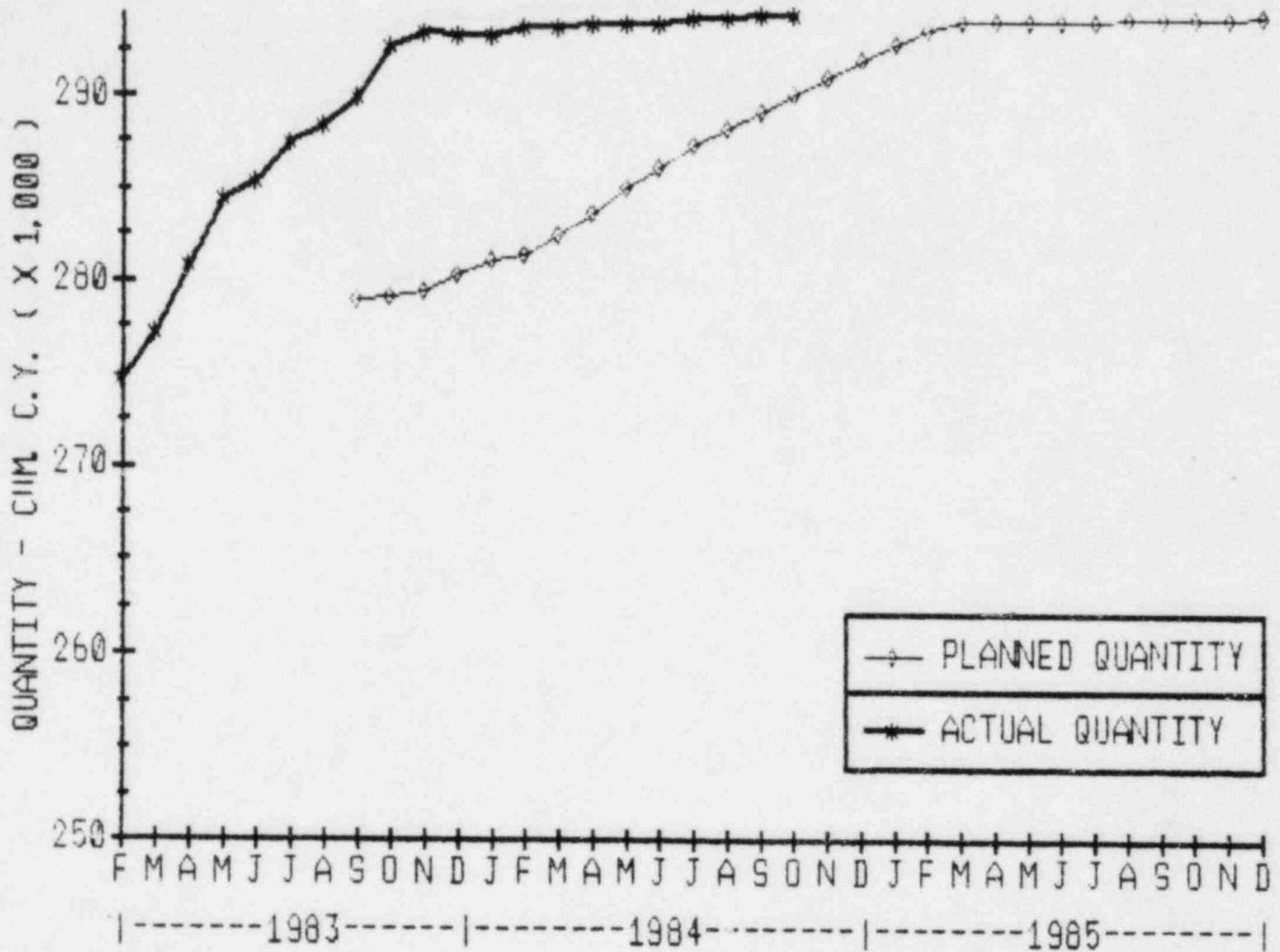
<u>COMMODITIES</u>	<u>DEC. 1984</u>	<u>DEC. 1983</u>	<u>± VARIANCE</u>
CONCRETE	294,851 CY	305,178 CY	-10,327 CY
PIPE - 2" & BELOW	123,348 LF	140,652 LF	-17,304 LF**
PIPE - 2½" & ABOVE	276,927 LF	288,366 LF	-11,439 LF
WELD - 2½" & ABOVE	24,712 EA	23,024 EA	+1,688 EA
LG. BORE HANGERS	14,719 EA	14,279 EA	+440 EA
SM. BORE HANGERS	17,092 EA	14,902 EA	+2,190 EA**
LIGHTING WIRE	907,833 LF	540,647 LF	+367,186 LF**
POWER CABLE	746,364 LF	1,007,365 LF	-261,001 LF**
POWER TERMS	19,240 EA	25,403 EA	-6,163 EA**
I & C CABLE	6,412,600 LF	5,904,600 LF	+508,000 LF
I & C TERMS	200,989 EA	238,631 EA	-37,642 EA**
CABLE TRAY	102,168 LF	103,249 LF	-1,081 LF
TOTAL CONDUIT	913,872 LF	895,735 LF	+18,137 LF
EXP. MET. CONDUIT	603,859 LF	585,722 LF	+18,137 LF

NOTE: ESTIMATES ARE THOSE GIVEN TO THE NRC  
AT DEC. 1983 CASE LOAD FORECAST AND  
AT UPCOMING DEC. 1984 CASE LOAD FORECAST.

\*\* ± GREATER THAN 10%.



# CONCRETE

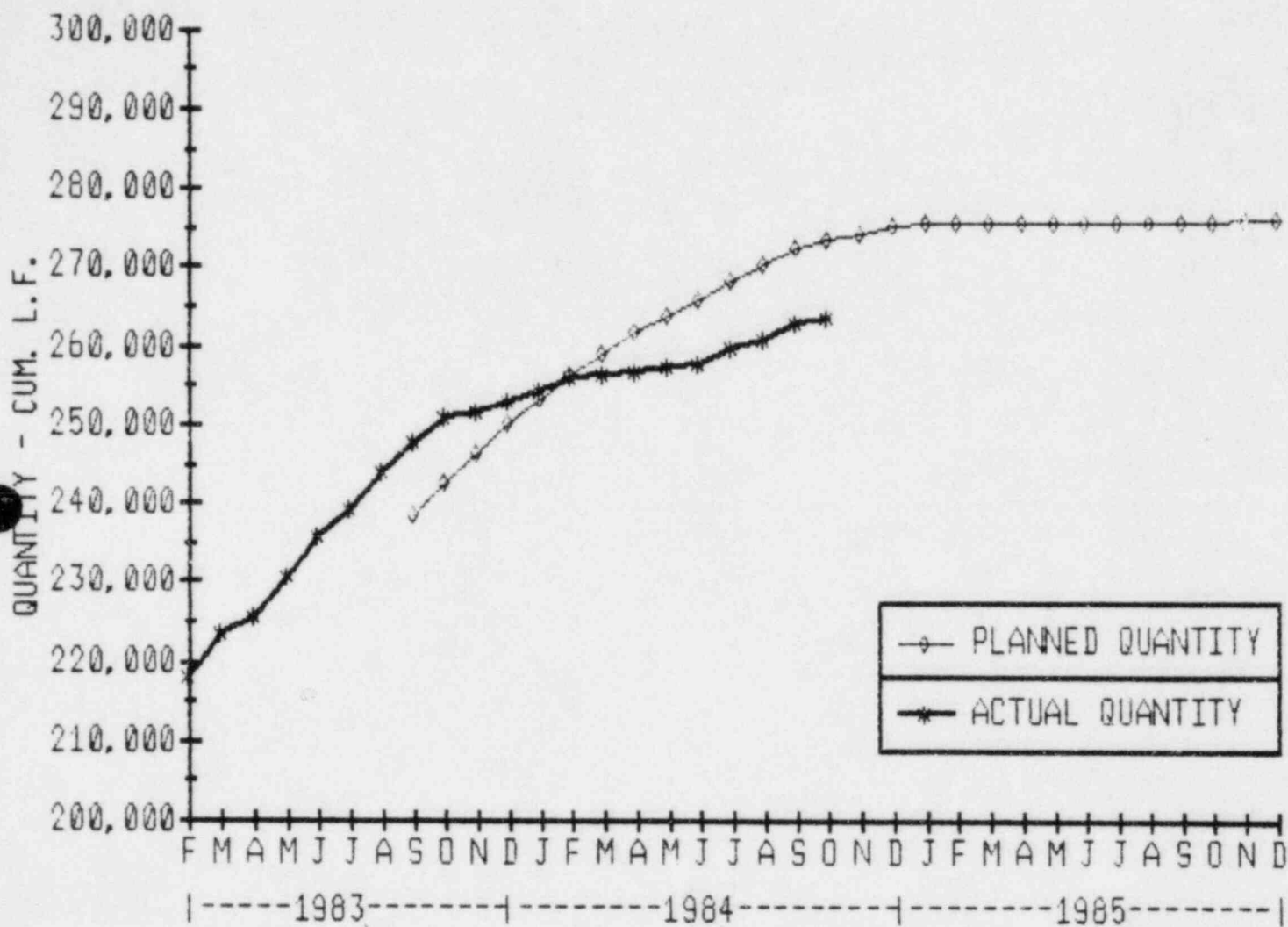


## CONCRETE

ESTIMATED QUANTITY	294,851 CY
INSTALLED TO DATE	294,443 CY
SCHEDULED TO DATE	290,202 CY
PERCENT COMPLETE - EARNED VALUE	99.9%
ACTUAL INSTALLATION RATE - PAST 6 MONTHS	81 CY/MONTH
PEAK INSTALLATION RATE - DURING PAST 6 MONTHS	931 CY/MONTH

NOTE: DATA AS OF 10/30/84

# PIPE - 2 1/2" & ABOVE

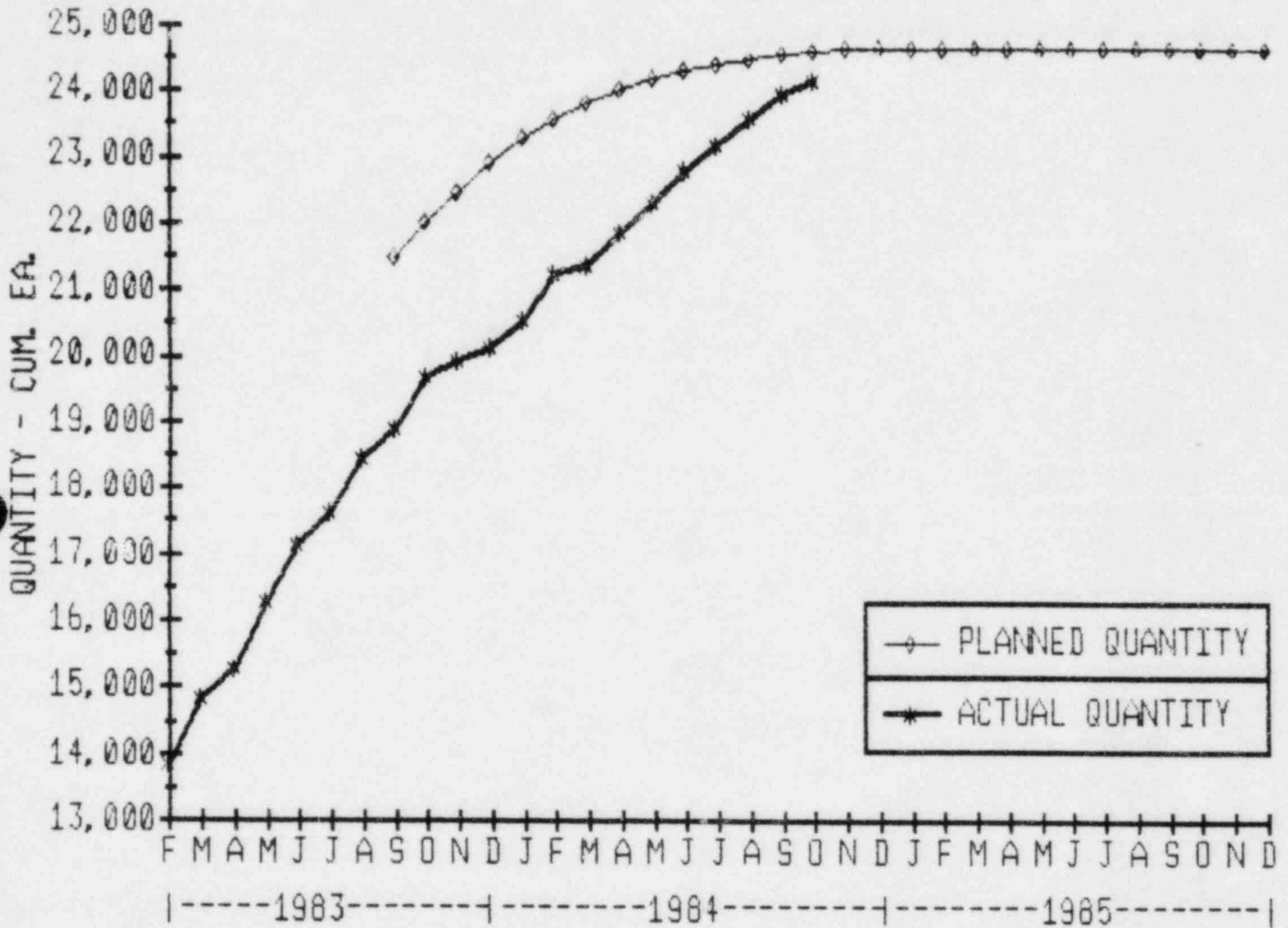


## PIPE -2 1/2" & ABOVE

ESTIMATED QUANTITY	276,927 LF
INSTALLED TO DATE	263,634 LF
SCHEDULED TO DATE	273,578 LF
PERCENT COMPLETE - EARNED VALUE	96.9%
ACTUAL INSTALLATION RATE - PAST 6 MONTHS	1,023 LF/MONTH
PEAK INSTALLATION RATE - DURING PAST 6 MONTHS	1,998 LF/MONTH

NOTE: DATA AS OF 10/30/84

# WELDING - 2 1/2" & ABOVE

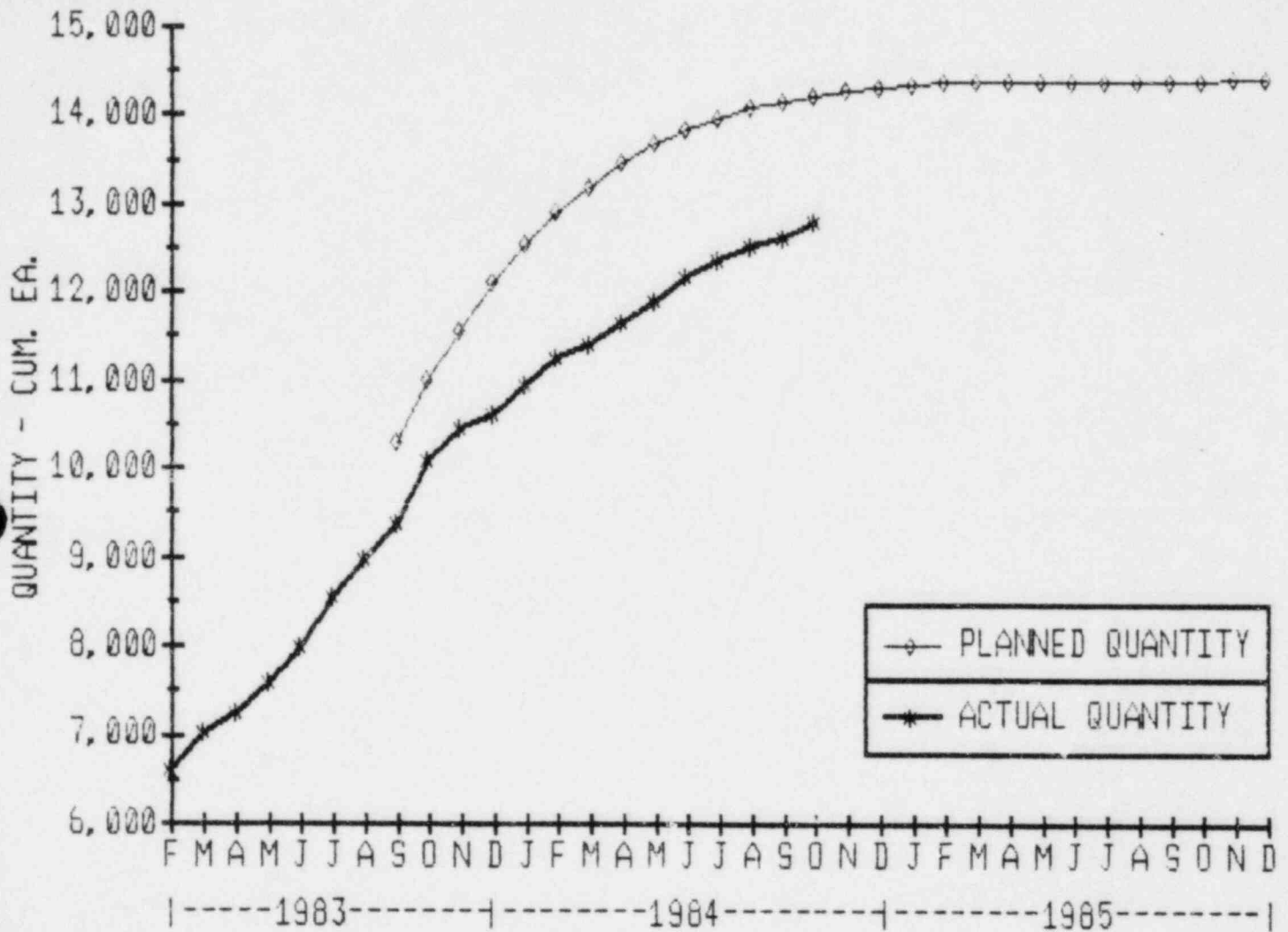


## WELDING - 2 1/2" & ABOVE

ESTIMATED QUANTITY	24,712 EA
INSTALLED TO DATE	24,160 EA
SCHEDULED TO DATE	24,621 EA
PERCENT COMPLETE - EARNED VALUE	96.7%
ACTUAL INSTALLATION RATE - PAST 6 MONTHS	395 EA/MONTH
PEAK INSTALLATION RATE - DURING PAST 6 MONTHS	468 EA/MONTH

NOTE: DATA AS OF 10/30/84

# LARGE BORE HANGERS AND SUPPORTS



## LARGE BORE HANGERS

ESTIMATED QUANTITY	14,403 EA
INSTALLED TO DATE	12,806 EA
SCHEDULED TO DATE	14,237 EA
PERCENT COMPLETE - EARNED VALUE	91.4%
ACTUAL INSTALLATION RATE - PAST 6 MONTHS	200 EA/MONTH
PEAK INSTALLATION RATE - DURING PAST 6 MONTHS	258 EA/MONTH

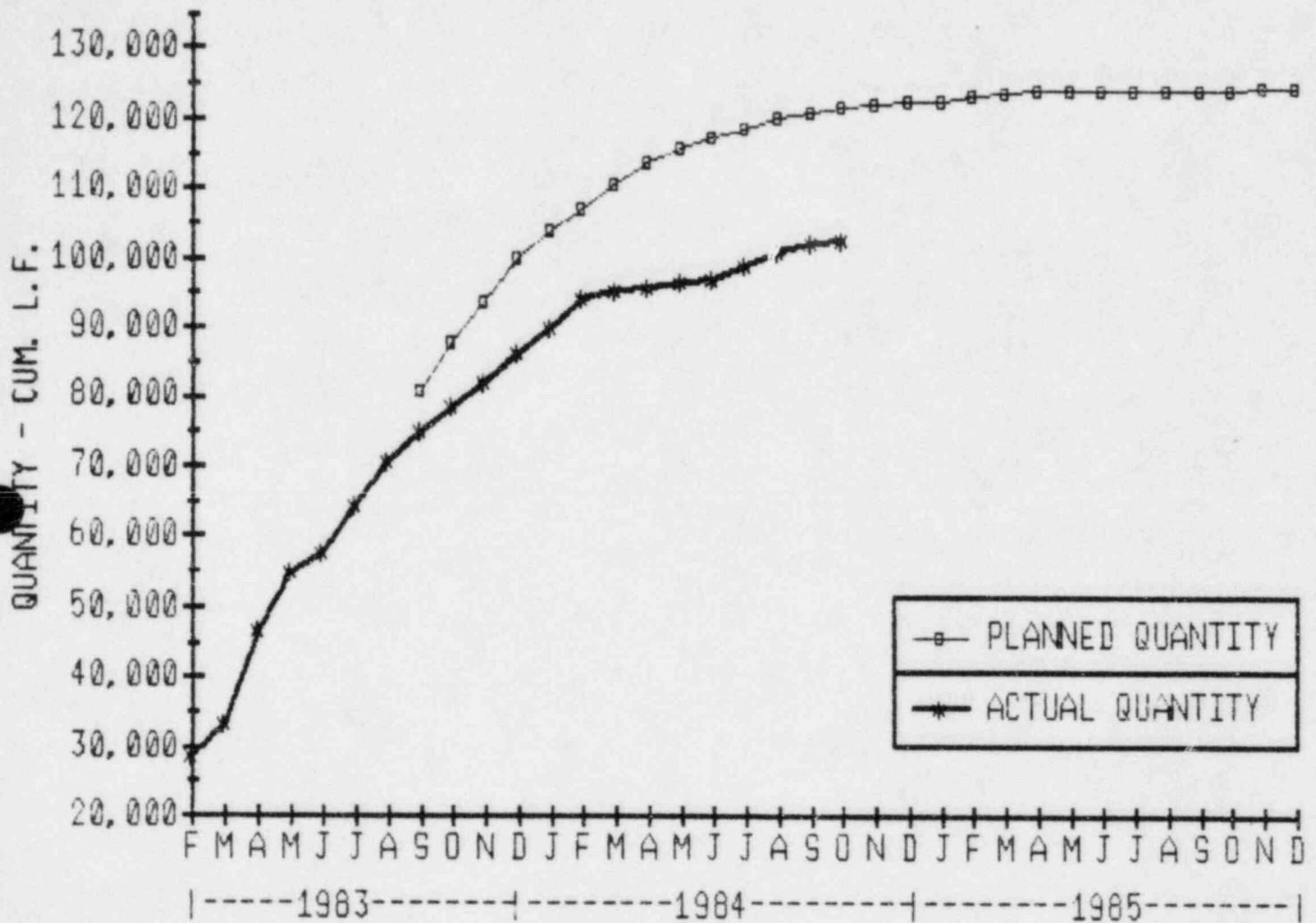
NOTE: DATA AS OF 10/30/84

LARGE BORE PIPE SUPPORTS

	<u>ESTIMATED QUANTITY</u>	<u>INSTALLED QUANTITY</u>
AUX BOILER: WT	269	263
AUXILIARY BLDG	2,037	1,656
AUX CONTROL BLDG	56	56
CIRC WTR PUMP HSE	19	19
TURBINE BLDG	5,563	5,392
CONTROL BLDG	579	559
COOLING TWRS	66	65
DIESEL GEN	206	204
FUEL BLDG	687	664
FIRE WTR PUMP HSE	58	51
NORMAL SWGR	41	41
RADWASTE BLDG	1,335	883
REACTOR BLDG	1,792	1,411
TUNNELS	1,396	1,315
YARD	299	227
TOTAL	<u>14,403</u>	<u>12,806</u>

NOTE: TOTAL DOES NOT INCLUDE 318 HANGERS  
INSTALLED BY A SUBCONTRACTOR IN THE  
ADMIN. COMPLEX.

