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FEDERAL ENERGY REGULATORY COMMISSION

OFFICE OF PIPELINE AND PRODUCER REGULATION

STAFF REPORT

COST OF PIPELINE AND COMPRESSOR STATION CONSTRUCTION UNDER NATURAL GAS ACT SECTION 7(c) FOR THE YEARS 1981 THROUGH 1984

WASHINGTON, D.C.

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This report shows the cost of constructing jurisdictional interstate natural gas pipeline and compression facilities. It summarizes and compares reported costs identified by the year in which construction ended for the period 1981 through 1984. Certain previously reported data for 1977 through 1979 and 1983 are also included. The report presents comparative cost and physical data for pipeline and compressor station construction. Also presented are project-by-project listing of cost and physical data that were reported to the Commission from August 1, 1984, through July 31, 1985.

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Cost of Pipeline and Compressor Station Construction
Under Natural Gas Act Section 7(c)
For the Years 1981 through 1984

Introduction

This annual report shows the cost of constructing jurisdictional interstate natural gas pipeline and compression facilities. It summarizes and compares reported costs identified by the year in which construction ended for the period 1981 through 1984. Certain previously reported data for 1977 through 1979 and 1983 are also included. 1/ The cost data used to compile the statistics are obtained from actual costs reported in pipeline and compressor construction certificate cost reports filed through July 31, 1985, pursuant to 18 CFR 157.20(c)(4) and from annual reports for blanket certificates pursuant to 18 CFR 157.207(a). These reports are for completed facilities authorized under permanent certificates issued by the Commission. This is the sixth report in the series. 2/

Blanket certificate cost data included in the annual report cover construction completed in 1982 through 1984. These certificates expedite the regulatory process by providing prior blanket Commission approval for routine construction projects which do not exceed certain annual dollar limits. The limits for each project were $4.2 million for automatic authorization and $12.0 million for prior notice authorization in 1982. The limits for 1983 were $4.5 million and $12.8 million, respectively. The limits for 1984 were $4.7 million and $13.3 million, respectively.

The report is divided into two parts containing two sections each. Part A is comprised of data from 157.20(c)(4) reports and Part B contains data from 157.207(a) reports. Part A, Section I and Part B, Section I present comparative cost and physical data for pipeline and compressor construction. Part A, Section II and Part B, Section II are project-by-project listings of cost and physical data that were reported to the Commission from August 1, 1984, through July 31, 1985. The tables which precede Parts A and B provide a convenient summary of the information.

The tables which follow provide highlights of the 1981-1984 period.

1/ See Appendix, page VIII.

2/ Publications previous to this series (1962-1975) used the fiscal year in which the cost reports were received rather than the year construction ended as a basis for data compilation.

Highlights

Part A - 18 CFR 157.20(c)(4)

TABLE I 1981-1984 PERIOD HIGHS

TOTAL PIPELINE MILEAGE (MILES)	3,429	1982
ONSHORE	3,042	1982
OFFSHORE	387	1982
TOTAL PIPELINE EXPENDITURES ($MM)	$ 2,694	1982
ONSHORE	2,280	1982
OFFSHORE	413	1982
TOTAL COMPRESSOR HORSEPOWER (M)	254	1981
ONSHORE	239	1982
OFFSHORE	38	1981
TOTAL COMPRESSOR EXPENDITURES ($MM)	$ 349	1982
ONSHORE	322	1982
OFFSHORE	26	1981, 1982
TOTAL PIPELINE & COMPRESSOR PROJECTS COMPLETED	272	1981
ONSHORE	218	1981
OFFSHORE	63	1982

TABLE II 1981-1984 ANNUAL HIGHS

A. MOST WIDELY USED PIPELINE DIAMETER: 3 MILES AND OVER

YEAR	DIAM(IN)	TYPE	TOTAL MILES	TOTAL COST($MM)	COST/MILE($M)
1984	16	LAT	60	$ 12.4	$ 206
1983	24	TRAN	67	39.3	585
1982	42	TRAN	836	1,248.8	1,494
1981	24	TRAN	440	222.2	505

B. MOST WIDELY USED COMPRESSORS

YEAR	TYPE	ENGINE	UNITS	TOTAL HP(M)	TOTAL COST($MM)	COST/HP
1984	NEW TRAN	RECIP	6	6.6	$ 13.3	$ 2,017
1983	NEW TRAN	RECIP	9	11.4	25.6	2,245
1982	NEW FLD	RECIP	35	25.0	34.8	1,391
1981	NEW FLD	RECIP	34	27.6	39.7	1,438

TABLE III 1981-1984 INDIVIDUAL PROJECT ANNUAL HIGHS

A. LONGEST PIPELINE PROJECTS

YEAR	MILES	DIAM(IN)	TYPE	STATE	COST($MM)	COST/MILE($M)	APPLICANT (DOCKET NO.)
1984	40	16	LAT	OK,TX	$ 8.4	$ 208	ANR (CP81-408)
1983	67	24	TRAN	PA	39.3	585	COLUMBIA GAS (CP81-433)
1983	37	30	TRAN	OK,TX	15.2	406	NGPL (CP82-50)
1982	822	42	TRAN	IA,MN,MT ND,SD	1,195.1	1,455	N BORDER (CP78-124)
1981	350 1/	24	TRAN	ID,OR	172.5	493	NORTHWEST (CP79-56)

B. HIGHEST TOTAL COST PIPELINE PROJECTS

YEAR	COST($MM)	COST/MILE($M)	DIAM(IN)	TYPE	MILES	STATE	APPLICANT (DOCKET NO.)
1984	29.6	$ 1,467	30	OFF	20	LA,TX	TENNECO, FLA GA (CP80-481)
1983	39.3	585	24	TRAN	67	PA	COLUMBIA GAS) (CP81-433)
1982	1,195.1	1,455	42	TRAN	822	IA,MN,MT ND,SD	N BORDER (CP78-124)
1981	172.5	493	24 1/	TRAN	350	ID,OR	NORTHWEST (CP79-56)

1/ Includes 100 miles of 30 inch transmission pipeline.

C. HIGHEST AVERAGE COST PER MILE PIPELINE PROJECTS: 3 MILES AND OVER

YEAR	COST/MILE($M)	COST($MM)	DIAM(IN)	TYPE	MILES	STATE	APPLICANT (DOCKET NO.)
1984	$ 1,775	$ 7.5	24	OFF	4	LA,TX	TENNECO, FLA GAS (CP80-481)
1983	1,526	12.7	12 2/	OFF	8	CA	PIOC (CP82-194)
1982	9,269	41.8	42	TRAN	5	ND	N BORDER (CP78-124)
1981	2,391	36.1	36	OFF	15	LA	TENNECO, COLUMBIA GULF (CP79-444) TRANSCO, UNITED (CP79-327)

2/ Includes 0.10 mile of 12 inch onshore pipeline.

TABLE III 1981-1984 INDIVIDUAL PROJECT ANNUAL HIGHS (CON'T)

D. HIGHEST HORSEPOWER COMPRESSOR PROJECTS

YEAR	HP	UNITS	TYPE	ENGINE	STATION	STATE	COST($MM)	COST/HP	APPLICANT (DOCKET NO.)
1984	11,600	2	ADD TO TRAN	TURB	BORGER	NY	$ 6.0	$ 514	CONSOLIDATED (CP83-177)
1983	8,640	2	NEW FLD	RECIP	FREDERICK	CO	12.0	1,388	PANHANDLE (CP80-365)
1982	22,000	4	NEW TRAN	ELEC	730	WY	21.1	961	CANYON CREEK (CP80-547)
1981	29,000	1	ADD TO OFF	TURB	BLK 188	LA	16.7	576	MICH WIS (CP80-119)

E. HIGHEST TOTAL COST COMPRESSOR PROJECTS

YEAR	COST($MM)	COST/HP	HP	UNITS	TYPE	ENGINE	STATION	STATE	APPLICANT (DOCKET NO.)
1984	$ 7.8	$ 2,367	3,300	3	NEW TRAN	RECIP	BURNSVILLE	WV	EQUITABLE (CP83-312)
1983	12.0	1,388	8,640	2	NEW FLD	RECIP	FREDERICK	CO	PANHANDLE (CP80-365)
1982	27.6	1,837	15,000	6	NEW STGE	RECIP	BORCHERS N STGE	KS	SOUTHWEST, PANHANDLE (CP79-490)
1981	55.7	1,988	28,000	4	NEW STGE	RECIP	BEAR CREEK	LA	BEAR CREEK, SOUTHERN, TENNECO (CP78-266)

F. HIGHEST AVERAGE COST PER HP COMPRESSOR PROJECTS

YEAR	COST/HP	COST($MM)	HP	UNITS	TYPE	ENGINE	STATION	STATE	APPLICANT (DOCKET NO.)
1984	$ 2,538	$ 1.3	521	1	NEW FLD	RECIP	OAKDALE	OK	PANHANDLE (CP82-189)
1983	3,524	9.5	2,700	1	NEW TRAN	RECIP	ROCK SPRINGS	WY	MOUNTAIN FUEL (CP80-07)
1982	13,131	0.5	40	1	NEW FLD	RECIP	LANDRUM	AR	OZARK (CP78-532)
1981	3,591	0.6	167	1	NEW FLD	RECIP	ANGELL	OK	PANHANDLE (CP78-487)

Highlights

Part B - 18 CFR 157.207(a)

TABLE I 1982-1984 PERIOD HIGHS

TOTAL PIPELINE MILEAGE (MILES)		471	1983
ONSHORE		413	1983
OFFSHORE		143	1984
TOTAL PIPELINE EXPENDITURES ($MM)	$	121	1984
ONSHORE		51	1983
OFFSHORE		85	1984
TOTAL COMPRESSOR HORSEPOWER (M)		12	1983
ONSHORE		12	1983
OFFSHORE		1	1984
TOTAL COMPRESSOR EXPENDITURES ($MM)	$	15	1983
ONSHORE		14	1983
OFFSHORE		*	1983, 1984
TOTAL PIPELINE & COMPRESSOR PROJECTS COMPLETED		227	1983
ONSHORE		207	1983
OFFSHORE		45	1984

* Insignificant.

TABLE II 1982-1984 ANNUAL HIGHS

A. MOST WIDELY USED PIPELINE DIAMETER: 3 MILES AND OVER

YEAR	DIAM(IN)	TYPE	TOTAL MILES	TOTAL COST($MM)	COST/MILE($M)
1984	10	OFF	75	$ 10.1	$ 136
1983	6 1/	ON	63	6.0	96
1982	8 2/	ON	8	1.3	169

1/ Includes 4.66 miles of 4 inch pipeline.
2/ Includes 2.14 miles of 4 inch pipeline.

B. MOST WIDELY USED COMPRESSORS

YEAR	TYPE	ENGINE	UNITS	TOTAL HP(M)	TOTAL COST ($MM)	COST/HP
1984	NEW FLD	RECIP	10	5.3	$ 4.7	$ 884
1983	NEW FLD	RECIP	16	5.7	8.1	1,412
1982	NEW FLD	RECIP	1	0.2	0.2	1,326
	ADD TO FLD	RECIP	1	0.3	0.3	725

TABLE III 1982-1984 INDIVIDUAL PROJECT ANNUAL HIGHS

A. LONGEST PIPELINE PROJECTS

YEAR	MILES	DIAM(IN)	TYPE	STATE	COST($MM)	COST/MILE($M)	APPLICANT (DOCKET NO.)
1984	34	10	ON	TX	$ 4.8	$ 144	SOUTHERN (CP82-406)
1983	13	8	ON	OK	1.1	83	PANHANDLE (CP83-83)
1982	8	8 1/	ON	CO	1.3	169	NORTHERN (CP82-401)

1/ Includes 2.14 miles of 4 inch pipeline.

B. HIGHEST TOTAL COST PIPELINE PROJECTS

YEAR	COST($MM)	COST/MILE($M)	DIAM(IN)	TYPE	MILES	STATE	APPLICANT (DOCKET NO.)
1984	$ 4.8	$ 144	10	ON	34	TX	SOUTHERN (CP82-406)
1983	5.1	959	12 2/	OFF	5	TX	ANR (CP83-401)
1982	1.5	295	6	OFF	5	LA	TENNECO (CP82-413)

2/ Prior notice project constructed under CP84-315. Texas Gas has 44.43% ownership in this facility.

C. HIGHEST AVERAGE COST PER MILE PIPELINE PROJECTS: 3 MILES AND OVER

YEAR	COST/MILE($M)	COST($MM)	DIAM(IN)	TYPE	MILES	STATE	APPLICANT (DOCKET NO.)
1984	$ 959	$ 4.3	10	OFF	4	TX	ANR 3/ (CP82-480)
1983	959	5.1	12	OFF	5	TX	ANR (CP83-401)
1982	295	1.5	6 3/	OFF	5	LA	TENNECO (CP82-413)

3/ Transco has 50% ownership in this facility.

TABLE III 1982-1984 INDIVIDUAL PROJECT ANNUAL HIGHS (CON'T)

D. HIGHEST HORSEPOWER COMPRESSOR PROJECTS

YEAR	HP	UNITS	TYPE	ENGINE	STATION	STATE	COST($MM)	COST/HP	APPLICANT (DOCKET NO.)
1984	1,800	3	NEW FLD	RECIP	CARTHAGE	TX	$ 1.9	$1,073	SOUTHERN (CP82-406)
1983	2,200	2	NEW FLD	TURB	RED BLUFF 1	NM	1.5	675	TRANSWESTERN (CP82-534)
1982	346	1	ADD TO FLD	RECIP	WARD CO 1	TX	0.3	725	NORTHERN (CP82-401)

E. HIGHEST TOTAL COST COMPRESSOR PROJECTS

YEAR	COST($MM)	COST/HP	HP	UNITS	TYPE	ENGINE	STATION	STATE	APPLICANT (DOCKET NO.)
1984	$ 1.9	$ 1,073	1,800	3	NEW FLD	RECIP	CARTHAGE	TX	SOUTHERN (CP82-406)
1983	2.4	1,346	1,800	2	NEW FLD	RECIP	ROUND TOP	NM	TRANSWESTERN (CP82-534)
1982	0.3	725	346	1	ADD TO FLD	RECIP	WARD CO 1	TX	NORTHERN (CP82-401)

F. HIGHEST AVERAGE COST PER HP COMPRESSOR PROJECTS

YEAR	COST/HP	COST($MM)	HP	UNITS	TYPE	ENGINE	STATION	STATE	APPLICANT (DOCKET NO.)
1984	$1,749	$ 0.8	450	1	ADD TO FLD	RECIP	AVARD	OK	PANHANDLE (CP83-83)
1983	4,193	0.8	190	1	NEW OFF	RECIP	BLK 820L	TX	EL PASO (CP82-435)
1982	1,326	0.2	175	1	NEW FLD	RECIP	BOOSTER 99	KS	NGPL (CP82-402)

Appendix

The following are additions to previously reported data under 18 CFR 157.20(c)(4) which have been incorporated into the data for the appropriate year of completion. Additions to pipeline data are:

CP Docket	Company	Diam	Miles	Type	State	Compl	Total Cost
76-387	Sea Robin, Transco	6	2.45	OFF	LA	1977	$ 932,451
77-106	Miss River	6	12.30	LAT	OK	1977	649,021
76-389	Northwest	26	5.50	TRAN	WY	1978	2,391,964
78-333	Southern	12	9.99	OFF	LA	1978	3,258,308
77-604	El Paso	4	3.50	LAT	TX	1979	229,327
79-128	CIG	16	5.00	LAT	CO	1979	2,048 1/
82-81	Col. Gas	6	2.30	TRAN	WV	1983	291,066
82-81	Col. Gas	4	0.60	MIX DIAM TRAN	PA	1983	20,487
82-81	Col. Gas	3	0.90	MIX DIAM TRAN	PA	1983	18,117
82-81	Col. Gas	4	0.70	MIX DIAM TRAN	PA	1983	43,576
82-81	Col. Gas	3	2.80	MIX DIAM TRAN	PA	1983	58,944
82-81	Col. Gas	4	0.40	MIX DIAM TRAN	PA	1983	13,004
82-81	Col. Gas	3	0.90	MIX DIAM TRAN	OH	1983	67,551
82-81	Col. Gas	8	0.40	MIX DIAM TRAN	OH	1983	39,984
82-81	Col. Gas	4	0.60	MIX DIAM TRAN	OH	1983	30,996
82-81	Col. Gas	4	0.70	MIX DIAM TRAN	OH	1983	32,094
82-81	Col. Gas	6	1.30	MIX DIAM TRAN	OH	1983	70,245
82-81	Col. Gas	6	2.90	TRAN	OH	1983	227,935
82-81	Col. Gas	8	3.60	TRAN	OH	1983	310,001
82-81	Col. Gas	16	2.90	TRAN	OH	1983	577,511
82-81	Col. Gas	3	0.30	MIX DIAM TRAN	OH	1983	27,547
82-81	Col. Gas	6	0.50	MIX DIAM TRAN	OH	1983	54,446
82-81	Col. Gas	8	4.30	TRAN	OH	1983	607,938
82-81	Col. Gas	4	1.70	TRAN	PA	1983	244,367
82-81	Col. Gas	2	0.50	MIX DIAM TRAN	OH	1983	22,058
83-184	N. W. Central	20	5.00	TRAN	MO	1983	934,710

1/ Supplemental expenditure to previously completed project.

Additions to compressor data are:

CP Docket	Company	Units	HP	Type	Eng	State	Compl	Total Cost
76-537	Mich Wis	2	2,200	NEW OFF	REC	LA	1977	$5,010,000
76-389	Northwest	1	3,730	ADD TRAN	TUR	WY	1978	2,995,505
76-389	Northwest	1	3,730	ADD TRAN	TUR	WY	1978	3,830,551
76-389	Northwest	1	3,830	ADD TRAN	TUR	ID	1978	2,843,211
76-389	Northwest	1	3,730	ADD TRAN	TUR	ID	1978	3,429,759

Methodology

Pipeline construction data reported in Part A have been categorized by type of pipeline and diameter. The data are aggregated by pipeline three miles and over or under three miles. There are two types of pipeline: onshore and offshore. Onshore pipeline is either transmission or lateral line. For purposes of this report, transmission pipeline consists of main or trunk line pipe. Lateral pipeline consists of line pipe that branches off the main pipeline. Unless onshore pipeline type has been specified by the certificate holder, the designations are determined by staff based on information in the certificate application and cost report. Pipeline construction data reported in Part B have only onshore and offshore categories. Transmission pipeline is not authorized under blanket certificate construction.

Multiple diameter pipeline cost reports usually show only total cost for the entire project. In most cases, the mileages of the components are reported, but in no cases are the individual costs provided. In order to deal with this reporting problem, the following methodology was applied in compiling information for this annual report. If a single pipeline diameter accounted for at least sixty-five percent of the total mileage of the project, then the total cost and mileage were classified under that pipeline diameter, and an accompanying footnote was provided giving the component mileages. In a situation where no diameter made up at least sixty-five percent, the project was classified as a mixed diameter project. Details of mixed diameter pipeline projects are presented in Table J-3 of Part A, Section II, and Table I-3 of Part B, Section II, and are also included in the Summary Tables of each part.

Compressor construction data presented in Part A have been categorized by type of station and engine. The compressor station is either a new one or an addition to an existing station, and is further classified as being a transmission, field, storage (all these are onshore types of compressors), or an offshore station (no categories; referred to only as offshore). The type of engine may be reciprocating, turbine, or electric motor driven. Compressor construction data presented in Part B have no transmission compressor stations because their construction is not authorized under the blanket certificate.

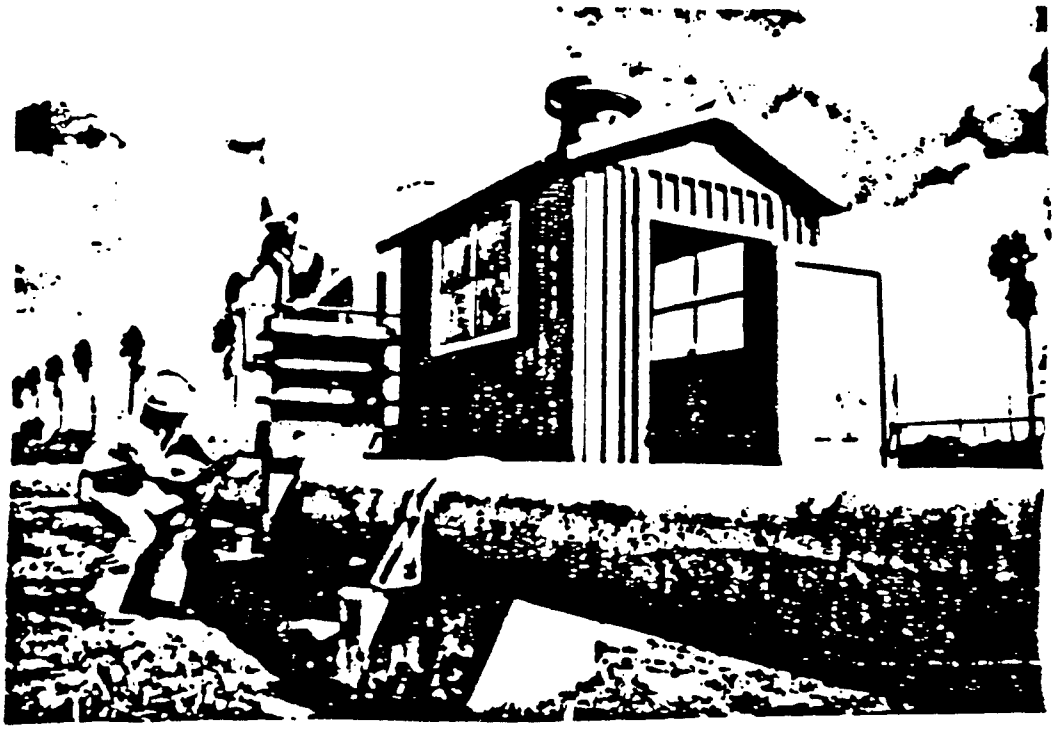
For each pipeline construction project reported in Part A, Section II, and Part B, Section II, the diameter of the pipe in inches, the miles constructed, the states traversed, the total cost, the average cost per mile, and the year in which construction was completed is provided. These data make it possible to analyze states individually or combine them into geographical areas.

For each compressor construction project reported in Part A, Section II, and Part B, Section II, the name of the compressor station, its location, the horsepower per unit, the number of units, total horsepower, the year construction ended, a cost breakdown, total cost, and the average cost per horsepower is listed.

Construction costs of pipelines in Part A are the costs of materials; labor; right-of-way and damages; engineering, inspection, supervision, and surveys; and miscellaneous items including interest during construction, overhead, and other costs such as contingencies, franchises, and consents. Construction costs of compressor stations in Part A are the costs of materials; labor; engineering, inspection, supervision, and surveys; and miscellaneous items including interest during construction, overhead, and other costs such as land, right-of-way and damages, and contingencies.

Construction costs of pipelines in Part B are the costs of materials; labor; and other costs. Construction costs of compressor stations in Part B are the costs of materials; labor; and other costs. Other costs for both pipelines and compressor stations may consist of engineering, inspection, supervision, surveys, interest during construction, overhead, land, right-of-way and damages, and contingencies.

PART A
SUMMARY TABLES



PART A

PIPELINE AND COMPRESSION CONSTRUCTION AND EXPENDITURES

YEAR CONSTRUCTION ENDED		TOTAL MILES	ONSHORE MILES	OFFSHORE MILES	TOTAL HORSEPOWER	TOTAL EXPENDITURES
1981	1)	2,124.40	1,784.82	339.58	254,400	$ 1,424,854,644
1982	2)	3,428.76	3,042.18	386.58	245,540	3,042,904,088
1983	3)	728.72	661.29	67.43	48,980	405,668,437
1984	4)	365.05	288.09	76.96	22,721	243,039,271

1) INCLUDES 85.16 MILES (65.31 ONSHORE AND 19.85 OFFSHORE) CONSTRUCTED UNDER 3 MILES IN LENGTH, AT A COST OF $ 54,718,013.

2) INCLUDES 69.33 MILES (32.16 ONSHORE AND 37.17 OFFSHORE) CONSTRUCTED UNDER 3 MILES IN LENGTH, AT A COST OF $ 86,503,314.

3) INCLUDES 66.43 MILES (60.81 ONSHORE AND 5.62 OFFSHORE) CONSTRUCTED UNDER 3 MILES IN LENGTH, AT A COST OF $ 18,083,329.

4) INCLUDES 19.30 MILES (12.55 ONSHORE AND 6.75 OFFSHORE) CONSTRUCTED UNDER 3 MILES IN LENGTH, AT A COST OF $ 19,374,937.

PART A

SUMMARY: NUMBER OF CONSTRUCTION PROJECTS COMPLETED BY YEAR

		1981	1982	1983	1984
ONSHORE					
PIPELINE	1)	146	102	81	26
COMPRESSION		72	60	19	5
TOTAL ONSHORE		218	162	100	31
OFFSHORE					
PIPELINE	2)	49	59	9	14
COMPRESSION		5	4	--	--
TOTAL OFFSHORE		54	63	9	14
TOTAL NUMBER OF PROJECTS		272	225	109	45
NUMBER OF PIPELINES COMPANIES REPORTING CONSTRUCTION COMPLETED		38	47	26	21
NUMBER OF DOCKETS REPORTED		106	114	44	28

1) PIPELINE COMPLETED IN 1981 INCLUDES 70 PROJECTS UNDER 3 MILES IN LENGTH REPORTED BY 17 PIPELINES IN 21 DOCKETS.
PIPELINE COMPLETED IN 1982 INCLUDES 27 PROJECTS UNDER 3 MILES IN LENGTH REPORTED BY 17 PIPELINES IN 19 DOCKETS.
PIPELINE COMPLETED IN 1983 INCLUDES 51 PROJECTS UNDER 3 MILES IN LENGTH REPORTED BY 11 PIPELINES IN 12 DOCKETS.
PIPELINE COMPLETED IN 1984 INCLUDES 11 PROJECTS UNDER 3 MILES IN LENGTH REPORTED BY 7 PIPELINES IN 8 DOCKETS.

2) PIPELINE COMPLETED IN 1981 INCLUDES 16 PROJECTS UNDER 3 MILES IN LENGTH REPORTED BY 11 PIPELINES IN 9 DOCKETS.
PIPELINE COMPLETED IN 1982 INCLUDES 22 PROJECTS UNDER 3 MILES IN LENGTH REPORTED BY 10 PIPELINES IN 13 DOCKETS.
PIPELINE COMPLETED IN 1983 INCLUDES 3 PROJECTS UNDER 3 MILES IN LENGTH REPORTED BY 3 PIPELINES IN 3 DOCKETS.
PIPELINE COMPLETED IN 1984 INCLUDES 5 PROJECTS UNDER 3 MILES IN LENGTH REPORTED BY 5 PIPELINES IN 3 DOCKETS.

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1981

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER MILE	NUMBER OF PROJECTS
TRANSMISSION	1,130.44	53.2%	$ 695,905,729	61.5%	$ 615,606	65
TRANSMISSION: MIXED DIAMETER	108.43	5.1	21,632,017	1.9	199,502	30
TOTAL TRANSMISSION	1,238.87	58.3	717,537,746	63.4	579,187	95
LATERAL	361.54	17.0	69,476,886	6.1	192,169	32
LATERAL: MIXED DIAMETER	184.41	8.7	38,418,058	3.4	208,330	19
TOTAL LATERAL	545.95	25.7	107,894,944	9.5	197,628	51
TOTAL ONSHORE LINES	1,784.82	84.0	825,432,690	72.9	462,474	146
OFFSHORE	330.90	15.6	299,806,538	26.5	906,034	47
OFFSHORE: MIXED DIAMETER	8.68	0.4	6,989,626	0.6	805,256	2
TOTAL OFFSHORE LINES	339.58	16.0	306,796,164	27.1	903,458	49
TOTAL LINES	2,124.40	100.0%	$ 1,132,228,854	100.0%	$ 532,964	195

PART A

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1981
3 MILES AND OVER

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER MILE	NUMBER OF PROJECTS
TRANSMISSION	1,094.20	53.7%	$ 682,631,784	63.4%	$ 623,864	34
TRANSMISSION: MIXED DIAMETER	94.63	4.6	20,878,725	1.9	220,635	4
TOTAL TRANSMISSION	1,188.83	58.3	703,510,509	65.3	591,767	38
LATERAL	348.81	17.1	67,343,460	6.2	193,066	20
LATERAL: MIXED DIAMETER	181.87	8.9	38,239,421	3.5	210,257	18
TOTAL LATERAL	530.68	26.0	105,582,881	9.8	198,958	38
TOTAL ONSHORE LINES	1,719.51	84.3	809,093,390	75.1	470,537	76
OFFSHORE	311.05	15.3	261,427,825	24.3	840,469	31
OFFSHORE: MIXED DIAMETER	8.68	0.4	6,989,626	0.6	805,256	2
TOTAL OFFSHORE LINES	319.73	15.7	268,417,451	24.9	839,513	33
TOTAL LINES	2,039.24	100.0%	$ 1,077,510,841	100.0%	$ 528,388	109

PART A

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1981
UNDER 3 MILES

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER MILE	NUMBER OF PROJECTS
TRANSMISSION	36.24	42.6%	$ 13,273,945	24.3%	$ 366,279	31
TRANSMISSION: MIXED DIAMETER	13.80	16.2	753,292	1.4	54,586	26
TOTAL TRANSMISSION	50.04	58.8	14,027,237	25.6	280,320	57
LATERAL	12.73	14.9	2,133,426	3.9	167,590	12
LATERAL: MIXED DIAMETER	2.54	3.0	178,637	0.3	70,330	1
TOTAL LATERAL	15.27	17.9	2,312,063	4.2	151,412	13
TOTAL ONSHORE LINES	65.31	76.7	16,339,300	29.9	250,181	70
OFFSHORE	19.85	23.3	38,378,713	70.1	1,933,436	16
OFFSHORE: MIXED DIAMETER	--	--	--	--	--	--
TOTAL OFFSHORE LINES	19.85	23.3	38,378,713	70.1	1,933,436	16
TOTAL LINES	85.16	100.0%	$ 54,718,013	100.0%	$ 642,532	86

PART A

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1982

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER MILE	NUMBER OF PROJECTS
TRANSMISSION	2,477.22	72.2%	$ 2,142,371,381	79.5%	$ 864,829	54
TRANSMISSION: MIXED DIAMETER	16.00	0.5	3,564,891	0.1	222,806	3
TOTAL TRANSMISSION	2,493.22	72.7	2,145,936,272	79.7	860,709	57
LATERAL	328.34	9.6	83,414,810	3.1	254,050	35
LATERAL: MIXED DIAMETER	220.62	6.4	51,379,222	1.9	232,886	10
TOTAL LATERAL	548.96	16.0	134,794,032	5.0	245,544	45
TOTAL ONSHORE LINES	3,042.18	88.7	2,280,730,304	84.7	749,703	102
OFFSHORE	369.43	10.8	372,254,540	13.8	1,007,646	53
OFFSHORE: MIXED DIAMETER	17.15	0.5	41,155,960	1.5	2,399,764	6
TOTAL OFFSHORE LINES	386.58	11.3	413,410,500	15.3	1,069,405	59
TOTAL LINES	3,428.76	100.0%	$ 2,694,140,804	100.0%	$ 785,748	161

PART A

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1982
3 MILES AND OVER

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER MILE	NUMBER OF PROJECTS
TRANSMISSION	2,464.36	73.4%	$ 2,133,530,131	81.8%	$ 865,754	43
TRANSMISSION: MIXED DIAMETER	13.00	0.4	2,593,954	0.1	199,535	1
TOTAL TRANSMISSION	2,477.36	73.7	2,136,124,085	81.9	862,258	44
LATERAL	316.59	9.4	80,945,223	3.1	255,678	25
LATERAL: MIXED DIAMETER	216.07	6.4	50,332,478	1.9	232,945	6
TOTAL LATERAL	532.66	15.9	131,277,701	5.0	246,457	31
TOTAL ONSHORE LINES	3,010.02	89.6	2,267,401,786	87.0	753,285	75
OFFSHORE	338.41	10.1	313,427,042	12.0	926,175	36
OFFSHORE: MIXED DIAMETER	11.00	0.3	26,808,662	1.0	2,437,151	1
TOTAL OFFSHORE LINES	349.41	10.4	340,235,704	13.0	973,743	37
TOTAL LINES	3,359.43	100.0%	$ 2,607,637,490	100.0%	$ 776,214	112

PART A

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1982
UNDER 3 MILES

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER MILE	NUMBER OF PROJECTS
TRANSMISSION	12.86	18.5%	$ 8,841,250	10.2%	$ 687,500	11
TRANSMISSION: MIXED DIAMETER	3.00	4.3	970,937	1.1	323,646	2
TOTAL TRANSMISSION	15.86	22.9	9,812,187	11.3	618,675	13
LATERAL	11.75	16.9	2,469,587	2.9	210,178	10
LATERAL: MIXED DIAMETER	4.55	6.6	1,046,744	1.2	230,054	4
TOTAL LATERAL	16.30	23.5	3,516,331	4.1	215,726	14
TOTAL ONSHORE LINES	32.16	46.4	13,328,518	15.4	414,444	27
OFFSHORE	31.02	44.7	58,827,498	68.0	1,896,438	17
OFFSHORE: MIXED DIAMETER	6.15	8.9	14,347,298	16.6	2,332,894	5
TOTAL OFFSHORE LINES	37.17	53.6	73,174,796	84.6	1,968,652	22
TOTAL LINES	69.33	100.0%	$ 86,503,314	100.0%	$ 1,247,704	49

PART A

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1983

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER MILE	NUMBER OF PROJECTS
TRANSMISSION	316.38	43.4%	$ 172,758,524	54.9%	$ 546,048	38
TRANSMISSION: MIXED DIAMETER	67.50	9.3	9,436,362	3.0	139,798	22
TOTAL TRANSMISSION	383.88	52.7	182,194,886	57.9	474,614	60
LATERAL	150.01	20.6	24,721,338	7.9	164,798	16
LATERAL: MIXED DIAMETER	127.40	17.5	22,976,006	7.3	180,345	5
TOTAL LATERAL	277.41	38.1	47,697,344	15.2	171,938	21
TOTAL ONSHORE LINES	661.29	90.7	229,892,230	73.1	347,642	81
OFFSHORE	57.63	7.9	52,418,762	16.7	909,574	8
OFFSHORE: MIXED DIAMETER	9.80	1.3	32,182,952	10.2	3,283,975	1
TOTAL OFFSHORE LINES	67.43	9.3	84,601,714	26.9	1,254,660	9
TOTAL LINES	728.72	100.0%	$ 314,493,944	100.0%	$ 431,570	90

PART A

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1983
3 MILES AND OVER

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER MILE	NUMBER OF PROJECTS
TRANSMISSION	282.34	42.6%	$ 167,204,547	56.4%	$ 592,210	16
TRANSMISSION: MIXED DIAMETER	52.90	8.0	8,672,523	2.9	163,942	1
TOTAL TRANSMISSION	335.24	50.6	175,877,070	59.3	524,630	17
LATERAL	138.37	20.9	22,776,616	7.7	164,607	9
LATERAL: MIXED DIAMETER	126.87	19.2	22,844,124	7.7	180,059	4
TOTAL LATERAL	265.24	40.0	45,620,740	15.4	171,998	13
TOTAL ONSHORE LINES	600.48	90.7	221,497,810	74.7	368,868	30
OFFSHORE	52.01	7.9	42,729,853	14.4	821,570	5
OFFSHORE: MIXED DIAMETER	9.80	1.5	32,182,952	10 9	3,283,975	1
TOTAL OFFSHORE LINES	61.81	9.3	74,912,805	25.3	1,211,985	6
TOTAL LINES	662.29	100.0%	$ 296,410,615	100.0%	$ 447,554	36

PART A

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1983
UNDER 3 MILES

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER MILE	NUMBER OF PROJECTS
TRANSMISSION	34.04	51.2%	$ 5,553,977	30.7%	$ 163,160	22
TRANSMISSION: MIXED DIAMETER	14.60	22.0	763,839	4.2	52,318	21
TOTAL TRANSMISSION	48.64	73.2	6,317,816	34.9	129,889	43
LATERAL	11.64	17.5	1,944,722	10.8	167,072	7
LATERAL: MIXED DIAMETER	0.53	0.8	131,882	0.7	248,834	1
TOTAL LATERAL	12.17	18.3	2,076,604	11.5	170,633	8
TOTAL ONSHORE LINES	60.81	91.5	8,394,420	46.4	138,043	51
OFFSHORE	5.62	8.5	9,688,909	53.6	1,724,005	3
OFFSHORE: MIXED DIAMETER	--	--	--	--	--	--
TOTAL OFFSHORE LINES	5.62	8.5	9,688,909	53.6	1,724,005	3
TOTAL LINES	66.43	100.0%	$ 18,083,329	100.0%	$ 272,216	54

PART A

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1984

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER MILE	NUMBER OF PROJECTS
TRANSMISSION	126.33	34.6%	$ 79,509,394	36.3%	$ 629,379	16
TRANSMISSION: MIXED DIAMETER	72.71	19.9	40,870,172	18.7	562,098	3
TOTAL TRANSMISSION	199.04	54.5	120,379,566	55.0	604,801	19
LATERAL	89.05	24.4	20,348,837	9.3	228,510	7
LATERAL: MIXED DIAMETER	--	--	--	--	--	--
TOTAL LATERAL	89.05	24.4	20,348,837	9.3	228,510	7
TOTAL ONSHORE LINES	288.09	78.9	140,728,403	64.2	488,488	26
OFFSHORE	76.96	21.1	78,328,116	35.8	1,017,777	14
OFFSHORE: MIXED DIAMETER	--	--	--	--	--	--
TOTAL OFFSHORE LINES	76.96	21.1	78,328,116	35.8	1,017,777	14
TOTAL LINES	365.05	100.0%	$ 219,056,519	100.0%	$ 600,073	40

PART A

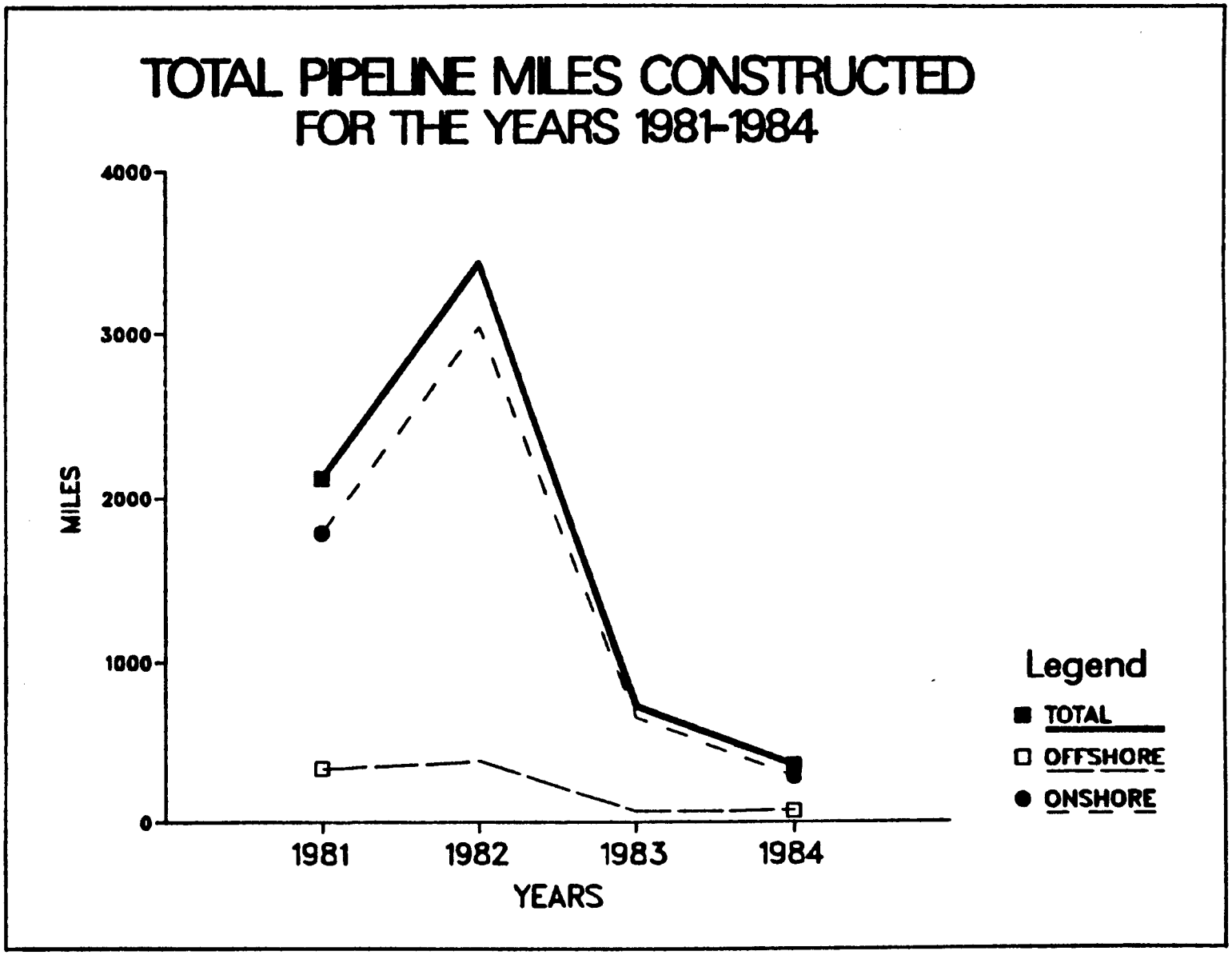
SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1984
3 MILES AND OVER

