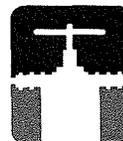


INGAA FOUNDATION



The INGAA Foundation, Inc.
555 13th Street, NW / Suite 300 West
Washington, D.C. 20004
(202) 626-3200

August 10, 1993

Memorandum to INGAA Foundation Members

Subject: Profile of Intrastate Gas Pipelines

I am very pleased to announce the publication of a new INGAA Foundation report, *Profile of Intrastate Gas Pipelines*. The report focuses on major intrastate natural gas pipelines operating in Louisiana, Oklahoma and Texas. The key findings are that intrastate gas pipelines operate in a highly competitive market, characterized by diverse business activities, a higher proportion of industrial/electric utility gas consumption, and significantly less regulation than interstate pipelines. The report contains a market profile of 33 intrastate natural gas pipeline systems in Oklahoma, Louisiana and Texas, along with a detailed discussion of the regulatory environment for each of the three states.

This report is being distributed only to INGAA Foundation members, with complimentary copies provided to intrastate pipelines that assisted the contractor with information. I hope that you find this report a valuable tool to enhance your understanding of the structural market characteristics of the gas pipeline industry.

A handwritten signature in black ink, appearing to read 'Jerald V. Halvorsen', with a stylized flourish at the end.

Jerald V. Halvorsen
Executive Director

Enclosure

Profile of Intrastate Gas Pipelines

Prepared for the INGAA Foundation, Inc., by:
Foster Associates, Inc.
1015 15th Street, N.W.
Washington, D.C. 20005

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- IV - MAJOR INTRASTATE PIPELINE COMPANIES IN LOUISIANA, OKLAHOMA, AND TEXAS

PREFACE

The natural gas industry is undergoing fundamental structural change. Over the years, substantial information has been available about interstate pipeline systems. This has not been true for the intrastate market, even though intrastate pipelines own and operate about one-half of the gas transmission lines in their respective markets. In certain markets, intrastate pipelines compete with interstate pipelines for gas supply and transportation services. Thus, knowledge about intrastate pipelines is paramount in assessing the competitive profile of the natural gas industry.

The INGAA Foundation is an organization of gas pipelines and suppliers to the natural gas industry. The INGAA Foundation commissioned Foster Associates, Inc. to conduct this study of the intrastate gas pipeline market in Texas, Louisiana and Oklahoma. The purpose of this report is to provide the INGAA Foundation members with a better understanding of the structural market characteristics of the gas pipeline industry.

EXECUTIVE SUMMARY

Foster Associates, Inc. has prepared this report under contract with the INGAA Foundation. This report focuses on the major intrastate natural gas pipelines operating in Louisiana, Oklahoma, and Texas, the intrastate gas market. The table on the following page presents a summary of this market.

Major findings of the report are as follows:

- ◆ Intrastate gas pipelines represent an important component of their respective markets. These pipelines own 53 percent of the total transmission miles, and transport 43 percent of the total intrastate production.
- ◆ Intrastate market demand characteristics differ sharply from other U.S. markets. Large industrial/electric utility sales, for example, represent close to 90 percent of the total market demand. Furthermore, gas holds a relatively high market share in the intrastate market, reflecting gas' low cost and high availability.
- ◆ The relatively larger proportion of industrial/electric utility gas consumption accounts for a laissez-faire regulatory environment for most of the intrastate areas. This environment is distinguished by minimal government regulation of intrastate pipeline rates and services.
- ◆ The intrastate pipelines continue to provide a merchant service to a greater extent than do interstate pipelines.
- ◆ Intrastate pipelines' business activities are diverse. These can be (1) stand-alone pipelines in business solely to transport and/or resell gas; (2) pipelines that transport on behalf of affiliates, e.g., to individual industrial and/or electric utility plants; or (3) pipelines that provide marketing assistance to affiliates, such as transporting affiliate production to the market.
- ◆ Effective competition is a characteristic of the intrastate market, stemming from: (1) surplus supplies in the area; (2) minimal intervention by state regulators; (3) excess capacity of some intrastate pipelines in the region; and (4) proximity of many interstate and intrastate pipelines in these states.

SUMMARY OF INTRASTATE GAS PIPELINE MARKET				
	Louisiana	Oklahoma	Texas	TOTAL
Miles of intrastate pipe	7,500	12,051	50,288	69,839
Percent of state total	25%	59%	63%	53%
Volumes Transported by Intrastate Pipeline (% of Total by State)	31%	28%	60%	53%
Marketer of Intrastate Pipelines				
Major	8	5	19	32
Other	14	-	41	55
Total	22	5	60	87
Market Profile (%)				
Residential/Commercial	5.3%	19.1%	11.2%	10.5%
Industrial	77.8	51.6	60.7	64.3
Electric Utility	<u>16.9</u>	<u>29.3</u>	<u>28.1</u>	<u>25.2</u>
TOTAL	100.0%	100.0%	100.0%	100.0%
<u>Regulations</u>				
City Gate Sales/ Transportation to LDC	Yes	Yes	Yes	--
Industrial (Direct) Sales/ Transportation	No*	No*	No*	--
Gathering	No	Yes	No	--
Construction (Permit)	Yes	Yes	Yes	--
Safety	Yes	Yes	Yes	--

* Except for complaint procedure.

PROFILE OF INTRASTATE GAS PIPELINES

I. INTRODUCTION

Foster Associates Inc. has prepared this report under contract with the INGAA Foundation.* The focus of this report is on the major intrastate natural gas pipelines' operations in the states of Louisiana, Oklahoma, and Texas. This report identifies and describes salient characteristics of intrastate pipelines, including mileage, throughput, ownership and market (e.g., system map). Where applicable, the report makes comparisons between the intrastate and the interstate markets.

Two sets of background information are useful in discussing the intrastate market: a set of definitions and a brief market profile. Definitions will provide a better understanding as to the type of company of our focus. The market profile will assist in understanding the atmosphere under which these companies operate, e.g., types of markets served and regulatory environment. Following a summary in Section II, Section III provides definitions, Section IV profiles the intrastate market, and Section V provides details on individual intrastate pipelines. Appendix I contains historical data, Appendix II presents system maps, Appendix III presents pertinent rates and regulations, and Appendix IV lists names and addresses of the major intrastate pipelines in the study.

* This report was directed by William G. Foster. Key investigators were Mary Jane Klipple, Rebecca Reddick, and David Neal.

II. SUMMARY/CONCLUSIONS

Relative Importance of the Intrastate Market

- ◆ Three states, Louisiana, Oklahoma and Texas, produce three-quarters of the Lower 48 States' gas supplies and hold 60 percent of the discovered reserves.
- ◆ Although these states supply an important share of the interstate market, local consumption of intrastate production represents 43 percent of the total supply in the three states.
- ◆ Intrastate pipelines represent the following percentages of the total transmission mileage and gas volumes in these states:

	<u>Louisiana</u>	<u>Oklahoma</u>	<u>Texas</u>	<u>Total</u>
Mileage	25%	59%	63%	53%
Volume	31%	28%	60%	43%

- ◆ The major pipelines are:

Louisiana

Acadian Gas Pipeline System
Bridgeline Gas Distribution Co.
Dow Intrastate Gas Co.
Louisiana Gas System Inc.
Louisiana Intrastate Gas Corp.
Louisiana Resources Co./
Louisiana Gas Marketing Co.
Monterey Pipeline
Transok, Inc.

Oklahoma

Delhi Gas Pipeline Corp.
Enogex
ONG Transmission
Phillips Petroleum
Transok, Inc.

Texas

Amoco Gas Co.
Channel Industries
Clajon Gas Co.
Delhi Gas Pipeline Corp.
Dow System
Enserch Gas Transmission/
Lone Star Gas
Exxon Gas System, Inc.
Gulf Energy Pipeline Co.
Houston Pipe Line Co.
Meridian Oil Hydrocarbons/
Meridian Oil Transmission

Mobil Vanderbilt-Beaumont
Seagull Energy
Southwestern System
Tejas Gas Corp.
Texas Utilities Fuel Co.
TransAmerican Pipeline
United Texas Transmission
Valero System
Westar Transmission

Market Profile

- ◆ The gas market demand profile in the three states differs sharply from other parts of the U.S., particularly the interstate market.
- ◆ The major differences are: (1) the relatively higher volumes consumed by large industrials and utilities in the intrastate market -- 90 percent compared to only 50 percent for the remainder of the U.S., and (2) the higher gas market share in the intrastate market -- 69 percent of the total stationary energy market, compared to 26 percent for the remainder of the U. S. In part, the higher market share of gas can be attributed to historically lower gas prices and availability of gas supplies in the intrastate market compared with other parts of the U.S.
- ◆ The relatively higher proportion of gas sales to large customers, as opposed to residential/commercial heating load, accounts for the more laissez-faire regulatory environment. Government regulation

to protect these more sophisticated customers is minimal. A complaint procedure often triggers regulatory intervention.

Regulatory Environment

- ◆ In general, there are rate and service regulations for intrastate pipelines' deliveries to local distribution companies. The relative importance of this type of service is greater in Oklahoma, followed by Texas and finally Louisiana. In every case, however, these services are small (in volume) compared to deliveries to the large customers.
- ◆ Louisiana and Texas generally preclude rate and service regulation of pipelines selling services to large customers. State law in Louisiana explicitly precludes Public Service Commission jurisdiction over direct industrial sales. The Conservation Commission does have jurisdiction over pipeline safety and the prevention of waste. The latter authority prohibits the sale of gas below "fair market value", although this regulation has not been enforced.

The basis of the Texas regulation is the Gas Utility Regulatory Act, and the primary goal of this Act is to foster competition. For example, while rates between pipelines and large customers are required to be filed with the Railroad Commission, they are deemed "just and reasonable" if no complaints are filed and they meet one of these three criteria: (1) neither party has an unfair advantage, (2)

rates are substantially the same for similar services, or (3) services are provided in a competitive market.

In addition the pipelines have no obligation to serve. The issue of pipeline service to new customers has resulted in more complaints filed with the Commission than any other issue. However, the Commission has no jurisdiction to require intrastate pipelines to serve new customers.¹

- ◆ The Oklahoma intrastate pipelines are under the jurisdiction of the Oklahoma Corporation Commission. While there has been little or no active rate regulation, the Commission's General Counsel has stated that the Commission has broad powers to require pipelines to transport gas at a fair price.² However, indirect rate regulation exists since the largest customers of intrastate pipelines are generally their affiliate utility customers. These utilities must receive Commission authorization to pass through their gas (or fuel) costs, including transportation, to their customers.

¹ Interestingly, however, a recent bill introduced in the Texas Senate requires pipelines to transport Texas-owned gas to State facilities.

² A recently-enacted bill gives the Commission explicit authority over gathering fees, providing for complaint and hearing procedures in the case of "unjust and unlawful discriminatory" fees (Section 24.3 of Title 52).

Business Activity/Environment

- ◆ Intrastate pipelines provide diverse and changing gas services. The intrastate pipelines either provide a transportation service for a fee and/or they provide a sales function for a sales margin. In the majority of cases, these fees are negotiated between the pipeline and the customer. In numerous cases, the pipelines are transporting on behalf of affiliates, in which case the fee becomes an inter-company transfer cost.

- ◆ Many intrastate pipelines were constructed to deliver gas to service the company's own facilities or affiliates' facilities, including refineries, petrochemical, and electric power plants, as well as other types of facilities. Examples of such pipelines are:
 - Exxon Gas System (Texas)
 - Monterey Pipeline (Louisiana)
 - Dow's intrastate pipelines (Texas and Louisiana)
 - Conoco's Louisiana Gas System (Louisiana)
 - Mobil's Vanderbilt-Beaumont line (Texas)
 - Phillips intrastate lines (Oklahoma and Texas)
 - Enogex/Oklahoma Gas and Electric (Oklahoma)
 - Transok/Public Service of Oklahoma et al. (Oklahoma)
 - Texas Utilities Fuel/Texas Utilities Electric (Texas)

- ◆ Intrastate pipelines also provide assistance to marketing affiliate companies. Generally, these pipeline companies are fully-integrated natural gas companies with business activities in exploration, development, production, gathering, processing, storage, transportation, and marketing. The transportation service provides expanded access to the market, at the city-gate, direct industrial plants, pipeline interchanges or marketing hubs. Examples of these are:

- Tejas Gas/Acadian (Louisiana and Oklahoma).
- Enron/Louisiana Resources (Louisiana)
- Enron/Louisiana Gas Marketing (Louisiana)
- Enron/Houston Pipe Line (Texas)
- Delhi Group (Louisiana, Oklahoma and Texas)
- Mitchell Energy/Southwestern Pipeline System (Texas)

- ◆ A number of pipelines are not fully integrated, but only have downstream marketing functions. These include:

- ONG/ONEOK (distribution function in Oklahoma)
- Lone Star/Enserch (retail sales in Texas)
- Valero (retail sales in Texas)
- United Texas Transmission (retail sales in Texas)

- ◆ Several companies are planning to increase sales by exporting gas to Mexico, e.g., Valero and Houston Pipe Line.

- ◆ Most, if not all, intrastate pipelines transport gas for or sell gas to third parties. As stated, these services are generally provided at negotiated rates. Sales services are more important to the intrastate market than the interstate market because of: (1) no prohibition against bundled services, (2) the existence of negotiated sales rates, and (3) substantial sales to affiliates. Nevertheless, transportation volumes have increased in the intrastate market, and are expected to increase in the future. Pipelines responding to the Foster Associates survey cited increased market opportunities in the intrastate market resulting from FERC Order No. 636, such as access to interstate markets via capacity release programs and the development of market hubs.

- ◆ While a full examination of the level of competition is beyond the scope of this report, certain findings indicate that much of the intrastate market is competitive. First, the intrastate market is a gas supply surplus area. Second, the states themselves, particularly Texas and Louisiana, encourage competition and have a laissez-faire philosophy. They do not see their role as one of direct regulatory involvement, and do not intervene in most service arrangements. Third, certain pipelines have throughput less than design capacity. Therefore, there is some excess pipeline capacity. Fourth, many pipelines serve the same general market.

The two best examples of this competitive market are found along the Texas Gulf Coast and in South Louisiana, depicted on the

following maps. Not only are there many intrastate pipelines in the same corridor, there are many interstate pipelines serving the same market. Finally, there are the natural gas hubs -- the Henry Hub, the Katy Hub and the Waha Hub. The intrastate pipelines connected to these hubs are identified below, along with the interstate pipelines connected to the hubs.

INTRASTATE PIPELINES

INTERSTATE PIPELINES

Henry Hub, Vermilion Parish, Louisiana:

Acadian Gas Pipeline
Bridgeline Gas Distribution
Dow Intrastate Gas Co.
Louisiana Gas System
Louisiana Resources Co.
Monterey Pipeline Company

ANR Pipeline
Natural Gas Pipeline Co.
Sabine Pipeline
Transcontinental Gas Pipe Line
Trunkline Gas Co.

Katy Hub, Waller County, Texas:

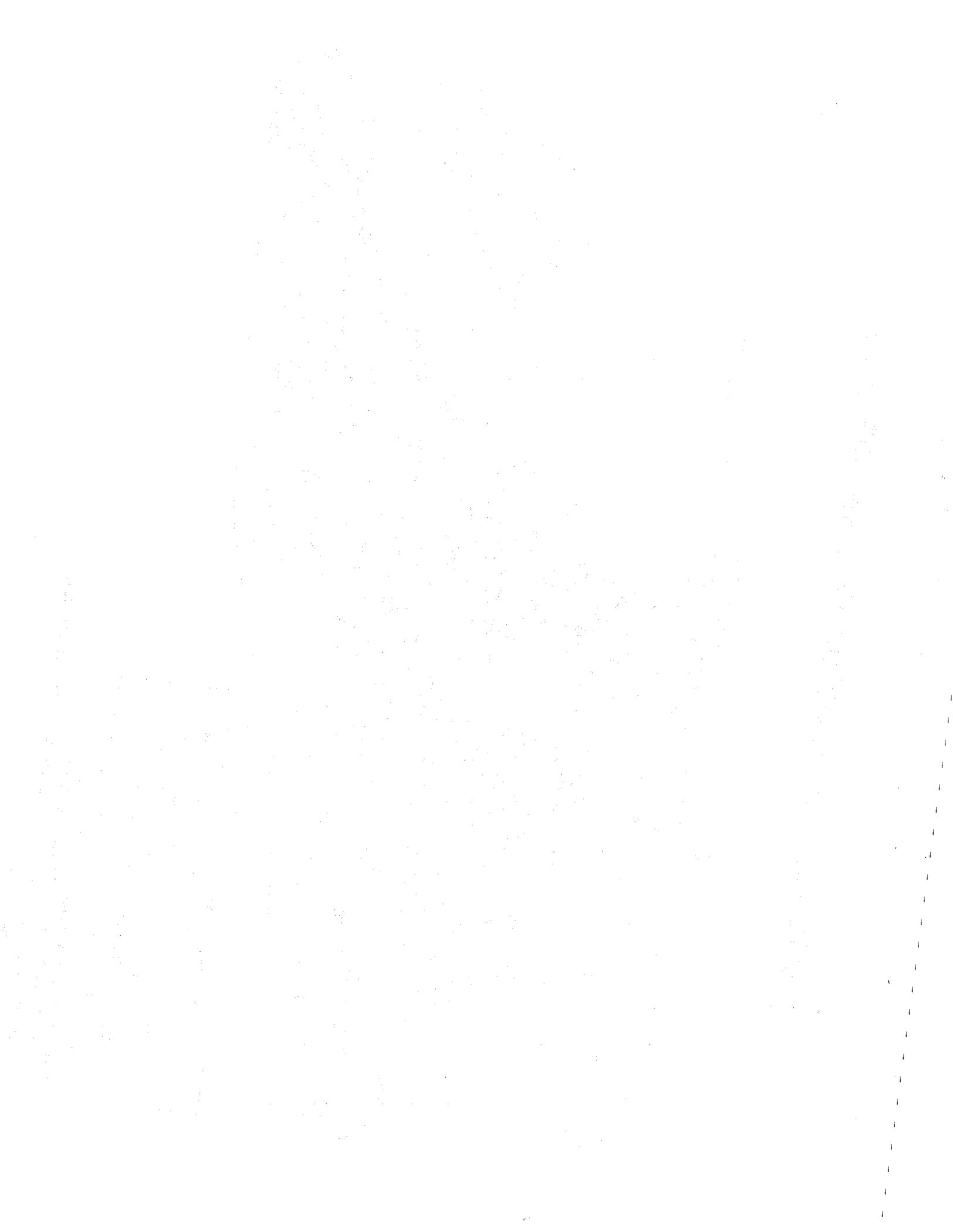
Amoco Gas Co.
Dow Pipeline Co.
Houston Pipe Line Co.
Lone Star Gas Co.
Oasis Pipe Line
Lone Star Gas Co.
Phillips Sea Gas P.L. (Hinshaw)
Southwestern Gas Pipeline (formerly Brazos)
United Texas Transmission

Tennessee Gas Pipeline
Trunkline Gas Co.
United Gas Pipe Line Co.