# PIPE - 2" & BELOW

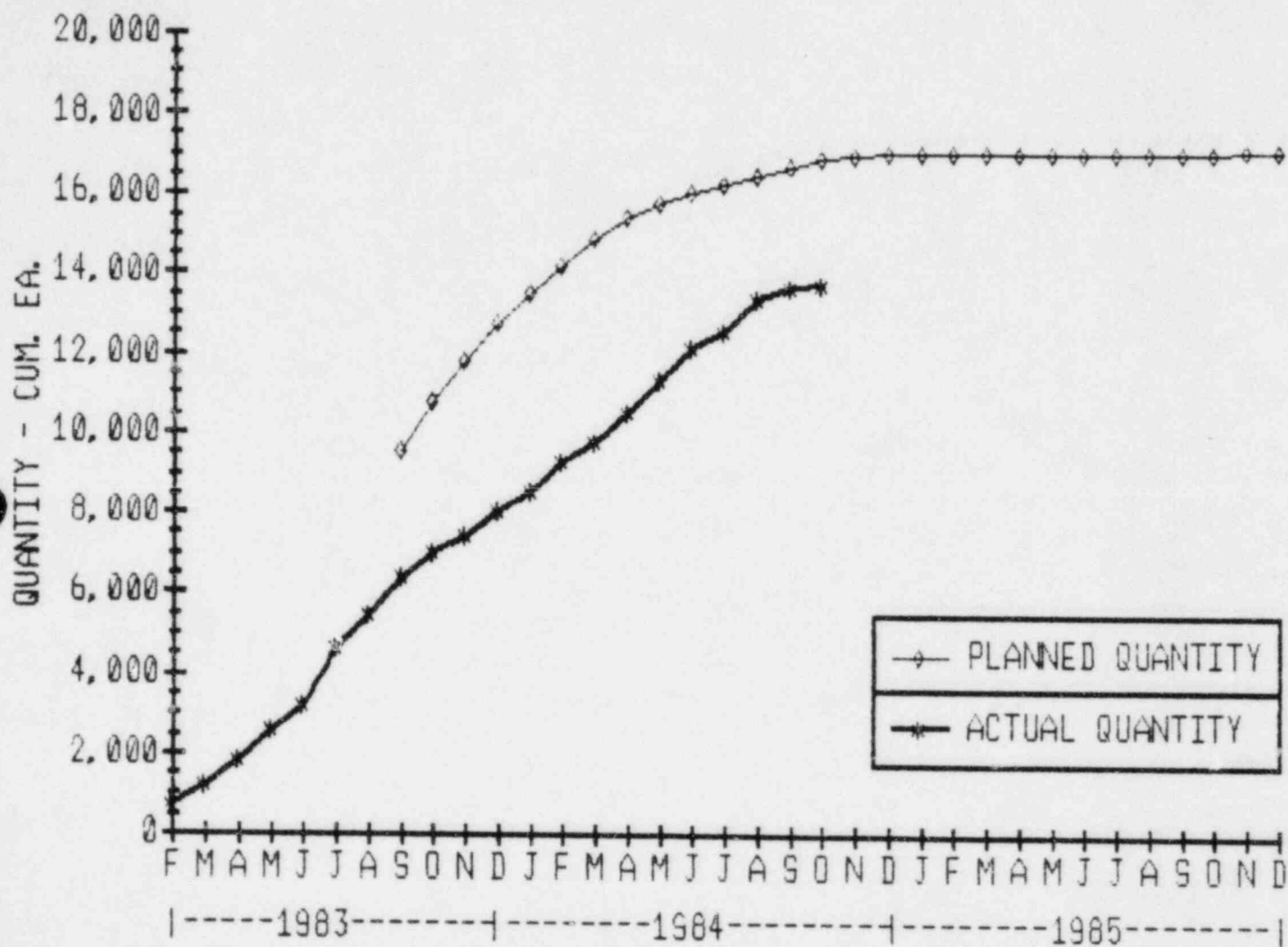


## PIPE-2" & BELOW

ESTIMATED QUANTITY	123,348 LF
INSTALLED TO DATE	102,681 LF
SCHEDULED TO DATE	122,094 LF
PERCENT COMPLETE - EARNED VALUE	90.8%
ACTUAL INSTALLATION RATE - PAST 6 MONTHS	1011 LF/MONTH
PEAK INSTALLATION RATE - DURING PAST 6 MONTHS	2067 LF/MONTH

NOTE: DATA AS OF 10/30/84

# SMALL BORE HANGERS AND SUPPORTS

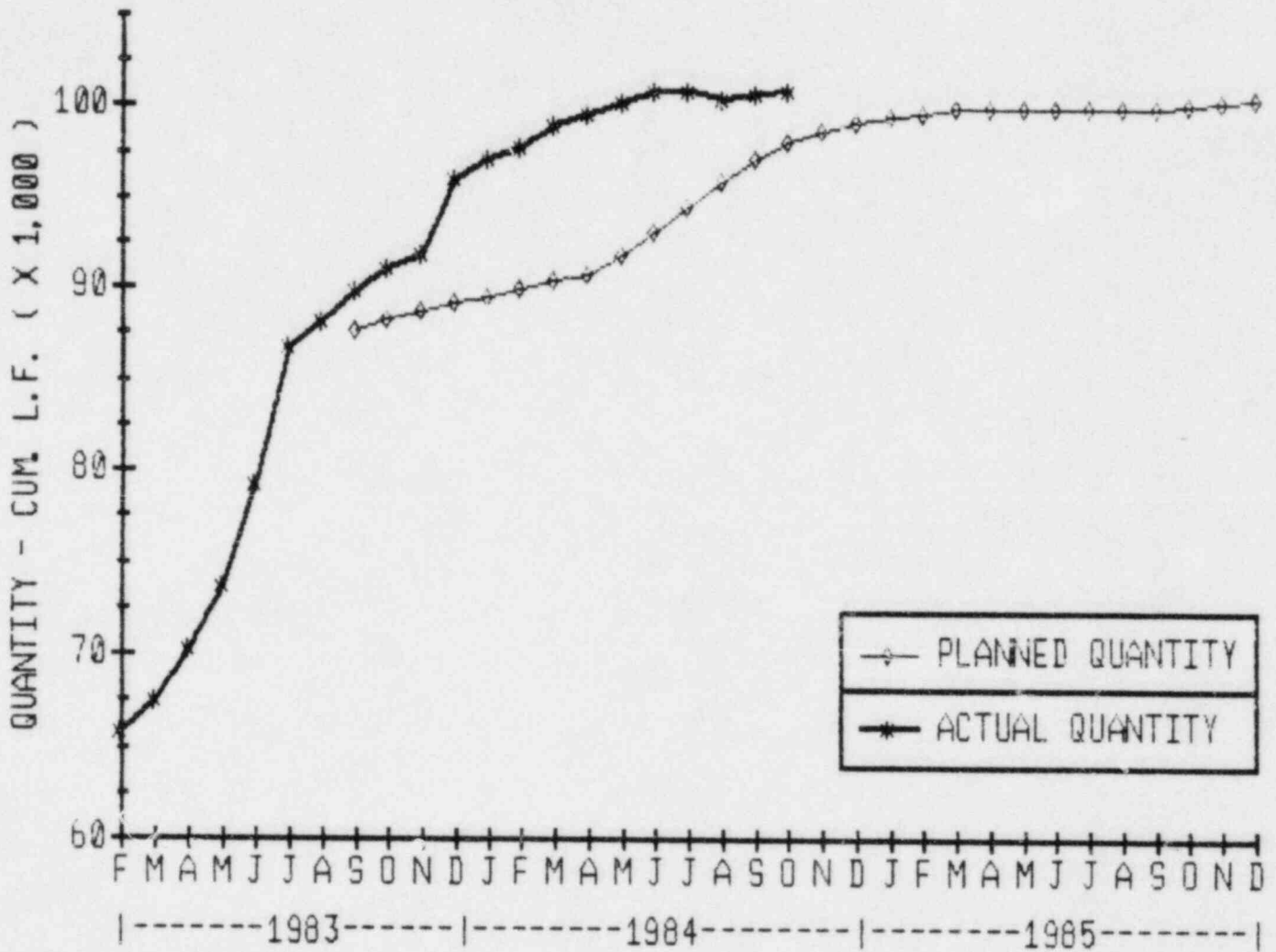


## SMALL BORE HANGERS

ESTIMATED QUANTITY	17,092 EA
INSTALLED TO DATE	13,773 EA
SCHEDULED TO DATE	16,872 EA
PERCENT COMPLETE - EARNED VALUE	84.3%
ACTUAL INSTALLATION RATE - PAST 6 MONTHS	572 EA/MONTH
PEAK INSTALLATION RATE - DURING PAST 6 MONTHS	851 EA/MONTH

NOTE: DATA AS OF 10/30/84

# CABLE TRAY



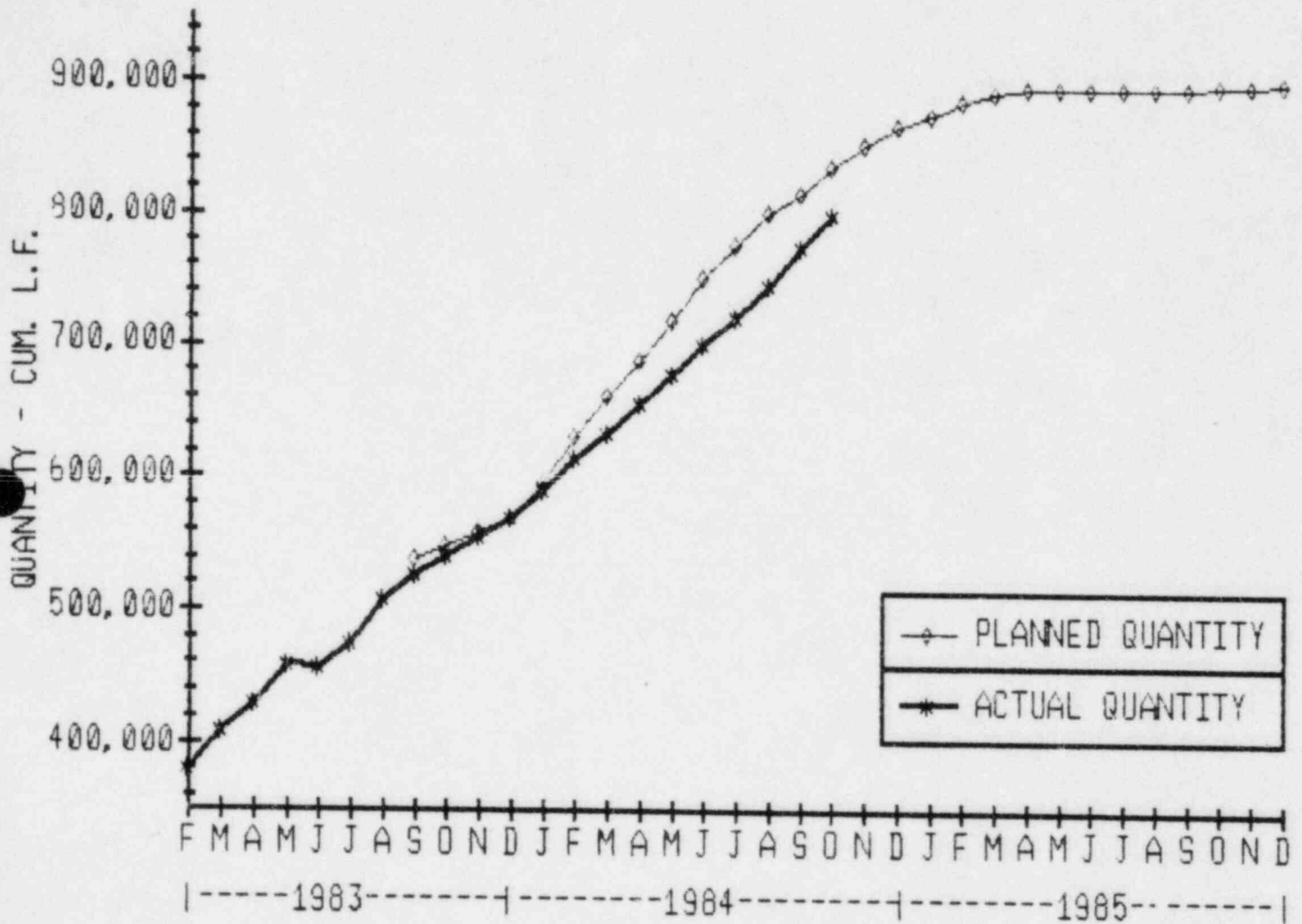
## CABLE TRAY

ESTIMATED QUANTITY	102,168 LF
INSTALLED TO DATE	100,741 LF
SCHEDULED TO DATE	98,115 LF
PERCENT COMPLETE - EARNED VALUE	97.3%
ACTUAL INSTALLATION RATE - PAST 6 MONTHS	262 LF/MONTH
PEAK INSTALLATION RATE - DURING PAST 6 MONTHS	611 LF/MONTH

NOTE: DATA AS OF 10/30/84



# TOTAL CONDUIT

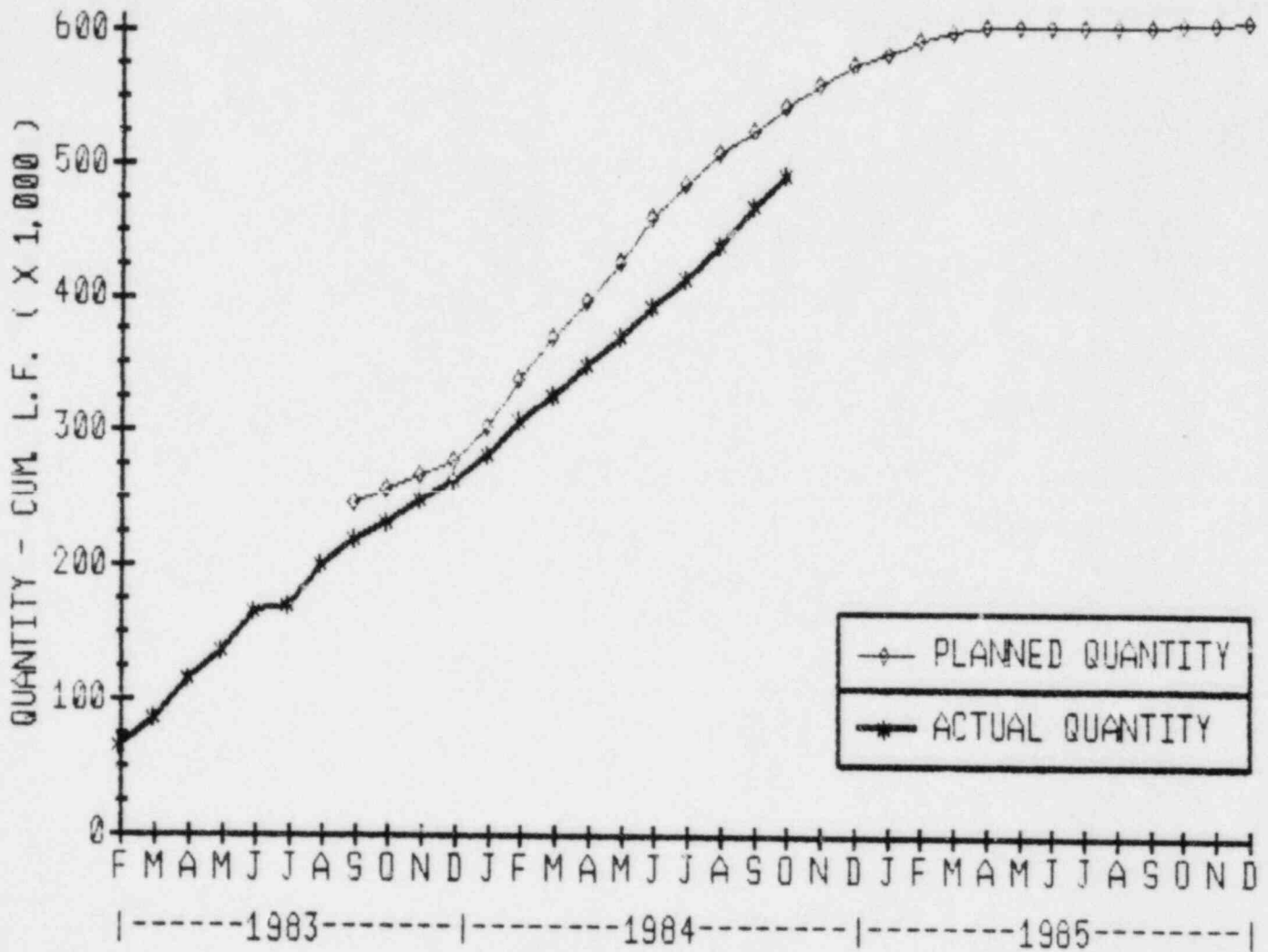


## TOTAL CONDUIT

ESTIMATED QUANTITY	913,872 LF
INSTALLED TO DATE	799,506 LF
SCHEDULED TO DATE	836,355 LF
PERCENT COMPLETE - EARNED VALUE	81.1%
ACTUAL INSTALLATION RATE - PAST 6 MONTHS	23,604 LF/MONTH
PEAK INSTALLATION RATE - DURING PAST 6 MONTHS	27,797 LF/MONTH

NOTE: DATA AS OF 10/30/84

# EXPOSED METAL CONDUIT

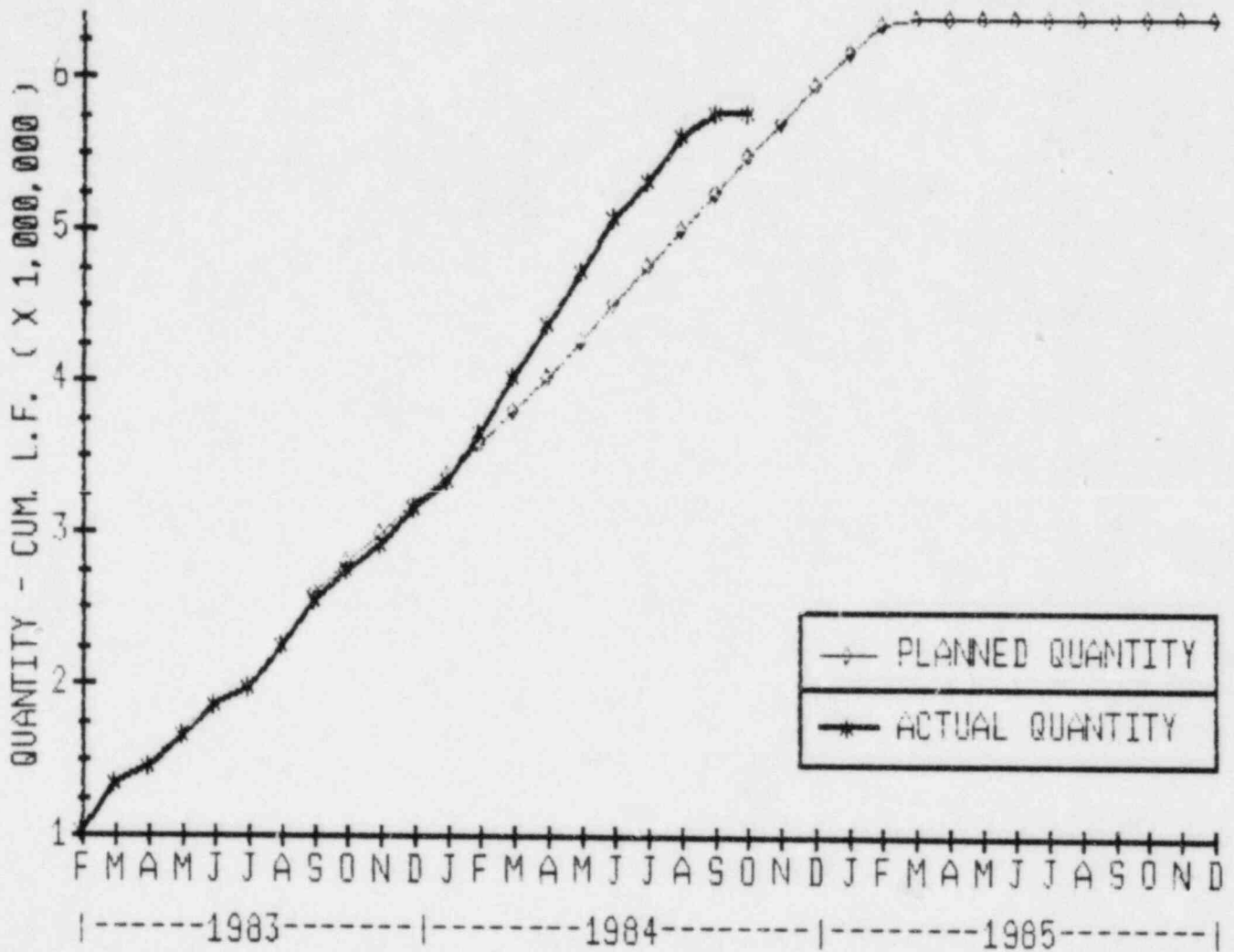


## EXPOSED METAL CONDUIT

ESTIMATED QUANTITY	603,859 LF
INSTALLED TO DATE	493,826 LF
SCHEDULED TO DATE	530,787 LF
PERCENT COMPLETE - EARNED VALUE	80.3%
ACTUAL INSTALLATION RATE - PAST 6 MONTHS	23,604 LF/MONTH
PEAK INSTALLATION RATE - DURING PAST 6 MONTHS	27,797 LF/MONTH

