

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8501250078 DOC. DATE: 85/01/17 NOTARIZED: NO DOCKET #
 FACIL: 50-410 Nine Mile Point Nuclear Station, Unit 2, Niagara Moho 05000410
 AUTH. NAME: AUTH. AFFILIATION:
 LEMPGES, T. E. Niagara Mohawk Power Corp.
 RECIP. NAME: RECIPIENT AFFILIATION:
 SCHWENCER, A. Licensing Branch 2

SUBJECT: Forwards weekly cost performance repts for 841022-850104
 & project repts for Oct, Nov & Dec 1984, per Caseload Forecast
 Panel 841030-31 visit.

DISTRIBUTION CODE: B001D COPIES RECEIVED: LTR 1 ENCL 6 SIZE: 34+2/3
 TITLE: Licensing Submittal: PSAR/FSAR Amdts & Related Correspondence

NOTES:

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

Limited Dist.



NIAGARA MOHAWK POWER CORPORATION/300 ERIE BOULEVARD WEST, SYRACUSE, N.Y. 13202/TELEPHONE (315) 474-1511

January 17, 1985
(NMP2L 0321)

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

Dear Mr. Schwencer:

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

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

1. Weekly Cost Performance Report from October 22, 1984 to January 4, 1985.
2. Project Report for October, November and December of 1984.

Very truly yours,

T. E. Lempges
Vice President
Nuclear Generation

TEL/TL:ja

Enclosure

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

850125007B 850117
PDR ADDCK 05000410
R PDR

Boo 1/2 *Revised* *Qatt*

IT GRINWELL		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
ESTIMATE	PERIOD	PERIOD				PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL		ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
CATEGORY	TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	% HC	HC	% HC		
SB PIPE	ILF	29,130	217	16	25,648	88,052	1,111	194	612	112	179,499	155,686	86.732	6.162	3.290	45.250	6.070	-	-	19	2.92	
SR HANGERS	SEA	6,116	47	5	5,036	82,342	2,193	384	1,071	197	336,806	274,162	81.402	55.070	46.600	253.600	54.440	69	8.72	33	5.02	
LB PIPE	ILF	28,616	88	11	26,143	91,362	1,694	296	4,385	808	338,597	295,945	87.402	11.832	6.250	471.909	11.320	-	-	137	20.52	
LB HANGERS	SEA	4,658	35	17	4,134	69,752	11,273	1,973	8,734	1,604	117,935	958,408	81.712	251.811	163.460	609.118	231.836	352	44.62	273	40.92	
CAT.1 COMPLETED (4-5)	SEA	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LB WELDS	SEA	7,595	67	22	6,597	86,732	1,732	303	1,380	254	215,353	185,104	85.952	28.355	-	74.273	28.161	51	6.92	43	6.52	
REWORK	IMH	-	-	-	-	-	-	1,671	307	376,861	279,569	74.182	-	-	-	-	-	-	-	52	7.82	
PIPE WHIP RESTRAINTS	IMH	-	-	-	-	-	-	25	5	236,220	147,273	62.352	-	-	-	-	-	-	-	1	1.22	
OTHER DIRECTS	IMH	-	-	-	-	-	-	1,532	281	258,258	217,263	84.132	-	-	-	-	-	-	-	46	7.22	
WAREHOUSEMEN	IMH	-	-	-	-	-	-	739	136	114,820	87,626	76.322	-	-	-	-	-	-	-	23	3.52	
QUALIFYING WELDERS	IMH	-	-	-	-	-	-	266	49	21,939	21,697	98.902	-	-	-	-	-	-	-	8	1.22	
CLEAN UNSAT. MATL.	IMH	-	-	-	-	-	-	0	0	19,771	19,790	100.102	-	-	-	-	-	-	-	0	0.02	
OTHER DISTRIB.	IMH	-	-	-	-	-	-	956	176	181,763	136,701	73.992	-	-	-	-	-	-	-	30	4.52	
TOTAL		-	-	-	-	-	25,253	4,419	21,371	3,927	113,455,822	12,779,224	80.422	-	-	-	-	789	100%	668	100%	
VARIANCE - PLAN vs. ACT.		-	-	-	-	-	-	-	3,882	492	-	-	-	-	-	-	-	-	-	121	-	
LK CONSTOCK		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
ESTIMATE	PERIOD	PERIOD				PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL		ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL		
CATEGORY	TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	% HC	HC	% HC		
SCHEDULED CABLE PULL	ILF	4,528,169	36,522	31,698	3,157,231	69,722	3,852	713	3,574	510	553,430	380,533	68.762	0.122	0.103	0.129	0.121	120	17.22	112	19.92	
STUFF-IN	IMH	-	-	98	EA	-	-	-	814	116	-	-	-	-	-	-	-	-	-	-	-	
UNSCHEDULED CABLE PULL	ILF	1,519,183	17,391	256	453,713	29,872	881	163	115	16	104,247	21,352	20.482	0.069	-	0.512	0.047	28	3.92	4	0.62	
CABLE TERMINATIONS -ALL	SEA	246,985	2,609	1,406	134,553	54,482	2,202	407	1,728	247	252,838	137,185	54.262	1.024	1.034	1.405	1.020	69	9.82	54		
CONDUIT	ILF	439,322	4,609	2,122	317,402	72,252	3,689	720	2,883	412	469,528	310,925	72.612	1.069	1.072	1.553	1.074	122	17.32	90	16.12	
CONDUIT SUPPORTS	SEA	29,019	305	219	20,985	72,312	4,110	760	3,791	537	479,924	349,835	72.892	16.538	16.500	19.763	16.671	128	18.32	118	21.12	
PIPE DETECTION	IMH	-	-	-	-	-	-	-	406	87	151,663	67,449	44.472	-	-	-	-	-	-	19	3.42	
SPECC MODIFICATIONS	IMH	-	-	-	-	-	-	-	1,051	150	139,439	90,639	65.002	-	-	-	-	-	-	33	5.92	
REWORK	IMH	-	-	-	-	-	-	-	1,151	164	241,437	128,146	53.082	-	-	-	-	-	-	36	6.42	
UNLOAD & HANDLE	IMH	-	-	-	-	-	-	-	344	49	81,929	55,466	67.702	-	-	-	-	-	-	11	1.92	
OTHER DIRECTS	IMH	-	-	-	-	-	-	-	1,913	273	391,985	274,399	70.002	-	-	-	-	-	-	60	10.72	
WAREHOUSEMEN	IMH	-	-	-	-	-	-	-	348	50	69,522	42,267	61.682	-	-	-	-	-	-			
QUALIFYING WELDERS	IMH	-	-	-	-	-	-	-	346	49	52,551	36,280	69.042	-	-	-	-	-	-			
OTHER DISTRIB.	IMH	-	-	-	-	-	-	-	111	16	25,479	17,268		-	-	-	-	-	-			
TOTAL		-	-	-	-	-	22,428	4,150	17,961	2,560												
VARIANCE - PLAN vs. ACT.		-	-	-	-	-	-	-	4,467	1,590												

JOHNSON CONTROLS		QUANTITIES					WEEKLY HOURS					CUMULATIVE HOURS					UNIT RATES					PERIOD WORKFORCE			
CATEGORY	UNIT TO COMPLETE	ESTIMATE	PERIOD	PERIOD		%	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	%	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL				
							SI HRS	OT HRS	SI HRS	OT HRS	HRS	HRS	EXPENSE	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	MC	% MC	MC	% MC				
TOTAL TUBING	LF	155,967	2,090	1,641	96,072	61.602%	3,832	881	2,796	425	362,544	186,129	51.342%	2,324	2,560	1,963	1,937	120	41.97%	87	19.72%				
SEISMIC SUPPORTS	EA	3,654	48	18	2,367	61.422%	2,655	619	2,331	355	267,084	158,652	59.402%	69,360	40,000	149,222	67,927	83	29.01%	73	32.77%				
INSTRUMENTS	EA	3,778		22	1,483	39.252%	-	-	208	31	57,959	16,758	28.912%	15,341	-	10,864	11,300	-	-	7	2.97%				
TUBE TRAY	INH	-	-	-	-	-	-	-	250	38	41,474	33,785	81.462%	-	-	-	-	-	-	8	3.57%				
PIPEWORK	INH	-	-	-	-	-	-	-	707	108	118,932	31,240	26.272%	-	-	-	-	-	-	22	9.87%				
UNLOAD & HANDLE	INH	-	-	-	-	-	-	-	117	18	17,319	10,202	58.912%	-	-	-	-	-	-	4	1.62%				
OTHER DIRECTS	INH	-	-	-	-	-	-	-	397	61	66,364	32,218	48.552%	-	-	-	-	-	-	17	5.57%				
WAREHOUSEMEN	INH	-	-	-	-	-	-	-	325	49	40,764	19,743	48.432%	-	-	-	-	-	-	10	4.57%				
QUALIFYING WELDERS	INH	-	-	-	-	-	-	-	91	14	8,726	4,484	74.312%	-	-	-	-	-	-	3	1.37%				
OTHER DISTRIB.	INH	-	-	-	-	-	-	-	10	2	10,253	3,777	36.842%	-	-	-	-	-	-	0	0.17%				
					</																				

SVEC		QUANTITIES					WEEKLY HOURS					CUMULATIVE HOURS					UNIT RATES					PERIOD WORKFORCE				
CATEGORY	UNIT TO COMPLETE	ESTIMATE	PERIOD	PERIOD	Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL						
						ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS		HRS	HRS		MC	Z MC	MC	Z MC							
ISB PIPE	LF	73,960	800	352	57,923	78,321	3,816	796	3,308	538	400,759	307,221	76,662	5,419	5,000	10,926	5,304	120	6,071	103	5,721					
ISB HANGERS	EA	13,463	186	77	8,558	63,572	6,664	1,379	6,155	1,032	562,757	359,908	63,952	41,800	40,000	93,338	42,055	208	10,371	192	10,671					
CAT. 243 HRS - COMPLETION	EA	8,965	105	29	7,968	88,682	2,789	577	1,567	255	232,522	203,120	87,362	25,937	-	62,820	25,472	87	4,371	49	2,721					
PAINTING	INH	-	-	-	-	-	-	-	3,528	109	678,661	144,770	21,332	-	-	-	-	-	110	6,171						
TURN/SUPPORT CRAFT	INH	-	-	-	-	-	-	-	2,838	315	447,789	290,551	64,892	-	-	-	-	-	89	4,971						
MISC. STEEL	INH	-	-	-	-	-	-	-	136	10	371,753	105,707	28,432	-	-	-	-	-	8	2,721						
MECHANICAL EQUIP.	INH	-	-	-	-	-	-	-	2,117	307	159,442	147,163	92,182	-	-	-	-	-	44	2,721						
PIPEWORK	INH	-	-	-	-	-	-	-	3,372	417	661,523	211,333	31,952	-	-	-	-	-	105	5,821						
PREVENTIVE MAINTENANCE	INH	-	-	-	-	-	-	-	797	133	63,210	43,547	68,892	-	-	-	-	-	25	1,421						
HYDROTEST	INH	-	-	-	-	-	-	-	146	24	171,783	42,606	24,802	-	-	-	-	-	5	0,371						
OTHER DIRECTS	INH	-	-	-	-	-	-	-	3,467	385	187,605	108,256	57,702	-	-	-	-	-	100	6,971						
SURVEYORS	INH	-	-	-	-	-	-	-	2,108	234	300,847	186,611	62,032	-	-	-	-	-	44	3,621						
WAREHOUSEMEN	INH	-	-	-	-	-	-	-	1,123	85	234,582	126,362	53,072	-	-	-	-	-	35	1,971						
UNALLOCATED LABOR	INH	-	-	-	-	-	-	-	2,383	265	283,234	131,050	46,272	-	-	-	-	-	74	4,121						
JANITORS	INH	-	-	-	-	-	-	-	2,256	94	313,311	129,764	41,422	-	-	-	-	-	71	3,971						
TEMPORARY POWER	INH	-	-	-	-	-	-	-	1,027	181	97,427	20,904	21,462	-	-	-	-	-	32	1,871						
SCAFFOLDING	INH	-	-	-	-	-	-	-	5,376	597	436,276	87,043	19,952	-	-	-	-	-	148	9,371						
GENERAL CLEAN-UP	INH	-	-	-	-	-	-	-	5,491	229	514,104	111,012	21,592	-	-	-	-	-	172	9,521						
OTHER DISTRIB.	INH	-	-	-	-	-	-	-	6,589	760	766,388	389,276	50,792	-	-	-	-	-	296	11,671						
ADVISORY OPERATIONS	INH	-	-	-	-	-	-	-	4,125	729	796,838	225,262	28,272	-	-	-	-	-	129	7,171						
TOTAL		-	-	-	-	-	64,411	13,333	57,909	6,699	117,681,011	13,371,416	43,892	-	-	-	2,013	10,071	1,810	10,071						
VARIANCE - PLAN vs. ACT.		-	-	-	-	-	-	-	6,502	6,634	-	-	-	-	-	-	-	-	203	-						

LEGEND:

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

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/81 THROUGH 10/86. (BASED ON RE-EVALUATED 12/10/84 FORECAST)

PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 12/10/84 FORECAST.

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

CUMULATIVE: TOTAL TO DATE FROM 1/81.

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

WEEKLY HOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE WEEK PERIOD BASED ON THE 12/10/84 FORECAST.

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

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/81 THROUGH 10/86. (BASED ON REEVALUATED 12/10/84 FORECAST)

ACTUAL HOURS: EXPENDED HOURS FROM 1/81 THROUGH PERIOD ENDING AS LISTED ABOVE.

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

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED HOURS" DIVIDED BY "ESTIMATED QUANTITIES". (BASED ON REEVALUATED 12/10/84 FORECAST)

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN.

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

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

PERIOD WORKFORCE: (EQUIVALENT)

PLANNED HEADCOUNT: BASED ON THE 12/10/84 FORECAST.

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

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

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

CATEGORIES:

ITT GRINNELL

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

LK CONSTOCK

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

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

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

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

JOHNSON CONTROLS

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

VARIANCE - PLANNED vs. ACTUAL

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

[illegible]

SVC	CATEGORY	QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES					PERIOD WORKFORCE				
		ESTIMATE	PERIOD	PERIOD		2	1	PLANNED	PLANNED	ACTUAL	ACTUAL	1	ESTIMATED	ACTUAL	2	1	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL
		TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	ST HRS	HRS	HRS	HRS	DEPEND	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	% HC	HC	% HC
SD PIPE	ILF	73,910	800	126	57,571	27,842	3,816	796	1,689	282	11	400,759	303,375	75,702	5,419	5,600	17,230	5,270	120	6,021	79	3,611		
											11													
SD HANGERS	FEA	13,163	186	96	8,491	62,992	6,664	1,379	4,211	543	11	562,757	352,721	62,682	41,600	40,000	49,833	41,590	208	10,311	177	8,011		
											11													
CAT. 243 HRS - COMPLETION	FEA	8,945	105	29	7,939	88,562	2,789	577	1,176	176	11	232,522	201,298	86,571	25,937	-	46,621	25,356	87	4,321	49	2,211		
											11													
PAINTING	SMH	-	-	-	-	-	-	-	3,332	69	11	678,661	141,133	20,602	-	-	-	-	-	-	139	7,711		
SUB/SUPPORT CRAFT	SMH	-	-	-	-	-	-	-	1,876	105	11	447,789	287,398	64,183	-	-	-	-	-	-	78	4,111		
MISC. STEEL	SMH	-	-	-	-	-	-	-	1,009	10	11	371,753	105,561	28,102	-	-	-	-	-	-	42	1,911		
MECHANICAL EQUIP.	SMH	-	-	-	-	-	-	-	1,616	224	11	159,612	144,739	90,662	-	-	-	-	-	-	69	3,171		
REWORK	SMH	-	-	-	-	-	-	-	5,356	460	11	661,523	207,544	31,372	-	-	-	-	-	-	223	10,111		
PREVENTIVE MAINTENANCE	SMH	-	-	-	-	-	-	-	785	117	11	63,210	42,617	67,121	-	-	-	-	-	-	33	1,571		
HYDROTEST	SMH	-	-	-	-	-	-	-	167	25	11	171,783	42,436	21,702	-	-	-	-	-	-	7	0,311		
OTHER DIRECTS	SMH	-	-	-	-	-	-	-	4,125	408	11	187,605	104,404	55,652	-	-	-	-	-	-	172	7,811		
											11													
SURVEYORS	SMH	-	-	-	-	-	-	-	2,006	198	11	300,847	184,269	61,253	-	-	-	-	-	-	81	3,811		
WAREHOUSEMEN	SMH	-	-	-	-	-	-	-	901	89	11	231,582	125,154	53,352	-	-	-	-	-	-	38	1,711		
UNALLOCATED LABOR	SMH	-	-	-	-	-	-	-	2,238	221	11	283,234	128,402	45,332	-	-	-	-	-	-	93	4,211		
SKILLERS	SMH	-	-	-	-	-	-	-	2,373	99	11	313,311	127,614	40,671	-	-	-	-	-	-	91	4,511		
TEMPORARY POWER	SMH	-	-	-	-	-	-	-	854	98	11	97,427	19,696	20,222	-	-	-	-	-	-	27	1,211		
SCAFFOLDING	SMH	-	-	-	-	-	-	-	4,991	408	11	436,276	81,070	18,582	-	-	-	-	-	-	208	9,411		
GENERAL CLEAN-UP	SMH	-	-	-	-	-	-	-	4,905	204	11	514,104	105,292	20,182	-	-	-	-	-	-	204	9,311		
OTHER DISTRI.	SMH	-	-	-	-	-	-	-	6,165	610	11	766,369	381,877	49,832	-	-	-	-	-	-	257	11,611		
											11													
ADVISORY OPERATIONS	SMH	-	-	-	-	-	-	-	3,174	395	11	716,838	220,408	27,662	-	-	-	-	-	-	132	6,011		
TOTAL		-	-	-	-	-	-	-	64,411	13,333	11	53,009	4,810	117,681,011	13,308,808	43,052	-	-	-	-	2,013	100%	2,201	100%
VARIANCE - PLAN vs. ACT.		-	-	-	-	-	-	-	11,402	8,523	11	-	-	-	-	-	-	-	-	-	119	5,111	-	-



LEGEND:

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

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/86. (BASED ON RE-EVALUATED 12/10/84 FORECAST)

PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 12/10/84 FORECAST.