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER MILE	NUMBER OF PROJECTS
TRANSMISSION	118.47	34.3%	$ 69,810,862	35.0%	$ 589,270	8
TRANSMISSION: MIXED DIAMETER	72.67	21.0	40,836,769	20.5	561,948	2
TOTAL TRANSMISSION	191.14	55.3	110,647,631	55.4	578,883	10
LATERAL	84.40	24.4	19,789,891	9.9	234,477	5
LATERAL: MIXED DIAMETER	--	--	--	--	--	--
TOTAL LATERAL	84.40	24.4	19,789,891	9.9	234,477	5
TOTAL ONSHORE LINES	275.54	79.7	130,437,522	65.3	473,389	15
OFFSHORE	70.21	20.3	69,244,060	34.7	986,242	9
OFFSHORE: MIXED DIAMETER	--	--	--	--	--	--
TOTAL OFFSHORE LINES	70.21	20.3	69,244,060	34.7	986,242	9
TOTAL LINES	345.75	100.0%	$ 199,681,582	100.0%	$ 577,532	24

PART A

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1984
UNDER 3 MILES

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER MILE	NUMBER OF PROJECTS
TRANSMISSION	7.86	40.7%	$ 9,698,532	50.1%	$ 1,233,910	8
TRANSMISSION: MIXED DIAMETER	0.04	0.2	33,403	0.2	835,075	1
TOTAL TRANSMISSION	7.90	40.9	9,731,935	50.2	1,231,891	9
LATERAL	4.65	24.1	558,946	2.9	120,203	2
LATERAL: MIXED DIAMETER	--	--	--	--	--	--
TOTAL LATERAL	4.65	24.1	558,946	2.9	120,203	2
TOTAL ONSHORE LINES	12.55	65.0	10,290,881	53.1	819,991	11
OFFSHORE	6.75	35.0	9,084,056	46.9	1,345,786	5
OFFSHORE: MIXED DIAMETER	--	--	--	--	--	--
TOTAL OFFSHORE LINES	6.75	35.0	9,084,056	46.9	1,345,786	5
TOTAL LINES	19.30	100.0%	$ 19,374,937	100.0%	$ 1,003,883	16


TOTAL PIPELINE MILES CONSTRUCTED
FOR THE YEARS 1981-1984
4000
3000
2000
1000
0
MILES
1981
1982
1983
1984
YEARS
Legend
TOTAL
OFFSHORE
ONSHORE

PART A

SUMMARY: COMPRESSOR CONSTRUCTION
ENDING IN 1981

COMPRESSORS	HORSEPOWER	PERCENTAGE OF TOTAL HORSEPOWER	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER HORSEPOWER	NUMBER OF PROJECTS
RECIPROCATING UNITS						
ONSHORE	149,860	58.9%	$ 225,436,106	77.0%	$ 1,504	60
OFFSHORE	8,900	3.5	8,992,202	3.1	1,010	4
TOTAL RECIPROCATING UNITS	158,760	62.4	234,428,308	80.1	1,477	64
TURBINE UNITS						
ONSHORE	57,640	22.7	33,805,991	11.6	587	11
OFFSHORE	29,000	11.4	16,691,773	5.7	576	1
TOTAL TURBINE UNITS	86,640	34.1	50,497,764	17.3	583	12
ELECTRIC MOTOR UNITS						
ONSHORE	9,000	3.5	7,699,718	2.6	856	1
OFFSHORE	--	--	--	--	--	--
TOTAL ELECTRIC MOTOR UNITS	9,000	3.5	7,699,718	2.6	856	1
TOTAL ONSHORE UNITS	216,500	85.1	266,941,815	91.2	1,233	72
TOTAL OFFSHORE UNITS	37,900	14.9	25,683,975	8.8	678	5
TOTAL COMPRESSION	254,400	100.0%	$ 292,625,790	100.0%	$ 1,150	77

PART A

SUMMARY: COMPRESSOR CONSTRUCTION
ENDING IN 1982

COMPRESSORS	HORSEPOWER	PERCENTAGE OF TOTAL HORSEPOWER	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER HORSEPOWER	NUMBER OF PROJECTS
RECIPROCATING UNITS						
ONSHORE	115,438	47.0%	$ 168,865,237	48.4%	$ 1,463	44
OFFSHORE	1,672	0.7	1,368,959	0.4	819	2
TOTAL RECIPROCATING UNITS	117,110	47.7	170,234,196	48.8	1,454	46
TURBINE UNITS						
ONSHORE	98,820	40.2	130,260,147	37.3	1,318	14
OFFSHORE	4,560	1.9	24,306,617	7.0	5,330	1
TOTAL TURBINE UNITS	103,380	42.1	154,566,764	44.3	1,495	15
ELECTRIC MOTOR UNITS						
ONSHORE	24,250	9.9	23,280,324	6.7	960	2
OFFSHORE	800	0.3	682,000	0.2	853	1
TOTAL ELECTRIC MOTOR UNITS	25,050	10.2	23,962,324	6.9	957	3
TOTAL ONSHORE UNITS	238,508	97.1	322,405,708	92.4	1,352	60
TOTAL OFFSHORE UNITS	7,032	2.9	26,357,576	7.6	3,748	4
TOTAL COMPRESSION	245,540	100.0%	$ 348,763,284	100.0%	$ 1,420	64

PART A

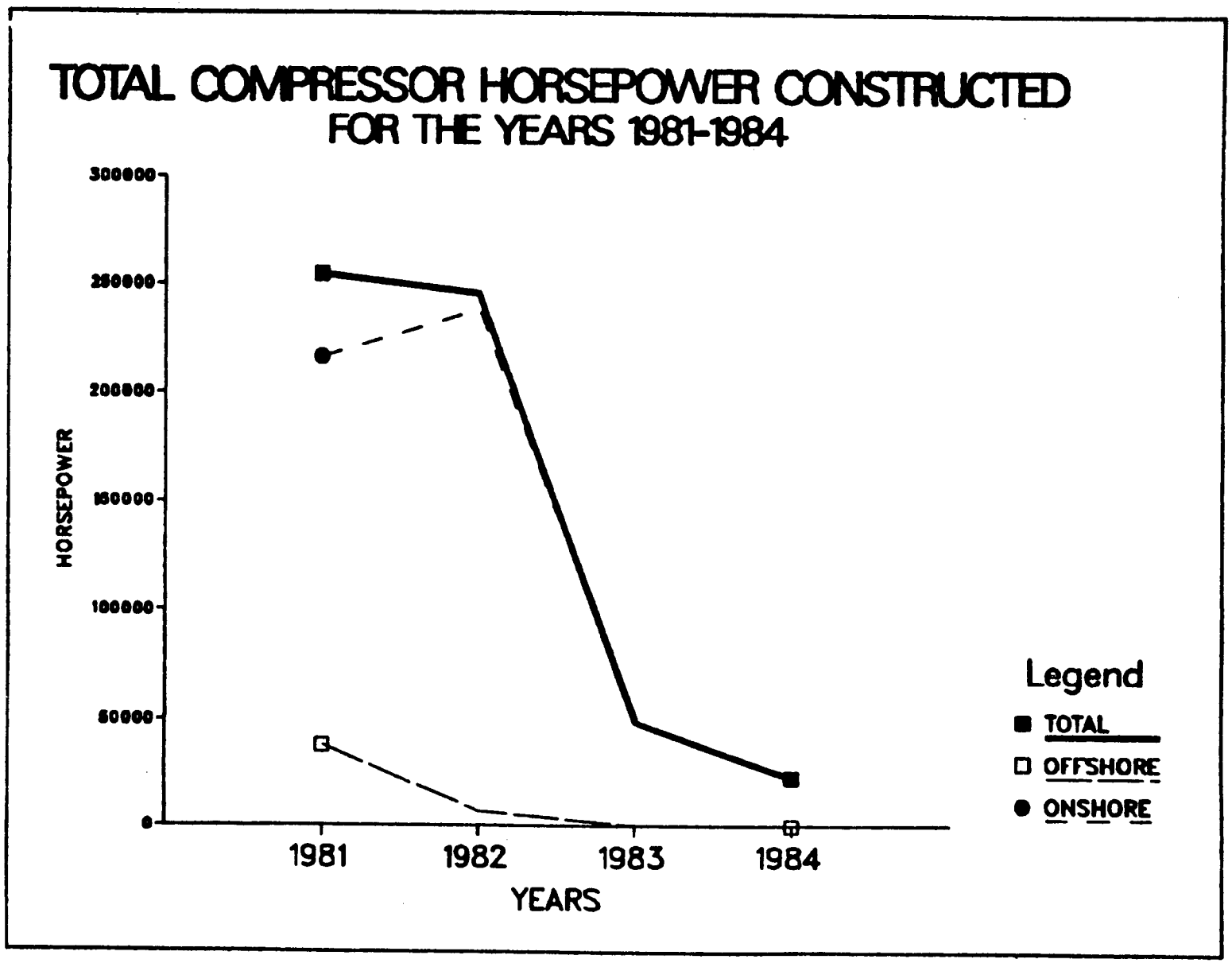
SUMMARY: COMPRESSOR CONSTRUCTION
ENDING IN 1983

COMPRESSORS	HORSEPOWER	PERCENTAGE OF TOTAL HORSEPOWER	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER HORSEPOWER	NUMBER OF PROJECTS
RECIPROCATING UNITS						
ONSHORE	42,830	87.4%	$ 86,282,149	94.6%	$ 2,015	16
OFFSHORE	--	--	--	--	--	--
TOTAL RECIPROCATING UNITS	42,830	87.4	86,282,149	94.6	2,015	16
TURBINE UNITS						
ONSHORE	6,150	12.6	4,892,344	5.4	796	3
OFFSHORE	--	--	--	--	--	--
TOTAL TURBINE UNITS	6,150	12.6	4,892,344	5.4	796	3
ELECTRIC MOTOR UNITS						
ONSHORE	--	--	--	--	--	--
OFFSHORE	--	--	--	--	--	--
TOTAL ELECTRIC MOTOR UNITS	--	--	--	--	--	--
TOTAL ONSHORE UNITS	48,980	100.0	91,174,493	100.0	1,861	19
TOTAL OFFSHORE UNITS	--	--	--	--	--	--
TOTAL COMPRESSION	48,980	100.0%	$ 91,174,493	100.0%	$ 1,861	19

PART A

SUMMARY: COMPRESSOR CONSTRUCTION
ENDING IN 1984

COMPRESSORS	HORSEPOWER	PERCENTAGE OF TOTAL HORSEPOWER	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER HORSEPOWER	NUMBER OF PROJECTS
RECIPROCATING UNITS						
ONSHORE	11,121	48.9%	$ 18,021,052	75.1%	$ 1,620	4
OFFSHORE	--	--	--	--	--	--
TOTAL RECIPROCATING UNITS	11,121	48.9	18,021,052	75.1	1,620	4
TURBINE UNITS						
ONSHORE	11,600	51.1	5,961,700	24.9	514	1
OFFSHORE	--	--	--	--	--	--
TOTAL TURBINE UNITS	11,600	51.1	5,961,700	24.9	514	1
ELECTRIC MOTOR UNITS						
ONSHORE	--	--	--	--	--	--
OFFSHORE	--	--	--	--	--	--
TOTAL ELECTRIC MOTOR UNITS	--	--	--	--	--	--
TOTAL ONSHORE UNITS	22,721	100.0	23,982,752	100.0	1,056	5
TOTAL OFFSHORE UNITS	--	--	--	--	--	--
TOTAL COMPRESSION	22,721	100.0%	$ 23,982,752	100.0%	$ 1,056	5


TOTAL COMPRESSOR HORSEPOWER CONSTRUCTED
FOR THE YEARS 1981-1984
HORSEPOWER
300000
250000
200000
150000
100000
50000
0
1981
1982
1983
1984
YEARS
Legend
TOTAL
OFFSHORE
ONSHORE

COMPANY NAMES AND ABBREVIATIONS

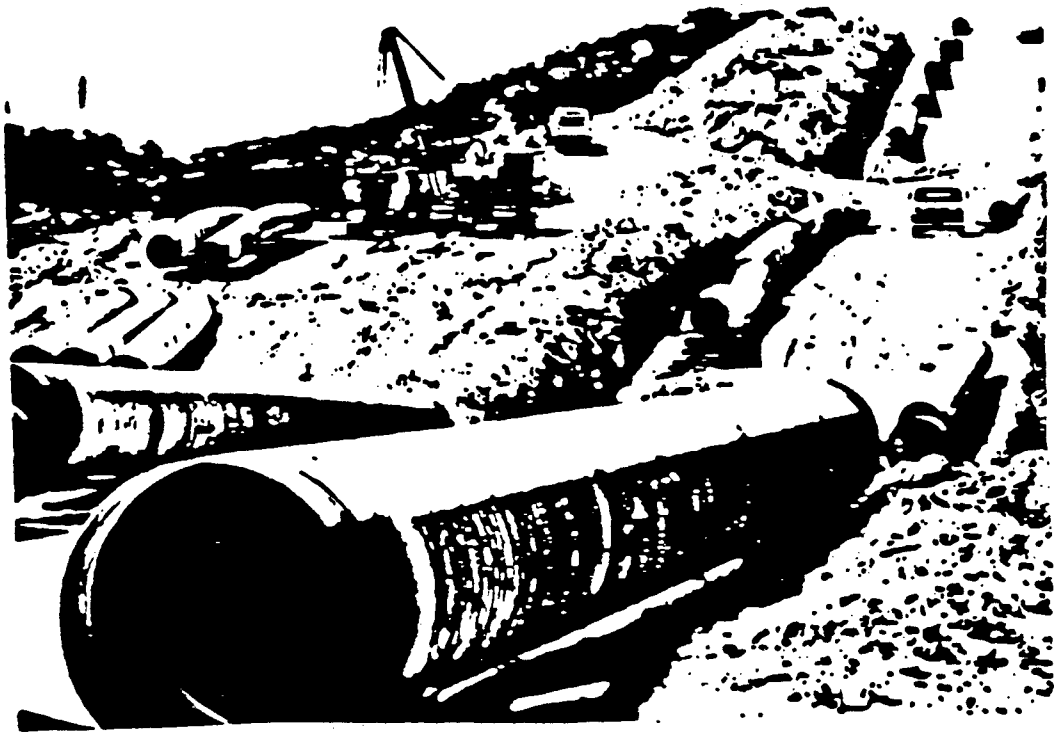
COMPANY NAME	COMPANY ABBREVIATION
AMERICAN DISTRIBUTION CO., INC. (ALABAMA DIV.)	ADC
ALABAMA GAS CORP.	ALA GAS
ALABAMA-TENNESSEE NATURAL GAS CO.	ALA-TENN
ALGONQUIN GAS TRANSMISSION CO.	ALGONQUIN
ANR PIPELINE CO.	ANR
ANR STORAGE CO.	ANR STGE
ARKANSAS LOUISIANA GAS CO.	ARKLA
ARKANSAS OKLAHOMA GAS CORP.	ARK OK
BAYOU INTERSTATE PIPELINE SYSTEM	BAYOU
BEAR CREEK STORAGE CO.	BEAR CREEK
BLACK MARLIN PIPELINE CO.	BLACK MARLIN
CANYON CREEK COMPRESSION CO.	CANYON CREEK
CARNEGIE NATURAL GAS CO.	CARNEGIE
CITIES SERVICE GAS CO.	CITIES
COLORADO INTERSTATE GAS CO.	CIG
COLUMBIA GAS TRANSMISSION CORP.	COLUMBIA GAS
COLUMBIA GULF TRANSMISSION CO.	COLUMBIA GULF
CONSOLIDATED GAS SUPPLY CORP.	CON GAS
CONSOLIDATED GAS TRANSMISSION CORP.	CONSOLIDATED
EASTERN SHORE NATURAL GAS CO.	EASTERN SHORE
EL PASO NATURAL GAS CO.	EL PASO
EQUITABLE GAS CO.	EQUITABLE
FLORIDA GAS TRANSMISSION CO.	FLA GAS
GASDEL SYSTEM PIPELINE INC.	GASDEL
GREAT LAKES GAS TRANSMISSION CO.	GREAT LAKES
HIGH ISLAND OFFSHORE SYSTEM	HIOS
HONEOYE STORAGE CORP.	HONEOYE
INLAND GAS CO., INC.	INLAND
IOWA-ILLINOIS GAS AND ELECTRIC CO.	IOWA-ILLINOIS
K N ENERGY, INC.	K N ENERGY
KANSAS-NEBRASKA NATURAL GAS CO, INC.	KANSAS-NEBRASKA
LONE STAR GAS CO.	LONE STAR
MICHIGAN CONSOLIDATED GAS CO.	MICH CON
MICHIGAN GAS STORAGE CO.	MICH GAS
MICHIGAN WISCONSIN PIPE LINE CO.	MICH WIS
MID LOUISIANA GAS CO.	MID LOUISIANA
MIDWESTERN GAS TRANSMISSION CO.	MIDWESTERN
MIGC, INC.	MIGC
MISSISSIPPI RIVER TRANSMISSION CORP.	MISS RIVER
MITCO PIPELINE CO.	MITCO
MONTANA-DAKOTA UTILITIES CO.	MONTANA-DAKOTA
MOUNTAIN FUEL RESOURCES, INC.	MOUNTAIN FUEL RES
MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL
NATIONAL FUEL GAS SUPPLY CORP.	NATIONAL FUEL
NATURAL GAS PIPELINE CO. OF AMERICA	NGPL
NORTHERN BORDER PIPELINE CO.	NORTHERN BORDER
NORTHERN NATURAL GAS CO.	NORTHERN
NORTHWEST CENTRAL PIPELINE CORP.	NORTHWEST CENTRAL
NORTHWEST PIPELINE CORP.	NORTHWEST
OHIO RIVER PIPELINE CORP.	OHIO RIVER
OVERTHRUST PIPELINE CO.	OVERTHRUST
OZARK GAS TRANSMISSION SYSTEM	OZARK
PACIFIC GAS TRANSMISSION CO.	PACIFIC GAS
PACIFIC INTERSTATE OFFSHORE CO.	PIOC
PACIFIC OFFSHORE PIPELINE CO.	POPCO
PANHANDLE EASTERN PIPE LINE CO.	PANHANDLE
SABINE PIPE LINE CO.	SABINE
SEA ROBIN PIPELINE CO.	SEA ROBIN
SOUTH GEORGIA NATURAL GAS CO.	SOUTH GEORGIA
SOUTHERN NATURAL GAS CO.	SOUTHERN
SOUTHWEST GAS CORP.	SOUTHWEST
STANDARD PACIFIC GAS LINE, INC.	STANDARD PACIFIC
STINGRAY PIPELINE CO.	STINGRAY
TARPON TRANMISSION CO.	TARPON
TCP GATHERING CO.	TCP GATHERING
TENNESSEE GAS PIPELINE CO.	TENNECO
TENNESSEE NATURAL GAS LINES, INC.	TNGL
TEXAS EASTERN TRANSMISSION CORP.	TETCO
TEXAS GAS TRANSMISSION CORP.	TEXAS GAS
TEXAS SEA RIM PIPELINE, INC.	TEXAS SEA RIM
TRAILBLAZER PIPELINE CO.	TRAILBLAZER
TRANSCONTINENTAL GAS PIPE LINE CORP.	TRANSCO
TRANSWESTERN PIPELINE CO.	TRANSWESTERN
TRUNKLINE GAS CO.	TRUNKLINE
U-T OFFSHORE SYSTEM	UTOS
UNITED GAS PIPE LINE CO.	UNITED
VALERO INTERSTATE TRANSMISSION CO.	VALERO
WESTERN GAS INTERSTATE CO.	WESTERN
WYOMING INTERSTATE CO., LTD.	WIC

LIST OF DESCRIPTIVE ABBREVIATIONS USED IN THE CONSTRUCTION COST REPORT

ITEM	ABBREVIATION
ADDITION	ADD
AVERAGE	AVG
BLOCK	BLK
COMPRESSOR	COMP
CONSTRUCTION	CONST
COUNTY	CO
DIAMETER	DIAM
EAST	E
ELECTRIC	ELEC
FIELD	FLD
ISLAND	ISL
LATERAL	LAT
NORTH	N
NUMBER	NO
PARISH	PAR
PLATFORM	PLAT
RECIPROCATING	RECIP
SAINT	ST
SOUTH	S
SOUTHWEST	SW
STATION	STA
STORAGE	STGE
TRANSMISSION	TRANSM
TURBINE	TURB
WEST	W

PART A
SECTION I COMPARATIVE SUMMARY

Table A Pipeline Construction and Expenditures



PART A

TABLE A

PIPELINE CONSTRUCTION EXPENDITURES
CONSTRUCTION ENDING IN 1981 THROUGH 1984

		YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
ONSHORE MILES					
3 MILES AND OVER		1,443.01	2,780.95	420.71	202.87
EXPENDITURES	$	749,975,244	2,214,475,354	189,981,163	89,600,753
AVG. COST PER MILE	$	519,730	796,302	451,573	441,666
UNDER 3 MILES		48.97	24.61	45.68	12.51
EXPENDITURES	$	15,407,371	11,310,837	7,498,699	10,257,478
AVG. COST PER MILE	$	314,629	459,603	164,157	819,942
MIXED DIAMETER -3 MILES AND OVER		276.50	229.07	179.77	72.67
EXPENDITURES	$	59,118,146	52,926,432	31,516,647	40,836,769
AVG. COST PER MILE	$	213,809	231,049	175,316	561,948
MIXED DIAMETER -UNDER 3 MILES		16.34	7.55	15.13	0.04
EXPENDITURES	$	931,929	2,017,681	895,721	33,403
AVG. COST PER MILE	$	57,034	267,243	59,202	835,075
TOTAL ONSHORE MILES		1,784.82	3,042.18	661.29	288.09
TOTAL ONSHORE EXPENDITURES	$	825,432,690	2,280,730,304	229,892,230	140,728,403
TOTAL AVG. COST PER MILE	$	462,474	749,703	347,642	488,488
OFFSHORE MILES					
3 MILES AND OVER		311.05	338.41	52.01	70.21
EXPENDITURES	$	261,427,825	313,427,042	42,729,853	69,244,060
AVG. COST PER MILE	$	840,469	926,175	821,570	986,242
UNDER 3 MILES		19.85	31.02	5.62	6.75
EXPENDITURES	$	38,378,713	58,827,498	9,688,909	9,084,056
AVG. COST PER MILE	$	1,933,436	1,896,438	1,724,005	1,345,786
MIXED DIAMETER -3 MILES AND OVER		8.68	11.00	9.80	--
EXPENDITURES	$	6,989,626	26,808,662	32,182,952	--
AVG. COST PER MILE	$	805,256	2,437,151	3,283,975	--
MIXED DIAMETER -UNDER 3 MILES		--	6.15	--	--
EXPENDITURES	$	--	14,347,298	--	--
AVG. COST PER MILE	$	--	2,332,894	--	--
TOTAL OFFSHORE MILES		339.58	386.58	67.43	76.96
TOTAL OFFSHORE EXPENDITURES	$	306,796,164	413,410,500	84,601,714	78,328,116
TOTAL AVG. COST PER MILE	$	903,458	1,069,405	1,254,660	1,017,777

PART A

TABLE A

PIPELINE CONSTRUCTION EXPENDITURES
CONSTRUCTION ENDING IN 1981 THROUGH 1984

		YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
TOTAL ONSHORE AND OFFSHORE MILES		2,124.40	3,428.76	728.72	365.05
TOTAL ONSHORE AND OFFSHORE EXPENDITURES	$	1,132,228,854	2,694,140,804	314,493,944	219,056,519
TOTAL AVG. COST PER MILE	$	532,964	785,748	431,570	600,073

Table B-1 Transmission Pipeline

PART A

TABLE B-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		3 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED			3.20		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		67,449		
MATERIAL % OF THE TOTAL $		%	34.2		
MATERIAL AVG. COST PER MILE	$		21,078		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$		--		
ENGINEERING ... % OF THE TOTAL $		%	--		
ENGINEERING ... AVG. COST PER MILE	$		--		
LABOR					
TOTAL LABOR	$		19,093		
LABOR % OF THE TOTAL $		%	9.7		
LABOR AVG. COST PER MILE	$		5,967		
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$		--		
RIGHT-OF-WAY ... % OF THE TOTAL $		%	--		
RIGHT-OF-WAY ... AVG. COST PER MILE	$		--		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$		--		
OVERHEAD	$		5,353		
OTHER MISCELLANEOUS 1)	$		105,555		
TOTAL MISCELLANEOUS	$		110,908		
MISCELLANEOUS % OF THE TOTAL $		%	56.2		
MISCELLANEOUS AVG. COST PER MILE	$		34,659		
TOTAL COST					
TOTAL COST	$	2)	197,450	2)	2)
TOTAL AVG. COST PER MILE	$		61,703		
COST RANGE PER MILE					
MINIMUM	$		3)		
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		4 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		4.00			
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	59,348			
MATERIAL % OF THE TOTAL $		25.2%			
MATERIAL AVG. COST PER MILE	$	14,837			
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	--			
ENGINEERING ... % OF THE TOTAL $		--%			
ENGINEERING ... AVG. COST PER MILE	$	--			
LABOR					
TOTAL LABOR	$	139,994			
LABOR % OF THE TOTAL $		59.4%			
LABOR AVG. COST PER MILE	$	34,999			
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	17,591			
RIGHT-OF-WAY ... % OF THE TOTAL $		7.5%			
RIGHT-OF-WAY ... AVG. COST PER MILE	$	4,398			
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	530			
OVERHEAD	$	16,313			
OTHER MISCELLANEOUS 1)	$	1,775			
TOTAL MISCELLANEOUS	$	18,618			
MISCELLANEOUS % OF THE TOTAL $		7.9%			
MISCELLANEOUS AVG. COST PER MILE	$	4,655			
TOTAL COST					
TOTAL COST	$	235,551	2)	2)	2)
TOTAL AVG. COST PER MILE	$	58,888			
COST RANGE PER MILE					
MINIMUM	$	3)			
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART 'A

TABLE B-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		6 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		3.40	12.00		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	75,207	300,395		
MATERIAL % OF THE TOTAL $		31.8%	55.7		
MATERIAL AVG. COST PER MILE	$	22,120	25,033		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	--	2,874		
ENGINEERING ... % OF THE TOTAL $		--%	0.5		
ENGINEERING ... AVG. COST PER MILE	$	--	240		
LABOR					
TOTAL LABOR	$	132,282	137,957		
LABOR % OF THE TOTAL $		55.9%	25.6		
LABOR AVG. COST PER MILE	$	38,906	11,496		
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	5,679	98,010		
RIGHT-OF-WAY ... % OF THE TOTAL $		2.4%	18.2		
RIGHT-OF-WAY ... AVG. COST PER MILE	$	1,670	8,168		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	1,079	--		
OVERHEAD	$	17,209	--		
OTHER MISCELLANEOUS 1)	$	5,026	--		
TOTAL MISCELLANEOUS	$	23,314	--		
MISCELLANEOUS % OF THE TOTAL $		9.9%	--		
MISCELLANEOUS AVG. COST PER MILE	$	6,857	--		
TOTAL COST					
TOTAL COST	$	236,482	539,236	2)	2)
TOTAL AVG. COST PER MILE	$	69,554	44,936		
COST RANGE PER MILE					
MINIMUM	$	3)	3)		
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		8 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		17.70	5.90	7.90	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	506,043	221,267	264,426	
MATERIAL % OF THE TOTAL $		27.2%	28.2	28.8	
MATERIAL AVG. COST PER MILE	$	28,590	37,503	33,472	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	--	59,556	--	
ENGINEERING ... % OF THE TOTAL $		--%	7.6	--	
ENGINEERING ... AVG. COST PER MILE	$	--	10,094	--	
LABOR					
TOTAL LABOR	$	480,250	421,016	517,046	
LABOR % OF THE TOTAL $		25.8%	53.6	56.3	
LABOR AVG. COST PER MILE	$	27,133	71,359	65,449	
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	200,664	59,329	13,600	
RIGHT-OF-WAY ... % OF THE TOTAL $		10.8%	7.6	1.5	
RIGHT-OF-WAY ... AVG. COST PER MILE	$	11,337	10,056	1,722	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	--	17,363	4,927	
OVERHEAD	$	121,810	--	98,889	
OTHER MISCELLANEOUS 1)	$	553,200	6,750	19,051	
TOTAL MISCELLANEOUS	$	675,010	24,113	122,867	
MISCELLANEOUS % OF THE TOTAL $		36.3%	3.1	13.4	
MISCELLANEOUS AVG. COST PER MILE	$	38,136	4,087	15,553	
TOTAL COST					
TOTAL COST	$	1,861,967	785,281	917,939	2)
TOTAL AVG. COST PER MILE	$	105,196	133,098	116,195	
COST RANGE PER MILE					
MINIMUM	$	3)	3)	86,111	
MAXIMUM	$			141,381	

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		10 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		4.90	8.25		4.94
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	181,690	446,547		248,285
MATERIAL % OF THE TOTAL $		29.2%	49.7		39.1
MATERIAL AVG. COST PER MILE	$	37,080	54,127		50,260
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	--	--		--
ENGINEERING ... % OF THE TOTAL $		--%	--		--
ENGINEERING ... AVG. COST PER MILE	$	--	--		--
LABOR					
TOTAL LABOR	$	380,387	395,936		360,928
LABOR % OF THE TOTAL $		61.2%	44.0		56.8
LABOR AVG. COST PER MILE	$	77,630	47,992		73,062
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	10,660	--		--
RIGHT-OF-WAY ... % OF THE TOTAL $		1.7%	--		--
RIGHT-OF-WAY ... AVG. COST PER MILE	$	2,176	--		--
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	2,980	13,960		8,390
OVERHEAD	$	38,523	17,520		17,113
OTHER MISCELLANEOUS 1)	$	7,266	24,896		966
TOTAL MISCELLANEOUS	$	48,769	56,376		26,469
MISCELLANEOUS % OF THE TOTAL $		7.8%	6.3		4.2
MISCELLANEOUS AVG. COST PER MILE	$	9,953	6,833		5,358
TOTAL COST					
TOTAL COST	$	621,506	898,859	2)	635,682
TOTAL AVG. COST PER MILE	$	126,838	108,953		128,681
COST RANGE PER MILE					
MINIMUM	$	3)	3)		3)
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		12 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		76.38	12.23	19.50	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	5,312,038	884,936	1,082,980	
MATERIAL % OF THE TOTAL $		46.7%	44.1	24.6	
MATERIAL AVG. COST PER MILE	$	69,547	72,358	55,537	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	76,670	75,362	--	
ENGINEERING ... % OF THE TOTAL $		0.7%	3.8	--	
ENGINEERING ... AVG. COST PER MILE	$	1,004	6,162	--	
LABOR					
TOTAL LABOR	$	5,130,936	878,440	2,712,633	
LABOR % OF THE TOTAL $		45.1%	43.8	61.7	
LABOR AVG. COST PER MILE	$	67,176	71,827	139,109	
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	233,672	37,847	144,993	
RIGHT-OF-WAY ... % OF THE TOTAL $		2.1%	1.9	3.3	
RIGHT-OF-WAY ... AVG. COST PER MILE	$	3,059	3,095	7,436	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	260,917	47,142	128,350	
OVERHEAD	$	299,801	82,278	185,959	
OTHER MISCELLANEOUS 1)	$	64,403	--	139,913	
TOTAL MISCELLANEOUS	$	625,121	129,420	454,222	
MISCELLANEOUS % OF THE TOTAL $		5.5%	6.5	10.3	
MISCELLANEOUS AVG. COST PER MILE	$	8,184	10,582	23,293	
TOTAL COST					
TOTAL COST	$	11,378,437	2,006,005	4,394,828	2)
TOTAL AVG. COST PER MILE	$	148,971	164,023	225,376	
COST RANGE PER MILE					
MINIMUM	$	90,389	3)	159,605	
MAXIMUM	$	348,708		251,214	

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		16 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		6.80	21.50	11.00	22.94
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	704,501	2,999,657	830,743	1,914,739
MATERIAL % OF THE TOTAL $		56.5%	38.6	50.9	46.6
MATERIAL AVG. COST PER MILE	$	103,603	139,519	75,522	83,467
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	--	514,308	29,902	66,776
ENGINEERING ... % OF THE TOTAL $		--%	6.6	1.8	1.6
ENGINEERING ... AVG. COST PER MILE	$	--	23,921	2,718	2,911
LABOR					
TOTAL LABOR	$	469,375	3,879,191	474,799	1,665,210
LABOR % OF THE TOTAL $		37.7%	49.9	29.1	40.5
LABOR AVG. COST PER MILE	$	69,026	180,427	43,164	72,590
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	1,627	152,444	33,000	101,651
RIGHT-OF-WAY ... % OF THE TOTAL $		0.1%	2.0	2.0	2.5
RIGHT-OF-WAY ... AVG. COST PER MILE	$	239	7,090	3,000	4,431
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	46,824	59,969	1,484	7,632
OVERHEAD	$	23,696	158,822	245,408	327,405
OTHER MISCELLANEOUS 1)	$	--	14,433	15,763	23,756
TOTAL MISCELLANEOUS	$	70,520	233,224	262,655	358,793
MISCELLANEOUS % OF THE TOTAL $		5.7%	3.0	16.1	8.7
MISCELLANEOUS AVG. COST PER MILE	$	10,371	10,848	23,878	15,640
TOTAL COST					
TOTAL COST	$	1,246,023	7,778,824	1,631,099	4,107,169
TOTAL AVG. COST PER MILE	$	183,239	361,806	148,282	179,040
COST RANGE PER MILE					
MINIMUM	$	2)	175,715	2)	157,297
MAXIMUM	$		517,677		231,894

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		18 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED			20.40		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		2,808,000		
MATERIAL % OF THE TOTAL $		%	34.2		
MATERIAL AVG. COST PER MILE	$		137,647		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$		382,800		
ENGINEERING ... % OF THE TOTAL $		%	4.7		
ENGINEERING ... AVG. COST PER MILE	$		18,765		
LABOR					
TOTAL LABOR	$		3,183,400		
LABOR % OF THE TOTAL $		%	38.8		
LABOR AVG. COST PER MILE	$		156,049		
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$		1,266,900		
RIGHT-OF-WAY ... % OF THE TOTAL $		%	15.4		
RIGHT-OF-WAY ... AVG. COST PER MILE	$		62,103		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$		190,128		
OVERHEAD	$		312,772		
OTHER MISCELLANEOUS 1)	$		57,100		
TOTAL MISCELLANEOUS	$		560,000		
MISCELLANEOUS % OF THE TOTAL $		%	6.8		
MISCELLANEOUS AVG. COST PER MILE	$		27,451		
TOTAL COST					
TOTAL COST	$	2)	8,201,100	2)	2)
TOTAL AVG. COST PER MILE	$		402,015		
COST RANGE PER MILE					
MINIMUM	$		3)		
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		20 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		23.03	448.79	29.70	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	3,218,008	56,940,607	4,440,729	
MATERIAL % OF THE TOTAL $		28.6%	41.1	42.3	
MATERIAL AVG. COST PER MILE	$	139,731	126,876	149,519	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	157,361	5,277,303	104,850	
ENGINEERING ... % OF THE TOTAL $		1.4%	3.8	1.0	
ENGINEERING ... AVG. COST PER MILE	$	6,833	11,759	3,530	
LABOR					
TOTAL LABOR	$	6,725,956	62,460,252	4,521,982	
LABOR % OF THE TOTAL $		59.7%	45.1	43.1	
LABOR AVG. COST PER MILE	$	292,052	139,175	152,255	
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	145,669	5,696,868	611,667	
RIGHT-OF-WAY ... % OF THE TOTAL $		1.3%	4.1	5.8	
RIGHT-OF-WAY ... AVG. COST PER MILE	$	6,325	12,694	20,595	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	78,888	4,232,515	399,084	
OVERHEAD	$	233,306	2,594,957	298,109	
OTHER MISCELLANEOUS 1)	$	711,475	1,411,421	125,289	
TOTAL MISCELLANEOUS	$	1,023,669	8,238,893	822,482	
MISCELLANEOUS % OF THE TOTAL $		9.1%	5.9	7.8	
MISCELLANEOUS AVG. COST PER MILE	$	44,449	18,358	27,693	
TOTAL COST					
TOTAL COST	$	11,270,663	138,613,923	10,501,710	2)
TOTAL AVG. COST PER MILE	$	489,390	308,861	353,593	
COST RANGE PER MILE					
MINIMUM	$	270,254	210,378	186,942	
MAXIMUM	$	1,741,597	482,464	387,328	

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

PART A

TABLE B-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		22 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED			10.10		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		3,274,426		
MATERIAL % OF THE TOTAL $		%	45.3		
MATERIAL AVG. COST PER MILE	$		324,201		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$		855,850		
ENGINEERING ... % OF THE TOTAL $		%	11.8		
ENGINEERING ... AVG. COST PER MILE	$		84,738		
LABOR					
TOTAL LABOR	$		1,946,348		
LABOR % OF THE TOTAL $		%	26.9		
LABOR AVG. COST PER MILE	$		192,708		
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$		23,851		
RIGHT-OF-WAY ... % OF THE TOTAL $		%	0.3		
RIGHT-OF-WAY ... AVG. COST PER MILE	$		2,361		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$		385,978		
OVERHEAD	$		593,662		
OTHER MISCELLANEOUS 1)	$		144,728		
TOTAL MISCELLANEOUS	$		1,124,368		
MISCELLANEOUS % OF THE TOTAL $		%	15.6		
MISCELLANEOUS AVG. COST PER MILE	$		111,324		
TOTAL COST					
TOTAL COST	$	2)	7,224,843	2)	2)
TOTAL AVG. COST PER MILE	$		715,331		
COST RANGE PER MILE					
MINIMUM	$		3)		
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

	24 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
	1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED	439.59	20.27	67.10	8.50
COST DATA				
MATERIALS				
TOTAL MATERIALS	$ 84,952,795	3,252,073	13,282,131	1,522,335
MATERIAL % OF THE TOTAL $	38.2%	33.3	33.8	44.5
MATERIAL AVG. COST PER MILE	$ 193,255	160,438	197,945	179,098
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY				
TOTAL ENGINEERING ...	$ 18,948,529	349,719	--	232,166
ENGINEERING ... % OF THE TOTAL $	8.5%	3.6	--	6.8
ENGINEERING ... AVG. COST PER MILE	$ 43,105	17,253	--	27,314
LABOR				
TOTAL LABOR	$ 76,120,765	5,398,862	21,354,423	1,052,460
LABOR % OF THE TOTAL $	34.3%	55.3	54.4	30.8
LABOR AVG. COST PER MILE	$ 173,163	266,347	318,248	123,819
RIGHT-OF-WAY AND DAMAGES				
TOTAL RIGHT-OF-WAY ...	$ 7,901,496	215,449	731,277	222,391
RIGHT-OF-WAY ... % OF THE TOTAL $	3.6%	2.2	1.9	6.5
RIGHT-OF-WAY ... AVG. COST PER MILE	$ 17,975	10,629	10,898	26,164
MISCELLANEOUS				
INTEREST DURING CONSTRUCTION	$ 22,789,100	410,816	1,452,971	116,912
OVERHEAD	$ 6,813,310	--	1,374,087	272,795
OTHER MISCELLANEOUS 1)	$ 4,624,303	136,216	1,084,436	--
TOTAL MISCELLANEOUS	$ 34,226,713	547,032	3,911,494	389,707
MISCELLANEOUS % OF THE TOTAL $	15.4%	5.6	10.0	11.4
MISCELLANEOUS AVG. COST PER MILE	$ 77,861	26,987	58,294	45,848
TOTAL COST				
TOTAL COST	$ 222,150,298	9,763,135	39,279,325	3,419,059
TOTAL AVG. COST PER MILE	$ 505,358	481,654	585,385	402,242
COST RANGE PER MILE				
MINIMUM	$ 310,513	2)	2)	2)
MAXIMUM	$ 862,088			

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) ONE REPORT RECEIVED FOR THIS YEAR.