NOTE: DATA AS OF 10/30/84

# INSTRUMENT & CONTROL CABLE

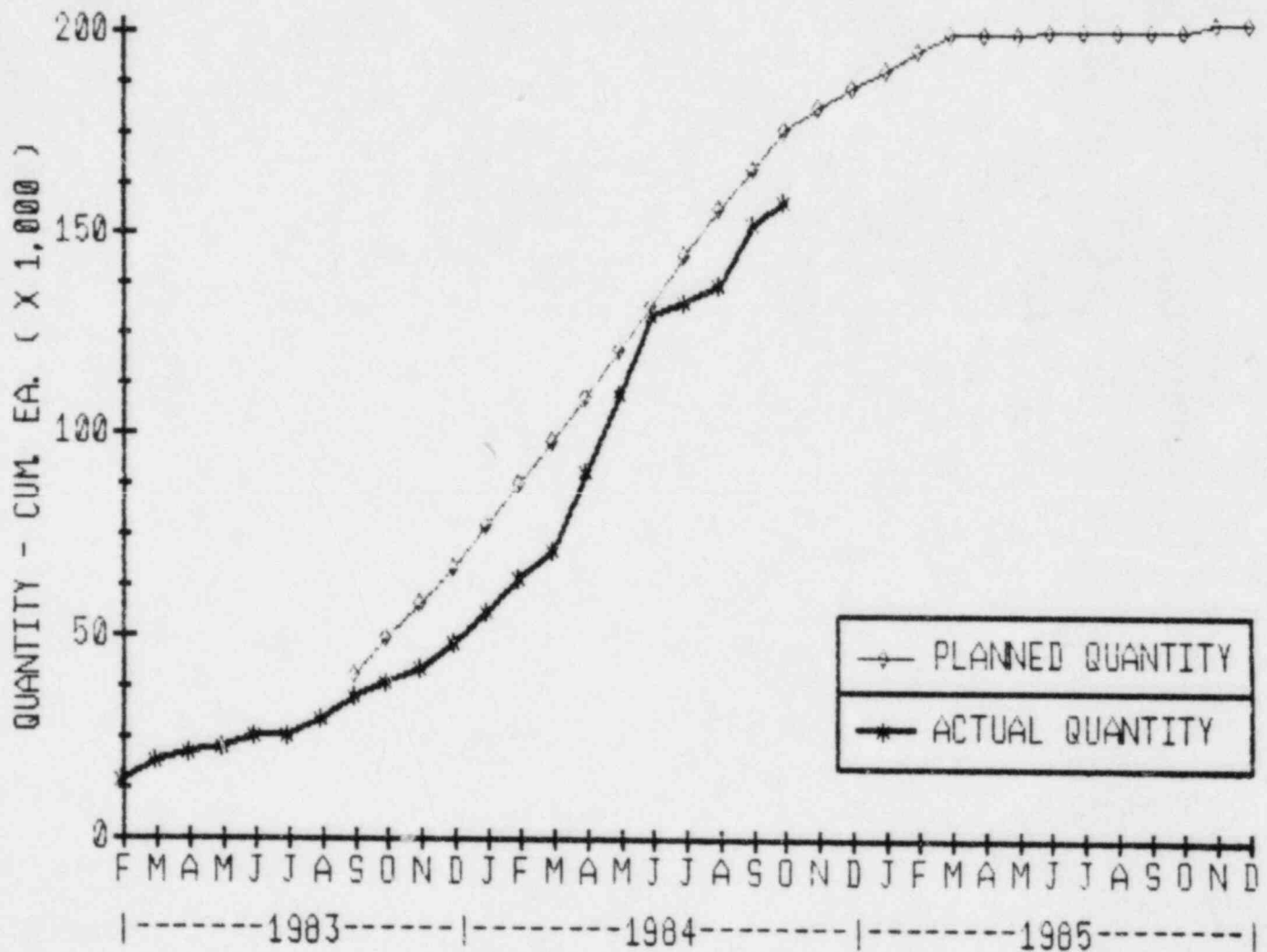


## INSTRUMENT & CONTROL CABLE

ESTIMATED QUANTITY	6,412,600 LF
INSTALLED TO DATE	5,775,400 LF
SCHEDULED TO DATE	5,505,100 LF
PERCENT COMPLETE - EARNED VALUE	89.3%
ACTUAL INSTALLATION RATE - PAST 6 MONTHS	248,286 LF/MONTH
PEAK INSTALLATION RATE - DURING PAST 6 MONTHS	354,633 LF/MONTH

NOTE: DATA AS OF 10/30/84

# INSTRUMENT & CONTROL TERMINATIONS

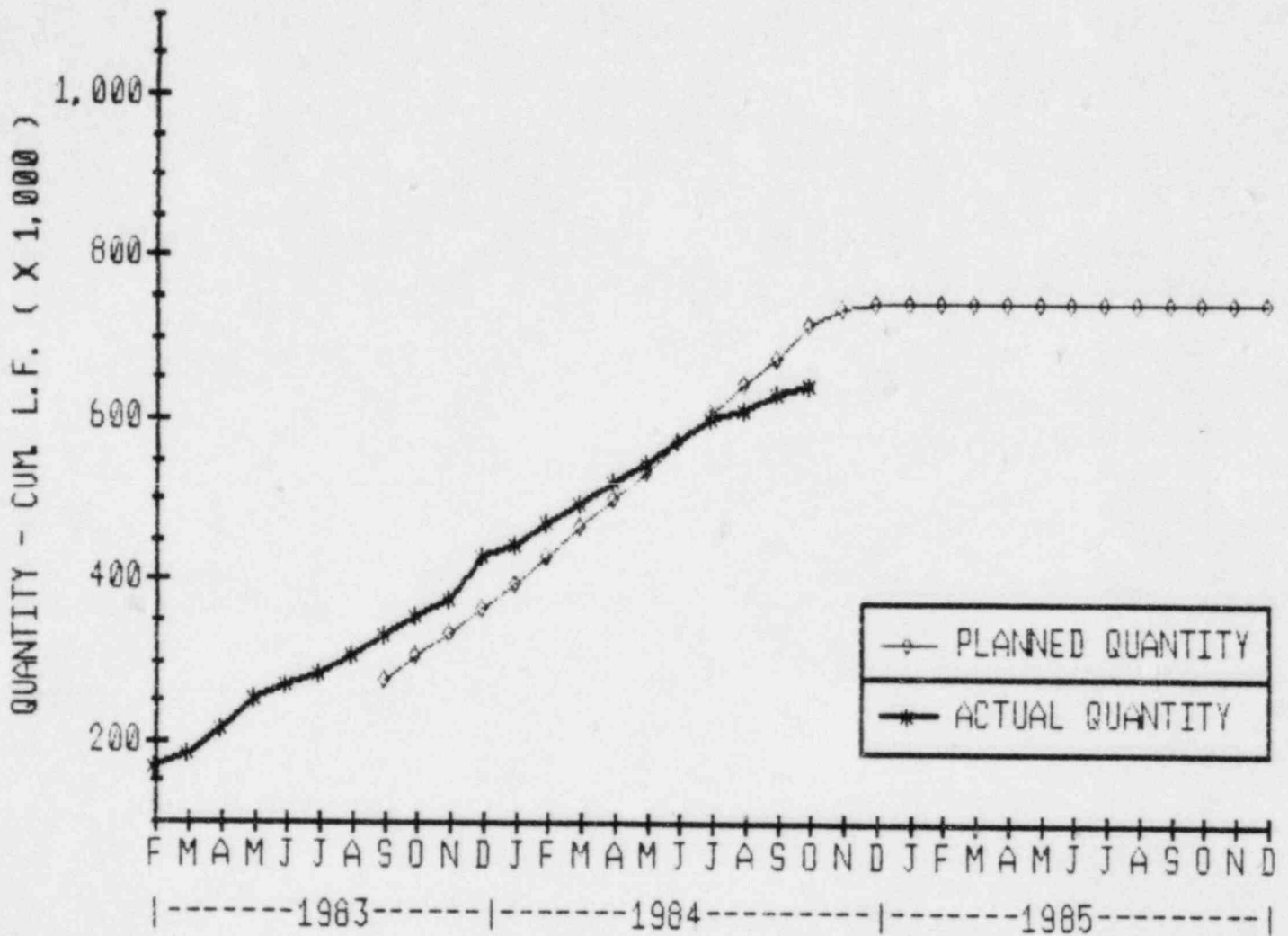


## INSTRUMENT & CONTROL TERMINATIONS

ESTIMATED QUANTITY	200,989 EA
INSTALLED TO DATE	158,431 EA
SCHEDULED TO DATE	176,441 EA
PERCENT COMPLETE - EARNED VALUE	77.2%
ACTUAL INSTALLATION RATE - PAST 6 MONTHS	12,414 EA/MONTH
PEAK INSTALLATION RATE - DURING PAST 6 MONTHS	19,438 EA/MONTH

NOTE: DATA AS OF 10/30/84

# POWER CABLE

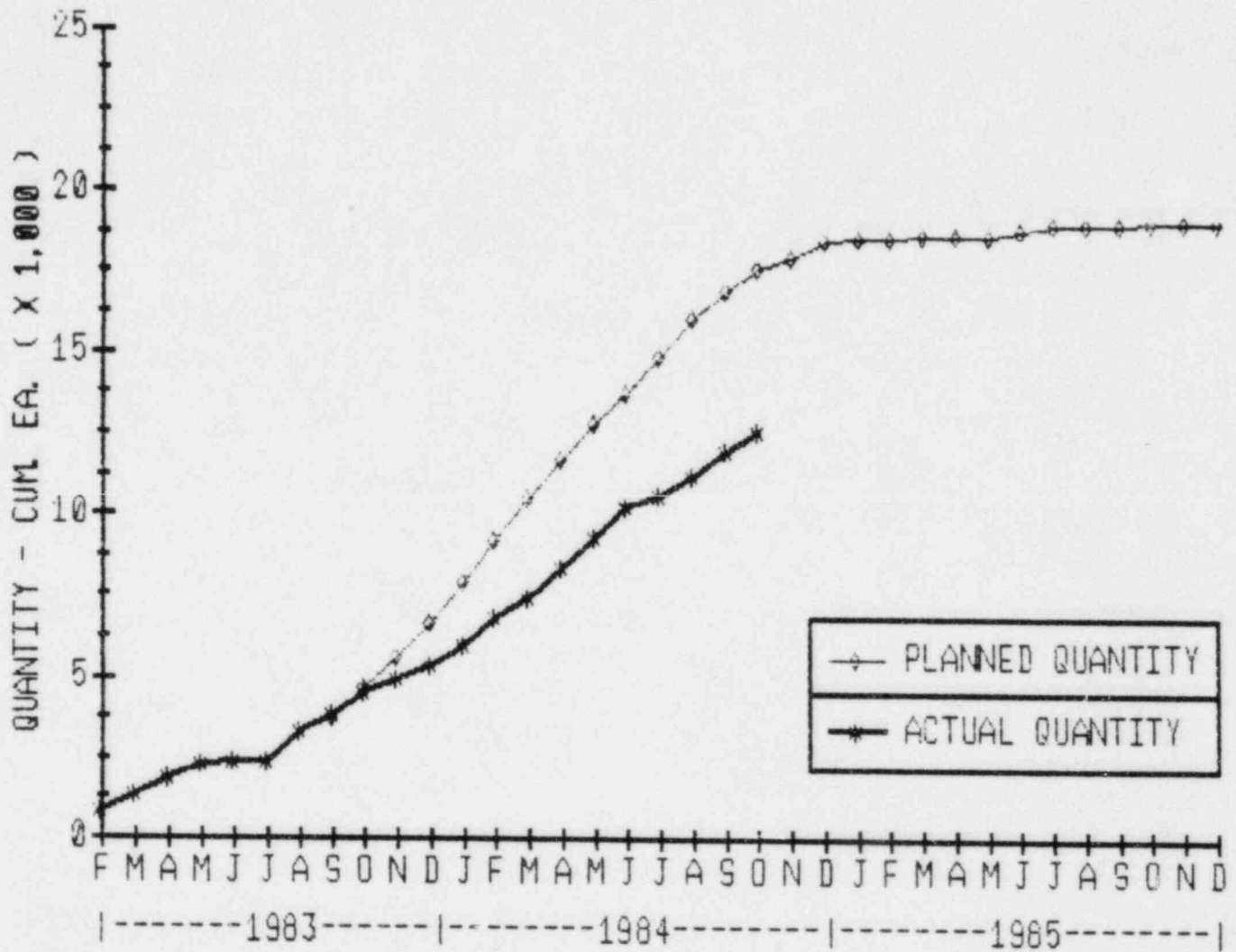


## POWER CABLE

ESTIMATED QUANTITY	746,364 LF
INSTALLED TO DATE	644,867 LF
SCHEDULED TO DATE	720,042 LF
PERCENT COMPLETE - EARNED VALUE	88.5%
ACTUAL INSTALLATION RATE - PAST 6 MONTHS	21,011 LF/MONTH
PEAK INSTALLATION RATE - DURING PAST 6 MONTHS	26,045 LF/MONTH

NOTE: DATA AS OF 10/30/84

# POWER CABLE TERMINATIONS

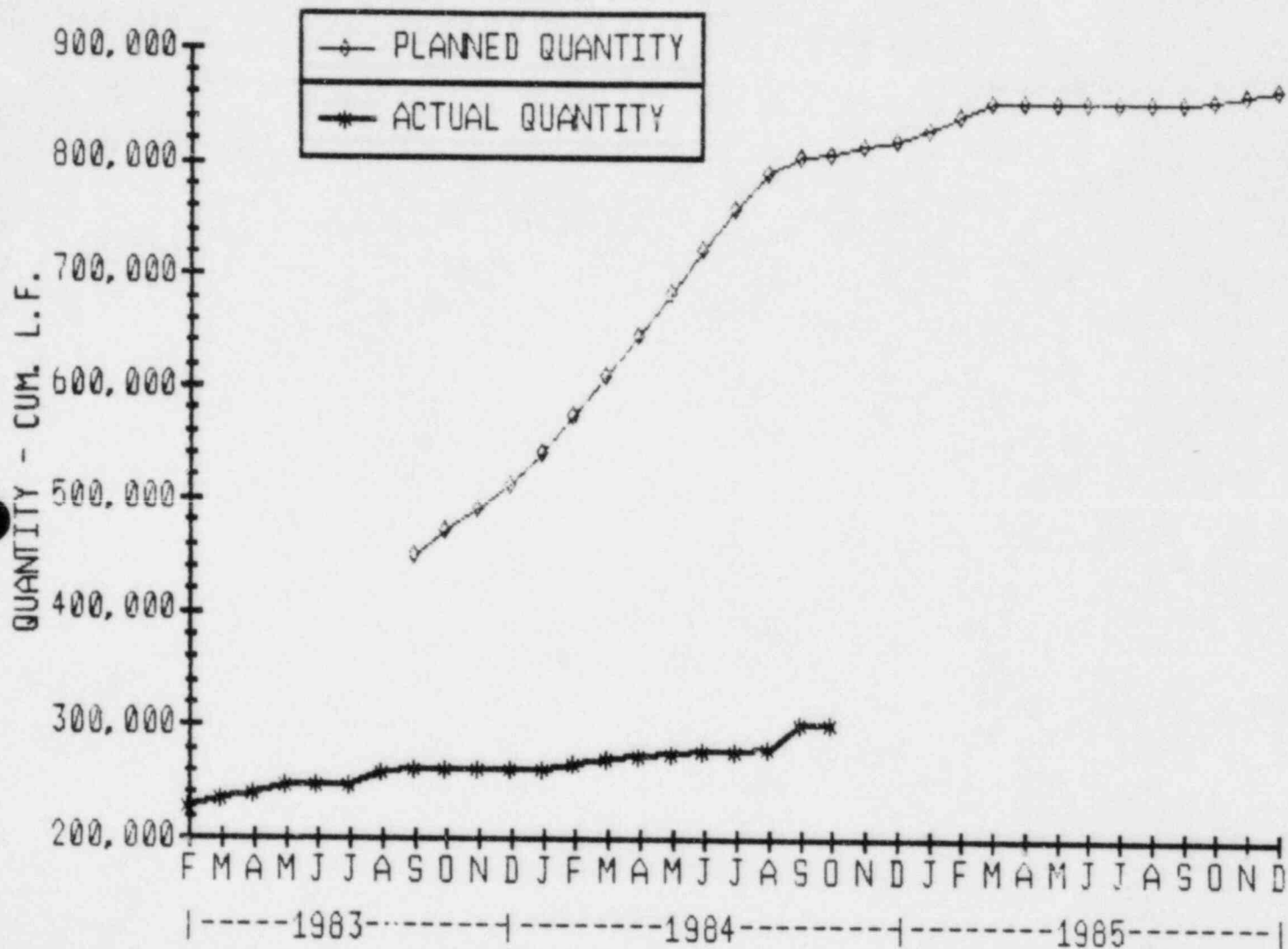


## POWER CABLE TERMINATIONS

ESTIMATED QUANTITY	19,240 EA
INSTALLED TO DATE	12,555 EA
SCHEDULED TO DATE	17,591 EA
PERCENT COMPLETE - EARNED VALUE	75.5%
ACTUAL INSTALLATION RATE - PAST 6 MONTHS	732 EA/MONTH
PEAK INSTALLATION RATE - DURING PAST 6 MONTHS	940 EA/MONTH

NOTE: DATA AS OF 10/30/84

# LIGHTING WIRE

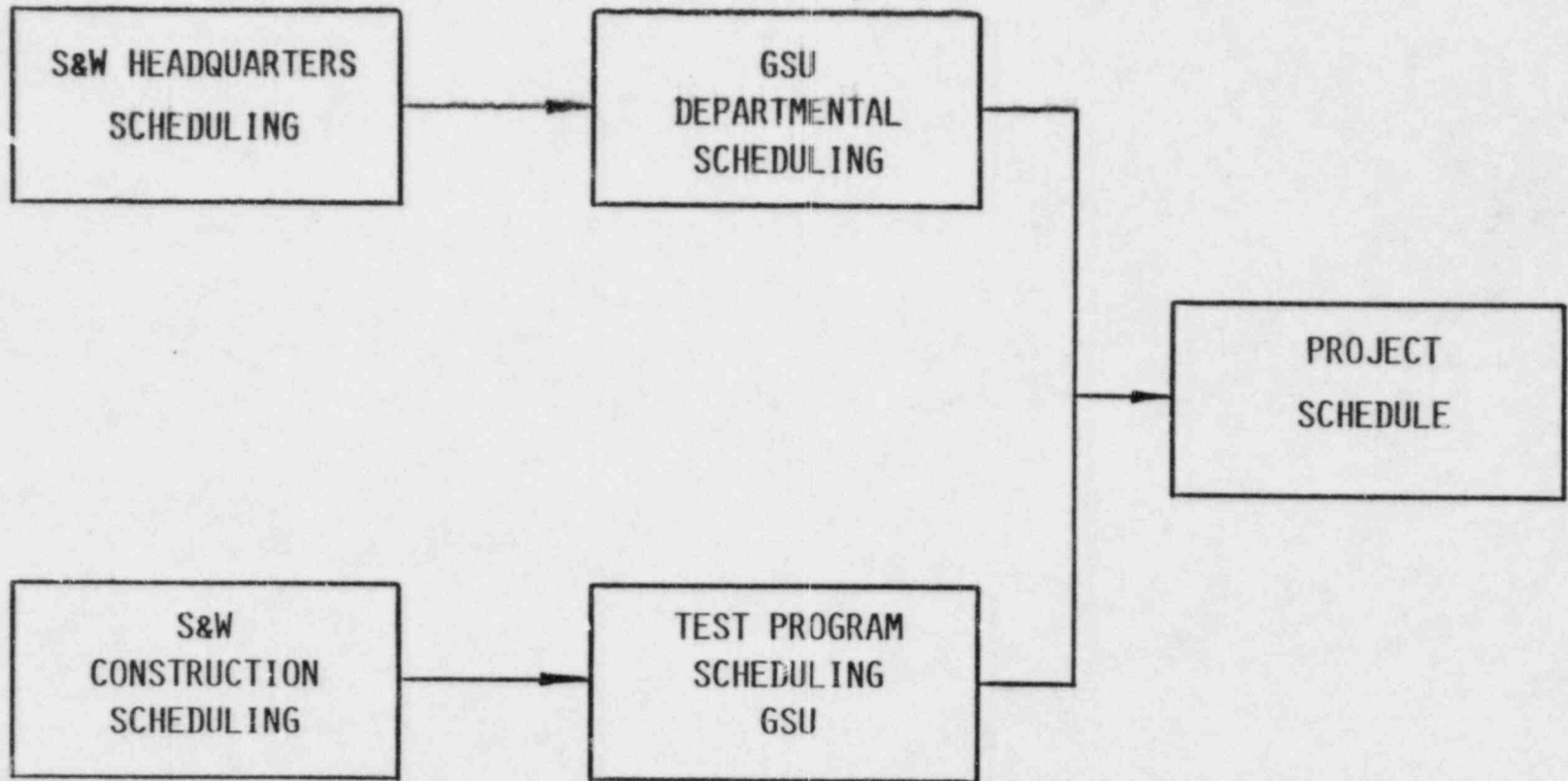


## LIGHTING WIRE

ESTIMATED QUANTITY	907,833 LF
INSTALLED TO DATE	302,697 LF
SCHEDULED TO DATE	807,542 LF
PERCENT COMPLETE - EARNED VALUE	32.0%
ACTUAL INSTALLATION RATE - PAST 6 MONTHS	4,506 LF/MONTH
PEAK INSTALLATION RATE - DURING PAST 6 MONTHS	21,705 LF/MONTH

NOTE: DATA AS OF 10/30/84

RIVER BEND PROJECT SCHEDULE





## CRITICAL PATH ANALYSIS

### PATH 1

ASME Verification/N-5 Stamp approval is presently negative (97) days. This represents a total of (10) of the (11) packages required for fuel load. Listed below are the Class 1 systems and their impact to fuel load:

High Pressure Core Spray (CSH)	-97 Days
Reactor Water Cleanup (WCS)	-97 Days
Reactor Core Isolation Cooling (ICS)	-97 Days
Residual Heat Removal (RHS)	-97 Days
Main Steam (MSS)	-95 Days
Low Pressure Core Spray (CSL)	-83 Days
Turbine Plant Misc. Drains (DTM)	-77 Days
Feedwater (FWS)	-77 Days
Main Steam Isolation Valve (MSI)	-71 Days
Standby Liquid Control (SLS)	-57 Days

Construction's late completion of systems, site reconciliation group's slow completion of as-built packages to be sent to Cherry Hill Operations Center (CHOC) and slow turnaround of as-built verifications in CHOC have all contributed to the current system verification negativity.