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

CUMULATIVE: TOTAL TO DATE FROM 1/84.

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

WEEKLY HOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE WEEK PERIOD BASED ON THE 12/10/84 FORECAST.

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

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/84 THROUGH 10/86. (BASED ON REEVALUATED 12/10/84 FORECAST)

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

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

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED HOURS" DIVIDED BY "ESTIMATED QUANTITIES". (BASED ON REEVALUATED 12/10/84 FORECAST)

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN.

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

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

PERIOD WORKFORCE: (EQUIVALENT)

PLANNED HEADCOUNT: BASED ON THE 12/10/84 FORECAST.

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

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

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

CATEGORIES:

ITT GRINNELL

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

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

LK CONSTACK

SCHEDULED CABLE PULL : CABLE REPORTED IN CMS WHICH IS ENGINEERED IDENTIFIED CABLE IN THE ENGINEERS ECSS SYSTEM.

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

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

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

JOHNSON CONTROLS

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

VARIANCE - PLANNED vs. ACTUAL

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

VARIANCE - PLAN vs. ACTUAL										11	1	1	364	2,031	11	1	1	11	1	1	1	11	1	1	91
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JOHNSON CONTROLS		QUANTITIES										WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	UO	ESTIMATE	PERIOD	PERIOD	Σ	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Σ	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL							
		UNIT TO COMPLETE	PLANNED	ACTUAL																	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS
TOTAL TUBING	1LF	153,783	2,500	3,239	93,981	61.11211	5,039	853	4,486	615	266,015	180,816	67.96211	1,730	2,500	1,637	1,924	126	41.921	117	42.321						
SEISMIC SUPPORTS	1EA	3,851	59	31	2,339	60.69211	3,491	591	3,196	420	261,221	154,050	58.97211	47,780	40,000	106,353	65,861	87	29.021	80	28.921						
INSTRUMENTS	1EA	3,778	-	28	1,460	38.61211	-	-	362	48	43,016	16,397	38.09211	11,394	-	14,643	11,231	-	-	9	3.321						
STOVE TRAY	1PSH	-	-	-	-	-	-	-	543	71	39,415	33,358	84.53211	-	-	-	-	-	16	4.921							
IREWORK	1PSH	-	-	-	-	-	-	-	1,081	142	47,663	29,923	42.78211	-	-	-	-	-	27	9.821							
UNLOAD & HANDLE	1PSH	-	-	-	-	-	-	-	168	22	12,718	9,953	78.07211	-	-	-	-	-	4	1.521							
OTHER DIRECTS	1PSH	-	-	-	-	-	-	-	474	62	85,283	31,611	37.10211	-	-	-	-	-	12	4.321							
WAREHOUSEMEN	1PSH	-	-	-	-	-	-	-	453	60	22,114	19,010	86.19211	-	-	-	-	-	11	12.21							
QUALIFYING WELDERS	1PSH	-	-	-	-	-	-	-	78	10	6,113	6,332	103.58211	-	-	-	-	-	2	21.21							
OTHER DISTRIB.	1PSH	-	-	-	-	-	-	-	33	4	5,872	3,760	84.03211	-	-	-	-	-	1	0.321							
TOTAL							12,020	2,034	11,074	1,451	789,573	485,290	61.46211	-	-	-	-	301	10021	277	10021						
VARIANCE - PLAN vs. ACT.									916	580										24							
SPEC																											
CATEGORY	UO	ESTIMATE	PERIOD	PERIOD	Σ	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Σ	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL							
		UNIT TO COMPLETE	PLANNED	ACTUAL																	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS
150 PIPE	1LF	72,961	1,000	1,011	57,472	78.77211	4,808	995	3,900	435	361,030	302,594	83.81211	4,918	5,000	4,336	5,265	120	6.021	98	4.621						
150 HANGERS	1EA	13,959	231	212	8,394	60.13211	8,331	1,724	9,149	1,344	564,049	352,937	62.57211	40,409	40,000	43,360	42,046	208	10.321	229	10.821						
ICAT. 213 HRS - COMPLT	1EA	8,965	130	83	7,910	88.23211	3,486	722	2,483	404	199,226	199,682	100.23211	22,223	-	32,807	25,244	87	4.321	62	2.921						
PAINTING	1PSH	-	-	-	-	-	-	-	4,975	102	410,278	137,817	31.30211	-	-	-	-	-	124	5.921							
TURN/SUPPORT CRAFT	1PSH	-	-	-	-	-	-	-	3,826	425	433,730	290,028	66.87211	-	-	-	-	-	96	4.521							
MISC. STEEL	1PSH	-	-	-	-	-	-	-	1,026	127	119,036	102,907	86.45211	-	-	-	-	-	26								
MECHANICAL EQUIP.	1PSH	-	-	-	-	-	-	-	1,793	281	120,621	110,916	109.58211	-	-	-	-	-	45								
IREWORK	1PSH	-	-	-	-	-	-	-	7,081	910	117,261	201,672	171.99211	-	-	-	-	-	177	8.121							
PREVENTIVE MAINTENANCE	1PSH	-	-	-	-	-	-	-	766	104	101,262	41,481	40.97211	-	-	-	-	-	18	0.821							
HYDROTEST	1PSH	-	-	-	-	-	-	-	521	85	160,878	42,160	26.21211	-	-	-	-	-	13	0.621							
OTHER DIRECTS	1PSH	-	-	-	-	-	-	-	5,564	618	196,679	99,923	46.23211	-	-	-	-	-	139	6.621							
SURVEYORS	1PSH	-	-	-	-	-	-	-	2,815	352	219,520	182,057	82.93211	-	-	-	-	-	71	3.121							
WAREHOUSEMEN	1PSH	-	-	-	-	-	-	-	1,972	148	149,835	121,172	82.87211	-	-	-	-	-	49	2.321							
UNALLOCATED LABOR	1PSH	-	-	-	-	-	-	-	3,288	365	124,670	125,824	100.93211	-	-	-	-	-	82	3.921							
WAXITORS	1PSH	-	-	-	-	-	-	-	3,184	96	110,738	121,966	88.79211	-	-	-	-	-	78	3.721							
TEMPORARY POWER	1PSH	-	-	-	-	-	-	-	1,225	151	100,912	17,567	17.40211	-	-	-	-	-	31	1.521							
SCAFFOLDING	1PSH	-	-	-	-	-	-	-	7,879	875	263,359	75,417	28.64211	-	-	-	-	-	197	9.321							
GENERAL CLEAN-UP	1PSH	-	-	-	-	-	-	-	7,598	235	338,015	100,059	29.60211	-	-	-	-	-	190	9.021							
OTHER DISTRIB.	1PSH	-	-	-	-	-	-	-	9,462	961	470,962	380,610	80.82211	-	-	-	-	-	237	11.221							
ADVISORY OPERATIONS	1PSH	-	-	-	-	-	-	-	5,995	857	631,978	216,806	31.31211	-	-	-	-	-	150	7.121							
TOTAL							80,516	16,667	81,392	9,110	115,262,081	13,250,658	61.78211	-	-	-	-	2,013	10021	2,110	10021						
VARIANCE - PLAN vs. ACT.									(3,878)	7,557										(97)							

LEGEND:

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

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/81 THROUGH 10/81. (BASED ON RE-EVALUATED 8/31/81 FORECAST)

PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/31/81 FORECAST.

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

CUMULATIVE: TOTAL TO DATE FROM 1/81.

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

WEEKLY HOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE WEEK PERIOD BASED ON THE 8/31/81 FORECAST.

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

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/81 THROUGH 10/81. (BASED ON REEVALUATED 8/31/81 FORECAST)

ACTUAL HOURS: EXPENDED HOURS FROM 1/81 THROUGH PERIOD ENDING AS LISTED ABOVE.

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

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED HOURS" DIVIDED BY "ESTIMATED QUANTITIES" (BASED ON REEVALUATED 8/31/81 FORECAST).

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

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

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

PERIOD WORKFORCE: (EQUIVALENT) ...

PLANNED HEADCOUNT: BASED ON THE 8/31/81 FORECAST

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

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

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

CATEGORIES:

ITT BRIMMELL

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

LK CONSTOCK

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

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

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

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

JOHNSON CONTROLS

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

VARIANCE - PLANNED vs. ACTUAL

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

JOHNSON CONTROLS		QUANTITIES					WEEKLY HOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE						
CATEGORY	UOM	ESTIMATE	PERIOD TO COMPLETE	PERIOD PLANNED	PERIOD ACTUAL	X	PLANNED ST HRS	PLANNED OT HRS	ACTUAL ST HRS	ACTUAL OT HRS	ESTIMATED HRS	ACTUAL HRS	X	ESTIMATED PERIOD	TARGET PERIOD	PERIOD CUMULATIVE	PLANNED MC	PLANNED % MC	ACTUAL MC	ACTUAL % MC					
TOTAL TUBING	ILF	153,783		3,079	3,404		90,745	59.01211	4,717	826	5,255	2,375		266,045	175,515	65.97211	1.730	2.500	2.241	1.934	118	42.21	131	44.52	
SEISMIC SUPPORTS	EA	3,851		45	74		2,305	59.81211	4,016	702	3,409	1,630		241,224	150,434	57.59211	47.780	40.000	49.934	65.264	100	35.52	90	30.62	
INSTRUMENTS	EA	3,778		-	50		1,432	37.90211	-	-	477	215		43,046	15,987	37.14211	11.394	-	13.840	11.164	-	-	12	4.02	
TUBE TRAY	ISM	-		-	-		-	-	-	-	530	240		39,465	32,744	82.97211	-	-	-	-	-	-	13	4.52	
TRENCH	ISM	-		-	-		-	-	-	-	633	286		47,663	28,700	60.21211	-	-	-	-	-	-	16	5.42	
UNLOAD & HANGLE	ISM	-		-	-		-	-	-	-	165	75		12,748	9,763	76.58211	-	-	-	-	-	-	4	1.42	
OTHER DIRECTS	ISM	-		-	-		-	-	-	-	532	240		85,283	31,105	36.47211	-	-	-	-	-	-	13	4.52	
WAREHOUSEMEN	ISM	-		-	-		-	-	-	-	444	201		22,114	18,517	83.87211	-	-	-	-	-	-	11	3.92	
QUALIFYING WELDERS	ISM	-		-	-		-	-	-	-	143	65		6,113	4,214	102.14211	-	-	-	-	-	-	4	1.22	
OTHER DISTRI.	ISM	-		-	-		-	-	-	-	24	11		5,872	3,723	63.40211	-	-	-	-	-	-	1	0.22	
TOTAL		-		-	-		-	-	11,016	1,928	11,812	5,338		789,573	472,762	59.86211	-	-	-	-	-	275	100%	295	100%
VARIANCE - PLAN vs. ACT.		-		-	-		-	-			(796)	(3,410)		-	-	-	-	-	-	-	-	-	(20)	-	
SVEC																									
CATEGORY	UOM	ESTIMATE	PERIOD TO COMPLETE	PERIOD PLANNED	PERIOD ACTUAL	X	PLANNED ST HRS	PLANNED OT HRS	ACTUAL ST HRS	ACTUAL OT HRS	ESTIMATED HRS	ACTUAL HRS	X	ESTIMATED PERIOD	TARGET PERIOD	PERIOD CUMULATIVE	PLANNED MC	PLANNED % MC	ACTUAL MC	ACTUAL % MC					
150 PIPE	ILF	72,961		1,708	1,140		56,431	77.34211	7,492	1,019	5,106	2,251		341,030	298,059	82.56211	4.918	5.000	6.456	5.282	187	13.42	128	6.22	
150 HANGERS	EA	13,959		305	319		8,152	58.40211	10,688	1,496	9,823	4,352		541,069	342,444	60.71211	40.409	40.000	44.436	42.007	267	19.22	246	11.92	
ICAT. 243 HRS - COMPLT	EA	8,965		216	68		7,822	87.25211	3,971	556	2,584	1,055		199,226	196,795	98.78211	22.223	-	53.515	25.159	99	7.12	65	3.12	
PAINTING	ISM	-		-	-		-	-	-	-	4,810	307		410,278	132,740	30.15211	-	-	-	-	-	-	120	5.82	
UNH/SUPPORT CRAFT	ISM	-		-	-		-	-	-	-	3,110	929		433,730	285,777	65.89211	-	-	-	-	-	-	78	2.92	
MISC. STEEL	ISM	-		-	-		-	-	-	-	3,164	431		119,036	101,754	85.48211	-	-	-	-	-	-	79	2.92	
MECHANICAL EQUIP.	ISM	-		-	-		-	-	-	-	1,736	518		128,628	138,869	107.97211	-	-	-	-	-	-	43	2.12	
TRENCH	ISM	-		-	-		-	-	-	-	7,555	2,317		117,241	193,651	165.15211	-	-	-	-	-	-	189	9.12	
PREVENTIVE MAINTENANCE	ISM	-		-	-		-	-	-	-	577	189		101,262	40,672	40.17211	-	-	-	-	-	-	14	0.72	
HYDROTEST	ISM	-		-	-		-	-	-	-	606	247		160,870	41,556	25.83211	-	-	-	-	-	-	15	0.72	
OTHER DIRECTS	ISM	-		-	-		-	-	-	-	1,921	574		196,679	84,741	43.09211	-	-	-	-	-	-	48	2.32	
SURVEYORS	ISM	-		-	-		-	-	-	-	2,770	1,077		219,520	178,840	81.48211	-	-	-	-	-	-	69	3.32	
WAREHOUSEMEN	ISM	-		-	-		-	-	-	-	2,136	348		149,835	122,052	81.46211	-	-	-	-	-	-	53	2.62	
UNALLOCATED LABOR	ISM	-		-	-		-	-	-	-	3,125	934		124,670	122,171	98.00211	-	-	-	-	-	-	78	3.82	
WELDERS	ISM	-		-	-		-	-	-	-	2,819	543		140,738	121,766	86.32211	-	-	-	-	-	-	71	3.42	
TEMPORARY POWER	ISM	-		-	-		-	-	-	-	1,535	337		100,942	16,191	16.04211	-	-	-	-	-	-	38	1.92	
SCAFFOLDING	ISM	-		-	-		-	-	-	-	7,945	2,529		263,359	46,663	25.31211	-	-	-	-	-	-	199	9.62	
GENERAL CLEAN-UP	ISM	-		-	-		-	-	-	-	7,718	1,470		338,015	92,226	27.28211	-	-	-	-	-	-	193	9.32	
OTHER DISTRI.	ISM	-		-	-		-	-	-	-	7,686	2,452		470,962	370,217	78.61211	-	-	-	-	-	-	192	9.32	
ADVISORY OPERATIONS	ISM	-		-	-		-	-	-	-	5,978	1,836		431,978	209,954	33.22211	-	-	-	-	-	-	149	7.22	
TOTAL		-		-	-		-	-	55,769	7,810	82,732	24,699		115,262,084	13,157,156	60.00211	-	-	-	-	-	1,395	100%	2,038	100%
VARIANCE - PLAN vs. ACT.		-		-	-		-	-			(26,963)	(116,889)		-	-	-	-	-	-	-	-	-	(670)	-	

LEGEND:

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

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/81 THROUGH 10/81. (BASED ON RE-EVALUATED 8/31/81 FORECAST)

PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/31/81 FORECAST.

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

CUMULATIVE: TOTAL TO DATE FROM 1/81.

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

WEEKLY MANHOURS:

PLANNED STRAIGHT TIME / OVERTIME HOURS: A ONE WEEK PERIOD BASED ON THE 8/31/81 FORECAST.

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

CUMULATIVE HOURS:

ESTIMATED HOURS: ESTIMATE TO COMPLETE FOR THE PERIOD 1/81 THROUGH 10/81. (BASED ON REEVALUATED 8/31/81 FORECAST)

ACTUAL HOURS: EXPENDED HOURS FROM 1/81 THROUGH PERIOD ENDING AS LISTED ABOVE.

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

UNIT RATES:

ESTIMATED UNIT RATE: "ESTIMATED MANHOURS" DIVIDED BY "ESTIMATED QUANTITIES" (BASED ON REEVALUATED 8/31/81 FORECAST)

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

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

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

PERIOD WORKFORCE: (EQUIVALENT)

PLANNED HEADCOUNT: BASED ON THE 8/31/81 FORECAST

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

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

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

CATEGORIES:

117 BRINWELL

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

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

LK CONSTOCK

SCHEDULED CABLE PULL: CABLE REPORTED IN CDS WHICH IS ENGINEERED IDENTIFIED CABLE IN THE ENGINEERS ECSS SYSTEM.