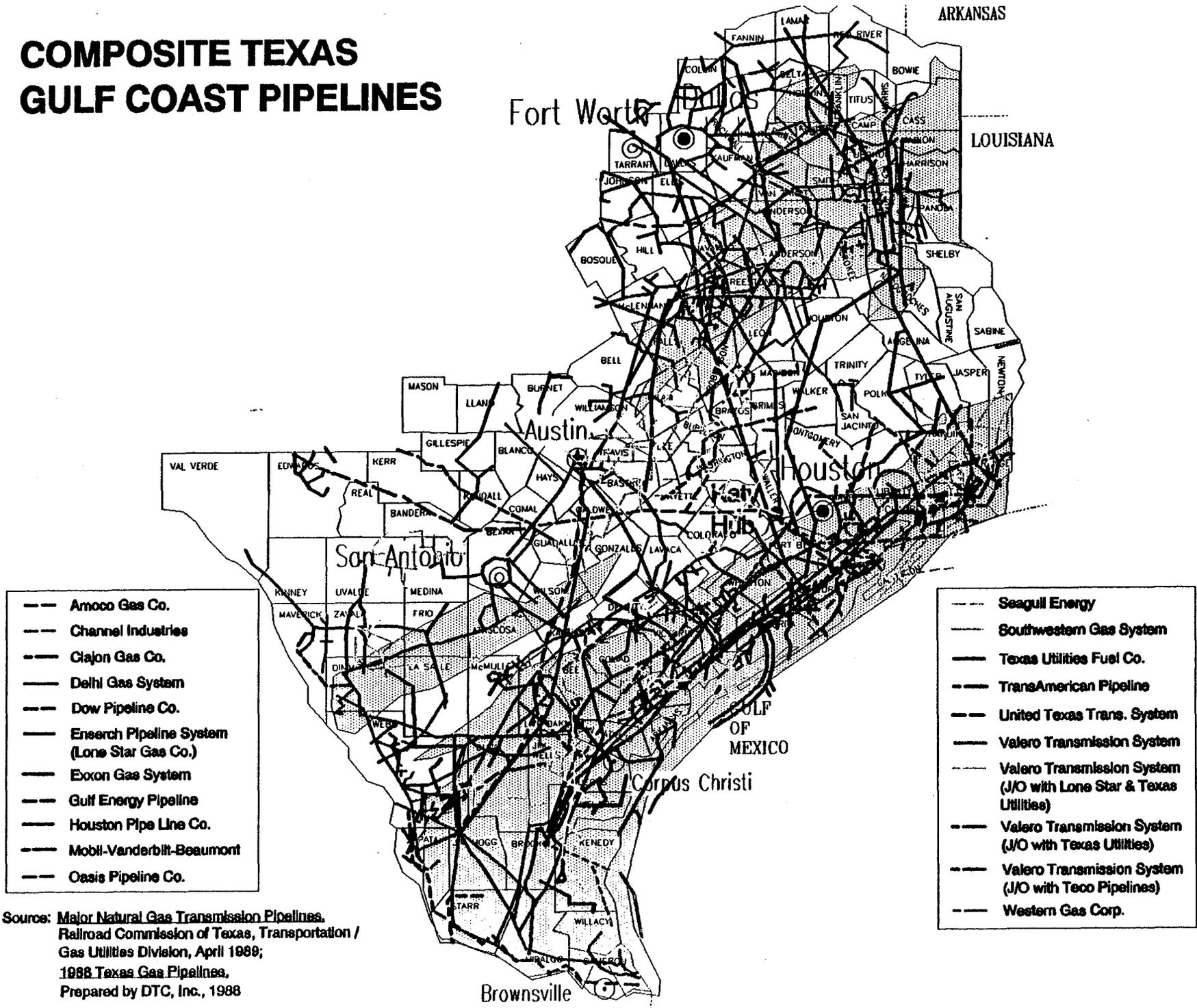
Waha Hub, Pecos County, Texas:

Delhi Gas Pipeline Corp.
Meridian Oil
Phillips Petroleum
Red River Pipeline
Teco Pipeline
Texas Utilities Fuel Co.
Valero Transmission
Westar Transmission

El Paso Natural Gas Co
Northern Natural Gas Co.
Transwestern Pipeline Co.



COMPOSITE TEXAS GULF COAST PIPELINES



Source: Major Natural Gas Transmission Pipelines, Railroad Commission of Texas, Transportation / Gas Utilities Division, April 1989; 1988 Texas Gas Pipelines, Prepared by DTC, Inc., 1988

III. DEFINITIONS

Two distinctions are pertinent in this report: the first, between intrastate and interstate pipelines, and the second, between transmission lines and gathering systems.

This report covers only intrastate gas transmission companies. Interstate gas pipelines and all gas gathering companies are excluded.¹ In addition, this report focuses on the large intrastate companies, defined as those with approximately 200 miles or more of transmission lines. This sample of large pipelines represents the majority of the pipeline ownership and volumes of gas transported in the intrastate market:

	Large Intrastate Pipelines as Percentage of <u>Total Intrastate Pipelines (1991)</u>	
	<u>Mileage</u>	<u>Throughput</u>
Louisiana	61%	86%
Oklahoma	NA	NA
Texas	86%	79%

¹ While intrastate gathering companies are excluded, there are instances where individual company pipeline mileage could not be separated between transmission and gathering facilities because of the integrated nature of the facilities.

Each of the three states defines intrastate pipelines in either a statutory act that provides State authority over the pipelines (see discussion below) or in rules written by the regulatory authority.

Louisiana regulations define an intrastate natural gas pipeline as a pipeline located and operated wholly within the State of Louisiana, but which is not merely a local branch of an interstate pipeline. Excluded are producer-owned producing and gathering lines and related facilities, provided they are not used for hire to transport natural gas for others.

In Oklahoma, any firm or combination of individuals may incorporate for the purpose of producing, transmitting, or transporting natural gas within the state by complying with the general corporation laws of the State of Oklahoma.

In Texas, a gas utility includes any person, corporation, cooperative, or any combination thereof, other than a municipal corporation, that owns or operates for compensation facilities in Texas for transmitting or distributing natural or synthetic natural gas for sale or resale in a manner which is not subject to the jurisdiction of the Federal Energy Regulatory Commission under the Natural Gas Act.

"Hinshaw pipelines" are interstate pipelines transporting or selling gas in interstate commerce for resale within the boundary of a state, and are exempt from FERC jurisdiction; such pipelines are also excluded from this study.

Transmission lines exclude gathering lines which have the primary function of collecting and/or processing gas produced by others and delivering gas from the field where it is produced, purchased or received to the trunk or main transmission line where it is sold or delivered. In Texas, the Railroad Commission clearly distinguishes between the two types of pipelines in that gas utilities, including intrastate pipelines, must file a general annual report, while gas gatherers file a gathering annual report. (See Appendix III for the statutory language defining intrastate gas pipelines in each state.)

IV. INTRASTATE MARKET PROFILE

Important influences on the character and nature of the intrastate pipelines are the markets that they serve. Louisiana, Oklahoma and Texas are the major U.S. gas producing states. In 1991, for example, they produced three-quarters of the Lower 48 States' gas supply, and held about 60 percent of the discovered reserves (including Federal offshore reserves) (Source: DOE/EIA, Natural Gas Annual, 1991).

The supply profiles for the three intrastate markets are summarized on the following table.

	Production (Dry)	Receipts from Interstate Market	Deliveries to Interstate Market	Net Shipments	Other a/	TOTAL
Louisiana	4,905.2	1,654.6	5,181.5	(3,526.9)	129.7	1,508.0
Oklahoma	2,052.0	330.5	1,756.7	(1,426.2)	(55.6)	570.2
Texas	5,980.3	709.9	2,742.2	(2,032.3)	(364.3)	3,583.7
TOTAL	12,937.5	2,695.0	9,680.4	(6,985.4)	(290.2)	5,661.9

a/ Change in storage and balancing.

Source: U.S. Dept. of Energy, Energy Information Administration, Natural Gas Annual, 1991.

By definition, the intrastate region is a surplus area, shipping supplies to other markets, i.e., interstate shipments. Some interstate deliveries are made to the intrastate region, although most are transshipments to the primary interstate market. Not only do these states represent three-quarters of the Lower 48 States' production, their gas production (in the composite) has increased in the past few years (1987 to 1991) by 1.6 percent, representing increases in Oklahoma and Texas, and declines in Louisiana. Total U.S. gas production increased by 6.4 percent over the same period, thus areas outside these states increased production by 22.2 percent.

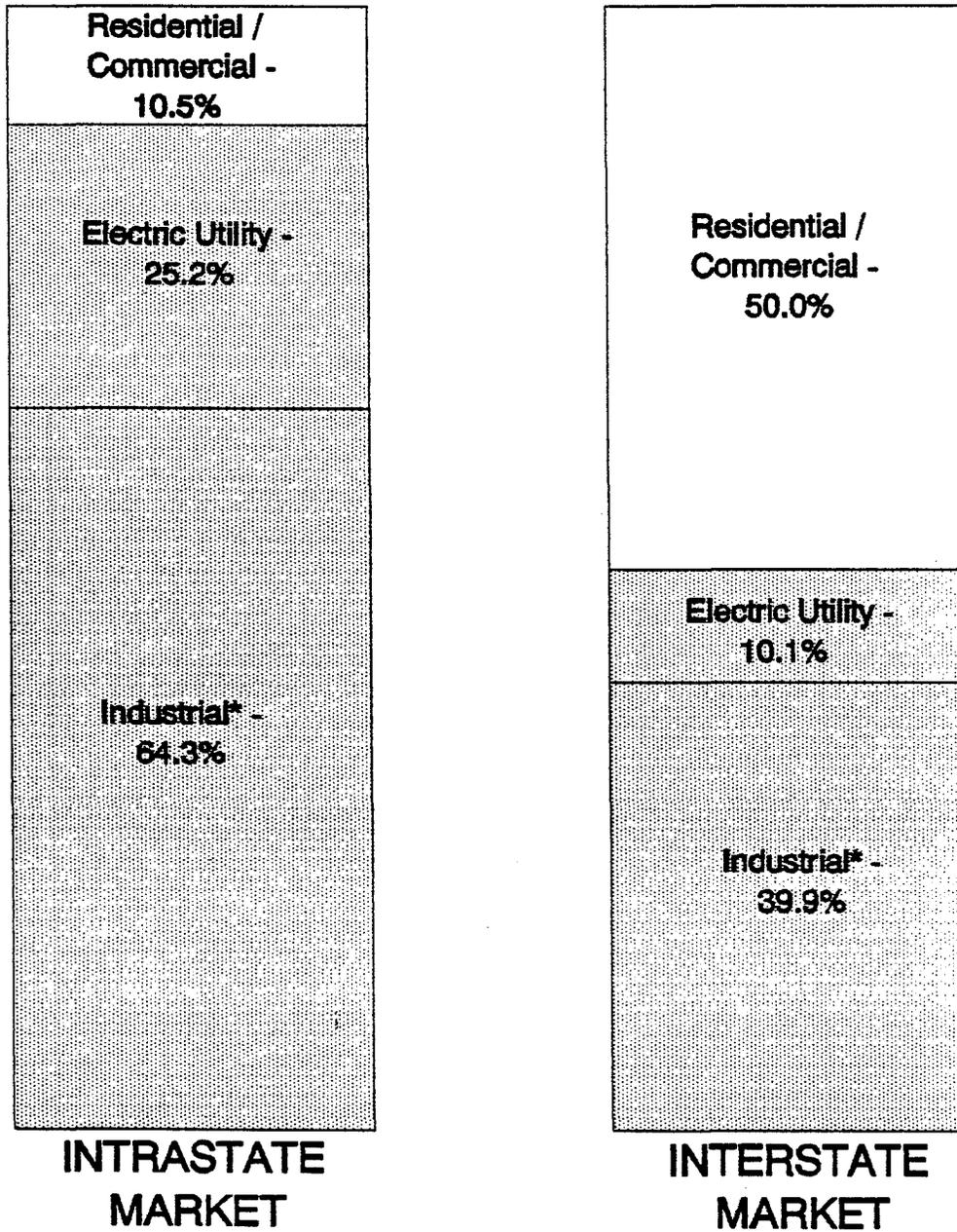
The intrastate market's gas demand profile differs sharply from the other parts of the U.S. The table below and the corresponding chart show these profiles for 1991.

Table 2 U.S. GAS MARKET PROFILE 1991 (Bcf)						
	Residential/ Commercial	Industrial	Electric Utility	Lease & Plant	Pipeline Fuel	TOTAL
INTRASTATE						
Louisiana	80.1	924.7	254.1	195.5	53.6	1,508.0
Oklahoma	108.8	180.7	167.2	88.4	25.1	570.2
Texas	402.9	1,772.7	1,005.1	320.0	82.0	3,582.7
Subtotal	591.8	2,878.1	1,426.4	603.9	160.7	5,660.9
INTERSTATE	6,693.1	4,353.3	1,362.0	544.5	440.2	13,393.1
TOTAL U.S.	7,284.9	7,231.4	2,788.4	1,148.4	600.9	19,054.0

Source: U.S. Dept. of Energy, Energy Information Administration, Natural Gas Annual, 1991.

Figure 1

GAS MARKET PROFILE



* Includes Lease + Plant Use and Pipeline Fuel.

Gas costs (prices) have historically been, and remain, lower in the intrastate market than the interstate market. For example, intrastate gas pipeline purchases have been priced about 11 percent below the average price paid by interstate pipelines -- \$1.83 per Mcf compared with \$2.05 per Mcf over the 1989-1991 period.¹ Furthermore, the average revenue for transportation of gas of others is lower for the intrastate pipelines than the interstate pipelines -- \$.13 per Mcf compared with \$.32 per Mcf.²

An important reason for the higher interstate pipeline average revenue, of course, is the longer distance of transport as well as the lower average load factor for these volumes (resulting from the higher heating load in the interstate market). Nevertheless, the end result is lower city gate and consumer gas prices in the intrastate market:

Table 3 AVERAGE PRICES FOR NATURAL GAS 1991 (\$/Mcf)			
	Intrastate Market	Interstate Market	Total U.S.
City Gate a/	\$2.62	\$3.90	\$3.00
Delivered to Customers:			
Residential/Commercial	4.92	5.49	5.44
Industrial/Elec. Utility	1.92	3.02	2.55
Total	2.29	4.35	3.77

a/ Average resale prices

Source: Department of Energy, Energy Information Administration, Natural Gas Annual (1991).

¹ Source: DOE/EIA, Natural Gas Annual (1991).

² Source: Annual Reports filed with the Texas Railroad Commission (1991) and interstate pipelines' FERC Forms 11 (monthly, 1991).

V. INTRASTATE PIPELINES

Data and information were collected for each major intrastate pipeline operating in the three state area. Foster Associates sent a survey to each intrastate pipeline company. The survey included questions concerning ownership, services offered, types of customers, pipeline mileage (both transmission and gathering), age of facilities, how rates are determined, the certification process, and system information about current capacity, and throughput volumes for sales and transportation, as well as system maps. The survey also requested information on each company's outlook for the next 10 years, including plans for expansion and projected throughput. Additional data sources include annual reports filed with regulatory authorities, Uniform Statistical Reports, annual reports to stockholders, and telephone interviews.

The primary criterion used to identify the large pipelines is mileage of pipe. The major intrastate pipelines are identified below and corporate addresses are listed in Appendix IV.

Louisiana

Acadian Gas Pipeline System
Bridgeline Gas Distribution Co.
Dow Intrastate Gas Co.
Louisiana Gas System Inc.
Louisiana Intrastate Gas Corp.
Louisiana Resources Co./
Louisiana Gas Marketing Co.
Monterey Pipeline
Transok, Inc.

Oklahoma

Delhi Gas Pipeline Corp.
Enogex
ONG Transmission
Phillips Petroleum
Transok, Inc.

Texas

Amoco Gas Co.
Channel Industries
Clajon Gas Co.
Delhi Gas Pipeline Corp.
Dow System
Enserch Gas Transmission/
Lone Star Gas
Exxon Gas System, Inc.
Gulf Energy Pipeline Co.
Houston Pipe Line Co.
Meridian Oil Hydrocarbons/
Meridian Oil Transmission

Mobil Vanderbilt-Beaumont
Seagull Energy
Southwestern System
Tejas Gas Corp.
Texas Utilities Fuel Co.
TransAmerican Pipeline
United Texas Transmission
Valero System
Westar Transmission

While this criterion is not necessarily the best determinant of size or importance, it does help identify the companies with the largest investment "in the ground". However, these high-mileage companies are also generally the largest in terms of throughput. For example, these major Texas intrastate pipelines represent 86 percent of the state's intrastate mileage and about 79 percent of total intrastate throughput.

A. LOUISIANA

1. Market Overview

In total, there are 22 intrastate pipelines in Louisiana, with eight of these included in this report. Table 4 summarizes salient features of these pipelines, including ownership, mileage and throughput for 1991.

Table 4

LOUISIANA-INTRASTATE PIPELINES - 1991

(Bcf)

Pipeline	Miles of Pipe (1992)	Intrastate Sales	Intrastate Transported Volumes	NGPA 311 Transported Volumes	Total System Throughput
Acadian Gas Pipeline System (Tejas)					
Acadian Gas Pipeline	424	0.9	114.6	16.4	131.9
Pontchartrain Natural Gas Co.	0	93.5	0.0	0.0	93.5
Total	424	94.4	114.6	16.4	225.4
Bridgeline Gas Distribution System	672	131.0	57.6	--	188.6
Dow Intrastate Gas Co.					
Mainline	176				
Gathering	43				
Total	219	22.1	3.6	19.2	44.9
Louisiana Gas System					
Mainline	80				
Gathering	29				
Total	109	68.2	3.6	0.0	71.8
Louisiana Intrastate Gas Corp.	1,859	11.9	130.9	62.7	205.5
Louisiana Resources System					
Louisiana Resources	502	0.0	76.4	219.5	295.9
Louisiana Gas Marketing	38	108.5	58.0	0.0	166.5
Total	540	108.5	134.4	219.5	462.4
Monterey Pipeline	560	46.2	44.9	0.0	91.1
Transok	198	0.0	22.3	44.7	67.0
Subtotal Major Pipelines	4,581	482.3	511.9	362.5	1,356.7
Other	2,919	62.1	112.1	47.3	221.5
TOTAL LOUISIANA	7,500	544.4	624.0	409.8	1,578.2

Source: 1991 Intrastate Pipeline Through-Put Survey, study prepared by State of Louisiana,
Department of Natural Resources, 1992.

The composite of all intrastate pipelines totals 7,500 miles of pipe, which represents only one-quarter of the total trunk line mileage in the state in 1991:

	<u>Miles</u>	<u>Percent</u>
Intrastate pipelines	7,500	25%
Interstate pipelines	<u>22,874</u>	<u>75%</u>
Total	30,374	100%

Two sets of throughput data are available for the intrastate Louisiana pipelines. The first is based on a special study, 1991 Intrastate Pipeline Through-Put Survey, prepared by the state's Department of Natural Resources, from a survey of responses by thirty-six intrastate pipelines. The second is an annual report generated by the Department of Conservation entitled Natural Gas Pipeline Summary of Acquisitions and Dispositions. The former source is used as the primary source for this report because of its accuracy in reporting actual transmission line throughputs, rather than gathering line throughput, which is included in the latter report. These data are shown in Table 4. The second source is used to report historical trends (since 1989) since the special survey is only available for 1991. These 1989-1991 data are reported in Appendix I.

Total 1991 throughput for the intrastate pipelines was 1,578.2 Bcf, of which eight major pipelines deliver 86 percent. The intrastate pipelines' throughput volumes minus Section 311 transport volumes to the interstate market total 1,168.4 Bcf, and compare with total state consumption of 1,508 Bcf (see Table 2).

Table 4 also shows the split between transport volumes and sales volumes. The Louisiana intrastate pipelines still provide an important sales function in that these volumes represent over one-third of the total, and close to one-half if the Section 311 volumes are excluded from the total. These figures are much higher than the corresponding figure of 13 percent for interstate pipelines reported by the Interstate Natural Gas Association of American (INGAA) in its report "Carriage Through 1992," July 1993.