Stone and Webster has recognized the criticality of this situation and is expediting the as-built package and verification process by hiring additional engineers both in CHOC and at the site.

### PATH 2

Presently the Security System is negative (71) days to fuel load. Due to the installation of doors in the Auxiliary Building which in turn restrains the start of preoperational testing of the security system. An evaluation has indicated that the completion of the installation of doors and sensors will not restrain the start of preoperational testing. The installation of doors and sensors will be tied to the closeout of test exemptions which in turn will be tied to implementation of the Security Plan. This action will result in reducing the negativity to (33) days.

A task force has been established for the Security System with its main objective directed towards the timely completion of this system.

### Path 3

Communications is presently (66) days negative to fuel load. This negativity is due to the late construction release of this system and the imposed date for completion of the preliminary test. Upon further evaluations, the imposed date for completion can be adjusted by removing the lag restraint to fuel load which will eliminate this negativity allowing operability of this system prior to fuel load.

### PATH 4

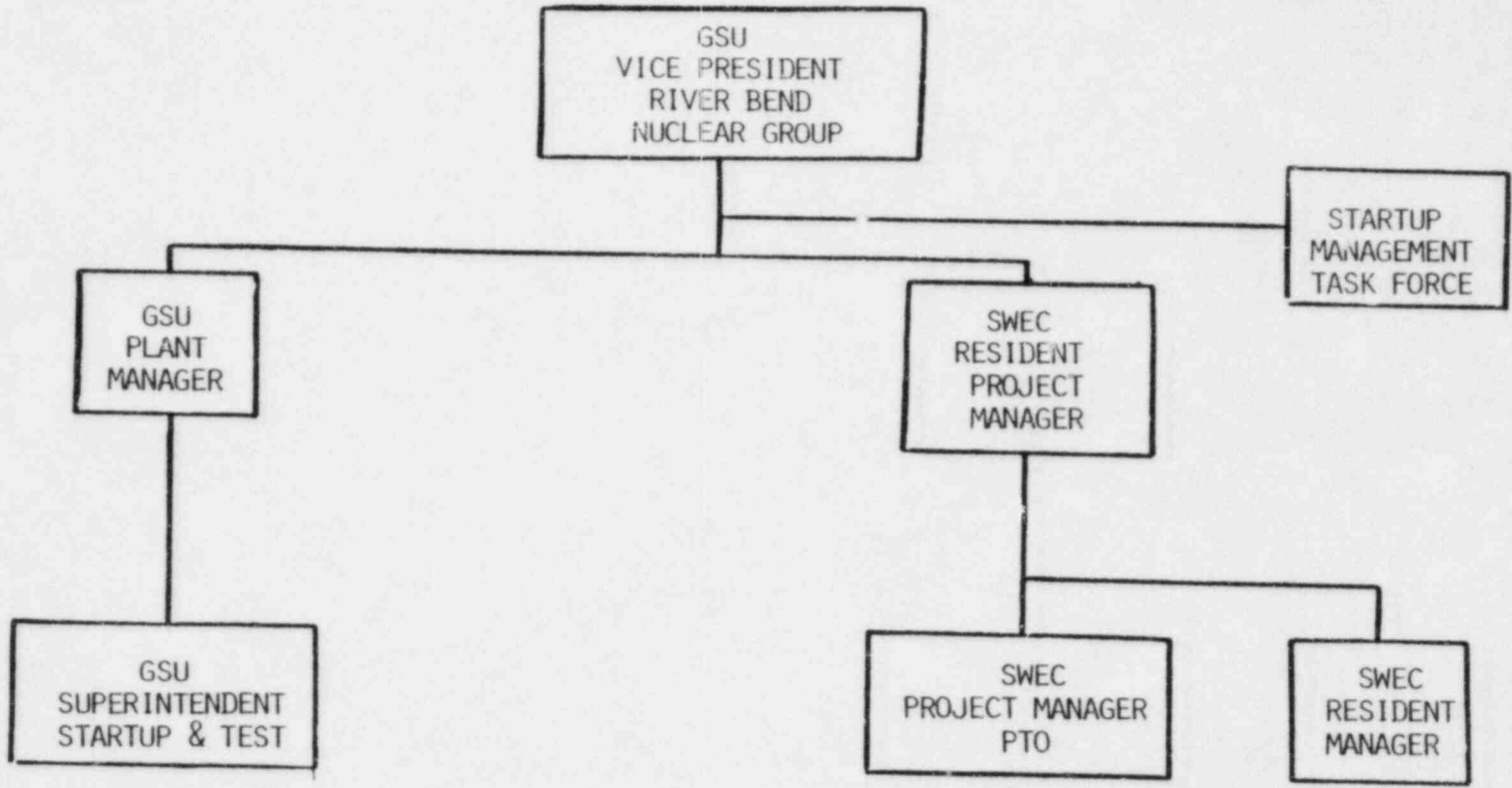
Currently, inclined fuel transfer system is (63) days negative to fuel receipt. This is due to the late construction release of this system. Fuel will not be transferred to the reactor building via the inclined fuel transfer system until fuel load. Although the special nuclear materials license noted that all fuel receipt systems be tested prior to fuel receipt, it will be proposed to startup and test that the tie for the completion of preliminary testing be removed from fuel receipt and retied to fuel load. Additionally, tie the I&C portion of fuel transfer system to fuel receipt since this will satisfy the special nuclear materials license requirements and eliminate all negativity of this system.

### PATH 5

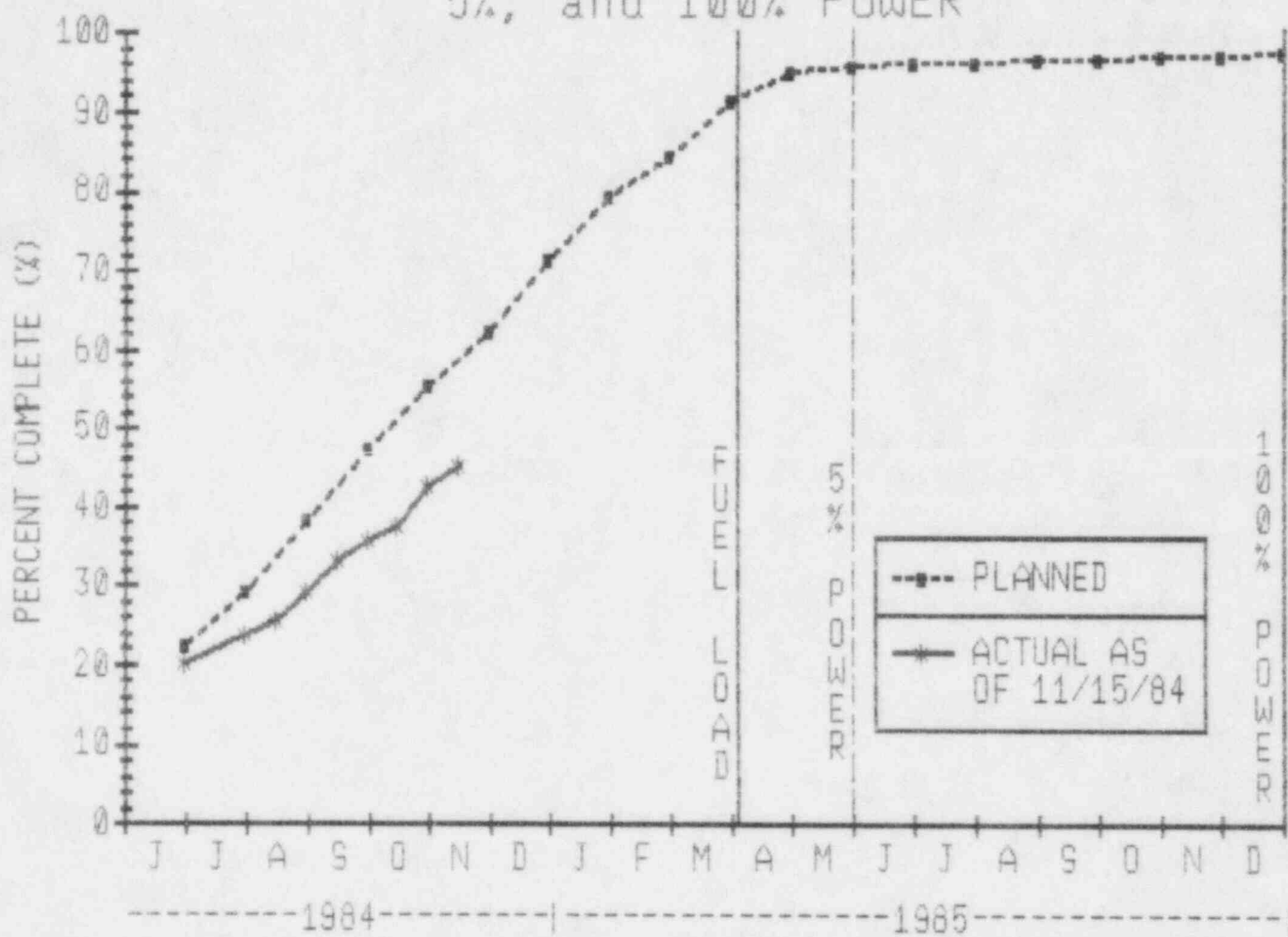
The personnel recruitment and training activity which drives radwaste support activity program is presently (61) days negative to fuel load. The negativity is due to the lack of approval of personnel descriptions are forecasted to be approved by mid Nov, 1984. The requisitions should also be approved at this time which will enable personnel on site in early January, 1985. This problem has been elevated to management to ensure the timely staffing of qualified personnel.

CORRECTIVE ACTION MEETINGS  
River Bend

Plan of the Day (POD, SU&T, SEG, GE, & Plant Staff)	Daily meetings to access current testing and coordinate problem resolution.
Punch List Meetings (Construction & PTO & SU&T)	Daily Meetings to address items required for upcoming equipment release (E/R) and turnovers (T/O).
PTO Turnover Meeting (Const., PTO, & SU&T)	Weekly meeting to ensure current month turnover (T/O) schedule is met and that problem areas are corrected.
Construction Level III Meetings (Const., PTO, SU&T)	Bi-weekly meetings to review equipment release (E/R) scheduled in the next 90 days.
Startup Management Task Force (Same as POD & GSU Upper Mgt.)	Weekly management meeting to resolve areas of concern for the test program.
Special Task Force Meetings	Task Forces have been established for major upcoming events (i.e. fuel receipt, Hot Flow Test, ECCS testing, LLRT etc.) and meet regularly to evaluate, schedule and resolve potential problem areas.



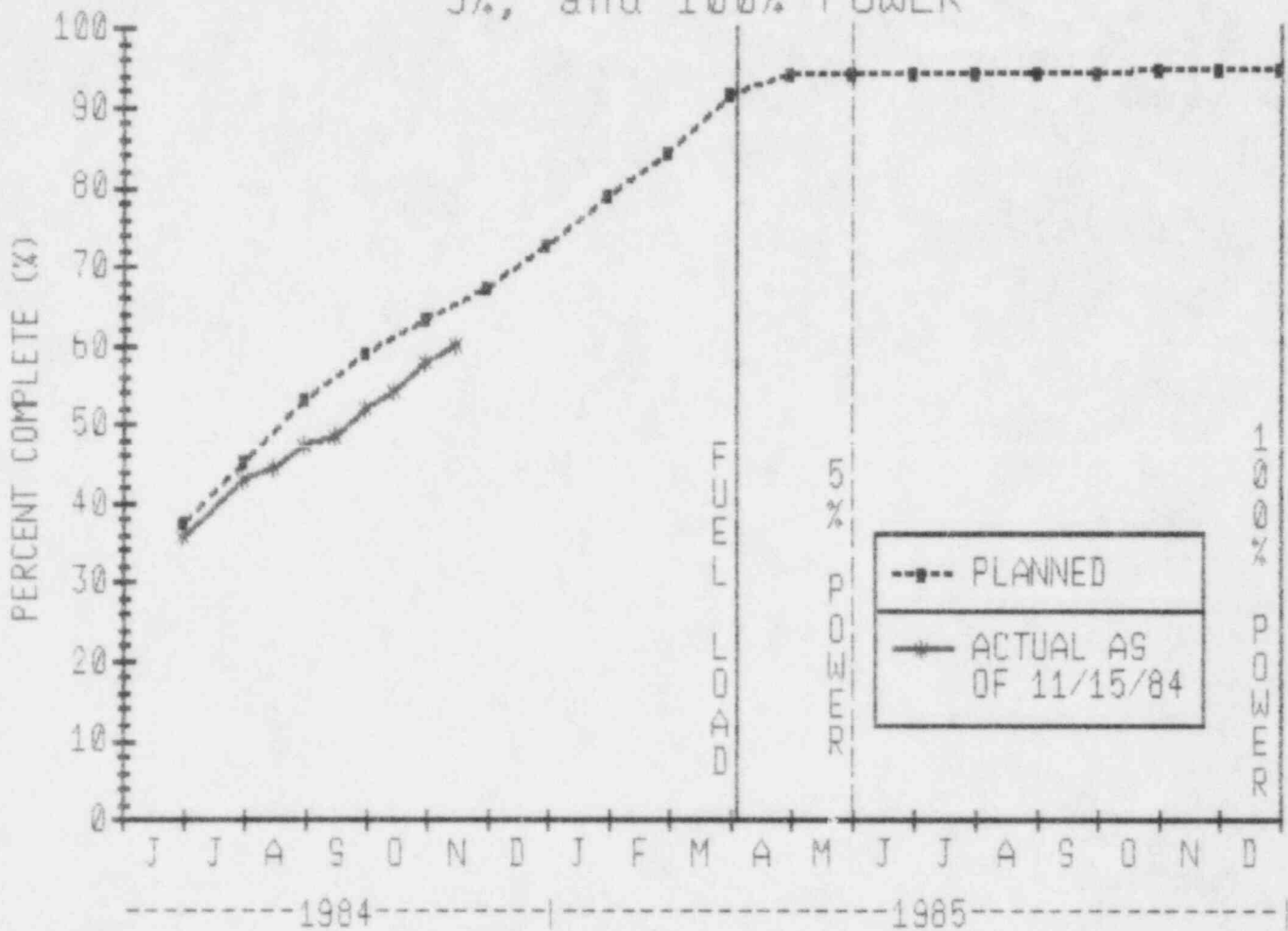
TEST PROGRAM PERCENT COMPLETE  
 RIVER BEND UNIT 1  
 PRIORITY NECESSARY FOR FUEL LOAD,  
 5%, and 100% POWER



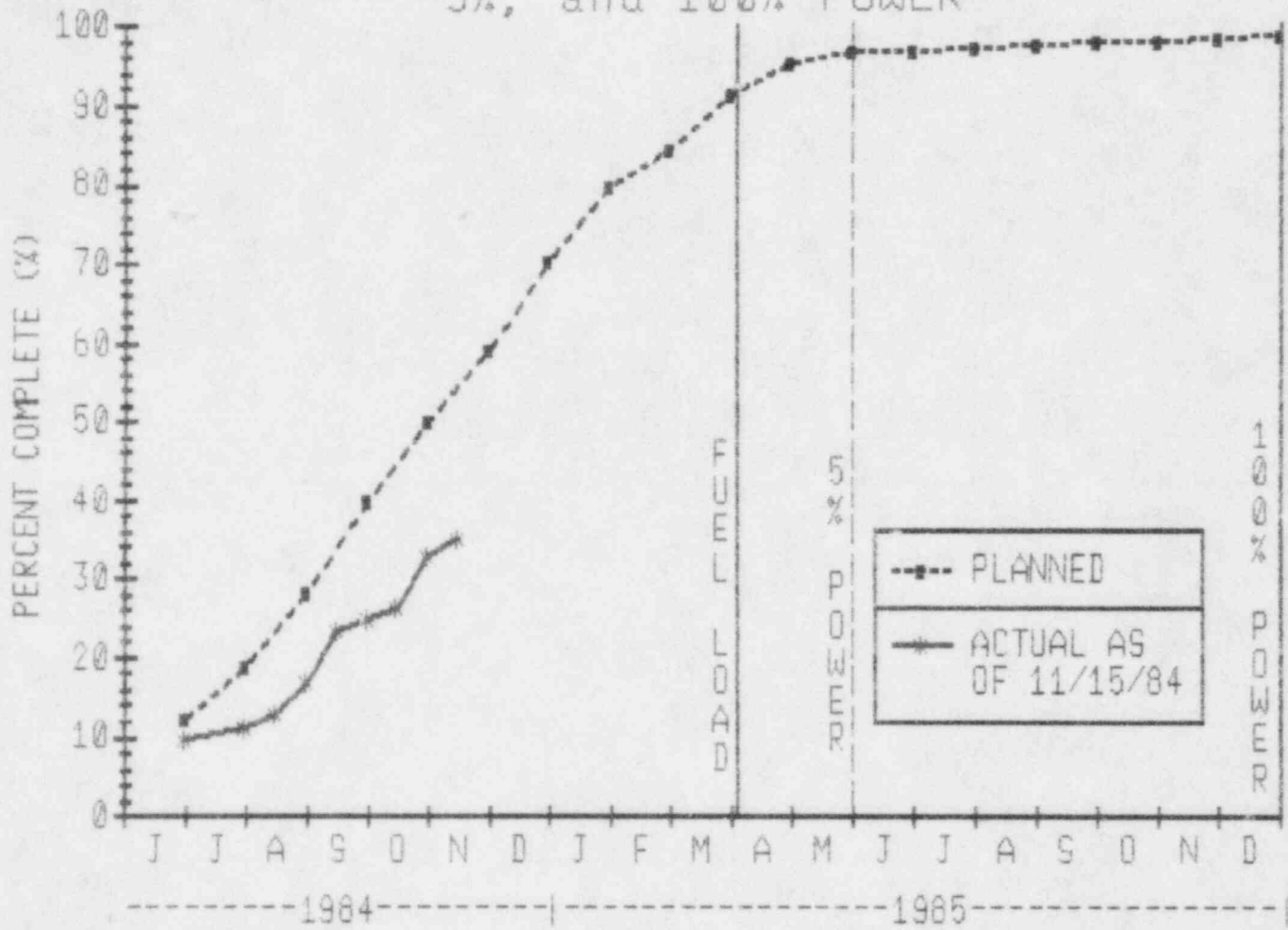
RBNG-COST SYSTEMS

GULF STATES UTILITIES

P.T.O. PERCENT COMPLETE  
 RIVER BEND UNIT 1  
 PRIORITIES NECESSARY FOR FUEL LOAD,  
 5%, and 100% POWER



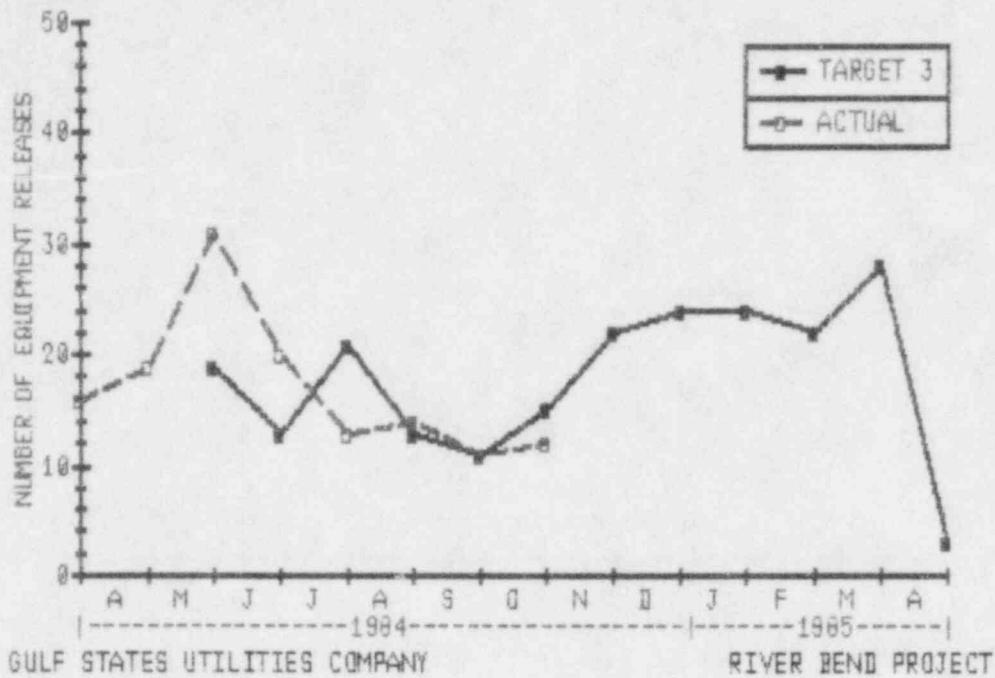
START-UP & TEST PERCENT COMPLETE  
 RIVER BEND UNIT 1  
 PRIORITIES NECESSARY FOR FUEL LOAD,  
 5%, and 100% POWER