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

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

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

JACKSON CONTROLS

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

VARIANCE - PLANNED vs. ACTUAL

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

Circumstance	All respondents	Men	Women	Age 18-29
If someone is attacking you	85%	80%	85%	85%
If someone is threatening you	75%	70%	75%	75%
If someone is harassing you	65%	60%	65%	65%
If someone is insulting you	45%	40%	45%	45%
If someone is annoying you	15%	10%	15%	15%

JOHNSON CONTROLS		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE				
CATEGORY	UO	ESTIMATE	PERIOD	PERIOD	%	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	%	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL			
		TO COMPLETE	PLANNED	ACTUAL																	CUMULATIVE	INSTALLED	ST HRS
TOTAL TUBING	ILF	153,793	3,079	3,251		87,341	56,792	4,717	826	4,558	1,831		266,045	167,895	63.10%	1.730	2.500	1.965	1.922	118	42.8%	114	39.6%
SEISMIC SUPPORTS	EA	3,854	65	71		2,229	57,842	4,016	702	3,820	1,534		261,224	145,195	55.58%	67.780	40,000	75.408	65.139	100	36.5%	96	33.3%
INSTRUMENTS	EA	3,778	-	48		1,382	36,582	-	-	522	210		43,046	15,295	35.53%	11.394	-	15.250	11.067	-	-	13	4.6%
TUBE TRAY	MM	-	-	-		-	-	-	-	489	196		39,465	31,974	81.02%	-	-	-	-	-	-	12	4.3%
REWORK	MM	-	-	-		-	-	-	-	930	374		47,663	27,781	58.29%	-	-	-	-	-	-	23	8.1%
UNLOAD & HANDLE	MM	-	-	-		-	-	-	-	183	73		12,748	9,523	74.70%	-	-	-	-	-	-	5	1.6%
OTHER DIRECTS	MM	-	-	-		-	-	-	-	273	110		85,283	30,333	35.57%	-	-	-	-	-	-	7	2.4%
WAREHOUSEMEN	MM	-	-	-		-	-	-	-	415	179		22,114	17,902	80.95%	-	-	-	-	-	-	11	3.9%
QUALIFYING WELDERS	MM	-	-	-		-	-	-	-	213	86		6,113	6,036	98.74%	-	-	-	-	-	-	5	1.9%
OTHER DISTRIB.	MM	-	-	-		-	-	-	-	32	13		5,872	3,688	62.81%	-	-	-	-	-	-	1	0.3%
TOTAL		-	-	-		-	-	-	-	11,016	1,928		11,465	4,606		-	-	-	-	275	100%	297	100%
VARIANCE - PLAN vs. ACT.		-	-	-		-	-	-	-	(449)	(2,678)		-	-		-	-	-	-	-	-	(11)	-
SVEC		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE				
CATEGORY	UO	ESTIMATE	PERIOD	PERIOD	%	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	%	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL			
		TO COMPLETE	PLANNED	ACTUAL																	CUMULATIVE	INSTALLED	ST HRS
ISB PIPE	ILF	72,961	1,708	1,030		55,291	75,782	7,492	1,049	5,307	2,611		361,030	290,699	80.52%	4.948	5.600	7.687	5.258	187	13.4%	133	6.7%
ISB HANGERS	EA	13,959	305	225		7,833	56,112	10,688	1,496	7,958	3,858		561,069	328,269	58.20%	40.409	40,000	52.516	41.908	267	19.2%	199	10.0%
ICAT. 263 HRS - COMPLT	EA	8,965	216	68		7,754	86,492	3,971	556	1,986	935		199,226	193,156	96.95%	22.223	-	42.956	24.910	99	7.1%	50	2.5%
PAINTING	MM	-	-	-		-	-	-	-	3,510	72		410,278	127,623	28.99%	-	-	-	-	-	-	89	4.5%
UUM/SUPPORT CRAFT	MM	-	-	-		-	-	-	-	2,877	908		433,730	281,738	64.96%	-	-	-	-	-	-	72	3.6%
INTSC. STEEL	MM	-	-	-		-	-	-	-	2,680	400		119,036	98,159	82.46%	-	-	-	-	-	-	67	3.4%
MECHANICAL EQUIP.	MM	-	-	-		-	-	-	-	831	318		128,624	136,617	106.21%	-	-	-	-	-	-	21	1.0%
REWORK	MM	-	-	-		-	-	-	-	9,116	2,784		117,261	183,779	156.73%	-	-	-	-	-	-	228	11.5%
PREVENTIVE MAINTENANCE	MM	-	-	-		-	-	-	-	622	271		101,262	39,906	39.41%	-	-	-	-	-	-	16	0.8%
HYDROTEST	MM	-	-	-		-	-	-	-	590	278		160,870	40,701	25.30%	-	-	-	-	-	-	15	0.7%
OTHER DIRECTS	MM	-	-	-		-	-	-	-	2,560	808		196,679	82,246	41.82%	-	-	-	-	-	-	64	3.2%
SURVEYORS	MM	-	-	-		-	-	-	-	2,797	1,034		219,520	175,013	79.73%	-	-	-	-	-	-	70	3.5%
WAREHOUSEMEN	MM	-	-	-		-	-	-	-	1,969	523		149,835	119,568	79.80%	-	-	-	-	-	-	49	2.5%
UNALLOCATED LABOR	MM	-	-	-		-	-	-	-	2,994	945		124,670	118,112	94.74%	-	-	-	-	-	-	75	3.8%
JANITORS	MM	-	-	-		-	-	-	-	2,146	349		140,738	118,374	84.11%	-	-	-	-	-	-	54	2.7%
TEMPORARY POWER	MM	-	-	-		-	-	-	-	1,393	370		100,942	14,319	14.19%	-	-	-	-	-	-	35	1.8%
SCAFFOLDING	MM	-	-	-		-	-	-	-	7,465	2,459		263,359	56,189	21.34%	-	-	-	-	-	-	187	9.4%
GENERAL CLEAN-UP	MM	-	-	-		-	-	-	-	7,755	1,262		338,015	83,038	24.57%	-	-	-	-	-	-	194	9.8%
OTHER DISTRIB.	MM	-	-	-		-	-	-	-	9,244	3,028		470,962	360,079	76.46%	-	-	-	-	-	-	231	11.7%
ADVISORY OPERATIONS	MM	-	-	-		-	-	-	-	5,471	2,079		631,978	202,140	31.99%	-	-	-	-	-	-	137	6.9%
TOTAL		-	-	-		-	-	-	-	55,789	7,810		79,301	25,284		-	-	-	-	1,395	100%	1,963	100%
VARIANCE - PLAN vs. ACT.		-	-	-		-	-	-	-	(23,512)	(17,474)		-	-		-	-	-	-	-	-	(589)	-

LEGEND:

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

QUANTITIES:

ESTIMATE TO COMPLETE: THE PERIOD 1/84 THROUGH 10/86. (BASED ON RE-EVALUATED 8/31/84 FORECAST)
 PERIOD PLANNED: A ONE WEEK PERIOD BASED ON THE 8/31/84 FORECAST.
 PERIOD ACTUAL: THE ACTUAL DATA FOR THE ONE WEEK PERIOD LISTED ABOVE.
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WEEKLY MANHOURS:

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

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 ACTUAL HOURS: EXPENDED HOURS FROM 1/84 THROUGH PERIOD ENDING AS LISTED ABOVE.
 PERCENT EXPENDED: "ACTUAL HOURS" DIVIDED BY "ESTIMATED HOURS".

UNIT RATES:

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

PERIOD WORKFORCE: (EQUIVALENT)

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

CATEGORIES:

ITT BRINKELL

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

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

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

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

JOHNSON CONTROLS

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

VARIANCE - PLANNED vs. ACTUAL

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

ITT GRINNELL		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
		ESTIMATE	PERIOD	PERIOD		Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
CATEGORY	UNIT	TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	Z HC	HC	Z HC	
1SB PIPE	1LF	35,358	-	277	24,619	69,632	-	-	1,202	390	212,042	148,468	70,022	5,997	3,290	5,747	6,031	-	-	30	3.32	
1SB HANGERS	1EA	7,258	94	45	4,913	67,692	4,335	650	2,211	718	391,141	258,784	66,162	53,891	46,600	65,089	52,673	108	12.72	55	6.02	
1LB PIPE	1LF	29,813	-	12	25,293	84,842	-	-	4,941	1,605	229,918	265,577	115,512	7,712	6,250	545,500	10,500	-	-	124	13.42	
1LB HANGERS	1EA	5,983	99	35	4,009	67,012	14,069	2,111	17,049	5,539	11,076,497	883,390	82,062	179,926	163,460	645,371	220,352	352	41.22	426	46.22	
1 CAT.1 COMPLETED (4-52)	1EA	-	-	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1LB WELDS	1EA	7,161	69	47	6,323	88,302	1,497	225	2,605	846	185,162	171,404	92,572	25,857	-	73,426	27,108	37	4.42	65	7.12	
1REWORK	1MH	-	-	-	-	-	-	-	2,819	916	310,084	262,931	84,792	-	-	-	-	-	-	70	6.22	
1PIPE WHIP RESTRAINTS	1MH	-	-	-	-	-	-	-	41	13	222,448	147,160	66,152	-	-	-	-	-	-	1	7.12	
1OTHER DIRECTS	1MH	-	-	-	-	-	-	-	2,682	872	223,409	212,918	95,302	-	-	-	-	-	-	67	7.32	
1WAREHOUSEMEN	1MH	-	-	-	-	-	-	-	1,153	375	96,909	82,016	84,632	-	-	-	-	-	-	29	3.12	
1QUALIFYING WELDERS	1MH	-	-	-	-	-	-	-	405	131	17,483	19,155	109,562	-	-	-	-	-	-	10	1.12	
1CLEAN UNSAT. MATL.	1MH	-	-	-	-	-	-	-	7	2	23,625	19,723	83,482	-	-	-	-	-	-	0	.02	
1OTHER DISTRIB.	1MH	-	-	-	-	-	-	-	1,756	573	137,222	127,315	92,782	-	-	-	-	-	-	44	4.82	
TOTAL		-	-	-	-	-	34,164	5,126	36,871	11,980	113,125,940	12,598,841	83,142	-	-	-	-	854	1002	922	1002	
VARIANCE - PLAN vs. ACT.		-	-	-	-	-	-	-	12,707	6,854	-	-	-	-	-	-	-	-	-	169	-	
LK CONSTOCK		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
		ESTIMATE	PERIOD	PERIOD		Z	PLANNED	PLANNED	ACTUAL	ACTUAL	ESTIMATED	ACTUAL	Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL	
CATEGORY	UNIT	TO COMPLETE	PLANNED	ACTUAL	CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS	EXPENDED	UNIT RATE	UNIT RATE	UNIT RATE	UNIT RATE	HC	Z HC	HC	Z HC	
1SCHEDULED CABLE PULL	1LF	4,528,169	49,043	46,313	2,927,929	64,652	4,968	770	4,693	1,732	532,121	348,747	65,542	0.118	0.103	0.139	0.119	124	24.52	117	17.62	
1STUFF-IN	1MH	-	-	163	-	-	-	-	919	339	-	-	-	-	-	-	-	-	-	-	-	
1UNSCHEDULED CABLE PULL	1LF	1,519,183	31,453	7,875	425,943	28,042	2,042	317	797	294	112,362	21,251	18,912	0.074	-	0.139	0.050	51	10.12	20	3.02	
1CABLE TERMINATIONS -ALL	1EA	246,247	5,392	2,433	123,538	50,172	4,202	651	1,740	643	237,427	125,549	52,892	0.964	1.034	0.979	1.016	105	20.72	44	6.52	
1CONDUIT	1LF	339,808	4,494	6,172	297,006	87,402	4,253	659	5,866	2,166	372,567	315,449	84,672	1.096	1.072	1.301	1.062	106	21.02	147	21.92	
1CONDUIT SUPPORTS	1EA	20,289	225	441	19,331	95,282	3,308	513	6,034	2,228	348,524	317,509	91,102	17.178	16,500	18,735	16,425	83	16.32	151	22.62	
1FIRE DETECTION	1MH	-	-	-	-	-	-	-	608	225	105,164	64,056	60,912	-	-	-	-	-	-	15	2.32	
1PCCC MODIFICATIONS	1MH	-	-	-	-	-	-	-	1,687	623	167,466	83,280	49,732	-	-	-	-	-	-	42	6.32	
1REWORK	1MH	-	-	-	-	-	-	-	1,576	582	203,227	118,733	58,422	-	-	-	-	-	-	39	5.92	
1UNLOAD & HANDLE	1MH	-	-	-	-	-	-	-	518	191	60,707	52,291	64,792	-	-	-	-	-	-	13	1.92	
134SKV YARD WORK	1MH	-	-	-	-	-	-	-	223	83	18,242	13,597	74,542	-	-	-	-	-	-	6	0.82	
1OTHER DIRECTS	1MH	-	-	-	-	-	-	-	1,740	642	294,296	247,755	84,192	-	-	-	-	-	-	44	6.52	
1WAREHOUSEMEN	1MH	-	-	-	-	-	-	-	491	177	45,977	39,615	66,162	-	-	-	-	-	-	12	1.62	
1QUALIFYING WELDERS	1MH	-	-	-	-	-	-	-	519	192	32,840	33,485	101,962	-	-	-	-	-	-	13	1.92	
1OTHER DISTRIB.	1MH	-	-	-	-	-	-	-	252	93	25,713	16,357	63,612	-	-	-	-	-	-	6	0.92	
TOTAL		-	-	-	-	-	20,253	3,139	26,734	9,871	12,576,633	11,797,674	69,772	-	-	-	-	506	1002	669	1002	
VARIANCE - PLAN vs. ACT.		-	-	-	-	-	-	-	6,461	6,732	-	-	-	-	-	-	-	-	-	1162	-	

[illegible]

LEGEND:

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

QUANTITIES:

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

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

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

CUMULATIVE: TOTAL TO DATE FROM 1/84.

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

WEEKLY MANHOURS:

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

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

CUMULATIVE HOURS:

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

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

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

UNIT RATES:

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

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

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

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

PERIOD WORKFORCE: (EQUIVALENT)

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

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

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

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

CATEGORIES:

ITT GRINNELL

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

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

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

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

JOHNSON CONTROLS

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

VARIANCE - PLANNED vs. ACTUAL

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

JOHNSON CONTROLS		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	BOOK TO COMPLETE	PERIOD PLANNED	PERIOD ACTUAL	CUMULATIVE	% INSTALLED	PLANNED ST HRS	PLANNED OT HRS	ACTUAL ST HRS	ACTUAL OT HRS	ESTIMATED HRS	ACTUAL HRS	% EXPENDED	UNIT RATE	TARGET PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL			
TOTAL TUBING	ILF	152,805	2,567	1,319	81,090	53,071	3,932	488	2,263	295	264,343	155,498	58.821	1.730	2,500	1,939	1,918	123	42.81	71	35.92	
SEISMIC SUPPORTS	IEA	3,853	54	43	2,083	54,061	3,343	588	2,297	299	261,157	134,753	51.601	47.780	40,000	40,372	44,692	104	34.42	72	34.41	
INSTRUMENTS	IEA	3,778	-	30	1,304	34,521	-	-	304	40	43,046	13,745	31.981	11.394	-	11,467	10,556	-	-	10	4.81	
TUBE TRAY	IMH	-	-	-	-	-	-	-	149	19	39,465	30,523	77.341	-	-	-	-	-	5	2.42		
REWORK	IMH	-	-	-	-	-	-	-	443	84	47,663	24,762	51.951	-	-	-	-	-	20	10.22		
UNLOAD & HANDLE	IMH	-	-	-	-	-	-	-	58	7	12,748	9,029	70.831	-	-	-	-	-	2	0.92		
OTHER DIRECTS	IMH	-	-	-	-	-	-	-	161	21	85,283	29,604	34.721	-	-	-	-	-	5	2.61		
WAREHOUSEMEN	IMH	-	-	-	-	-	-	-	219	28	22,114	16,680	75.431	-	-	-	-	-	7	-		
QUALIFYING WELDERS	IMH	-	-	-	-	-	-	-	179	23	4,113	5,401	88.351	-	-	-	-	-	6	2.41		
OTHER DISTRIB.	IMH	-	-	-	-	-	-	-	34	5	5,872	4,072	69.351	-	-	-	-	-	1	0.51		
TOTAL		-	-	-	-	-	9,178	1,608	6,307	821	787,804	424,089	53.831	-	-	-	-	287	100.1	197	100.1	
VARIANCE - PLAN vs. ACT.		-	-	-	-	-	-	-	2,871	787	-	-	-	-	-	-	-	-	90	-	-	