Historical data are only available for pipeline throughput from the annual acquisitions and dispositions reports, as shown for 1989, 1990 and 1991 in Appendix I. In the composite, reported throughput declined between 1989 and 1990 before showing a 16 percent increase in 1991. The 1991 increase represented higher deliveries to transporters and processing plants, as well as city gate and industrial customers.

2. Description of Major Pipelines

The following is a brief discussion of each major intrastate pipeline in Louisiana. Appendix II presents maps of each major system.

- ◆ Acadian Gas Pipeline System is owned by Tejas Gas, which purchased it three years ago from Occidental and Marathon. Tejas Gas is engaged in purchasing, gathering, processing, transporting and marketing natural gas operations in Louisiana and Texas, with additional operations in Oklahoma and West Virginia.

Tejas recently announced that it had reached preliminary agreement to purchase Exxon's intrastate pipelines in Louisiana and Texas for \$300 to \$400 million. (See discussion re: Monterey Pipeline.)

This acquisition more than doubles Tejas' capacity. Prior to the acquisition, Tejas owned more than 3,200 miles of pipeline, primarily in Louisiana and Texas, and moves about 1.3 Bcf per day. It also operates 10 processing and treating plants. According to the company, the acquisition will provide a number of opportunities to Tejas, for example, to penetrate the electric generation market.

In 1992, Tejas formed a 50/50 partnership with Enserch in a company called Gulf Coast Natural Gas, a 580-mile pipeline along the Texas Gulf Coast.

Acadian (formerly Sugar Bowl) owns 424 miles of pipeline in South Louisiana. The line extends from the Gulf Coast area to include the Henry Hub to the Baton Rouge area (the Northern leg) and to the New Orleans area (the Eastern leg). The pipeline's market is the industrial market along the Mississippi River between these two cities. Average 1991 throughput was 450 MMcf per day, up from 400 MMcf per day in 1989.

- ◆ Bridgeline Gas Distribution System is owned by Texaco, Inc., a major integrated oil company. In addition to Bridgeline, Texaco owns Sabine Pipe Line and other pipelines in Louisiana, including lines from its onshore and offshore producing properties, that feed into Bridgeline.

Bridgeline is an extensive system located throughout South Louisiana. Bridgeline's principal customers include power companies (e.g., Louisiana Power and Light) and chemical companies (e.g., Monsanto). The market area extends from the Lake Charles area to Baton Rouge and along the Mississippi River to New Orleans.

- ◆ Dow Intrastate Gas Co. is a subsidiary of the Dow Chemical Company, a company engaged in the manufacturing of chemicals, plastic, agricultural products, and pharmaceuticals as well as

petroleum and energy products. Dow Chemical also owns Dow Pipeline Co., an intrastate pipeline in Texas.

Dow Intrastate Gas Co. is a 219-mile pipe, extending from the Lake Charles area to the Baton Rouge area, and includes a small gathering system. Primarily, Dow Intrastate serves Dow Chemical's manufacturing facilities at Plaquemine, just south of Baton Rouge. Average 1991 throughput was 195 MMcf per day, up sharply from 47 MMcf per day in 1989.

- ◆ Louisiana Gas System, Inc. is a subsidiary of Conoco, Inc., a major integrated oil company which is owned by E. I. duPont de Nemours and Co. Dupont is a leading world producer of chemicals, as well as other products.

Louisiana Gas System is located in southwest Louisiana, centering on the Lake Charles area, and extending eastwardly to St. Martin Parish, approaching the Henry Hub. The primary markets of the pipeline are Conoco's facilities -- the Egan and Gullis plants. Average pipeline throughput in 1991 was 223 MMcf per day, up slightly from 1989 throughput of 192 MMcf per day.

- ◆ Louisiana Intrastate Gas Corporation (LIG) has recently been purchased by Equitable Resources from Arkla, Inc., and the purchase price has been reported at \$190 million. Equitable is an LDC serving the Pittsburgh area. Equitable also has exploration, production, and marketing activities on the Gulf Coast and elsewhere, and operates an interstate pipeline in Pennsylvania, Kentucky and West Virginia.

LIG operates a 1,859-mile intrastate system in Louisiana, which has a capacity of approximately 1.5 Bcf per day. Average 1991 throughput was 1.0 Bcf per day, up from 0.8 Bcf per day in 1989. The pipeline extends from Northern Louisiana, through the Henry Hub to the Gulf Coast.

- ◆ Louisiana Resources Company is owned by the Enron Corp., which purchased the pipeline in April 1993 from Williams Energy Group,

and is a major integrated natural gas company engaged in all segments of the industry.

Louisiana Resources Company is a 502-mile intrastate pipeline which extends from the Louisiana-Texas border in southwestern Louisiana to a point outside New Orleans. The pipeline extends through the Henry Hub. Average throughput (sales and transportation) in 1991 was 812 MMcf per day.

Louisiana Gas Marketing Company, also owned by Enron, sells to end users and local distribution companies along the industrial corridor between Baton Rouge and New Orleans. The marketing company own 38 miles of pipe extending off Louisiana Resources' mainline.

- ◆ Monterey Pipeline System is currently owned by Exxon Corp., a major integrated oil company. Exxon owns Exxon Gas Systems, and two Hinshaw pipelines -- Humble Gas Transmission (Texas) and Humble Gas Transmission (Louisiana).

Exxon has recently announced plans to sell these properties to Tejas Gas Corp. for the reported price of \$300 to \$400 million. Tejas also owns Acadian Gas Pipeline, an intrastate Louisiana pipeline, as well as other natural gas interests (see above discussion for Acadian).

Monterey is a 560-mile pipeline with two legs extending from the Gulf Coast to Baton Rouge. Estimated capacity is 500 MMcf per day. Monterey primarily serves the industrial market along the Mississippi River between Baton Rouge and New Orleans, including Exxon's Baton Rouge refinery. Average 1991 throughput was 366 MMcf per day, about the same level as 1989.

- ◆ Transok, Inc. is wholly-owned by Central and Southwest Corp., a public utility holding company with four operating subsidiaries -- Public Service Co. of Oklahoma, Central Power & Light Co., Southwestern Electric Power Company and West Texas Utilities Co.

Transok's 400 miles of intrastate Louisiana pipelines are located in North Louisiana, east of Shreveport. The system is concentrated

around Monroe and is a combination of gathering and trunk line. Average 1991 throughput was 185 MMcf per day, about the 1990 level. (Data for 1989 are not available.) Transok's principal pipeline facilities are in Oklahoma (see discussion below). In 1991, the company purchased the natural gas business of Tex/Con Oil and Gas.

3. Louisiana Intrastate Pipeline Regulations¹

The transportation or sale of natural gas by intrastate pipelines to local distribution companies for resale is subject to rate and service regulation of the Louisiana Public Service Commission. The Commission has no jurisdiction over the direct industrial sales. LDC sales in Louisiana only represent about 5 percent of the total state gas consumption, and the remaining 95 percent is exempted from this regulation.

There is an exception to Commission lack of jurisdiction over direct industrial sales. If after investigation, the Commission finds that any particular industrial sale is "prima facie prejudicial" to the rates charged for natural gas to LDCs, the Commission can order adjustment to the rate charged the LDC to remove the prejudicial effect of the industrial rate.

Gas pipeline companies are also subject to regulation by the Department of Natural Resources, Office of Conservation. The basis of this regulation is the Natural Resources and Energy Act of 1973 (Act 16), as amended, and it includes

¹ Extracts and summaries of pertinent rules and regulations of Louisiana, as well as the other states, are presented in Appendix III.

jurisdiction over the prevention of waste, regulation of utilities and administration of the state's proprietary interest in minerals and pipeline safety.

One important regulatory role is held by the Commissioner of Conservation, whose mission is to prevent waste of the state's mineral resources. Act 16 provides that the sale of intrastate natural gas at prices below the fair market value, especially as compared to other fuels, is one of the primary causes of the energy crisis in the state [in 1973], "...in that it has caused and is causing the physical and economic waste, wasteful use and wasteful utilization of intrastate natural gas," especially in connection with excess capacity on pipelines. The Commissioner has the authority to solve excess capacity situations by means of rate regulation. However, to date, that authority has never been exercised. The Office of Conservation also has the authority, again never exercised, to impose rate regulation in case of curtailment or in any event which may affect the use of Louisiana-produced gas. It remains unclear when, or if, such regulation would be implemented.

The Office of Conservation has the authority to collect a large amount of data concerning intrastate gas pipelines, and maintains the following information on file in its offices in Baton Rouge¹: (1) Natural Gas Pipeline Summary of Acquisitions and Dispositions of gas for each of the major intrastate pipelines. (2) maps; (3) Annual Pipeline Safety Reports filed by all gas transmission and gathering systems in Louisiana, reporting pipeline length among other data; (4) other annual reports filed with the Louisiana Conservation Commission by gas

¹ In addition, a packet of materials is given to any party wishing to construct, operate, or expand a pipeline.

pipelines, LDCs, marketers, industrial customers, and others; and (5) summaries of sales by each segment of the industry, including intrastate pipelines. In addition, a special study was prepared in 1991 by the Office of Conservation on total system throughput of Louisiana intrastate pipeline companies. The Conservation Commission provided results of the 1991 survey to Foster Associates to use in this report (see Table 4).

B. OKLAHOMA

1. Market Overview

Five pipelines have been identified as intrastate pipelines in Oklahoma, all classified as major pipelines. Table 5 summarizes salient features of these systems in 1991¹; Phillips Petroleum is excluded because of lack of data.

The total mileage of these five pipelines in 1991 is 12,051, representing the majority of the trunk line mileage in the state:²

	<u>Miles</u>	<u>Percent</u>
Intrastate pipelines	12,051	59%
Interstate pipelines	<u>8,540</u>	<u>41%</u>
Total	20,591	100%

¹ 1991 is the only year available.

² Oklahoma interstate transmission mileage is overstated because it includes some gathering mileage (see Table 5).

Table 5

OKLAHOMA - INTRASTATE PIPELINES - 1991

PIPELINE COMPANY (Parent) *	Miles of Pipeline		Throughput (MMCF)		
	Transmission	Gathering	Sales	Transportation	Total
Delhi Gas Pipeline (USX Corp.)	2,680	a/	-	110,230	110,230
Enogax (OK Gas and Electric Corp.)	3,000	a/	-	153,636	153,636
ONG Transmission (ONEOK, Inc.)	5,176	a/	2,836 b/	281,273	284,109
Transok, Inc. (Central and Southwest Corp.)	1,095	1,187	30,000	216,000	246,000
Anadarko (Central and Southwest Corp.)	100	700	-	113,000	113,000
Total Companies	12,051	1,887	32,836	874,139	906,975

a/ Included with transmission.

b/ Includes only sale for resale. ONEOK is an integrated transportation / distribution company. Total distribution sales were 166 Bcf in 1991.

* Excludes Phillips for the lack of data.

Sources:

Delhi - Response to Foster Associates' survey.

Enogax - Cause No. PUD896 and 1005, Corporation Commission of Oklahoma, Testimony of L.W. Thompson, P.E., 2/10/92, Section A, schedule 6.

ONEOK - Uniform Statistical Report, Year Ended December 31, 1991.

Transok - Response to Foster Associates' questionnaire.

The total throughput of the four intrastate carriers with available data is 907 Bcf, and the majority of the throughput is transportation volumes, including Section 311 gas for interstate movement. The proportion of transportation volumes might be somewhat overstated because ONEOK is an integrated transmission/distribution company, and volumes are generally purchased in the field and transported to the distribution system by ONG Transmission, a division of ONEOK Inc.

Total Oklahoma gas consumption in 1991 was 570 Bcf, compared with major intrastate pipelines' throughput of 907 Bcf. Thus, the intrastate carriers transport for each other (creating double accounting), transport interstate volumes, and transport significant Section 311 gas to the interstate market.

2. Description of Major Pipelines

The following is a brief discussion of each major intrastate pipeline in Oklahoma. Appendix II presents system maps.

- ◆ Delhi Gas Pipeline Corp. is a subsidiary of USX Corp., a diversified company engaged in energy through its Marathon Oil Group and in the steel business through its U.S. Steel Group. USX's Delhi Group consists of Delhi Gas Pipeline and several other related companies engaged in gathering, processing, transporting, and marketing natural gas.

Delhi Gas Pipeline has transmission lines in all three of the intrastate markets in this study, plus Arkansas, Colorado, and Kansas. The company performs an important gathering function in Oklahoma, as well as a transmission function. In responding to Foster Associates'

survey, the company did not separate the gathering mileage from transmission mileage. The company's pipeline system is in the northwestern part of Oklahoma, i.e., Hugoton-Anadarko Basin. Average 1991 throughput was 421 MMcf per day, all transport volumes.

- ◆ Enogex Inc. is a wholly owned "non-utility" subsidiary of Oklahoma Gas and Electric Co., the largest electric utility in Oklahoma. (About one-third of OG&E's power is generated by gas.) Enogex is engaged in gathering and transporting gas to utilities (primarily OG&E), to other transporters (e.g., Transok) and to end-users in Oklahoma. In addition, the pipeline transports Section 311 gas to the interstate market.

Enogex has four subsidiaries engaged in exploration and production, gas processing, and other services for the gas industry. The company owns about 3,000 miles of pipe, extending from the Arkoma Basin in eastern Oklahoma to the Anadarko Basin in western Oklahoma. Average 1991 throughput was 475 MMcf per day, all transportation volumes. The majority of Enogex's throughput is on behalf of its parent, Oklahoma Gas and Electric Co. The pipeline transports for Transok and others.

- ◆ ONG Transmission Co. is a division of ONEOK, Inc., and the other major division of the parent is Oklahoma Natural Gas. These two utility divisions purchase, gather, transport and distribute gas in Oklahoma, and the largest markets are Oklahoma City and Tulsa. In addition, ONG Transmission leases capacity to others and provides interstate transportation service under Section 311. The non-utility division of ONEOK is engaged in gas processing as well as exploration and production activities.

ONEOK owns a total of 5,176 miles of transmission and gathering lines throughout the state. The company did not separate the gathering mileage from the transmission mileage. The company also owns interests in the 280-mile Ozark Gas Transmission System, running from western Oklahoma to Arkansas, and in Red River Pipeline (recently purchased from Delhi), consisting of 361 miles of

pipeline extending from Hemphill County, Texas to Pecos, Texas, where it connects with the Oasis System. In addition, the company owns five underground gas storage fields.

The company's average 1991 throughput was 778 MMcf per day, primarily transport volumes on behalf of the company's distribution system. (Section 311 volumes and shipments on leased capacity to fertilizer plants and represent 16 percent and 25 percent of the company's throughput, respectively.)

- ◆ Phillips Natural Gas Company is a wholly-owned subsidiary of Phillips Petroleum Company, a major integrated oil, gas and chemical company, with activities ranging from producing raw materials to manufacturing and marketing finished products. Phillips' Oklahoma system includes facilities originally owned by Phillips Petroleum Co. in the Anadarko producing area. In the mid-1980s, Phillips converted a 200-mile oil line to a gas line, presently known as Phillips Gas Pipeline Co. (This pipeline is subject to FERC jurisdiction.) The line capacity is 225 MMcf per day, and provides only transportation services. This line extends from near Cushing, Oklahoma to the Oklahoma/Texas border, interconnecting with Phillips' Texas Border Pipeline.

Phillips Natural Gas Company also has over 1,800 miles of intrastate pipeline in Texas and is a transporter of gas for others. Phillips' principal trunk line in Texas (the Seagas pipeline) extends from Texas Railroad District 9 (near the Oklahoma border) to the Texas Gulf Coast (near Freeport). This Texas line is a Hinshaw pipeline which receives supplies from Phillips' Oklahoma system, and transports the gas to meet its requirements in plants near the Texas Gulf Coast, especially its refinery at Sweeney, Texas and its petrochemical plant at Pasadena, Texas. Capacity of the Texas intrastate pipeline is 75 MMcf per day.

- ◆ Transok, Inc. is wholly-owned by Central and Southwest Corp., a public utility holding company with four operating subsidiaries -- Public Service Co. of Oklahoma, Central Power & Light Co., Southwestern Electric Power Company and West Texas Utilities Co.

Transok acts as an agent for Public Service Co. of Oklahoma with respect to purchases and development of gas supplies. Transok also transports gas to the utility's power plants, as well as on behalf of others. In 1991, Transok leased pipeline capacity of 125 MMcf per day to Williams Natural Gas and Texas Eastern Transmission, with an option to increase the leased capacity to 400 MMcf per day. In the same year, Transok purchased the marketing, transmission and processing business of Tex/Con Oil and Gas, and the gathering facilities of Reliance Pipeline Co. In 1993, Transok purchased the 250 miles of gathering facilities of NAGS from Natural Gas Clearinghouse and Apache, and a processing plant in the Anadarko Basin. Transok currently owns eight processing plants with a combined capacity of 471 MMcf per day. Total pipeline throughput in 1991 was 983 MMcf per day, primarily transport volumes.

3. Oklahoma Intrastate Pipeline Regulations

Intrastate gas pipelines are under the jurisdiction of the Corporation Commission of Oklahoma. The statutes governing natural gas pipelines are found in Title 52 of the Statutes, entitled "Oil and Gas".

The Corporation Commission can adopt and enforce safety standards for intrastate pipelines (Section 5). Before any gas pipeline can construct any pipeline for the transportation of gas, it shall file in the Corporation Commission's office a plat showing in detail the route proposed to be constructed, the intended size and capacity, and the location and capacity of all pumping stations and connections of all kinds on the line (Section 8).

All corporations, companies, etc. that transport natural gas for hire are subject to the Production and Transportation Act of 1913. Pipeline operators are

common purchasers (Section 23) and common carriers (Section 24), and are prohibited from discrimination in favor of their own production.

Under Section 24.1, the Corporation Commission, upon complaint filed by an aggrieved party, can order a pipeline to purchase or transport natural gas, and fix a fair rate for such transportation. In the current session of the legislature, ended on May 31, 1993, a new Section 24.3 was passed, giving the Corporation Commission explicit authority over gathering fees, providing for complaint and hearing procedures in the case of "unjust and unlawful discriminatory" fees.

According to the Commission's Office of General Counsel, the Commission has broad general powers and could require both oil and gas pipelines to file regular rate proceedings. However, in modern times there has been no regulation of rates although the authority exists, and there is no move toward such regulation. The Commission can mediate disputes between transporters and producers. There is no regulation of tariffs on transmission of natural gas under the utility rate base. There is no requirement that rates be on file with the Commission.

Apparently, there is some controversy as to whether intrastate pipelines are subject to direct rate regulation by the Corporation Commission. Enogex, Inc., a subsidiary of Oklahoma Gas and Electric, states for example, that the intrastate pipeline business is not directly regulated by the Commission. Nevertheless, Enogex does admit that the Commission has "the authority to examine the appropriateness of any transportation charge or other fee paid by OG&E to Enogex, which OG&E seeks to recover from ratepayers".

See Appendix III for further details.

C. TEXAS

1. Market Overview

Texas has more intrastate pipelines than any other state. In total, over 60 pipelines were identified as intrastate transmissions lines in Texas, and 19 of these were classified as major pipelines. Table 6 summarizes salient features of all the pipelines. Similar data for 1989-1991 are presented in Appendix I.

Total intrastate trunk line mileage in 1991 is 50,288, representing almost two-thirds of the total state mileage.

	<u>Miles</u>	<u>Percentage</u>
Intrastate pipelines		
Major	43,434	54%
Other	<u>6,854</u>	<u>9%</u>
Subtotal	50,288	63%
Interstate pipelines a/	<u>30,112</u>	<u>37%</u>
Total	80,400	100%

a/ Includes the Hinshaw pipelines of Phillips and Humble.