ART A

TABLE B-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		26 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
ILES OF PIPE CONSTRUCTED				4.70	
OST DATA					
MATERIALS					
TOTAL MATERIALS	$			1,003,065	
MATERIAL % OF THE TOTAL $		%		43.2	
MATERIAL AVG. COST PER MILE	$			213,418	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$			175,755	
ENGINEERING ... % OF THE TOTAL $		%		7.6	
ENGINEERING ... AVG. COST PER MILE	$			37,395	
LABOR					
TOTAL LABOR	$			767,570	
LABOR % OF THE TOTAL $		%		33.0	
LABOR AVG. COST PER MILE	$			163,313	
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$			172,519	
RIGHT-OF-WAY ... % OF THE TOTAL $		%		7.4	
RIGHT-OF-WAY ... AVG. COST PER MILE	$			36,706	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$			124,633	
OVERHEAD	$			--	
OTHER MISCELLANEOUS 1)	$			79,965	
TOTAL MISCELLANEOUS	$			204,598	
MISCELLANEOUS % OF THE TOTAL $		%		8.8	
MISCELLANEOUS AVG. COST PER MILE	$			43,531	
TOTAL COST					
TOTAL COST	$	2)	2)	2,323,507	2)
TOTAL AVG. COST PER MILE	$			494,363	
COST RANGE PER MILE					
MINIMUM	$			3)	
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

	30 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
	1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED	239.40	241.57	48.00	
COST DATA				
MATERIALS				
TOTAL MATERIALS	$ 77,121,636	75,858,721	10,896,722	
MATERIAL % OF THE TOTAL $	43.7%	38.8	48.3	
MATERIAL AVG. COST PER MILE	$ 322,146	314,024	227,015	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY				
TOTAL ENGINEERING ...	$ 2,602,775	6,277,356	618,672	
ENGINEERING ... % OF THE TOTAL $	1.5%	3.2	2.7	
ENGINEERING ... AVG. COST PER MILE	$ 10,872	25,986	12,889	
LABOR				
TOTAL LABOR	$ 81,427,784	92,669,152	8,514,928	
LABOR % OF THE TOTAL $	46.1%	47.4	37.7	
LABOR AVG. COST PER MILE	$ 340,133	383,612	177,394	
RIGHT-OF-WAY AND DAMAGES				
TOTAL RIGHT-OF-WAY ...	$ 7,743,258	5,461,561	1,184,731	
RIGHT-OF-WAY ... % OF THE TOTAL $	4.4%	2.8	5.3	
RIGHT-OF-WAY ... AVG. COST PER MILE	$ 32,344	22,609	24,682	
MISCELLANEOUS				
INTEREST DURING CONSTRUCTION	$ 6,532,989	8,075,898	511,159	
OVERHEAD	$ 1,050,108	5,745,734	831,728	
OTHER MISCELLANEOUS 1)	$ 18,115	1,437,600	--	
TOTAL MISCELLANEOUS	$ 7,601,212	15,259,232	1,342,887	
MISCELLANEOUS % OF THE TOTAL $	4.3%	7.8	6.0	
MISCELLANEOUS AVG. COST PER MILE	$ 31,751	63,167	27,977	
TOTAL COST				
TOTAL COST	$ 176,496,665	195,526,022	22,557,940	2)
TOTAL AVG. COST PER MILE	$ 737,246	809,397	469,957	
COST RANGE PER MILE				
MINIMUM	$ 304,124	548,396	405,614	
MAXIMUM	$ 1,049,416	1,179,760	696,980	

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

PART A

TABLE B-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		34 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		24.20			
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	7,535,761			
MATERIAL % OF THE TOTAL $		65.6%			
MATERIAL AVG. COST PER MILE	$	311,395			
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	540			
ENGINEERING ... % OF THE TOTAL $		0.0%			
ENGINEERING ... AVG. COST PER MILE	$	22			
LABOR					
TOTAL LABOR	$	2,636,219			
LABOR % OF THE TOTAL $		23.0%			
LABOR AVG. COST PER MILE	$	108,935			
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	14,519			
RIGHT-OF-WAY ... % OF THE TOTAL $		0.1%			
RIGHT-OF-WAY ... AVG. COST PER MILE	$	600			
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	--			
OVERHEAD	$	403,912			
OTHER MISCELLANEOUS 1)	$	895,616			
TOTAL MISCELLANEOUS	$	1,299,528			
MISCELLANEOUS % OF THE TOTAL $		11.3%			
MISCELLANEOUS AVG. COST PER MILE	$	53,700			
TOTAL COST					
TOTAL COST	$	11,486,567	2)	2)	2)
TOTAL AVG. COST PER MILE	$	474,652			
COST RANGE PER MILE					
MINIMUM	$	3)			
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

	36 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
	1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED	240.60	824.10	47.92	31.50
COST DATA				
MATERIALS				
TOTAL MATERIALS	$ 105,450,188	309,269,291	20,880,478	11,812,827
MATERIAL % OF THE TOTAL $	46.5%	60.3	47.3	51.8
MATERIAL AVG. COST PER MILE	$ 438,280	375,281	435,736	375,010
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY				
TOTAL ENGINEERING ...	$ 4,140,263	10,402,001	618,765	434,955
ENGINEERING ... % OF THE TOTAL $	1.8%	2.0	1.4	1.9
ENGINEERING ... AVG. COST PER MILE	$ 17,208	12,622	12,912	13,808
LABOR				
TOTAL LABOR	$ 90,108,100	145,277,934	19,536,538	6,905,938
LABOR % OF THE TOTAL $	39.8%	28.3	44.2	30.3
LABOR AVG. COST PER MILE	$ 374,514	176,287	407,691	219,236
RIGHT-OF-WAY AND DAMAGES				
TOTAL RIGHT-OF-WAY ...	$ 1,189,512	11,067,071	1,901,167	146,739
RIGHT-OF-WAY ... % OF THE TOTAL $	0.5%	2.2	4.3	0.6
RIGHT-OF-WAY ... AVG. COST PER MILE	$ 4,944	13,429	39,674	4,658
MISCELLANEOUS				
INTEREST DURING CONSTRUCTION	$ 2,720,816	34,430,905	1,214,405	860,800
OVERHEAD	$ 14,006,779	531,580	12,628	2,632,582
OTHER MISCELLANEOUS 1)	$ 9,007,588	2,183,880	--	--
TOTAL MISCELLANEOUS	$ 25,735,183	37,146,365	1,227,033	3,493,382
MISCELLANEOUS % OF THE TOTAL $	11.4%	7.2	2.8	15.3
MISCELLANEOUS AVG. COST PER MILE	$ 106,963	45,075	25,606	110,901
TOTAL COST				
TOTAL COST	$ 226,623,246	513,162,662	44,163,981	22,793,841
TOTAL AVG. COST PER MILE	$ 941,909	622,695	921,619	723,614
COST RANGE PER MILE				
MINIMUM	$ 693,945	612,227	615,339	2)
MAXIMUM	$ 1,015,908	833,546	1,008,191	

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		42 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		14.20	836.05	46.52	50.59
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	7,034,635	561,230,274	19,426,821	17,197,871
MATERIAL % OF THE TOTAL $		37.0%	44.9	46.9	44.3
MATERIAL AVG. COST PER MILE	$	495,397	671,288	417,601	339,946
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	1,077,560	698,808	1,940,959	1,913,722
ENGINEERING ... % OF THE TOTAL $		5.7%	0.1	4.7	4.9
ENGINEERING ... AVG. COST PER MILE	$	75,885	836	41,723	37,828
LABOR					
TOTAL LABOR	$	8,203,104	373,753,684	14,795,989	13,707,007
LABOR % OF THE TOTAL $		43.1%	29.9	35.7	35.3
LABOR AVG. COST PER MILE	$	577,683	447,047	318,057	270,943
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	1,366,537	25,804,216	1,696,632	2,757,407
RIGHT-OF-WAY ... % OF THE TOTAL $		7.2%	2.1	4.1	7.1
RIGHT-OF-WAY ... AVG. COST PER MILE	$	96,235	30,864	36,471	54,505
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	829,572	152,553,157	1,823,051	1,640,562
OVERHEAD	$	512,971	123,819,852	1,739,393	1,633,328
OTHER MISCELLANEOUS 1)	$	--	10,972,800	11,373	5,214
TOTAL MISCELLANEOUS	$	1,342,543	287,345,809	3,573,817	3,279,104
MISCELLANEOUS % OF THE TOTAL $		7.1%	23.0	8.6	8.4
MISCELLANEOUS AVG. COST PER MILE	$	94,545	343,695	76,823	64,817
TOTAL COST					
TOTAL COST	$	19,024,379	1,248,832,791	41,434,218	38,855,111
TOTAL AVG. COST PER MILE	$	1,339,745	1,493,730	890,675	768,039
COST RANGE PER MILE					
MINIMUM	$	2)	1,064,978	833,016	708,656
MAXIMUM	$		9,268,868	1,036,240	842,413

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) ONE REPORT RECEIVED FOR THIS YEAR.

Table B-2 Lateral Pipeline

PART A

TABLE B-2

COMPARISON OF LATERAL PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		4 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		32.39	17.40	53.18	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	1,666,478	669,078	3,802,878	
MATERIAL % OF THE TOTAL $		47.6%	33.9	46.3	
MATERIAL AVG. COST PER MILE	$	51,450	38,453	71,510	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	606,429	278,344	1,160,408	
ENGINEERING ... % OF THE TOTAL $		17.3%	14.1	14.1	
ENGINEERING ... AVG. COST PER MILE	$	18,723	15,997	21,820	
LABOR					
TOTAL LABOR	$	817,188	866,347	1,557,540	
LABOR % OF THE TOTAL $		23.4%	43.9	19.0	
LABOR AVG. COST PER MILE	$	25,230	49,790	29,288	
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	192,838	68,573	543,831	
RIGHT-OF-WAY ... % OF THE TOTAL $		5.5%	3.5	6.6	
RIGHT-OF-WAY ... AVG. COST PER MILE	$	5,954	3,941	10,226	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	84,989	24,861	767,558	
OVERHEAD	$	131,425	66,370	377,041	
OTHER MISCELLANEOUS 1)	$	--	--	--	
TOTAL MISCELLANEOUS	$	216,414	91,231	1,144,599	
MISCELLANEOUS % OF THE TOTAL $		6.2%	4.6	13.9	
MISCELLANEOUS AVG. COST PER MILE	$	6,682	5,243	21,523	
TOTAL COST					
TOTAL COST	$	3,499,347	1,973,573	8,209,256	2)
TOTAL AVG. COST PER MILE	$	108,038	113,424	154,367	
COST RANGE PER MILE					
MINIMUM	$	105,986	73,753	139,805	
MAXIMUM	$	108,385	161,329	160,918	

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

PART A

TABLE B-2

COMPARISON OF LATERAL PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		6 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		49.34	37.42	10.74	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	1,400,142	1,701,596	486,033	
MATERIAL % OF THE TOTAL $		19.8%	31.1	35.7	
MATERIAL AVG. COST PER MILE	$	28,377	45,473	45,254	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	43,324	713,474	151,543	
ENGINEERING ... % OF THE TOTAL $		0.6%	13.0	11.1	
ENGINEERING ... AVG. COST PER MILE	$	878	19,067	14,110	
LABOR					
TOTAL LABOR	$	4,593,832	2,194,520	546,860	
LABOR % OF THE TOTAL $		64.9%	40.1	40.2	
LABOR AVG. COST PER MILE	$	93,106	58,646	50,918	
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	532,740	287,972	59,263	
RIGHT-OF-WAY ... % OF THE TOTAL $		7.5%	5.3	4.4	
RIGHT-OF-WAY ... AVG. COST PER MILE	$	10,797	7,696	5,518	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	132,311	186,444	34,954	
OVERHEAD	$	303,967	374,923	73,727	
OTHER MISCELLANEOUS 1)	$	76,007	9,273	8,225	
TOTAL MISCELLANEOUS	$	512,285	570,640	116,906	
MISCELLANEOUS % OF THE TOTAL $		7.2%	10.4	8.6	
MISCELLANEOUS AVG. COST PER MILE	$	10,383	15,250	10,885	
TOTAL COST					
TOTAL COST	$	7,082,323	5,468,202	1,360,605	2)
TOTAL AVG. COST PER MILE	$	143,541	146,130	126,686	
COST RANGE PER MILE					
MINIMUM	$	54,202	78,896	113,970	
MAXIMUM	$	227,473	218,512	135,511	

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

ART A

TABLE B-2

COMPARISON OF LATERAL PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		8 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
ILES OF PIPE CONSTRUCTED		29.60	14.80	51.80	
OST DATA					
MATERIALS					
TOTAL MATERIALS	$	1,131,101	718,431	2,062,575	
MATERIAL % OF THE TOTAL $		49.5%	25.8	23.3	
MATERIAL AVG. COST PER MILE	$	38,213	48,543	39,818	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	187,382	207,875	87,701	
ENGINEERING ... % OF THE TOTAL $		8.2%	7.5	1.0	
ENGINEERING ... AVG. COST PER MILE	$	6,330	14,046	1,693	
LABOR					
TOTAL LABOR	$	622,293	1,345,174	4,594,928	
LABOR % OF THE TOTAL $		27.2%	48.3	51.9	
LABOR AVG. COST PER MILE	$	21,023	90,890	88,705	
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	214,280	131,392	424,761	
RIGHT-OF-WAY ... % OF THE TOTAL $		9.4%	4.7	4.8	
RIGHT-OF-WAY ... AVG. COST PER MILE	$	7,239	8,878	8,200	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	101,008	142,130	241,115	
OVERHEAD	$	31,235	239,299	1,303,112	
OTHER MISCELLANEOUS 1)	$	--	530	141,236	
TOTAL MISCELLANEOUS	$	132,243	381,959	1,685,463	
MISCELLANEOUS % OF THE TOTAL $		5.8%	13.7	19.0	
MISCELLANEOUS AVG. COST PER MILE	$	4,468	25,808	32,538	
TOTAL COST					
TOTAL COST	$	2,287,299	2,784,831	8,855,428	2)
TOTAL AVG. COST PER MILE	$	77,274	188,164	170,954	
COST RANGE PER MILE					
MINIMUM	$	55,981	73,596	119,341	
MAXIMUM	$	83,497	572,926	179,822	

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

PART A

TABLE B-2

COMPARISON OF LATERAL PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		10 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		16.80	3.00	6.00	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	633,675	514,353	321,324	
MATERIAL % OF THE TOTAL $		45.8%	29.0	45.8	
MATERIAL AVG. COST PER MILE	$	37,719	171,451	53,554	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	172,664	61,947	63,718	
ENGINEERING ... % OF THE TOTAL $		12.5%	3.5	9.1	
ENGINEERING ... AVG. COST PER MILE	$	10,278	20,649	10,620	
LABOR					
TOTAL LABOR	$	357,799	823,237	186,237	
LABOR % OF THE TOTAL $		25.9%	46.4	26.6	
LABOR AVG. COST PER MILE	$	21,298	274,412	31,040	
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	152,739	99,264	34,235	
RIGHT-OF-WAY ... % OF THE TOTAL $		11.0%	5.6	4.9	
RIGHT-OF-WAY ... AVG. COST PER MILE	$	9,092	33,088	5,706	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	39,996	73,118	77,058	
OVERHEAD	$	26,110	201,404	18,694	
OTHER MISCELLANEOUS 1)	$	--	--	--	
TOTAL MISCELLANEOUS	$	66,106	274,522	95,752	
MISCELLANEOUS % OF THE TOTAL $		4.8%	15.5	13.7	
MISCELLANEOUS AVG. COST PER MILE	$	3,935	91,507	15,959	
TOTAL COST					
TOTAL COST	$	1,382,983	1,773,323	701,266	2)
TOTAL AVG. COST PER MILE	$	82,320.	591,108	116,878	
COST RANGE PER MILE					
MINIMUM	$	3)	3)	3)	
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-2

COMPARISON OF LATERAL PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		12 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		33.56	117.42	16.65	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	2,196,051	10,432,932	1,026,718	
MATERIAL % OF THE TOTAL $		47.9%	35.9	28.1	
MATERIAL AVG. COST PER MILE	$	65,437	88,851	61,665	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	274,179	590,317	5,966	
ENGINEERING ... % OF THE TOTAL $		6.0%	2.0	0.2	
ENGINEERING ... AVG. COST PER MILE	$	8,170	5,027	358	
LABOR					
TOTAL LABOR	$	1,721,334	13,318,491	1,888,724	
LABOR % OF THE TOTAL $		37.5%	45.9	51.7	
LABOR AVG. COST PER MILE	$	51,291	113,426	113,437	
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	128,392	1,621,721	331,973	
RIGHT-OF-WAY ... % OF THE TOTAL $		2.8%	5.6	9.1	
RIGHT-OF-WAY ... AVG. COST PER MILE	$	3,826	13,811	19,938	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	163,324	824,187	119,004	
OVERHEAD	$	99,887	1,881,972	277,676	
OTHER MISCELLANEOUS 1)	$	1,000	362,006	--	
TOTAL MISCELLANEOUS	$	264,211	3,068,165	396,680	
MISCELLANEOUS % OF THE TOTAL $		5.8%	10.6	10.9	
MISCELLANEOUS AVG. COST PER MILE	$	7,873	26,130	23,825	
TOTAL COST					
TOTAL COST	$	4,584,167	29,031,626	3,650,061	2)
TOTAL AVG. COST PER MILE	$	136,596	247,246	219,223	
COST RANGE PER MILE					
MINIMUM	$	87,602	130,252	3)	
MAXIMUM	$	168,077	669,227		

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-2

COMPARISON OF LATERAL PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		16 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		50.77			60.30
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	5,662,205			6,177,956
MATERIAL % OF THE TOTAL $		35.8%			49.8
MATERIAL AVG. COST PER MILE	$	111,527			102,454
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	1,295,074			457,521
ENGINEERING ... % OF THE TOTAL $		8.2%			3.7
ENGINEERING ... AVG. COST PER MILE	$	25,509			7,587
LABOR					
TOTAL LABOR	$	7,365,769			4,200,601
LABOR % OF THE TOTAL $		46.5%			33.9
LABOR AVG. COST PER MILE	$	145,081			69,662
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	526,446			831,579
RIGHT-OF-WAY ... % OF THE TOTAL $		3.3%			6.7
RIGHT-OF-WAY ... AVG. COST PER MILE	$	10,369			13,791
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	672,012			403,529
OVERHEAD	$	198,353			333,272
OTHER MISCELLANEOUS 1)	$	112,002			--
TOTAL MISCELLANEOUS	$	982,367			736,801
MISCELLANEOUS % OF THE TOTAL $		6.2%			5.9
MISCELLANEOUS AVG. COST PER MILE	$	19,349			12,219
TOTAL COST					
TOTAL COST	$	15,831,861	2)	2)	12,404,458
TOTAL AVG. COST PER MILE	$	311,835			205,712
COST RANGE PER MILE					
MINIMUM	$	140,674			201,282
MAXIMUM	$	590,112			207,927

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

PART A

TABLE B-2

COMPARISON OF LATERAL PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		20 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		136.35	66.10		24.10
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	16,331,363	7,583,229		3,758,646
MATERIAL % OF THE TOTAL $		50.0%	52.7		50.9
MATERIAL AVG. COST PER MILE	$	119,775	114,724		155,960
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	702,671	977,204		551,390
ENGINEERING ... % OF THE TOTAL $		2.2%	6.8		7.5
ENGINEERING ... AVG. COST PER MILE	$	5,153	14,784		22,879
LABOR					
TOTAL LABOR	$	11,466,818	3,484,025		2,249,749
LABOR % OF THE TOTAL $		35.1%	24.2		30.5
LABOR AVG. COST PER MILE	$	84,098	52,708		93,351
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	1,217,915	617,945		304,118
RIGHT-OF-WAY ... % OF THE TOTAL $		3.7%	4.3		4.1
RIGHT-OF-WAY ... AVG. COST PER MILE	$	8,932	9,349		12,619
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	459,283	1,574,834		64,465
OVERHEAD	$	981,986	151,695		457,065
OTHER MISCELLANEOUS 1)	$	1,515,444	--		--
TOTAL MISCELLANEOUS	$	2,956,713	1,726,529		521,530
MISCELLANEOUS % OF THE TOTAL $		9.0%	12.0		7.1
MISCELLANEOUS AVG. COST PER MILE	$	21,685	26,120		21,640
TOTAL COST					
TOTAL COST	$	32,675,480	14,388,932	2)	7,385,433
TOTAL AVG. COST PER MILE	$	239,644	217,684		306,450
COST RANGE PER MILE					
MINIMUM	$	227,679	3)		289,505
MAXIMUM	$	293,821			325,484

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-2

COMPARISON OF LATERAL PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		24 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED			60.45		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		12,422,567		
MATERIAL % OF THE TOTAL $		%	48.7		
MATERIAL AVG. COST PER MILE	$		205,502		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$		993,810		
ENGINEERING ... % OF THE TOTAL $		%	3.9		
ENGINEERING ... AVG. COST PER MILE	$		16,440		
LABOR					
TOTAL LABOR	$		7,526,373		
LABOR % OF THE TOTAL $		%	29.5		
LABOR AVG. COST PER MILE	$		124,506		
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$		869,571		
RIGHT-OF-WAY ... % OF THE TOTAL $		%	3.4		
RIGHT-OF-WAY ... AVG. COST PER MILE	$		14,385		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$		2,658,302		
OVERHEAD	$		670,553		
OTHER MISCELLANEOUS 1)	$		383,560		
TOTAL MISCELLANEOUS	$		3,712,415		
MISCELLANEOUS % OF THE TOTAL $		%	14.5		
MISCELLANEOUS AVG. COST PER MILE	$		61,413		
TOTAL COST					
TOTAL COST	$	2)	25,524,736	2)	2)
TOTAL AVG. COST PER MILE	$		422,245		
COST RANGE PER MILE					
MINIMUM	$		342,976		
MAXIMUM	$		457,550		

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

Table B-3 Offshore Pipeline

PART A

TABLE B-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		6 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		14.04	12.14		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	1,105,596	857,351		
MATERIAL % OF THE TOTAL $		22.8%	18.1		
MATERIAL AVG. COST PER MILE	$	78,746	70,622		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	578,609	222,521		
ENGINEERING ... % OF THE TOTAL $		11.9%	4.7		
ENGINEERING ... AVG. COST PER MILE	$	41,211	18,330		
LABOR					
TOTAL LABOR	$	2,782,882	3,287,125		
LABOR % OF THE TOTAL $		57.3%	69.3		
LABOR AVG. COST PER MILE	$	198,211	270,768		
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	190	137,798		
RIGHT-OF-WAY ... % OF THE TOTAL $		0.0%	2.9		
RIGHT-OF-WAY ... AVG. COST PER MILE	$	14	11,351		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	279,575	81,924		
OVERHEAD	$	108,283	155,182		
OTHER MISCELLANEOUS 1)	$	--	1,221		
TOTAL MISCELLANEOUS	$	387,858	238,327		
MISCELLANEOUS % OF THE TOTAL $		8.0%	5.0		
MISCELLANEOUS AVG. COST PER MILE	$	27,625	19,632		
TOTAL COST					
TOTAL COST	$	4,855,135	4,743,122	2)	2)
TOTAL AVG. COST PER MILE	$	345,807	390,702		
COST RANGE PER MILE					
MINIMUM	$	236,580	272,659		
MAXIMUM	$	515,408	546,526		

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

PART A

TABLE B-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		8 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		21.86	31.59		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	2,274,062	4,632,177		
MATERIAL % OF THE TOTAL $		23.1%	19.1		
MATERIAL AVG. COST PER MILE	$	104,028	146,634		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	673,811	1,435,493		
ENGINEERING ... % OF THE TOTAL $		6.8%	5.9		
ENGINEERING ... AVG. COST PER MILE	$	30,824	45,441		
LABOR					
TOTAL LABOR	$	6,335,894	15,666,289		
LABOR % OF THE TOTAL $		64.4%	64.7		
LABOR AVG. COST PER MILE	$	289,840	495,926		
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	126	264,310		
RIGHT-OF-WAY ... % OF THE TOTAL $		0.0%	1.1		
RIGHT-OF-WAY ... AVG. COST PER MILE	$	6	8,367		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	331,284	814,309		
OVERHEAD	$	191,948	1,395,846		
OTHER MISCELLANEOUS 1)	$	29,646	404		
TOTAL MISCELLANEOUS	$	552,878	2,210,559		
MISCELLANEOUS % OF THE TOTAL $		5.6%	9.1		
MISCELLANEOUS AVG. COST PER MILE	$	25,292	69,977		
TOTAL COST					
TOTAL COST	$	9,836,771	24,208,828	2)	2)
TOTAL AVG. COST PER MILE	$	449,990	766,345		
COST RANGE PER MILE					
MINIMUM	$	351,370	578,663		
MAXIMUM	$	682,155	1,175,739		

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

PART A

TABLE B-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		10 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		42.63	49.40		10.14
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	5,552,947	7,553,265		1,626,651
MATERIAL % OF THE TOTAL $		16.2%	23.3		29.6
MATERIAL AVG. COST PER MILE	$	130,259	152,900		160,419
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	2,983,589	2,392,692		714,242
ENGINEERING ... % OF THE TOTAL $		8.7%	7.4		13.0
ENGINEERING ... AVG. COST PER MILE	$	69,988	48,435		70,438
LABOR					
TOTAL LABOR	$	23,289,874	20,595,938		2,690,437
LABOR % OF THE TOTAL $		68.0%	63.4		48.9
LABOR AVG. COST PER MILE	$	546,326	416,922		265,329
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	8,658	9,974		--
RIGHT-OF-WAY ... % OF THE TOTAL $		0.0%	0.0		--
RIGHT-OF-WAY ... AVG. COST PER MILE	$	203	202		--
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	1,169,056	1,169,410		177,737
OVERHEAD	$	1,231,354	739,486		294,356
OTHER MISCELLANEOUS 1)	$	13,888	14,981		--
TOTAL MISCELLANEOUS	$	2,414,298	1,923,877		472,093
MISCELLANEOUS % OF THE TOTAL $		7.0%	5.9		8.6
MISCELLANEOUS AVG. COST PER MILE	$	56,634	38,945		46,557
TOTAL COST					
TOTAL COST	$	34,249,366	32,475,746	2)	5,503,423
TOTAL AVG. COST PER MILE	$	803,410	657,404		542,744
COST RANGE PER MILE					
MINIMUM	$	674,135	411,272		491,402
MAXIMUM	$	1,223,258	1,413,124		664,937

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

PART A

TABLE B-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		12 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		38.79	36.65	25.71	12.94
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	5,413,289	8,196,198	9,254,451	3,806,654
MATERIAL % OF THE TOTAL $		24.8%	25.4	41.5	37.5
MATERIAL AVG. COST PER MILE	$	139,554	223,634	359,955	294,177
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	1,334,011	1,491,267	700,067	754,470
ENGINEERING ... % OF THE TOTAL $		6.1%	4.6	3.1	7.4
ENGINEERING ... AVG. COST PER MILE	$	34,391	40,689	27,229	58,305
LABOR					
TOTAL LABOR	$	12,985,630	21,657,475	9,022,045	4,906,172
LABOR % OF THE TOTAL $		59.5%	67.2	40.4	48.3
LABOR AVG. COST PER MILE	$	334,767	590,927	350,916	379,148
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	41,634	7,741	153,593	410
RIGHT-OF-WAY ... % OF THE TOTAL $		0.2%	0.0	0.7	0.0
RIGHT-OF-WAY ... AVG. COST PER MILE	$	1,073	211	5,974	32
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	724,449	567,008	1,362,511	197,630
OVERHEAD	$	1,316,274	312,605	1,622,584	482,215
OTHER MISCELLANEOUS 1)	$	--	2,943	201,713	755
TOTAL MISCELLANEOUS	$	2,040,723	882,556	3,186,808	680,600
MISCELLANEOUS % OF THE TOTAL $		9.4%	2.7	14.3	6.7
MISCELLANEOUS AVG. COST PER MILE	$	52,610	24,081	123,952	52,597
TOTAL COST					
TOTAL COST	$	21,815,287	32,235,237	22,316,964	10,148,306
TOTAL AVG. COST PER MILE	$	562,395	879,543	868,027	784,259
COST RANGE PER MILE					
MINIMUM	$	425,895	599,673	435,315	717,871
MAXIMUM	$	798,976	1,798,940	1,526,088	896,841

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.

PART A

TABLE B-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

	16 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
	1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED	53.05	47.99	6.00	19.23
COST DATA				
MATERIALS				
TOTAL MATERIALS	$ 11,436,390	12,175,306	1,925,565	3,741,900
MATERIAL % OF THE TOTAL $	33.1%	21.9	37.5	31.1
MATERIAL AVG. COST PER MILE	$ 215,578	253,705	320,928	194,587
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY				
TOTAL ENGINEERING ...	$ 2,078,786	2,393,820	326,665	357,517
ENGINEERING ... % OF THE TOTAL $	6.0%	4.3	6.4	3.0
ENGINEERING ... AVG. COST PER MILE	$ 39,185	49,882	54,444	18,592
LABOR				
TOTAL LABOR	$ 18,962,554	35,146,956	2,206,729	6,901,545
LABOR % OF THE TOTAL $	54.8%	63.3	42.9	57.3
LABOR AVG. COST PER MILE	$ 357,447	732,381	367,788	358,895
RIGHT-OF-WAY AND DAMAGES				
TOTAL RIGHT-OF-WAY ...	$ 123,620	52,962	--	2,839
RIGHT-OF-WAY ... % OF THE TOTAL $	0.4%	0.1	--	0.0
RIGHT-OF-WAY ... AVG. COST PER MILE	$ 2,330	1,104	--	148
MISCELLANEOUS				
INTEREST DURING CONSTRUCTION	$ 1,349,928	1,958,057	298,055	463,886
OVERHEAD	$ 625,050	3,233,432	382,625	580,747
OTHER MISCELLANEOUS 1)	$ 1,207	573,779	--	--
TOTAL MISCELLANEOUS	$ 1,976,185	5,765,268	680,680	1,044,633
MISCELLANEOUS % OF THE TOTAL $	5.7%	10.4	13.2	8.7
MISCELLANEOUS AVG. COST PER MILE	$ 37,251	120,135	113,447	54,323
TOTAL COST				
TOTAL COST	$ 34,577,535	55,534,312	5,139,639	12,048,434
TOTAL AVG. COST PER MILE	$ 651,791	1,157,206	856,607	626,544
COST RANGE PER MILE				
MINIMUM	$ 521,617	502,485	2)	595,159
MAXIMUM	$ 767,012	2,506,283		658,488

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		18 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		13.78			
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	1,847,397			
MATERIAL % OF THE TOTAL $		13.4%			
MATERIAL AVG. COST PER MILE	$	134,064			
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	657,732			
ENGINEERING ... % OF THE TOTAL $		4.8%			
ENGINEERING ... AVG. COST PER MILE	$	47,731			
LABOR					
TOTAL LABOR	$	10,839,877			
LABOR % OF THE TOTAL $		78.5%			
LABOR AVG. COST PER MILE	$	786,638			
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	275,000			
RIGHT-OF-WAY ... % OF THE TOTAL $		2.0%			
RIGHT-OF-WAY ... AVG. COST PER MILE	$	19,956			
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	121,993			
OVERHEAD	$	68,000			
OTHER MISCELLANEOUS 1)	$	--			
TOTAL MISCELLANEOUS	$	189,993			
MISCELLANEOUS % OF THE TOTAL $		1.4%			
MISCELLANEOUS AVG. COST PER MILE	$	13,788			
TOTAL COST					
TOTAL COST	$	13,809,999	2)	2)	2)
TOTAL AVG. COST PER MILE	$	1,002,177			
COST RANGE PER MILE					
MINIMUM	$	3)			
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

	20 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
	1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED	57.60	93.10	20.30	
COST DATA				
MATERIALS				
TOTAL MATERIALS	$ 15,662,822	29,098,337	6,535,455	
MATERIAL % OF THE TOTAL $	31.2%	34.8	42.8	
MATERIAL AVG. COST PER MILE	$ 271,924	312,549	321,944	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY				
TOTAL ENGINEERING ...	$ 2,081,607	4,250,388	917,169	
ENGINEERING ... % OF THE TOTAL $	4.1%	5.1	6.0	
ENGINEERING ... AVG. COST PER MILE	$ 36,139	45,654	45,181	
LABOR				
TOTAL LABOR	$ 27,702,511	45,252,602	5,625,110	
LABOR % OF THE TOTAL $	55.2%	54.2	36.8	
LABOR AVG. COST PER MILE	$ 480,946	486,064	277,099	
RIGHT-OF-WAY AND DAMAGES				
TOTAL RIGHT-OF-WAY ...	$ 39,034	285	515	
RIGHT-OF-WAY ... % OF THE TOTAL $	0.1%	0.0	0.0	
RIGHT-OF-WAY ... AVG. COST PER MILE	$ 678	3	25	
MISCELLANEOUS				
INTEREST DURING CONSTRUCTION	$ 1,129,521	3,951,484	1,145,649	
OVERHEAD	$ 2,276,401	987,809	1,049,352	
OTHER MISCELLANEOUS 1)	$ 1,288,322	100	--	
TOTAL MISCELLANEOUS	$ 4,694,244	4,939,393	2,195,001	
MISCELLANEOUS % OF THE TOTAL $	9.4%	5.9	14.4	
MISCELLANEOUS AVG. COST PER MILE	$ 81,497	53,055	108,128	
TOTAL COST				
TOTAL COST	$ 50,180,218	83,541,005	15,273,250	2)
TOTAL AVG. COST PER MILE	$ 871,184	897,326	752,377	
COST RANGE PER MILE				
MINIMUM	$ 592,768	775,383	3)	
MAXIMUM	$ 1,643,346	955,458		

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		24 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		43.20	37.42		7.70
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	11,728,433	13,957,772		3,500,713
MATERIAL % OF THE TOTAL $		32.4%	28.4		29.4
MATERIAL AVG. COST PER MILE	$	271,492	373,003		454,638
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	4,673,595	3,121,510		583,095
ENGINEERING ... % OF THE TOTAL $		12.9%	6.3		4.9
ENGINEERING ... AVG. COST PER MILE	$	108,185	83,418		75,727
LABOR					
TOTAL LABOR	$	17,018,656	27,870,123		6,435,714
LABOR % OF THE TOTAL $		47.0%	56.7		54.1
LABOR AVG. COST PER MILE	$	393,950	744,792		835,807
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	--	738		2,538
RIGHT-OF-WAY ... % OF THE TOTAL $		--%	0.0		0.0
RIGHT-OF-WAY ... AVG. COST PER MILE	$	--	20		330
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	1,811,439	2,643,059		348,990
OVERHEAD	$	947,271	1,577,603		1,030,901
OTHER MISCELLANEOUS 1)	$	--	15,568		--
TOTAL MISCELLANEOUS	$	2,758,710	4,236,230		1,379,891
MISCELLANEOUS % OF THE TOTAL $		7.6%	8.6		11.6
MISCELLANEOUS AVG. COST PER MILE	$	63,859	113,208		179,207
TOTAL COST					
TOTAL COST	$	36,179,394	49,186,373	2)	11,901,951
TOTAL AVG. COST PER MILE	$	837,486	1,314,441		1,545,708
COST RANGE PER MILE					
MINIMUM	$	806,596	1,004,383		1,270,459
MAXIMUM	$	875,738	1,952,927		1,775,082

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

PART A

TABLE B-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		26 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		11.00			
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	5,019,900			
MATERIAL % OF THE TOTAL $		25.3%			
MATERIAL AVG. COST PER MILE	$	456,355			
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	432,400			
ENGINEERING ... % OF THE TOTAL $		2.2%			
ENGINEERING ... AVG. COST PER MILE	$	39,309			
LABOR					
TOTAL LABOR	$	12,609,600			
LABOR % OF THE TOTAL $		63.6%			
LABOR AVG. COST PER MILE	$	1,146,327			
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	7,500			
RIGHT-OF-WAY ... % OF THE TOTAL $		0.0%			
RIGHT-OF-WAY ... AVG. COST PER MILE	$	682			
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	676,830			
OVERHEAD	$	1,071,510			
OTHER MISCELLANEOUS 1)	$	--			
TOTAL MISCELLANEOUS	$	1,748,340			
MISCELLANEOUS % OF THE TOTAL $		8.8%			
MISCELLANEOUS AVG. COST PER MILE	$	158,940			
TOTAL COST					
TOTAL COST	$	19,817,740	2)	2)	2)
TOTAL AVG. COST PER MILE	$	1,801,613			
COST RANGE PER MILE					
MINIMUM	$	3)			
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		30 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED			30.12		20.20
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		13,925,846		11,348,287
MATERIAL % OF THE TOTAL $		%	44.2		38.3
MATERIAL AVG. COST PER MILE	$		462,345		561,796
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$		1,545,119		463,555
ENGINEERING ... % OF THE TOTAL $		%	4.9		1.6
ENGINEERING ... AVG. COST PER MILE	$		51,299		22,948
LABOR					
TOTAL LABOR	$		14,470,331		13,740,967
LABOR % OF THE TOTAL $		%	45.9		46.4
LABOR AVG. COST PER MILE	$		480,423		680,246
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$		--		81,967
RIGHT-OF-WAY ... % OF THE TOTAL $		%	--		0.3
RIGHT-OF-WAY ... AVG. COST PER MILE	$		--		4,058
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$		645,847		948,150
OVERHEAD	$		858,590		3,059,020
OTHER MISCELLANEOUS 1)	$		56,686		--
TOTAL MISCELLANEOUS	$		1,561,123		4,007,170
MISCELLANEOUS % OF THE TOTAL $		%	5.0		13.5
MISCELLANEOUS AVG. COST PER MILE	$		51,830		198,375
TOTAL COST					
TOTAL COST	$	2)	31,502,419	2)	29,641,946
TOTAL AVG. COST PER MILE	$		1,045,897		1,467,423
COST RANGE PER MILE					
MINIMUM	$		3)		3)
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE B-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		36 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		15.10			
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	12,822,800			
MATERIAL % OF THE TOTAL $		35.5%			
MATERIAL AVG. COST PER MILE	$	849,192			
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	1,064,600			
ENGINEERING ... % OF THE TOTAL $		2.9%			
ENGINEERING ... AVG. COST PER MILE	$	70,503			
LABOR					
TOTAL LABOR	$	18,883,700			
LABOR % OF THE TOTAL $		52.3%			
LABOR AVG. COST PER MILE	$	1,250,576			
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	103,500			
RIGHT-OF-WAY ... % OF THE TOTAL $		0.3%			
RIGHT-OF-WAY ... AVG. COST PER MILE	$	6,854			
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	1,251,110			
OVERHEAD	$	1,980,670			
OTHER MISCELLANEOUS 1)	$	--			
TOTAL MISCELLANEOUS	$	3,231,780			
MISCELLANEOUS % OF THE TOTAL $		9.0%			
MISCELLANEOUS AVG. COST PER MILE	$	214,025			
TOTAL COST					
TOTAL COST	$	36,106,380	2)	2)	2)
TOTAL AVG. COST PER MILE	$	2,391,151			
COST RANGE PER MILE					
MINIMUM	$	3)			
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

Table C-1 Transmission Pipeline

PART A

TABLE C-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		2 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		2.20			
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	23,746			
MATERIAL % OF THE TOTAL $		36.1%			
MATERIAL AVG. COST PER MILE	$	10,794			
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	--			
ENGINEERING ... % OF THE TOTAL $		--%			
ENGINEERING ... AVG. COST PER MILE	$	--			
LABOR					
TOTAL LABOR	$	32,595			
LABOR % OF THE TOTAL $		49.6%			
LABOR AVG. COST PER MILE	$	14,816			
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	2,502			
RIGHT-OF-WAY ... % OF THE TOTAL $		3.8%			
RIGHT-OF-WAY ... AVG. COST PER MILE	$	1,137			
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	198			
OVERHEAD	$	4,947			
OTHER MISCELLANEOUS 1)	$	1,728			
TOTAL MISCELLANEOUS	$	6,873			
MISCELLANEOUS % OF THE TOTAL $		10.5%			
MISCELLANEOUS AVG. COST PER MILE	$	3,124			
TOTAL COST					
TOTAL COST	$	65,716	2)	2)	2)
TOTAL AVG. COST PER MILE	$	29,871			
COST RANGE PER MILE					
MINIMUM	$	3)			
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		3 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED				1.20	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$			18,391	
MATERIAL % OF THE TOTAL $		%		31.2	
MATERIAL AVG. COST PER MILE	$			15,326	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$			--	
ENGINEERING ... % OF THE TOTAL $		%		--	
ENGINEERING ... AVG. COST PER MILE	$			--	
LABOR					
TOTAL LABOR	$			35,404	
LABOR % OF THE TOTAL $		%		60.0	
LABOR AVG. COST PER MILE	$			29,503	
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$			2,170	
RIGHT-OF-WAY ... % OF THE TOTAL $		%		3.7	
RIGHT-OF-WAY ... AVG. COST PER MILE	$			1,808	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$			601	
OVERHEAD	$			1,793	
OTHER MISCELLANEOUS 1)	$			633	
TOTAL MISCELLANEOUS	$			3,027	
MISCELLANEOUS % OF THE TOTAL $		%		5.1	
MISCELLANEOUS AVG. COST PER MILE	$			2,523	
TOTAL COST					
TOTAL COST	$	2)	2)	58,992	2)
TOTAL AVG. COST PER MILE	$			49,160	
COST RANGE PER MILE					
MINIMUM	$			3)	
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		4 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		5.70		4.30	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	91,732		122,039	
MATERIAL % OF THE TOTAL $		22.6%		28.9	
MATERIAL AVG. COST PER MILE	$	16,093		28,381	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	--		--	
ENGINEERING ... % OF THE TOTAL $		--%		--	
ENGINEERING ... AVG. COST PER MILE	$	--		--	
LABOR					
TOTAL LABOR	$	226,964		235,084	
LABOR % OF THE TOTAL $		55.8%		55.7	
LABOR AVG. COST PER MILE	$	39,818		54,671	
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	8,182		20,738	
RIGHT-OF-WAY ... % OF THE TOTAL $		2.0%		4.9	
RIGHT-OF-WAY ... AVG. COST PER MILE	$	1,435		4,823	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	2,099		5,498	
OVERHEAD	$	41,575		20,668	
OTHER MISCELLANEOUS 1)	$	35,967		17,828	
TOTAL MISCELLANEOUS	$	79,641		43,994	
MISCELLANEOUS % OF THE TOTAL $		19.6%		10.4	
MISCELLANEOUS AVG. COST PER MILE	$	13,972		10,231	
TOTAL COST					
TOTAL COST	$	406,519	2)	421,855	2)
TOTAL AVG. COST PER MILE	$	71,319		98,106	
COST RANGE PER MILE					
MINIMUM	$	43,997		56,543	
MAXIMUM	$	109,667		158,127	