SNEC		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	BOOK TO COMPLETE	PERIOD PLANNED	PERIOD ACTUAL	CUMULATIVE	% INSTALLED	PLANNED ST HRS	PLANNED OT HRS	ACTUAL ST HRS	ACTUAL OT HRS	ESTIMATED HRS	ACTUAL HRS	% EXPENDED	UNIT RATE	TARGET PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL			
ISB PIPE	ILF	72,960	777	1,074	53,655	73,541	3,406	477	2,829	371	361,030	274,720	76.091	4.918	5,000	2,980	5,120	106	13.42	88	6.32	
ISB HANGERS	IEA	13,463	138	196	7,612	56,511	4,858	481	4,085	456	544,024	304,802	56.031	40.409	40,000	23,168	40,042	152	19.22	128	9.12	
CAT. 243 HRS - COMPLN	IEA	8,965	98	50	7,634	85,151	1,804	253	1,405	165	199,226	187,435	94.081	22.223	-	31,460	24,553	56	7.12	44	3.12	
PAINTING	IMH	-	-	-	-	-	-	-	1,654	26	440,278	115,963	26.341	-	-	-	-	-	53	3.81		
UHM/SUPPORT CRAFT	IMH	-	-	-	-	-	-	-	2,457	285	433,730	278,974	64.321	-	-	-	-	-	77	5.52		
MISC. STEEL	IMH	-	-	-	-	-	-	-	1,457	110	119,036	93,577	78.611	-	-	-	-	-	46	-		
MECHANICAL EQUIP.	IMH	-	-	-	-	-	-	-	380	53	128,624	135,874	105.641	-	-	-	-	-	12	0.61		
REWORK	IMH	-	-	-	-	-	-	-	3,282	360	117,261	157,379	134.211	-	-	-	-	-	103	7.31		
PREVENTIVE MAINTENANCE	IMH	-	-	-	-	-	-	-	382	54	101,262	37,944	37.471	-	-	-	-	-	12	0.91		
HYDROTEST	IMH	-	-	-	-	-	-	-	297	31	160,670	38,998	24.241	-	-	-	-	-	9	0.72		
OTHER DIRECTS	IMH	-	-	-	-	-	-	-	2,115	245	196,679	77,558	39.431	-	-	-	-	-	46	4.72		
SURVEYORS	IMH	-	-	-	-	-	-	-	2,339	266	219,520	167,430	76.271	-	-	-	-	-	73	5.21		
WAREHOUSEMEN	IMH	-	-	-	-	-	-	-	1,342	154	149,835	114,833	76.641	-	-	-	-	-	42	3.81		
UNALLOCATED LABOR	IMH	-	-	-	-	-	-	-	2,162	251	124,670	110,307	88.481	-	-	-	-	-	68	4.81		
JEANITORS	IMH	-	-	-	-	-	-	-	1,619	80	140,738	112,832	80.171	-	-	-	-	-	51	3.62		
TEMPORARY POWER	IMH	-	-	-	-	-	-	-	601	92	100,942	11,163	11.061	-	-	-	-	-	19	1.31		
SCAFFOLDING	IMH	-	-	-	-	-	-	-	4,061	471	263,359	35,964	13.661	-	-	-	-	-	127	9.12		
GENERAL CLEAN-UP	IMH	-	-	-	-	-	-	-	4,049	200	338,015	45,725	19.441	-	-	-	-	-	127	9.62		
OTHER DISTRIB.	IMH	-	-	-	-	-	-	-	5,286	614	470,962	339,488	72.081	-	-	-	-	-	145	11.81		
ADVISORY OPERATIONS	IMH	-	-	-	-	-	-	-	2,934	861	431,978	184,832	29.541	-	-	-	-	-	92	6.62		
TOTAL		-	-	-	-	-	25,363	3,551	44,766	5,168	115,242,039	12,817,798	54.331	-	-	-	-	793	100.1	1,399	100.1	
VARIANCE - PLAN vs. ACT.		-	-	-	-	-	-	-	(17,403)	(1,617)	-	-	-	-	-	-	-	-	(661)	-	-	

LEGEND:

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

QUANTITIES:

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

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

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

CUMULATIVE: TOTAL TO DATE FROM 1/84.

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

WEEKLY MANHOURS:

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

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

CUMULATIVE HOURS:

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

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

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

UNIT RATES:

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

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

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

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

PERIOD WORKFORCE: (EQUIVALENT)

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

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

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

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

CATEGORIES:

ITT GRINWELL

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

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

LK CONSTOCK

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

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

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

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

JOHNSON CONTROLS

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

VARIANCE - PLANNED vs. ACTUAL

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

[illegible]

JOHNSON CONTROLS		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	UNIT TO COMPLETE	PERIOD PLANNED	PERIOD ACTUAL	CUMULATIVE	INSTALLED	Z	PLANNED ST HRS	PLANNED OT HRS	ACTUAL ST HRS	ACTUAL OT HRS	ESTIMATED HRS	ACTUAL HRS	Z	ESTIMATED UNIT RATE	TARGET UNIT RATE	PERIOD UNIT RATE	CUMULATIVE UNIT RATE	PLANNED HC	Z HC	PLANNED HC	ACTUAL HC	Z HC
TOTAL TUBING	ILF	152,805	2,904	3,022	79,771	52,201	4,449	778	4,088	1,328	264,343	152,940	57,862	1.730	2.500	1.792	1.917	111	40.4%	102	37.6%	
SEISMIC SUPPORTS	IEA	3,853	62	40	2,040	52,951	3,857	675	3,635	1,181	261,157	132,157	50,602	67.780	40.000	120.400	64.783	96	35.0%	91	33.4%	
INSTRUMENTS	IEA	3,778	-	36	1,274	33,722	-	-	400	131	43,046	13,421	31,182	11.394	-	14.750	10.535	-	-	10	3.7%	
TUBE TRAY	IMH	-	-	-	-	-	-	-	481	156	39,465	30,355	76,922	-	-	-	-	-	-	12	4.4%	
IREWORK	IMH	-	-	-	-	-	-	-	1,215	395	47,663	24,035	50,432	-	-	-	-	-	-	30	11.2%	
UNLOAD & HANDLE	IMH	-	-	-	-	-	-	-	173	56	12,748	8,964	70,322	-	-	-	-	-	-	4	1.6%	
OTHER DIRECTS	IMH	-	-	-	-	-	-	-	293	95	85,283	29,424	34,592	-	-	-	-	-	-	7	2.7%	
WAREHOUSEMEN	IMH	-	-	-	-	-	-	-	382	124	22,114	16,433	74,312	-	-	-	-	-	-	10	3.5%	
QUALIFYING WELDERS	IMH	-	-	-	-	-	-	-	183	60	6,113	5,199	85,052	-	-	-	-	-	-	5	1.7%	
OTHER DISTRIB.	IMH	-	-	-	-	-	-	-	31	10	5,872	4,033	68,682	-	-	-	-	-	-	1	0.4%	
TOTAL		-	-	-	-	-	11,016	1,928	10,881	3,536	787,804	416,961	52,932	-	-	-	-	275	100%	272	100%	
VARIANCE - PLAN vs. ACT.		-	-	-	-	-	-	-	135	(1,608)	-	-	-	-	-	-	-	-	-	3	-	

SWEC		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE			
CATEGORY	UNIT TO COMPLETE	PERIOD PLANNED	PERIOD ACTUAL	CUMULATIVE	INSTALLED	Z	PLANNED ST HRS	PLANNED OT HRS	ACTUAL ST HRS	ACTUAL OT HRS	ESTIMATED HRS	ACTUAL HRS	Z	ESTIMATED UNIT RATE	TARGET UNIT RATE	PERIOD UNIT RATE	CUMULATIVE UNIT RATE	PLANNED HC	Z HC	PLANNED HC	ACTUAL HC	Z HC
ISB PIPE	ILF	72,960	1,156	696	52,581	72,072	5,049	710	4,395	1,418	361,030	271,520	75,212	4.948	5.000	8.352	5.164	127	10.0%	110	6.0%	
ISB HANGERS	IEA	13,463	247	255	7,416	55,081	8,667	1,213	7,500	2,420	544,024	300,261	55,192	40.409	40.000	38.902	40.488	217	17.1%	188	10.2%	
ICAT. 243 HRS - COMPLTN	IEA	8,965	180	104	7,584	81,602	3,304	463	1,967	634	199,226	185,862	93,292	22.223	-	25.010	24.507	83	6.5%	49	2.7%	
PAINTING	IMH	-	-	-	-	-	-	-	3,740	70	440,278	114,253	25,952	-	-	-	-	-	-	94	5.1%	
ISH/SUPPORT CRAFT	IMH	-	-	-	-	-	-	-	3,157	681	433,730	276,232	63,692	-	-	-	-	-	-	79	4.3%	
INISC. STEEL	IMH	-	-	-	-	-	-	-	2,352	183	119,036	92,010	77,302	-	-	-	-	-	-	59	3.2%	
MECHANICAL EQUIP.	IMH	-	-	-	-	-	-	-	1,213	384	128,624	135,441	105,302	-	-	-	-	-	-	30	1.6%	
IREWORK	IMH	-	-	-	-	-	-	-	7,303	2,244	117,261	153,717	131,092	-	-	-	-	-	-	183	9.5%	
IPREVENTIVE MAINTENANCE	IMH	-	-	-	-	-	-	-	577	177	101,262	37,508	37,042	-	-	-	-	-	-	14	0.7%	
HYDROTEST	IMH	-	-	-	-	-	-	-	496	160	160,870	38,670	24,042	-	-	-	-	-	-	12	0.7%	
OTHER DIRECTS	IMH	-	-	-	-	-	-	-	1,836	395	196,679	75,198	38,232	-	-	-	-	-	-	46	2.5%	
SURVEYORS	IMH	-	-	-	-	-	-	-	2,924	687	219,520	164,825	75,082	-	-	-	-	-	-	73	4.0%	
WAREHOUSEMEN	IMH	-	-	-	-	-	-	-	1,787	174	149,835	113,337	75,642	-	-	-	-	-	-	45	2.4%	
UNALLOCATED LABOR	IMH	-	-	-	-	-	-	-	3,135	675	124,670	107,894	86,542	-	-	-	-	-	-	78	4.2%	
TRANSMITORS	IMH	-	-	-	-	-	-	-	2,509	219	140,738	111,133	78,982	-	-	-	-	-	-	63	3.4%	
TEMPORARY POWER	IMH	-	-	-	-	-	-	-	1,014	272	100,942	10,470	10,372	-	-	-	-	-	-	25	1.4%	
SCAFFOLDING	IMH	-	-	-	-	-	-	-	8,160	1,760	263,359	31,432	11,942	-	-	-	-	-	-	204	11.2%	
GENERAL CLEAN-UP	IMH	-	-	-	-	-	-	-	6,850	652	338,015	61,476	18,192	-	-	-	-	-	-	171	9.3%	
OTHER DISTRIB.	IMH	-	-	-	-	-	-	-	6,921	2,319	470,962	333,588	70,832	-	-	-	-	-	-	173	9.4%	
ADVISORY OPERATIONS	IMH	-	-	-	-	-	-	-	6,003	1,866	631,978	183,037	28,962	-	-	-	-	-	-	150	8.1%	
TOTAL		-	-	-	-	-	50,784	7,109	73,839	17,590	115,242,039	12,797,864	53,372	-	-	-	-	1,270	100%	1,846	100%	
VARIANCE - PLAN vs. ACT.		-	-	-	-	-	-	-	(23,055)	(10,481)	-	-	-	-	-	-	-	-	-	(576)	-	

LEGEND:

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

QUANTITIES:

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

WEEKLY MANHOURS:

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

CUMULATIVE HOURS:

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

UNIT RATES:

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

PERIOD WORKFORCE: (EQUIVALENT)

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

CATEGORIES:

ITT GRIMMELL

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

LK CONSTOCK

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

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

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

JOHNSON CONTROLS

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

VARIANCE - PLANNED vs. ACTUAL

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

JOHNSON CONTROLS		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE				
CATEGORY	UOM	ESTIMATE	PERIOD	PERIOD	Z	PLANNED	PLANNED		ACTUAL		ESTIMATED		ACTUAL		Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL
		TO COMPLETE	PLANNED	ACTUAL			CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS									
TOTAL TUBING	ILF	152,805	2,904	2,685	76,749	50.2311	4,449	778	4,294	824	264,343	147,524	55.8121	1,730	2,500	1,906	1,922	111	40.42	113	43.21		
SEISMIC SUPPORTS	EA	3,853	62	39	2,000	51.9121	3,857	675	2,712	521	261,157	127,341	48.7621	67,780	40,000	82,897	63,671	96	35.02	71	27.31		
INSTRUMENTS	EA	3,778	-	37	1,238	32.7721	-	-	333	64	43,046	12,890	29.9421	11,394	-	10,730	10,412	-	-	9	3.41		
TUBE TRAY	INH	-	-	-	-	-	-	-	654	126	39,465	29,718	75.3021	-	-	-	-	-	-	17	6.62		
REWORK	INH	-	-	-	-	-	-	-	669	129	47,663	22,425	47.0521	-	-	-	-	-	-	18	6.72		
UNLOAD & HANDLE	INH	-	-	-	-	-	-	-	225	43	12,748	8,735	68.5221	-	-	-	-	-	-	6	2.31		
OTHER DIRECTS	INH	-	-	-	-	-	-	-	555	107	85,283	29,036	34.0521	-	-	-	-	-	-	15	5.62		
WAREHOUSEMEN	INH	-	-	-	-	-	-	-	388	75	22,114	15,927	72.0221	-	-	-	-	-	-	10	3.92		
QUALIFYING WELDERS	INH	-	-	-	-	-	-	-	70	13	6,113	4,956	81.0721	-	-	-	-	-	-	2	0.72		
OTHER DISTRIB.	INH	-	-	-	-	-	-	-	30	6	5,872	3,992	67.9821	-	-	-	-	-	-	1	0.32		
TOTAL		-	-	-	-	-	11,016	1,928	9,930	1,908	787,804	402,544	51.1021	-	-	-	-	275	1002	261	1002		
VARIANCE - PLAN vs. ACT.		-	-	-	-	-	-	-	1,086	20	-	-	-	-	-	-	-	-	-	14	-		
SWEC		QUANTITIES					WEEKLY MANHOURS				CUMULATIVE HOURS				UNIT RATES				PERIOD WORKFORCE				
CATEGORY	UOM	ESTIMATE	PERIOD	PERIOD	Z	PLANNED	PLANNED		ACTUAL		ESTIMATED		ACTUAL		Z	ESTIMATED	TARGET	PERIOD	CUMULATIVE	PLANNED	PLANNED	ACTUAL	ACTUAL
		TO COMPLETE	PLANNED	ACTUAL			CUMULATIVE	INSTALLED	ST HRS	OT HRS	ST HRS	OT HRS	HRS	HRS									
ISB PIPE	ILF	72,960	1,156	945	51,685	71.1121	5,069	710	4,180	1,104	361,030	265,707	73.6021	4,948	5,000	5,592	5,121	127	10.02	106	5.62		
ISB HANGERS	EA	13,463	247	231	7,161	53.1921	8,667	1,213	6,284	1,661	544,024	290,341	53.3721	40,409	40,000	34,394	40,545	217	17.12	159	8.42		
CAT. 2&3 HGERS - COMPLT	EA	8,965	180	109	7,480	83.4421	3,304	463	2,959	782	199,226	183,261	91.9921	22,223	-	34,321	24,500	83	6.52	75	4.02		
PAINTING	INH	-	-	-	-	-	-	-	3,786	85	440,278	110,443	25.0821	-	-	-	-	-	-	96	5.12		
UWH/SUPPORT CRAFT	INH	-	-	-	-	-	-	-	3,872	716	433,730	272,394	62.8021	-	-	-	-	-	-	98	5.22		
MISC. STEEL	INH	-	-	-	-	-	-	-	1,983	177	119,036	89,475	75.1721	-	-	-	-	-	-	50	7.72		
MECHANICAL EQUIP.	INH	-	-	-	-	-	-	-	1,477	320	128,624	133,844	104.0621	-	-	-	-	-	-	37	6.72		
REWORK	INH	-	-	-	-	-	-	-	7,071	1,309	117,261	144,170	122.9521	-	-	-	-	-	-	179	9.52		
PREVENTIVE MAINTENANCE	INH	-	-	-	-	-	-	-	618	162	101,262	36,754	36.3021	-	-	-	-	-	-	16	0.82		
HYDROTEST	INH	-	-	-	-	-	-	-	671	177	160,870	38,014	23.6321	-	-	-	-	-	-	17	0.92		
OTHER DIRECTS	INH	-	-	-	-	-	-	-	2,686	714	196,679	72,967	37.1021	-	-	-	-	-	-	68	3.62		
SURVEYORS	INH	-	-	-	-	-	-	-	2,824	587	219,520	161,014	73.3521	-	-	-	-	-	-	71	3.82		
WAREHOUSEMEN	INH	-	-	-	-	-	-	-	1,763	216	149,835	111,376	74.3321	-	-	-	-	-	-	45	2.42		
UNALLOCATED LABOR	INH	-	-	-	-	-	-	-	3,161	584	124,670	104,084	83.4921	-	-	-	-	-	-	80	4.22		
JANITORS	INH	-	-	-	-	-	-	-	2,318	193	140,738	108,405	77.0321	-	-	-	-	-	-	59	3.12		
TEMPORARY POWER	INH	-	-	-	-	-	-	-	1,029	280	100,942	9,184	9.1021	-	-	-	-	-	-	26	1.42		
SCAFFOLDING	INH	-	-	-	-	-	-	-	7,959	1,471	263,359	21,512	8.1721	-	-	-	-	-	-	201	10.72		
GENERAL CLEAN-UP	INH	-	-	-	-	-	-	-	6,954	580	338,015	53,974	15.9721	-	-	-	-	-	-	176	9.32		
OTHER DISTRIB.	INH	-	-	-	-	-	-	-	7,247	1,340	470,962	324,348	68.8721	-	-	-	-	-	-	183	9.72		
ADVISORY OPERATIONS	INH	-	-	-	-	-	-	-	5,796	1,554	631,978	175,168	27.7221	-	-	-	-	-	-	147	7.82		
TOTAL		-	-	-	-	-	50,784	7,109	74,638	14,012	1,524,039	1,270,435	51.6321	-	-	-	-	1,270	1002	1,890	1002		
VARIANCE - PLAN vs. ACT.		-	-	-	-	-	-	-	(23,854)	(6,903)	-	-	-	-	-	-	-	-	-	-	(620)	-	

LEGEND:

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

QUANTITIES:

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

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

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

CUMULATIVE: TOTAL TO DATE FROM 1/84.