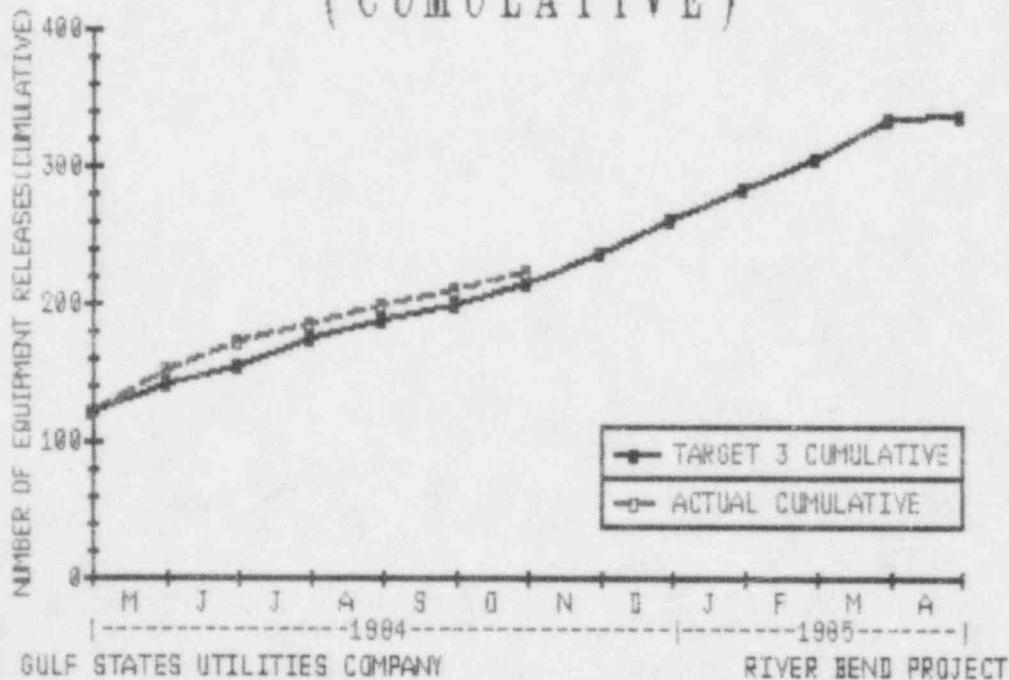
RBNG-COST SYSTEMS

GULF STATES UTILITIES

# PTO-EQUIPMENT RELEASES

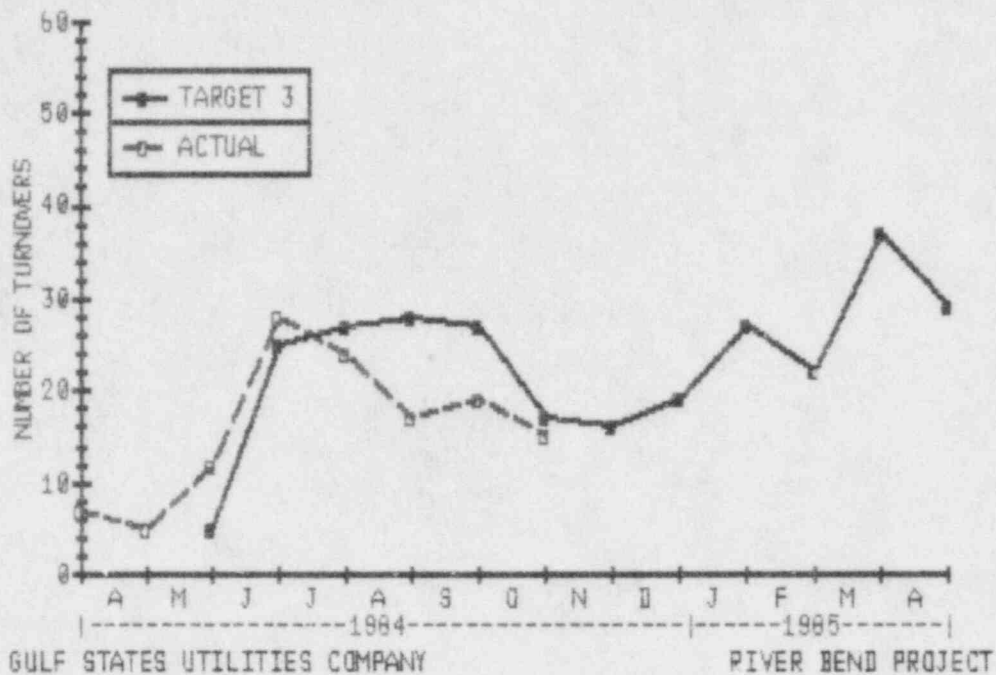


# PTO-EQUIPMENT RELEASES (CUMULATIVE)

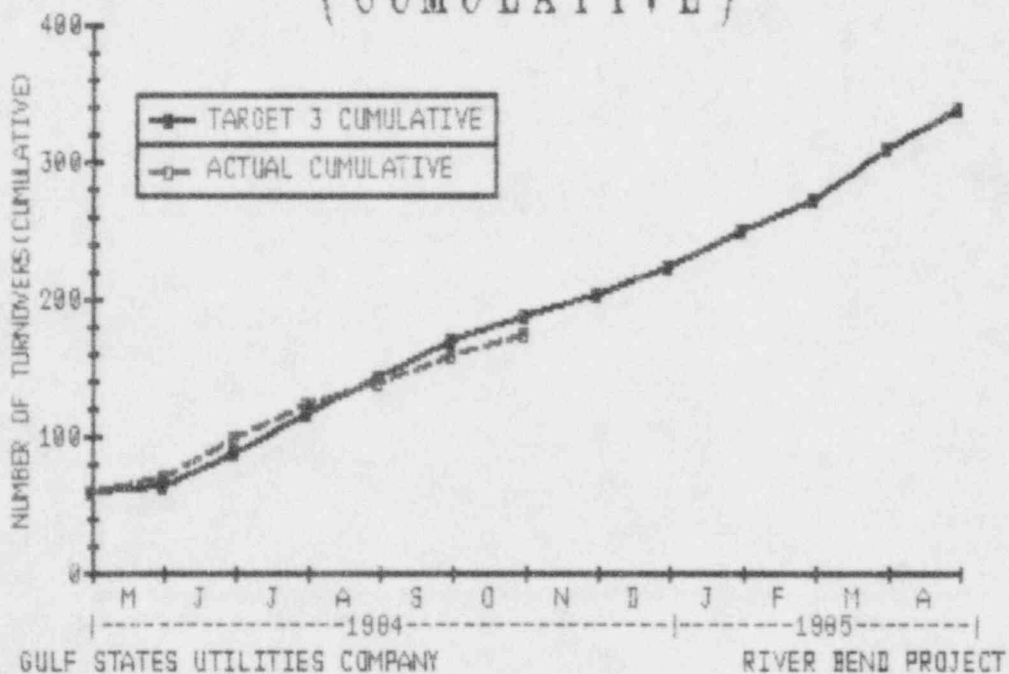




# STARTUP & TEST-TURNOVERS



# STARTUP & TEST-TURNOVERS (CUMULATIVE)





RIVER BEND STATION-UNIT 1  
Pre-Op & Acceptance Test Status

Percent Complete thru October 31 1984

13	14	15	(2)	(4)	(5)	16	(17)
AT	PT	‡	DESCRIPTION	REQ'D BY	ACTUAL PER-CENT	‡	FSAR SECTION
PT	50		rvv intl vib	FL	80.0	1	14.2.12.1.37
PT	51		nuclear boiler	FL		1	14.2.12.1.04
PT	52		control rod drive hydraulic	FL	50.0	1	14.2.12.1.11
PT	53		reactor recirculation	FL	80.0	1	14.2.12.1.10
PT	54		reactor servicing equipment	FL		1	14.2.12.1.12
PT	55	1	fuel servicing equipment	FL		1	14.2.12.1.12
PT	55	2	inclined fuel transfer	FL		1	14.2.12.1.12
PT	57	1	prim contain leak rate test a	FL		1	
PT	57	3	drywell leak struct interqr	FL		1	14.2.12.1.52
PT	57	2	type b c local leak rate	FL	73.2	1	14.2.12.1.53
PT	58		NSSS-ISC	FL		1	14.2.12.1.43
AT	102		bearing cooling	FL	100.0	1	
AT	104		condensate	FL	80.0	1	14.2.12.1.58
AT	111	2	turbine lube oil	FL	90.0	1	
AT	111	1	gen. oil cond sto	FL	100.0	1	
AT	114		gland seal exhaust	FL		1	
AT	115		closed cooling water-reactor	FL	87.0	1	14.2.12.1.23
AT	116		ccw-Turbine Plant	FL	99.0	1	14.2.12.1.25
AT	118		service water normal	FL	58.0	1	14.2.12.1.26
AT	121		air-service breathing	FL	57.0	1	14.2.12.1.50
AT	122		air-instrument	FL	57.0	1	14.2.12.1.50
AT	125		air-removal-condenser	FL	90.0	1	14.2.12.1.67
PT	200		remote shutdown	FL		1	14.2.12.1.35
PT	201		standby liquid control	FL	100.0	1	14.2.12.1.03
PT	202		ADS-SVV	FL		1	14.2.12.1.63
PT	203	1	npcs	FL	87.0	1	14.2.12.1.08
PT	203	3	hpcs diesel	FL		1	14.2.12.1.08
PT	203	2	hpcs switchgear	FL	89.3	1	14.2.12.1.08
PT	204		residual heat removal-lpci	FL	80.0	1	14.2.12.1.05
PT	205		low pressure core spray	FL	100.0	1	14.2.12.1.07
PT	207		leak detection	FL		1	14.2.12.1.15
PT	208		msiv positive leakage control	FL		1	14.2.12.1.09
PT	209		reactor core isolation coolin	FL	15.0	1	14.2.12.1.06
PT	210		ECCS	FL		1	14.2.12.1.44
PT	250		fire detection-supervisory	FL		1	14.2.12.1.48
PT	251		fire protection-water engin	FL		1	
PT	254		hydrogen mixing purge recom	FL		1	14.2.12.1.24
PT	255		pent. vlv lkge cntrl protecti	FL		1	14.2.12.1.09
PT	256		service water-standby	FL		1	14.2.12.1.26
PT	257		standby gas treatment	FL		1	14.2.12.1.34
PT	300		230/500 kv dist	FL	100.0	1	
PT	300	1	230kv dist generator breakers	FL	100.0	1	
PT	301		13.8kv dist	FL	100.0	1	14.2.12.1.51
PT	302		4.16 kv-electric distribution	FL	100.0	1	
AT	304		120v ac dist	FL	27.0	1	14.2.12.1.62
PT	305	5	bys ic battery/charger system	FL	100.0	1	
PT	305	1	125VDC bys dist/batter/charge	FL	100.0	1	
PT	305	3	inc 125vdc invol control powe	FL	100.0	1	

RIVER BEND STATION-UNIT 1  
Pre-Op & Acceptance Test Status

Percent Complete thru October 31 1984

13	14	15	(2)	(4)	(6)	16	(17)
AT	PT	↓	DESCRIPTION	REQ'D BY	ACTUAL PER-CENT	‡	FSAR SECTION
PT	305	4A	inverters	FL	100.0	1	
PT	305	4B	inverters	FL	90.0	1	
PT	305	6	service building batteries	FL		1	
PT	305	2	enb 125vdc nss control power	FL	100.0	1	14.2.12.1.39
PT	309	1	diesel generator 1a	FL	90.0	1	14.2.12.1.36
PT	309	2	diesel generator 1b	FL		1	14.2.12.1.36
AT	312		lighting	FL		1	14.2.12.1.66
AT	313		ground grid	FL		1	
AT	314		supv telemet	FL	30.0	1	
AT	400	1	hvac-non safety air flow cks	FL	20.0	1	
AT	400	2	hvac-safety air flow checks	FL		1	
AT	401	2	service bldg ventilation	FL		1	
PT	401	1	tech suppt system ventilation	FL		1	
PT	402		hvac-control bldg.	FL		1	14.2.12.1.28
AT	404		hvac-drywell cooling	FL		1	14.2.12.1.32
PT	405		hvac-diesel generator	FL	70.0	1	14.2.12.1.31
PT	406		hvac-fuel bldg.	FL		1	14.2.12.1.47
PT	409	1	hvac-cont recir cooling	FL	55.0	1	14.2.12.1.33
PT	409	2	hvac-annulus pressure/mixing	FL		1	14.2.12.1.33
PT	409	3	hvac-cont purge filter	FL		1	14.2.12.1.33
PT	409	4	hvac-aux bldg norm suply/exha	FL		1	14.2.12.1.45
PT	409	56	hvac-aux bldg equipment area	FL	98.0	1	14.2.12.1.45
AT	410	1	chilled water-turbine bldg	FL		1	14.2.12.1.30
PT	410	2	chilled water-radwaste bldg	FL		1	
PT	410	3	chilled water-control bldg	FL		1	14.2.12.1.29
AT	411		isolated phase bus cooling	FL	100.0	1	
PT	500		RX Control Info Sys.	FL	30.0	1	14.2.12.1.13
PT	501		feedwater control	FL	75.0	1	14.2.12.1.14
PT	503		source range monitor	FL		1	14.2.12.1.17
PT	504		intermediate range monitor	FL		1	14.2.12.1.17
PT	505		average power range monitor	FL		1	14.2.12.1.17
PT	508		reactor protection	FL		1	14.2.12.1.16
AT	509	2	turbine ehc controls	FL		1	14.2.12.1.64
AT	509	1	steam bypass pressure contr	FL		1	14.2.12.1.64
PT	510		process computer	FL	48.0	1	14.2.12.1.21
PT	511	1	digital radiation monitoring	FL		1	14.2.12.1.19
PT	511	2	process radiation monitor	FL		1	14.2.12.1.20
PT	514		ERIS	FL		1	
PT	551		communications	FL		1	14.2.12.1.55
PT	552		containment atmos leakage mon	FL		1	14.2.12.1.42
AT	554		meteorological tower	FL		1	
PT	557		seismic monitoring	FL		1	14.2.12.1.54
PT	559		vibration	FL	60.0	1	14.2.12.1.69
AT	562		temp scanner	FL	45.0	1	
AT	601		reactor water cleanup & filter	FL		1	14.2.12.1.02
PT	602		fuel pool cooling	FL	30.0	1	14.2.12.1.22
AT	608		condensate deain.	FL		1	
AT	611	1	turbine sampling-makeup demin	FL	100.0	1	14.2.12.1.60

RIVER BEND STATION-UNIT 1  
Pre-Op & Acceptance Test Status

Percent Complete thru October 31 1984

13 14 15 (2) (4) (6) 16 (17)

AT PT #	DESCRIPTION	REQ'D BY	ACTUAL PER-CENT	#	FSAR SECTION
AT 611 2	turbine samp-condensate demin	FL	100.0	1	14.2.12.1.60
AT 611 3	turbine samp-turbine bldg	FL	90.0	1	14.2.12.1.60
AT 652	chem fd & hydrochl	FL	100.0	1	
AT 657	waste h2o treat	FL	100.0	1	
AT 658	makeup demin water treat	FL	90.0	1	
AT 700	doors-motor operated	FL		1	
PT 702 1	bldg card reader & computer	FL		1	
PT 702 2	entry area pap	FL		1	
PT 702 3	microwave	FL		1	
PT 702 5	cctv	FL		1	
PT 705	pipng vib	FL		1	
AT 706	heat tracing	FL	45.0	1	
TOTAL FL *				108	

RIVER BEND STATION-UNIT 1  
Pre-Op & Acceptance Test Status

Percent Complete thru October 31 1984

13 14 15 (2) (4) (6) 16 (17)

AT PT #	DESCRIPTION	REQ'D BY	ACTUAL PER-CENT	#	FSAR SECTION
AT 103	circ wtr, clg twr vac priming	5	40.0	1	14.2.12.1.57
AT 106	condensate makeup, storage	5	100.0	1	
AT 107 1	feedwater pump/drive lube oil	5	90.0	1	14.2.12.1.01
AT 107 2	feedwater system	5	30.0	1	14.2.12.1.01
PT 303	480v ac-electric distribution	5	65.0	1	14.2.12.1.41
PT 306	48v dc-electric dist. charger	5		1	
PT 407	hvac-radwaste bldg.	5		1	14.2.12.1.46
AT 408 2	hvac-off gas vault refrigerat	5		1	
AT 408 3	hvac-off gas bldg.	5		1	
AT 408 4	hvac-cond demin/turb sampling	5	100.0	1	
AT 408 1	hvac-turbine bldg.	5	66.6	1	14.2.12.1.49
AT 414 2	hvac-stnby serv wtr pump hou	5		1	
AT 414 3	hvac-yd struct fire pump hous	5	100.0	1	
AT 414 4	hvac-yd struct norm swgr bldg	5	100.0	1	
AT 414 5	hvac-yd struct motor genr bld	5	100.0	1	
AT 414 6	hvac-yd struct demin pump hou	5	100.0	1	
AT 414 9	hvac-yd struct intak mkup wtr	5		1	
AT 414 10	hvac-yd struct swgr hous cool	5		1	
AT 414 11	hypochlor bldg blwdwn pit ven	5	100.0	1	
AT 414 7	hvac-yd struct circ wtr pump	5	100.0	1	
AT 414 8	hvac-yd struct swgr hous clar	5	100.0	1	
PT 414	hvac-elect ppg tnls	5	35.0	1	14.2.12.1.27
PT 506	transversing incore probe	5		1	14.2.12.1.18
PT 606	off gas	5		1	14.2.12.1.38
AT 609 1	rx bldg equipment drains	5		1	
AT 609 2	turbine bldg equipment drains	5		1	
AT 609 3	fuel bldg floor drains	5		1	
AT 609 5	aux bldg floor drains	5		1	
AT 609 6	turbine bldg floor drains	5		1	
AT 609 7	radwst bldg floor equip drs	5		1	
AT 609 9	containment floor drains	5		1	
AT 609 4	misc bldg floor drains	5		1	
AT 653	ct makeup wtr clarifier vac p	5		1	
AT 659 1	makup water system	5	100.0	1	
AT 659 2	makeup water radwaste bldg	5		1	
AT 701 1	rcb polar crane	5		1	14.2.12.1.56
AT 701 2	radwst bldg bridge crane	5		1	14.2.12.1.56
AT 701 3	aux bldg cranes, hoist trolley	5	33.0	1	14.2.12.1.56
AT 701 4	turbine bldg cranes	5		1	14.2.12.1.56
AT 701 5	circ water pump house crane	5	100.0	1	14.2.12.1.56
AT 701 6	aux control bldg crane	5		1	14.2.12.1.56
AT 701 7	fuel bldg bridge crane	5		1	14.2.12.1.56
AT 701 8	spent fuel cask trolley	5		1	14.2.12.1.56
AT 701 9	cold machine shop crane	5		1	14.2.12.1.56

TOTAL 5 \*

44

GRAND TOTAL

178

RIVER BEND STATION-UNIT 1  
Pre-Op & Acceptance Test Status

Percent Complete thru October 31 1984

AT	PT #	DESCRIPTION	REQ'D BY	ACTUAL PER-CENT	#	FSAR SECTION
13	14	15	(2)	(4)	(6)	16 (17)
AT 108	2	extraction reheat system	100	100.0	1	
AT 108	3	reheat temp cntrl misc drns	100	100.0	1	
AT 108	1	feedwater heater vents drai	100	90.0	1	14.2.12.1.68
AT 110		turbine-main	100	90.0	1	
AT 112		hood spray	100	90.0	1	
AT 113		ehc hydraulic oil	100	90.0	1	
AT 119		seal oil-hydrogen	100	90.0	1	
AT 120		stator cooling	100		1	
AT 123		hydrogen co2-generator	100		1	
AT 310	1	generator exciter	100		1	
AT 310	2	generator protection	100	57.0	1	
PT 311		main stn xfmr's	100	90.0	1	
AT 412		hvac-water treatment bldg.	100	100.0	1	
AT 413		hvac-aux boiler room	100	100.0	1	
AT 415		hvac-aux control bldg.	100		1	
AT 610	1	reactor plant sampling	100		1	14.2.12.1.59
AT 610	2	fuel bldg sampling	100		1	14.2.12.1.59
AT 610	3	post accident sampling	100		1	14.2.12.1.59
AT 660		waste oil disposal	100	100.0	1	
TOTAL 100 *					19	

RIVER BEND STATION-UNIT 1  
Pre-Op & Acceptance Test Status

Percent Complete thru October 31 1984

13 14 15

(2)

(4)

(6)

16

(17)

AT PT #	DESCRIPTION	REQ'D BY	ACTUAL PER-CENT	#	FSAR SECTION
AT 126 2	radwaste auxiliary steam	ACC		1	
AT 126 1	auxiliary steam	ACC	90.0	1	
AT 308	cathode protection	ACC	54.0	1	
AT 603	liqd radwaste (continued)	ACC			14.2.12.1.40
AT 603	liqd radwst system	ACC		1	14.2.12.1.61
PT 604	solid radwaste system	ACC		1	14.2.12.1.65
AT 654	sanitary-sewage treatment	ACC		1	
AT 655	domestic water	ACC		1	
TOTAL ACC *				7	