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

PART A

TABLE C-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		6 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		2.71		14.90	0.24
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	91,646		403,926	36,736
MATERIAL % OF THE TOTAL $		23.9%		28.7	37.5
MATERIAL AVG. COST PER MILE	$	33,818		27,109	153,067
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	4,726		--	--
ENGINEERING ... % OF THE TOTAL $		1.2%		--	--
ENGINEERING ... AVG. COST PER MILE	$	1,744		--	--
LABOR					
TOTAL LABOR	$	196,790		778,554	57,277
LABOR % OF THE TOTAL $		51.2%		55.3	58.4
LABOR AVG. COST PER MILE	$	72,616		52,252	238,654
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	1,832		36,371	--
RIGHT-OF-WAY ... % OF THE TOTAL $		0.5%		2.6	--
RIGHT-OF-WAY ... AVG. COST PER MILE	$	676		2,441	--
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	1,123		12,823	--
OVERHEAD	$	30,500		91,113	3,988
OTHER MISCELLANEOUS 1)	$	57,509		85,477	--
TOTAL MISCELLANEOUS	$	89,132		189,413	3,988
MISCELLANEOUS % OF THE TOTAL $		23.2%		13.5	4.1
MISCELLANEOUS AVG. COST PER MILE	$	32,890		12,712	16,617
TOTAL COST					
TOTAL COST	$	384,126	2)	1,408,264	98,001
TOTAL AVG. COST PER MILE	$	141,744		94,514	408,338
COST RANGE PER MILE					
MINIMUM	$	127,853		62,859	3)
MAXIMUM	$	154,741		151,333	

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		8 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		9.40		5.70	0.26
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	396,703		187,363	21,459
MATERIAL % OF THE TOTAL $		30.5%		27.7	58.0
MATERIAL AVG. COST PER MILE	$	42,202		32,871	82,535
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	--		--	--
ENGINEERING ... % OF THE TOTAL $		--%		--	--
ENGINEERING ... AVG. COST PER MILE	$	--		--	--
LABOR					
TOTAL LABOR	$	684,093		429,929	12,200
LABOR % OF THE TOTAL $		52.6%		63.6	33.0
LABOR AVG. COST PER MILE	$	72,776		75,426	46,923
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	48,982		14,270	--
RIGHT-OF-WAY ... % OF THE TOTAL $		3.8%		2.1	--
RIGHT-OF-WAY ... AVG. COST PER MILE	$	5,211		2,504	--
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	27,250		5,305	--
OVERHEAD	$	81,586		26,141	3,339
OTHER MISCELLANEOUS 1)	$	61,313		13,474	--
TOTAL MISCELLANEOUS	$	170,149		44,920	3,339
MISCELLANEOUS % OF THE TOTAL $		13.1%		6.6	9.0
MISCELLANEOUS AVG. COST PER MILE	$	18,101		7,881	12,842
TOTAL COST					
TOTAL COST	$	1,299,927	2)	676,482	36,998
TOTAL AVG. COST PER MILE	$	138,290		118,681	142,300
COST RANGE PER MILE					
MINIMUM	$	77,682		115,000	3)
MAXIMUM	$	407,823		130,769	

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		10 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		3.10			
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	174,859			
MATERIAL % OF THE TOTAL $		15.0%			
MATERIAL AVG. COST PER MILE	$	56,406			
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	--			
ENGINEERING ... % OF THE TOTAL $		--%			
ENGINEERING ... AVG. COST PER MILE	$	--			
LABOR					
TOTAL LABOR	$	850,076			
LABOR % OF THE TOTAL $		72.7%			
LABOR AVG. COST PER MILE	$	274,218			
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	1,785			
RIGHT-OF-WAY ... % OF THE TOTAL $		0.2%			
RIGHT-OF-WAY ... AVG. COST PER MILE	$	576			
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	13,835			
OVERHEAD	$	92,395			
OTHER MISCELLANEOUS 1)	$	36,242			
TOTAL MISCELLANEOUS	$	142,472			
MISCELLANEOUS % OF THE TOTAL $		12.2%			
MISCELLANEOUS AVG. COST PER MILE	$	45,959			
TOTAL COST					
TOTAL COST	$	1,169,192	2)	2)	2)
TOTAL AVG. COST PER MILE	$	377,159			
COST RANGE PER MILE					
MINIMUM	$	168,344			
MAXIMUM	$	975,340			

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

PART A

TABLE C-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		12 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		4.55	2.40		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	402,336	194,155		
MATERIAL % OF THE TOTAL $		13.6%	40.4		
MATERIAL AVG. COST PER MILE	$	88,425	80,898		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	--	--		
ENGINEERING ... % OF THE TOTAL $		--%	--		
ENGINEERING ... AVG. COST PER MILE	$	--	--		
LABOR					
TOTAL LABOR	$	2,430,676	247,803		
LABOR % OF THE TOTAL $		81.9%	51.6		
LABOR AVG. COST PER MILE	$	534,215	103,251		
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	35,848	15,828		
RIGHT-OF-WAY ... % OF THE TOTAL $		1.2%	3.3		
RIGHT-OF-WAY ... AVG. COST PER MILE	$	7,879	6,595		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	46,341	--		
OVERHEAD	$	25,620	1,913		
OTHER MISCELLANEOUS 1)	$	27,685	20,370		
TOTAL MISCELLANEOUS	$	99,646	22,283		
MISCELLANEOUS % OF THE TOTAL $		3.4%	4.6		
MISCELLANEOUS AVG. COST PER MILE	$	21,900	9,285		
TOTAL COST					
TOTAL COST	$	2,968,506	480,069	2)	2)
TOTAL AVG. COST PER MILE	$	652,419	200,029		
COST RANGE PER MILE					
MINIMUM	$	158,800	3)		
MAXIMUM	$	1,472,607			

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE) REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		16 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		2.10	3.72	3.60	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	517,034	464,191	260,648	
MATERIAL % OF THE TOTAL $		47.0%	29.0	36.7	
MATERIAL AVG. COST PER MILE	$	246,207	124,783	72,402	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	133,917	26,458	--	
ENGINEERING ... % OF THE TOTAL $		12.2%	1.7	--	
ENGINEERING ... AVG. COST PER MILE	$	63,770	7,112	--	
LABOR					
TOTAL LABOR	$	336,256	1,040,413	368,457	
LABOR % OF THE TOTAL $		30.6%	64.9	51.9	
LABOR AVG. COST PER MILE	$	160,122	279,681	102,349	
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	24,234	11,102	14,381	
RIGHT-OF-WAY ... % OF THE TOTAL $		2.2%	0.7	2.0	
RIGHT-OF-WAY ... AVG. COST PER MILE	$	11,540	2,984	3,995	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	53,190	13,469	15,437	
OVERHEAD	$	34,296	42,253	24,551	
OTHER MISCELLANEOUS 1)	$	--	4,842	27,045	
TOTAL MISCELLANEOUS	$	87,486	60,564	67,033	
MISCELLANEOUS % OF THE TOTAL $		8.0%	3.8	9.4	
MISCELLANEOUS AVG. COST PER MILE	$	41,660	16,281	18,620	
TOTAL COST					
TOTAL COST	$	1,098,927	1,602,728	710,519	2)
TOTAL AVG. COST PER MILE	$	523,299	430,841	197,366	
COST RANGE PER MILE					
MINIMUM	$	313,361	255,676	190,011	
MAXIMUM	$	1,195,098	1,147,442	199,142	

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

PART A

TABLE C-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		20 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		3.80	2.55	0.28	2.00
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	499,494	672,841	234,894	396,598
MATERIAL % OF THE TOTAL $		25.7%	30.8	71.6	12.5
MATERIAL AVG. COST PER MILE	$	131,446	263,859	838,907	198,299
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	150,865	57,166	18,740	--
ENGINEERING ... % OF THE TOTAL $		7.8%	2.6	5.7	--
ENGINEERING ... AVG. COST PER MILE	$	39,701	22,418	66,929	--
LABOR					
TOTAL LABOR	$	833,123	1,316,432	53,637	2,383,222
LABOR % OF THE TOTAL $		42.8%	60.2	16.4	75.2
LABOR AVG. COST PER MILE	$	219,243	516,248	191,561	1,191,611
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	113,038	13,856	--	7,861
RIGHT-OF-WAY ... % OF THE TOTAL $		5.8%	0.6	--	0.2
RIGHT-OF-WAY ... AVG. COST PER MILE	$	29,747	5,434	--	3,931
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	240,986	94,097	--	44,897
OVERHEAD	$	97,062	14,538	20,640	290,341
OTHER MISCELLANEOUS 1)	$	11,388	17,440	--	47,986
TOTAL MISCELLANEOUS	$	349,436	126,075	20,640	383,224
MISCELLANEOUS % OF THE TOTAL $		18.0%	5.8	6.3	12.1
MISCELLANEOUS AVG. COST PER MILE	$	91,957	49,441	73,714	191,612
TOTAL COST					
TOTAL COST	$	1,945,956	2,186,370	327,911	3,170,905
TOTAL AVG. COST PER MILE	$	512,094	857,400	1,171,111	1,585,453
COST RANGE PER MILE					
MINIMUM	$	232,392	615,222	2)	278,394
MAXIMUM	$	648,140	1,846,878		3,182,969

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		24 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		1.20	0.19	2.60	4.60
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	174,904	96,563	436,900	923,766
MATERIAL % OF THE TOTAL $		41.5%	34.7	50.8	38.0
MATERIAL AVG. COST PER MILE	$	145,753	508,226	168,038	200,819
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	--	7,866	--	5,559
ENGINEERING ... % OF THE TOTAL $		--%	2.8	--	0.2
ENGINEERING ... AVG. COST PER MILE	$	--	41,400	--	1,208
LABOR					
TOTAL LABOR	$	209,925	153,491	347,300	1,143,515
LABOR % OF THE TOTAL $		49.9%	55.1	40.4	47.0
LABOR AVG. COST PER MILE	$	174,938	807,847	133,577	248,590
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	6,000	5,422	14,000	49,995
RIGHT-OF-WAY ... % OF THE TOTAL $		1.4%	1.9	1.6	2.1
RIGHT-OF-WAY ... AVG. COST PER MILE	$	5,000	28,537	5,385	10,868
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	4,100	13,469	19,000	19,880
OVERHEAD	$	20,240	--	27,600	256,719
OTHER MISCELLANEOUS 1)	$	5,908	1,635	14,900	32,671
TOTAL MISCELLANEOUS	$	30,248	15,104	61,500	309,270
MISCELLANEOUS % OF THE TOTAL $		7.2%	5.4	7.2	12.7
MISCELLANEOUS AVG. COST PER MILE	$	25,207	79,495	23,654	67,233
TOTAL COST					
TOTAL COST	$	421,077	278,446	859,700	2,432,105
TOTAL AVG. COST PER MILE	$	350,898	1,465,505	330,654	528,718
COST RANGE PER MILE					
MINIMUM	$	2)	2)	2)	443,262
MAXIMUM	$				831,132

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		26 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		0.40			
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	144,577			
MATERIAL % OF THE TOTAL $		22.9%			
MATERIAL AVG. COST PER MILE	$	361,443			
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	4,190			
ENGINEERING ... % OF THE TOTAL $		0.7%			
ENGINEERING ... AVG. COST PER MILE	$	10,475			
LABOR					
TOTAL LABOR	$	475,965			
LABOR % OF THE TOTAL $		75.3%			
LABOR AVG. COST PER MILE	$	1,189,913			
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	1,748			
RIGHT-OF-WAY ... % OF THE TOTAL $		0.3%			
RIGHT-OF-WAY ... AVG. COST PER MILE	$	4,370			
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	--			
OVERHEAD	$	--			
OTHER MISCELLANEOUS 1)	$	5,685			
TOTAL MISCELLANEOUS	$	5,685			
MISCELLANEOUS % OF THE TOTAL $		0.9%			
MISCELLANEOUS AVG. COST PER MILE	$	14,213			
TOTAL COST					
TOTAL COST	$	632,165	2)	2)	2)
TOTAL AVG. COST PER MILE	$	1,580,413			
COST RANGE PER MILE					
MINIMUM	$	3)			
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		30 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		0.38	1.40 2)		0.76
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	312,874	463,704		841,851
MATERIAL % OF THE TOTAL $		17.6%	43.2		21.3
MATERIAL AVG. COST PER MILE	$	823,353	331,217		1,107,699
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	68,159	143,163		184,725
ENGINEERING ... % OF THE TOTAL $		3.8%	13.4		4.7
ENGINEERING ... AVG. COST PER MILE	$	179,366	102,259		243,059
LABOR					
TOTAL LABOR	$	1,259,642	460,437		2,252,311
LABOR % OF THE TOTAL $		70.8%	42.9		56.9
LABOR AVG. COST PER MILE	$	3,314,847	328,884		2,963,567
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	65,757	3,308		441,458
RIGHT-OF-WAY ... % OF THE TOTAL $		3.7%	0.3		11.1
RIGHT-OF-WAY ... AVG. COST PER MILE	$	173,045	2,363		580,866
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	275	--		40,542
OVERHEAD	$	19,239	--		198,626
OTHER MISCELLANEOUS 1)	$	54,257	1,770		1,010
TOTAL MISCELLANEOUS	$	73,771	1,770		240,178
MISCELLANEOUS % OF THE TOTAL $		4.1%	0.2		6.1
MISCELLANEOUS AVG. COST PER MILE	$	194,134	1,264		316,024
TOTAL COST					
TOTAL COST	$	1,780,203	1,072,382	3)	3,960,523
TOTAL AVG. COST PER MILE	$	4,684,745	765,987		5,211,214
COST RANGE PER MILE					
MINIMUM	$	4)	4)		4)
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) INCLUDES 0.01 MILES OF 20 INCH TRANSMISSION PIPELINE.
3) NO REPORTS RECEIVED FOR THIS YEAR.
4) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		36 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		0.70		1.46	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	329,587		449,880	
MATERIAL % OF THE TOTAL $		29.9%		41.3	
MATERIAL AVG. COST PER MILE	$	470,839		308,137	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	21,021		2,932	
ENGINEERING ... % OF THE TOTAL $		1.9%		0.3	
ENGINEERING ... AVG. COST PER MILE	$	30,030		2,008	
LABOR					
TOTAL LABOR	$	616,852		388,537	
LABOR % OF THE TOTAL $		56.0%		35.6	
LABOR AVG. COST PER MILE	$	881,217		266,121	
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	657		--	
RIGHT-OF-WAY ... % OF THE TOTAL $		0.1%		--	
RIGHT-OF-WAY ... AVG. COST PER MILE	$	939		--	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	127,232		--	
OVERHEAD	$	6,282		17,992	
OTHER MISCELLANEOUS 1)	$	--		230,913	
TOTAL MISCELLANEOUS	$	133,514		248,905	
MISCELLANEOUS % OF THE TOTAL $		12.1%		22.8	
MISCELLANEOUS AVG. COST PER MILE	$	190,734		170,483	
TOTAL COST					
TOTAL COST	$	1,101,631	2)	1,090,254	2)
TOTAL AVG. COST PER MILE	$	1,573,759		746,749	
COST RANGE PER MILE					
MINIMUM	$	3)		3)	
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-1

COMPARISON OF TRANSMISSION PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		42 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED			2.60		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		1,355,581		
MATERIAL % OF THE TOTAL $		%	42.1		
MATERIAL AVG. COST PER MILE	$		521,377		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$		216,736		
ENGINEERING ... % OF THE TOTAL $		%	6.7		
ENGINEERING ... AVG. COST PER MILE	$		83,360		
LABOR					
TOTAL LABOR	$		1,364,963		
LABOR % OF THE TOTAL $		%	42.4		
LABOR AVG. COST PER MILE	$		524,986		
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$		127,995		
RIGHT-OF-WAY ... % OF THE TOTAL $		%	4.0		
RIGHT-OF-WAY ... AVG. COST PER MILE	$		49,229		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$		32,180		
OVERHEAD	$		123,800		
OTHER MISCELLANEOUS 1)	$		--		
TOTAL MISCELLANEOUS	$		155,980		
MISCELLANEOUS % OF THE TOTAL $		%	4.8		
MISCELLANEOUS AVG. COST PER MILE	$		59,992		
TOTAL COST					
TOTAL COST	$	2)	3,221,255	2)	2)
TOTAL AVG. COST PER MILE	$		1,238,944		
COST RANGE PER MILE					
MINIMUM	$		3)		
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

Table C-2 Lateral Pipeline

PART A

TABLE C-2

COMPARISON OF LATERAL PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		2 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		1.96			
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	58,504			
MATERIAL % OF THE TOTAL $		54.6%			
MATERIAL AVG. COST PER MILE	$	29,849			
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	2,538			
ENGINEERING ... % OF THE TOTAL $		2.4%			
ENGINEERING ... AVG. COST PER MILE	$	1,295			
LABOR					
TOTAL LABOR	$	40,000			
LABOR % OF THE TOTAL $		37.3%			
LABOR AVG. COST PER MILE	$	20,408			
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	6,100			
RIGHT-OF-WAY ... % OF THE TOTAL $		5.7%			
RIGHT-OF-WAY ... AVG. COST PER MILE	$	3,112			
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	--			
OVERHEAD	$	--			
OTHER MISCELLANEOUS 1)	$	--			
TOTAL MISCELLANEOUS	$	--			
MISCELLANEOUS % OF THE TOTAL $		--%			
MISCELLANEOUS AVG. COST PER MILE	$	--			
TOTAL COST					
TOTAL COST	$	107,142	2)	2)	2)
TOTAL AVG. COST PER MILE	$	54,664			
COST RANGE PER MILE					
MINIMUM	$	3)			
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-2

COMPARISON OF LATERAL PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		4 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		3.37	5.74	8.02 2)	2.60
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	125,746	221,431	411,520	96,538
MATERIAL % OF THE TOTAL $		30.1%	34.6	41.5	34.3
MATERIAL AVG. COST PER MILE	$	37,313	38,577	51,312	37,130
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	24,522	31,206	25,276	22,577
ENGINEERING ... % OF THE TOTAL $		5.9%	4.9	2.6	8.0
ENGINEERING ... AVG. COST PER MILE	$	7,277	5,437	3,152	8,683
LABOR					
TOTAL LABOR	$	188,108	313,837	355,194	120,582
LABOR % OF THE TOTAL $		45.1%	49.0	35.8	42.8
LABOR AVG. COST PER MILE	$	55,818	54,675	44,289	46,378
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	16,889	26,427	74,860	18,253
RIGHT-OF-WAY ... % OF THE TOTAL $		4.0%	4.1	7.6	6.5
RIGHT-OF-WAY ... AVG. COST PER MILE	$	5,012	4,604	9,334	7,020
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	4,358	20,910	39,184	2,668
OVERHEAD	$	26,955	24,077	84,989	20,890
OTHER MISCELLANEOUS 1)	$	30,866	2,960	24	--
TOTAL MISCELLANEOUS	$	62,179	47,947	124,197	23,558
MISCELLANEOUS % OF THE TOTAL $		14.9%	7.5	12.5	8.4
MISCELLANEOUS AVG. COST PER MILE	$	18,451	8,353	15,486	9,061
TOTAL COST					
TOTAL COST	$	417,444	640,848	991,047	281,508
TOTAL AVG. COST PER MILE	$	123,871	111,646	123,572	108,272
COST RANGE PER MILE					
MINIMUM	$	112,838	41,000	112,820	3)
MAXIMUM	$	133,918	149,698	130,865	

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) INCLUDES 0.76 MILE OF 3 INCH LATERAL PIPELINE.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-2

COMPARISON OF LATERAL PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		6 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		0.21	2.10 2)		2.05
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	13,239	209,267		203,056
MATERIAL % OF THE TOTAL $		50.1%	57.5		73.2
MATERIAL AVG. COST PER MILE	$	63,043	99,651		99,052
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	2,265	58,185		--
ENGINEERING ... % OF THE TOTAL $		8.6%	16.0		--
ENGINEERING ... AVG. COST PER MILE	$	10,786	27,707		--
LABOR					
TOTAL LABOR	$	10,686	78,600		74,382
LABOR % OF THE TOTAL $		40.4%	21.6		26.8
LABOR AVG. COST PER MILE	$	50,886	37,429		36,284
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	--	5,882		--
RIGHT-OF-WAY ... % OF THE TOTAL $		--%	1.6		--
RIGHT-OF-WAY ... AVG. COST PER MILE	$	--	2,801		--
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	--	3,834		--
OVERHEAD	$	--	8,193		--
OTHER MISCELLANEOUS 1)	$	255	--		--
TOTAL MISCELLANEOUS	$	255	12,027		--
MISCELLANEOUS % OF THE TOTAL $		1.0%	3.3		--
MISCELLANEOUS AVG. COST PER MILE	$	1,214	5,727		--
TOTAL COST					
TOTAL COST	$	26,445	363,961	3)	277,438
TOTAL AVG. COST PER MILE	$	125,929	173,315		135,336
COST RANGE PER MILE					
MINIMUM	$	4)	4)		4)
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) INCLUDES 0.70 MILES OF 10 INCH LATERAL PIPELINE.
3) NO REPORTS RECEIVED FOR THIS YEAR.
4) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-2

COMPARISON OF LATERAL PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		8 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		5.25	0.50		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	212,502	35,542		
MATERIAL % OF THE TOTAL $		48.4%	39.9		
MATERIAL AVG. COST PER MILE	$	40,477	71,084		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	64,799	--		
ENGINEERING ... % OF THE TOTAL $		14.8%	--		
ENGINEERING ... AVG. COST PER MILE	$	12,343	--		
LABOR					
TOTAL LABOR	$	86,243	53,261		
LABOR % OF THE TOTAL $		19.7%	59.8		
LABOR AVG. COST PER MILE	$	16,427	106,522		
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	26,666	--		
RIGHT-OF-WAY ... % OF THE TOTAL $		6.1%	--		
RIGHT-OF-WAY ... AVG. COST PER MILE	$	5,079	--		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	30,071	--		
OVERHEAD	$	18,394	--		
OTHER MISCELLANEOUS 1)	$	--	240		
TOTAL MISCELLANEOUS	$	48,465	240		
MISCELLANEOUS % OF THE TOTAL $		11.0%	0.3		
MISCELLANEOUS AVG. COST PER MILE	$	9,231	480		
TOTAL COST					
TOTAL COST	$	438,675	89,043	2)	2)
TOTAL AVG. COST PER MILE	$	83,557	178,086		
COST RANGE PER MILE					
MINIMUM	$	67,553	3)		
MAXIMUM	$	109,078			

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-2

COMPARISON OF LATERAL PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		10 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		0.13	2.00	1.02 2)	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	27,722	201,706	56,000	
MATERIAL % OF THE TOTAL $		12.2%	54.8	54.0	
MATERIAL AVG. COST PER MILE	$	213,246	100,853	54,902	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	5,787	57,662	--	
ENGINEERING ... % OF THE TOTAL $		2.5%	15.7	--	
ENGINEERING ... AVG. COST PER MILE	$	44,515	28,831	--	
LABOR					
TOTAL LABOR	$	158,906	84,905	43,800	
LABOR % OF THE TOTAL $		69.9%	23.0	42.2	
LABOR AVG. COST PER MILE	$	1,222,354	42,453	42,941	
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	--	4,116	3,900	
RIGHT-OF-WAY ... % OF THE TOTAL $		--%	1.1	3.8	
RIGHT-OF-WAY ... AVG. COST PER MILE	$	--	2,058	3,824	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	9,294	12,452	--	
OVERHEAD	$	25,707	7,560	--	
OTHER MISCELLANEOUS 1)	$	--	--	--	
TOTAL MISCELLANEOUS	$	35,001	20,012	--	
MISCELLANEOUS % OF THE TOTAL $		15.4%	5.4	--	
MISCELLANEOUS AVG. COST PER MILE	$	269,238	10,006	--	
TOTAL COST					
TOTAL COST	$	227,416	368,401	103,700	3)
TOTAL AVG. COST PER MILE	$	1,749,354	184,201	101,667	
COST RANGE PER MILE					
MINIMUM	$	4)	151,339	4)	
MAXIMUM	$		217,062		

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) INCLUDES 0.09 MILE OF 6 INCH LATERAL PIPELINE.
3) NO REPORTS RECEIVED FOR THIS YEAR.
4) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-2

COMPARISON OF LATERAL PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		12 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		0.71	1.01	1.70 2)	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	351,897	122,542	175,463	
MATERIAL % OF THE TOTAL $		46.3%	36.9	38.1	
MATERIAL AVG. COST PER MILE	$	495,630	121,329	103,214	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	85,531	17,136	59,044	
ENGINEERING ... % OF THE TOTAL $		11.3%	5.2	12.8	
ENGINEERING ... AVG. COST PER MILE	$	120,466	16,966	34,732	
LABOR					
TOTAL LABOR	$	219,538	148,396	172,629	
LABOR % OF THE TOTAL $		28.9%	44.7	37.4	
LABOR AVG. COST PER MILE	$	309,208	146,927	101,546	
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	9,053	4,972	15,404	
RIGHT-OF-WAY ... % OF THE TOTAL $		1.2%	1.5	3.3	
RIGHT-OF-WAY ... AVG. COST PER MILE	$	12,751	4,923	9,061	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	66,268	11,955	678	
OVERHEAD	$	27,107	13,093	37,757	
OTHER MISCELLANEOUS 1)	$	--	13,900	--	
TOTAL MISCELLANEOUS	$	93,375	38,948	38,435	
MISCELLANEOUS % OF THE TOTAL $		12.3%	11.7	8.3	
MISCELLANEOUS AVG. COST PER MILE	$	131,514	38,562	22,609	
TOTAL COST					
TOTAL COST	$	759,394	331,994	460,975	3)
TOTAL AVG. COST PER MILE	$	1,069,569	328,707	271,162	
COST RANGE PER MILE					
MINIMUM	$	891,371	284,776	4)	
MAXIMUM	$	1,864,608	343,158		

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) INCLUDES 0.20 MILE OF 8 INCH LATERAL PIPELINE.
3) NO REPORTS RECEIVED FOR THIS YEAR.
4) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-2

COMPARISON OF LATERAL PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		16 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		1.10	0.40		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	100,026	230,429		
MATERIAL % OF THE TOTAL $		63.7%	34.1		
MATERIAL AVG. COST PER MILE	$	90,933	576,073		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	14,386	69,014		
ENGINEERING ... % OF THE TOTAL $		9.2%	10.2		
ENGINEERING ... AVG. COST PER MILE	$	13,078	172,535		
LABOR					
TOTAL LABOR	$	26,740	296,368		
LABOR % OF THE TOTAL $		17.0%	43.9		
LABOR AVG. COST PER MILE	$	24,309	740,920		
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	3,867	7,565		
RIGHT-OF-WAY ... % OF THE TOTAL $		2.5%	1.1		
RIGHT-OF-WAY ... AVG. COST PER MILE	$	3,515	18,913		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	8,677	50,007		
OVERHEAD	$	3,214	21,957		
OTHER MISCELLANEOUS 1)	$	--	--		
TOTAL MISCELLANEOUS	$	11,891	71,964		
MISCELLANEOUS % OF THE TOTAL $		7.6%	10.7		
MISCELLANEOUS AVG. COST PER MILE	$	10,810	179,910		
TOTAL COST					
TOTAL COST	$	156,910	675,340	2)	2)
TOTAL AVG. COST PER MILE	$	142,645	1,688,350		
COST RANGE PER MILE					
MINIMUM	$	3)	3)		
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-2

COMPARISON OF LATERAL PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		30 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED				0.90	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$			193,247	
MATERIAL % OF THE TOTAL $		%		49.7	
MATERIAL AVG. COST PER MILE	$			214,719	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$			--	
ENGINEERING ... % OF THE TOTAL $		%		--	
ENGINEERING ... AVG. COST PER MILE	$			--	
LABOR					
TOTAL LABOR	$			146,769	
LABOR % OF THE TOTAL $		%		37.7	
LABOR AVG. COST PER MILE	$			163,077	
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$			34,358	
RIGHT-OF-WAY ... % OF THE TOTAL $		%		8.8	
RIGHT-OF-WAY ... AVG. COST PER MILE	$			38,176	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$			--	
OVERHEAD	$			14,626	
OTHER MISCELLANEOUS 1)	$			--	
TOTAL MISCELLANEOUS	$			14,626	
MISCELLANEOUS % OF THE TOTAL $		%		3.8	
MISCELLANEOUS AVG. COST PER MILE	$			16,251	
TOTAL COST					
TOTAL COST	$	2)	2)	389,000	2)
TOTAL AVG. COST PER MILE	$			432,222	
COST RANGE PER MILE					
MINIMUM	$			3)	
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

Table C-3 Offshore Pipeline

PART A

TABLE C-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		6 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		4.18 2)	3.89		0.96
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	527,759	522,438		219,252
MATERIAL % OF THE TOTAL $		8.5%	10.3		14.7
MATERIAL AVG. COST PER MILE	$	126,258	134,303		228,388
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	177,104	177,707		129,242
ENGINEERING ... % OF THE TOTAL $		2.8%	3.5		8.7
ENGINEERING ... AVG. COST PER MILE	$	42,369	45,683		134,627
LABOR					
TOTAL LABOR	$	5,159,833	4,262,683		953,447
LABOR % OF THE TOTAL $		83.0%	84.0		64.0
LABOR AVG. COST PER MILE	$	1,234,410	1,095,805		993,174
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	2,300	638		--
RIGHT-OF-WAY ... % OF THE TOTAL $		0.0%	0.0		--
RIGHT-OF-WAY ... AVG. COST PER MILE	$	550	164		--
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	67,103	67,319		27,297
OVERHEAD	$	278,698	44,692		159,971
OTHER MISCELLANEOUS 1)	$	5,067	--		65
TOTAL MISCELLANEOUS	$	350,868	112,011		187,333
MISCELLANEOUS % OF THE TOTAL $		5.6%	2.2		12.6
MISCELLANEOUS AVG. COST PER MILE	$	83,940	28,795		195,139
TOTAL COST					
TOTAL COST	$	6,217,864	5,075,477	3)	1,489,274
TOTAL AVG. COST PER MILE	$	1,487,527	1,304,750		1,551,327
COST RANGE PER MILE					
MINIMUM	$	1,088,969	703,147		4)
MAXIMUM	$	1,783,275	1,954,610		

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) INCLUDES 0.08 MILES OF 12 INCH OFFSHORE PIPELINE COMPLETED 10/28/80.
3) NO REPORTS RECEIVED FOR THIS YEAR.
4) ONE REPORT RECEIVED FOR THIS YEAR.

TABLE C-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		8 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
.ES OF PIPE CONSTRUCTED		6.51	4.30	1.74	0.98
ST DATA					
MATERIALS					
TOTAL MATERIALS	$	1,215,098	895,938	294,966	328,726
MATERIAL % OF THE TOTAL $		18.3%	10.0	19.0	21.4
MATERIAL AVG. COST PER MILE	$	186,651	208,358	169,521	335,435
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	725,111	1,153,784	--	110,786
ENGINEERING ... % OF THE TOTAL $		10.9%	12.9	--	7.2
ENGINEERING ... AVG. COST PER MILE	$	111,384	268,322	--	113,047
LABOR					
TOTAL LABOR	$	3,996,720	6,486,055	1,197,259	928,041
LABOR % OF THE TOTAL $		60.3%	72.3	77.1	60.3
LABOR AVG. COST PER MILE	$	613,935	1,508,385	688,080	946,981
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	1,090	26	28,061	--
RIGHT-OF-WAY ... % OF THE TOTAL $		0.0%	0.0	1.8	--
RIGHT-OF-WAY ... AVG. COST PER MILE	$	167	6	16,127	--
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	176,463	163,742	31,884	20,664
OVERHEAD	$	258,004	218,809	--	149,859
OTHER MISCELLANEOUS 1)	$	251,988	52,528	--	--
TOTAL MISCELLANEOUS	$	686,455	435,079	31,884	170,523
MISCELLANEOUS % OF THE TOTAL $		10.4%	4.8	2.1	11.1
MISCELLANEOUS AVG. COST PER MILE	$	105,446	101,181	18,324	174,003
TOTAL COST					
TOTAL COST	$	6,624,474	8,970,882	1,552,170	1,538,076
TOTAL AVG. COST PER MILE	$	1,017,584	2,086,252	892,052	1,569,465
COST RANGE PER MILE					
MINIMUM	$	870,396	1,068,294	2)	2)
MAXIMUM	$	1,499,207	2,684,134		

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		10 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		2.22	5.50		2.41
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	736,810	997,959		573,444
MATERIAL % OF THE TOTAL $		14.2%	9.2		17.1
MATERIAL AVG. COST PER MILE	$	331,896	181,447		237,944
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	673,022	1,089,004		224,672
ENGINEERING ... % OF THE TOTAL $		12.9%	10.1		6.7
ENGINEERING ... AVG. COST PER MILE	$	303,163	198,001		93,225
LABOR					
TOTAL LABOR	$	3,424,381	7,544,638		2,506,954
LABOR % OF THE TOTAL $		65.8%	69.7		74.9
LABOR AVG. COST PER MILE	$	1,542,514	1,371,752		1,040,230
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	4	34,072		145
RIGHT-OF-WAY ... % OF THE TOTAL $		0.0%	0.3		0.0
RIGHT-OF-WAY ... AVG. COST PER MILE	$	2	6,195		60
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	63,577	260,165		44,081
OVERHEAD	$	172,156	896,748		--
OTHER MISCELLANEOUS 1)	$	131,425	--		--
TOTAL MISCELLANEOUS	$	367,158	1,156,913		44,081
MISCELLANEOUS % OF THE TOTAL $		7.1%	10.7		1.3
MISCELLANEOUS AVG. COST PER MILE	$	165,386	210,348		18,291
TOTAL COST					
TOTAL COST	$	5,201,375	10,822,586	2)	3,349,296
TOTAL AVG. COST PER MILE	$	2,342,962	1,967,743		1,389,749
COST RANGE PER MILE					
MINIMUM	$	1,034,842	1,874,962		3)
MAXIMUM	$	3,454,863	2,057,210		

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

'ART A

TABLE C-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		12 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
IILES OF PIPE CONSTRUCTED		2.74	10.30	3.88	2.20
:OST DATA					
MATERIALS					
TOTAL MATERIALS	$	1,248,805	3,261,234	1,522,683	367,898
MATERIAL % OF THE TOTAL $		14.0%	17.6	18.7	23.0
MATERIAL AVG. COST PER MILE	$	455,768	316,625	392,444	167,226
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	641,474	737,345	385,610	--
ENGINEERING ... % OF THE TOTAL $		7.2%	4.0	4.7	--
ENGINEERING ... AVG. COST PER MILE	$	234,115	71,587	99,384	--
LABOR					
TOTAL LABOR	$	6,331,763	12,771,080	5,667,734	1,039,781
LABOR % OF THE TOTAL $		71.2%	69.0	69.7	65.1
LABOR AVG. COST PER MILE	$	2,310,862	1,239,911	1,460,756	472,628
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	150	27,843	755	3,209
RIGHT-OF-WAY ... % OF THE TOTAL $		0.0%	0.2	0.0	0.2
RIGHT-OF-WAY ... AVG. COST PER MILE	$	55	2,703	195	1,459
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	151,695	737,620	183,420	44,100
OVERHEAD	$	517,115	956,030	376,108	142,280
OTHER MISCELLANEOUS 1)	$	1,122	4,278	429	--
TOTAL MISCELLANEOUS	$	669,932	1,697,928	559,957	186,380
MISCELLANEOUS % OF THE TOTAL $		7.5%	9.2	6.9	11.7
MISCELLANEOUS AVG. COST PER MILE	$	244,501	164,847	144,319	84,718
TOTAL COST					
TOTAL COST	$	8,892,124	18,495,430	5,136,739	1,597,268
TOTAL AVG. COST PER MILE	$	3,245,301	1,795,673	2,097,098	726,031
COST RANGE PER MILE					
MINIMUM	$	1,717,383	1,109,365	1,824,995	2)
MAXIMUM	$	33,588,614	6,121,325	2,204,764	

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		16 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		3.90	7.03		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	1,216,653	2,893,932		
MATERIAL % OF THE TOTAL $		14.4%	18.7		
MATERIAL AVG. COST PER MILE	$	311,962	411,655		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	1,414,401	1,156,053		
ENGINEERING ... % OF THE TOTAL $		16.8%	7.5		
ENGINEERING ... AVG. COST PER MILE	$	362,667	164,446		
LABOR					
TOTAL LABOR	$	5,163,810	10,583,833		
LABOR % OF THE TOTAL $		61.2%	68.4		
LABOR AVG. COST PER MILE	$	1,324,054	1,505,524		
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	--	280		
RIGHT-OF-WAY ... % OF THE TOTAL $		--%	0.0		
RIGHT-OF-WAY ... AVG. COST PER MILE	$	--	40		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	223,875	303,926		
OVERHEAD	$	418,710	521,912		
OTHER MISCELLANEOUS 1)	$	--	3,187		
TOTAL MISCELLANEOUS	$	642,585	829,025		
MISCELLANEOUS % OF THE TOTAL $		7.6%	5.4		
MISCELLANEOUS AVG. COST PER MILE	$	164,765	117,927		
TOTAL COST					
TOTAL COST	$	8,437,449	15,463,123	2)	2)
TOTAL AVG. COST PER MILE	$	2,163,448	2,199,591		
COST RANGE PER MILE					
MINIMUM	$	1,234,881	704,812		
MAXIMUM	$	3,821,605	10,410,853		

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

PART A

TABLE C-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		20 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED		0.30			
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	368,803			
MATERIAL % OF THE TOTAL $		12.3%			
MATERIAL AVG. COST PER MILE	$	1,229,343			
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$	187,270			
ENGINEERING ... % OF THE TOTAL $		6.2%			
ENGINEERING ... AVG. COST PER MILE	$	624,233			
LABOR					
TOTAL LABOR	$	2,235,156			
LABOR % OF THE TOTAL $		74.4%			
LABOR AVG. COST PER MILE	$	7,450,520			
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$	--			
RIGHT-OF-WAY ... % OF THE TOTAL $		--%			
RIGHT-OF-WAY ... AVG. COST PER MILE	$	--			
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	33,648			
OVERHEAD	$	178,792			
OTHER MISCELLANEOUS 1)	$	1,758			
TOTAL MISCELLANEOUS	$	214,198			
MISCELLANEOUS % OF THE TOTAL $		7.1%			
MISCELLANEOUS AVG. COST PER MILE	$	713,993			
TOTAL COST					
TOTAL COST	$	3,005,427	2)	2)	2)
TOTAL AVG. COST PER MILE	$	10,018,090			
COST RANGE PER MILE					
MINIMUM	$	3)			
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE C-3