Table 6

TEXAS - INTRASTATE PIPELINES - 1991
(MMcf)

PIPELINE COMPANY	Miles of Pipeline	Retail Sales	Sales for Resale	Total Sales	Transportation of Gas for Others	Total Throughput
Large Pipelines						
Amoco Gas Co.	437	52,223		52,223	58,739	110,962
Channel Industries (Tenneco)	701				244,252	244,252
Ciajon Gas Co.	1,292	117	32,487	32,604	18,597	51,200
Delhi Gas Pipeline Corp.:						
Delhi Gas Pipeline Corp.	4,147	16,728	13,268	29,996	115,179	145,175
Red River Pipeline a/	372				12,597	12,597
Western Gas Corp.	402	2,620		2,620	8,090	10,709
Total	4,921	19,348	13,268	32,616	135,866	168,482
Dow System Co.:						
Dow Pipeline Co.	468	834		834	119,437	120,271
Intratax b/	8	1,234	3,236	4,470	224	4,694
Oasis Pipeline Co. c/	575		1,239	1,239	425,896	427,135
Total	1,051	2,068	4,475	6,543	545,557	552,100
Enserch Gas Transmission:						
Enserch Gas Transmission	504	13,820	8,164	21,985	25,817	47,801
Lone Star Gas Co., Div. of Enserch	7,103	74	16	90	290,436	290,526
Total	7,607	13,894	8,181	22,075	316,252	338,327
Exxon Gas System, Inc.	1,650	65,798	14,928	80,726	216,491	297,217
Gulf Energy Pipeline Co.	899		5,303	5,303	87,770	93,073
Houston Pipe Line Co. (Enron)	2,899	4,161	19,424	23,585	751,895	775,480
Meridian:						
Meridian Oil Hydrocarbons	345	6,175	42,418	48,595 d/	9,162	57,757
Meridian Oil Transportation, Inc.	181	18,594	7,381	25,976	4,057	30,032
Total	526	24,769	49,800	74,571	13,218	87,789
Mobil-Vanderbilt-Beaumont	246				37,018	37,018
Seagull Energy:						
Seagull Energy	224		1,877	1,877	15,299	17,176
Seagull Natural Gas Co.	172		1,787	1,787	21,845	23,633
Seagull Shoreline	68				222	222
Total	464		3,664	3,664	37,367	41,030
Southwestern System (Mitchell Energy & Development):						
Brazos		204	1,838	2,042	10,708	12,750
Ferguson-Crossing		5,473	12,254	17,727	2,138	19,865
Ferguson-Burleson	795	9,979	29,971	39,950	1,044	40,994
Southwestern Gas Pipeline	2,284	27	9,632	9,659	50,366	60,025
Texline	80				2,718	2,718
Winnie Pipeline Co.	509	21,036	4,499	25,536	37,963	63,498
Total	3,668	36,720	58,194	94,913	104,937	199,850
Tejas Gas Corp. e/	607	165	1,119	1,284	80,881	82,165
Texas Utilities Fuel Co.	2,086	337,107	65	337,172	7,793	344,965
TransAmerican Pipeline:						
TransAmerican Pipeline	607				114,460	114,460
TransAmerican Transmission Corp.	104				110,199	110,199
Total	711				224,659	224,659
United Texas Transmission:						
United Texas Transmission	2,165	120,531	38,665	159,197	271,113	430,310
Palo Duro Pipeline Co. Inc. f/	388	7		7	17,600	17,607
Total	2,553	120,538	38,665	159,203	288,714	447,917

Table 6

TEXAS - INTRASTATE PIPELINES - 1991
(MMcf)

PIPELINE COMPANY	Miles of Pipeline	Retail Sales	Sales for Resale	Total Sales	Transportation of Gas for Others	Total Throughput
Valero System:						
Javeline Pipeline Co.	14				48,603	48,603
REATA Industrial						
Rio Pipeline	419				11,702	11,702
TransTexas Pipeline g/	456				77,466	77,466
VHC Pipeline	30				8,250	8,250
Valero Gas	86		90	90	3,383	3,472
Valero Gas, LP	273	14,840	885	15,724	9,895	25,619
Valero Gathering						
Valero Gathering, LP	219				18,905	18,905
Valero Transmission, LP	5,293	13,843	22,901	36,998	h/ 680,092	717,090
Total	6,790	28,683	23,876	52,812	858,296	911,108
Westar Transmission (American Oil & Gas)	4,326	119	17,001	17,120	182,387	199,507
Total Large Pipelines	43,434	705,709	290,448	996,413	4,210,689	5,207,102
Total Other Companies	6,854	295,031	151,862	451,203	911,164	1,362,367
Grand Total	50,288	1,000,740	442,310	1,447,616	5,121,853	6,569,469

a/ Delhi recently sold its interest to ONEOK. Remaining interest owned by American Oil and Gas.

b/ Jointly owned with Houston Pipe Line.

c/ Jointly owned with Houston Pipe Line, and a joint venture between Dow Chemical and Tenngasco.

d/ Includes 2 MMcf other.

e/ Owns 50% of Gulf Coast Energy.

f/ Jointly owned with Midcon, subsidiary of Occidental.

g/ Jointly owned with Teco.

h/ Includes 253 MMcf other.

i/ Includes 829 MMcf other and 885 MMcf interdepartmental.

Source: Gas Utilities Annual Report Fiscal Year 1992,
Railroad Commission of Texas

Total 1991 throughput for the intrastate pipelines was 6,569 Bcf, of which the major companies represent about 79 percent. While most of the companies with high mileage also have the highest levels of throughput, there are several relatively small mileage pipelines with high throughput, including East Texas Gas System and Enron Industrial Gas Co.

As in statistics for Louisiana and Oklahoma, the published throughput volumes in the Texas intrastate market have the problem of double counting (e.g., gas transported by more than one party). Total Texas gas consumption in 1991 was 3,584 Bcf, compared with throughput by the intrastate carriers of nearly double this amount. The difference arises from the double counting problem and the intrastate pipelines' transportation of Section 311 gas to the interstate market. Because of this double counting problem, it is not possible to determine exactly the true proportion of sales versus transportation services provided by the Texas intrastate carriers; the sales volumes range from 22 to 44 percent of throughput, and the percentage is probably closer to the higher end of the range.¹ This range assumes that no interstate gas is consumed in Texas; however, we know that small volumes are shipped into Texas.

2. Description of Major Pipelines

The following is a brief discussion of the major intrastate pipelines in Texas. System maps are presented in Appendix II.

¹ The low figure of the range is calculated using total throughput, while the upper end is calculated from the intrastate gas consumption.

- ◆ Amoco Gas Company is a subsidiary of Amoco Production Company, a major integrated oil company, and is a large integrated petroleum and chemical enterprise that conducts operations on a worldwide basis. Currently, Amoco is a transmission pipeline; all major gathering facilities have been divested. The company's pipeline is located on the Gulf Coast, around the Houston area, connecting to the Katy Hub. Amoco is not an open-access pipeline. Current capacity is approximately 750 MMcf per day, and the average age of transmission facilities is 20 years.

In 1991, average throughput was 304 MMcf per day. Over the period since 1989, throughput has declined sharply as a result of declines in sales volumes. However, according to the company, the prospects over the next 10 years are "very good". Amoco plans to continue to look for new sales, supply and transportation opportunities on the system. Gas storage opportunities may be expanded in the future. Projected throughput during the next 10 years is over 600 MMcf per day.

- ◆ Channel Industries Pipeline is a subsidiary of Tenneco, Inc., a diversified industrial corporation with major interests in natural gas pipelines, chemical and minerals, and manufacturing. Channel is approximately 700 miles in length, and extends from the Texas/Louisiana border in Orange County, to the coast line in Kenedy and Willacy counties in South Texas. Channel historically has sold gas to industrial and electric utility customers. In the years 1989-1992, however, the Texas annual reports lists the pipeline only as a transporter of gas for others. In 1991, average throughput was 669 MMcf per day, up significantly from the 1989 level.

- ◆ Clajon Gas Co. is held by Clajon Holding. According to the Texas Railroad Commission, the company owns 1,292 miles of pipe with total 1991 throughput averaging 140 MMcf per day. About two-thirds of the throughput is resale volumes and one-third is transportation volumes on behalf of an affiliate marketing company, industrials, and power companies. (No additional information is available on this company.)

- ◆ Delhi Gas Pipeline is a subsidiary of USX Corp., a diversified company engaged in energy through its Marathon Oil Group and in the steel business through its U.S. Steel Group. USX's Delhi Group consists of Delhi Gas Pipeline and other related companies engaged in gathering, processing, transporting and marketing gas. Delhi has intrastate pipeline and gathering systems in Texas and Oklahoma, and has additional operations in Louisiana, Arkansas, Colorado and Kansas. As of June, 1992, Delhi had a total of approximately 7,500 miles of intrastate natural gas pipeline systems, and held interests in three partnerships which bring total system mileage to approximately 8,400 miles.

Delhi Gas Pipeline owns approximately 4,500 miles of intrastate pipeline in Texas. The pipeline is not open-access, and has a peak historical capacity of approximately 831 MMcf per day. Average 1991 throughput was 398 MMcf per day, up slightly from the 1989 level. Customers include LDCs, utility electric generators (UEG), pipelines, industrial end users, and marketers. Delhi's largest customers in Texas are Southwestern Electric Power Company, Central Power and Light Company, Lone Star Gas Company, and Entex.

In addition to Delhi Gas Pipeline, the Delhi Group holds a 50 percent interest in the Laredo-Nueces Pipeline, an intrastate pipeline in South Texas. And, according to Delhi, it has recently sold its 25 percent interest in the Red River Pipeline (located in West Texas) to ONEOK.

Delhi plans to expand its merchant gas sales, with particular emphasis on premium supply services to LDCs and UEGs. Delhi believes that it will need to increase system throughput by acquiring additional gas reserves, by building or acquiring gathering, processing and transmission facilities and engaging in active marketing to existing and new customers.

- ◆ Dow Pipeline Co. is a subsidiary of the Dow Chemical Company, a company engaged in the manufacturing of chemicals, plastic, agricultural products, and pharmaceuticals as well as petroleum and

energy products. Dow Chemical also owns Dow Intrastate Gas Co., an intrastate pipeline in Louisiana.

Dow Pipeline Co. is a 468-mile pipeline extending along the Texas Gulf Coast from the Katy Hub. Most of Dow's throughput is transportation volumes on behalf of affiliate companies (e.g., Dow Chemical -- Texas Operations), and to a lesser extent, on behalf of others (e.g., Houston Pipe Line Co.). Dow owns 45 percent of the Oasis Pipe Line, which extends from West Texas to the Katy Hub. Other owners of Oasis are Houston Pipe Line and Tenngasco. Throughput averaged 330 MMcf per day in 1991, up slightly from 1989.

- ◆ Enserch Gas Transmission Co. and Lone Star Gas Company are both subsidiaries of Enserch Corporation, which is an integrated company focused on natural gas. The bulk of Enserch's transmission and distribution activities are carried out by Lone Star, whose customers are residential, commercial, industrials and other pipelines. Current capacity is approximately 3,000 MMcf per day. The pipeline is an open-access pipeline.

Average total throughput in 1992 was 1,447 MMcf per day, either flowed through the pipeline system or sold off system. During the past five years (1988-1992), average annual increase in total throughput has been 7 percent.

Lone Star's system includes both transmission and distribution operations, and this integration gives the company an advantage as a wellhead to end-use company that is adapting to more competitive market. The majority of its customers are in the Dallas/Fort Worth area. The pipeline is approximately 9,000 miles in length, of which more than 7,000 is transmission mileage, and the rest is gathering. It extends from the major gas producing areas of the Texas Gulf Coast, South Texas and West Texas primarily to its market area.

Enserch Gas Transmission Company is a non-regulated marketer of natural gas, and provides certain markets with non-utility services. The company owns 50 percent of Gulf Coast Natural Gas Co. that

extends from the Gulf Coast producing area to the Katy Hub. Tejas Gas owns the remainder of the pipeline.

Although the company, as an intrastate pipeline, is not directly affected by FERC Order No. 636, the Order does increase opportunities for Enserch companies to provide customers on various pipelines with multiple gas sales services, such as term contracts with interruptible and firm deliveries, aggregation of supplies, storage, and nominations and scheduling of deliveries.

Enserch is actively developing the natural gas vehicles (NGVs) market, and Lone Star transports gas to sales stations for compression.

To meet growing markets, Lone Star will continue to make improvements to its pipeline system. By the end of 1993, two new compressors will have been added, which will increase Lone Star's capacity to move gas from East Texas by up to 65 MMcf per day and increase pipeline capacity between the Waha Hub in West Texas and the Katy Hub in southeast Texas.

- ◆ Exxon Gas System, Inc. is currently owned by Exxon Corp., a major integrated oil company. Exxon Corp. also owns Monterey Pipeline, an intrastate pipeline in Louisiana, and two Hinshaw pipelines -- Humble Gas Transmission (Texas) and Humble Gas Systems (Louisiana).

Exxon Corp. has recently announced plans to sell these properties to Tejas Gas Corp. which owns another intrastate pipeline in Texas (see below). The reported price tag is \$300 to \$400 million.

Exxon Gas System, Inc. is a 1,650-mile pipeline which has two main legs, one from Kingsville in south Texas and the other from around Longview in east Texas, both running to Houston. The pipeline also owns two field storage facilities. The pipeline was originally built to serve Exxon's refinery at Baytown, Texas, and other customers along the Houston Ship Channel. The system throughput has declined over the past years due to declining production and reduced gas requirements by some of Exxon's other customers. Recent

throughput has averaged 0.8 Bcf per day, compared with a capacity of about 2.0 Bcf per day.

- ◆ Gulf Energy Pipeline Co. is owned by Gulf Energy Development Co. The pipeline company owns 899 miles of pipe extending from south Texas to Austin. The majority of the pipeline's throughput is transportation volumes on behalf of the company's marketing affiliate and Houston Pipe Line Co. The pipeline's throughput has increased substantially over the past few years -- 43 percent between 1989 and 1991. Gulf Energy Pipeline jointly owns a pipeline in the southern part of its system with Houston Pipe Line Co.
- ◆ Houston Pipe Line Company (HPL) is an affiliate of Enron Gas Services Corp. (EGS) a subsidiary of Enron Corp, which is a major integrated natural gas company engaged in all segments of the natural gas business.

HPL serves a variety of industrial customers, utilities and natural gas transmission companies. HPL's pipeline operations function primarily as a gas gathering and transportation system, with natural gas sales made primarily by non-regulated marketing companies. The average age of the pipeline facilities is 30 to 40 years, and the pipeline has a projected annual capital expenditure plan of \$60 to \$70 million. HPL's gas sales, transportation and storage services are subject to seasonal variation because many of its customers have weather-sensitive gas requirements. In 1991, average throughput was 2,125 MMcf per day. HPL continues to provide some long-term system sales to gas distribution companies at city gates, however, the majority of the throughput is transportation volumes.

Enron also owns 25 percent of Oasis Pipe Line Company, a 520-mile pipeline which connects West Texas supply to the main Houston Pipe Line system. Other owners of Oasis are Dow Chemical and Tenggasco in a joint venture agreement. All three pipelines move gas through the Oasis line.

Intratex, which operates primarily as a gathering line into Oasis facilities in West Texas, is another wholly-owned subsidiary of Enron.

Support services offered by HPL to EGS customers include electronic nomination, transportation management, customized billing, confirmation of nomination changes and daily load balancing on the HPL system.

EGS (including HPL) states that it should benefit in 1993 from significant margin opportunities resulting from FERC Order No. 636. HPL will focus on marketing long-term fixed price arrangements, continue development of new products and services, and will also target independent power projects and electric utilities which may convert to gas in response to the Clean Air Act.

- ◆ Meridian Oil Hydrocarbons, Inc. (Hydrocarbons) owns 245 miles of pipe, and Meridian Oil Transportation (Transportation) is a 216-mile pipeline (181 miles transmission and 35 miles gathering), both located in West Texas. The two pipelines are not contiguous, but are connected by a leg of the Westar Transmission Company. In addition, Hydrocarbons participates in a joint venture line with Westar from Waha to a connection with Hydrocarbons' main transmission line in Midland County. The parent company is Meridian Oil, Inc.

Current capacity of each pipeline is 175 MMcf per day, and Hydrocarbons' facilities average 29 years in age, while Transportation's facilities average 19 years. Each pipeline serves LDCs, industrials, and electric generators. Average 1991 throughputs were 158 and 82 MMcf per day, respectively, and both levels are up sharply from the 1989 level.

- ◆ Mobil Vanderbilt-Beaumont Pipeline Company is a subsidiary of Mobil Oil, a large integrated oil company with major chemical operations. The Vanderbilt-Beaumont pipeline extends approximately 246 miles from the East Texas supply area near Beaumont along the Gulf Coast to Mobil's Vanderbilt plant in Jackson County, Texas. It operates as a transporter of gas for others. Average 1991 throughput was just over 100 MMcf per day.

- ◆ Seagull Energy owns and operates 42 onshore and offshore intrastate gas gathering pipelines in the southwestern U.S., and has a partial interest in six other intrastate pipelines. In Texas, Seagull owns and operates Seagull Energy Pipeline, Seagull Natural Gas Co. Seagull Shoreline System, all located in the Texas Gulf Coast, and Cavallo Pipeline Company. The Seagull system is a marketer, purchasing and reselling natural gas. It also transports gas for others. Total system throughput was 112 MMcf per day in 1991, down from the 1989 level.

- ◆ Southwestern Gas Pipeline, Inc. System includes Southwestern Gas Pipeline, Inc. (Southwestern), Ferguson-Burleson County Gas Gathering System, and Winnie Pipeline Co. (Winnie). The parent is Mitchell Energy and Development Corporation, a holding company whose subsidiaries are engaged in exploration and production, operation of intrastate pipelines (both transmission and gathering lines) and real estate development.

Southwestern Gas Pipeline includes Texline Gas Co., a 234-mile gathering system in South Texas, acquired in March 1990, Brazos Pipeline System and Ferguson Crossing Pipeline, which were merged into Southwestern late in 1992.

Southwestern has total Texas mileage of 3,725 miles, including the Brazos system, which extends 235 miles to the Katy Hub. The Winnie Pipeline totals 510 miles. Southwestern's customers are city gate and industrial customers; Winnie's are industrial. Southwestern is not an open-access pipeline.

The total pipeline system's average daily throughput in fiscal 1992 (year ended January 31, 1992) was 581 MMcf per day, compared to 458 MMcf per day in fiscal 1991, and 421 MMcf per day in fiscal 1990. Much of the increase was due to increased gas production in the Austin Chalk area of central Texas, where horizontal drilling has increased. Throughput in fiscal 1992 consisted of 63 percent sales volumes and 37 percent transportation, compared to 74 percent sales volumes and 26 percent transportation volumes in fiscal years

1991 and 1990. The company expected to shift more of the throughput to sales volumes in fiscal 1993.

The company reports certain expected changes over the next 10 years. Winnie has completed the first cavern of a planned 12 Bcf salt dome storage project at Spindletop Natural Gas Storage Field near Beaumont, Texas. The company expected to begin storing gas there late in the second half of fiscal 1993. A natural gas-powered compressor station and pipeline header system were scheduled to be installed in the second quarter of fiscal 1993, and leaching of a second cavern is underway. The company believes that the storage facility will position Winnie as a major supplier to the "Golden Triangle" industrial complex on the Texas Gulf Coast.