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

WEEKLY MANHOURS:

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

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

CUMULATIVE HOURS:

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

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

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

UNIT RATES:

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

TARGET UNIT RATE: UNIT RATE IMPROVEMENT PLAN

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

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

PERIOD WORKFORCE: (EQUIVALENT)

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

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

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

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

CATEGORIES:

ITT GRINNELL

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

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LK CONSTOCK

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

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

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JOHNSON CONTROLS

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

VARIANCE - PLANNED vs. ACTUAL

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



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VARIANCE - PLANNED vs. ACTUAL

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

107
1
102

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107
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102

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107

OCTOBER 1984
PROJECT REPORT

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I. EXECUTIVE SUMMARY

A. Project Director

This is the first monthly Project Report since the appointment of the new NMPC Project Director, Dean L. Quamme. With this appointment, a rapid transition will take place on the Project with emphasis shifting from bulk construction to that work required to support the Start-up and Test schedule. This will be accompanied by establishment of a clear definition of the scope of each system or testable sub-system. A walk-down process will be utilized to establish system status which will allow the development of definitive short-term schedules which are necessary to control a Project at this stage of completion.

In addition to the above, continued emphasis will be placed on development of area/system schedules, which will integrate the non-system related to-go work with that work necessary to support the near-term test schedules, allowing the earliest completion of the total Project.

The Project percent complete table and curve has been revised to correspond to the official Project fuel load date of February 1986. The new earning rules described in last month's report have been utilized in this month's progress calculation and will not change under the new Project Director. The philosophy of only taking credit for completed work in the milestone and start-up progress calculation is sound and is totally supported by this office.

The Project this period earned 1.0 percent progress against the scheduled 1.3 percent reflected in our new planning profile, and is at a cumulative 82.0% complete under our method of calculating progress. To illustrate the conservatism inherent in our new earning rules for progress measurement it will be noted that no credit has been taken for this period for "Start-up and Test Commodities." It can be seen in Section VIII of this report that a substantial number of "B releases" were taken and a substantial amount of prerequisite testing accomplished with no credit taken in the period progress calculation.

The Project is essentially on schedule for the February 1986 fuel load; however, certain discrete areas are behind the plan as described elsewhere in this report. In each case where a critical area is behind schedule, a management plan is either in place or being developed to recover or to mitigate the consequence of that situation.

The INPO evaluation team has completed three weeks of site studies and interviews and has returned to Atlanta to prepare for the exit meeting with the Project on November 6, 1984. The Project has been briefed by the INPO team members on several areas of concern and has begun to evaluate the interim results and prepare corrective action plans where deemed necessary.

The Project is preparing for the NRC Caseload Forecast panel visit scheduled for October 30-31. The results of this visit will be reported to management as soon as they are known.

MAJOR PROBLEMS

1. "Our ability to control work within schedule requires improvement." A Master Tracking System (MTS) or Punchlist is to be developed 13 weeks prior to release of a system or BIP for test from information in the engineering/planning file and a system walkdown. This document (MFS) is used to scope the work remaining and is provided on the Thirteen Week Look Ahead Schedule. Four weeks prior to release for test, a system walkdown is conducted and any refinements to the MTS will be made. The implementation of this system will enhance our ability to scope, status, and consequently control the work.
2. Cable backlog required to support planned cable pulling rates needs to be improved." The cable backlog is 113,000 ft. as of October 25. The "Tiger Team" has been able to identify and resolve constraints to raceway completion which is the key to cable pulling. This area will continue to receive close Management attention.
3. "ITTG has not been able to meet the recovery plan for Large Bore Category I Pipe Supports." A Hanger Action Committee has been established under the direction of the SWEC Project Director. The following specific actions have been taken to increase the hanger production:
 - a) ITTG Engineering Organization has been augmented by SWEC Engineering.
 - b) Daily N&D sign-out sessions are held by SWEC and ITTG.
 - c) Constructability reviews are held prior to hanger installation.
 - d) Plan of the day meetings are held to resolve hardspots.
4. "As-built Program has fallen behind schedule." As discussed in Section IV, Engineering, the receipt of as-built packages from Construction continues to fall behind schedule. A schedule consistent with the ISF Milestone is being developed and should be complete by the end of October and a corresponding engineering schedule will be completed by mid-November.

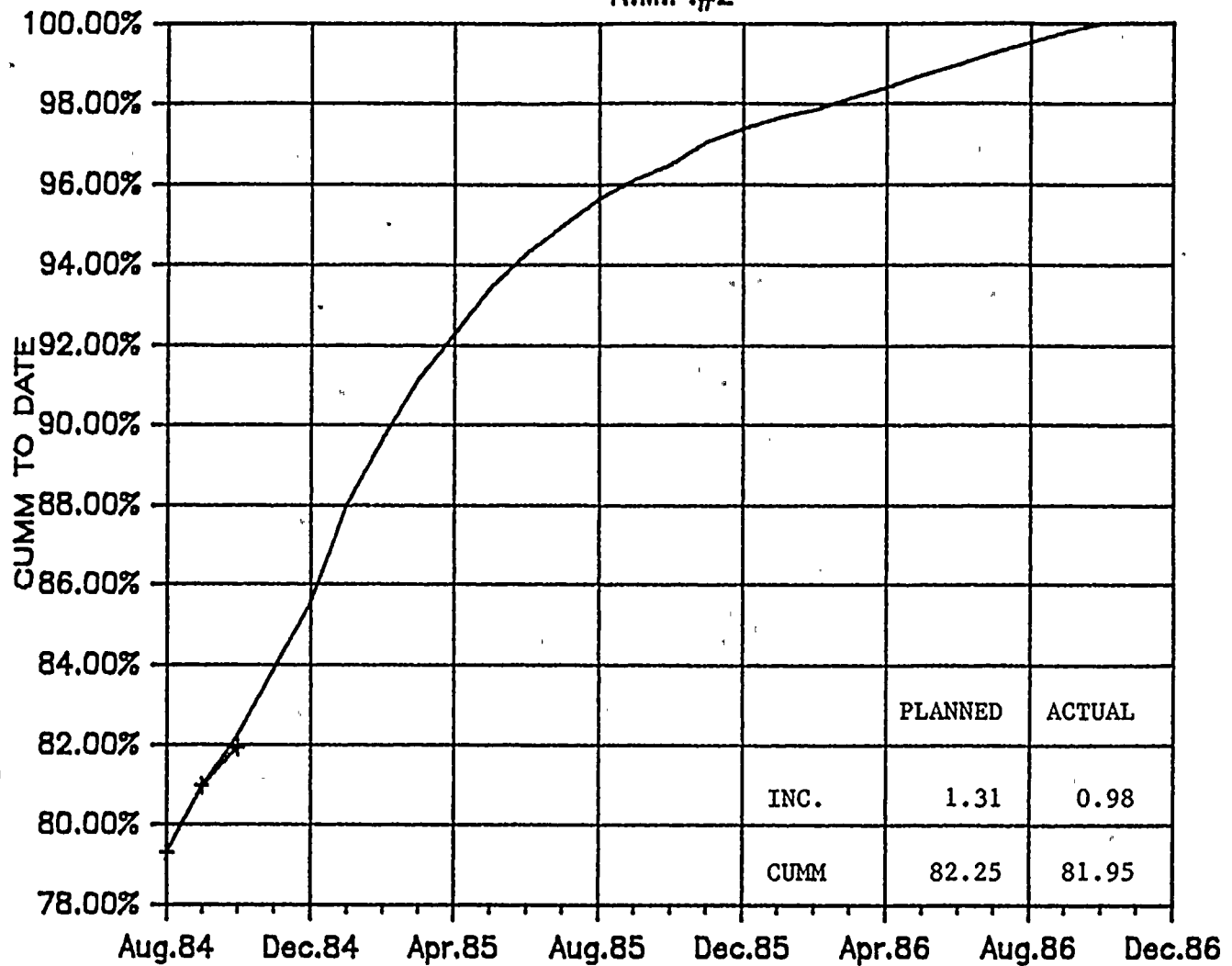
TOTAL PROJECT PERCENT COMPLETE SUMMARY TABLE

DATE 14-Oct-84

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

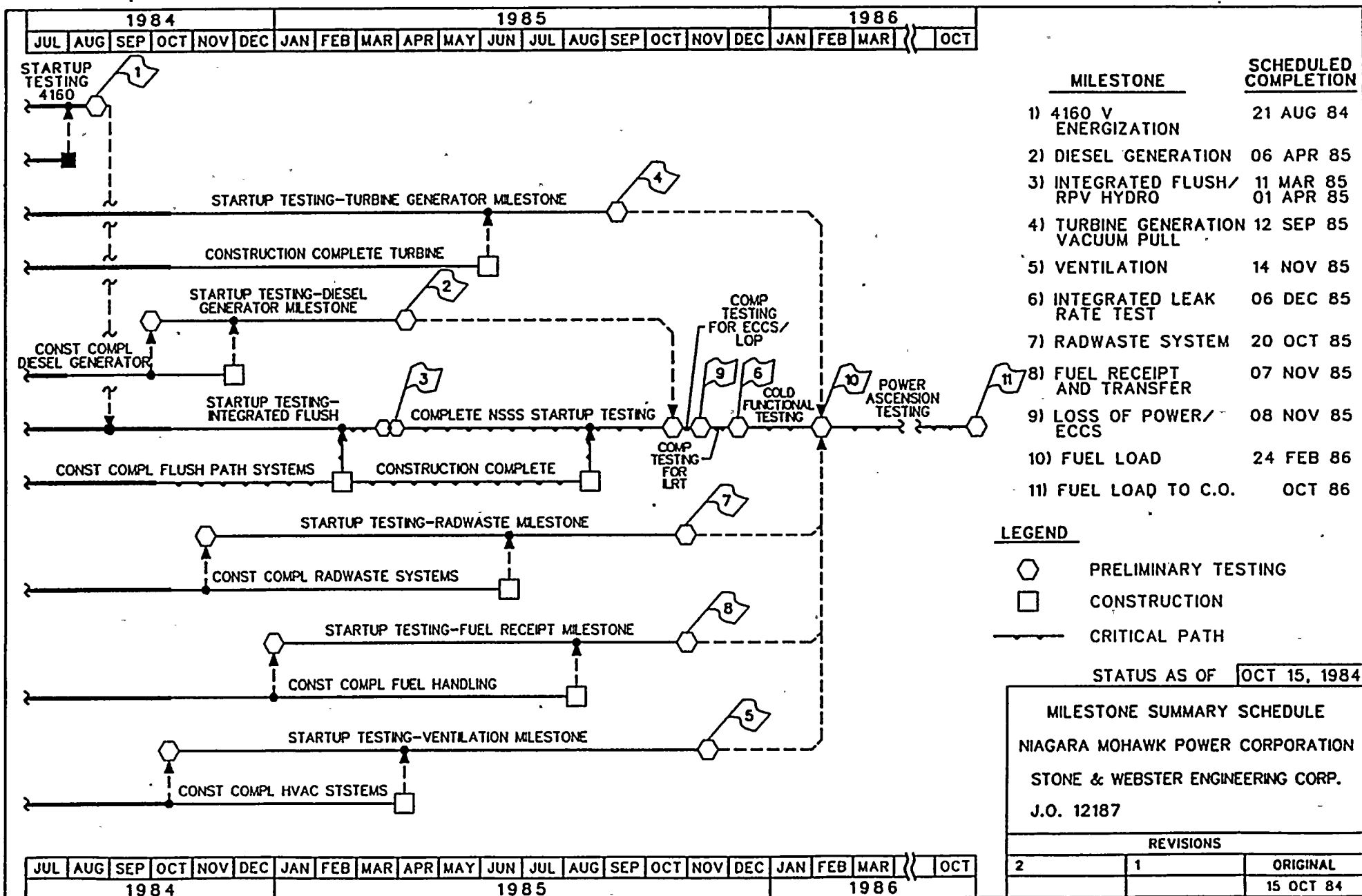
PROJECT PERCENT COMPLETE

N.M.P.#2



— PLAN + ACTUAL

	PLANNED	ACTUAL
INC.	1.31	0.98
CUMM	82.25	81.95



I. EXECUTIVE SUMMARY

B. Manager Quality Assurance - Projects

As part of our surveillance activities, a review was performed of in-place safety related items, materials, components, etc., that had been accepted by the Contractor's QC organization. This activity is likened to the approach utilized by outside organizations assessing the quality of construction activities at the site (i.e. NRC, INPO, etc), and encompass all discipline activities (Civil, Mechanical, Electrical and Welding). The details and results of this activity are addressed within this report.

MPQC QA-Projects has completed the detailed assessment of the on-site contractor's programs. The results and detail of the assessment are addressed within this report.

The concern with the unacceptable reject rate for ITT Grinnell welds is addressed in detail in the Quality Performance Management Program (QPMP). The QPMP provides an outline of proposed actions and the status of those actions. Therefore, this item is being removed from this report.

The Independent Assessment Team is continuing its review of completed CAT Action Plans, NRC deficiencies identified in the SALP Report, and NMPC/Contractor identified deficiencies.

II. MILESTONE SCHEDULE STATUS

A. General

The Milestone barchart updating has been changed in this report to a Milestone Summary Schedule which has been added and progressed through the reporting period.

1. Energization 4160V

Startup has energized the 13.8 KV switchgears. Seven of the eight 4160V switchgears have been energized with the one remaining to be energized in early November. Prioritization of work remaining is being made to support the overall project schedule.

2. Diesel Generators

Several systems are presently impacting the completion of the Diesel Generator Milestone. At the present time this milestone remains 3 weeks behind the scheduled milestone completion date. The major system impacts are:

100.A03 Air Exhaust System - 8 Weeks

2. Diesel Generators (Continued)

Completion of the air system for EG-1 is eight weeks behind schedule. Large bore pipe and hanger work has been restrained by several E&DCR's which were required due to the misalignment of the air piping and the re-routing of vent lines. Completion of this work is schedule for November 12, 1984.

The electrical and instrumentation installation has been delayed by the late delivery of instrument and control valves. Delivery of the valve order is estimated by November 21, 1984.

100.A04 Air Exhaust System - 4 Weeks

The air system for EG-2 will complete four weeks later than the schedule release date of October 29, 1984. Re-routing of the vent line and the late valve delivery which are impacting 100.A03 will also delay completion of this system.

100.B01 Fuel Oil Transfer - 6 Weeks

The lube oil skid was received on Site in October. Installation and modification work on the mechanical changes have been released. The electrical modifications however, require a revision to the FDI prior to work being released. The current status is six weeks behind schedule.

3. Integrated Flush/RPV Hydro

During October, five (5) flush paths have fallen behind schedule and are impacting the integrated flush milestone date. Below is a listing of the negative flush paths.

1.001A Main Steam System - 2 Weeks

The major problem with this flush path is meeting the required production level for small bore pipe and hangers in the primary containment. Work in this area is hampered by interference problems.

31.001M Residual Heat Removal - 2 Weeks

Turnover of this flush path is required on November 19, 1984. Small bore piping is currently behind schedule due to the lack of large bore tie-in pipe.

33.001A High Pressure Core Spray - 2 Weeks

Turnover is scheduled for November 19, 1984. Piping work is restrained by ISI problems.

37.001A Reactor Water Cleanup - 2 Weeks

3. Integrated Flush/RPV Hydro (Continued)

Construction is presently indicated at four weeks behind schedule. During the development of the flush path program, this system's work to complete was under scoped. Detail reviews on the amount of remaining work in this flush path, projects the completion of construction in February, 1985. AOD is currently revising the WCS flush paths to accommodate completion date.

13.001A Reactor Closed Loop Cooling - 1 Week

Turnover is scheduled for November 5, 1984. Completion as the electrical and instrumentation work is currently impacting this date.

The remainder of the Milestones continued with no overall impacts noted to the Milestone dates.