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		24 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED					0.20
COST DATA					
MATERIALS					
TOTAL MATERIALS	$				299,857
MATERIAL % OF THE TOTAL $		%			27.0
MATERIAL AVG. COST PER MILE	$				1,499,285
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING ...	$				50,832
ENGINEERING ... % OF THE TOTAL $		%			4.6
ENGINEERING ... AVG. COST PER MILE	$				254,160
LABOR					
TOTAL LABOR	$				573,073
LABOR % OF THE TOTAL $		%			51.6
LABOR AVG. COST PER MILE	$				2,865,365
RIGHT-OF-WAY AND DAMAGES					
TOTAL RIGHT-OF-WAY ...	$				--
RIGHT-OF-WAY ... % OF THE TOTAL $		%			--
RIGHT-OF-WAY ... AVG. COST PER MILE	$				--
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$				44,100
OVERHEAD	$				142,280
OTHER MISCELLANEOUS 1)	$				--
TOTAL MISCELLANEOUS	$				186,380
MISCELLANEOUS % OF THE TOTAL $		%			16.8
MISCELLANEOUS AVG. COST PER MILE	$				931,900
TOTAL COST					
TOTAL COST	$	2)	2)	2)	1,110,142
TOTAL AVG. COST PER MILE	$				5,550,710
COST RANGE PER MILE					
MINIMUM	$				3)
MAXIMUM	$				

1) CONSISTS OF CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

Table D Compression Construction and Expenditures

COMPRESSION CONSTRUCTION AND EXPENDITURES
CONSTRUCTION ENDING IN 1981 THROUGH 1984

YEAR CONSTRUCTION ENDED	ONSHORE HORSEPOWER	ONSHORE EXPENDITURES	AVG. COST PER HORSEPOWER	OFFSHORE HORSEPOWER	OFFSHORE EXPENDITURES	AVG. COST PER HORSEPOWER	TOTAL HORSEPOWER	TOTAL EXPENDITURES	AVG. COST PER HORSEPOWER
1981	216,500	$266,941,815	$ 1,233	37,900	$ 25,683,975	$ 678	254,400	$292,625,790	$ 1,150
1982	238,508	322,405,708	1,352	7,032	26,357,576	3,748	245,540	348,763,284	1,420
1983	48,980	91,174,493	1,861	--	--	--	48,980	91,174,493	1,861
1984	22,721	23,982,752	1,056	--	--	--	22,721	23,982,752	1,056

Table E-1 Reciprocating Units

PART A

TABLE E-1

COMPARISON OF CONSTRUCTION COSTS FOR
TRANSMISSION COMPRESSOR STATIONS WITH RECIPROCATING UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		NEW TRANSMISSION COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS		17	1	9	6
TOTAL HORSEPOWER		41,250	1,000	11,390	6,600
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	30,182,950	619,825	13,031,162	7,110,175
MATERIAL % OF THE TOTAL $		53.9%	73.6	51.0	53.4
MATERIAL AVG.COST PER HORSEPOWER	$	732	620	1,144	1,077
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING...	$	3,542,850	54,783	2,867,020	890,808
ENGINEERING ... % OF THE TOTAL $		6.3%	6.5	11.2	6.7
ENGINEERING ... AVG. COST PER HORSEPOWER	$	86	55	252	135
LABOR					
TOTAL LABOR	$	15,651,688	110,997	5,848,160	2,689,815
LABOR % OF THE TOTAL $		27.9%	13.2	22.9	20.2
LABOR AVG. COST PER HORSEPOWER	$	379	111	513	408
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	4,974,369	--	1,927,155	306,814
OVERHEAD	$	1,036,580	--	1,431,938	2,295,489
OTHER MISCELLANEOUS 1)	$	614,345	56,864	463,434	21,889
TOTAL MISCELLANEOUS	$	6,625,294	56,864	3,822,527	2,624,192
MISCELLANEOUS % OF THE TOTAL $		11.8%	6.7	14.9	19.7
MISCELLANEOUS AVG. COST PER HORSEPOWER	$	161	57	336	398
TOTAL COST					
TOTAL COST	$	56,002,782	842,469	25,568,869	13,314,990
TOTAL AVG. COST PER HORSEPOWER	$	1,358	842	2,245	2,017
COST RANGE PER HORSEPOWER					
MINIMUM	$	740	2)	894	1,668
MAXIMUM	$	1,696		3,524	2,367

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE E-1

COMPARISON OF CONSTRUCTION COSTS FOR TRANSMISSION COMPRESSOR STATIONS WITH RECIPROCATING UNITS REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		ADDITIONS TO TRANSMISSION COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS		11	12	6	
TOTAL HORSEPOWER		11,345	34,900	10,675	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	11,475,290	25,237,597	11,664,407	
MATERIAL % OF THE TOTAL $		55.9%	58.2	46.2	
MATERIAL AVG.COST PER HORSEPOWER	$	1,011	723	1,093	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING...	$	1,349,083	3,733,752	776,719	
ENGINEERING ... % OF THE TOTAL $		6.6%	8.6	3.1	
ENGINEERING ... AVG. COST PER HORSEPOWER	$	119	107	73	
LABOR					
TOTAL LABOR	$	5,366,279	8,725,161	8,152,675	
LABOR % OF THE TOTAL $		26.1%	20.1	32.3	
LABOR AVG. COST PER HORSEPOWER	$	473	250	764	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	1,377,880	2,007,495	1,289,849	
OVERHEAD	$	638,028	2,079,059	2,190,511	
OTHER MISCELLANEOUS 1)	$	324,413	1,573,174	1,163,452	
TOTAL MISCELLANEOUS	$	2,340,321	5,659,728	4,643,812	
MISCELLANEOUS % OF THE TOTAL $		11.4%	13.1	18.4	
MISCELLANEOUS AVG. COST PER HORSEPOWER	$	206	162	435	
TOTAL COST					
TOTAL COST	$	20,530,973	43,356,238	25,237,613	2)
TOTAL AVG. COST PER HORSEPOWER	$	1,810	1,242	2,364	
COST RANGE PER HORSEPOWER					
MINIMUM	$	1,303	647	1,396	
MAXIMUM	$	2,899	2,186	3,319	

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

Table E-2 Turbine Driven Centrifugal Units

PART A

TABLE E-2

COMPARISON OF CONSTRUCTION COSTS FOR
TRANSMISSION COMPRESSOR STATIONS WITH TURBINE DRIVEN CENTRIFUGAL UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		NEW TRANSMISSION COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS		2	7	1	
TOTAL HORSEPOWER		7,160	60,160	3,830	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	3,827,246	37,624,199	1,653,797	
MATERIAL % OF THE TOTAL $		63.8%	54.0	69.6	
MATERIAL AVG.COST PER HORSEPOWER	$	535	625	432	
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING...	$	--	1,658,588	60,164	
ENGINEERING ... % OF THE TOTAL $		--%	2.4	2.5	
ENGINEERING ... AVG. COST PER HORSEPOWER	$	--	28	16	
LABOR					
TOTAL LABOR	$	888,061	16,052,013	339,667	
LABOR % OF THE TOTAL $		14.8%	23.0	14.3	
LABOR AVG. COST PER HORSEPOWER	$	124	267	89	
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	--	6,799,411	79,098	
OVERHEAD	$	210,931	5,573,677	244,289	
OTHER MISCELLANEOUS 1)	$	1,072,859	2,005,898	--	
TOTAL MISCELLANEOUS	$	1,283,790	14,378,986	323,387	
MISCELLANEOUS % OF THE TOTAL $		21.4%	20.6	13.6	
MISCELLANEOUS AVG. COST PER HORSEPOWER	$	179	239	84	
TOTAL COST					
TOTAL COST	$	5,999,097	69,713,786	2,377,015	2)
TOTAL AVG. COST PER HORSEPOWER	$	838	1,159	621	
COST RANGE PER HORSEPOWER					
MINIMUM	$	3)	623	3)	
MAXIMUM	$		1,493		

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE E-2

COMPARISON OF CONSTRUCTION COSTS FOR
TRANSMISSION COMPRESSOR STATIONS WITH TURBINE DRIVEN CENTRIFUGAL UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		ADDITIONS TO TRANSMISSION COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS		10	3	2	2
TOTAL HORSEPOWER		46,900	13,460	2,320	11,600
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	14,331,688	8,035,151	1,502,188	4,745,693
MATERIAL % OF THE TOTAL $		56.6%	43.4	59.7	79.6
MATERIAL AVG.COST PER HORSEPOWER	$	306	597	647	409
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING...	$	987,663	3,566,467	--	289,465
ENGINEERING ... % OF THE TOTAL $		3.9%	19.3	--	4.9
ENGINEERING ... AVG. COST PER HORSEPOWER	$	21	265	--	25
LABOR					
TOTAL LABOR	$	8,326,040	5,960,181	678,666	734,667
LABOR % OF THE TOTAL $		32.9%	32.2	27.0	12.3
LABOR AVG. COST PER HORSEPOWER	$	178	443	293	63
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	696,579	939,107	76,117	148,209
OVERHEAD	$	413,615	--	124,885	--
OTHER MISCELLANEOUS 1)	$	550,199	--	133,473	43,666
TOTAL MISCELLANEOUS	$	1,660,393	939,107	334,475	191,875
MISCELLANEOUS % OF THE TOTAL $		6.6%	5.1	13.3	3.2
MISCELLANEOUS AVG. COST PER HORSEPOWER	$	35	70	144	17
TOTAL COST					
TOTAL COST	$	25,305,784	18,500,906	2,515,329	5,961,700
TOTAL AVG. COST PER HORSEPOWER	$	540	1,375	1,084	514
COST RANGE PER HORSEPOWER					
MINIMUM	$	382	810	1,059	2)
MAXIMUM	$	1,476	1,819	1,110	

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) ONE REPORT RECEIVED FOR THIS YEAR.

Table E-3 Electric Motor Driven Centrifugal Units

PART A

TABLE E-3

COMPARISON OF CONSTRUCTION COSTS FOR
TRANSMISSION COMPRESSOR STATIONS WITH ELECTRIC MOTOR DRIVEN CENTRIFUGAL UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		NEW TRANSMISSION COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS		2	4		
TOTAL HORSEPOWER		9,000	22,000		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	3,655,994	10,479,000		
MATERIAL % OF THE TOTAL $		47.5%	49.6		
MATERIAL AVG.COST PER HORSEPOWER	$	406	476		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING...	$	--	1,264,200		
ENGINEERING ... % OF THE TOTAL $		--%	6.0		
ENGINEERING ... AVG. COST PER HORSEPOWER	$	--	57		
LABOR					
TOTAL LABOR	$	2,813,872	7,626,000		
LABOR % OF THE TOTAL $		36.5%	36.1		
LABOR AVG. COST PER HORSEPOWER	$	313	347		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	513,720	1,745,000		
OVERHEAD	$	483,033	25,800		
OTHER MISCELLANEOUS 1)	$	233,099	--		
TOTAL MISCELLANEOUS	$	1,229,852	1,770,800		
MISCELLANEOUS % OF THE TOTAL $		16.0%	8.4		
MISCELLANEOUS AVG. COST PER HORSEPOWER	$	137	80		
TOTAL COST					
TOTAL COST	$	7,699,718	21,140,000	2)	2)
TOTAL AVG. COST PER HORSEPOWER	$	856	961		
COST RANGE PER HORSEPOWER					
MINIMUM	$	3)	3)		
MAXIMUM	$				

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

Table F-1 Reciprocating Units

PART A

TABLE F-1

COMPARISON OF CONSTRUCTION COSTS FOR
FIELD COMPRESSOR STATIONS WITH RECIPROCATING UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		NEW FIELD COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS		34	35	7	1
TOTAL HORSEPOWER		27,609	25,008	15,893	521
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	26,596,004	15,229,129	15,171,254	706,407
MATERIAL % OF THE TOTAL $		67.0%	43.8	60.0	53.4
MATERIAL AVG.COST PER HORSEPOWER	$	963	609	955	1,356
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING...	$	3,036,494	786,742	2,472,006	262,083
ENGINEERING ... % OF THE TOTAL $		7.6%	2.3	9.8	19.8
ENGINEERING ... AVG. COST PER HORSEPOWER	$	110	31	156	503
LABOR					
TOTAL LABOR	$	6,742,734	15,818,366	3,962,846	177,730
LABOR % OF THE TOTAL $		17.0%	45.5	15.7	13.4
LABOR AVG. COST PER HORSEPOWER	$	244	633	249	341
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	2,373,272	1,112,201	2,676,534	68,550
OVERHEAD	$	844,006	1,519,081	776,025	107,601
OTHER MISCELLANEOUS 1)	$	123,014	330,877	227,356	--
TOTAL MISCELLANEOUS	$	3,340,292	2,962,159	3,679,915	176,151
MISCELLANEOUS % OF THE TOTAL $		8.4%	8.5	14.6	13.3
MISCELLANEOUS AVG. COST PER HORSEPOWER	$	121	118	232	338
TOTAL COST					
TOTAL COST	$	39,715,524	34,796,396	25,286,021	1,322,371
TOTAL AVG. COST PER HORSEPOWER	$	1,438	1,391	1,591	2,538
COST RANGE PER HORSEPOWER					
MINIMUM	$	773	551	1,061	2)
MAXIMUM	$	6,025	13,131	2,103	

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLF F-1

COMPARISON OF CONSTRUCTION COSTS FOR
FIELD COMPRESSOR STATIONS WITH RECIPROCATING UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		ADDITIONS TO FIELD COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS		33	8	3	2
TOTAL HORSEPOWER		34,156	23,100	4,872	4,000
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	22,713,508	14,479,674	6,311,080	2,351,940
MATERIAL % OF THE TOTAL $		64.5%	60.3	61.9	69.5
MATERIAL AVG.COST PER HORSEPOWER	$	665	627	1,295	588
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING...	$	1,886,845	2,191,827	1,293,604	284,089
ENGINEERING ... % OF THE TOTAL $		5.4%	9.1	12.7	8.4
ENGINEERING ... AVG. COST PER HORSEPOWER	$	55	95	266	71
LABOR					
TOTAL LABOR	$	7,152,047	3,935,305	1,228,960	570,575
LABOR % OF THE TOTAL $		20.3%	16.4	12.1	16.9
LABOR AVG. COST PER HORSEPOWER	$	209	170	252	143
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	1,575,869	2,310,738	945,399	51,036
OVERHEAD	$	1,415,588	866,336	410,603	126,051
OTHER MISCELLANEOUS 1)	$	470,645	211,711	--	--
TOTAL MISCELLANEOUS	$	3,462,102	3,388,785	1,356,002	177,087
MISCELLANEOUS % OF THE TOTAL $		9.8%	14.1	13.3	5.2
MISCELLANEOUS AVG. COST PER HORSEPOWER	$	101	147	278	44
TOTAL COST					
TOTAL COST	$	35,214,502	23,995,591	10,189,646	3,383,691
TOTAL AVG. COST PER HORSEPOWER	$	1,031	1,039	2,091	846
COST RANGE PER HORSEPOWER					
MINIMUM	$	454	984	1,123	2)
MAXIMUM	$	1,532	1,096	2,547	

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) ONE REPORT RECEIVED FOR THIS YEAR.

Table F-2 Turbine Driven Centrifugal Units

PART A

TABLE F-2

COMPARISON OF CONSTRUCTION COSTS FOR
FIELD COMPRESSOR STATIONS WITH TURBINE DRIVEN CENTRIFUGAL UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		NEW FIELD COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS			14		
TOTAL HORSEPOWER			14,000		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		7,132,880		
MATERIAL % OF THE TOTAL $		%	37.5		
MATERIAL AVG.COST PER HORSEPOWER	$		509		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING...	$		--		
ENGINEERING ... % OF THE TOTAL $		%	--		
ENGINEERING ... AVG. COST PER HORSEPOWER	$		--		
LABOR					
TOTAL LABOR	$		10,855,978		
LABOR % OF THE TOTAL $		%	57.1		
LABOR AVG. COST PER HORSEPOWER	$		775		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$		476,319		
OVERHEAD	$		315,174		
OTHER MISCELLANEOUS 1)	$		230,755		
TOTAL MISCELLANEOUS	$		1,022,248		
MISCELLANEOUS % OF THE TOTAL $		%	5.4		
MISCELLANEOUS AVG. COST PER HORSEPOWER	$		73		
TOTAL COST					
TOTAL COST	$	2)	19,011,106	2)	2)
TOTAL AVG. COST PER HORSEPOWER	$		1,358		
COST RANGE PER HORSEPOWER					
MINIMUM	$		1,104		
MAXIMUM	$		1,584		

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

PART A

TABLE F-2

COMPARISON OF CONSTRUCTION COSTS FOR
FIELD COMPRESSOR STATIONS WITH TURBINE DRIVEN CENTRIFUGAL UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		ADDITIONS TO FIELD COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS		1			
TOTAL HORSEPOWER		3,580			
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	1,319,106			
MATERIAL % OF THE TOTAL $		52.7%			
MATERIAL AVG.COST PER HORSEPOWER	$	368			
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING...	$	--			
ENGINEERING ... % OF THE TOTAL $		--%			
ENGINEERING ... AVG. COST PER HORSEPOWER	$	--			
LABOR					
TOTAL LABOR	$	460,819			
LABOR % OF THE TOTAL $		18.4%			
LABOR AVG. COST PER HORSEPOWER	$	129			
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	--			
OVERHEAD	$	87,968			
OTHER MISCELLANEOUS 1)	$	633,217			
TOTAL MISCELLANEOUS	$	721,185			
MISCELLANEOUS % OF THE TOTAL $		28.8%			
MISCELLANEOUS AVG. COST PER HORSEPOWER	$	201			
TOTAL COST					
TOTAL COST	$	2,501,110	2)	2)	2)
TOTAL AVG. COST PER HORSEPOWER	$	699			
COST RANGE PER HORSEPOWER					
MINIMUM	$	3)			
MAXIMUM	$				

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

Table F-3 Electric Motor Driven Centrifugal Units

PART A

TABLE F-3

COMPARISON OF CONSTRUCTION COSTS FOR
FIELD COMPRESSOR STATIONS WITH ELECTRIC MOTOR DRIVEN CENTRIFUGAL UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		ADDITIONS TO FIELD COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS			1		
TOTAL HORSEPOWER			2,250		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		1,127,656		
MATERIAL % OF THE TOTAL $		%	52.7		
MATERIAL AVG.COST PER HORSEPOWER	$		501		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING...	$		4,867		
ENGINEERING ... % OF THE TOTAL $		%	0.2		
ENGINEERING ... AVG. COST PER HORSEPOWER	$		2		
LABOR					
TOTAL LABOR	$		670,563		
LABOR % OF THE TOTAL $		%	31.3		
LABOR AVG. COST PER HORSEPOWER	$		298		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$		99,278		
OVERHEAD	$		231,648		
OTHER MISCELLANEOUS 1)	$		6,312		
TOTAL MISCELLANEOUS	$		337,238		
MISCELLANEOUS % OF THE TOTAL $		%	15.8		
MISCELLANEOUS AVG. COST PER HORSEPOWER	$		150		
TOTAL COST					
TOTAL COST	$	2)	2,140,324	2)	2)
TOTAL AVG. COST PER HORSEPOWER	$		951		
COST RANGE PER HORSEPOWER					
MINIMUM	$		3)		
MAXIMUM	$				

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

Table G-1 Reciprocating Units

PART A

TABLE G-1

COMPARISON OF CONSTRUCTION COSTS FOR
STORAGE COMPRESSOR STATIONS WITH RECIPROCATING UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

	NEW STORAGE COMPRESSOR STATIONS			
	1981	1982	1983	1984
DESCRIPTIVE DATA				
NUMBER OF UNITS	6	12		
TOTAL HORSEPOWER	35,500	29,210		
COST DATA				
MATERIALS				
TOTAL MATERIALS	$ 46,548,172	36,158,516		
MATERIAL % OF THE TOTAL $	62.9%	56.6		
MATERIAL AVG.COST PER HORSEPOWER	$ 1,311	1,238		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY				
TOTAL ENGINEERING...	$ 1,779,115	7,109,262		
ENGINEERING ... % OF THE TOTAL $	2.4%	11.1		
ENGINEERING ... AVG. COST PER HORSEPOWER	$ 50	243		
LABOR				
TOTAL LABOR	$ 11,942,544	12,723,350		
LABOR % OF THE TOTAL $	16.1%	19.9		
LABOR AVG. COST PER HORSEPOWER	$ 336	436		
MISCELLANEOUS				
INTEREST DURING CONSTRUCTION	$ 7,898,449	6,444,325		
OVERHEAD	$ 5,792,938	1,146,030		
OTHER MISCELLANEOUS 1)	$ 11,107	259,512		
TOTAL MISCELLANEOUS	$ 13,702,494	7,849,867		
MISCELLANEOUS % OF THE TOTAL $	18.5%	12.3		
MISCELLANEOUS AVG. COST PER HORSEPOWER	$ 386	269		
TOTAL COST				
TOTAL COST	$ 73,972,325	63,840,995	2)	2)
TOTAL AVG. COST PER HORSEPOWER	$ 2,084	2,186		
COST RANGE PER HORSEPOWER				
MINIMUM	$ 1,988	1,837		
MAXIMUM	$ 2,442	3,066		

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

PART A

TABLE G-1

COMPARISON OF CONSTRUCTION COSTS FOR
STORAGE COMPRESSOR STATIONS WITH RECIPROCATING UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		ADDITIONS TO STORAGE COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS			4		
TOTAL HORSEPOWER			2,220		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		1,590,426		
MATERIAL % OF THE TOTAL $		%	78.2		
MATERIAL AVG.COST PER HORSEPOWER	$		716		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING...	$		51,761		
ENGINEERING ... % OF THE TOTAL $		%	2.5		
ENGINEERING ... AVG. COST PER HORSEPOWER	$		23		
LABOR					
TOTAL LABOR	$		184,108		
LABOR % OF THE TOTAL $		%	9.1		
LABOR AVG. COST PER HORSEPOWER	$		83		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$		49,171		
OVERHEAD	$		158,082		
OTHER MISCELLANEOUS 1)	$		--		
TOTAL MISCELLANEOUS	$		207,253		
MISCELLANEOUS % OF THE TOTAL $		%	10.2		
MISCELLANEOUS AVG. COST PER HORSEPOWER	$		93		
TOTAL COST					
TOTAL COST	$	2)	2,033,548	2)	2)
TOTAL AVG. COST PER HORSEPOWER	$		916		
COST RANGE PER HORSEPOWER					
MINIMUM	$		623		
MAXIMUM	$		1,550		

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

Table G-2 Turbine Driven Centrifugal Units

PART A

TABLE G-2

COMPARISON OF CONSTRUCTION COSTS FOR
STORAGE COMPRESSOR STATIONS WITH TURBINE DRIVEN CENTRIFUGAL UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		NEW STORAGE COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS			2		
TOTAL HORSEPOWER			9,000		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		10,680,993		
MATERIAL % OF THE TOTAL $		%	52.4		
MATERIAL AVG.COST PER HORSEPOWER	$		1,187		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING...	$		--		
ENGINEERING ... % OF THE TOTAL $		%	--		
ENGINEERING ... AVG. COST PER HORSEPOWER	$		--		
LABOR					
TOTAL LABOR	$		7,534,243		
LABOR % OF THE TOTAL $		%	37.0		
LABOR AVG. COST PER HORSEPOWER	$		837		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$		--		
OVERHEAD	$		702,374		
OTHER MISCELLANEOUS 1)	$		1,468,353		
TOTAL MISCELLANEOUS	$		2,170,727		
MISCELLANEOUS % OF THE TOTAL $		%	10.6		
MISCELLANEOUS AVG. COST PER HORSEPOWER	$		241		
TOTAL COST					
TOTAL COST	$	2)	20,385,963	2)	2)
TOTAL AVG. COST PER HORSEPOWER	$		2,265		
COST RANGE PER HORSEPOWER					
MINIMUM	$		3)		
MAXIMUM	$				

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE G-2

COMPARISON OF CONSTRUCTION COSTS FOR
STORAGE COMPRESSOR STATIONS WITH TURBINE DRIVEN CENTRIFUGAL UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		ADDITIONS TO STORAGE COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS			2		
TOTAL HORSEPOWER			2,200		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		1,773,696		
MATERIAL % OF THE TOTAL $		%	67.0		
MATERIAL AVG.COST PER HORSEPOWER	$		806		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING...	$		--		
ENGINEERING ... % OF THE TOTAL $		%	--		
ENGINEERING ... AVG. COST PER HORSEPOWER	$		--		
LABOR					
TOTAL LABOR	$		612,487		
LABOR % OF THE TOTAL $		%	23.1		
LABOR AVG. COST PER HORSEPOWER	$		278		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$		159,742		
OVERHEAD	$		51,201		
OTHER MISCELLANEOUS 1)	$		51,260		
TOTAL MISCELLANEOUS	$		262,203		
MISCELLANEOUS % OF THE TOTAL $		%	9.9		
MISCELLANEOUS AVG. COST PER HORSEPOWER	$		119		
TOTAL COST					
TOTAL COST	$	2)	2,648,386	2)	2)
TOTAL AVG. COST PER HORSEPOWER	$		1,204		
COST RANGE PER HORSEPOWER					
MINIMUM	$		3)		
MAXIMUM	$				

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

Table H-1 Reciprocating Units

PART A

TABLE H-1

COMPARISON OF CONSTRUCTION COSTS FOR
OFFSHORE COMPRESSOR STATIONS WITH RECIPROCATING UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		NEW OFFSHORE COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS		7	2		
TOTAL HORSEPOWER		8,900	1,672		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	5,792,250	869,303		
MATERIAL % OF THE TOTAL $		64.4%	63.5		
MATERIAL AVG.COST PER HORSEPOWER	$	651	520		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING...	$	--	40,000		
ENGINEERING ... % OF THE TOTAL $		--%	2.9		
ENGINEERING ... AVG. COST PER HORSEPOWER	$	--	24		
LABOR					
TOTAL LABOR	$	3,030,337	366,049		
LABOR % OF THE TOTAL $		33.7%	26.7		
LABOR AVG. COST PER HORSEPOWER	$	340	219		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	73,160	27,461		
OVERHEAD	$	96,455	66,146		
OTHER MISCELLANEOUS 1)	$	--	--		
TOTAL MISCELLANEOUS	$	169,615	93,607		
MISCELLANEOUS % OF THE TOTAL $		1.9%	6.8		
MISCELLANEOUS AVG. COST PER HORSEPOWER	$	19	56		
TOTAL COST					
TOTAL COST	$	8,992,202	1,368,959	2)	2)
TOTAL AVG. COST PER HORSEPOWER	$	1,010	819		
COST RANGE PER HORSEPOWER					
MINIMUM	$				
MAXIMUM	$				

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.

Table H-2 Turbine Driven Centrifugal Units

PART A

TABLE H-2

COMPARISON OF CONSTRUCTION COSTS FOR
OFFSHORE COMPRESSOR STATIONS WITH TURBINE DRIVEN CENTRIFUGAL UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		NEW OFFSHORE COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS			2		
TOTAL HORSEPOWER			4,560		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		8,717,408		
MATERIAL % OF THE TOTAL $		%	35.9		
MATERIAL AVG.COST PER HORSEPOWER	$		1,912		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING...	$		767,551		
ENGINEERING ... % OF THE TOTAL $		%	3.2		
ENGINEERING ... AVG. COST PER HORSEPOWER	$		168		
LABOR					
TOTAL LABOR	$		12,669,593		
LABOR % OF THE TOTAL $		%	52.1		
LABOR AVG. COST PER HORSEPOWER	$		2,778		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$		912,964		
OVERHEAD	$		1,233,907		
OTHER MISCELLANEOUS 1)	$		5,194		
TOTAL MISCELLANEOUS	$		2,152,065		
MISCELLANEOUS % OF THE TOTAL $		%	8.9		
MISCELLANEOUS AVG. COST PER HORSEPOWER	$		472		
TOTAL COST					
TOTAL COST	$	2)	24,306,617	2)	2)
TOTAL AVG. COST PER HORSEPOWER	$		5,330		
COST RANGE PER HORSEPOWER					
MINIMUM	$		3)		
MAXIMUM	$				

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART A

TABLE H-2

COMPARISON OF CONSTRUCTION COSTS FOR OFFSHORE COMPRESSOR STATIONS WITH TURBINE DRIVEN CENTRIFUGAL UNITS REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		ADDITIONS TO OFFSHORE COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS		1			
TOTAL HORSEPOWER		29,000			
COST DATA					
MATERIALS					
TOTAL MATERIALS	$	7,068,323			
MATERIAL % OF THE TOTAL $		42.3%			
MATERIAL AVG.COST PER HORSEPOWER	$	244			
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING...	$	1,841,083			
ENGINEERING ... % OF THE TOTAL $		11.0%			
ENGINEERING ... AVG. COST PER HORSEPOWER	$	63			
LABOR					
TOTAL LABOR	$	6,349,119			
LABOR % OF THE TOTAL $		38.0%			
LABOR AVG. COST PER HORSEPOWER	$	219			
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$	1,182,747			
OVERHEAD	$	250,501			
OTHER MISCELLANEOUS 1)	$	--			
TOTAL MISCELLANEOUS	$	1,433,248			
MISCELLANEOUS % OF THE TOTAL $		8.6%			
MISCELLANEOUS AVG. COST PER HORSEPOWER	$	49			
TOTAL COST					
TOTAL COST	$	16,691,773	2)	2)	2)
TOTAL AVG. COST PER HORSEPOWER	$	576			
COST RANGE PER HORSEPOWER					
MINIMUM	$	3)			
MAXIMUM	$				

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

Table H-3 Electric Motor Driven Centrifugal Units

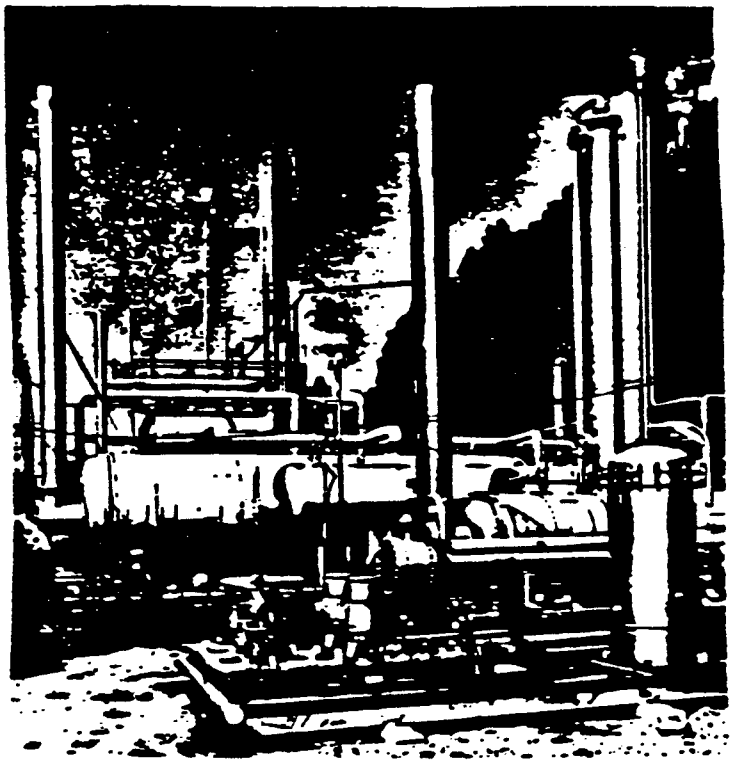
PART A

TABLE H-3

COMPARISON OF CONSTRUCTION COSTS FOR
OFFSHORE COMPRESSOR STATIONS WITH ELECTRIC MOTOR DRIVEN CENTRIFUGAL UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		NEW OFFSHORE COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS			1		
TOTAL HORSEPOWER			800		
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		379,090		
MATERIAL % OF THE TOTAL $		%	55.6		
MATERIAL AVG.COST PER HORSEPOWER	$		474		
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY					
TOTAL ENGINEERING...	$		33,000		
ENGINEERING ... % OF THE TOTAL $		%	4.8		
ENGINEERING ... AVG. COST PER HORSEPOWER	$		41		
LABOR					
TOTAL LABOR	$		215,810		
LABOR % OF THE TOTAL $		%	31.6		
LABOR AVG. COST PER HORSEPOWER	$		270		
MISCELLANEOUS					
INTEREST DURING CONSTRUCTION	$		--		
OVERHEAD	$		19,900		
OTHER MISCELLANEOUS 1)	$		34,200		
TOTAL MISCELLANEOUS	$		54,100		
MISCELLANEOUS % OF THE TOTAL $		%	7.9		
MISCELLANEOUS AVG. COST PER HORSEPOWER	$		68		
TOTAL COST					
TOTAL COST	$	2)	682,000	2)	2)
TOTAL AVG. COST PER HORSEPOWER	$		853		
COST RANGE PER HORSEPOWER					
MINIMUM	$		3)		
MAXIMUM	$				

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.



PART A
SECTION II INDIVIDUAL PROJECTS

Table I Construction Cost Reports Filed From August 1, 1984 Through July 31, 1985

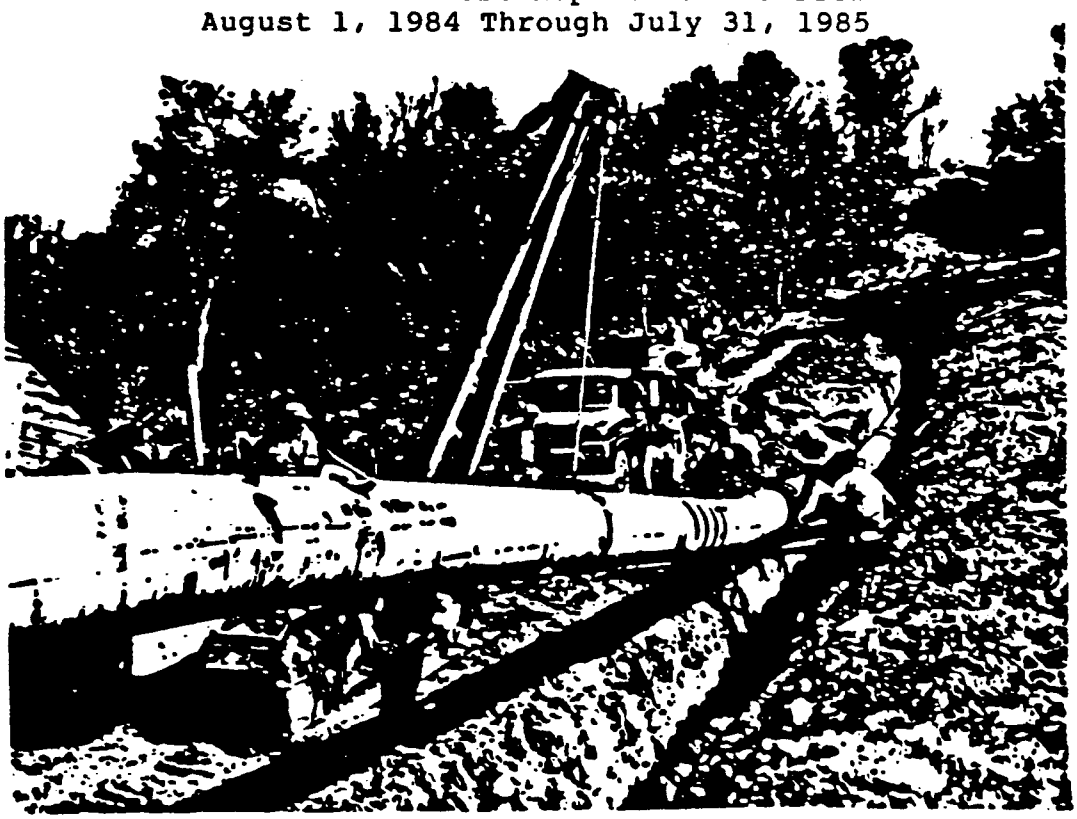


TABLE I

PART A

CONSTRUCTION COST REPORTS FILED FROM AUGUST 1, 1984 THROUGH JULY 31, 1985
CONSTRUCTION ENDING IN 1981

	DOCKET NO. (CP)	TYPE OF CONSTRUCTION COST REPORTED: COMPRESSOR STATIONS ONSHORE	COMPRESSOR STATIONS OFFSHORE	ONSHORE PIPELINES TRANSMISSION	ONSHORE PIPELINES LATERAL	OFFSHORE PIPELINES	MIXED DIAMETER PIPELINES
NORTHWEST PIPELINE CORP.	79-56	X		X			
UNITED GAS PIPE LINE CO.							
TRANSCONTINENTAL GAS PIPE LINE CORP. 1)	80-359					X	

1) SUPPLEMENTAL EXPENDITURES FOR PROJECT ORIGINALLY COMPLETED IN 1981, WHICH APPEARED IN THE 1978-1981 REPORT ARE:MAT(-$31,867);ENG 3,338;LBR 362,709;INT 1,036;OH 10,680;OTR MISC 6,554.

PART A

TABLE I

CONSTRUCTION COST REPORTS FILED FROM AUGUST 1, 1984 THROUGH JULY 31, 1985
CONSTRUCTION ENDING IN 1982

		DOCKET NO. (CP)	TYPE OF CONSTRUCTION COST REPORTED: COMPRESSOR STATIONS ONSHORE	COMPRESSOR STATIONS OFFSHORE	ONSHORE PIPELINES TRANSMISSION	ONSHORE PIPELINES LATERAL	OFFSHORE PIPELINES	MIXED DIAMETER PIPELINES
ANR PIPELINE CO.		80-313	X		X	X		
COLORADO INTERSTATE GAS CO.	1)	79-128	X					

1) SUPPLEMENTAL EXPENDITURES FOR PROJECT ORIGINALLY COMPLETED IN 1982, WHICH APPEARED IN THE 1979-1982 REPORT ARE:MAT(-$146);ENG 3,374;OH 2.

TABLE I

PART A

CONSTRUCTION COST REPORTS FILED FROM AUGUST 1, 1984 THROUGH JULY 31, 1985
CONSTRUCTION ENDING IN 1983

	DOCKET NO. (CP)	TYPE OF CONSTRUCTION COST REPORTED					
		COMPRESSOR STATIONS		ONSHORE PIPELINES		OFFSHORE PIPELINES	MIXED DIAMETER PIPELINES
		ONSHORE	OFFSHORE	TRANSMISSION	LATERAL		
COLUMBIA GAS TRANSMISSION CORP.	81-433	X		X			
MOUNTAIN FUEL RESOURCES, INC.	75-215						X
NATURAL GAS PIPELINE CO. OF AMERICA	83-194			X			
NATURAL GAS PIPELINE CO. OF AMERICA	83-252						X

PART A

TABLE I

CONSTRUCTION COST REPORTS FILED FROM AUGUST 1, 1984 THROUGH JULY 31, 1985
CONSTRUCTION ENDING IN 1984

	DOCKET NO. (CP)	TYPE OF CONSTRUCTION COST REPORTED: COMPRESSOR STATIONS ONSHORE	COMPRESSOR STATIONS OFFSHORE	ONSHORE PIPELINES TRANSMISSION	ONSHORE PIPELINES LATERAL	OFFSHORE PIPELINES	MIXED DIAMETER PIPELINES
ANR PIPELINE CO.	80-297				X		
ANR PIPELINE CO.	81-408	X			X		
ANR PIPELINE CO.	84-639				X		
COLORADO INTERSTATE GAS CO.	81-328	X					
COLUMBIA GAS TRANSMISSION CORP.	83-229			X			X
COLUMBIA GAS TRANSMISSION CORP.	84-333			X			X
COLUMBIA GAS TRANSMISSION CORP.	84-470			X			
CONSOLIDATED GAS TRANSMISSION CORP.	83-177	X					
CONSOLIDATED GAS TRANSMISSION CORP. TEXAS EASTERN TRANSMISSION CORP.	83-460				X		
EASTERN SHORE NATURAL GAS CO.	81-226			X			
EQUITABLE GAS CO.	83-312	X					
K N ENERGY, INC.	81-430			X			
NATIONAL FUEL GAS SUPPLY CORP.	84-221			X			
NATURAL GAS PIPELINE CO. OF AMERICA	84-16						X
NORTHERN NATURAL GAS CO.	83-131					X	
NORTHERN NATURAL GAS CO.	83-392			X			
NORTHWEST PIPELINE CORP.	83-493			X			
PANHANDLE EASTERN PIPE LINE CO.	82-189	X					
SABINE PIPE LINE CO.	84-96					X	
SABINE PIPE LINE CO.	84-97					X	
SOUTHERN NATURAL GAS CO.	82-467					X	
TENNESSEE GAS PIPELINE CO.	84-23			X			
TENNESSEE GAS PIPELINE CO. FLORIDA GAS TRANSMISSION CO.	80-481					X	
TRANSCONTINENTAL GAS PIPE LINE CORP.	83-489			X			
TRANSCONTINENTAL GAS PIPE LINE CORP.	84-569			X			
TRANSCONTINENTAL GAS PIPE LINE CORP. COLUMBIA GULF TRANSMISSION CO.	83-156					X	
TRUNKLINE GAS CO. PANHANDLE EASTERN PIPE LINE CO. TRANSCONTINENTAL GAS PIPE LINE CORP.	83-426					X	
WESTERN GAS INTERSTATE CO.	84-174			X			

Table J-1 Three Miles and Over
(Excludes Mixed Diameter Pipeline)

PART A

TABLE J-1

PIPELINE CONSTRUCTION PROJECTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1981

DOCKET NO. (CP)	APPLICANT		DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE TRANSMISSION PIPELINE						
79-56	NORTHWEST PIPELINE CORP.	1)	24	350.00	ID,OR	$172,481,902	$ 492,805

1) INCLUDES 100.00 MILES OF 30 INCH TRANSMISSION PIPELINE.