Other initiatives to accelerate marketing activities of Southwestern's pipeline operations include establishing market outlets in the northeast, improving pipeline connections to other systems and increasing gathering and transporting of gas in "hot" drilling areas such as Austin Chalk. Pipeline acquisitions and expansions have enabled Southwestern to increase gas supplies, throughput and marketing flexibility in a highly competitive environment. Additional throughput has opened up new gas processing opportunities.

- ◆ Tejas Gas Corp. is a pipeline company engaged in purchasing, gathering, processing, transporting and marketing natural gas operations in Texas and Louisiana, with additional operations in Oklahoma and West Virginia. Currently, the company owns a 607-mile pipeline in Texas, and total throughput averaged 225 MMcf per day in 1991, primarily sales volumes.

Tejas recently announced that it had reached preliminary agreement to purchase Exxon's intrastate pipelines in Texas and Louisiana for \$300 to \$400 million. (See above discussion re Exxon Gas System and Monterey Pipeline.)

The acquisition more than doubles Tejas' capacity. Prior to the acquisition, Tejas owned more than 3,200 miles of pipeline primarily in Texas and Louisiana, and currently moves about 1.3 Bcf per day.

It also operates 10 processing and treating plants. According to the company, the acquisition will provide a number of opportunities to Tejas, for example, to penetrate the electric generation market. The Exxon lines will also bridge several gaps between legs of Tejas' existing system, and give it greater access to the Houston market. A number of the Tejas gathering lines are already tied into the Exxon system.

Three years ago, Tejas acquired the Acadian Gas Group from Occidental and Marathon. And in 1992, Tejas formed a 50/50 partnership with Enserch in a company called Gulf Coast Natural Gas, a 580-mile pipeline along the Texas Gulf Coast.

- ◆ Texas Utilities Fuel Company (TUFCO) is a wholly-owned subsidiary of the Texas Utilities Company, and provides gas solely for generation stations of Texas Utilities Electric Co., another subsidiary. The pipeline supplies approximately 49 percent of the gas requirements under contracts with producers, and 51 percent under contracts with commercial suppliers. Throughput averaged 945 MMcf per day in 1991, primarily sales volumes.

TUFCO owns and operates an intrastate pipeline system which extends from the Permian Basin in west Texas, to east Texas and southward into the Gulf Coast area. The pipeline system is approximately 2,100 miles long. The system includes a one-half interest in a 36-inch pipeline (together with Valero) which extends 395 miles from the Permian Basin to a point south of the Dallas-Fort Worth area and has a total estimated capacity of 800 MMcf/day with existing compression. TUFCO owns a 39 percent interest (other partners are Valero and Lone Star) in another 36-inch connecting pipeline which extends 58 miles east to a TUFCO underground storage facility. The remainder of the system includes approximately 1,650 miles of various smaller capacity lines used to gather and transport natural gas.

TUFCO has committed to multiple contracts with gas producers, expiring at intervals through 2008. As gas production declines or

contracts expire, the pipeline expects to negotiate new supply contracts.

- ◆ TransAmerican Pipeline Company and TransAmerican Transmission Corp. together are approximately 700 miles long and are transporters of gas for others from lines in South Texas. They transport for industrials, utility companies and other Texas intrastate pipelines. Average 1991 system throughput was 616 MMcf per day, slightly lower than the 1989 level.
- ◆ United Texas Transmission System (UTTCO) is a subsidiary of the MidCon Corporation, which is a subsidiary of Occidental Petroleum Corporation. Occidental is engaged in oil and gas operations, natural gas transmission, chemical and coal operations. UTTCO includes the approximately 2,200-mile United Texas Transmission Company pipeline in the Texas Gulf Coast area and the 400-mile Palo Duro Gas Company pipeline in the Panhandle area of Texas. UTTCO's principal customers are located in the Houston-Beaumont-Port Arthur area of Texas. Approximately 70 percent of UTTCO's sales deliveries currently are made under market-indexed contracts having a duration of one year or more. The company also provides firm and interruptible transportation services. Average 1991 throughput was 1,227 MMcf per day, up from the 1990 level, but beneath the 1989 level.
- ◆ Valero Natural Gas Partners, L.P. (Valero) owns and operates several natural gas pipeline systems principally serving Texas intrastate markets. It also markets natural gas throughout the United States through interconnections with various interstate pipelines. Principal intrastate pipelines and operating partnerships are:

Transmission:

Valero Transmission, L.P. (formerly Valero Transmission Company) - sells natural gas under long-term contracts to intrastate customers and transports gas both for affiliates and third parties. Currently, principally a transporter rather than a marketer.

Rio Pipeline

VHC Pipeline

TransTexas Pipeline (jointly owned with Teco)

Marketers:

Reata Industrial Gas, L.P.
Valero Industrial Gas, L.P. (Vigas)
VLDC

Valero's wholly-owned, jointly-owned and leased pipeline systems include approximately 7,200 miles of mainlines, lateral lines and gathering lines along the Texas Gulf Coast and through South Texas, and west to near Pecos, Texas. The transmission system generally consists of large diameter transmission lines which receive gas at central gathering points and move the gas to delivery points.

Valero also operates and jointly owns (equally) with Texas Utilities Fuel Co. (TUFECO) a 395-mile pipeline from Waha in Pecos County to Ennis, just south of the Dallas-Fort Worth area. This line extends 58 miles into East Texas to Bethel, Texas (jointly owned by TUFECO, 39%; Lone Star, 39%, and Valero Partnership, 22%) This line has been extended from Bethel to Carthage in East Texas; the extension is owned 80% by Valero, and 20% by a subsidiary of Exxon Corporation. Valero also operates and jointly owns with TECO Pipeline Company a 340-mile pipeline system (TransTexas Pipeline Co.) from Waha to New Braunfels, near San Antonio.

Valero's sales are made primarily to gas distribution companies, electric utilities, other pipeline companies and industrial users. Many contracts are short-term, and Valero anticipates that most contracts will be renewed or converted to transportation arrangements. Valero's largest sales customer is San Antonio City Public Service Board (through Reata). Valero also provides gas to the cities of Dallas, Austin and Corpus Christi.

Transportation customers include major oil and natural gas producers and pipeline companies.

Gas suppliers include independent producers, under both short and long-term contracts, and pipeline companies. In 1991, sales of natural gas (including some interstate sales) accounted for approximately 47 percent of total pipeline system throughput.

Because Valero's pipeline system is extensive throughout the state of Texas, it is not dependent on any specific supply area.

Valero intends to continue acquiring new gas supplies under contract, including, where possible, supplies released by other pipelines under their take-or-pay settlements. It believes that, for the foreseeable future, it will be able to acquire adequate gas supplies to meet customer demand. Although Valero no longer has exclusive arrangements with its major customers, it expects to retain a significant share of those sales due to the capital costs required for other pipelines to serve those markets, and the likelihood that a significant portion of any sales by other suppliers will be transported by Valero Transmission.

Valero expects competition in both gas supply and markets to continue, with no company or small group of companies being dominant. It does not expect price parity between spot prices of gas and fuel oil, and therefore does not anticipate much switching from gas to fuel oil or other alternative fuels. Valero does expect displacement of some sales volumes by nuclear and coal-fired generating plants which are coming on-line within the next few years.

However, even with increased competition, Valero has been able to maintain its throughput and believes that, because of the location of the transmission system, it will continue to compete effectively for new gas supplies and new sales and transmission customers.

Valero has constructed facilities in south Texas which will interconnect with a PEMEX-owned pipeline in Mexico capable of exporting up to 400 MMcf per day to Mexico.

- ◆ Westar Transmission System, a subsidiary of American Oil and Gas Corp., includes the Webb/Duval, Mestena Grande and Panola/Rusk systems which both gather and transport gas, and the Red River System which only transports gas. (In 1992, Red River was acquired by ONEOK.) All of the pipeline facilities are located in the Texas Panhandle and/or West Texas. Westar is a subsidiary of American Oil

and Gas Corporation, in which Cabot Corp. has a 38 percent interest. The parent company is an integrated gathering, processing, transporting and marketing company, with Westar Transmission System as the transporting segment.

Total throughput during 1991 on the system ranged from approximately 500 MMcf during lower demand months to approximately 1 Bcf during peak demand winter months. Average 1991 throughput was 547 MMcf per day, down from the 1989 level. The largest customer is Energas, a gas distribution system which serves residential, commercial and industrial customers in west Texas and the Texas Panhandle. Under 1988 amendments to contracts, Energas is required to purchase all of its gas from American Oil and Gas. Westar's other major customer is Southwestern Public Service Company, an electric utility.

3. Texas Intrastate Pipeline Regulations

Intrastate gas pipeline companies are regulated by the Railroad Commission of Texas. The Commission's authority over the pipelines stems from the Cox Act -- 1920 (as amended) and the Gas Utility Regulatory Act -- 1983 (as amended). While there are no contradictions between the provisions of the Acts, there are overlaps. The primary focus of the Cox Act is on safety, and the focus of the Gas Utility Regulatory Act is on administration and procedures, including regulation of rates.

Rate regulation of intrastate pipelines by the Railroad Commission is generally restricted to transportation and sales to local distribution systems. These strictly regulated services, however, represent a small proportion (about 10 percent) of the total throughput volumes of the pipelines.

One emphasis of the Gas Utility Regulatory Act is on competition. For instance, there are no state-sanctioned franchise markets in Texas. (Such franchises can be established by municipalities for retail service, and municipal governments have authority over rates and services, subject to appeal to the Railroad Commission.) In addition, Article V, Section 5.02 which establishes the criteria for "just and reasonable" rates, and prescribes that rates charged between pipelines and large customers (excluding city-gate sales for resale) are "just and reasonable" if: (1) neither party has an unfair advantage; (2) rates are substantially the same as rates between parties under similar conditions of service; or (3) competition does or did exist either with other utilities, another supplier or alternative energy sources.

Once these conditions are met, tariffs are filed with the Commission and maintained by the Utility Group (in the Curtailment Office), to go into effect after 30 days, assuming no complaints are filed. Rate changes have to be filed unless such changes are included as a provision of the tariff.

The above standards do not apply to affiliate transactions or if a complaint is filed with the Commission.

According to the Commission staff, rate complaints are not often filed; however, there is currently a "test case". Texas Utilities Company has filed a complaint against Ferguson Crossing Pipeline (a major intrastate pipeline in this report, and a subsidiary of Southwestern Gas Pipeline). Foster Associates understands that the reasonableness criteria were originally met, but conditions changed. Texas Utilities recently has completed a prudency review, and the

purchased gas cost from Ferguson Crossing is above market, prompting the complaint. Texas Utilities is requesting the Commission to exert its authority under Section 5.02(C), the complaint provision, to determine if the rate is "just and reasonable" as a result of changed conditions.

A further indication of Texas' reliance on market forces for controlling large companies rather than imposing regulation is in the area of service obligation. There is no certification procedure, therefore, there is no obligation to serve. Pipelines only have to apply for a permit, filing a T-4 form and a detailed map with the Pipeline Safety Branch of the Oil and Gas Division of the Commission. (note: pipeline safety is being shifted to the Utility Group.) Furthermore, the only abandonment "procedure" to discontinue service is a requirement to submit a written notice beforehand.

There are no open-access requirements in Texas. According to Commission Staff, more complaints are filed related to inability to get service than about any other issue. However, the Commission has no authority over service requirements of these large pipelines. Of interest, however, is a recent bill introduced into the Texas Senate, Bill 83, which would require utilities, including the intrastate pipelines, to establish a separate customer classification for the State of Texas and to transport the state's own gas to Texas' facilities.

APPENDIX I

HISTORICAL DATA 1989-1991

Louisiana

Texas

**LOUISIANA – INTRASTATE PIPELINES – 1989
(MMCF)**

<u>Pipeline Company</u>	<u>THROUGHPUT*</u>				
	<u>To Gas Transporters</u>	<u>To Gas Processing Plants</u>	<u>To City Gate and Industrials</u>	<u>Other a/</u>	<u>Total Disposition</u>
Large Pipelines					
Acadian Gas Pipeline System	80,141	11,587	56,575	155	148,459
Tejas Gas Corp.	6,621				6,621
Total	86,762	11,587	56,575	155	155,080
Bridgeline Gas Distribution Co.	5,331	24,980	205,011	495	235,818
Dow Intrastate Gas Co.	756		16,249	246	17,251
Louisiana Gas System Inc.	18,882	49,967	479	1,429	70,758
Louisiana Intrastate Gas Corp.	72,225	97,609	125,464	600	295,898
Louisiana Resources Co.	206,686	15,520	2,309	9,572	234,088
Louisiana Gas Marketing Co.	23,200		110,490	69	133,759
Monterey Pipeline Co.	11,447	53,381	65,510	474	130,812
Transok (Formerly BP)	10,389	8,286		230	18,905
Subtotal Large Pipelines	435,680	261,331	638,663	13,425	1,447,448
Other Pipelines					
Associated Natural Gas					
Arkla Energy Resources – Intrastate	11,732	1,000	7,166	1,252	21,150
Delhi Gas Pipeline Corp.	5,492			104	5,596
Gulf States Pipeline Corp.	6,430		1,257	92	7,780
LPC Energy, Inc.	21,957		14,249	156	36,361
Louisiana Gas Service Co.	606		2,942		3,548
Louisiana State Gas Corp.	13,690			11	13,701
Portchartrain Natural Gas Co.			3,705		3,705
Trans. LA – Industrial Gas Co.	208				208
Transco – LA Intrastate Pipeline	878		12		889
Tuscaloosa Pipeline Co.			268	3	271
Varibus	7,548	63,023		184	70,755
Wintershall	1,318		9,435	661	11,414
Subtotal Other Pipelines	69,858	64,023	39,034	2,463	175,378
Total	505,537	325,354	677,697	15,888	1,622,826

* Totals may not compute due to independent rounding.

a/ Includes return to field, storage, fuel, and shortage gas.

Source: Natural Gas Pipeline Summary of Acquisitions and Dispositions,
Louisiana Department of Natural Resources, Department of Conservation.

**LOUISIANA – INTRASTATE PIPELINES – 1990
(MMCF)**

<u>Pipeline Company</u>	<u>THROUGHPUT*</u>				<u>Total Disposition</u>
	<u>To Gas Transporters</u>	<u>To Gas Processing Plants</u>	<u>To City Gate and Industrials</u>	<u>Other a/</u>	
Large Pipelines					
Acadian Gas Pipeline System	89,068	8,780	55,205	88	153,141
Bridgeline Gas Distribution Co.	20,974	40,252	194,776	3,578	259,581
Dow Intrastate Gas Co.	2,303		39,678	240	42,221
Louisiana Gas System Inc.	21,150	51,619	419	1,046	74,234
Louisiana Intrastate Gas Corp.	80,735	105,511	112,505	473	299,223
Louisiana Resources Co.	141,544	47,447	1,764	3,338	194,093
Louisiana Gas Marketing Co.	38,972	6,193	100,049	46	145,260
Monterey Pipeline Co.	9,945	52,513	64,706	508	127,672
Transok (Formerly BP)	45,130		23,399	140	68,668
Subtotal Large Pipelines	449,821	312,316	592,500	9,457	1,364,093
Other Pipelines					
Associated Natural Gas					
Arkla Energy Resources – Intrastate			1,605	287	1,892
Delhi Gas Pipeline Corp.	5,971			174	6,145
Gulf States Pipeline Corp.	23,428		2,438	235	26,101
LGS Natural Gas Co.					
Louisiana Gas Service Co.	356		3,005		3,361
Louisiana Industrial Gas Supply			42,644		42,644
Louisiana State Gas Corp.	10,978			35	11,013
Pontchartrain Natural Gas Co.			2,414		2,414
Transco – LA Intrastate Pipeline	878				878
Tuscaloosa Pipeline Co.			186	7	193
Varibus	13,655		66,532	109	80,296
Wintershall	2,554		7,068	549	10,171
Subtotal Other Pipelines	57,819		125,892	1,396	185,107
Total	507,640	312,316	718,392	10,853	1,549,200

* Totals may not compute due to independent rounding.

a/ Includes return to field, storage, fuel, and shortage gas.

Source: Natural Gas Pipeline Summary of Acquisitions and Dispositions,
Louisiana Department of Natural Resources, Department of Conservation.

LOUISIANA – INTRASTATE PIPELINES – 1991
(MMCF)

Pipeline Company	THROUGHPUT*				Total Disposition
	To Gas Transporters	To Gas Processing Plants	To City Gate and Industrials	Other a/	
Large Pipelines					
Acadian Gas Pipeline System	84,914	23,267	57,271		165,452
Bridgeline Gas Distribution Co.	15,950	53,758	182,985	8,454	261,147
Dow Intrastate Gas Co.	26,175		44,157	827	71,159
Louisiana Gas System Inc.	16,968	54,005	9,157	1,069	81,198
Louisiana Intrastate Gas Corp.	117,480	139,121	117,406	503	374,511
Louisiana Resources Co.	195,391	97,737	2,375	719	296,222
Louisiana Gas Marketing Co.	19,152		147,362	67	166,581
Monterey Pipeline Co.	12,277	50,690	69,953	774	133,694
Transok (Formerly BP)	50,621		16,059	713	67,392
Subtotal Large Pipelines	538,929	418,578	646,723	13,125	1,617,355
Other Pipelines					
Associated Natural Gas	6,460	8,218		19	14,697
Arkla Energy Resources – Intrastate			2,641	528	3,169
Delhi Gas Pipeline Corp.	5,215			270	5,485
Gulf States Pipeline Corp.	32,679		2,096	126	34,901
LGS Natural Gas Co.			25,316		25,316
Louisiana Gas Service Co.	309		1,983		2,293
Louisiana State Gas Corp.	13,430			24	13,454
Pontchartrain Natural Gas Co.			2,102		2,102
Transco – LA Intrastate Pipeline	936				936
Tuscaloosa Pipeline Co.			12,225	6	12,231
Varibus	12,216		51,399	109	63,724
Wintershall	1,391		4,355	671	6,417
Subtotal Other Pipelines	72,635	8,218	102,116	1,753	184,724
Total	611,564	426,796	748,839	14,878	1,802,079

* Totals may not compute due to independent rounding.

a/ Includes return to field, storage, fuel, and shortage gas.

Source: Natural Gas Pipeline Summary of Acquisitions and Dispositions.
Louisiana Department of Natural Resources, Department of Conservation.