4. Turbine Generator
5. Ventilation Systems
6. Integrated Leak Rate Test
7. Radwaste Systems
8. Fuel Receipt
9. Loss of Power/ECCS Test
10. Fuel Load
11. Commercial Operation

III. CONSTRUCTION

A. General

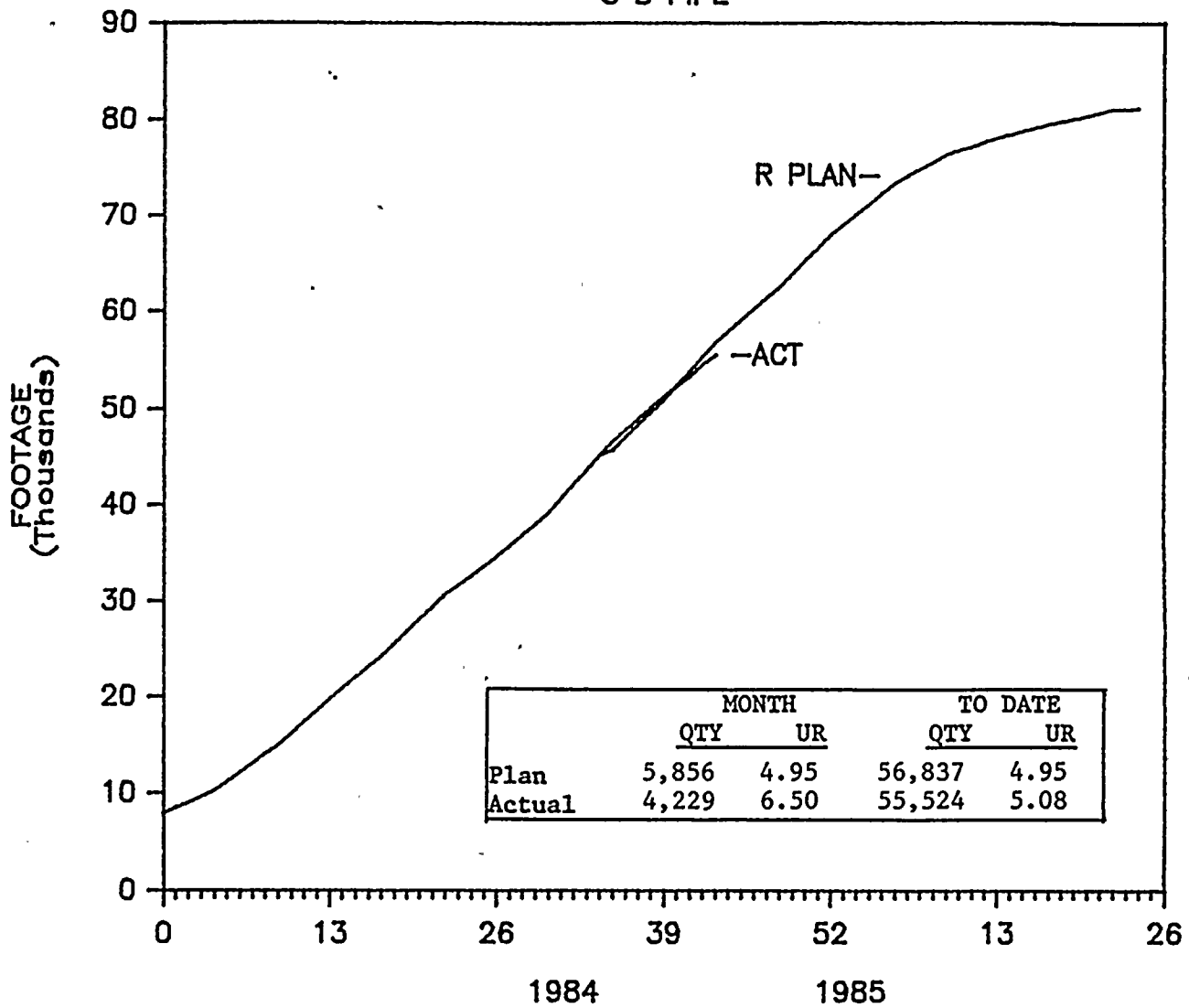
During October, efforts continued to establish a finer integration of critical system work with the Testing Program. Greater emphasis on system completion was initiated.

Housekeeping continued to receive Management attention.

Work continued on the development of area schedules by construction management and planning.

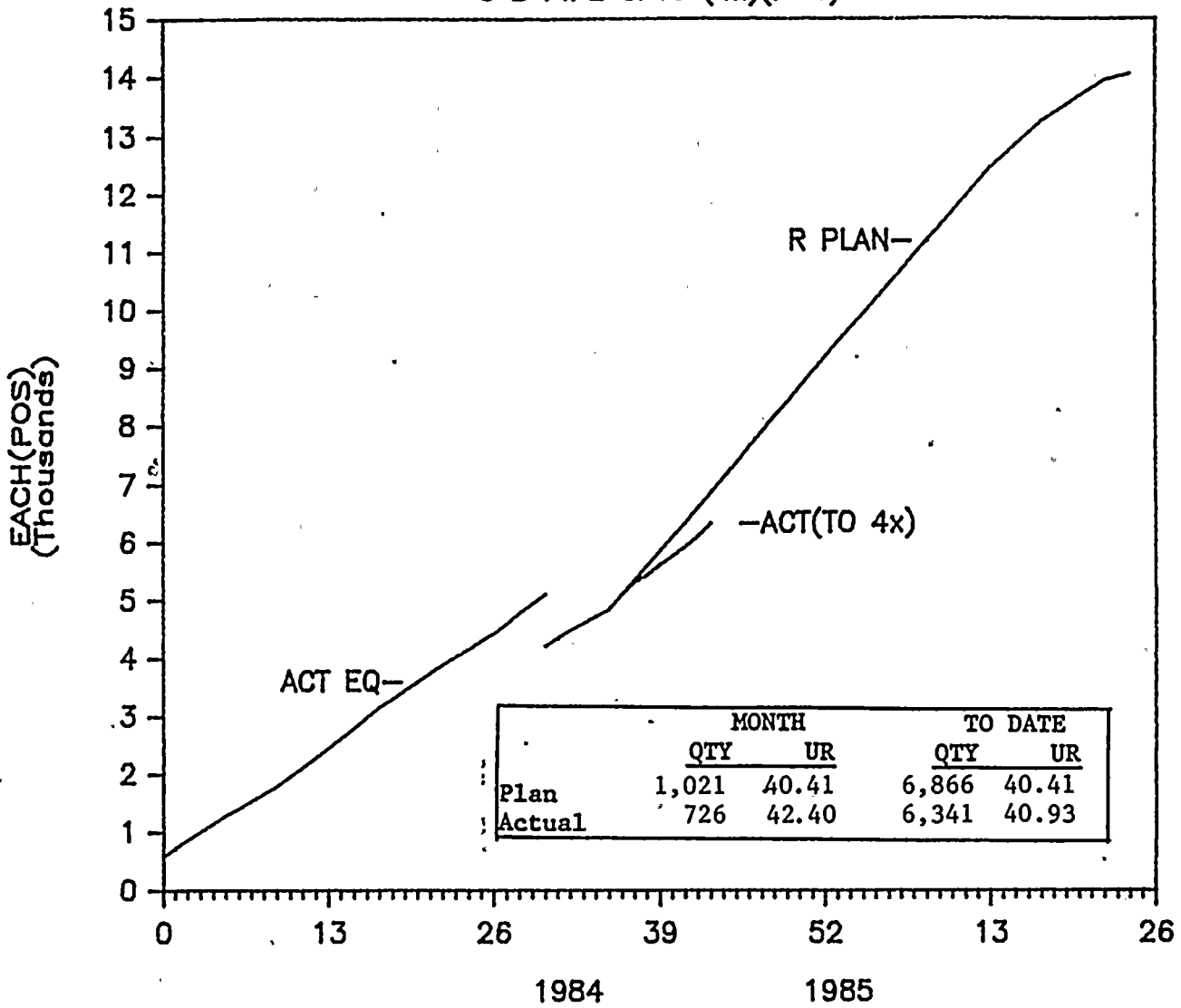
SWEC PLAN VS ACT

S B PIPE



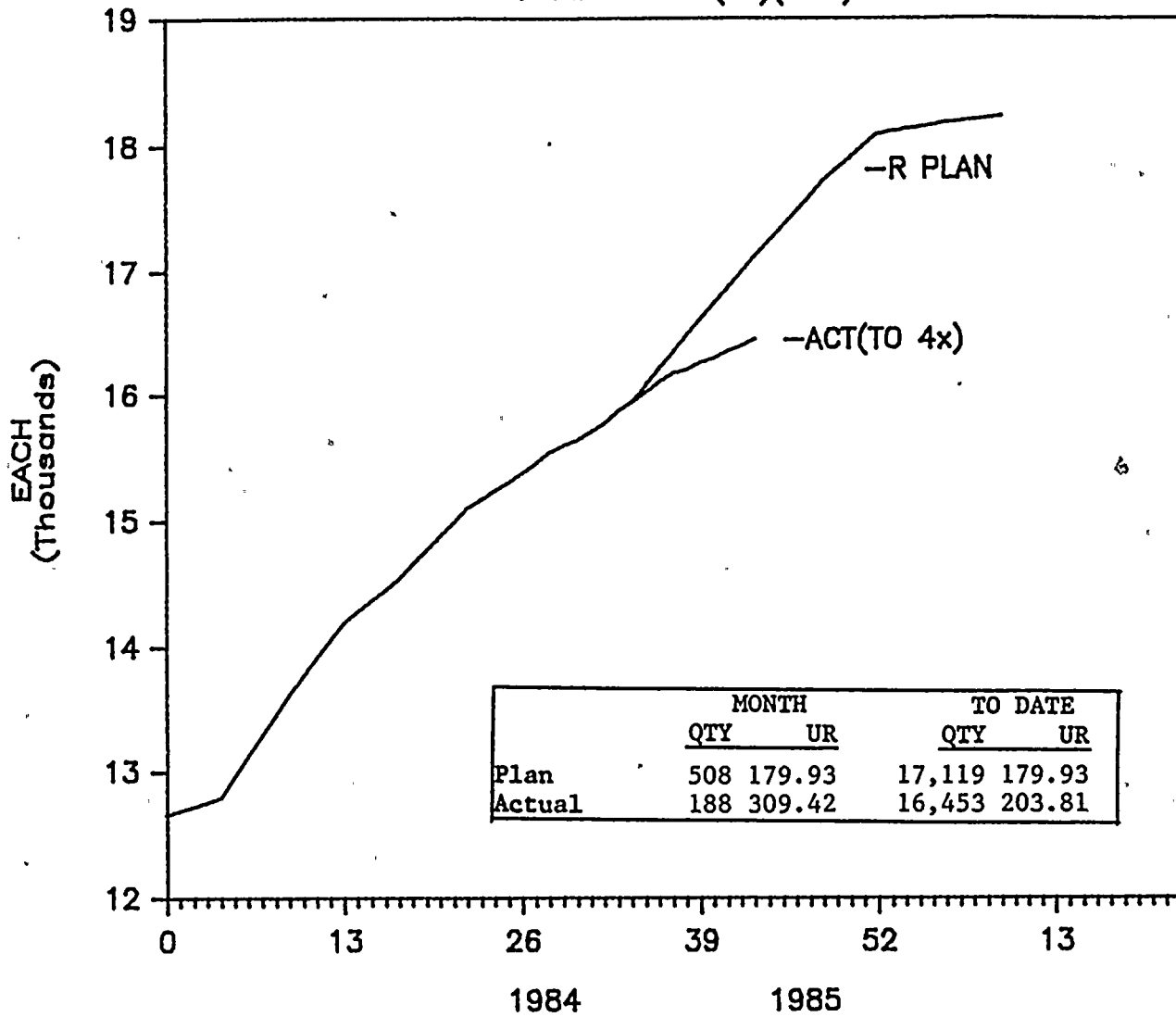
SWEC PLAN VS ACT

S B PIPE SPTS (4x)(POS)



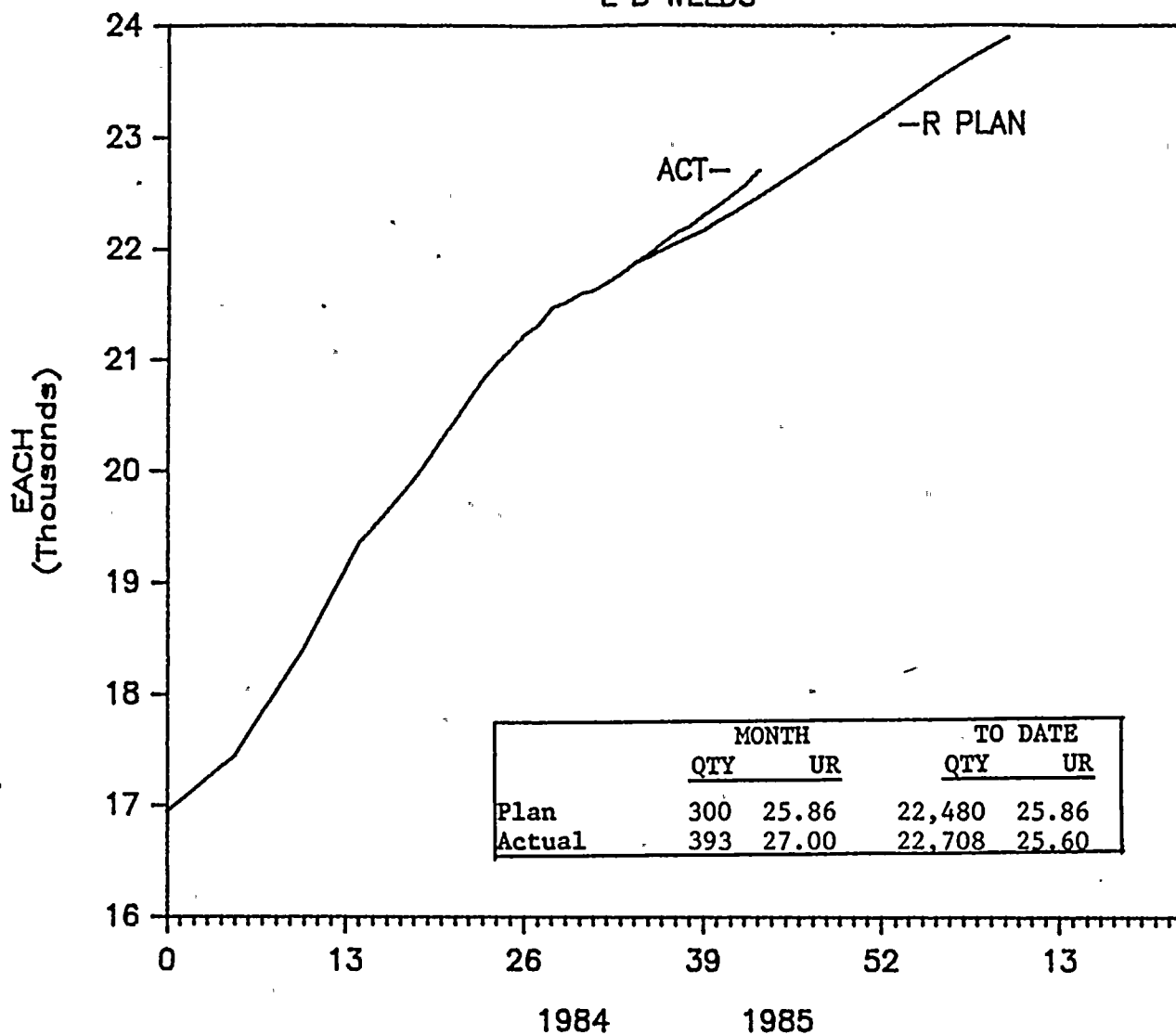
ITT PLAN VS ACT

L B PIPE SPTS (4x)(POS)