PART A

PIPELINE CONSTRUCTION PROJECTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1982

TABLE J-1

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE TRANSMISSION PIPELINE					
80-313	ANR PIPELINE CO.	20	11.90	MI	$ 4,505,994	$ 378,655

PART A

TABLE J-1

PIPELINE CONSTRUCTION PROJECTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1983

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE TRANSMISSION PIPELINE					
81-433	COLUMBIA GAS TRANSMISSION CORP.	24	67.10	PA	$ 39,279,325	$ 585,385
83-194	NATURAL GAS PIPELINE CO. OF AMERICA	36	10.56	IA,IL	6,497,981	615,339

PART A

TABLE J-1

PIPELINE CONSTRUCTION PROJECTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1984

DOCKET NO. (CP)	APPLICANT		DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE TRANSMISSION PIPELINE						
81-226	EASTERN SHORE NATURAL GAS CO.		10	4.94	DE	$ 635,682	$ 128,681
83-229	COLUMBIA GAS TRANSMISSION CORP.		16	4.20	OH	917,723	218,505
81-430	K N ENERGY, INC.	1)	16	15.50	WY	2,438,110	157,297
84-221	NATIONAL FUEL GAS SUPPLY CORP.		16	3.24	PA	751,336	231,894
83-392	NORTHERN NATURAL GAS CO.		24	8.50	TX	3,419,059	402,242
84-23	TENNESSEE GAS PIPELINE CO.		36	31.50	TX	22,793,841	723,614
83-489	TRANSCONTINENTAL GAS PIPE LINE CORP.		42	28.13	LA	19,934,506	708,656
83-489	TRANSCONTINENTAL GAS PIPE LINE CORP.		42	22.46	LA	18,920,605	842,413

1) INCLUDES 2.40 MILES OF 20 INCH TRANSMISSION PIPELINE.

PART A

PIPELINE CONSTRUCTION PROJECTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1984

TABLE J-1

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE LATERAL PIPELINE					
80-297	ANR PIPELINE CO.	16	20.10	TX	$ 4,045,778	$ 201,282
81-408	ANR PIPELINE CO.	16	40.20	OK,TX	8,358,680	207,927
81-408	ANR PIPELINE CO.	20	10.10	KS	2,923,999	289,505
81-408	ANR PIPELINE CO.	20	6.90	OK	2,150,497	311,666
81-408	ANR PIPELINE CO.	20	7.10	OK	2,310,937	325,484

PART A

TABLE J-1

PIPELINE CONSTRUCTION PROJECTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1981

DOCKET NO. (CP)	APPLICANT		DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	OFFSHORE PIPELINE						
80-359	UNITED GAS PIPE LINE CO. TRANSCONTINENTAL GAS PIPE LINE CORP.	1)	10	5.30	TX	$ 4,219,056	$ 796,048

1) SUPPLEMENTAL EXPENDITURES FOR PROJECT ORIGINALLY COMPLETED IN 1981, WHICH APPEARED IN THE 1978-1981 REPORT ARE:MAT(-$31,867);ENG 3,338;LBR 362,709;INT 1,036;OH 10,680;OTR MISC 6,554.

PART A

TABLE J-1

PIPELINE CONSTRUCTION PROJECTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1984

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	OFFSHORE PIPELINE					
80-481	TENNESSEE GAS PIPELINE CO.					
	FLORIDA GAS TRANSMISSION CO.	10	3.00	LA,TX	$ 1,994,810	$ 664,937
83-426	TRUNKLINE GAS CO.					
	PANHANDLE EASTERN PIPE LINE CO.					
	TRANSCONTINENTAL GAS PIPE LINE CORP.	10	7.14	TX	3,508,613	491,402
84-96	SABINE PIPE LINE CO.	12	4.80	LA	4,304,836	896,841
83-156	TRANSCONTINENTAL GAS PIPE LINE CORP.					
	COLUMBIA GULF TRANSMISSION CO.	12	8.14	TX	5,843,470	717,871
82-467	SOUTHERN NATURAL GAS CO.	16	9.53	TX	6,275,387	658,488
80-481	TENNESSEE GAS PIPELINE CO.					
	FLORIDA GAS TRANSMISSION CO.	16	9.70	LA,TX	5,773,047	595,159
83-131	NORTHERN NATURAL GAS CO.	24	3.50	TX	4,446,608	1,270,459
80-481	TENNESSEE GAS PIPELINE CO.					
	FLORIDA GAS TRANSMISSION CO.	24	4.20	LA,TX	7,455,343	1,775,082
80-481	TENNESSEE GAS PIPELINE CO.					
	FLORIDA GAS TRANSMISSION CO.	30	20.20	LA,TX	29,641,946	1,467,423

Table J-2 Under Three Miles
(Excludes Mixed Diameter Pipeline)

PART A

TABLE J-2

PIPELINE CONSTRUCTION PROJECTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1984

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE TRANSMISSION PIPELINE					
84-174	WESTERN GAS INTERSTATE CO.	6	0.24	OK	$ 98,001	$ 408,338
84-174	WESTERN GAS INTERSTATE CO.	8	0.26	TX	36,998	142,300
83-229	COLUMBIA GAS TRANSMISSION CORP.	20	1.10	OH	306,233	278,394
84-333	COLUMBIA GAS TRANSMISSION CORP.	20	0.90	MD	2,864,672	3,182,969
84-470	COLUMBIA GAS TRANSMISSION CORP.	24	2.50	WV	1,108,156	443,262
84-470	COLUMBIA GAS TRANSMISSION CORP.	24	1.20	OH	575,930	479,942
83-493	NORTHWEST PIPELINE CORP.	24	0.90	WY	748,019	831,132
84-569	TRANSCONTINENTAL GAS PIPE LINE CORP.	30	0.76	LA	3,960,523	5,211,214

PART A

PIPELINE CONSTRUCTION PROJECTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1982

TABLE J-2

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE LATERAL PIPELINE					
80-313	ANR PIPELINE CO.	16	0.40	MI	$ 675,340	$ 1,688,350

PART A

TABLE J-2

PIPELINE CONSTRUCTION PROJECTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1984

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE LATERAL PIPELINE					
84-639	ANR PIPELINE CO.	4	2.60	IA	$ 281,508	$ 108,272
83-460	CONSOLIDATED GAS TRANSMISSION CORP. TEXAS EASTERN TRANSMISSION CORP.	6	2.05	PA	277,438	135,336

PART A

TABLE J-2

PIPELINE CONSTRUCTION PROJECTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1984

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	OFFSHORE PIPELINE					
83-156	TRANSCONTINENTAL GAS PIPE LINE CORP. COLUMBIA GULF TRANSMISSION CO.	6	0.96	TX	$ 1,489,274	$ 1,551,327
83-156	TRANSCONTINENTAL GAS PIPE LINE CORP. COLUMBIA GULF TRANSMISSION CO.	8	0.98	TX	1,538,076	1,569,465
84-97	SABINE PIPE LINE CO.	10	2.41	LA	3,349,296	1,389,749
80-481	TENNESSEE GAS PIPELINE CO. FLORIDA GAS TRANSMISSION CO.	12	2.20	LA	1,597,268	726,031
80-481	TENNESSEE GAS PIPELINE CO. FLORIDA GAS TRANSMISSION CO.	24	0.20	LA	1,110,142	5,550,710

Table J-3 Mixed Diameter Pipeline

PART A

TABLE J-3

PIPELINE CONSTRUCTION PROJECTS
MIXED DIAMETER PIPELINE 3 MILES AND OVER
CONSTRUCTION ENDING IN 1984

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE TRANSMISSION PIPELINE					
84-333	COLUMBIA GAS TRANSMISSION CORP.	20, 24, 26	5.76	MD	$ 3,557,393	$ 617,603
84-16	NATURAL GAS PIPELINE CO. OF AMERICA	36, 42	66.91	IA	37,279,376	557,157

PART A

TABLE J-3

PIPELINE CONSTRUCTION PROJECTS
MIXED DIAMETER PIPELINE 3 MILES AND OVER
CONSTRUCTION ENDING IN 1983

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE LATERAL PIPELINE					
83-252	NATURAL GAS PIPELINE CO. OF AMERICA	4, 6, 8, 12, 16	12.50	IL	$ 3,660,634	$ 292,851

PART A

PIPELINE CONSTRUCTION PROJECTS
MIXED DIAMETER PIPELINE UNDER 3 MILES
CONSTRUCTION ENDING IN 1984

TABLE J-3

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE TRANSMISSION PIPELINE					
83-229	COLUMBIA GAS TRANSMISSION CORP.	16, 20, 26	0.04	MD	$ 33,403	$ 835,075

PART A

TABLE J-3

PIPELINE CONSTRUCTION PROJECTS
MIXED DIAMETER PIPELINE UNDER 3 MILES
CONSTRUCTION ENDING IN 1983

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE LATERAL PIPELINE					
75-215	MOUNTAIN FUEL RESOURCES, INC.	1) 6	0.53	UT	$ 131,882	$ 248,834

1) COST DETAIL WAS NOT OBTAINABLE.

Table K-1 Reciprocating Units

PART A

TABLE K-1

NEW TRANSMISSION COMPRESSOR STATIONS
RECIPROCATING UNITS
CONSTRUCTION ENDING IN 1984

	DOCKET NUMBER (CP) AND APPLICANT	
	81-328 CIG	83-312 EQUITABLE
DESCRIPTIVE DATA		
NAME OF COMPRESSOR STATION	BEAVER CO COMP STA	BURNSVILLE COMP STA
LOCATION	BEAVER CO, OK	BRAXTON CO, WV
HORSEPOWER/UNIT	3 AT 1,100	2 AT 1,350; 1 AT 600
NUMBER OF UNITS	3	3
TOTAL HORSEPOWER	3,300	3,300
COST DATA		
MATERIALS		
TOTAL MATERIALS	$ 2,495,575	4,614,600
MATERIAL % OF THE TOTAL $	45.3%	59.1
MATERIAL AVG. COST PER HORSEPOWER	$ 756	1,398
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY		
TOTAL ENGINEERING...	$ 890,808	--
ENGINEERING ... % OF THE TOTAL $	16.2%	--
ENGINEERING ... AVG. COST PER HORSEPOWER	$ 270	--
LABOR		
TOTAL LABOR	$ 502,415	2,187,400
LABOR % OF THE TOTAL $	9.1%	28.0
LABOR AVG. COST PER HORSEPOWER	$ 152	663
MISCELLANEOUS		
INTEREST DURING CONSTRUCTION	$ 306,814	--
OVERHEAD	$ 1,286,289	1,009,200
OTHER MISCELLANEOUS 1)	$ 21,889	--
TOTAL MISCELLANEOUS	$ 1,614,992	1,009,200
MISCELLANEOUS % OF THE TOTAL $	29.3%	12.9
MISCELLANEOUS AVG. COST PER HORSEPOWER	$ 489	306
TOTAL COST		
TOTAL COST	$ 5,503,790	7,811,200
TOTAL AVG. COST PER HORSEPOWER	$ 1,668	2,367

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.

PART A

TABLE K-1

ADDITIONS TO TRANSMISSION COMPRESSOR STATIONS
RECIPROCATING UNITS
CONSTRUCTION ENDING IN 1981

	DOCKET NUMBER (CP) AND APPLICANT	
	79-56 NORTHWEST	79-56 NORTHWEST
DESCRIPTIVE DATA		
NAME OF COMPRESSOR STATION	BAKER STA	CALDWELL STA
LOCATION	BAKER CO, OR	GEM CO, ID
HORSEPOWER/UNIT	1 AT 2,000	1 AT 1,500
NUMBER OF UNITS	1	1
TOTAL HORSEPOWER	2,000	1,500
COST DATA		
MATERIALS		
TOTAL MATERIALS	$ 2,021,478	1,974,161
MATERIAL % OF THE TOTAL $	48.7%	49.4
MATERIAL AVG. COST PER HORSEPOWER	$ 1,011	1,316
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY		
TOTAL ENGINEERING...	$ 281,392	326,250
ENGINEERING ... % OF THE TOTAL $	6.8%	8.2
ENGINEERING ... AVG. COST PER HORSEPOWER	$ 141	218
LABOR		
TOTAL LABOR	$ 1,227,823	1,073,205
LABOR % OF THE TOTAL $	29.6%	26.8
LABOR AVG. COST PER HORSEPOWER	$ 614	715
MISCELLANEOUS		
INTEREST DURING CONSTRUCTION	$ 436,679	436,679
OVERHEAD	$ 102,921	102,921
OTHER MISCELLANEOUS 1)	$ 84,502	84,502
TOTAL MISCELLANEOUS	$ 624,102	624,102
MISCELLANEOUS % OF THE TOTAL $	15.0%	15.6
MISCELLANEOUS AVG. COST PER HORSEPOWER	$ 312	416
TOTAL COST		
TOTAL COST	$ 4,154,795	3,997,718
TOTAL AVG. COST PER HORSEPOWER	$ 2,077	2,665

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.

PART A

TABLE K-1

ADDITIONS TO TRANSMISSION COMPRESSOR STATIONS
RECIPROCATING UNITS
CONSTRUCTION ENDING IN 1983

	DOCKET NUMBER (CP) AND APPLICANT	
	81-433 COLUMBIA GAS	81-433 COLUMBIA GAS
DESCRIPTIVE DATA		
NAME OF COMPRESSOR STATION	EAGLE COMP STA	RENOVO COMP STA
LOCATION	CHESTER CO, PA	CLINTON CO, PA
HORSEPOWER/UNIT	2 AT 1,350	1 AT 375
NUMBER OF UNITS	2	1
TOTAL HORSEPOWER	2,700	375
COST DATA		
MATERIALS		
TOTAL MATERIALS	$ 3,862,553	265,949
MATERIAL % OF THE TOTAL $	43.1%	50.8
MATERIAL AVG. COST PER HORSEPOWER	$ 1,431	709
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY		
TOTAL ENGINEERING...	$ --	--
ENGINEERING ... % OF THE TOTAL $	--%	--
ENGINEERING ... AVG. COST PER HORSEPOWER	$ --	--
LABOR		
TOTAL LABOR	$ 2,696,816	210,648
LABOR % OF THE TOTAL $	30.1%	40.3
LABOR AVG. COST PER HORSEPOWER	$ 999	562
MISCELLANEOUS		
INTEREST DURING CONSTRUCTION	$ 672,602	26,614
OVERHEAD	$ 597,286	16,438
OTHER MISCELLANEOUS 1)	$ 1,132,422	3,699
TOTAL MISCELLANEOUS	$ 2,402,310	46,751
MISCELLANEOUS % OF THE TOTAL $	26.8%	8.9
MISCELLANEOUS AVG. COST PER HORSEPOWER	$ 890	125
TOTAL COST		
TOTAL COST	$ 8,961,679	523,348
TOTAL AVG. COST PER HORSEPOWER	$ 3,319	1,396

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.

Table K-2 Turbine Driven Centrifugal Units

PART A

TABLE K-2

ADDITIONS TO TRANSMISSION COMPRESSOR STATIONS
TURBINE DRIVEN CENTRIFUGAL UNITS
CONSTRUCTION ENDING IN 1983

	DOCKET NUMBER (CP) AND APPLICANT	
	81-433 COLUMBIA GAS	81-433 COLUMBIA GAS
DESCRIPTIVE DATA		
NAME OF COMPRESSOR STATION	ARTEMAS COMP STA	EASTON COMP STA
LOCATION	BEDFORD CO, PA	NORTHAMPTON CO, PA
HORSEPOWER/UNIT	1 AT 1,160	1 AT 1,160
NUMBER OF UNITS	1	1
TOTAL HORSEPOWER	1,160	1,160
COST DATA		
MATERIALS		
TOTAL MATERIALS	$ 793,941	708,247
MATERIAL % OF THE TOTAL $	61.7%	57.7
MATERIAL AVG. COST PER HORSEPOWER	$ 684	611
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY		
TOTAL ENGINEERING...	$ --	--
ENGINEERING ... % OF THE TOTAL $	--%	--
ENGINEERING ... AVG. COST PER HORSEPOWER	$ --	--
LABOR		
TOTAL LABOR	$ 396,013	282,653
LABOR % OF THE TOTAL $	30.8%	23.0
LABOR AVG. COST PER HORSEPOWER	$ 341	244
MISCELLANEOUS		
INTEREST DURING CONSTRUCTION	$ 43,467	32,650
OVERHEAD	$ 38,791	86,094
OTHER MISCELLANEOUS 1)	$ 14,997	118,476
TOTAL MISCELLANEOUS	$ 97,255	237,220
MISCELLANEOUS % OF THE TOTAL $	7.6%	19.3
MISCELLANEOUS AVG. COST PER HORSEPOWER	$ 84	205
TOTAL COST		
TOTAL COST	$ 1,287,209	1,228,120
TOTAL AVG. COST PER HORSEPOWER	$ 1,110	1,059

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.

PART A

TABLE K-2

ADDITIONS TO TRANSMISSION COMPRESSOR STATIONS
TURBINE DRIVEN CENTRIFUGAL UNITS
CONSTRUCTION ENDING IN 1984

DOCKET NUMBER (CP) AND APPLICANT

		83-177 CONSOLIDATED
DESCRIPTIVE DATA		
NAME OF COMPRESSOR STATION		BORGER COMP STA
LOCATION		TOMPKINS CO, NY
HORSEPOWER/UNIT		2 AT 5,800
NUMBER OF UNITS		2
TOTAL HORSEPOWER		11,600
COST DATA		
MATERIALS		
TOTAL MATERIALS	$	4,745,693
MATERIAL % OF THE TOTAL $		79.6%
MATERIAL AVG. COST PER HORSEPOWER	$	409
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY		
TOTAL ENGINEERING...	$	289,465
ENGINEERING ... % OF THE TOTAL $		4.9%
ENGINEERING ... AVG. COST PER HORSEPOWER	$	25
LABOR		
TOTAL LABOR	$	734,667
LABOR % OF THE TOTAL $		12.3%
LABOR AVG. COST PER HORSEPOWER	$	63
MISCELLANEOUS		
INTEREST DURING CONSTRUCTION	$	148,209
OVERHEAD	$	--
OTHER MISCELLANEOUS 1)	$	43,666
TOTAL MISCELLANEOUS	$	191,875
MISCELLANEOUS % OF THE TOTAL $		3.2%
MISCELLANEOUS AVG. COST PER HORSEPOWER	$	17
TOTAL COST		
TOTAL COST	$	5,961,700
TOTAL AVG. COST PER HORSEPOWER	$	514

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.

Table L-1 Reciprocating Units

PART A

TABLE L-1

NEW FIELD COMPRESSOR STATIONS
RECIPROCATING UNITS
CONSTRUCTION ENDING IN 1984

DOCKET NUMBER (CP) AND APPLICANT

		82-189
		PANHANDLE
DESCRIPTIVE DATA		
NAME OF COMPRESSOR STATION		OAKDALE COMP STA
LOCATION		WOODS CO, OK
HORSEPOWER/UNIT		1 AT 521
NUMBER OF UNITS		1
TOTAL HORSEPOWER		521
COST DATA		
MATERIALS		
TOTAL MATERIALS	$	706,407
MATERIAL % OF THE TOTAL $		53.4%
MATERIAL AVG. COST PER HORSEPOWER	$	1,356
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY		
TOTAL ENGINEERING...	$	262,083
ENGINEERING ... % OF THE TOTAL $		19.8%
ENGINEERING ... AVG. COST PER HORSEPOWER	$	503
LABOR		
TOTAL LABOR	$	177,730
LABOR % OF THE TOTAL $		13.4%
LABOR AVG. COST PER HORSEPOWER	$	341
MISCELLANEOUS		
INTEREST DURING CONSTRUCTION	$	68,550
OVERHEAD	$	107,601
OTHER MISCELLANEOUS 1)	$	--
TOTAL MISCELLANEOUS	$	176,151
MISCELLANEOUS % OF THE TOTAL $		13.3%
MISCELLANEOUS AVG. COST PER HORSEPOWER	$	338
TOTAL COST		
TOTAL COST	$	1,322,371
TOTAL AVG. COST PER HORSEPOWER	$	2,538

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.

PART A

TABLE L-1

ADDITIONS TO FIELD COMPRESSOR STATIONS
RECIPROCATING UNITS
CONSTRUCTION ENDING IN 1984

	DOCKET NUMBER (CP) AND APPLICANT	
		81-408
		ANR
DESCRIPTIVE DATA		
NAME OF COMPRESSOR STATION		CUSTER COMP STA
LOCATION		CUSTER CO, OK
HORSEPOWER/UNIT		2 AT 2,000
NUMBER OF UNITS		2
TOTAL HORSEPOWER		4,000
COST DATA		
MATERIALS		
TOTAL MATERIALS	$	2,351,940
MATERIAL % OF THE TOTAL $		69.5%
MATERIAL AVG. COST PER HORSEPOWER	$	588
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY		
TOTAL ENGINEERING...	$	284,089
ENGINEERING ... % OF THE TOTAL $		8.4%
ENGINEERING ... AVG. COST PER HORSEPOWER	$	71
LABOR		
TOTAL LABOR	$	570,575
LABOR % OF THE TOTAL $		16.9%
LABOR AVG. COST PER HORSEPOWER	$	143
MISCELLANEOUS		
INTEREST DURING CONSTRUCTION	$	51,036
OVERHEAD	$	126,051
OTHER MISCELLANEOUS 1)	$	--
TOTAL MISCELLANEOUS	$	177,087
MISCELLANEOUS % OF THE TOTAL $		5.2%
MISCELLANEOUS AVG. COST PER HORSEPOWER	$	44
TOTAL COST		
TOTAL COST	$	3,383,691
TOTAL AVG. COST PER HORSEPOWER	$	846

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.

Table M-1 Reciprocating Units

PART A

TABLE M-1

NEW STORAGE COMPRESSOR STATIONS
RECIPROCATING UNITS
CONSTRUCTION ENDING IN 1982

	DOCKET NUMBER (CP) AND APPLICANT
	80-313
	ANR
DESCRIPTIVE DATA	
NAME OF COMPRESSOR STATION	CENTRAL CHARLTON COMP STA
LOCATION	OTSEGO CO, MI
HORSEPOWER/UNIT	2 AT 4,000
NUMBER OF UNITS	2
TOTAL HORSEPOWER	8,000
COST DATA	
MATERIALS	
TOTAL MATERIALS	$ 13,176,561
MATERIAL % OF THE TOTAL $	53.7%
MATERIAL AVG. COST PER HORSEPOWER	$ 1,647
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY	
TOTAL ENGINEERING...	$ 4,136,001
ENGINEERING ... % OF THE TOTAL $	16.9%
ENGINEERING ... AVG. COST PER HORSEPOWER	$ 517
LABOR	
TOTAL LABOR	$ 4,803,421
LABOR % OF THE TOTAL $	19.6%
LABOR AVG. COST PER HORSEPOWER	$ 600
MISCELLANEOUS	
INTEREST DURING CONSTRUCTION	$ 1,550,206
OVERHEAD	$ 680,666
OTHER MISCELLANEOUS 1)	$ 179,534
TOTAL MISCELLANEOUS	$ 2,410,406
MISCELLANEOUS % OF THE TOTAL $	9.8%
MISCELLANEOUS AVG. COST PER HORSEPOWER	$ 301
TOTAL COST	
TOTAL COST	$ 24,526,389
TOTAL AVG. COST PER HORSEPOWER	$ 3,066

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.

PART A

ADDITIONS TO STORAGE COMPRESSOR STATIONS
RECIPROCATING UNITS
CONSTRUCTION ENDING IN 1982

TABLE M-1

		DOCKET NUMBER (CP) AND APPLICANT
		79-128 2)
		CIG
DESCRIPTIVE DATA		
NAME OF COMPRESSOR STATION		FLANK COMP STA
LOCATION		BACA CO, CO
HORSEPOWER/UNIT		1 AT 1,600
NUMBER OF UNITS		1
TOTAL HORSEPOWER		1,600
COST DATA		
MATERIALS		
TOTAL MATERIALS	$	901,713
MATERIAL % OF THE TOTAL $		76.2%
MATERIAL AVG. COST PER HORSEPOWER	$	564
ENGINEERING, INSPECTION, SUPERVISION, AND SURVEY		
TOTAL ENGINEERING...	$	51,761
ENGINEERING ... % OF THE TOTAL $		4.4%
ENGINEERING ... AVG. COST PER HORSEPOWER	$	32
LABOR		
TOTAL LABOR	$	124,846
LABOR % OF THE TOTAL $		10.5%
LABOR AVG. COST PER HORSEPOWER	$	78
MISCELLANEOUS		
INTEREST DURING CONSTRUCTION	$	10,387
OVERHEAD	$	95,242
OTHER MISCELLANEOUS 1)	$	--
TOTAL MISCELLANEOUS	$	105,629
MISCELLANEOUS % OF THE TOTAL $		8.9%
MISCELLANEOUS AVG. COST PER HORSEPOWER	$	66
TOTAL COST		
TOTAL COST	$	1,183,949
TOTAL AVG. COST PER HORSEPOWER	$	740

1) CONSISTS OF LAND, RIGHT-OF-WAY, DAMAGES, CONTINGENCIES, AND OTHER COSTS.
2) SUPPLEMENTAL EXPENDITURES FOR PROJECT ORIGINALLY COMPLETED IN 1982, WHICH APPEARED IN THE 1979-1982 REPORT ARE:MAT(-$146);ENG 3,374;OH 2.

PART B

Summary Tables

PART B

PIPELINE AND COMPRESSION CONSTRUCTION AND EXPENDITURES

YEAR CONSTRUCTION ENDED		TOTAL MILES	ONSHORE MILES	OFFSHORE MILES	TOTAL HORSEPOWER	TOTAL EXPENDITURES
1981		--	--	--	--	--
1982	1)	32.88	26.16	6.72	521	$ 6,849,482
1983	2)	470.64	413.17	57.47	12,447	106,273,295
1984	3)	425.62	282.75	142.87	11,307	130,861,111

1) INCLUDES 15.27 MILES (13.74 ONSHORE AND 1.53 OFFSHORE) CONSTRUCTED UNDER 3 MILES IN LENGTH, AT A COST OF $ 3,077,863.

2) INCLUDES 209.07 MILES (93.50 ONSHORE AND 15.57 OFFSHORE) CONSTRUCTED UNDER 3 MILES IN LENGTH, AT A COST OF $ 36,832,644.

3) INCLUDES 150.59 MILES (4.90 ONSHORE AND 45.69 OFFSHORE) CONSTRUCTED UNDER 3 MILES IN LENGTH, AT A COST OF $ 52,066,010.

SUMMARY: NUMBER OF CONSTRUCTION PROJECTS COMPLETED BY YEAR

		1981	1982	1983	1984
ONSHORE					
PIPELINE	1)	--	11	185	136
COMPRESSION		--	2	22	13
TOTAL ONSHORE		--	13	207	149
OFFSHORE					
PIPELINE	2)	--	3	19	44
COMPRESSION		--	--	1	1
TOTAL OFFSHORE		--	3	20	45
TOTAL NUMBER OF PROJECTS		--	16	227	194
NUMBER OF PIPELINES COMPANIES REPORTING CONSTRUCTION COMPLETED		--	9	25	24
NUMBER OF DOCKETS REPORTED		--	9	25	25

1) PIPELINE COMPLETED IN 1982 INCLUDES 9 PROJECTS UNDER 3 MILES IN LENGTH REPORTED BY 5 PIPELINES IN 5 DOCKETS. PIPELINE COMPLETED IN 1983 INCLUDES155 PROJECTS UNDER 3 MILES IN LENGTH REPORTED BY 18 PIPELINES IN 18 DOCKETS. PIPELINE COMPLETED IN 1984 INCLUDES118 PROJECTS UNDER 3 MILES IN LENGTH REPORTED BY 21 PIPELINES IN 21 DOCKETS.

2) PIPELINE COMPLETED IN 1982 INCLUDES 2 PROJECTS UNDER 3 MILES IN LENGTH REPORTED BY 1 PIPELINES IN 1 DOCKETS. PIPELINE COMPLETED IN 1983 INCLUDES 10 PROJECTS UNDER 3 MILES IN LENGTH REPORTED BY 3 PIPELINES IN 2 DOCKETS. PIPELINE COMPLETED IN 1984 INCLUDES 27 PROJECTS UNDER 3 MILES IN LENGTH REPORTED BY 8 PIPELINES IN 9 DOCKETS.

PART B

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1982

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES		COST	PERCENTAGE OF TOTAL COST		AVERAGE COST PER MILE	NUMBER OF PROJECTS
ONSHORE	18.95	57.6%	$	2,025,355	31.8%	$	106,879	5
ONSHORE: MIXED DIAMETER	7.21	21.9		837,654	13.2		116,179	6
TOTAL ONSHORE LINES	26.16	79.6		2,863,009	45.0		109,442	11
OFFSHORE	6.72	20.4		3,503,353	55.0		521,332	3
OFFSHORE: MIXED DIAMETER	--	--		--	--		--	--
TOTAL OFFSHORE LINES	6.72	20.4		3,503,353	55.0		521,332	3
TOTAL LINES	32.88	100.0%	$	6,366,362	100.0%	$	193,624	14

PART B

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1982
3 MILES AND OVER

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES		COST	PERCENTAGE OF TOTAL COST		AVERAGE COST PER MILE	NUMBER OF PROJECTS
ONSHORE	12.42	70.5%	$	1,755,430	53.4%	$	141,339	2
ONSHORE: MIXED DIAMETER	--	--		--	--		--	--
TOTAL ONSHORE LINES	12.42	70.5		1,755,430	53.4		141,339	2
OFFSHORE	5.19	29.5		1,533,069	46.6		295,389	1
OFFSHORE: MIXED DIAMETER	--	--		--	--		--	--
TOTAL OFFSHORE LINES	5.19	29.5		1,533,069	46.6		295,389	1
TOTAL LINES	17.61	100.0%	$	3,288,499	100.0%	$	186,740	3

PART B

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1982
UNDER 3 MILES

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER MILE	NUMBER OF PROJECTS
ONSHORE	6.53	42.8%	$ 269,925	8.8%	$ 41,336	3
ONSHORE: MIXED DIAMETER	7.21	47.2	837,654	27.2	116,179	6
TOTAL ONSHORE LINES	13.74	90.0	1,107,579	36.0	80,610	9
OFFSHORE	1.53	10.0	1,970,284	64.0	1,287,767	2
OFFSHORE: MIXED DIAMETER	--	--	--	--	--	--
TOTAL OFFSHORE LINES	1.53	10.0	1,970,284	64.0	1,287,767	2
TOTAL LINES	15.27	100.0%	$ 3,077,863	100.0%	$ 201,563	11

PART B

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1983

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES		COST	PERCENTAGE OF TOTAL COST		AVERAGE COST PER MILE	NUMBER OF PROJECTS
ONSHORE	274.03	58.2%	$	29,749,163	32.6%	$	108,562	139
ONSHORE: MIXED DIAMETER	139.14	29.6		21,229,338	23.3		152,575	46
TOTAL ONSHORE LINES	413.17	87.8		50,978,501	55.8		123,384	185
OFFSHORE	34.44	7.3		23,248,350	25.5		675,039	10
OFFSHORE: MIXED DIAMETER	23.03	4.9		17,080,085	18.7		741,645	9
TOTAL OFFSHORE LINES	57.47	12.2		40,328,435	44.2		701,730	19
TOTAL LINES	470.64	100.0%	$	91,306,936	100.0%	$	194,006	204

PART B

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1983
3 MILES AND OVER

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES		COST	PERCENTAGE OF TOTAL COST		AVERAGE COST PER MILE	NUMBER OF PROJECTS
ONSHORE	125.36	47.9%	$	14,977,285	27.5%	$	119,474	18
ONSHORE: MIXED DIAMETER	94.31	36.1		15,221,807	27.9		161,402	12
TOTAL ONSHORE LINES	219.67	84.0		30,199,092	55.4		137,475	30
OFFSHORE	26.95	10.3		14,155,869	26.0		525,264	5
OFFSHORE: MIXED DIAMETER	14.95	5.7		10,119,331	18.6		676,878	4
TOTAL OFFSHORE LINES	41.90	16.0		24,275,200	44.6		579,360	9
TOTAL LINES	261.57	100.0%	$	54,474,292	100.0%	$	208,259	39

PART B

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1983
UNDER 3 MILES

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES		COST	PERCENTAGE OF TOTAL COST		AVERAGE COST PER MILE	NUMBER OF PROJECTS
ONSHORE	148.67	71.1%	$	14,771,878	40.1%	$	99,360	121
ONSHORE: MIXED DIAMETER	44.83	21.4		6,007,531	16.3		134,007	34
TOTAL ONSHORE LINES	193.50	92.6		20,779,409	56.4		107,387	155
OFFSHORE	7.49	3.6		9,092,481	24.7		1,213,949	5
OFFSHORE: MIXED DIAMETER	8.08	3.9		6,960,754	18.9		861,479	5
TOTAL OFFSHORE LINES	15.57	7.4		16,053,235	43.6		1,031,036	10
TOTAL LINES	209.07	100.0%	$	36,832,644	100.0%	$	176,174	165

PART B

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1984

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER MILE	NUMBER OF PROJECTS
ONSHORE	262.83	61.8%	$ 32,108,559	26.6%	$ 122,165	134
ONSHORE: MIXED DIAMETER	19.92	4.7	4,085,966	3.4	205,119	2
TOTAL ONSHORE LINES	282.75	66.4	36,194,525	30.0	128,009	136
OFFSHORE	137.47	32.3	79,293,384	65.7	576,805	41
OFFSHORE: MIXED DIAMETER	5.40	1.3	5,241,811	4.3	970,706	3
TOTAL OFFSHORE LINES	142.87	33.6	84,535,195	70.0	591,693	44
TOTAL LINES	425.62	100.0%	$ 120,729,720	100.0%	$ 283,656	180

PART B

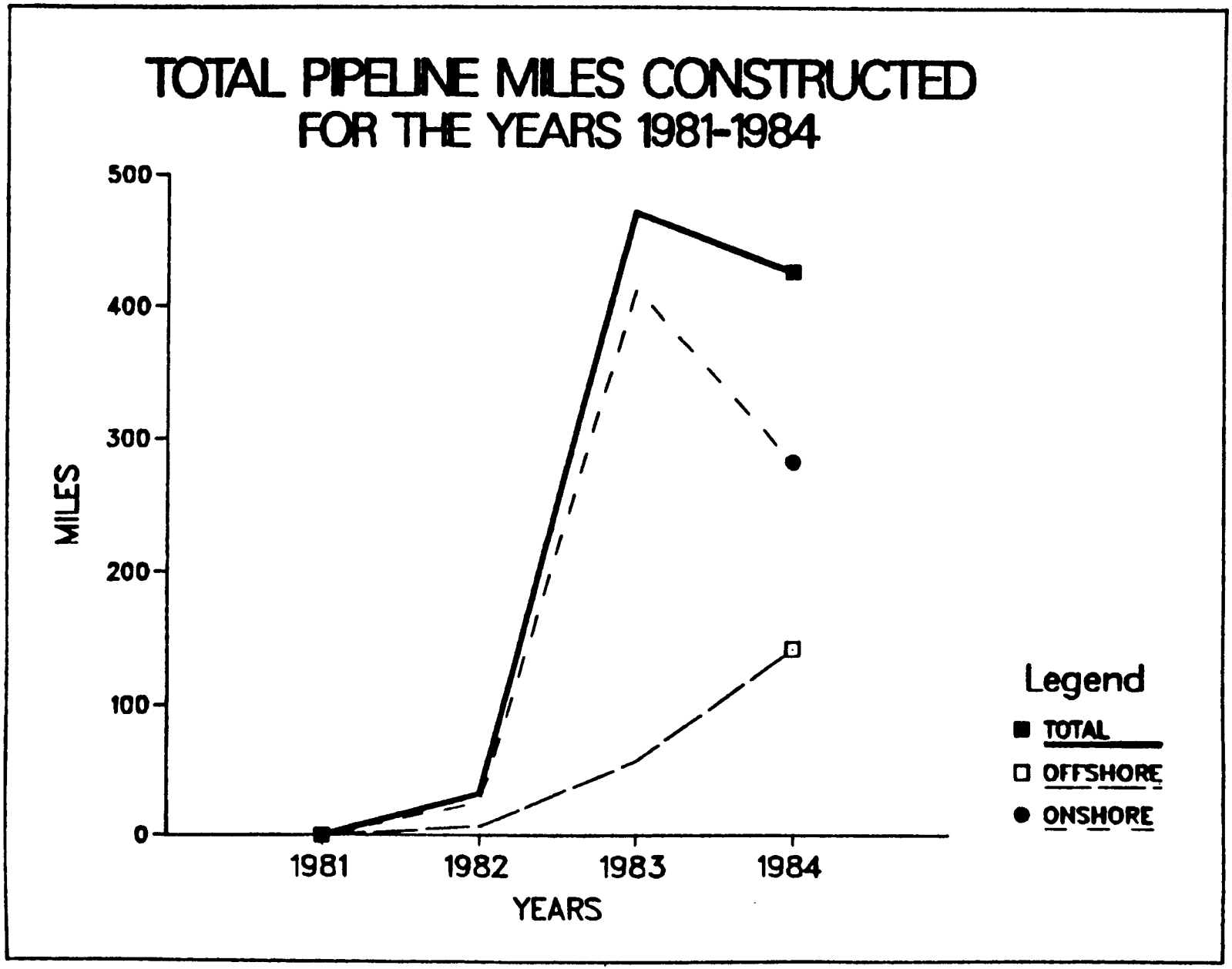
SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1984
3 MILES AND OVER

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES		COST	PERCENTAGE OF TOTAL COST		AVERAGE COST PER MILE	NUMBER OF PROJECTS
ONSHORE	158.94	57.8%	$	21,775,524	31.7%	$	137,005	17
ONSHORE: MIXED DIAMETER	18.91	6.9		2,125,684	3.1		112,411	1
TOTAL ONSHORE LINES	177.85	64.7		23,901,208	34.8		134,390	18
OFFSHORE	93.98	34.2		42,387,345	61.7		451,025	16
OFFSHORE: MIXED DIAMETER	3.20	1.2		2,375,157	3.5		742,237	1
TOTAL OFFSHORE LINES	97.18	35.3		44,762,502	65.2		460,614	17
TOTAL LINES	275.03	100.0%	$	68,663,710	100.0%	$	249,659	35

PART B

SUMMARY: PIPELINE CONSTRUCTION
ENDING IN 1984
UNDER 3 MILES

PIPELINE	MILES	PERCENTAGE OF TOTAL MILES	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER MILE	NUMBER OF PROJECTS
ONSHORE	103.89	69.0%	$ 10,333,035	19.8%	$ 99,461	117
ONSHORE: MIXED DIAMETER	1.01	0.7	1,960,282	3.8	1,940,873	1
TOTAL ONSHORE LINES	104.90	69.7	12,293,317	23.6	117,191	118
OFFSHORE	43.49	28.9	36,906,039	70.9	848,610	25
OFFSHORE: MIXED DIAMETER	2.20	1.5	2,866,654	5.5	1,303,025	2
TOTAL OFFSHORE LINES	45.69	30.3	39,772,693	76.4	870,490	27
TOTAL LINES	150.59	100.0%	$ 52,066,010	100.0%	$ 345,747	145


TOTAL PIPELINE MILES CONSTRUCTED
FOR THE YEARS 1981-1984
500
400
300
200
100
0
MILES
1981
1982
1983
1984
YEARS
Legend
TOTAL
OFFSHORE
ONSHORE

PART B

SUMMARY: COMPRESSOR CONSTRUCTION
ENDING IN 1982

COMPRESSORS	HORSEPOWER	PERCENTAGE OF TOTAL HORSEPOWER	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER HORSEPOWER	NUMBER OF PROJECTS
RECIPROCATING UNITS						
ONSHORE	521	100.0%	$ 483,120	100.0%	$ 927	2
OFFSHORE	--	--	--	--	--	--
TOTAL RECIPROCATING UNITS	521	100.0	483,120	100.0	927	2
TURBINE UNITS						
ONSHORE	--	--	--	--	--	--
OFFSHORE	--	--	--	--	--	--
TOTAL TURBINE UNITS	--	--	--	--	--	--
ELECTRIC MOTOR UNITS						
ONSHORE	--	--	--	--	--	--
OFFSHORE	--	--	--	--	--	--
TOTAL ELECTRIC MOTOR UNITS	--	--	--	--	--	--
TOTAL ONSHORE UNITS	521	100.0	483,120	100.0	927	2
TOTAL OFFSHORE UNITS	--	--	--	--	--	--
TOTAL COMPRESSION	521	100.0%	$ 483,120	100.0%	$ 927	2