TEXAS - INTRASTATE PIPELINES - 1989
(MMcf)

<u>PIPELINE COMPANY</u>	<u>Miles of Pipeline</u>	<u>Retail Sales</u>	<u>Sales for Resale</u>	<u>Total Sales</u>	<u>Transportation of Gas for Others</u>	<u>Total Throughput</u>
Large Pipelines						
Amoco Gas Co.	442	165,304	NA	165,304	16,668	181,972
Channel Industries (Tenneco)	672	18	NA	18	128,546	128,564
Ciajon Gas Co.	1,103	279	NA	279	8,942	9,221
Delhi Gas Pipeline Corp.						
Delhi Gas Pipeline Corp.	4,462	18,186	NA	18,186	102,672	120,858
Red River Pipeline a/	372		NA		65,714	65,714
Western Gas Corp.	400	2,863	NA	2,863	6,887	9,750
Total	5,234	21,049	NA	21,049	175,274	196,323
Dow System (Dow Chemical):						
Dow Pipeline Co.	466	1,661	NA	1,661	107,608	109,269
Intratex b/	8	858	NA	858	8,161	9,018
Oasis Pipeline Co. c/	575		NA		492,107	492,107
Total	1,049	2,519	NA	2,519	607,875	610,394
Enserch Gas Transmission:						
Enserch Gas Transmission	505	16,334	NA	16,334	41,757	58,092
Lone Star Gas Co., Div. of Enserch	7,239	280	NA	280	235,607	235,887
Total	7,744	16,615	NA	16,615	277,364	293,979
Econ Gas System, Inc.	1,650	48,527	NA	48,527	245,146	293,673
Gulf Energy Pipeline Co.	1,034		NA		65,189	65,189
Houston Pipe Line Co. (Enron)	2,773	35,471	NA	35,471	516,197	551,668
Meridian:						
Meridian Oil Hydrocarbons	364	7,823	NA	7,823	15,710	23,533
Meridian Oil Transportation, Inc.	181	5,930	NA	5,930	3,848	9,778
Total	545	13,753	NA	13,753	19,558	33,311
Mobil-Vanderbilt-Beaumont (Mobil Oil)	193		NA		33,487	33,487
Seagull Energy:						
Seagull Energy	235		NA		21,573	21,573
Seagull Natural Gas Co.	176		NA		32,409	32,409
Seagull Shoreline	68		NA		13	13
Total	479		NA		53,995	53,995
Southwestern System						
(Mitchell Energy & Development):						
Brazos	235	82	NA	82	5,392	5,473
Ferguson-Crossing	524	1,925	NA	1,925	4,748	6,673
Ferguson-Burleson	470	2,559	NA	2,559	714	3,274
Southwestern Gas Pipeline	2,250	5,476	NA	5,476	39,966	45,442
Texline	134		NA		5,322	5,322
Winnie Pipeline Co.	496	17,184	NA	17,184	11,836	29,020
Total	4,109	27,226	NA	27,226	67,978	95,205
Tejas Gas Corp. d/	606	300	NA	300	80,416	80,716
Texas Utilities Fuel Co.	2,178	355,235	NA	355,235	7,717	362,952
TransAmerican Pipeline:						
TransAmerican Pipeline	562		NA		122,839	122,839
TransAmerican Transmission Corp.	104		NA		122,839	122,839
Total	666		NA		245,677	245,677
United Texas Transmission:						
United Texas Transmission	2,123	727	NA	727	466,892	467,619
Palo Duro Pipeline Co. Inc. e/	388		NA		20,882	20,882
Total	2,511	727	NA	727	487,773	488,501

TEXAS – INTRASTATE PIPELINES – 1989
(MMcf)

<u>PIPELINE COMPANY</u>	<u>Miles of Pipeline</u>	<u>Retail Sales</u>	<u>Sales for Resale</u>	<u>Total Sales</u>	<u>Transportation of Gas for Others</u>	<u>Total Throughput</u>
Large Pipelines (continued)						
Valero System:						
Javeline Pipeline Co.			NA			
Reata Industrial		120,843	NA	120,843		120,843
Rio Pipeline	439		NA		17,140	17,140
TransTexas Pipeline f/	456		NA		80,405	80,405
VHC Pipeline	30		NA		10,800	10,800
Valero Gas	92		NA		2,826	2,826
Valero Gas, LP	272	27,934	NA	27,934	7,904	35,838
Valero Gathering			NA		787	787
Valero Gathering, LP	216		NA		36,937	36,937
Valero Transmission, LP	5,227	15,063	NA	15,063	727,768	742,831
Total	6,732	163,840	NA	163,840	884,568	1,048,407
Westar Transmission (American Oil & Gas)	4,322	264	NA	264	214,146	214,411
Subtotal – Large Pipelines	44,042	851,128	NA	851,128	4,136,518	4,987,646
Small Pipelines						
American Distribution Co.	20	663	NA	663	13,376	14,039
American Pipeline Co.	116	21,535	NA	21,535	8,061	29,597
Arkia, Inc.			NA		1,032	1,032
B & A Pipeline Co.	88	305	NA	305	616	921
Bright Star Partnership			NA			
Cameon Pipeline Corp.	28		NA			
Cavallo Pipeline Co.	37		NA		5,918	5,918
Coastal States Gas Transmission	57		NA		7,997	7,997
Coronado Transmission Co.	222	187	NA	187	11,310	11,497
Corpus Christi Industries Pipeline	38		NA		28,148	28,148
Corpus Christi Transmission	149		NA		13,231	13,231
East Texas Gas Systems	54	968	NA	968		968
Empire Pipeline	223		NA			
Enercorp			NA			
Energas	64		NA		32,274	32,274
Enron Industrial Gas Co.	8	75,770	NA	75,770	1,891	77,661
Entex, Division of Arkia			NA		9,625	9,625
Hanover Energy	233		NA		10,450	10,450
High Plains Natural Gas Co.	208	53	NA	53	679	732
Hydrocarbon Ltd.	12		NA		3,231	3,231
Industrial Gas Supply Corp.	134	8,459	NA	8,459	16,085	24,544
Industrial Gas System	15	906	NA	906	1,473	2,379
J.H. Taylor Gas Co.			NA			
La Vaca Pipeline Company	128	32	NA	32	13,961	13,993
Longhorn Pipeline Co.	5	1,875	NA	1,875	644	2,519
Mid-Con Texas Pipeline	78		NA		43,957	43,957
Mountain Creek Joint Venture			NA			
Neches Gas Distribution System	8	54,881	NA	54,881	72	54,953
Neches Pipeline System	68	7,520	NA	7,520	13,792	21,312
Petrofina Gas Pipeline Co.	21	4,685	NA	4,685	11,605	16,290
Picor Pipeline Co. (Americian Oil & Gas)	54		NA		8,379	8,379
Power-Tex Joint Venture	49	7,076	NA	7,076	1,059	8,135

TEXAS – INTRASTATE PIPELINES – 1989
(MMcf)

<u>PIPELINE COMPANY</u>	<u>Miles of Pipeline</u>	<u>Retail Sales</u>	<u>Sales for Resale</u>	<u>Total Sales</u>	<u>Transportation of Gas for Others</u>	<u>Total Throughput</u>
Small Pipelines (continued)						
Reynolds Pipeline Systems, Inc.	10		NA		5,476	5,476
Rockland Pipeline Co.	193	205	NA	205	18,645	18,850
Rothwood Eastex Gas Stor. Service	4	9,580	NA	9,580		9,580
Sabine Gas Transmission	9	15,141	NA	15,141	74,185	89,326
Sabine Pipeline Co.	37		NA		12,011	12,011
Seadrift Pipeline	82		NA		12,666	12,666
Southern Union	87		NA		5,393	5,393
Spindletop Gas Distribution System		14,403	NA	14,403		14,403
Teco Pipeline System (TRT Holding):						
San Jacinto Pipeline			NA			
Teco Pipeline	111		NA		12,309	12,309
Total	111		NA		12,309	12,309
THC Pipeline	15		NA		56,727	56,727
Throckmorton Gas System, Ltd.	223		NA		427	427
Tom Cat	31		NA			
TPCPL Inc. / + PC Trans. Inc.	36		NA		17,311	17,311
Unit Gas Transmission	19	11,679	NA	11,679	3,405	15,084
USA Gas Co.			NA			
Valley Pipe Line g/	99	15,318	NA	15,318	498	15,816
Webb / Duval Gatherers (American Oil & Gas)	106		NA		39,235	39,235
West Texas Gas	128		NA		530	530
West Texas Gathering	130		NA		17,061	17,061
Western Gas Resources—Texas, Inc.			NA			
Willowtax Pipeline Co.	15		NA		1,022	1,022
Total Smaller Pipelines	3,452	251,241	NA	251,241	535,767	787,009
Total Companies	47,494	1,102,369	NA	1,102,369	4,672,285	5,774,654
Total Other Companies	4,132	30,203	NA	30,203	215,561	245,764
Grand Total	51,626	1,132,572	NA	1,132,572	4,887,846	6,020,418

a/ Delphi recently sold its interest to ONEOK. Remaining interest owned by American Oil and Gas.

b/ Jointly owned with Houston Pipe Line.

c/ Jointly owned with Houston Pipe Line, and a joint-venture between Dow Chemical and Tenngasco.

d/ Owns 50% of Gulf Coast Energy.

e/ Jointly owned with Mid-con, subsidiary of Occidental.

f/ Jointly owned with Teco.

g/ Affiliated with Houston Pipe Line.

Source: Gas Utilities Report Fiscal Year 1989, Railroad Commission of Texas.

Gas Utilities Report Fiscal Year 1989, filed by Houston Pipe Line Company with the railroad Commission of Texas.

TEXAS – INTRASTATE PIPELINES – 1990
(MMcf)

PIPELINE COMPANY	Miles of Pipeline	Retail Sales	Sales for Resale	Total Sales	Transportation of Gas for Others	Total Throughput
Large Pipelines						
Amoco Gas Co.	446	122,719	NA	122,719	50,940	173,659
Channel Industries (Tenneco)	699		NA		228,648	228,648
Ciajon Gas Co.	1,148	197	NA	197	9,587	9,785
Delhi Gas Pipeline Corp.:						
Delhi Gas Pipeline Corp.	4,131	18,712	NA	18,712	112,324	131,037
Red River Pipeline a/	372		NA		20,177	20,177
Western Gas Corp.	401	3,663	NA	3,663	7,417	11,079
Total	4,904	22,375	NA	22,375	139,918	162,293
Dow System:						
Dow Pipeline Co.	468	1,497	NA	1,497	109,646	111,143
Intratex b/	8	823	NA	823	116	939
Oasis Pipeline Co. c/	575		NA		459,371	459,371
Total	1,051	2,320	NA	2,320	569,132	571,452
Enserch Gas Transmission:						
Enserch Gas Transmission	505	14,900	NA	14,900	34,440	49,340
Lone Star Gas Co., Div. of Enserch	7,152	106	NA	106	246,589	246,695
Total	7,657	15,007	NA	15,007	281,029	296,036
Exxon Gas System, Inc.	1,649	46,576	NA	46,576	248,844	295,420
Guif Energy Pipeline Co.	893		NA		85,834	85,834
Houston Pipe Line Co. (Enron)	2,868	32,315	NA	32,315	775,931	808,246
Meridian:						
Meridian Oil Hydrocarbons	354	5,974	NA	5,974	13,645	19,620
Meridian Oil Transportation, Inc.	181	19,234	NA	19,234	3,850	23,085
Total	535	25,209	NA	25,209	17,496	42,704
Mobil–Vanderbilt–Beaumont (Mobil Oil)	246		NA		38,674	38,674
Seagull Energy:						
Seagull Energy	224		NA		17,417	17,417
Seagull Natural Gas Co.	177		NA		25,873	25,873
Seagull Shoreline	68		NA		78,371	78,371
Total	469		NA		121,661	121,661
Southwestern System (Mitchell Energy & Development):						
Brazos	240	114	NA	114	9,003	9,117
Ferguson–Crossing	537	4,988	NA	4,988	2,445	7,433
Ferguson–Burleson	498	3,705	NA	3,705	816	4,521
Southwestern Gas Pipeline	2,280	1,198	NA	1,198	40,298	41,496
Texline	152		NA		6,976	6,976
Winnie Pipeline Co.	501	38,516	NA	38,516	15,797	54,313
Total	4,208	48,522	NA	48,522	75,335	123,857
Tejas Gas Corp. d/	601	128	NA	128	77,466	77,595
Texas Utilities Fuel Co.	2,099	343,195	NA	343,195	5,762	348,957
TransAmerican Pipeline:						
TransAmerican Pipeline	575		NA		93,613	93,613
TransAmerican Transmission Corp.	104		NA		105,527	105,527
Total	679		NA		199,140	199,140
United Texas Transmission:						
United Texas Transmission	2,118	92,551	NA	92,551	247,978	340,529
Palo Duro Pipeline Co. Inc. e/	388		NA		35,137	35,137
Total	2,506	92,551	NA	92,551	283,115	375,666

TEXAS – INTRASTATE PIPELINES – 1990
(MMcf)

<u>PIPELINE COMPANY</u>	<u>Miles of Pipeline</u>	<u>Retail Sales</u>	<u>Sales for Resale</u>	<u>Total Sales</u>	<u>Transportation of Gas for Others</u>	<u>Total Throughput</u>
Large Pipelines (continued)						
Valero System:						
Javeline Pipeline Co.	14		NA			
Reata Industrial		7,134	NA	7,134		7,134
Rio Pipeline	418		NA		11,080	11,080
TransTexas Pipeline f/	456		NA		78,958	78,958
VHC Pipeline	30		NA		8,467	8,467
Valero Gas	91		NA		2,526	2,526
Valero Gas, LP	273	13,523	NA	13,523	4,814	18,338
Valero Gathering			NA			
Valero Gathering, LP	216		NA		31,819	31,819
Valero Transmission, LP	5,256	13,878	NA	13,878	645,980	659,857
Valero Industrial Gas Co.		18,319	NA	18,319		18,319
Total	<u>6,754</u>	<u>52,854</u>	NA	<u>52,854</u>	<u>783,644</u>	<u>836,498</u>
Westar Transmission (American Oil & Gas)	4,325	281	NA	281	156,079	156,360
Subtotal – Large Pipelines	<u>43,737</u>	<u>804,250</u>	NA	<u>804,250</u>	<u>4,148,236</u>	<u>4,952,485</u>
Small Pipelines						
American Distribution Co.	4	1,264	NA	1,264	7,790	9,054
American Pipeline Co.	88	18,205	NA	18,205	11,085	29,290
Arkla, Inc.			NA		1,204	1,204
B & A Pipeline Co.	77		NA		863	863
Bright Star Partnership			NA			
Cameron Pipeline Corp.	28		NA		9,706	9,706
Cavallo Pipeline Co.	38		NA		4,095	4,095
Coastal States Gas Transmission	57		NA		7,366	7,366
Coronado Transmission Co.	166	191	NA	191	7,982	8,173
Corpus Christi Industries Pipeline	38		NA		21,271	21,271
Corpus Christi Transmission	183		NA		38,908	38,908
East Texas Gas Systems	11		NA		19,643	19,643
Empire Pipeline	223		NA			
Enercorp	150	701	NA	701	4,166	4,867
Energas	63		NA		30,517	30,517
Enron Industrial Gas Co.	8	93,364	NA	93,364	637	94,001
Entex, Division of Arkla			NA		7,985	7,985
Hanover Energy	280		NA		8,421	8,421
High Plains Natural Gas Co.	208	52	NA	52	585	636
Hydrocarbon Ltd.	13		NA		4,376	4,376
Industrial Gas Supply Corp.	135	8,674	NA	8,674	19,059	27,732
Industrial Gas System	15	321	NA	321	1,273	1,595
J.H. Taylor Gas Co.	262	64	NA	64		64
La Vaca Pipeline Company	128		NA		11,926	11,926
Longhorn Pipeline Co.	5	12,815	NA	12,815	559	13,374
Mid-Con Texas Pipeline	78		NA		30,292	30,292
Mountain Creek Joint Venture	16		NA		14,802	14,802
Neches Gas Distribution System	20	54,866	NA	54,866	1,449	56,315
Neches Pipeline System	68		NA		11,843	11,843
Petrofina Gas Pipeline Co.	21	3,655	NA	3,655	10,858	14,514
Picor Pipeline Co. (American Oil & Gas)	61	798	NA	798	53,961	54,759
Power-Tex Joint Venture	49	7,191	NA	7,191	1,695	8,886

TEXAS - INTRASTATE PIPELINES - 1990
(MMcf)

<u>PIPELINE COMPANY</u>	<u>Miles of Pipeline</u>	<u>Retail Sales</u>	<u>Sales for Resale</u>	<u>Total Sales</u>	<u>Transportation of Gas for Others</u>	<u>Total Throughput</u>
Small Pipelines (continued)						
Reynolds Pipeline Systems, Inc.	28		NA		11,965	11,965
Rockland Pipeline Co.	197		NA		14,472	14,472
Rothwood Eastex Gas Stor. Service	5		NA			
Sabine Gas Transmission	37	9,492	NA	9,492	63,162	72,654
Sabine Pipeline Co.			NA		23,313	23,313
Seadrift Pipeline	69		NA		12,806	12,806
Southern Union	87		NA		5,286	5,286
Spindletop Gas Distribution System			NA			
Teco Pipeline System (TRT Holding):						
San Jacinto Pipeline	93	2,054	NA	2,054	9,943	11,997
Teco Pipeline	98	166	NA	166	23,104	23,270
Total	191	2,220	NA	2,220	33,047	35,267
THC Pipeline	15		NA		75,985	75,985
Throckmorton Gas System, Ltd.	222		NA		233	233
Tom Cat	73		NA		114,013	114,013
TPCPL Inc. / + PC Trans. Inc.	10		NA		25,535	25,535
Unit Gas Transmission	19	11,930	NA	11,930	2,710	14,640
USA Gas Co.	80		NA		238	238
Valley Pipe Line g/	99	14,283	NA	14,283	3,974	18,256
Webb / Duval Gatherers (American Oil & Gas)	106		NA		30,595	30,595
West Texas Gas	128		NA		413	413
West Texas Gathering	130		NA		13,886	13,886
Western Gas Resources-Texas, Inc.			NA			
Willotax Pipeline Co.	15		NA		10,045	10,045
Total Smaller Pipelines	4,004	240,086	NA	240,086	785,994	1,026,080
Total Companies	47,741	1,044,336	NA	1,044,336	4,934,230	5,978,566
Total Other Companies	3,479	21,921	NA	21,921	164,645	186,566
Grand Total	51,220	1,066,257	NA	1,066,257	5,098,875	6,165,132

a/ Delphi recently sold its interest to ONEOK. Remaining interest owned by American Oil and Gas.

b/ Jointly owned with Houston Pipe Line.

c/ Jointly owned with Houston Pipe Line, and a joint-venture between Dow Chemical and Tenngasco.

d/ Owns 50% of Gulf Coast Energy.

e/ Jointly owned with Mid-con, subsidiary of Occidental.

f/ Jointly owned with Teco.

g/ Affiliated with Houston Pipe Line.

Source: Gas Utilities Report Fiscal Year 1990, Railroad Commission of Texas.

Gas Utilities Report Fiscal Year 1990, filed by Houston Pipe Line Company with the railroad Commission of Texas.