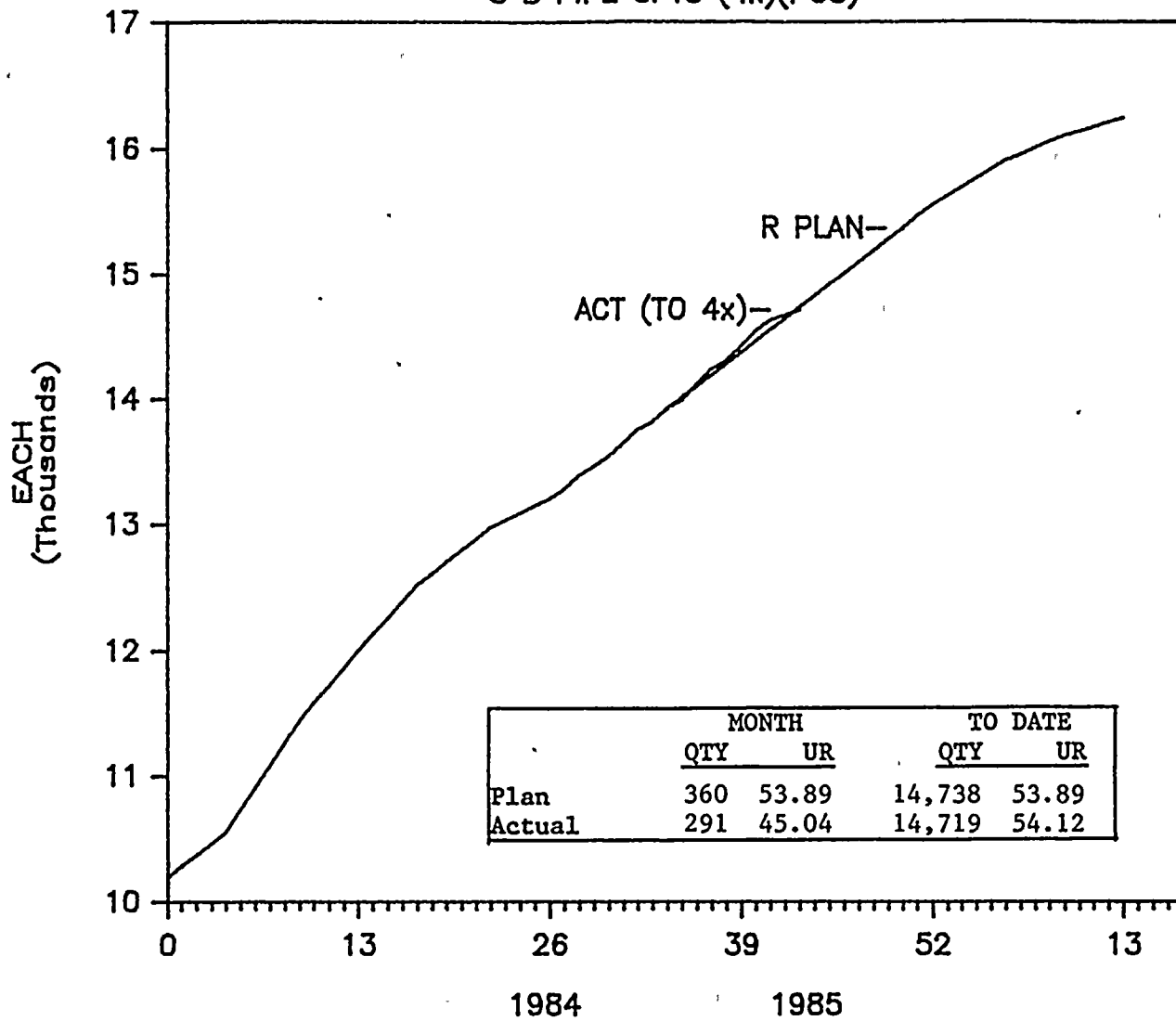
ITT PLAN VS ACT

L B WELDS



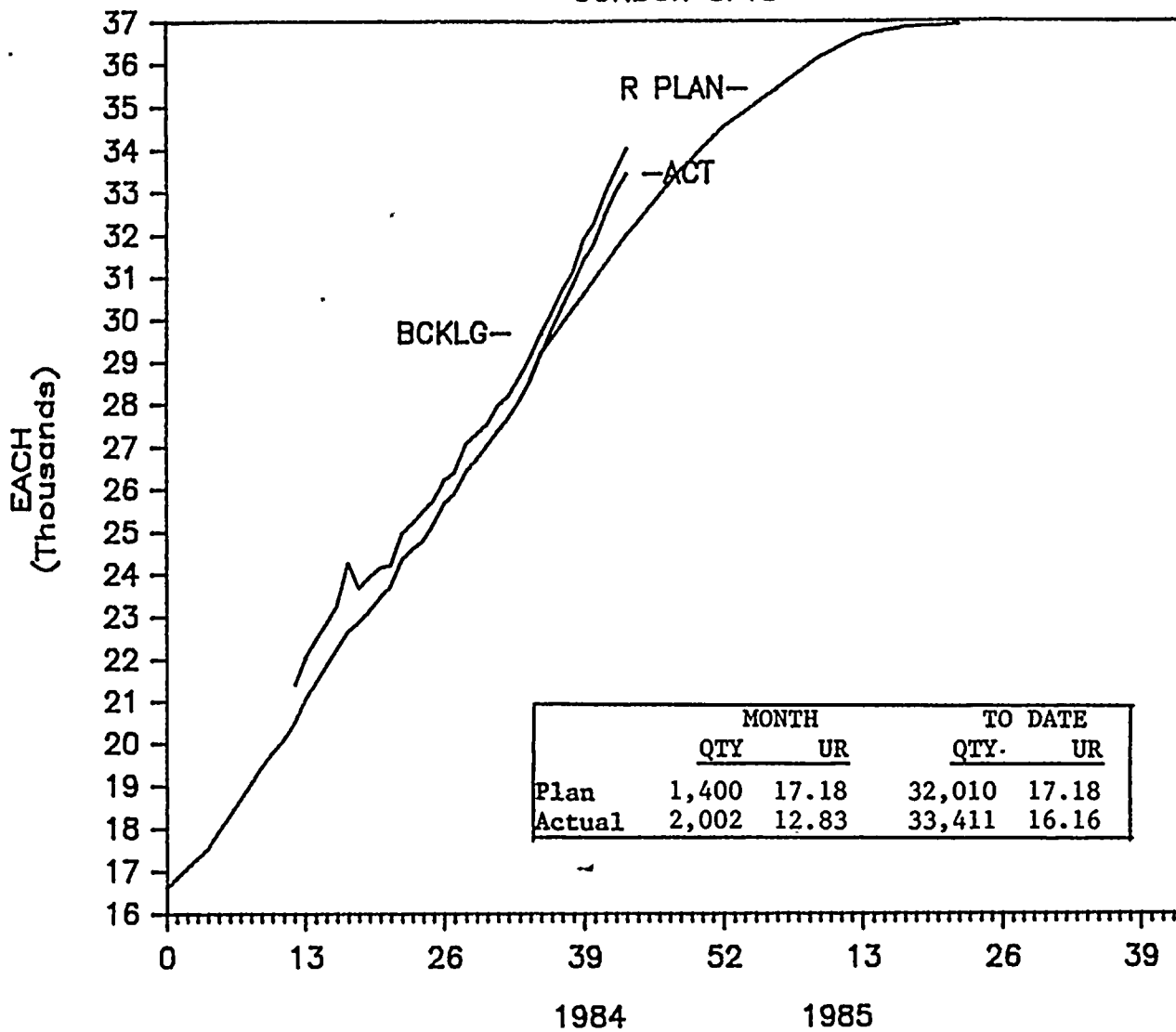
ITT PLAN VS ACT

S B PIPE SPTS (4x)(POS)