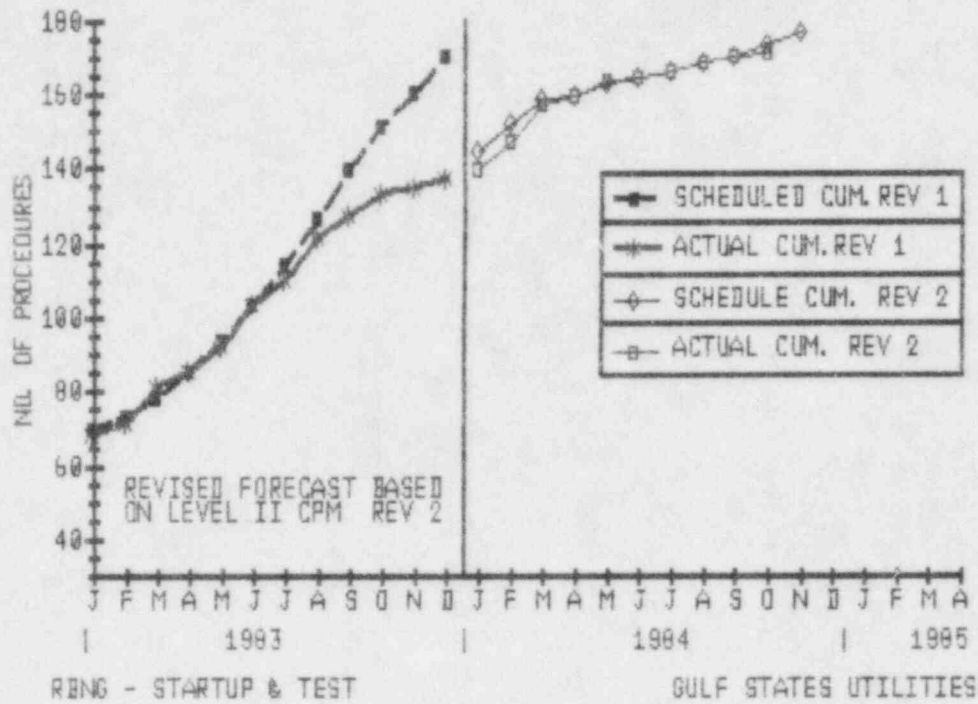


TEST PROCEDURE STATUS

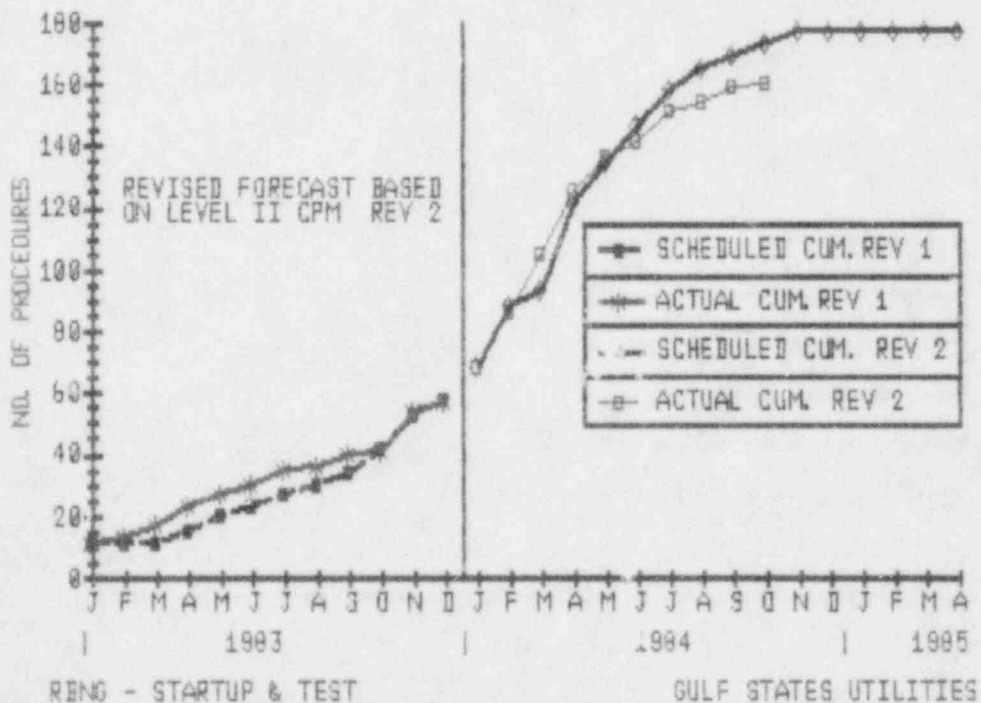
AS OF 10/31/84

	<u>REQUIRED</u>	<u>NOT STARTED</u>	<u>IN PROGRESS</u>	<u>DRAFT COMPLETE</u>	<u>JTG REVIEW</u>	<u>APPROVED</u>
PREOPERATION/ACCEPTANCE	179	5	2	4	6	162
STARTUP TEST	46	3	6	23	0	14
TEST INSTRUCTION	18	0	0	0	0	18
BOUNDARY IDENTIFICATION PACKAGE	387	0	2	0	N/A	385
GENERIC PRELIMINARY TESTS						
INSTRUMENTATION	4	0	0	0	0	4
FLUSH	117	20	6	0	0	91
ELECTRICAL	32	0	0	0	0	32
MECHANICAL	12	0	2	0	0	10
HYDRO	2	0	0	0	0	2
TYPE "C" SKETCH	63	0	1	62	0	N/A

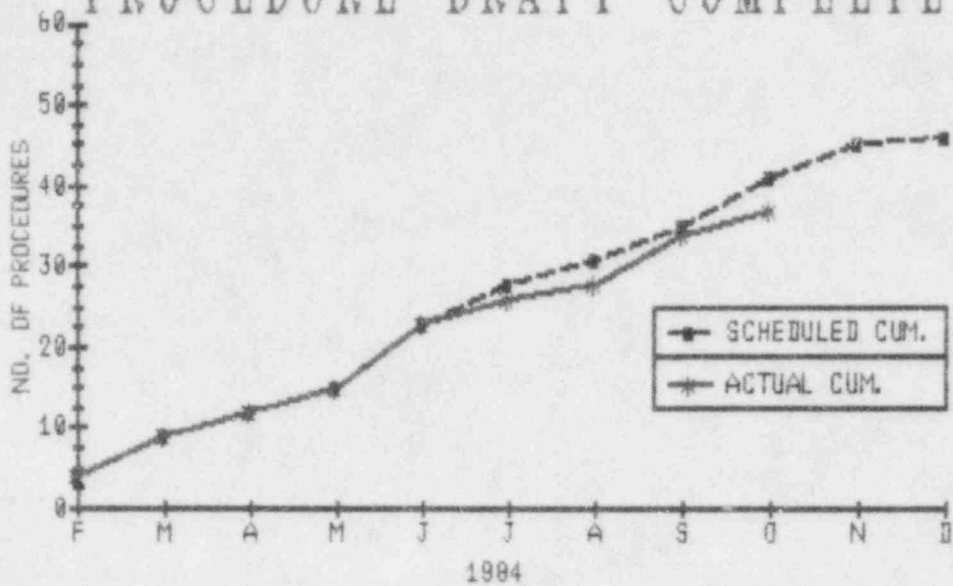
# PT&AT DRAFT PROCEDURES



# AT/PT APPROVED PROCEDURES



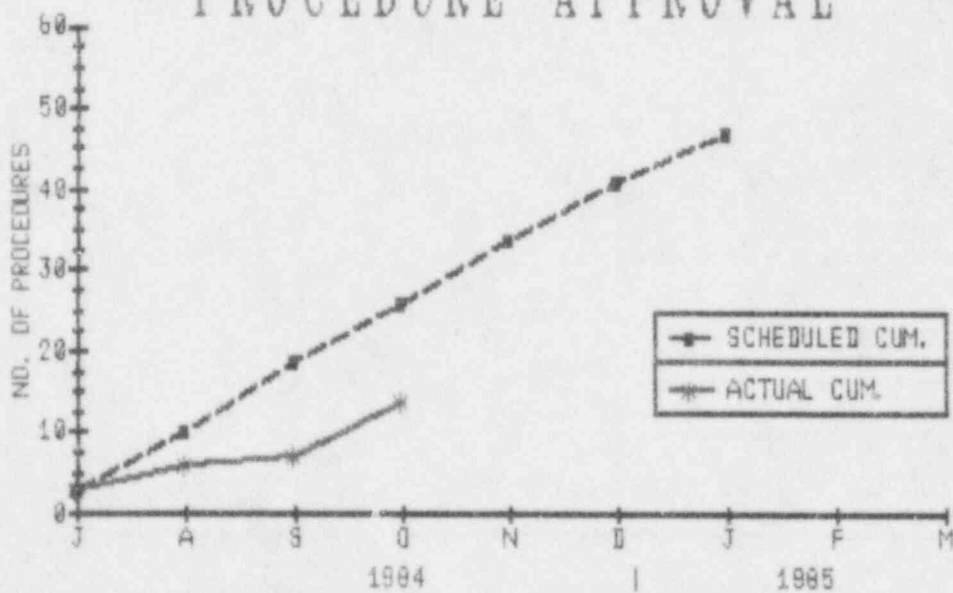
STARTUP & TEST  
 POWER ASCENSION (ST)  
 PROCEDURE DRAFT COMPLETE



RBNG - STARTUP & TEST

GULF STATES UTILITIES

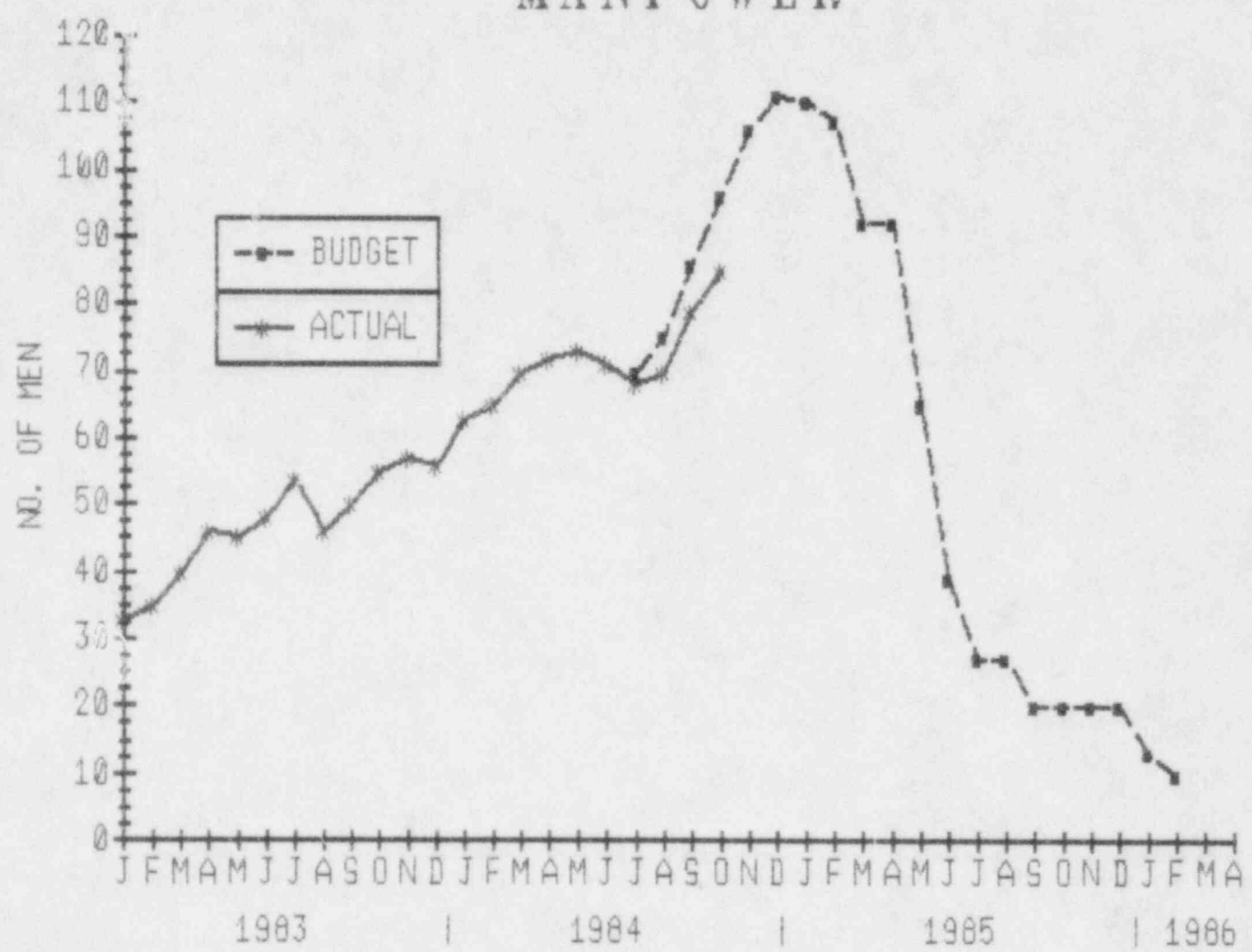
STARTUP & TEST  
 POWER ASCENSION (ST)  
 PROCEDURE APPROVAL



RBNG - STARTUP & TEST

GULF STATES UTILITIES

# STARTUP & TEST MANPOWER

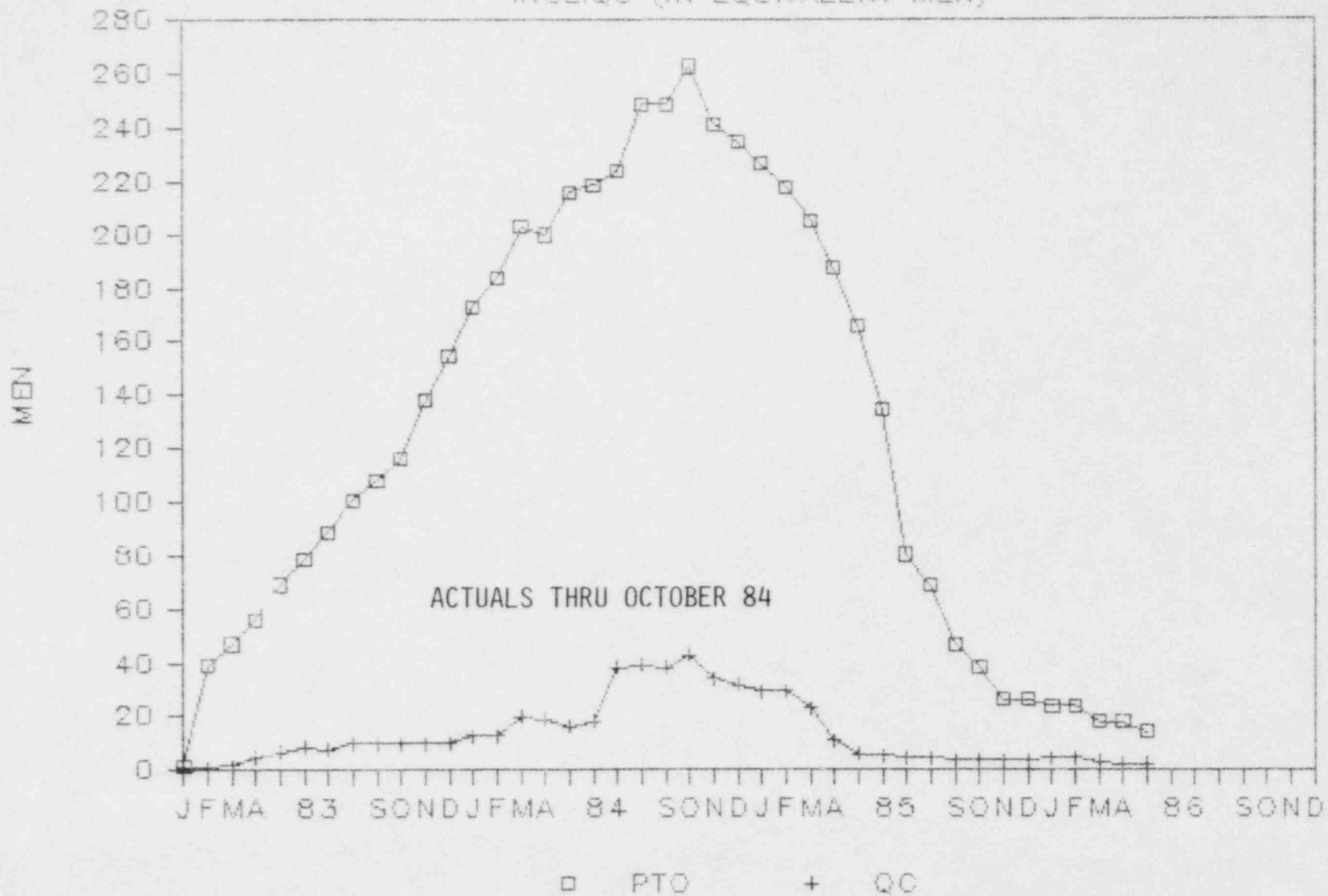


RBNG - STARTUP & TEST

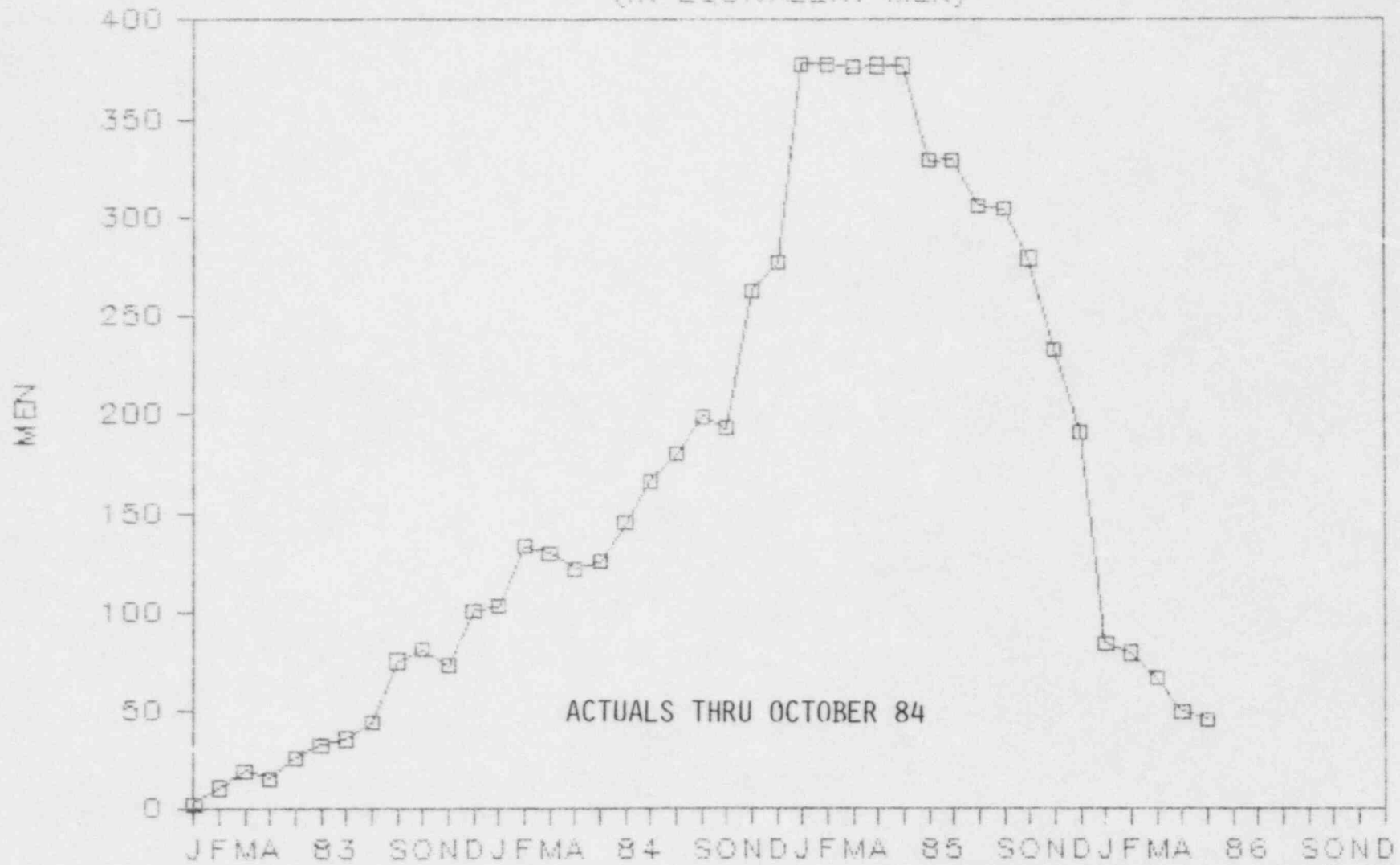
GULF STATES UTILITIES

# PTO NON-MANUAL MANPOWER

INCL. QC (IN EQUIVALENT MEN)