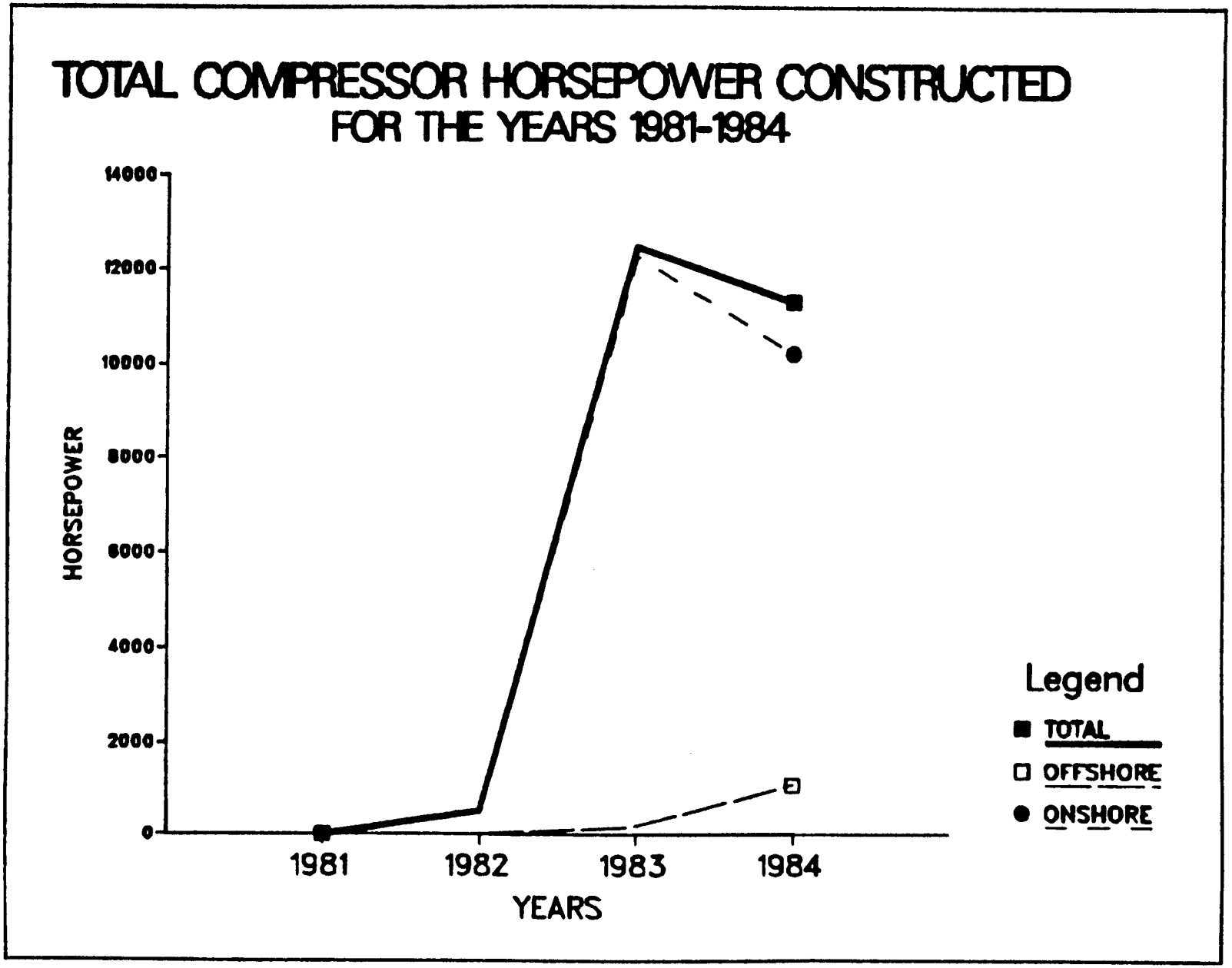
SUMMARY: COMPRESSOR CONSTRUCTION
ENDING IN 1983

COMPRESSORS	HORSEPOWER	PERCENTAGE OF TOTAL HORSEPOWER	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER HORSEPOWER	NUMBER OF PROJECTS
RECIPROCATING UNITS						
ONSHORE	10,057	80.8%	$ 12,685,717	84.8%	$ 1,261	21
OFFSHORE	190	1.5	796,642	5.3	4,193	1
TOTAL RECIPROCATING UNITS	10,247	82.3	13,482,359	90.1	1,316	22
TURBINE UNITS						
ONSHORE	2,200	17.7	1,484,000	9.9	675	1
OFFSHORE	--	--	--	--	--	--
TOTAL TURBINE UNITS	2,200	17.7	1,484,000	9.9	675	1
ELECTRIC MOTOR UNITS						
ONSHORE	--	--	--	--	--	--
OFFSHORE	--	--	--	--	--	--
TOTAL ELECTRIC MOTOR UNITS	--	--	--	--	--	--
TOTAL ONSHORE UNITS	12,257	98.5	14,169,717	94.7	1,156	22
TOTAL OFFSHORE UNITS	190	1.5	796,642	5.3	4,193	1
TOTAL COMPRESSION	12,447	100.0%	$ 14,966,359	100.0%	$ 1,202	23

PART B

SUMMARY: COMPRESSOR CONSTRUCTION
ENDING IN 1984

COMPRESSORS	HORSEPOWER	PERCENTAGE OF TOTAL HORSEPOWER	COST	PERCENTAGE OF TOTAL COST	AVERAGE COST PER HORSEPOWER	NUMBER OF PROJECTS
RECIPROCATING UNITS						
ONSHORE	10,207	90.3%	$ 9,409,551	92.9%	$ 922	13
OFFSHORE	1,100	9.7	721,840	7.1	656	1
TOTAL RECIPROCATING UNITS	11,307	100.0	10,131,391	100.0	896	14
TURBINE UNITS						
ONSHORE	--	--	--	--	--	--
OFFSHORE	--	--	--	--	--	--
TOTAL TURBINE UNITS	--	--	--	--	--	--
ELECTRIC MOTOR UNITS						
ONSHORE	--	--	--	--	--	--
OFFSHORE	--	--	--	--	--	--
TOTAL ELECTRIC MOTOR UNITS	--	--	--	--	--	--
TOTAL ONSHORE UNITS	10,207	90.3	9,409,551	92.9	922	13
TOTAL OFFSHORE UNITS	1,100	9.7	721,840	7.1	656	1
TOTAL COMPRESSION	11,307	100.0%	$ 10,131,391	100.0%	$ 896	14


TOTAL COMPRESSOR HORSEPOWER CONSTRUCTED
FOR THE YEARS 1981-1984
HORSEPOWER
14000
12000
10000
8000
6000
4000
2000
0
1981
1982
1983
1984
YEARS
Legend
TOTAL
OFFSHORE
ONSHORE

PART B
SECTION I COMPARATIVE SUMMARY

Table A Pipeline Construction and Expenditures

TABLE A

PIPELINE CONSTRUCTION EXPENDITURES
CONSTRUCTION ENDING IN 1981 THROUGH 1984

		YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
ONSHORE MILES					
3 MILES AND OVER		--	12.42	125.36	158.94
EXPENDITURES	$	--	1,755,430	14,977,285	21,775,524
AVG. COST PER MILE	$	--	141,339	119,474	137,005
UNDER 3 MILES		--	6.53	148.67	103.89
EXPENDITURES	$	--	269,925	14,771,878	10,333,035
AVG. COST PER MILE	$	--	41,336	99,360	99,461
MIXED DIAMETER -3 MILES AND OVER		--	--	94.31	18.91
EXPENDITURES	$	--	--	15,221,807	2,125,684
AVG. COST PER MILE	$	--	--	161,402	112,411
MIXED DIAMETER -UNDER 3 MILES		--	7.21	44.83	1.01
EXPENDITURES	$	--	837,654	6,007,531	1,960,282
AVG. COST PER MILE	$	--	116,179	134,007	1,940,873
TOTAL ONSHORE MILES		--	26.16	413.17	282.75
TOTAL ONSHORE EXPENDITURES	$	--	2,863,009	50,978,501	36,194,525
TOTAL AVG. COST PER MILE	$	--	109,442	123,384	128,009
OFFSHORE MILES					
3 MILES AND OVER		--	5.19	26.95	93.98
EXPENDITURES	$	--	1,533,069	14,155,869	42,387,345
AVG. COST PER MILE	$	--	295,389	525,264	451,025
UNDER 3 MILES		--	1.53	7.49	43.49
EXPENDITURES	$	--	1,970,284	9,092,481	36,906,039
AVG. COST PER MILE	$	--	1,287,767	1,213,949	848,610
MIXED DIAMETER -3 MILES AND OVER		--	--	14.95	3.20
EXPENDITURES	$	--	--	10,119,331	2,375,157
AVG. COST PER MILE	$	--	--	676,878	742,237
MIXED DIAMETER -UNDER 3 MILES		--	--	8.08	2.20
EXPENDITURES	$	--	--	6,960,754	2,866,654
AVG. COST PER MILE	$	--	--	861,479	1,303,025
TOTAL OFFSHORE MILES		--	6.72	57.47	142.87
TOTAL OFFSHORE EXPENDITURES	$	--	3,503,353	40,328,435	84,535,195
TOTAL AVG. COST PER MILE	$	--	521,332	701,730	591,693

PART B

TABLE A

PIPELINE CONSTRUCTION EXPENDITURES
CONSTRUCTION ENDING IN 1981 THROUGH 1984

		YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
TOTAL ONSHORE AND OFFSHORE MILES		--	32.88	470.64	425.62
TOTAL ONSHORE AND OFFSHORE EXPENDITURES	$	--	6,366,362	91,306,936	120,729,720
TOTAL AVG. COST PER MILE	$	--	193,624	194,006	283,656

Table B-1 Onshore Pipeline

PART B

TABLE B-1

COMPARISON OF ONSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		2 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED			4.51		4.40
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		149,052		122,026
MATERIAL % OF THE TOTAL $		%	35.6		44.9
MATERIAL AVG.COST PER MILE	$		33,049		27,733
LABOR					
TOTAL LABOR	$		146,896		129,994
LABOR % OF THE TOTAL $		%	35.1		47.8
LABOR AVG. COST PER MILE	$		32,571		29,544
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$		122,246		19,882
MISCELLANEOUS % OF THE TOTAL $		%	29.2		7.3
MISCELLANEOUS AVG. COST PER MILE	$		27,106		4,519
TOTAL COST					
TOTAL COST	$	2)	418,194	2)	271,902
TOTAL AVG. COST PER MILE	$		92,726		61,796
COST RANGE PER MILE					
MINIMUM	$		3)		3)
MAXIMUM	$				

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE B-1

COMPARISON OF ONSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		3 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED					6.36
COST DATA					
MATERIALS					
TOTAL MATERIALS	$				81,962
MATERIAL % OF THE TOTAL $		x			20.5
MATERIAL AVG.COST PER MILE	$				12,887
LABOR					
TOTAL LABOR	$				246,157
LABOR % OF THE TOTAL $		x			61.4
LABOR AVG. COST PER MILE	$				38,704
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$				72,662
MISCELLANEOUS % OF THE TOTAL $		x			18.1
MISCELLANEOUS AVG. COST PER MILE	$				11,425
TOTAL COST					
TOTAL COST	$	2)	2)	2)	400,781
TOTAL AVG. COST PER MILE	$				63,016
COST RANGE PER MILE					
MINIMUM	$				3)
MAXIMUM	$				

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE B-1

COMPARISON OF ONSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		4 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED				11.42	10.50
COST DATA					
MATERIALS					
TOTAL MATERIALS	$			383,334	190,535
MATERIAL % OF THE TOTAL $		%		22.6	19.6
MATERIAL AVG.COST PER MILE	$			33,567	18,146
LABOR					
TOTAL LABOR	$			1,057,391	669,375
LABOR % OF THE TOTAL $		%		62.4	68.8
LABOR AVG. COST PER MILE	$			92,591	63,750
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$			252,559	113,335
MISCELLANEOUS % OF THE TOTAL $		%		14.9	11.6
MISCELLANEOUS AVG. COST PER MILE	$			22,115	10,794
TOTAL COST					
TOTAL COST	$	2)	2)	1,693,284	973,245
TOTAL AVG. COST PER MILE	$			148,274	92,690
COST RANGE PER MILE					
MINIMUM	$			132,746	3)
MAXIMUM	$			181,195	

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

COMPARISON OF ONSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

TABLE B-1

		6 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED				62.92 2)	22.99 3)
COST DATA					
MATERIALS					
TOTAL MATERIALS	$			2,034,453	752,528
MATERIAL % OF THE TOTAL $		%		33.8	46.3
MATERIAL AVG.COST PER MILE	$			32,334	32,733
LABOR					
TOTAL LABOR	$			2,953,634	408,191
LABOR % OF THE TOTAL $		%		49.0	25.1
LABOR AVG. COST PER MILE	$			46,943	17,755
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$			1,035,504	463,966
MISCELLANEOUS % OF THE TOTAL $		%		17.2	28.6
MISCELLANEOUS AVG. COST PER MILE	$			16,457	20,181
TOTAL COST					
TOTAL COST	$	4)	4)	6,023,591	1,624,685
TOTAL AVG. COST PER MILE	$			95,734	70,669
COST RANGE PER MILE					
MINIMUM	$			47,693	48,244
MAXIMUM	$			228,395	97,219

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) INCLUDES 2.40 MILES OF 4 INCH ONSHORE PIPELINE.
INCLUDES 2.26 MILES OF 4 INCH ONSHORE PIPELINE.
3) INCLUDES 0.02 MILE OF 2 INCH ONSHORE PIPELINE.
4) NO REPORTS RECEIVED FOR THIS YEAR.

PART B

TABLE B-1

COMPARISON OF ONSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		8 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED						
		1981	1982		1983		1984	
MILES OF PIPE CONSTRUCTED			7.91	2)	37.62	3)	35.35	4)
COST DATA								
MATERIALS								
TOTAL MATERIALS	$		318,062		1,930,873		1,896,109	
MATERIAL % OF THE TOTAL $		%	23.8		36.7		30.2	
MATERIAL AVG.COST PER MILE	$		40,210		51,326		53,638	
LABOR								
TOTAL LABOR	$		665,039		1,747,053		2,074,519	
LABOR % OF THE TOTAL $		%	49.7		33.2		33.0	
LABOR AVG. COST PER MILE	$		84,076		46,439		58,685	
MISCELLANEOUS								
TOTAL MISCELLANEOUS 1)	$		354,135		1,588,694		2,311,702	
MISCELLANEOUS % OF THE TOTAL $		%	26.5		30.2		36.8	
MISCELLANEOUS AVG. COST PER MILE	$		44,771		42,230		65,395	
TOTAL COST								
TOTAL COST	$	5)	1,337,236		5,266,620		6,282,330	
TOTAL AVG. COST PER MILE	$		169,056		139,995		177,718	
COST RANGE PER MILE								
MINIMUM	$			6)	82,806		61,176	
MAXIMUM	$				300,740		243,525	

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) INCLUDES 2.14 MILES OF 4 INCH ONSHORE PIPELINE.
3) INCLUDES 1.50 MILES OF 12 INCH AND 0.32 MILE OF 4 INCH ONSHORE PIPELINE.
4) PRIOR NOTICE PROJECT CONSTRUCTED UNDER CP83-275.
5) NO REPORTS RECEIVED FOR THIS YEAR.
6) ONE REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE B-1

COMPARISON OF ONSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		10 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED				
		1981	1982	1983	1984	
MILES OF PIPE CONSTRUCTED				5.30	74.54	2)
COST DATA						
MATERIALS						
TOTAL MATERIALS	$			330,000	3,994,435	
MATERIAL % OF THE TOTAL $		%		44.4	39.4	
MATERIAL AVG.COST PER MILE	$			62,264	53,588	
LABOR						
TOTAL LABOR	$			310,000	5,014,855	
LABOR % OF THE TOTAL $		%		41.7	49.5	
LABOR AVG. COST PER MILE	$			58,491	67,277	
MISCELLANEOUS						
TOTAL MISCELLANEOUS 1)	$			103,820	1,125,638	
MISCELLANEOUS % OF THE TOTAL $		%		14.0	11.1	
MISCELLANEOUS AVG. COST PER MILE	$			19,589	15,101	
TOTAL COST						
TOTAL COST	$	3)	3)	743,820	10,134,928	
TOTAL AVG. COST PER MILE	$			140,343	135,966	
COST RANGE PER MILE						
MINIMUM	$			4)	101,037	
MAXIMUM	$				198,949	

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) PRIOR NOTICE PROJECT CONSTRUCTED UNDER CP83-390.
3) NO REPORTS RECEIVED FOR THIS YEAR.
4) ONE REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE B-1

COMPARISON OF ONSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		12 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED					4.80
COST DATA					
MATERIALS					
TOTAL MATERIALS	$				757,367
MATERIAL % OF THE TOTAL $		%			36.3
MATERIAL AVG.COST PER MILE	$				157,785
LABOR					
TOTAL LABOR	$				967,413
LABOR % OF THE TOTAL $		%			46.3
LABOR AVG. COST PER MILE	$				201,544
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$				362,873
MISCELLANEOUS % OF THE TOTAL $		%			17.4
MISCELLANEOUS AVG. COST PER MILE	$				75,599
TOTAL COST					
TOTAL COST	$	2)	2)	2)	2,087,653
TOTAL AVG. COST PER MILE	$				434,928
COST RANGE PER MILE					
MINIMUM	$				3)
MAXIMUM	$				

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

TABLE B-1

COMPARISON OF ONSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		16 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED				8.10	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$			463,075	
MATERIAL % OF THE TOTAL $		%		37.0	
MATERIAL AVG.COST PER MILE	$			57,170	
LABOR					
TOTAL LABOR	$			430,379	
LABOR % OF THE TOTAL $		%		34.4	
LABOR AVG. COST PER MILE	$			53,133	
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$			356,516	
MISCELLANEOUS % OF THE TOTAL $		%		28.5	
MISCELLANEOUS AVG. COST PER MILE	$			44,014	
TOTAL COST					
TOTAL COST	$	2)	2)	1,249,970	2)
TOTAL AVG. COST PER MILE	$			154,317	
COST RANGE PER MILE					
MINIMUM	$			3)	
MAXIMUM	$				

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

Table B-2 Offshore Pipeline

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

TABLE B-2

		6 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED			5.19 2)		26.91
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		370,222		2,218,040
MATERIAL % OF THE TOTAL $		%	24.1		21.2
MATERIAL AVG.COST PER MILE	$		71,334		82,424
LABOR					
TOTAL LABOR	$		902,686		5,882,931
LABOR % OF THE TOTAL $		%	58.9		56.3
LABOR AVG. COST PER MILE	$		173,928		218,615
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$		260,161		2,355,862
MISCELLANEOUS % OF THE TOTAL $		%	17.0		22.5
MISCELLANEOUS AVG. COST PER MILE	$		50,127		87,546
TOTAL COST					
TOTAL COST	$	3)	1,533,069	3)	10,456,833
TOTAL AVG. COST PER MILE	$		295,389		388,585
COST RANGE PER MILE					
MINIMUM	$		4)		258,812
MAXIMUM	$				581,247

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) TRANSCO HAS 50% OWNERSHIP IN THIS FACILITY (CP 82-426, FILED 5/4/83).
3) NO REPORTS RECEIVED FOR THIS YEAR.
4) ONE REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE B-2

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		8 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED				11.41 2)	29.60 3)
COST DATA					
MATERIALS					
TOTAL MATERIALS	$			1,316,250	2,802,780
MATERIAL % OF THE TOTAL $		%		33.9	31.1
MATERIAL AVG.COST PER MILE	$			115,359	94,689
LABOR					
TOTAL LABOR	$			1,985,749	5,072,224
LABOR % OF THE TOTAL $		%		51.2	56.3
LABOR AVG. COST PER MILE	$			174,036	171,359
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$			578,840	1,138,856
MISCELLANEOUS % OF THE TOTAL $		%		14.9	12.6
MISCELLANEOUS AVG. COST PER MILE	$			50,731	38,475
TOTAL COST					
TOTAL COST	$	4)	4)	3,880,839	9,013,860
TOTAL AVG. COST PER MILE	$			340,126	304,522
COST RANGE PER MILE					
MINIMUM	$			271,524	245,162
MAXIMUM	$			488,352	489,314

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) PRIOR NOTICE PROJECT CONSTRUCTED UNDER CP83-349.
3) PRIOR NOTICE PROJECT CONSTRUCTED UNDER CP84-125.
4) NO REPORTS RECEIVED FOR THIS YEAR.

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

TABLE B-2

		10 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED				
		1981	1982	1983	1984	
MILES OF PIPE CONSTRUCTED					18.03	2)
COST DATA						
MATERIALS						
TOTAL MATERIALS	$				3,087,665	
MATERIAL % OF THE TOTAL $		%			29.0	
MATERIAL AVG.COST PER MILE	$				171,252	
LABOR						
TOTAL LABOR	$				6,565,131	
LABOR % OF THE TOTAL $		%			61.6	
LABOR AVG. COST PER MILE	$				364,123	
MISCELLANEOUS						
TOTAL MISCELLANEOUS 1)	$				1,004,241	
MISCELLANEOUS % OF THE TOTAL $		%			9.4	
MISCELLANEOUS AVG. COST PER MILE	$				55,698	
TOTAL COST						
TOTAL COST	$	3)	3)	3)	10,657,037	
TOTAL AVG. COST PER MILE	$				591,072	
COST RANGE PER MILE						
MINIMUM	$				406,519	
MAXIMUM	$				959,041	

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) PRIOR NOTICE PROJECT CONSTRUCTED UNDER CP84-315. TEXAS GAS HAS 44.43% OWNERSHIP IN THIS FACILITY (CP82-407, FILED 4/30/85).
3) NO REPORTS RECEIVED FOR THIS YEAR.

PART B

TABLE B-2

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		12 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED				15.54 2)	19.44 3)
COST DATA					
MATERIALS					
TOTAL MATERIALS	$			2,494,430	5,925,797
MATERIAL % OF THE TOTAL $		%		24.3	48.3
MATERIAL AVG.COST PER MILE	$			160,517	304,825
LABOR					
TOTAL LABOR	$			6,977,234	5,135,961
LABOR % OF THE TOTAL $		%		67.9	41.9
LABOR AVG. COST PER MILE	$			448,985	264,196
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$			803,366	1,197,857
MISCELLANEOUS % OF THE TOTAL $		%		7.8	9.8
MISCELLANEOUS AVG. COST PER MILE	$			51,697	61,618
TOTAL COST					
TOTAL COST	$	4)	4)	10,275,030	12,259,615
TOTAL AVG. COST PER MILE	$			661,199	630,639
COST RANGE PER MILE					
MINIMUM	$			455,498	478,662
MAXIMUM	$			959,423	783,679

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) PRIOR NOTICE PROJECT CONSTRUCTED UNDER CP83-401.
3) MISS RIVER HAS 10% OWNERSHIP IN THIS FACILITY(CP82-489, FILED 4/30/85).
4) NO REPORTS RECEIVED FOR THIS YEAR.

Table C-1 Onshore Pipeline

PART B

TABLE C-1

COMPARISON OF ONSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		2 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED			2.33 2)	15.25	11.65
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		16,810	351,690	162,564
MATERIAL % OF THE TOTAL $		%	30.1	29.7	21.2
MATERIAL AVG.COST PER MILE	$		7,215	23,062	13,954
LABOR					
TOTAL LABOR	$		30,250	551,047	483,719
LABOR % OF THE TOTAL $		%	54.2	46.6	63.0
LABOR AVG. COST PER MILE	$		12,983	36,134	41,521
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$		8,747	280,524	122,103
MISCELLANEOUS % OF THE TOTAL $		%	15.7	23.7	15.9
MISCELLANEOUS AVG. COST PER MILE	$		3,754	18,395	10,481
TOTAL COST					
TOTAL COST	$	3)	55,807	1,183,261	768,386
TOTAL AVG. COST PER MILE	$		23,952	77,591	65,956
COST RANGE PER MILE					
MINIMUM	$		4)	31,187	9,718
MAXIMUM	$			247,689	715,300

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) INCLUDES 0.72 MILE OF 6 INCH ONSHORE PIPELINE.
3) NO REPORT RECEIVED FOR THIS YEAR.
4) ONE REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE C-1

COMPARISON OF ONSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		3 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED				7.57	9.49
COST DATA					
MATERIALS					
TOTAL MATERIALS	$			132,693	159,837
MATERIAL % OF THE TOTAL $		%		23.4	25.3
MATERIAL AVG.COST PER MILE	$			17,529	16,843
LABOR					
TOTAL LABOR	$			292,998	421,237
LABOR % OF THE TOTAL $		%		51.6	66.7
LABOR AVG. COST PER MILE	$			38,705	44,387
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$			141,994	50,307
MISCELLANEOUS % OF THE TOTAL $		%		25.0	8.0
MISCELLANEOUS AVG. COST PER MILE	$			18,757	5,301
TOTAL COST					
TOTAL COST	$	2)	2)	567,685	631,381
TOTAL AVG. COST PER MILE	$			74,991	66,531
COST RANGE PER MILE					
MINIMUM	$			33,608	37,333
MAXIMUM	$			101,263	109,884

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE C-1

COMPARISON OF ONSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		4 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED			4.20 2)	72.73 3)	50.93 4)
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		107,816	2,301,380	1,398,383
MATERIAL % OF THE TOTAL $		%	50.4	36.6	33.2
MATERIAL AVG.COST PER MILE	$		25,670	31,643	27,457
LABOR					
TOTAL LABOR	$		88,302	2,696,145	1,710,182
LABOR % OF THE TOTAL $		%	41.2	42.9	40.6
LABOR AVG. COST PER MILE	$		21,024	37,071	33,579
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$		18,000	1,290,496	1,106,137
MISCELLANEOUS % OF THE TOTAL $		%	8.4	20.5	26.2
MISCELLANEOUS AVG. COST PER MILE	$		4,286	17,744	21,719
TOTAL COST					
TOTAL COST	$	5)	214,118	6,288,021	4,214,702
TOTAL AVG. COST PER MILE	$		50,980	86,457	82,755
COST RANGE PER MILE					
MINIMUM	$		48,484	37,828	29,092
MAXIMUM	$		53,294	1,055,350	625,686

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) INCLUDES 0.01 MILE OF 2 INCH ONSHORE PIPELINE.
INCLUDES 0.03 MILE OF 2 INCH ONSHORE PIPELINE.
3) INCLUDES 0.18 MILE OF 2 INCH ONSHORE PIPELINE.
4) INCLUDES 0.01 MILE OF 2 INCH ONSHORE PIPELINE.
INCLUDES 0.03 MILE OF 2 INCH ONSHORE PIPELINE.
INCLUDES 0.03 MILE OF 2 INCH ONSHORE PIPELINE.
INCLUDES 0.06 MILE OF 2 INCH ONSHORE PIPELINE.
INCLUDES 0.23 MILE OF 3 INCH ONSHORE PIPELINE.
5) NO REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE C-1

COMPARISON OF ONSHORE PIPELINE CONSTRUCTION COSTS UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE) REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		6 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED				35.31 2)	20.86 3)
COST DATA					
MATERIALS					
TOTAL MATERIALS	$			1,505,613	799,052
MATERIAL % OF THE TOTAL $		%		44.0	34.8
MATERIAL AVG.COST PER MILE	$			42,640	38,305
LABOR					
TOTAL LABOR	$			1,290,048	915,704
LABOR % OF THE TOTAL $		%		37.7	39.8
LABOR AVG. COST PER MILE	$			36,535	43,898
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$			626,325	584,448
MISCELLANEOUS % OF THE TOTAL $		%		18.3	25.4
MISCELLANEOUS AVG. COST PER MILE	$			17,738	28,018
TOTAL COST					
TOTAL COST	$	4)	4)	3,421,986	2,299,204
TOTAL AVG. COST PER MILE	$			96,913	110,221
COST RANGE PER MILE					
MINIMUM	$			70,655	71,000
MAXIMUM	$			133,349	224,189

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) INCLUDES 0.10 MILE OF 4 INCH ONSHORE PIPELINE.
INCLUDES 0.20 MILE OF 4 INCH ONSHORE PIPELINE.
INCLUDES 0.01 MILE OF 4 INCH ONSHORE PIPELINE.
3) INCLUDES 0.04 MILE OF 2 INCH ONSHORE PIPELINE.
INCLUDES 0.06 MILE OF 2 INCH ONSHORE PIPELINE.
4) NO REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE C-1

COMPARISON OF ONSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		8 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED				10.07	6.83 2)
COST DATA					
MATERIALS					
TOTAL MATERIALS	$			496,455	416,956
MATERIAL % OF THE TOTAL $		%		33.4	44.1
MATERIAL AVG.COST PER MILE	$			49,300	61,048
LABOR					
TOTAL LABOR	$			637,888	228,750
LABOR % OF THE TOTAL $		%		43.0	24.2
LABOR AVG. COST PER MILE	$			63,345	33,492
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$			350,200	300,760
MISCELLANEOUS % OF THE TOTAL $		%		23.6	31.8
MISCELLANEOUS AVG. COST PER MILE	$			34,777	44,035
TOTAL COST					
TOTAL COST	$	3)	3)	1,484,543	946,466
TOTAL AVG. COST PER MILE	$			147,422	138,575
COST RANGE PER MILE					
MINIMUM	$			114,780	78,803
MAXIMUM	$			216,368	1,680,300

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) INCLUDES 0.05 MILE OF 2 INCH ONSHORE PIPELINE.
3) NO REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE C-1

COMPARISON OF ONSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		10 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED				3.27	1.86
COST DATA					
MATERIALS					
TOTAL MATERIALS	$			197,884	133,776
MATERIAL % OF THE TOTAL $		%		32.7	31.3
MATERIAL AVG.COST PER MILE	$			60,515	71,923
LABOR					
TOTAL LABOR	$			329,902	125,930
LABOR % OF THE TOTAL $		%		54.6	29.4
LABOR AVG. COST PER MILE	$			100,887	67,704
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$			76,449	168,037
MISCELLANEOUS % OF THE TOTAL $		%		12.7	39.3
MISCELLANEOUS AVG. COST PER MILE	$			23,379	90,342
TOTAL COST					
TOTAL COST	$	2)	2)	604,235	427,743
TOTAL AVG. COST PER MILE	$			184,781	229,969
COST RANGE PER MILE					
MINIMUM	$			110,716	3)
MAXIMUM	$			1,289,150	

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORT RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE C-1

COMPARISON OF ONSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		12 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED				3.17	1.40
COST DATA					
MATERIALS					
TOTAL MATERIALS	$			250,467	193,315
MATERIAL % OF THE TOTAL $		x		30.3	52.6
MATERIAL AVG.COST PER MILE	$			79,012	138,082
LABOR					
TOTAL LABOR	$			302,713	109,866
LABOR % OF THE TOTAL $		x		36.7	29.9
LABOR AVG. COST PER MILE	$			95,493	78,476
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$			272,711	64,537
MISCELLANEOUS % OF THE TOTAL $		x		33.0	17.6
MISCELLANEOUS AVG. COST PER MILE	$			86,029	46,098
TOTAL COST					
TOTAL COST	$	2)	2)	825,891	367,718
TOTAL AVG. COST PER MILE	$			260,533	262,656
COST RANGE PER MILE					
MINIMUM	$			217,459	140,501
MAXIMUM	$			796,680	798,394

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE C-1

COMPARISON OF ONSHORE PIPELINE CONSTRUCTION COSTS UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE) REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		16 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED				1.30	0.87
COST DATA					
MATERIALS					
TOTAL MATERIALS	$			120,787	134,517
MATERIAL % OF THE TOTAL $		%		30.5	19.9
MATERIAL AVG.COST PER MILE	$			92,913	154,617
LABOR					
TOTAL LABOR	$			195,724	454,854
LABOR % OF THE TOTAL $		%		49.4	67.1
LABOR AVG. COST PER MILE	$			150,557	522,821
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$			79,745	88,064
MISCELLANEOUS % OF THE TOTAL $		%		20.1	13.0
MISCELLANEOUS AVG. COST PER MILE	$			61,342	101,223
TOTAL COST					
TOTAL COST	$	2)	2)	396,256	677,435
TOTAL AVG. COST PER MILE	$			304,812	778,661
COST RANGE PER MILE					
MINIMUM	$			3)	764,883
MAXIMUM	$				936,129

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORT RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

Table C-2 Offshore Pipeline

PART B

TABLE C-2

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		4 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED			0.51 2)		5.81 3)
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		55,165		369,159
MATERIAL % OF THE TOTAL $		%	6.3		14.4
MATERIAL AVG.COST PER MILE	$		108,167		63,539
LABOR					
TOTAL LABOR	$		673,236		1,819,600
LABOR % OF THE TOTAL $		%	76.7		71.1
LABOR AVG. COST PER MILE	$		1,320,071		313,184
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$		148,874		369,633
MISCELLANEOUS % OF THE TOTAL $		%	17.0		14.4
MISCELLANEOUS AVG. COST PER MILE	$		291,910		63,620
TOTAL COST					
TOTAL COST	$	4)	877,275	4)	2,558,392
TOTAL AVG. COST PER MILE	$		1,720,147		440,343
COST RANGE PER MILE					
MINIMUM	$		5)		259,940
MAXIMUM	$				832,855

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) TRANSCO HAS 50% OWNERSHIP IN THIS FACILITY (CP82-426, FILED 05/04/83).
3) UNITED HAS 70.77% OWNERSHIP IN THIS FACILITY.
4) NO REPORT RECEIVED FOR THIS YEAR.
5) ONE REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE C-2

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		6 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED			1.02	6.17	15.20 2)
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		156,363	1,084,221	1,767,025
MATERIAL % OF THE TOTAL $		%	14.3	13.3	14.1
MATERIAL AVG.COST PER MILE	$		153,297	175,725	116,252
LABOR					
TOTAL LABOR	$		751,162	6,106,043	8,826,017
LABOR % OF THE TOTAL $		%	68.7	74.9	70.5
LABOR AVG. COST PER MILE	$		736,433	989,634	580,659
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$		185,484	965,855	1,934,169
MISCELLANEOUS % OF THE TOTAL $		%	17.0	11.8	15.4
MISCELLANEOUS AVG. COST PER MILE	$		181,847	156,541	127,248
TOTAL COST					
TOTAL COST	$	3)	1,093,009	8,156,119	12,527,211
TOTAL AVG. COST PER MILE	$		1,071,577	1,321,899	824,159
COST RANGE PER MILE					
MINIMUM	$		4)	748,948	356,011
MAXIMUM	$			2,299,864	3,519,647

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) PRIOR NOTICE PROJECT CONSTRUCTED UNDER CP83-349.
3) NO REPORT RECEIVED FOR THIS YEAR.
4) ONE REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE C-2

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		8 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED				1.32	9.19
COST DATA					
MATERIALS					
TOTAL MATERIALS	$			218,426	1,525,530
MATERIAL % OF THE TOTAL $		%		23.3	16.6
MATERIAL AVG.COST PER MILE	$			165,474	165,999
LABOR					
TOTAL LABOR	$			578,274	5,728,621
LABOR % OF THE TOTAL $		%		61.8	62.4
LABOR AVG. COST PER MILE	$			438,086	623,354
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$			139,662	1,921,987
MISCELLANEOUS % OF THE TOTAL $		%		14.9	20.9
MISCELLANEOUS AVG. COST PER MILE	$			105,805	209,139
TOTAL COST					
TOTAL COST	$	2)	2)	936,362	9,176,138
TOTAL AVG. COST PER MILE	$			709,365	998,492
COST RANGE PER MILE					
MINIMUM	$			3)	446,044
MAXIMUM	$				26,991,325

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORT RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE C-2

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		10 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED					4.35 2)
COST DATA					
MATERIALS					
TOTAL MATERIALS	$				1,103,505
MATERIAL % OF THE TOTAL $		%			23.4
MATERIAL AVG.COST PER MILE	$				253,679
LABOR					
TOTAL LABOR	$				3,095,260
LABOR % OF THE TOTAL $		%			65.5
LABOR AVG. COST PER MILE	$				711,554
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$				525,294
MISCELLANEOUS % OF THE TOTAL $		%			11.1
MISCELLANEOUS AVG. COST PER MILE	$				120,757
TOTAL COST					
TOTAL COST	$	3)	3)	3)	4,724,059
TOTAL AVG. COST PER MILE	$				1,085,991
COST RANGE PER MILE					
MINIMUM	$				889,719
MAXIMUM	$				2,502,663

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NGPL HAS 50% OWNERSHIP IN THIS FACILITY.
3) NO REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE C-2

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE) REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		12 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED					7.40 2)
COST DATA					
MATERIALS					
TOTAL MATERIALS	$				1,773,538
MATERIAL % OF THE TOTAL $		%			28.4
MATERIAL AVG.COST PER MILE	$				239,667
LABOR					
TOTAL LABOR	$				3,863,000
LABOR % OF THE TOTAL $		%			61.8
LABOR AVG. COST PER MILE	$				522,027
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$				610,155
MISCELLANEOUS % OF THE TOTAL $		%			9.8
MISCELLANEOUS AVG. COST PER MILE	$				82,453
TOTAL COST					
TOTAL COST	$	3)	3)	3)	6,246,693
TOTAL AVG. COST PER MILE	$				844,148
COST RANGE PER MILE					
MINIMUM	$				810,664
MAXIMUM	$				880,851

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) MISS RIVER HAS 10% OWNERSHIP IN THIS FACILITY (CP82-489, FILED 4/30/85).
3) NO REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE C-2

COMPARISON OF OFFSHORE PIPELINE CONSTRUCTION COSTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		16 INCH DIAMETER PIPE AND THE YEAR CONSTRUCTION ENDED			
		1981	1982	1983	1984
MILES OF PIPE CONSTRUCTED					1.54
COST DATA					
MATERIALS					
TOTAL MATERIALS	$				391,820
MATERIAL % OF THE TOTAL $		%			23.4
MATERIAL AVG.COST PER MILE	$				254,429
LABOR					
TOTAL LABOR	$				1,049,972
LABOR % OF THE TOTAL $		%			62.7
LABOR AVG. COST PER MILE	$				681,800
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$				231,754
MISCELLANEOUS % OF THE TOTAL $		%			13.8
MISCELLANEOUS AVG. COST PER MILE	$				150,490
TOTAL COST					
TOTAL COST	$	2)	2)	2)	1,673,546
TOTAL AVG. COST PER MILE	$				1,086,718
COST RANGE PER MILE					
MINIMUM	$				3)
MAXIMUM	$				

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, FRANCHISES, CONSENTS, AND OTHER COSTS.
2) NO REPORT RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

Table D Compression Construction and Expenditures

PART B

TABLE D

COMPRESSION CONSTRUCTION AND EXPENDITURES
CONSTRUCTION ENDING IN 1981 THROUGH 1984

YEAR CONSTRUCTION ENDED	ONSHORE HORSEPOWER	ONSHORE EXPENDITURES	AVG. COST PER HORSEPOWER	OFFSHORE HORSEPOWER	OFFSHORE EXPENDITURES	AVG. COST PER HORSEPOWER	TOTAL HORSEPOWER	TOTAL EXPENDITURES	AVG. COST PER HORSEPOWER
1981	--	--	--	--	--	--	--	--	--
1982	521	$ 483,120	$ 927	--	$ --	$ --	521	$ 483,120	$ 927
1983	12,257	14,169,717	1,156	190	796,642	4,193	12,447	14,966,359	1,202
1984	10,207	9,409,551	922	1,100	721,840	656	11,307	10,131,391	896

Table E-1 Reciprocating Units

PART B

TABLE E-1

COMPARISON OF CONSTRUCTION COSTS FOR
FIELD COMPRESSOR STATIONS WITH RECIPROCATING UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		NEW FIELD COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS			1	16	10
TOTAL HORSEPOWER			175	5,717	5,346
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		104,000	4,589,312	2,870,352
MATERIAL % OF THE TOTAL $		%	44.8	56.9	60.7
MATERIAL AVG.COST PER HORSEPOWER	$		594	803	537
LABOR					
TOTAL LABOR	$		101,000	2,414,118	1,453,470
LABOR % OF THE TOTAL $		%	43.5	29.9	30.8
LABOR AVG. COST PER HORSEPOWER	$		577	422	272
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$		27,100	1,069,065	402,422
MISCELLANEOUS % OF THE TOTAL $		%	11.7	13.2	8.5
MISCELLANEOUS AVG. COST PER HORSEPOWER	$		155	187	75
TOTAL COST					
TOTAL COST	$	2)	232,100	8,072,495	4,726,244
TOTAL AVG. COST PER HORSEPOWER	$		1,326	1,412	884
COST RANGE PER HORSEPOWER					
MINIMUM	$		3)	191	248
MAXIMUM	$			3,113	1,689

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, LAND, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART B

TABLE E-1

COMPARISON OF CONSTRUCTION COSTS FOR FIELD COMPRESSOR STATIONS WITH RECIPROCATING UNITS REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		ADDITIONS TO FIELD COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS			1	8	7
TOTAL HORSEPOWER			346	4,340	4,861
COST DATA					
MATERIALS					
TOTAL MATERIALS	$		108,875	2,686,311	2,735,430
MATERIAL % OF THE TOTAL $		%	43.4	58.2	58.4
MATERIAL AVG.COST PER HORSEPOWER	$		315	619	563
LABOR					
TOTAL LABOR	$		116,046	1,099,466	1,011,625
LABOR % OF THE TOTAL $		%	46.2	23.8	21.6
LABOR AVG. COST PER HORSEPOWER	$		335	253	208
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$		26,099	827,445	936,252
MISCELLANEOUS % OF THE TOTAL $		%	10.4	17.9	20.0
MISCELLANEOUS AVG. COST PER HORSEPOWER	$		75	191	193
TOTAL COST					
TOTAL COST	$	2)	251,020	4,613,222	4,683,307
TOTAL AVG. COST PER HORSEPOWER	$		725	1,063	963
COST RANGE PER HORSEPOWER					
MINIMUM	$		3)	377	561
MAXIMUM	$			4,083	1,749

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, LAND, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

Table E-2 Turbine Driven Centrifugal Units

PART B

TABLE E-2

COMPARISON OF CONSTRUCTION COSTS FOR
FIELD COMPRESSOR STATIONS WITH TURBINE DRIVEN CENTRIFUGAL UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		NEW FIELD COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS				2	
TOTAL HORSEPOWER				2,200	
COST DATA					
MATERIALS					
TOTAL MATERIALS	$			825,127	
MATERIAL % OF THE TOTAL $		%		55.6	
MATERIAL AVG.COST PER HORSEPOWER	$			375	
LABOR					
TOTAL LABOR	$			467,049	
LABOR % OF THE TOTAL $		%		31.5	
LABOR AVG. COST PER HORSEPOWER	$			212	
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$			191,824	
MISCELLANEOUS % OF THE TOTAL $		%		12.9	
MISCELLANEOUS AVG. COST PER HORSEPOWER	$			87	
TOTAL COST					
TOTAL COST	$	2)	2)	1,484,000	2)
TOTAL AVG. COST PER HORSEPOWER	$			675	
COST RANGE PER HORSEPOWER					
MINIMUM	$			3)	
MAXIMUM	$				

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, LAND, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, AND OTHER COSTS.
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

Table F No Reports Received

Table G-1 Reciprocating Units

PART B

TABLE G-1

COMPARISON OF CONSTRUCTION COSTS FOR
OFFSHORE COMPRESSOR STATIONS WITH RECIPROCATING UNITS
REPORTED FROM CONSTRUCTION ENDING IN 1981 THROUGH 1984

		NEW OFFSHORE COMPRESSOR STATIONS			
		1981	1982	1983	1984
DESCRIPTIVE DATA					
NUMBER OF UNITS				1	1
TOTAL HORSEPOWER				190	1,100
COST DATA					
MATERIALS					
TOTAL MATERIALS	$			237,932	342,446
MATERIAL % OF THE TOTAL $		%		29.9	47.4
MATERIAL AVG.COST PER HORSEPOWER	$			1,252	311
LABOR					
TOTAL LABOR	$			424,432	357,554
LABOR % OF THE TOTAL $		%		53.3	49.5
LABOR AVG. COST PER HORSEPOWER	$			2,234	325
MISCELLANEOUS					
TOTAL MISCELLANEOUS 1)	$			134,278	21,840
MISCELLANEOUS % OF THE TOTAL $		%		16.9	3.0
MISCELLANEOUS AVG. COST PER HORSEPOWER	$			707	20
TOTAL COST					
TOTAL COST	$	2)	2)	796,642	721,840
TOTAL AVG. COST PER HORSEPOWER	$			4,193	656
COST RANGE PER HORSEPOWER					
MINIMUM	$			3)	3)
MAXIMUM	$				

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, LAND, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, AND OTHER COSTS
2) NO REPORTS RECEIVED FOR THIS YEAR.
3) ONE REPORT RECEIVED FOR THIS YEAR.