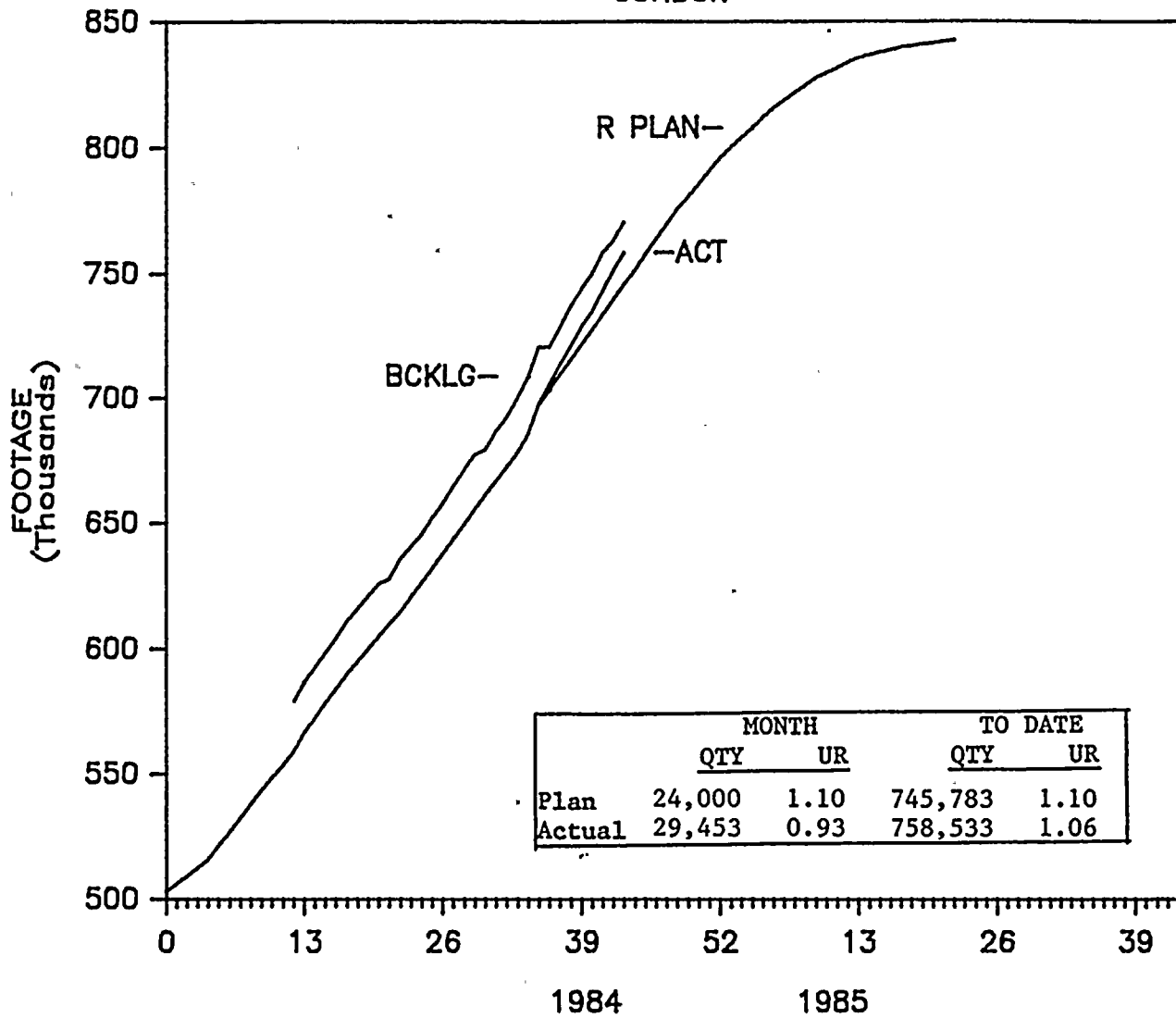
LKC PLAN VS ACT

CONDUIT SPTS



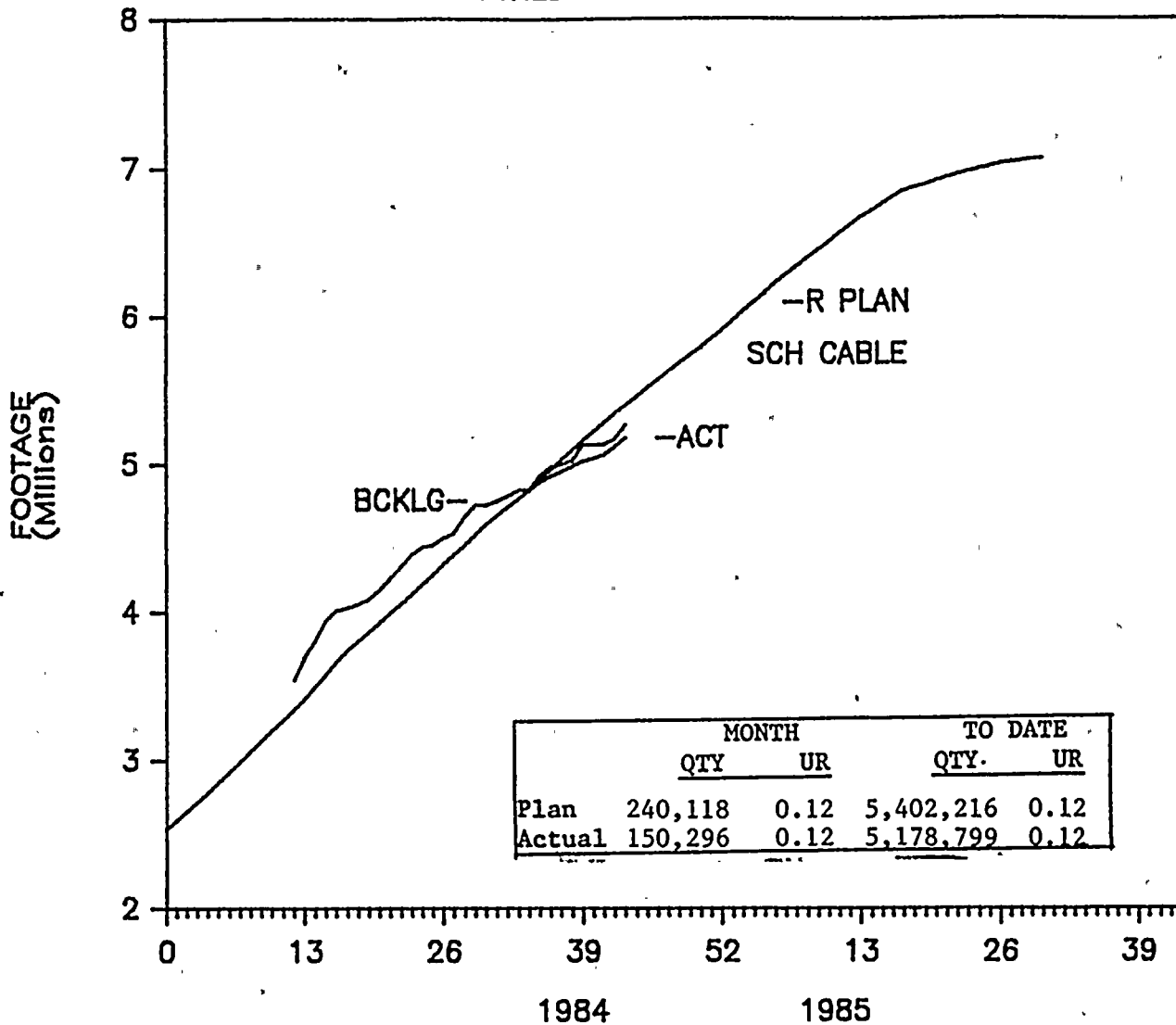
LKC PLAN VS ACT

CONDUIT



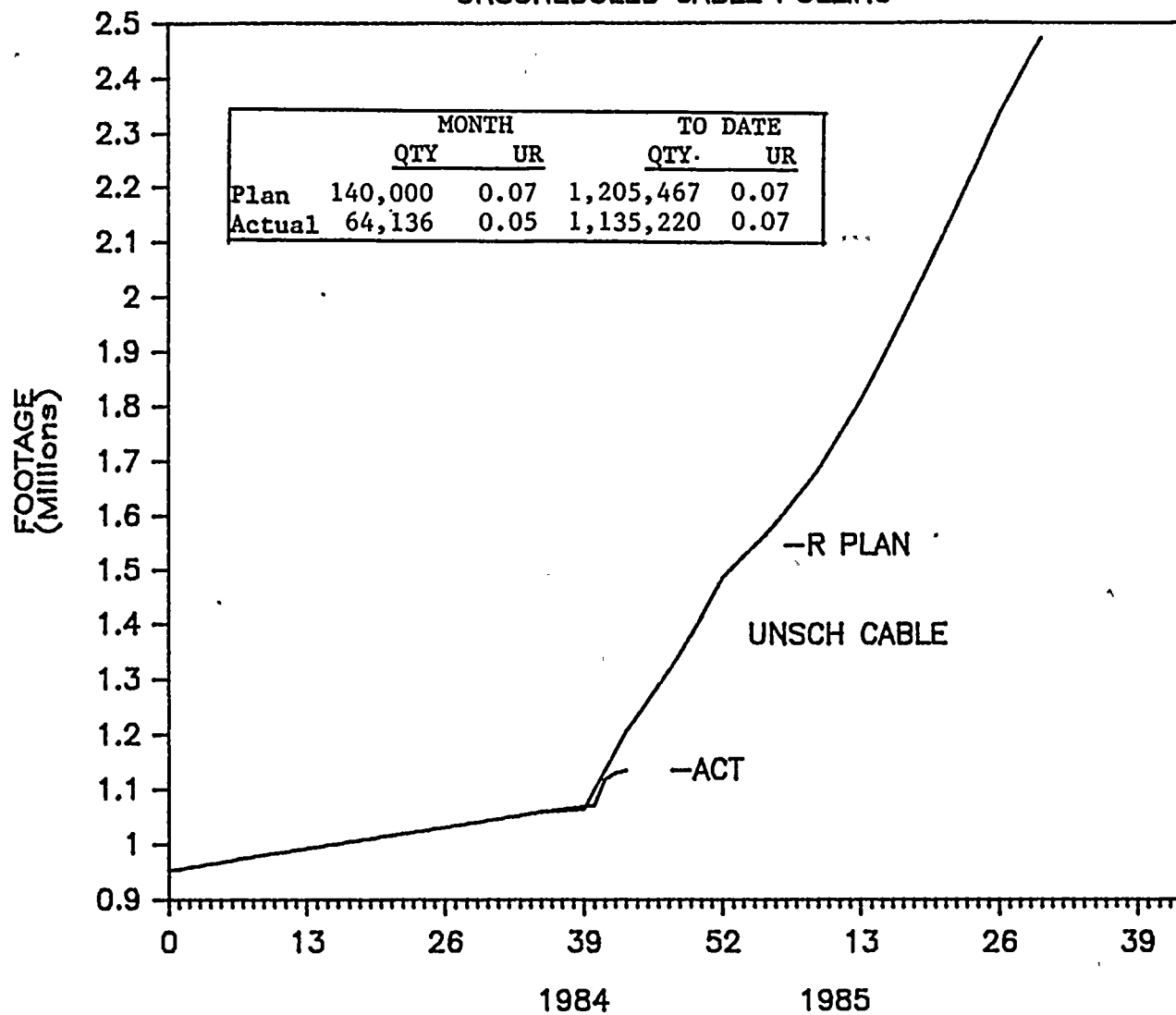
LKC PLAN VS ACT

SCHEDULED CABLE PULLING



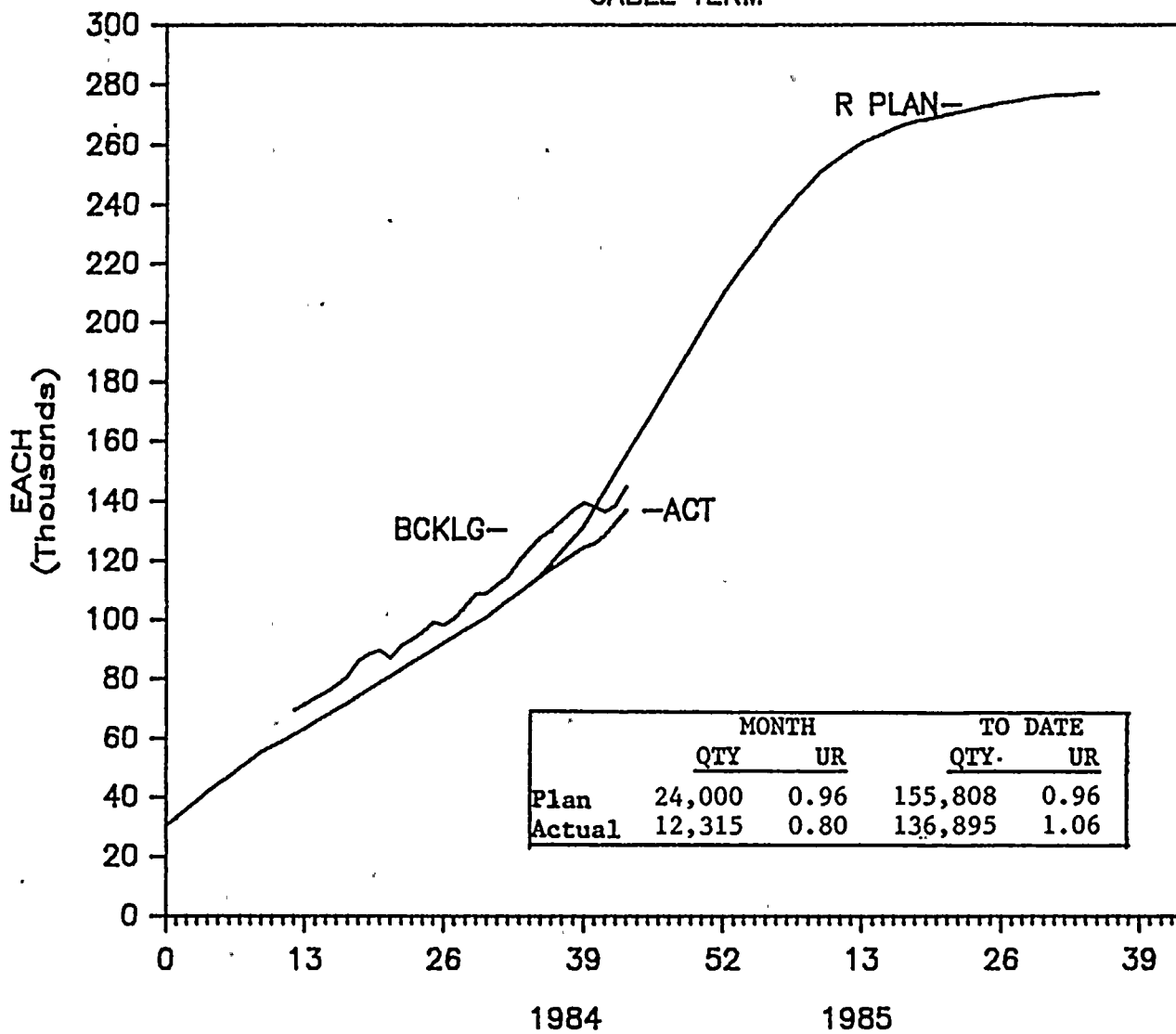
LKC PLAN VS ACT

UNSCHEDULED CABLE PULLING



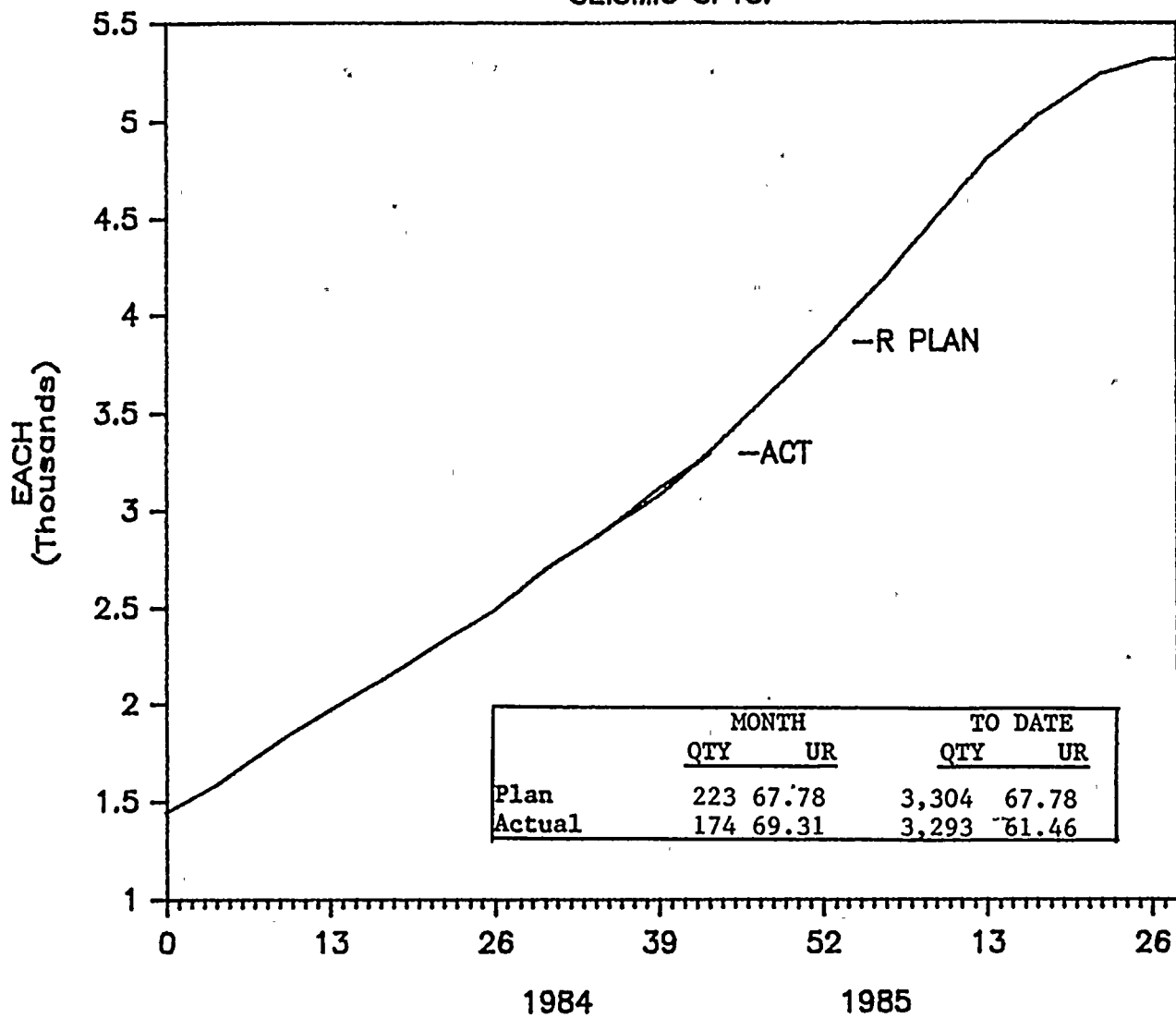
LKC PLAN VS ACT

CABLE TERM



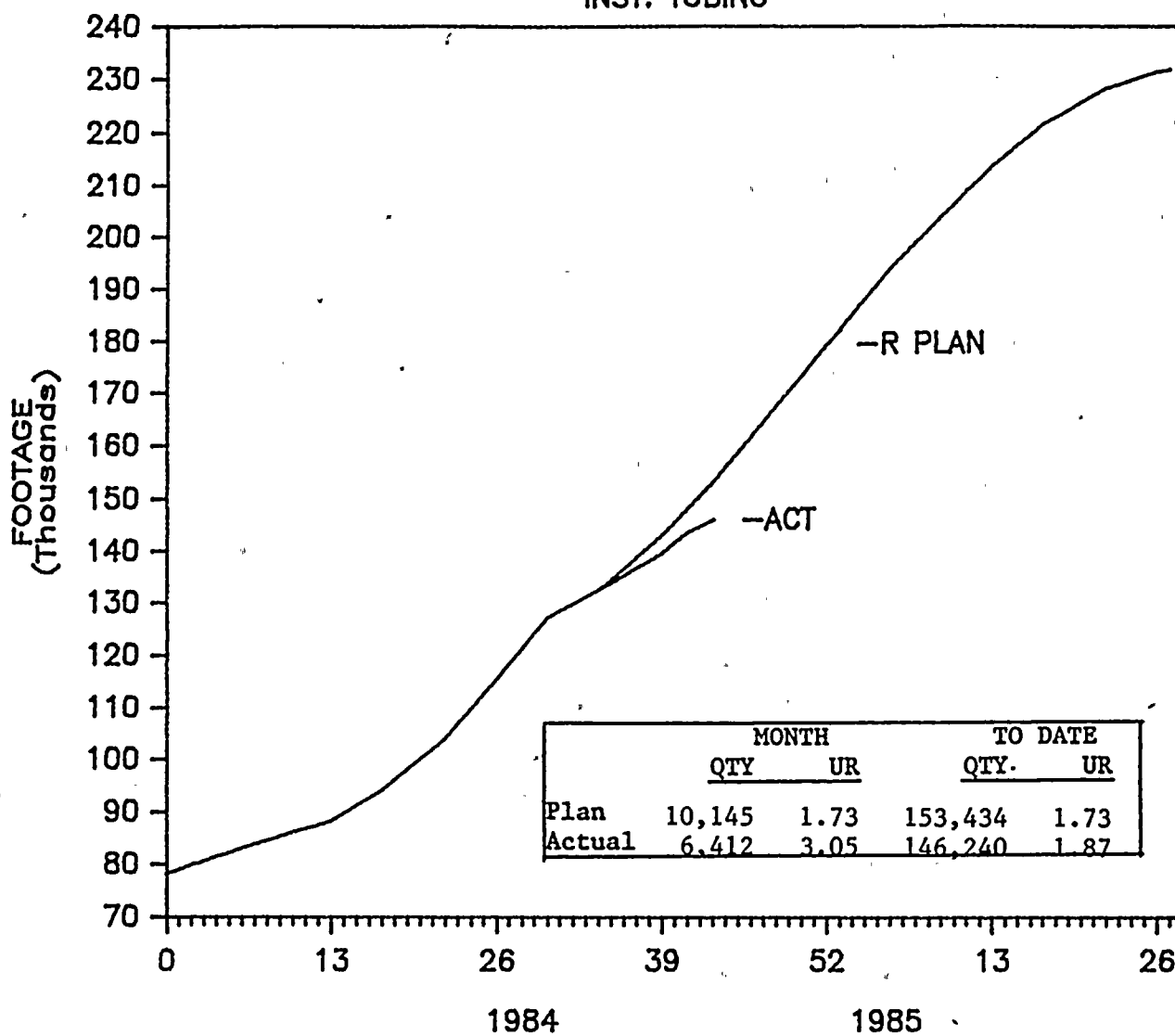
JCI PLAN VS ACT

SEISMIC SPTS.



JCI PLAN VS ACT

INST. TUBING



B. Contractor Performance

1. SWEC Force Account

Overall, SWEC Force Account work continues to support Project priorities. However, there are areas, such as small bore hangers, which require improvement. Specific production assessments and exceptions are addressed below.

Mechanical Equipment Erection

A limited amount of equipment remains to be installed and is being completed in compliance with system priorities.

Cat II and III Hanger Completion

Production for October was slightly below planned levels but in support of system priorities.

Small Bore Pipe and Supports

Both small bore pipe and hangers proceeded below the revised planned production. The revised plan requires an increased production rate. SWEC has been authorized to increase manpower in these areas, including a build-up of second shift efforts to relieve congested areas where necessary.

Preventative Maintenance

Planned maintenance requirements and inspections were performed this period. No significant problems were identified. Minor discrepancies are being addressed through Engineering (i.e. PM requirements and related specifications).

Painting

A contract was not finalized in October. SWEC force account continued to perform site-wide painting.

2. ITT Grinnell

Overall, ITT Grinnell's commodity installation performance through this period sustained improvements. However, large bore hangers continued below planned quantities. Efforts continue to maximize hanger production with crews being shifted from completed S.B. piping work to L.B. hangers.

Reductions in QC involvement in CAT II & III inspections have been implemented. A sitewide inventory of ITT Grinnell materials was also completed.

III CONSTRUCTION (Continued)

Additional emphasis on repair work, trim and misc. punchlist items is required to support turnover priorities.

3. L. K. Comstock

L. K. Comstock's positive conduit production continued. LKC's unit rate performance for October was also very positive.

Cable termination increased but remains below target as production was less than planned.

Efforts will continue toward release of raceway tickets on hold and continued improvement of the cable pulling backlog with the establishment of the "Tiger Team." Cable production remained below expectations.

Increased attention to system completion has become a priority for Comstock.

4. GE-PGCC

Separation rework of four panels is being finalized, with completion of all separation work required by the end of December to meet the NRC commitment. The relatively large number of phase 3D modifications included in the NSSS/BIP program, plus other mandatory BOP and NSSS changes identified in phase 3E & F are extending the completion of the PGCC Modification Program at least through the first quarter of 1985.

5. Johnson Controls

Johnson Controls exhibited a shortfall in scheduled quantities for instrument tubing installation, due in part to the necessity to complete systems work in support of the integrated flush, thus reducing the numbers of craft available for bulk work.

In initiating work in the upper elevations of the Secondary Containment, problems with pre-engineered supports and tubing have been encountered. Due to criticality of the systems involved, these items will be handled on a priority basis.

During September, JCI's manloading increases were authorized in recognition of increased production requirements.

6. Schneider Power Corporation

Additional focus has been placed on the Primary Containment installations.

III CONSTRUCTION (Continued)

7. Insulation Contracts (Various)

Schedule slippages in piping systems release continued to restrain insulation. Revised Area schedules in development are expected to provide better focus on insulation criticality.

8. Synder, Mackin and Shaffer

During October, normal support of Construction activities proceeded. Effective October 22, 1984 SWEAC force account assumes the scope of work for temporary light and power.

9. Tuscarora Construction

Progress remains approximately two weeks behind schedule and completion is anticipated in October, 1984. Rough grading was performed in support of the security fence installation.

10. Reactor Controls Inc. (NSSS)

In general, the Recirculation System and Control Rod Drive installations are proceeding on schedule. Internal activity on the RPV remains about four weeks behind schedule.

11. Walsh Construction

Walsh's Civil contract was not extended, consequently Walsh activity on site will be terminated 12-31-84. SWEAC force account has already assumed Walsh's responsibility for distributable works and will assume direct work in January of 1985. Walsh continued working punch list items and backfill operations site-wide.

12. CB&I :

Contractor has completed as-built field work of the turbine and condenser areas receiving shielding. Shop drawings for elevation 250' shielding are being prepared and material ordering has begun. Fabrication of Elevation 306' has been put on-hold, pending the results of an engineering evaluation requested by NMPC.

C. Construction Completion

Fifteen releases are delinquent as of October 22, 1984 and are being addressed based upon criticality.

III. CONSTRUCTION (Continued)

BIP releases completed since last month are as follows:

3.002	Condensate
19.002	Instrument Air
22.A01	Turbine Lube Oil
22.A02	Turbine Lube Oil
22.A03	Turbine Lube Oil
40.006	Radwaste Computer
4.004	Condensate Supply to Radwaste
47.004	Normal Swgr. Building Fire Detection

IV. ENGINEERING

A. General

1. Overall Engineering & Design efforts continue on schedule. The Bar Chart Summary of the 1985 Engineering Work Plan is provided on the following pages.

IV. ENGINEERING (Continued)

A. (Cont'd)

2. Licensing

Preparation of responses to NRC questions and closeout of open items in the draft safety evaluation report are continuing on schedule. Twenty-two of the 807 NRC questions remain to be answered, and of 331 draft SER open items, only 29 remain open. These are being answered on an expedited basis. The goal of 20 or less open item in the SER by December 10, 1984 remains achievable.

3. Appendix R

Niagara Mohawk and Stone & Webster have approved the final list and methods of control room fixes for the fire scenario.

GE has completed its analysis of the NSSS's response for the control room fire scenario. Detailed designs are on-going with the critical activity identified as being the design and procurement of the disconnect panels.

4. Final Structural Load Verification

Calculations performed to date indicate less rework than initially anticipated. As shown on attachment I, 36 design activities of the final load verification task have been completed compared to 38 scheduled. Two activities: Primary Containment, EL 261 beam design and Primary Containment EL 278 floor analysis are behind schedule. These two activities will be completed and the overall effort back on schedule by November 1984.

5. E&DCR's

The status of E&DCR's open with Construction, QC, and Engineering is shown on Attachment II.

B. Problem Areas

1. Control Panel Modifications

As of September 28, 1984, Engineering has identified a total of 64 control panels requiring potential field modifications. Of the 64 panels scheduled, 39 change packages have been issued. The balance of the panel change packages are scheduled to be complete by December 31, 1984.

A detailed review of all outstanding changes is being performed to identify any additional modifications required. Results of this review will be reported next month.