# PTO MANUAL MANPOWER (IN EQUIVALENT MEN)



PROCEDURE STATUS  
As of 11/16/84

<u>DEPARTMENT AND PROCEDURE TYPE</u>	<u>NUMBER IDENTIFIED</u>	<u>NUMBER OF DRAFTS COMPLETE</u>	<u>NUMBER APPROVED</u>
<u>Administration</u>			
ADM - General Administration	38	37	29
MHP - Material Handling	10	9	9
ASP - Administrative Section	1	1	1
<u>Administration (Off-site)</u>			
EIP - Emergency Implementing	34	34	34
EMP - Environmental Monitoring	41	24	20
PSP - Plant Security	37	37	23
RENP - River Bend Nuclear	20	20	20
TAP - Training Administration	8	8	0
TMP - Training Methodology	6	6	0
TRP - Training Program	16	16	0
<u>Maintenance</u>			
CMP - Corrective Maintenance	299	196	140
GMP - General Maintenance	37	31	26
MCP - Maintenance Calibration	249	232	119
MLP - Maintenance Lifting	13	13	0
MSP - Maintenance Section	22	22	14
PMP - Preventative Maintenance	50	49	23
SPP - Special Process	11	11	10
STP - Surveillance Test	508	384	69
- Unassigned Procedures	176	-	-
<u>Operations</u>			
ARP - Alarm Response	78	39	13
AOP - Abnormal Operating	48	45	41
EOP - Emergency Operating	5	5	5
FHP - Fuel Handling	7	6	2
GOP - General Operating	6	6	6
OSP - Operating Section	7	7	6
SOP - System Operating	91	63	49
STP - Surveillance Test	133	104	32
<u>Radiation/Chemistry</u>			
COP - Chem. Operating	134	179	130
CSP - Chemistry Section	26	28	11
FHP - Health Physics	33	31	23
RPP - Radiation Protection	64	59	40
RSP - Radiation Section	14	11	4
RWP - Radwaste Working	15	15	4
PWS - Radwaste Section	2	2	0
STP - Surveillance Test	38	19	0
Unassigned Procedures	71	-	-

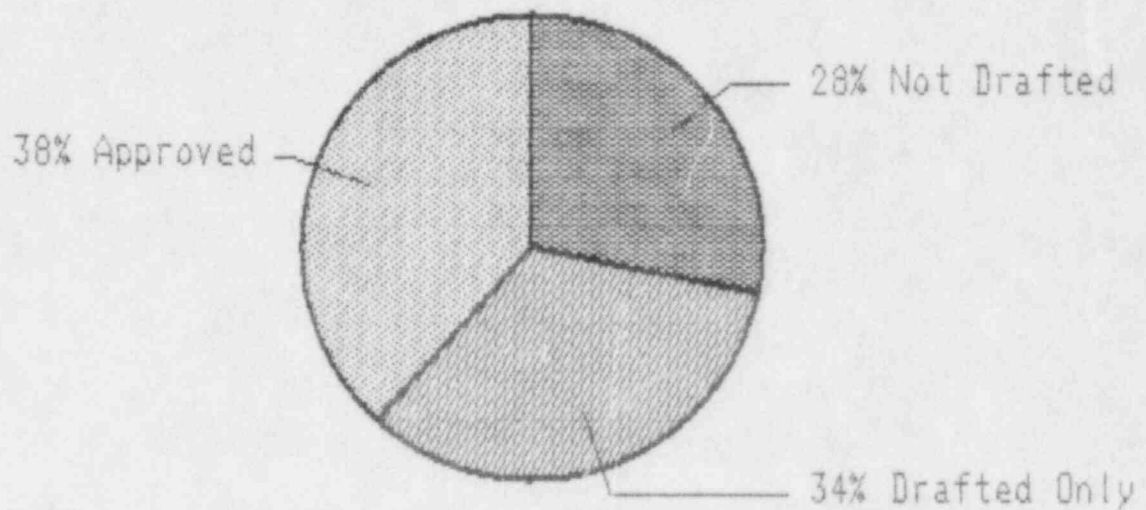
PROCEDURE STATUS (Continued)  
As of 11/16/84

<u>DEPARTMENT AND PROCEDURE TYPE</u>	<u>NUMBER IDENTIFIED</u>	<u>NUMBER OF DRAFTS COMPLETE</u>	<u>NUMBER APPROVED</u>
<u>Technical Staff</u>			
FPP - Fire Protection	11	11	11
PFP - Plant Engineering	13	4	2
PTP - Plant Testing Program	2	0	0
REP - Reactor Engineering	29	13	7
TSP - Technical Section	3	3	3
STP - Surveillance Test	63	27	23
<u>QA/QC</u>			
OCT - Quality Control Instr.	20	16	13
CAP - Quality Assurance Procedure	19	18	15
QAI - Quality Assurance Instr.	17	16	15
TOTAL	2585	1857	993



# PERMANENT PLANT PROCEDURES

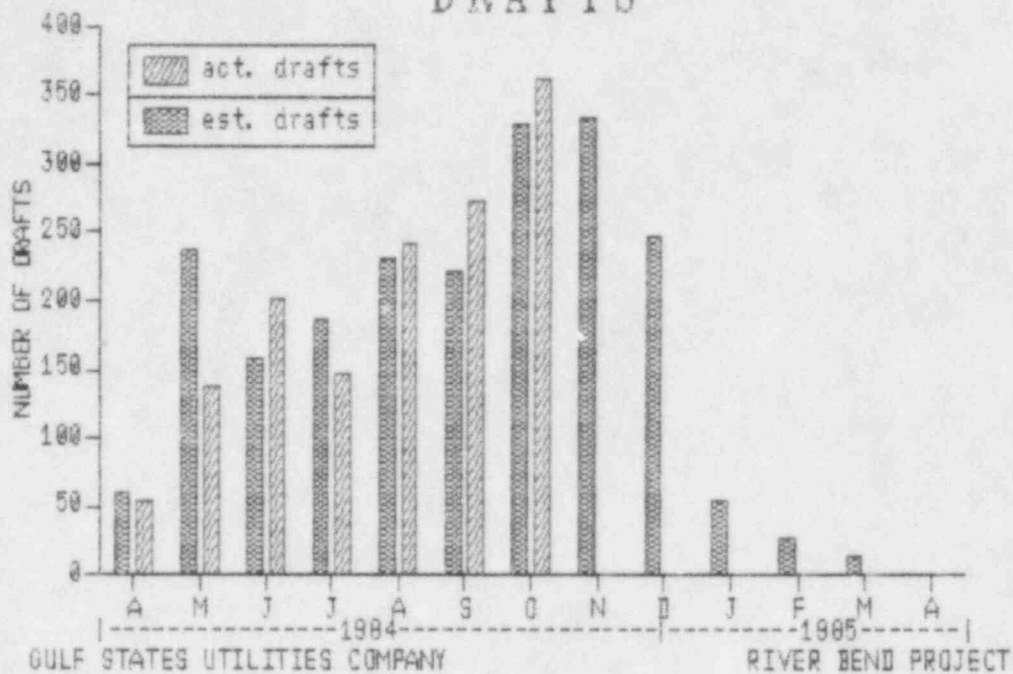
## SCOPE OVERVIEW



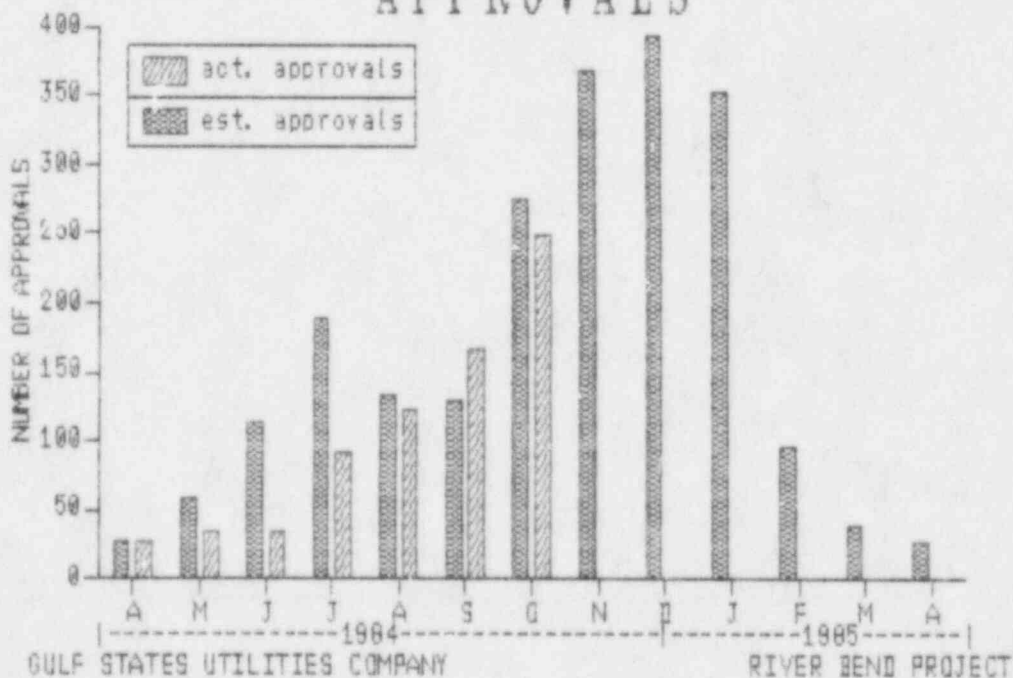
As of: 11/16/84

Total Procedures Identified: 2585  
Total Approved: 993  
Total Drafted Only: 864