TEXAS – INTRASTATE PIPELINES – 1991
(MMcf)

PIPELINE COMPANY	Miles of Pipeline	Retail Sales	Sales for Resale	Total Sales	Transportation of Gas for Others	Total Throughput
Large Pipelines						
Amoco Gas Co.	437	52,223		52,223	58,739	110,962
Channel Industries (Tenneco)	701				244,252	244,252
Clajon Gas Co.	1,292	117	32,487	32,604	18,597	51,200
Delhi Gas Pipeline Corp.:						
Delhi Gas Pipeline Corp.	4,147	16,728	13,268	29,996	115,179	145,175
Red River Pipeline a/	372				12,597	12,597
Western Gas Corp.	402	2,620		2,620	8,090	10,709
Total	4,921	19,348	13,268	32,616	135,866	168,482
Dow System Co.:						
Dow Pipeline Co.	468	834		834	119,437	120,271
Intratex b/	8	1,234	3,236	4,470	224	4,694
Oasis Pipeline Co. c/	575		1,239	1,239	425,896	427,135
Total	1,051	2,068	4,475	6,543	545,557	552,100
Enserch Gas Transmission:						
Enserch Gas Transmission	504	13,820	8,164	21,985	25,817	47,801
Lone Star Gas Co., Div. of Enserch	7,103	74	16	90	290,436	290,526
Total	7,607	13,894	8,181	22,075	316,252	338,327
Exxon Gas System, Inc.	1,650	65,798	14,928	80,726	216,491	297,217
Gulf Energy Pipeline Co.	899		5,303	5,303	87,770	93,073
Houston Pipe Line Co. (Enron)	2,899	4,161	19,424	23,585	751,895	775,480
Meridian:						
Meridian Oil Hydrocarbons	345	6,175	42,418	48,595 d/	9,162	57,757
Meridian Oil Transportation, Inc.	181	18,594	7,381	25,976	4,057	30,032
Total	526	24,769	49,800	74,571	13,218	87,789
Mobil-Vanderbilt-Beaumont	246				37,018	37,018
Seagull Energy:						
Seagull Energy	224		1,877	1,877	15,299	17,176
Seagull Natural Gas Co.	172		1,787	1,787	21,845	23,633
Seagull Shoreline	68				222	222
Total	464		3,664	3,664	37,367	41,030
Southwestern System (Mitchell Energy & Development):						
Brazos		204	1,838	2,042	10,708	12,750
Ferguson-Crossing		5,473	12,254	17,727	2,138	19,865
Ferguson-Burleson	795	9,979	29,971	39,950	1,044	40,994
Southwestern Gas Pipeline	2,284	27	9,632	9,659	50,366	60,025
Texline	80				2,718	2,718
Winnie Pipeline Co.	509	21,036	4,499	25,536	37,963	63,498
Total	3,668	36,720	58,194	94,913	104,937	199,850
Tejas Gas Corp. e/	607	165	1,119	1,284	80,881	82,165
Texas Utilities Fuel Co.	2,086	337,107	65	337,172	7,793	344,965
TransAmerican Pipeline:						
TransAmerican Pipeline	607				114,460	114,460
TransAmerican Transmission Corp.	104				110,199	110,199
Total	711				224,659	224,659
United Texas Transmission:						
United Texas Transmission	2,165	120,531	38,665	159,197	271,113	430,310
Palo Duro Pipeline Co. Inc. f/	388	7		7	17,600	17,607
Total	2,553	120,538	38,665	159,203	288,714	447,917

TEXAS – INTRASTATE PIPELINES – 1991
(MMcf)

<u>PIPELINE COMPANY</u>	<u>Miles of Pipeline</u>	<u>Retail Sales</u>	<u>Sales for Resale</u>	<u>Total Sales</u>	<u>Transportation of Gas for Others</u>	<u>Total Throughput</u>
Large Pipelines (continued)						
Valero System:						
Javaline Pipeline Co.	14				48,603	48,603
REATA Industrial						
Rio Pipeline	419				11,702	11,702
TransTexas Pipeline g/	456				77,466	77,466
VHC Pipeline	30				8,250	8,250
Valero Gas	86		90	90	3,383	3,472
Valero Gas, LP	273	14,840	885	15,724	9,895	25,619
Valero Gathering						
Valero Gathering, LP	219				18,905	18,905
Valero Transmission, LP	5,293	13,843	22,901	36,998	h/ 680,092	717,090
Total	6,790	28,683	23,876	52,812	858,296	911,108
Westar Transmission (American Oil & Gas)	4,326	119	17,001	17,120	182,387	199,507
Subtotal – Large Pipelines	43,434	705,709	290,448	996,413	4,210,689	5,207,102
Small Pipelines						
American Distribution Co.	4				3,355	3,355
American Pipeline Co.	81				8,447	8,447
Arkla, Inc.					1,409	1,409
B & A Pipeline Co.	77		18,318	18,318	734	19,052
Bright Star Partnership			7,034	7,184	i/	7,184
Campeon Pipeline Corp.	17		428	428	4,223	4,651
Cavallo Pipeline Co.	38				5,419	5,419
Coastal States Gas Transmission	85				10,494	10,494
Coronado Transmission Co.	160	148	1,482	1,630	6,044	7,674
Corpus Christi Industries Pipeline	38		2,792	2,792	19,990	22,782
Corpus Christi Texas	188		0	0	38,613	38,613
East Texas Gas Systems	11				102,347	102,347
Empire Pipeline	223	2,831		2,831		2,831
Enercorp	149	2,786	718	3,504	13,038	16,542
Energas	63				15,222	15,222
Enron Industrial Gas Co.	8	122,861	20,107	142,968	2,400	145,367
Entex, Division of Arkla					8,773	8,773
Hanover Energy	280		2,290	2,961	j/ 9,673	12,634
High Plains Natural Gas Co.	208	52	627	679	323	1,002
Hydrocarbon Ltd.	10		872	872	3,094	3,966
Industrial Gas Supply Corp.	136	8,850		8,850	17,516	26,366
Industrial Gas System	15	271		271	878	1,149
J.H. Taylor Gas Co.	265		2,468	2,468		2,468
La Vaca Pipeline Company	132	128		128	10,376	10,505
Longhorn Pipeline Co.	5	23,015	34	23,049	649	23,698
Mid-Con Texas Pipeline					190	190
Mountain Creek Joint Venture	16				10,716	10,716
Neches Gas Distribution System	21	55,573		55,573	1,615	57,188
Neches Pipeline System	68	1,602	2,682	4,284	14,180	18,464
Petrofina Gas Pipeline Co.	21	4,673		4,673	11,236	15,909
Picor Pipeline Co. (American Oil & Gas)	61	64		64	15,050	15,115
Power-Tex Joint Venture	68	10,179	25	10,203	2,937	13,140

TEXAS – INTRASTATE PIPELINES – 1991
(MMcf)

<u>PIPELINE COMPANY</u>	<u>Miles of Pipeline</u>	<u>Retail Sales</u>	<u>Sales for Resale</u>	<u>Total Sales</u>	<u>Transportation of Gas for Others</u>	<u>Total Throughput</u>
Small Pipelines (Continued)						
Reynolds Pipeline Systems, Inc.	28				13,343	13,343
Rockland Pipeline Co.	197		11,147	11,147	15,581	26,727
Rotherwood Eastex Gas Stor. Service	5		13,520	13,604	84	13,688
Sabine Gas Transmission	9				74,125	74,125
Sabine Pipeline Co.	37					
Seadrift Pipeline	69				11,291	11,291
Southern Union	87				6,935	6,935
Spindletop Gas Distribution System		12,612	25	12,637		12,637
Teco Pipeline System (TRT Holding):						
San Jacinto Pipeline	108	5,076		5,076	18,980	24,055
Teco Pipeline	155	114	453	568	45,535	46,103
Total	261	5,190	453	5,644	64,515	70,159
THC Pipeline	15				76,526	76,526
Throckmorton Gas System, Ltd.	222		2,395	2,395	64	2,459
Tom Cat	73				65,237	65,237
TPCPL Inc. / + PC Trans. Inc.	10				28,791	28,791
Unit Gas Transmission	23	13,395	231	13,626	4,098	17,724
USAGas Co.	83	8	8,238	8,247	3,196	11,442
Valley Pipe Line I/		12,212	1,351	13,563	2,148	15,711
Webb / Duval Gatherers (American Oil & Gas)	105				35,922	35,922
West Texas Gas	128		148	148	1,151	1,299
West Texas Gathering						
Western Gas Resources—Texas, Inc.	520		7,892	7,892		7,892
Willowtex Pipeline Co.	15				10,493	10,493
Total Smaller Pipelines	4,313	276,451	105,276	382,632	752,438	1,135,070
Total Listed Companies	47,747	982,160	395,725	1,379,045	4,963,127	6,342,172
Total Other Companies	2,541	18,580	46,585	68,571	158,726	227,297
Grand Total	50,288	1,000,740	442,310	1,447,616	5,121,853	6,569,469

a/ Delhi recently sold its interest to ONEOK. Remaining interest owned by American Oil and Gas.

b/ Jointly owned with Houston Pipe Line.

c/ Jointly owned with Houston Pipe Line, and a joint venture between Dow Chemical and Tenngasco.

d/ Includes 2 MMcf other.

e/ Owns 50% of Gulf Coast Energy.

f/ Jointly owned with Midcon, subsidiary of Occidental.

g/ Jointly owned with Teco.

h/ Includes 253 MMcf other.

i/ Includes 150 MMcf other.

j/ Includes 64 MMcf other sales and 607 MMcf interdepartmental sales.

k/ Includes 84 MMcf interdepartmental.

l/ Affiliated with Houston Pipe Line.

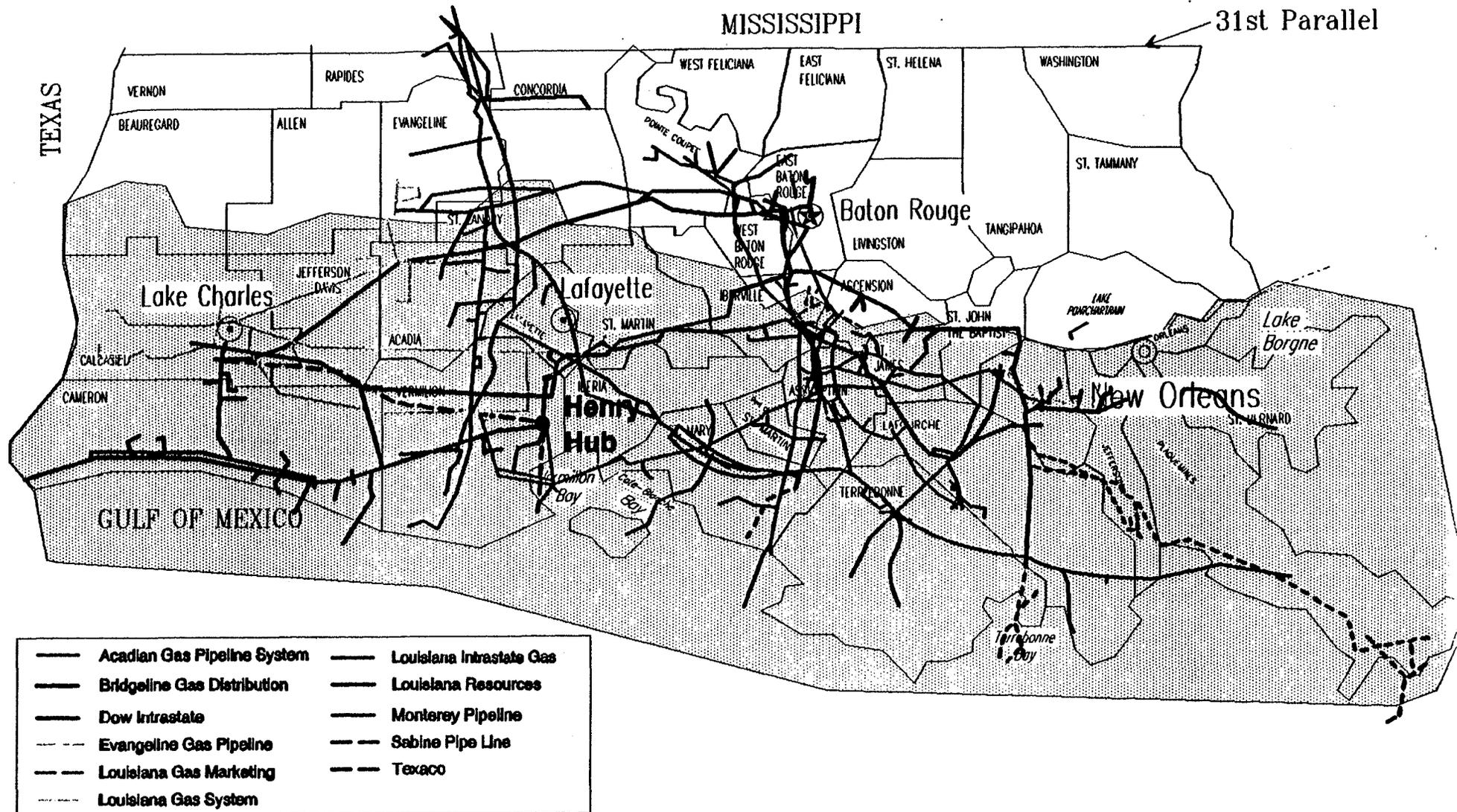
m/ Includes 829 MMcf other and 885 MMcf interdepartmental.

Source: Gas Utilities Annual Report Fiscal Year 1992,
Railroad Commission of Texas

APPENDIX II

SYSTEM MAPS

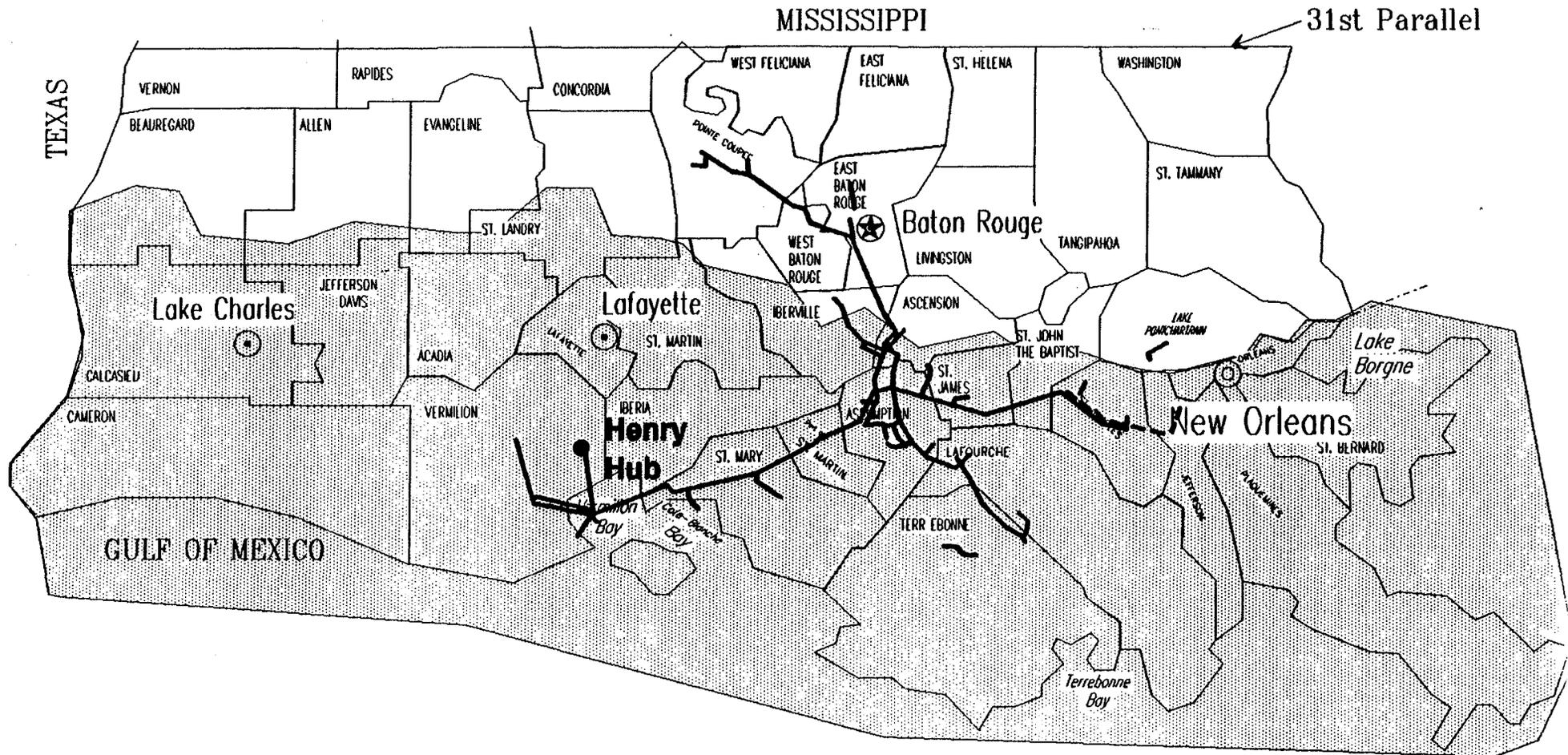
COMPOSITE OF LOUISIANA GULF PIPELINES



Source: 1988 Louisiana Natural Gas Pipelines. DTC, Inc., 1988;
 Map filed with the Louisiana Conservation Commission, 1992
 Map dated January 1993, filed with the Louisiana Conservation Commission, March, 1993
 Map of Arka Energy Resources Gas Systems (no date given)

ACADIAN GAS PIPELINE SYSTEM (TEJAS)

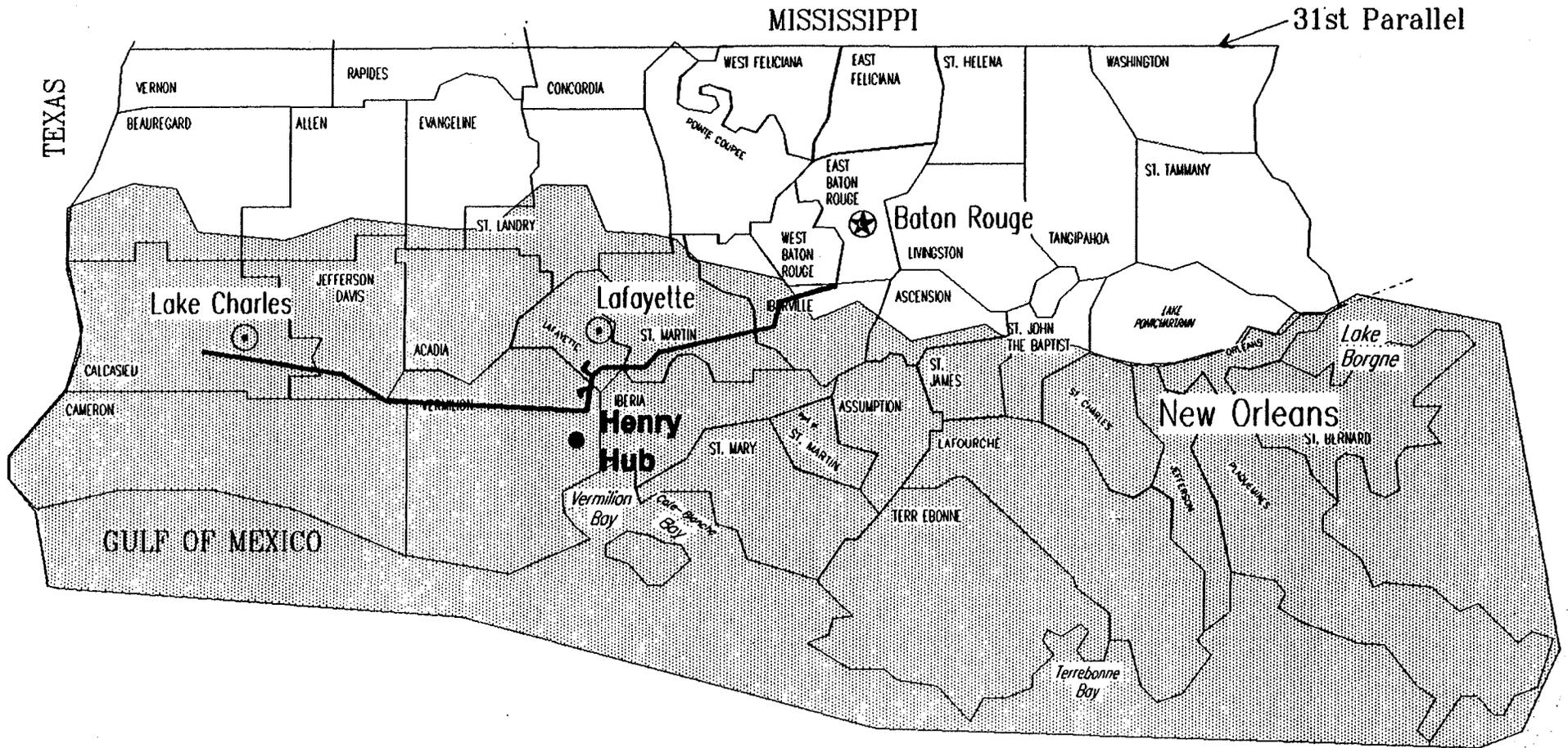
LOUISIANA



Source: Map dated January 1993, filed with the Louisiana Conservation Commission, March, 1993