PART B
SECTION II INDIVIDUAL PROJECTS

Table H Construction Cost Reports Filed From August 1, 1984 Through July 31, 1985

TABLE H

PART B

CONSTRUCTION COST REPORTS FILED FROM AUGUST 1, 1984 THROUGH JULY 31, 1985
CONSTRUCTION ENDING IN 1982

	DOCKET NO. (CP)	TYPE OF CONSTRUCTION COST REPORTED				
		COMPRESSOR STATIONS		PIPELINES		MIXED DIAMETER PIPELINES
		ONSHORE	OFFSHORE	ONSHORE	OFFSHORE	
NORTHWEST CENTRAL PIPELINE CORP.	82-479			X		

PART B

TABLE H

CONSTRUCTION COST REPORTS FILED FROM AUGUST 1, 1984 THROUGH JULY 31, 1985
CONSTRUCTION ENDING IN 1984

	DOCKET NO. (CP)	TYPE OF CONSTRUCTION COST REPORTED: COMPRESSOR STATIONS ONSHORE	COMPRESSOR STATIONS OFFSHORE	PIPELINES ONSHORE	PIPELINES OFFSHORE	MIXED DIAMETER PIPELINES
ANR PIPELINE CO.	82-480				X	
ARKANSAS LOUISIANA GAS CO.	82-384	X		X		
COLORADO INTERSTATE GAS CO.	83-21			X		
COLUMBIA GAS TRANSMISSION CORP.	83-76			X		
CONSOLIDATED GAS TRANSMISSION CORP.	82-537			X		
EL PASO NATURAL GAS CO.	82-435				X	
FLORIDA GAS TRANSMISSION CO.	82-553			X		
GASDEL SYSTEM PIPELINE INC.	83-276			X		
K N ENERGY, INC.	83-140			X		
LONE STAR GAS CO.	83-59			X		
MONTANA-DAKOTA UTILITIES CO.	83-1			X		
MOUNTAIN FUEL RESOURCES, INC.	82-491			X		
MOUNTAIN FUEL SUPPLY CO.	82-490			X		
NATURAL GAS PIPELINE CO. OF AMERICA	82-402			X	X	X
NORTHERN NATURAL GAS CO.	82-401	X		X	X	X
NORTHWEST PIPELINE CORP.	82-433			X		
PANHANDLE EASTERN PIPE LINE CO.	83-83	X		X		
SOUTHERN NATURAL GAS CO.	82-406	X		X	X	
TENNESSEE GAS PIPELINE CO.	82-413			X	X	
TEXAS EASTERN TRANSMISSION CORP.	82-535				X	X
TEXAS GAS TRANSMISSION CORP.	82-407		X	X	X	
TRANSCONTINENTAL GAS PIPE LINE CORP.	82-426			X	X	X
TRANSCONTINENTAL GAS PIPE LINE CORP.	84-426				X	
TRANSWESTERN PIPELINE CO.	82-534	X		X		
WESTERN GAS INTERSTATE CO.	82-441			X		

Table I-1 Three Miles and Over
(Excludes Mixed Diameter Pipeline)

PIPELINE CONSTRUCTION PROJECTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1984

TABLE I-1

DOCKET NO. (CP)	APPLICANT		DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE PIPELINE						
82-407	TEXAS GAS TRANSMISSION CORP.		2	4.40	IN	$ 271,902	$ 61,796
82-401	NORTHERN NATURAL GAS CO.		3	6.36	MN	400,781	63,016
82-406	SOUTHERN NATURAL GAS CO.		4	10.50	AL	973,245	92,690
83-76	COLUMBIA GAS TRANSMISSION CORP.		6	3.80	OH	248,800	65,474
83-140	K N ENERGY, INC.		6	10.00	KS	482,442	48,244
82-534	TRANSWESTERN PIPELINE CO.	1)	6	9.19	NM	893,443	97,219
82-384	ARKANSAS LOUISIANA GAS CO.	2)	8	8.20	TX	1,299,570	158,484
83-76	COLUMBIA GAS TRANSMISSION CORP.		8	8.50	OH	1,061,000	124,824
82-426	TRANSCONTINENTAL GAS PIPE LINE CORP.		8	15.25	LA	3,713,760	243,525
82-441	WESTERN GAS INTERSTATE CO.		8	3.40	TX	208,000	61,176
82-537	CONSOLIDATED GAS TRANSMISSION CORP.		10	7.21	WV	1,007,231	139,699
82-491	MOUNTAIN FUEL RESOURCES, INC.		10	13.56	WY	1,370,060	101,037
82-490	MOUNTAIN FUEL SUPPLY CO.		10	8.90	WY	1,150,164	129,232
82-433	NORTHWEST PIPELINE CORP.		10	7.68	OK	1,038,415	135,210
82-406	SOUTHERN NATURAL GAS CO.	3)	10	33.50	TX	4,834,938	144,327
82-534	TRANSWESTERN PIPELINE CO.		10	3.69	NM	734,120	198,949
82-413	TENNESSEE GAS PIPELINE CO.		12	4.80	AR	2,087,653	434,928

1) INCLUDES 0.02 MILE OF 2 INCH ONSHORE PIPELINE.
2) PRIOR NOTICE PROJECT CONSTRUCTED UNDER CP83-275.
3) PRIOR NOTICE PROJECT CONSTRUCTED UNDER CP83-390.

PART B

TABLE I-1

PIPELINE CONSTRUCTION PROJECTS
3 MILES AND OVER (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1984

DOCKET NO. (CP)	APPLICANT		DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	OFFSHORE PIPELINE						
82-435	EL PASO NATURAL GAS CO.		6	3.63	TX	$ 2,109,925	$ 581,247
82-413	TENNESSEE GAS PIPELINE CO.		6	4.10	LA	1,943,962	474,137
82-535	TEXAS EASTERN TRANSMISSION CORP.		6	10.60	LA,TX	2,743,406	258,812
82-535	TEXAS EASTERN TRANSMISSION CORP.		6	4.20	LA	1,588,690	378,260
82-535	TEXAS EASTERN TRANSMISSION CORP.		6	4.38	LA	2,070,850	472,797
82-406	SOUTHERN NATURAL GAS CO.	1)	8	12.25	LA	3,453,484	281,917
82-413	TENNESSEE GAS PIPELINE CO.		8	3.82	LA	1,869,180	489,314
82-535	TEXAS EASTERN TRANSMISSION CORP.		8	8.70	LA	2,132,907	245,162
82-535	TEXAS EASTERN TRANSMISSION CORP.		8	4.83	LA	1,558,289	322,627
82-480	ANR PIPELINE CO.	2)	10	4.47	TX	4,286,912	959,041
82-535	TEXAS EASTERN TRANSMISSION CORP.		10	7.20	LA	2,926,934	406,519
82-407	TEXAS GAS TRANSMISSION CORP.		10	6.36	LA	3,443,191	541,382
82-402	NATURAL GAS PIPELINE CO. OF AMERICA	3)	12	4.27	LA	2,043,888	478,662
82-535	TEXAS EASTERN TRANSMISSION CORP.		12	4.40	LA	2,393,035	543,872
82-407	TEXAS GAS TRANSMISSION CORP.		12	5.99	TX	4,694,237	783,679
82-426	TRANSCONTINENTAL GAS PIPE LINE CORP.		12	4.78	TX	3,128,455	654,488

1) PRIOR NOTICE PROJECT CONSTRUCTED UNDER CP84-125.
2) PRIOR NOTICE PROJECT CONSTRUCTED UNDER CP84-315. TEXAS GAS HAS 44.43% OWNERSHIP IN THIS FACILITY (CP82-407, FILED 4/30/85).
3) MISS RIVER HAS 10% OWNERSHIP IN THIS FACILITY(CP82-489, FILED 4/30/85).

Table I-2 Under Three Miles
(Excludes Mixed Diameter Pipeline)

PART B

TABLE I-2

PIPELINE CONSTRUCTION PROJECTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1982

DOCKET NO. (CP)	APPLICANT		DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE PIPELINE						
82-479	NORTHWEST CENTRAL PIPELINE CORP.	1)	4	2.18	WY	$ 116,181	$ 53,294

1) INCLUDES 0.01 MILE OF 2 INCH ONSHORE PIPELINE.

PIPELINE CONSTRUCTION PROJECTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1984

TABLE I-2

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE PIPELINE					
83-76	COLUMBIA GAS TRANSMISSION CORP.	2	1.50	WV	$ 182,923	$ 121,949
83-76	COLUMBIA GAS TRANSMISSION CORP.	2	0.30	PA	9,929	33,097
83-76	COLUMBIA GAS TRANSMISSION CORP.	2	2.50	PA	24,294	9,718
83-76	COLUMBIA GAS TRANSMISSION CORP.	2	0.70	PA	24,850	35,500
83-76	COLUMBIA GAS TRANSMISSION CORP.	2	0.30	OH	19,557	65,190
82-537	CONSOLIDATED GAS TRANSMISSION CORP.	2	0.05	WV	13,453	269,060
82-537	CONSOLIDATED GAS TRANSMISSION CORP.	2	0.15	WV	35,047	233,647
82-537	CONSOLIDATED GAS TRANSMISSION CORP.	2	1.61	WV	85,819	53,304
82-537	CONSOLIDATED GAS TRANSMISSION CORP.	2	0.05	WV	25,017	500,340
82-537	CONSOLIDATED GAS TRANSMISSION CORP.	2	0.17	WV	21,275	125,147
82-537	CONSOLIDATED GAS TRANSMISSION CORP.	2	0.02	WV	14,306	715,300
82-537	CONSOLIDATED GAS TRANSMISSION CORP.	2	0.11	WV	9,765	88,773
82-537	CONSOLIDATED GAS TRANSMISSION CORP.	2	0.17	WV	21,892	128,776
82-537	CONSOLIDATED GAS TRANSMISSION CORP.	2	0.29	WV	29,179	100,617
82-537	CONSOLIDATED GAS TRANSMISSION CORP.	2	0.31	WV	19,694	63,529
83-1	MONTANA-DAKOTA UTILITIES CO.	2	1.98	ND	68,125	34,407
82-491	MOUNTAIN FUEL RESOURCES, INC.	2	0.38	UT	8,859	23,313
82-406	SOUTHERN NATURAL GAS CO.	2	1.06	AL	154,402	145,662
83-76	COLUMBIA GAS TRANSMISSION CORP.	3	0.70	OH	34,000	48,571
83-76	COLUMBIA GAS TRANSMISSION CORP.	3	0.30	OH	11,200	37,333
82-537	CONSOLIDATED GAS TRANSMISSION CORP.	3	2.73	PA	206,878	75,779
82-537	CONSOLIDATED GAS TRANSMISSION CORP.	3	0.45	PA	49,448	109,884
82-537	CONSOLIDATED GAS TRANSMISSION CORP.	3	1.40	PA	117,611	84,008
83-276	GASDEL SYSTEM PIPELINE INC.	3	1.71	LA	87,818	51,356
82-401	NORTHERN NATURAL GAS CO.	3	2.20	MN	124,426	56,557

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TABLE I-2

PIPELINE CONSTRUCTION PROJECTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1984

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE PIPELINE					
82-384	ARKANSAS LOUISIANA GAS CO.	4	2.01	AR	$ 173,041	$ 86,090
82-384	ARKANSAS LOUISIANA GAS CO.	4	1.14	OK	135,045	118,461
82-384	ARKANSAS LOUISIANA GAS CO.	4	1.52	OK	181,663	119,515
83-21	COLORADO INTERSTATE GAS CO.	4	0.09	CO	22,523	250,256
83-76	COLUMBIA GAS TRANSMISSION CORP.	4	1.20	OH	77,400	64,500
83-76	COLUMBIA GAS TRANSMISSION CORP.	4	1.30	OH	72,700	55,923
83-76	COLUMBIA GAS TRANSMISSION CORP.	4	0.40	PA	57,568	143,920
82-537	CONSOLIDATED GAS TRANSMISSION CORP.	4	0.72	WV	62,330	86,569
82-553	FLORIDA GAS TRANSMISSION CO.	4	1.23	LA	95,479	77,625
83-140	K N ENERGY, INC.	4	0.25	CO	10,114	40,456
83-140	K N ENERGY, INC.	4	1.01	CO	38,247	37,868
83-140	K N ENERGY, INC.	4	0.02	CO	1,607	80,350
83-140	K N ENERGY, INC.	4	0.15	CO	7,467	49,780
83-140	K N ENERGY, INC.	4	0.82	CO	31,096	37,922
83-140	K N ENERGY, INC.	4	0.21	CO	8,635	41,119
83-140	K N ENERGY, INC.	4	0.16	CO	8,814	55,088
83-140	K N ENERGY, INC.	4	0.47	CO	19,840	42,213
83-140	K N ENERGY, INC.	4	0.22	CO	10,736	48,800
83-140	K N ENERGY, INC.	4	0.04	CO	3,744	93,600
83-140	K N ENERGY, INC.	4	0.30	CO	13,238	44,127
83-140	K N ENERGY, INC.	4	0.27	CO	13,665	50,611
83-140	K N ENERGY, INC.	4	0.03	CO	1,634	54,467
83-140	K N ENERGY, INC.	4	0.07	CO	5,122	73,171
83-140	K N ENERGY, INC.	4	0.52	KS	21,339	41,037
83-140	K N ENERGY, INC.	4	0.82	KS	29,726	36,251

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TABLE I-2

PIPELINE CONSTRUCTION PROJECTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1984

DOCKET NO. (CP)	APPLICANT		DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE PIPELINE						
83-140	K N ENERGY, INC.		4	0.12	MT	$ 6,798	$ 56,650
83-140	K N ENERGY, INC.		4	0.20	MT	8,200	41,000
83-140	K N ENERGY, INC.		4	0.04	MT	4,942	123,550
83-140	K N ENERGY, INC.		4	0.47	MT	18,194	38,711
83-140	K N ENERGY, INC.		4	0.49	MT	19,023	38,822
83-140	K N ENERGY, INC.		4	0.45	MT	17,933	39,851
83-140	K N ENERGY, INC.		4	1.38	MT	51,598	37,390
83-140	K N ENERGY, INC.		4	0.09	MT	6,192	68,800
83-140	K N ENERGY, INC.		4	0.19	MT	8,944	47,074
83-140	K N ENERGY, INC.		4	0.63	MT	24,491	38,875
83-140	K N ENERGY, INC.		4	0.67	MT	26,294	39,245
83-140	K N ENERGY, INC.		4	0.64	MT	18,619	29,092
83-140	K N ENERGY, INC.		4	0.55	MT	19,438	35,342
83-140	K N ENERGY, INC.		4	0.35	MT	12,753	36,437
83-140	K N ENERGY, INC.		4	0.53	MT	18,873	35,609
83-140	K N ENERGY, INC.		4	0.03	MT	4,665	155,500
83-140	K N ENERGY, INC.		4	0.41	MT	15,521	37,856
83-140	K N ENERGY, INC.		4	0.35	MT	13,102	37,434
83-140	K N ENERGY, INC.		4	0.49	MT	17,111	34,920
83-140	K N ENERGY, INC.		4	1.13	OK	42,510	37,619
83-140	K N ENERGY, INC.		4	0.91	WY	38,348	42,141
82-402	NATURAL GAS PIPELINE CO. OF AMERICA		4	2.22	NM	141,926	63,931
82-402	NATURAL GAS PIPELINE CO. OF AMERICA	1)	4	1.98	OK	232,459	117,404
82-433	NORTHWEST PIPELINE CORP.		4	2.83	WY	189,796	67,066
83-83	PANHANDLE EASTERN PIPE LINE CO.		4	1.30	CO	123,509	95,007

1) INCLUDES 0.23 MILE OF 3 INCH ONSHORE PIPELINE.

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TABLE I-2

PIPELINE CONSTRUCTION PROJECTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1984

DOCKET NO. (CP)	APPLICANT		DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE PIPELINE						
83-83	PANHANDLE EASTERN PIPE LINE CO.		4	1.10	CO	$ 100,849	$ 91,681
83-83	PANHANDLE EASTERN PIPE LINE CO.		4	1.30	CO	95,861	73,739
82-406	SOUTHERN NATURAL GAS CO.		4	0.47	OK	51,768	110,145
82-406	SOUTHERN NATURAL GAS CO.		4	1.85	OK	172,150	93,054
82-413	TENNESSEE GAS PIPELINE CO.		4	1.02	OK	274,447	269,066
82-413	TENNESSEE GAS PIPELINE CO.		4	0.90	MS	168,967	187,741
82-407	TEXAS GAS TRANSMISSION CORP.		4	0.09	LA	37,840	420,444
82-426	TRANSCONTINENTAL GAS PIPE LINE CORP.		4	0.07	TX	43,798	625,686
82-534	TRANSWESTERN PIPELINE CO.		4	1.34	OK	166,387	124,169
82-534	TRANSWESTERN PIPELINE CO.		4	1.04	NM	114,670	110,260
82-534	TRANSWESTERN PIPELINE CO.	1)	4	1.27	NM	221,701	174,568
82-534	TRANSWESTERN PIPELINE CO.		4	1.58	NM	95,616	60,516
82-534	TRANSWESTERN PIPELINE CO.	2)	4	1.09	OK	98,939	90,770
82-534	TRANSWESTERN PIPELINE CO.		4	1.79	TX	166,377	92,948
82-534	TRANSWESTERN PIPELINE CO.	3)	4	1.26	TX	125,008	99,213
82-534	TRANSWESTERN PIPELINE CO.	4)	4	1.32	NM	94,114	71,298
82-441	WESTERN GAS INTERSTATE CO.		4	0.02	OK	2,198	109,900
83-21	COLORADO INTERSTATE GAS CO.		6	1.95	CO	161,342	82,739
83-21	COLORADO INTERSTATE GAS CO.		6	1.95	CO	172,417	88,419
83-76	COLUMBIA GAS TRANSMISSION CORP.		6	2.10	OH	199,100	94,810
83-76	COLUMBIA GAS TRANSMISSION CORP.		6	1.00	OH	71,000	71,000
83-76	COLUMBIA GAS TRANSMISSION CORP.		6	0.40	OH	54,826	137,065
82-537	CONSOLIDATED GAS TRANSMISSION CORP.		6	1.65	WV	209,744	127,118
82-490	MOUNTAIN FUEL SUPPLY CO.		6	2.87	WY	254,756	88,765
83-83	PANHANDLE EASTERN PIPE LINE CO.		6	2.90	CO	304,939	105,151

1) INCLUDES 0.06 MILE OF 2 INCH ONSHORE PIPELINE.
2) INCLUDES 0.03 MILE OF 2 INCH ONSHORE PIPELINE.
3) INCLUDES 0.01 MILE OF 2 INCH ONSHORE PIPELINE.
4) INCLUDES 0.03 MILE OF 2 INCH ONSHORE PIPELINE.

PIPELINE CONSTRUCTION PROJECTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1984

TABLE I-2

DOCKET NO. (CP)	APPLICANT		DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE PIPELINE						
82-426	TRANSCONTINENTAL GAS PIPE LINE CORP.		6	0.38	TX	$ 85,192	$ 224,189
82-534	TRANSWESTERN PIPELINE CO.	1)	6	1.50	OK	247,220	164,813
82-534	TRANSWESTERN PIPELINE CO.		6	1.09	NM	93,170	85,477
82-534	TRANSWESTERN PIPELINE CO.	2)	6	1.10	NM	119,498	108,635
82-534	TRANSWESTERN PIPELINE CO.		6	1.97	NM	326,000	165,482
82-402	NATURAL GAS PIPELINE CO. OF AMERICA		8	0.01	KS	16,803	1,680,300
82-401	NORTHERN NATURAL GAS CO.		8	1.99	NM	156,817	78,803
82-426	TRANSCONTINENTAL GAS PIPE LINE CORP.		8	0.15	MS	34,782	231,880
82-534	TRANSWESTERN PIPELINE CO.		8	2.66	NM	461,233	173,396
82-534	TRANSWESTERN PIPELINE CO.	3)	8	2.02	NM	276,831	137,045
82-534	TRANSWESTERN PIPELINE CO.		10	1.86	NM	427,743	229,969
83-59	LONE STAR GAS CO.		12	0.75	TX	105,376	140,501
83-59	LONE STAR GAS CO.		12	0.18	TX	143,711	798,394
83-59	LONE STAR GAS CO.		12	0.12	TX	34,204	285,033
83-59	LONE STAR GAS CO.		12	0.35	TX	84,427	241,220
83-21	COLORADO INTERSTATE GAS CO.		16	0.07	WY	65,529	936,129
82-406	SOUTHERN NATURAL GAS CO.		16	0.80	LA	611,906	764,883

1) INCLUDES 0.06 MILE OF 2 INCH ONSHORE PIPELINE.
2) INCLUDES 0.04 MILE OF 2 INCH ONSHORE PIPELINE.
3) INCLUDES 0.05 MILE OF 2 INCH ONSHORE PIPELINE.

PART B

TABLE I-2

PIPELINE CONSTRUCTION PROJECTS
UNDER 3 MILES (EXCLUDES MIXED DIAMETER PIPELINE)
CONSTRUCTION ENDING IN 1984

DOCKET NO. (CP)	APPLICANT		DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	OFFSHORE PIPELINE						
82-406	SOUTHERN NATURAL GAS CO.	1)	4	2.40	LA	$ 623,855	$ 259,940
82-413	TENNESSEE GAS PIPELINE CO.		4	2.40	TX	1,093,353	455,564
82-413	TENNESSEE GAS PIPELINE CO.		4	1.01	LA	841,184	832,855
82-480	ANR PIPELINE CO.		6	2.40	TX	1,665,986	694,161
82-406	SOUTHERN NATURAL GAS CO.		6	2.50	LA	951,688	380,675
82-413	TENNESSEE GAS PIPELINE CO.	2)	6	2.30	LA	1,147,482	498,905
82-413	TENNESSEE GAS PIPELINE CO.		6	0.30	LA	1,055,894	3,519,647
82-413	TENNESSEE GAS PIPELINE CO.		6	1.50	TX	2,541,904	1,694,603
82-413	TENNESSEE GAS PIPELINE CO.		6	1.80	TX	1,963,588	1,090,882
82-413	TENNESSEE GAS PIPELINE CO.		6	1.80	LA	1,494,029	830,016
82-535	TEXAS EASTERN TRANSMISSION CORP.		6	1.20	LA	1,208,224	1,006,853
82-407	TEXAS GAS TRANSMISSION CORP.		6	1.40	LA	498,416	356,011
82-402	NATURAL GAS PIPELINE CO. OF AMERICA		8	2.15	LA	1,463,768	680,822
82-402	NATURAL GAS PIPELINE CO. OF AMERICA		8	2.56	LA	1,141,873	446,044
82-413	TENNESSEE GAS PIPELINE CO.		8	2.80	LA	1,427,195	509,713
82-535	TEXAS EASTERN TRANSMISSION CORP.		8	1.60	LA	2,983,996	1,864,998
82-426	TRANSCONTINENTAL GAS PIPE LINE CORP.		8	0.04	LA	1,079,653	26,991,325
84-426	TRANSCONTINENTAL GAS PIPE LINE CORP.		8	0.04	LA	1,079,653	26,991,325
82-401	NORTHERN NATURAL GAS CO.		10	0.43	TX	1,076,145	2,502,663
82-406	SOUTHERN NATURAL GAS CO.	3)	10	2.40	LA	2,135,325	889,719
82-426	TRANSCONTINENTAL GAS PIPE LINE CORP.		10	1.52	LA	1,512,589	995,124
82-402	NATURAL GAS PIPELINE CO. OF AMERICA	4)	12	2.28	TX	1,848,313	810,664
82-407	TEXAS GAS TRANSMISSION CORP.		12	2.21	LA	1,946,680	880,851
82-426	TRANSCONTINENTAL GAS PIPE LINE CORP.		12	2.91	TX	2,451,700	842,509
82-426	TRANSCONTINENTAL GAS PIPE LINE CORP.		16	1.54	LA	1,673,546	1,086,718

1) UNITED HAS 70.77% OWNERSHIP IN THIS FACILITY.
2) PRIOR NOTICE PROJECT CONSTRUCTED UNDER CP83-349.
3) NGPL HAS 50% OWNERSHIP IN THIS FACILITY.
4) MISS RIVER HAS 10% OWNERSHIP IN THIS FACILITY (CP82-489, FILED 4/30/85).

Table I-3 Mixed Diameter Pipeline

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TABLE I-3

PIPELINE CONSTRUCTION PROJECTS
MIXED DIAMETER PIPELINE 3 MILES AND OVER
CONSTRUCTION ENDING IN 1984

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE PIPELINE					
82-402	NATURAL GAS PIPELINE CO. OF AMERICA	3, 4, 6, 8, 10	18.91	OK	$ 2,125,684	$ 112,411

PIPELINE CONSTRUCTION PROJECTS
MIXED DIAMETER PIPELINE 3 MILES AND OVER
CONSTRUCTION ENDING IN 1984

TABLE I-3

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	OFFSHORE PIPELINE					
82-535	TEXAS EASTERN TRANSMISSION CORP.	1) 8	3.20	LA	$ 2,375,157	$ 742,237

1) COST DETAIL WAS NOT OBTAINABLE.TENNECO HAS 8.17% OWNERSHIP IN THIS FACILITY(CP82-413,FILED 5/31/85).

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TABLE I-3

PIPELINE CONSTRUCTION PROJECTS
MIXED DIAMETER PIPELINE UNDER 3 MILES
CONSTRUCTION ENDING IN 1984

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	ONSHORE PIPELINE					
82-426	TRANSCONTINENTAL GAS PIPE LINE CORP.	1) 30	1.01	TX	$ 1,960,282	$ 1,940,873

1) COST DETAIL WAS NOT OBTAINABLE.COLUMBIA GULF HAS 21.05% AND ANR HAS 8.77% OWNERSHIP IN THIS FACILITY(CP83-496,CP82-480,FILED 5/1/85).

PIPELINE CONSTRUCTION PROJECTS
MIXED DIAMETER PIPELINE UNDER 3 MILES
CONSTRUCTION ENDING IN 1984

TABLE I-3

DOCKET NO. (CP)	APPLICANT	DIAM. OF PIPE IN INCHES	MILES CONSTRUCTED	STATES TRAVERSED	TOTAL COST	AVG. COST PER MILE
	OFFSHORE PIPELINE					
82-401	NORTHERN NATURAL GAS CO.	1) 12	0.80	TX	$ 1,696,220	$ 2,120,275
82-401	NORTHERN NATURAL GAS CO.	2) 10	1.40	TX	1,170,434	836,024

1) COST DETAIL WAS NOT OBTAINABLE.TENNECO HAS 16.667% OWNERSHIP IN THIS FACILITY (CP82-413, FILED 5/31/85).
2) COST DETAIL WAS NOT OBTAINABLE.TENNECO HAS 50% OWNERSHIP IN THIS FACILITY(CP82-413,FILED 5/31/85).

Table J-1 Reciprocating Units

PART B

TABLE J-1

NEW FIELD COMPRESSOR STATIONS
RECIPROCATING UNITS
CONSTRUCTION ENDING IN 1984

	DOCKET NUMBER (CP) AND APPLICANT		
	82-384 ARKLA	82-401 NORTHERN	83-83 PANHANDLE
DESCRIPTIVE DATA			
NAME OF COMPRESSOR STATION	GURDON COMP STA	GOMEZ COMP STA	DEWEY CO ANR EXCHANGE
LOCATION	CLARK CO, AR	PECOS CO, TX	DEWEY CO, OK
HORSEPOWER/UNIT	1 AT 950	1 AT 500	1 AT 520
NUMBER OF UNITS	1	1	1
TOTAL HORSEPOWER	950	500	520
COST DATA			
MATERIALS			
TOTAL MATERIALS	$ 108,573	274,297	188,275
MATERIAL % OF THE TOTAL $	46.2%	54.7	52.7
MATERIAL AVG. COST PER HORSEPOWER	$ 114	549	362
LABOR			
TOTAL LABOR	$ 100,659	160,537	136,890
LABOR % OF THE TOTAL $	42.8%	32.0	38.3
LABOR AVG. COST PER HORSEPOWER	$ 106	321	263
MISCELLANEOUS			
TOTAL MISCELLANEOUS 1)	$ 25,960	66,379	31,818
MISCELLANEOUS % OF THE TOTAL $	11.0%	13.2	8.9
MISCELLANEOUS AVG. COST PER HORSEPOWER	$ 27	133	61
TOTAL COST			
TOTAL COST	$ 235,192	501,213	356,983
TOTAL AVG. COST PER HORSEPOWER	$ 248	1,002	687

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, LAND, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, AND OTHER COSTS.

PART B

TABLE J-1

NEW FIELD COMPRESSOR STATIONS
RECIPROCATING UNITS
CONSTRUCTION ENDING IN 1984

	DOCKET NUMBER (CP) AND APPLICANT		
	82-406 SOUTHERN	82-406 SOUTHERN	82-534 TRANSWESTERN
DESCRIPTIVE DATA			
NAME OF COMPRESSOR STATION	CARTHAGE COMP STA	HOLT COMP STA	CIG EXCHANGE POINT
LOCATION	PANOLA CO, TX	TUSCALOOSA CO, AL	HARPER CO, OK
HORSEPOWER/UNIT	3 AT 600	2 AT 634	1 AT 200
NUMBER OF UNITS	3	2	1
TOTAL HORSEPOWER	1,800	1,268	200
COST DATA			
MATERIALS			
TOTAL MATERIALS	$ 1,224,952	897,107	68,137
MATERIAL % OF THE TOTAL $	63.5%	67.0	37.7
MATERIAL AVG. COST PER HORSEPOWER	$ 681	707	341
LABOR			
TOTAL LABOR	$ 596,324	380,969	41,620
LABOR % OF THE TOTAL $	30.9%	28.5	23.0
LABOR AVG. COST PER HORSEPOWER	$ 331	300	208
MISCELLANEOUS			
TOTAL MISCELLANEOUS 1)	$ 109,256	60,900	71,179
MISCELLANEOUS % OF THE TOTAL $	5.7%	4.5	39.3
MISCELLANEOUS AVG. COST PER HORSEPOWER	$ 61	48	356
TOTAL COST			
TOTAL COST	$ 1,930,532	1,338,976	180,936
TOTAL AVG. COST PER HORSEPOWER	$ 1,073	1,056	905

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, LAND, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, AND OTHER COSTS.

PART B

TABLE J-1

NEW FIELD COMPRESSOR STATIONS
RECIPROCATING UNITS
CONSTRUCTION ENDING IN 1984

	DOCKET NUMBER (CP) AND APPLICANT	
	82-534	
	TRANSWESTERN	
DESCRIPTIVE DATA		
NAME OF COMPRESSOR STATION	PIONEER-SCHULTZ NO 1	
LOCATION	LIPSCOMB CO, TX	
HORSEPOWER/UNIT	1 AT	108
NUMBER OF UNITS		1
TOTAL HORSEPOWER		108
COST DATA		
MATERIALS		
TOTAL MATERIALS	$	109,011
MATERIAL % OF THE TOTAL $		59.8%
MATERIAL AVG. COST PER HORSEPOWER	$	1,009
LABOR		
TOTAL LABOR	$	36,471
LABOR % OF THE TOTAL $		20.0%
LABOR AVG. COST PER HORSEPOWER	$	338
MISCELLANEOUS		
TOTAL MISCELLANEOUS 1)	$	36,930
MISCELLANEOUS % OF THE TOTAL $		20.2%
MISCELLANEOUS AVG. COST PER HORSEPOWER	$	342
TOTAL COST		
TOTAL COST	$	182,412
TOTAL AVG. COST PER HORSEPOWER	$	1,689

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, LAND, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, AND OTHER COSTS.

PART B

ADDITIONS TO FIELD COMPRESSOR STATIONS
RECIPROCATING UNITS
CONSTRUCTION ENDING IN 1984

TABLE J-1

	DOCKET NUMBER (CP) AND APPLICANT		
	82-401 NORTHERN	83-83 PANHANDLE	82-406 SOUTHERN
DESCRIPTIVE DATA			
NAME OF COMPRESSOR STATION	FINNEY CO NO 1 STA	AVARD FLD BOOSTER STA	SPIDER COMP STA
LOCATION	FINNEY CO, KS	WOODS CO, OK	DESOTO PAR, LA
HORSEPOWER/UNIT	1 AT 988; 1 AT 727	1 AT 450	1 AT 46
NUMBER OF UNITS	2	1	1
TOTAL HORSEPOWER	1,715	450	46
COST DATA			
MATERIALS			
TOTAL MATERIALS	$ 1,054,475	521,749	20,784
MATERIAL % OF THE TOTAL $	62.9%	66.3	49.4
MATERIAL AVG. COST PER HORSEPOWER	$ 615	1,159	452
LABOR			
TOTAL LABOR	$ 259,817	227,508	14,327
LABOR % OF THE TOTAL $	15.5%	28.9	34.0
LABOR AVG. COST PER HORSEPOWER	$ 151	506	311
MISCELLANEOUS			
TOTAL MISCELLANEOUS 1)	$ 361,327	37,827	6,980
MISCELLANEOUS % OF THE TOTAL $	21.6%	4.8	16.6
MISCELLANEOUS AVG. COST PER HORSEPOWER	$ 211	84	152
TOTAL COST			
TOTAL COST	$ 1,675,619	787,084	42,091
TOTAL AVG. COST PER HORSEPOWER	$ 977	1,749	915

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, LAND, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, AND OTHER COSTS.

PART B

TABLE J-1

ADDITIONS TO FIELD COMPRESSOR STATIONS
RECIPROCATING UNITS
CONSTRUCTION ENDING IN 1984

	DOCKET NUMBER (CP) AND APPLICANT		
	82-534 TRANSWESTERN	82-534 TRANSWESTERN	82-534 TRANSWESTERN
DESCRIPTIVE DATA			
NAME OF COMPRESSOR STATION	FELDMAN STA	RED BLUFF STA NO 1	RED BLUFF STA NO 5
LOCATION	HEMPHILL CO, TX	CHAVES CO, NM	CHAVES CO, NM
HORSEPOWER/UNIT	1 AT 450	1 AT 1,100	1 AT 1,100
NUMBER OF UNITS	1	1	1
TOTAL HORSEPOWER	450	1,100	1,100
COST DATA			
MATERIALS			
TOTAL MATERIALS	$ 403,080	330,183	405,159
MATERIAL % OF THE TOTAL $	52.6%	53.5	51.0
MATERIAL AVG. COST PER HORSEPOWER	$ 896	300	368
LABOR			
TOTAL LABOR	$ 136,655	193,772	179,546
LABOR % OF THE TOTAL $	17.8%	31.4	22.6
LABOR AVG. COST PER HORSEPOWER	$ 304	176	163
MISCELLANEOUS			
TOTAL MISCELLANEOUS 1)	$ 227,008	93,411	209,699
MISCELLANEOUS % OF THE TOTAL $	29.6%	15.1	26.4
MISCELLANEOUS AVG. COST PER HORSEPOWER	$ 504	85	191
TOTAL COST			
TOTAL COST	$ 766,743	617,366	794,404
TOTAL AVG. COST PER HORSEPOWER	$ 1,704	561	722

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, LAND, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, AND OTHER COSTS.

Table K No Reports Received

Table L-1 Reciprocating Units

PART B

NEW OFFSHORE COMPRESSOR STATIONS
RECIPROCATING UNITS
CONSTRUCTION ENDING IN 1984

TABLE L-1

	DOCKET NUMBER (CP) AND APPLICANT
	82-407 TEXAS GAS
DESCRIPTIVE DATA	
NAME OF COMPRESSOR STATION	BLK 220-A
LOCATION	E CAMERON, LA
HORSEPOWER/UNIT	1 AT 1,100
NUMBER OF UNITS	1
TOTAL HORSEPOWER	1,100
COST DATA	
MATERIALS	
TOTAL MATERIALS	$ 342,446
MATERIAL % OF THE TOTAL $	47.4%
MATERIAL AVG. COST PER HORSEPOWER	$ 311
LABOR	
TOTAL LABOR	$ 357,554
LABOR % OF THE TOTAL $	49.5%
LABOR AVG. COST PER HORSEPOWER	$ 325
MISCELLANEOUS	
TOTAL MISCELLANEOUS 1)	$ 21,840
MISCELLANEOUS % OF THE TOTAL $	3.0%
MISCELLANEOUS AVG. COST PER HORSEPOWER	$ 20
TOTAL COST	
TOTAL COST	$ 721,840
TOTAL AVG. COST PER HORSEPOWER	$ 656

1) CONSISTS OF ENGINEERING, INSPECTION, SUPERVISION, SURVEY, LAND, RIGHT-OF-WAY, DAMAGES, INTEREST, OVERHEAD, CONTINGENCIES, AND OTHER COSTS.