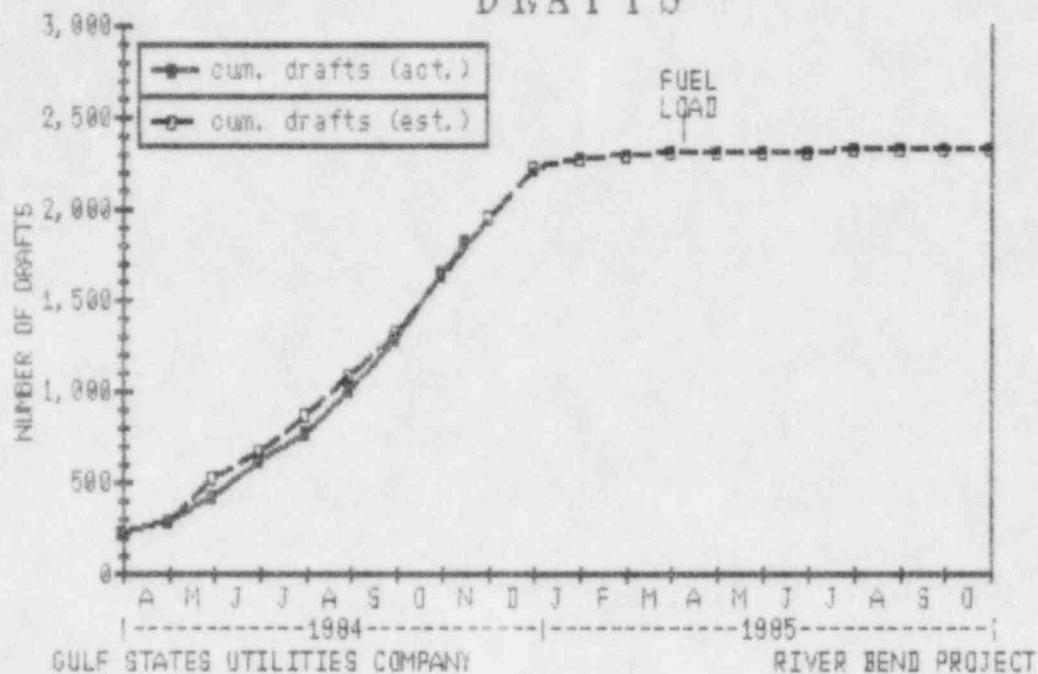
## PERMANENT PLANT PROCEDURES DRAFTS



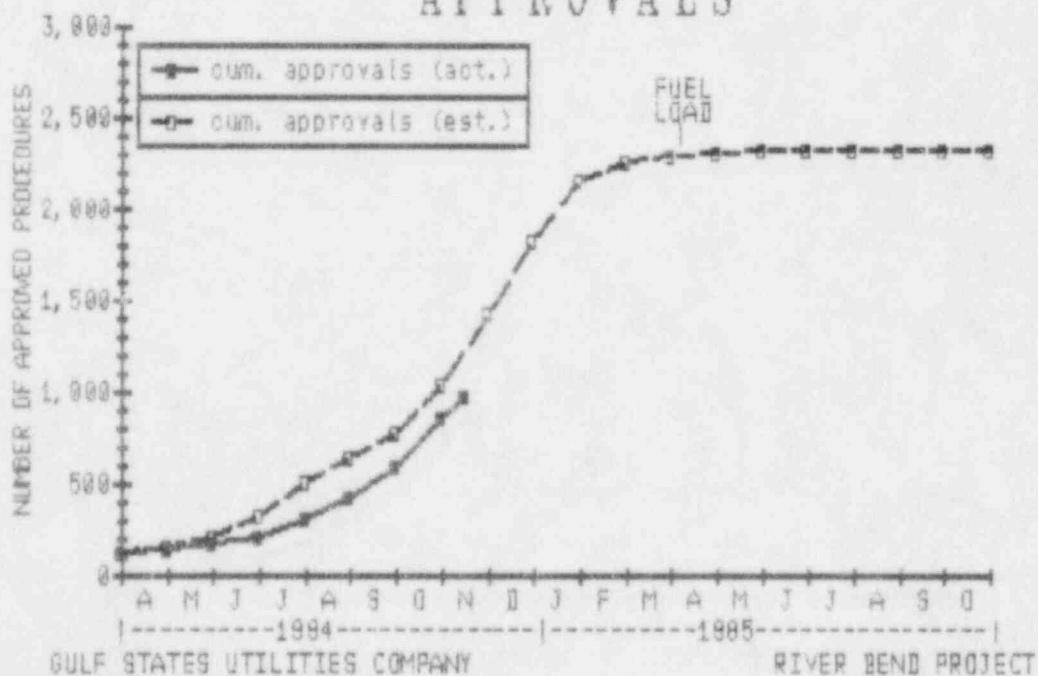
## PERMANENT PLANT PROCEDURES APPROVALS



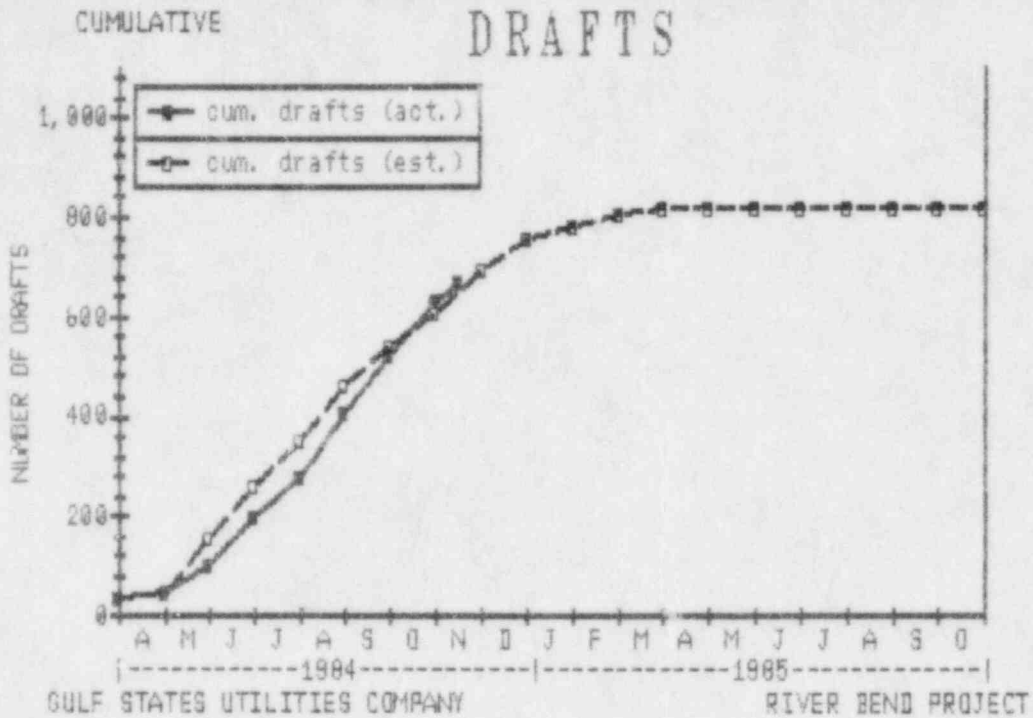
# PERMANENT PLANT PROCEDURES CUMULATIVE DRAFTS



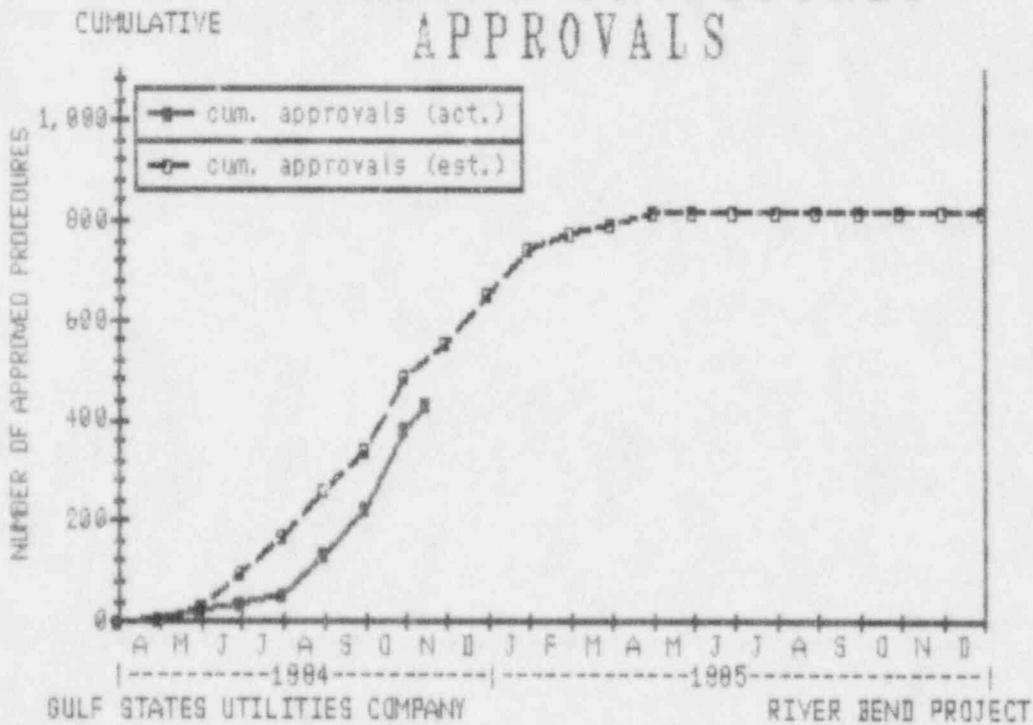
# PERMANENT PLANT PROCEDURES CUMULATIVE APPROVALS



# NES WORKING PROCEDURES DRAFTS



# NES WORKING PROCEDURES APPROVALS



# SURVEILLANCE TEST PROCEDURES

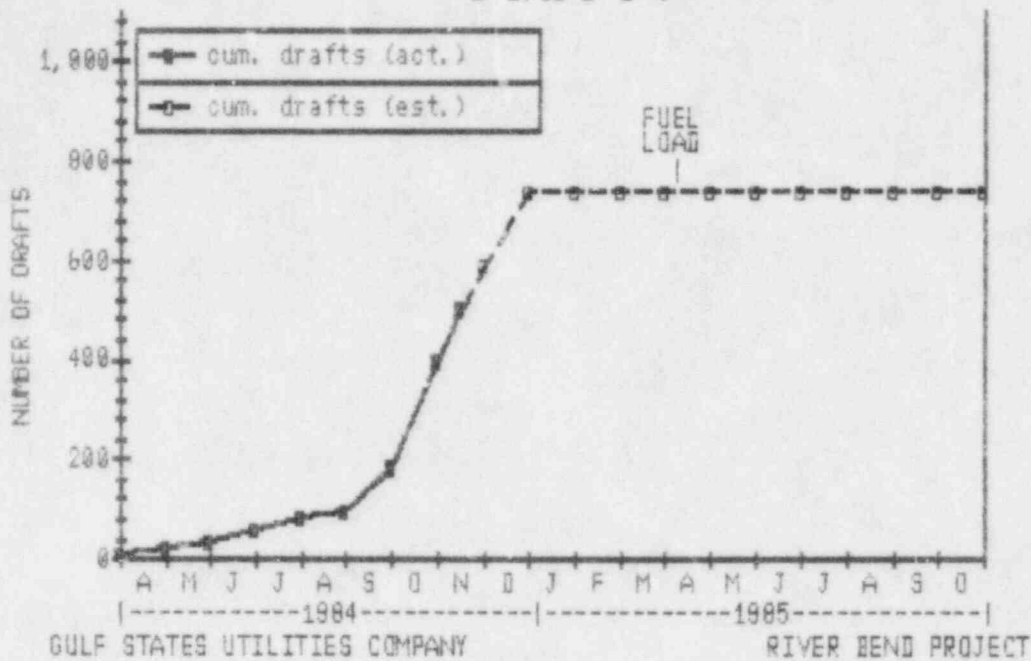
## SCOPE OVERVIEW



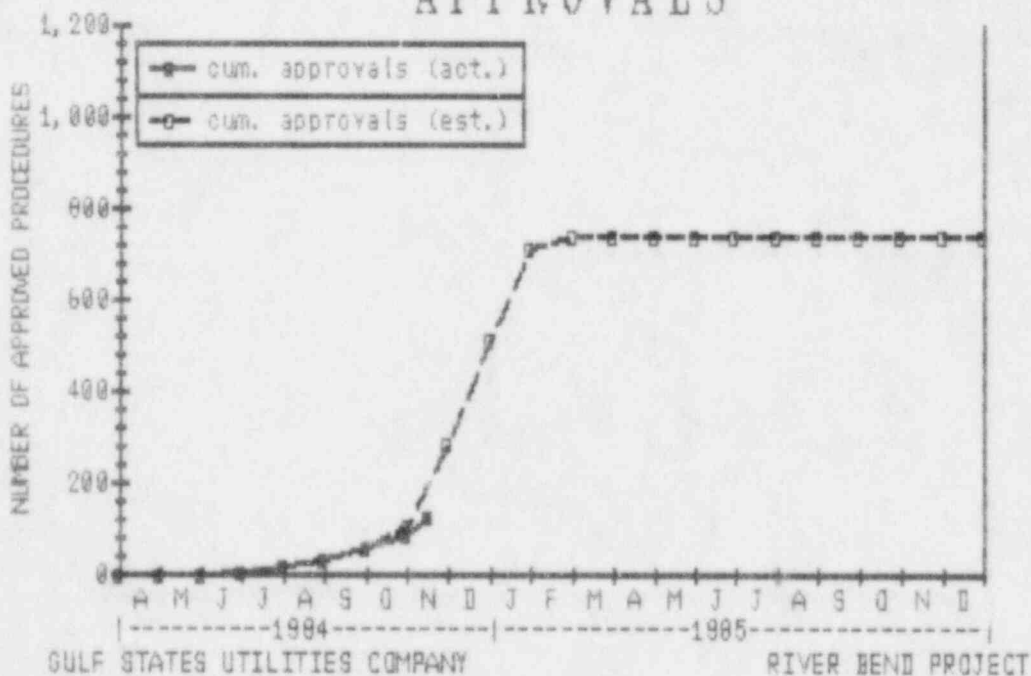
As of: 11/16/84

Total Procedures Identified: 742  
Total Approved: 124  
Total Drafted Only: 381

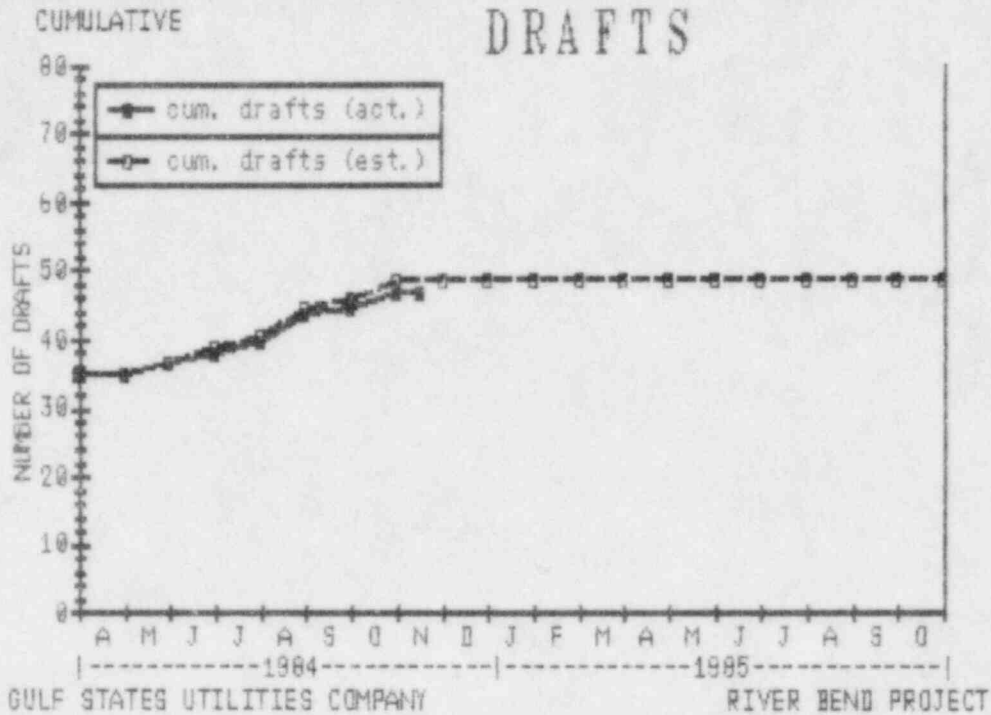
# SURVEILLANCE TEST PROCEDURES cumulative DRAFTS



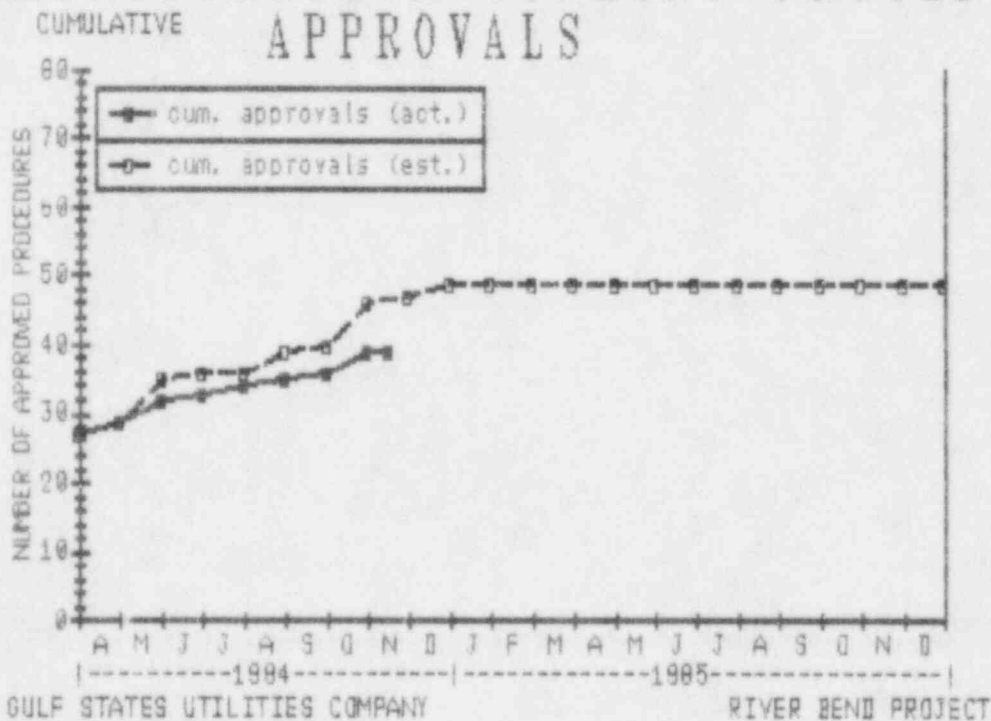
# SURVEILLANCE TEST PROCEDURES CUMULATIVE APPROVALS



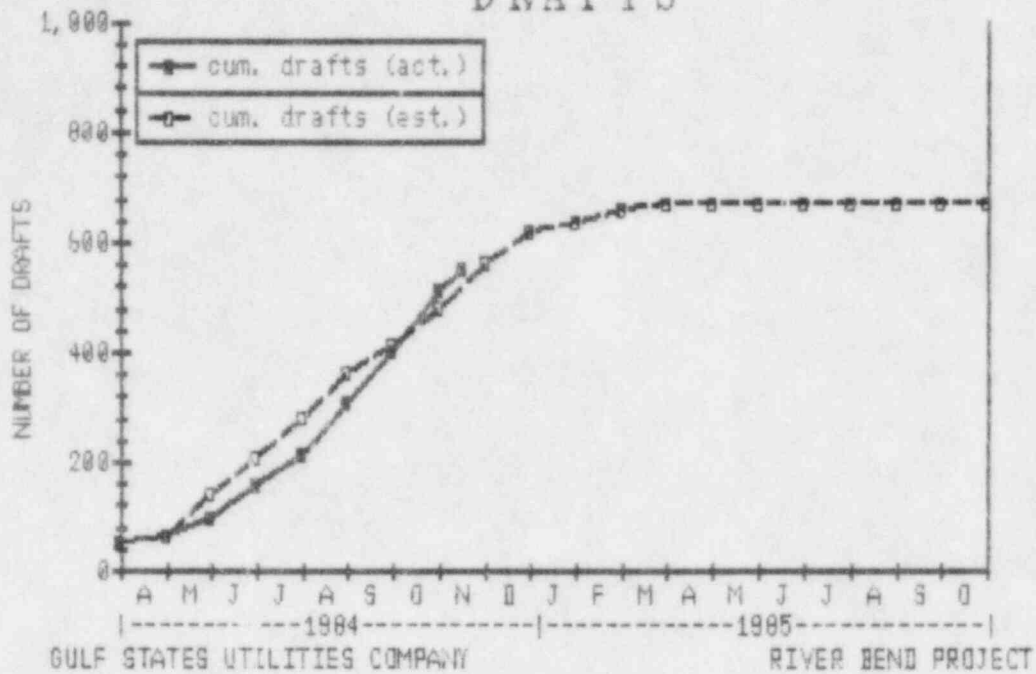
# ADMINISTRATION WORKING PROCEDURE DRAFTS



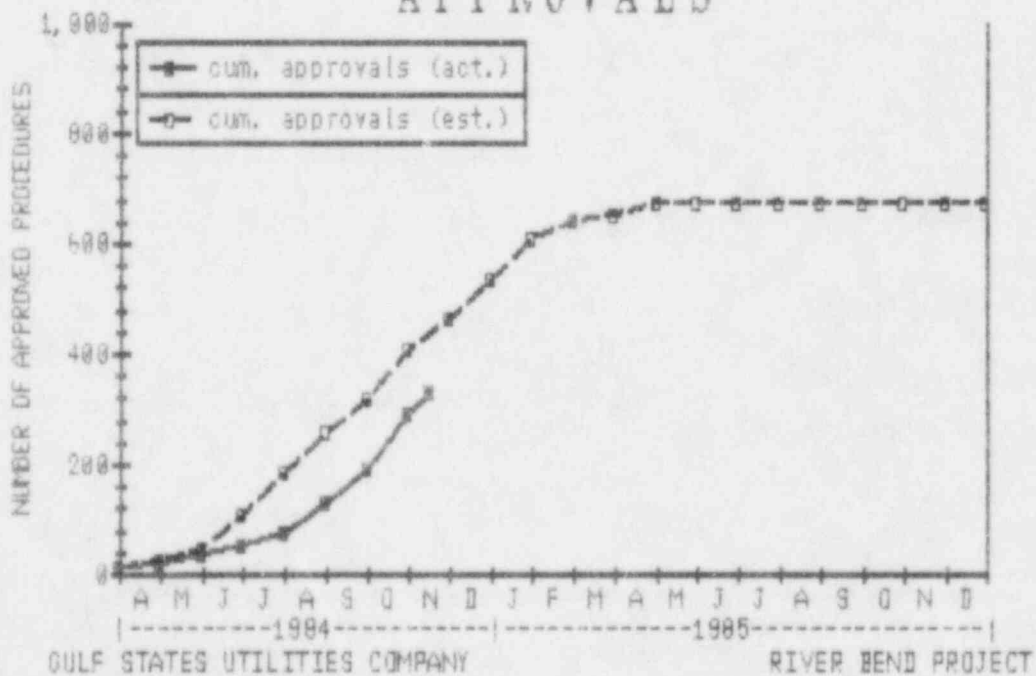
# ADMINISTRATION WORKING PROCEDURE APPROVALS



# MAINTENANCE WORKING PROCEDURES CUMULATIVE DRAFTS

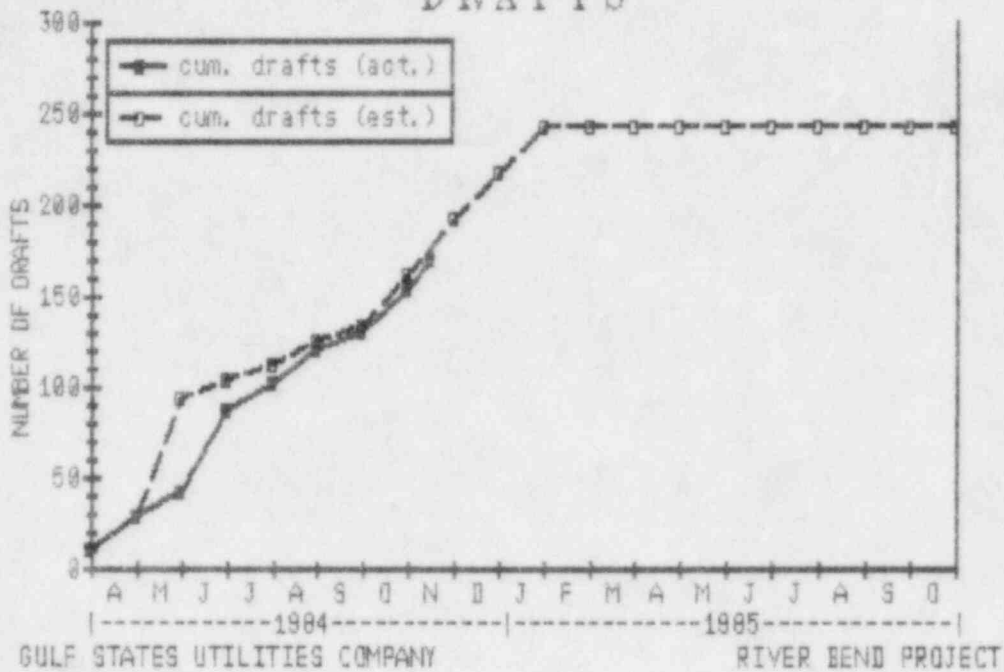


# MAINTENANCE WORKING PROCEDURES CUMULATIVE APPROVALS

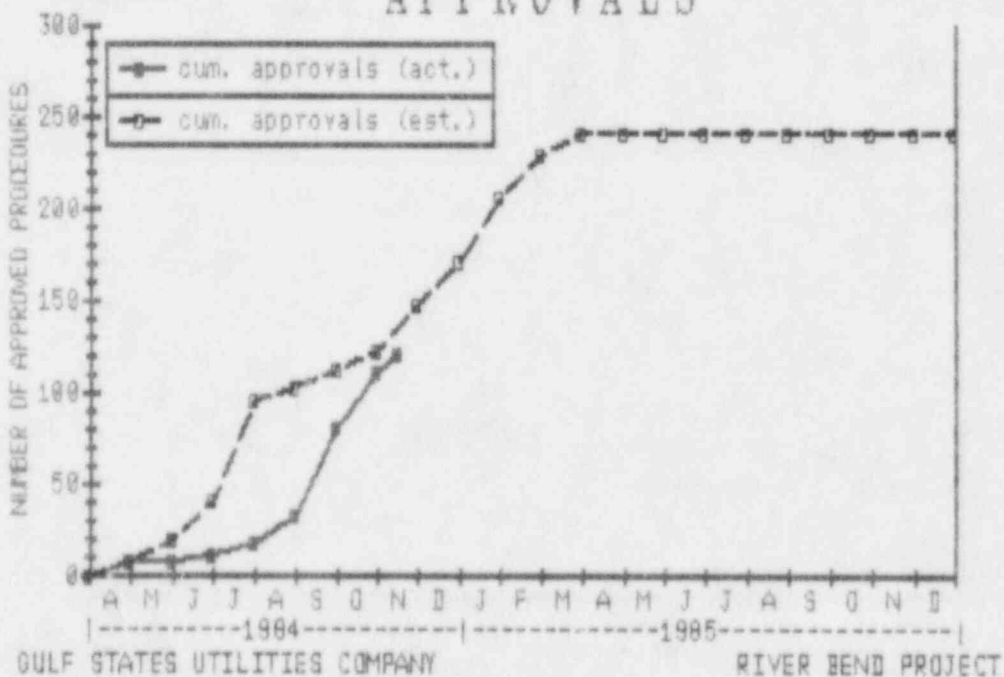




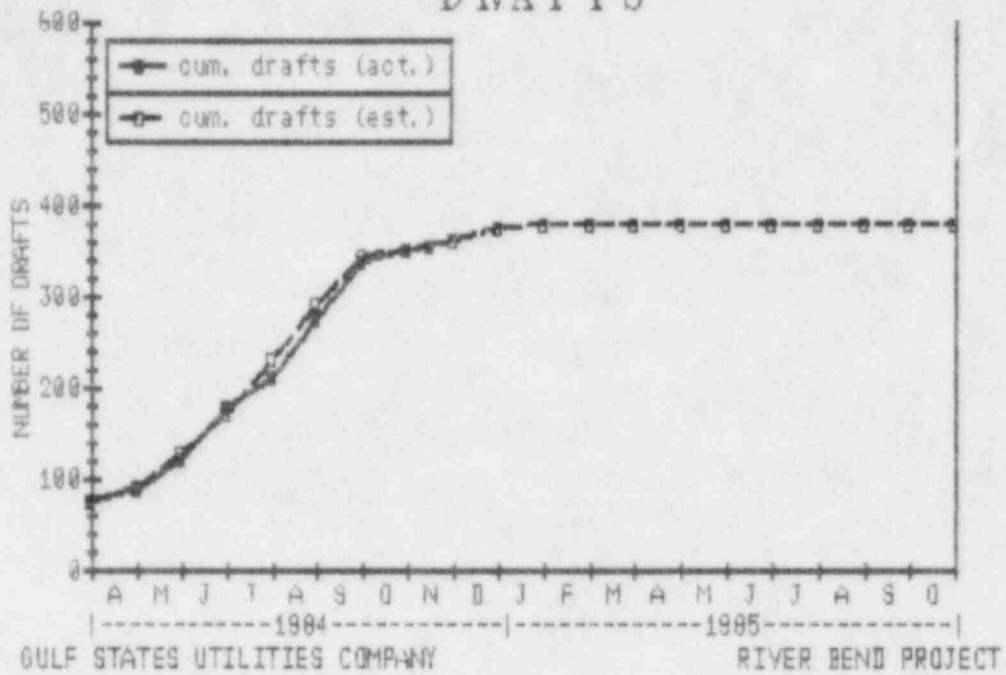
# OPERATIONS WORKING PROCEDURES CUMULATIVE DRAFTS



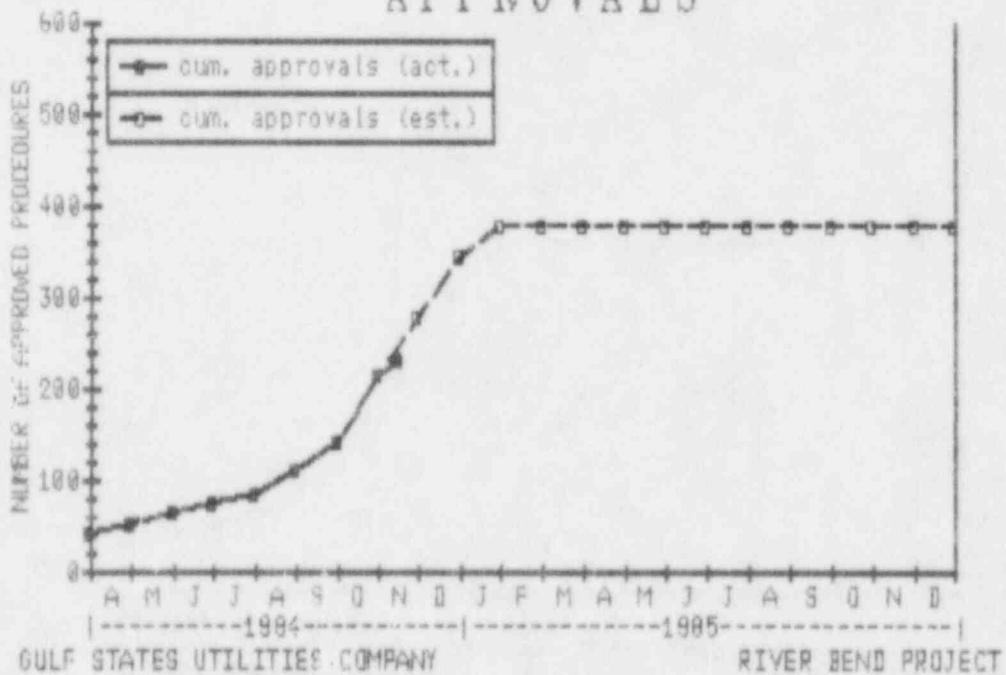
# OPERATIONS WORKING PROCEDURES CUMULATIVE APPROVALS



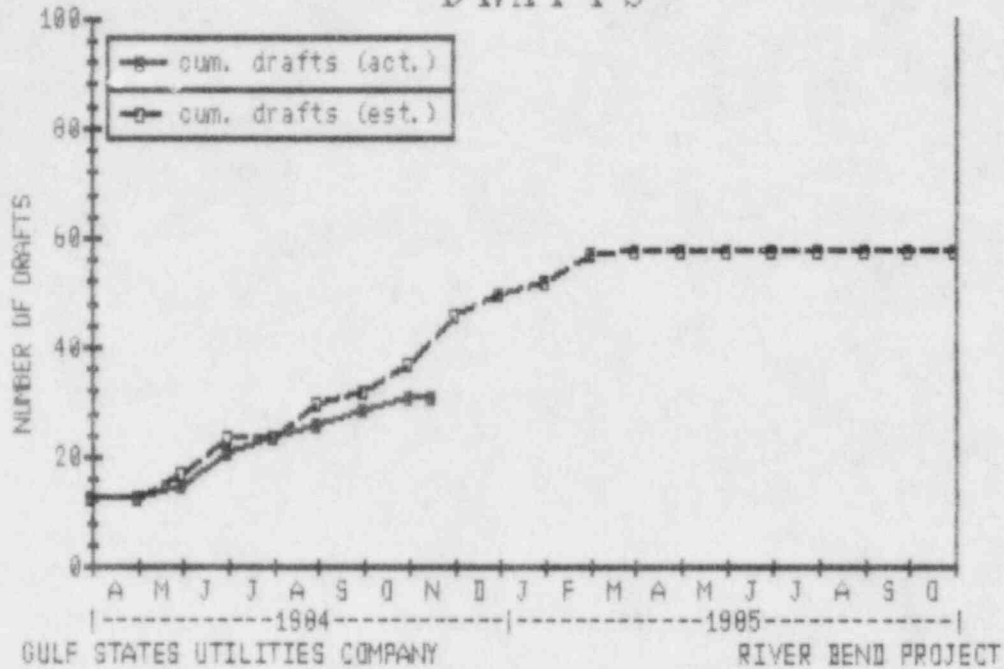
# RAD DEPT. WORKING PROCEDURES CUMULATIVE DRAFTS



# RAD DEPT. WORKING PROCEDURES CUMULATIVE APPROVALS



# TECH-STAFF WORKING PROCEDURES CUMULATIVE DRAFTS



# TECH-STAFF WORKING PROCEDURES CUMULATIVE APPROVALS