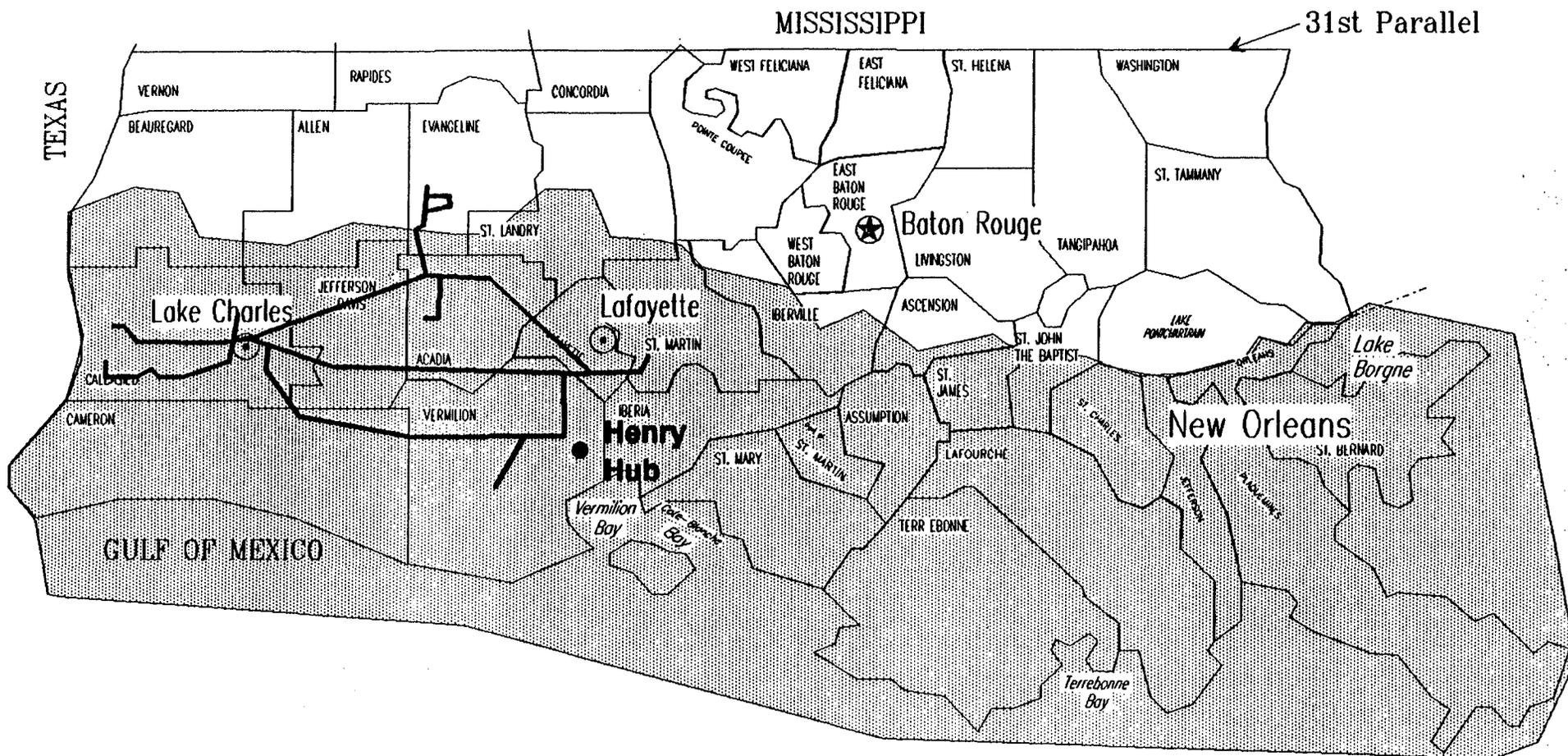
DOW INTRASTATE GAS CO.

LOUISIANA



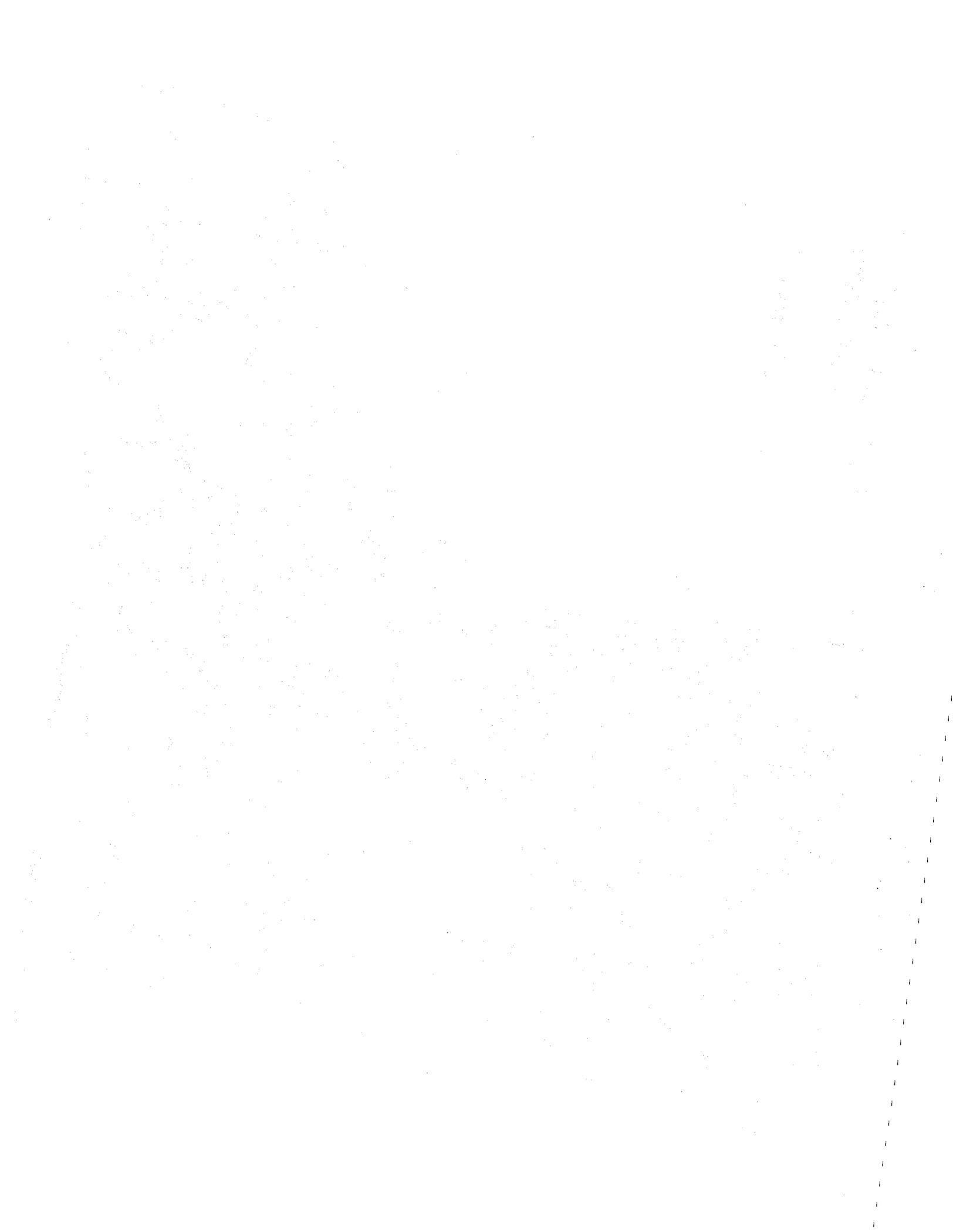
LOUISIANA GAS SYSTEMS, INC.

LOUISIANA



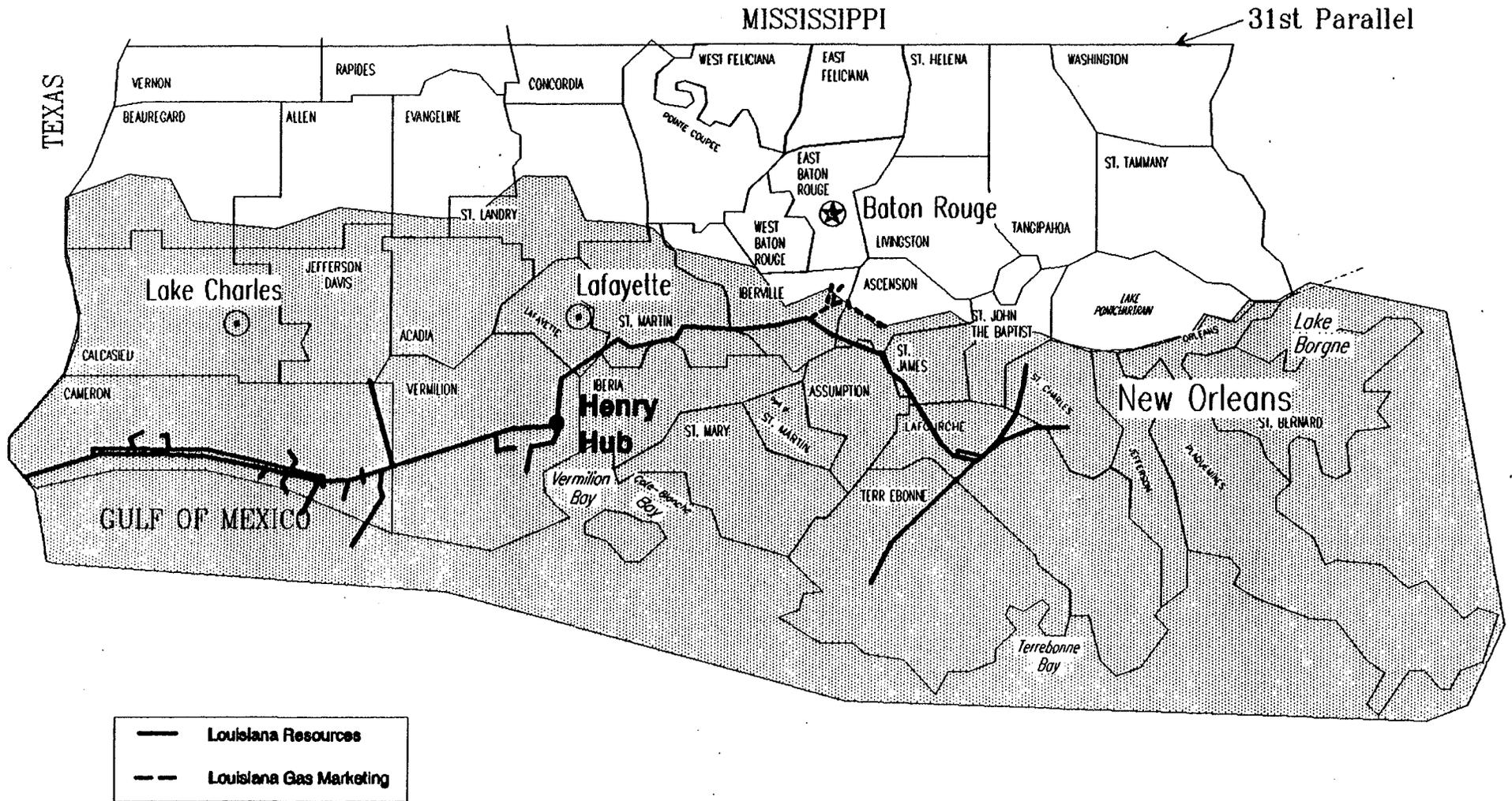
Source: 1988 Louisiana Natural Gas Pipelines, DTC, Inc., 1988;
Map filed with the Louisiana Conservation Commission, 1992

Handwritten text, likely bleed-through from the reverse side of the page. The text is extremely faint and illegible due to the quality of the scan. It appears to be a list or series of entries, possibly names and dates, but cannot be transcribed accurately.



LOUISIANA RESOURCES PIPELINE SYSTEM

LOUISIANA

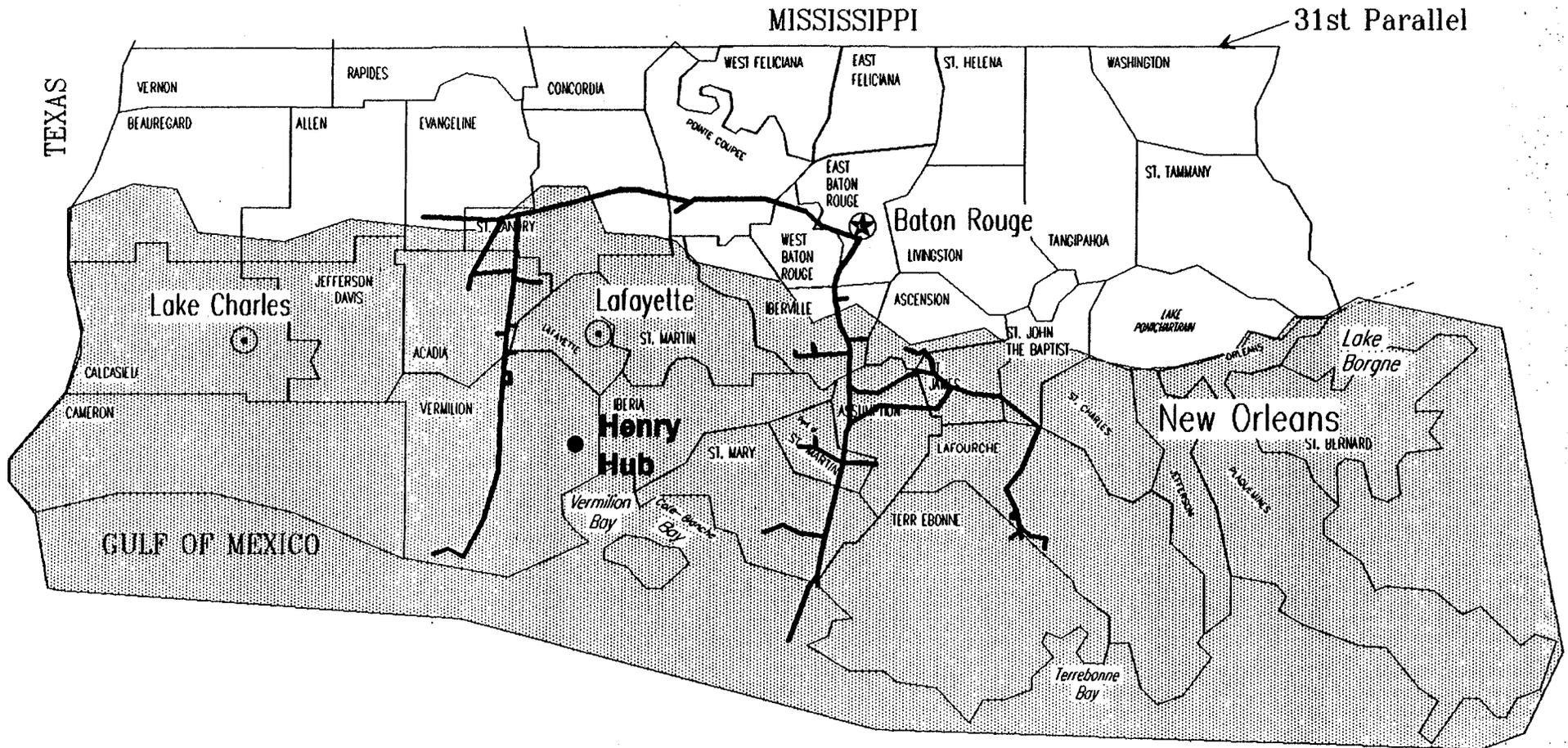


Source: Map dated January 1993, filed with the Louisiana Conservation Commission, March, 1993



MONTEREY PIPELINE SYSTEM

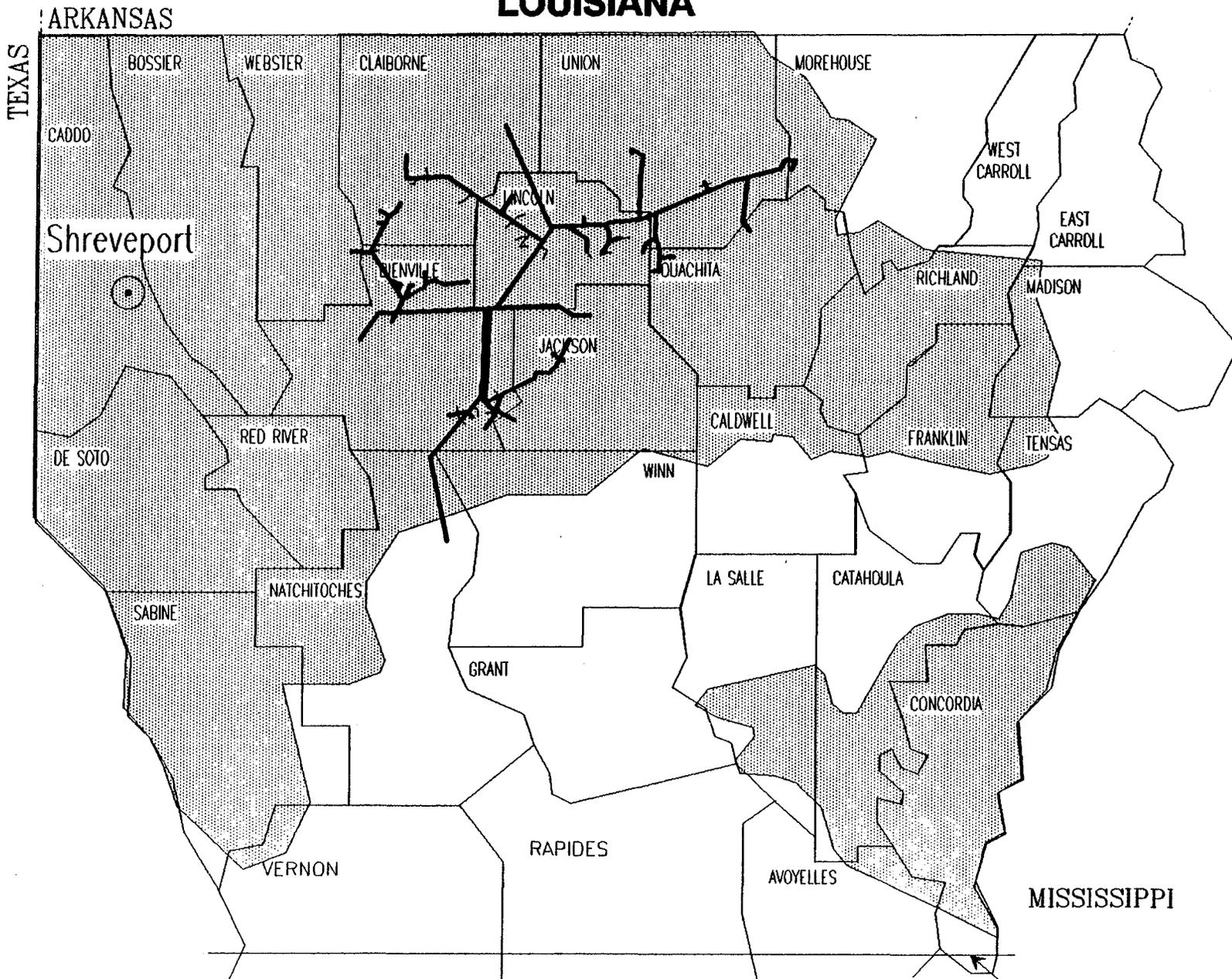
LOUISIANA



Source: Monterey PL Co. (1992) Map filed with Louisiana Conservation Commission 3/31/93;
System Map with changes made in 1992

TRANSOK NORTH LOUISIANA LINE

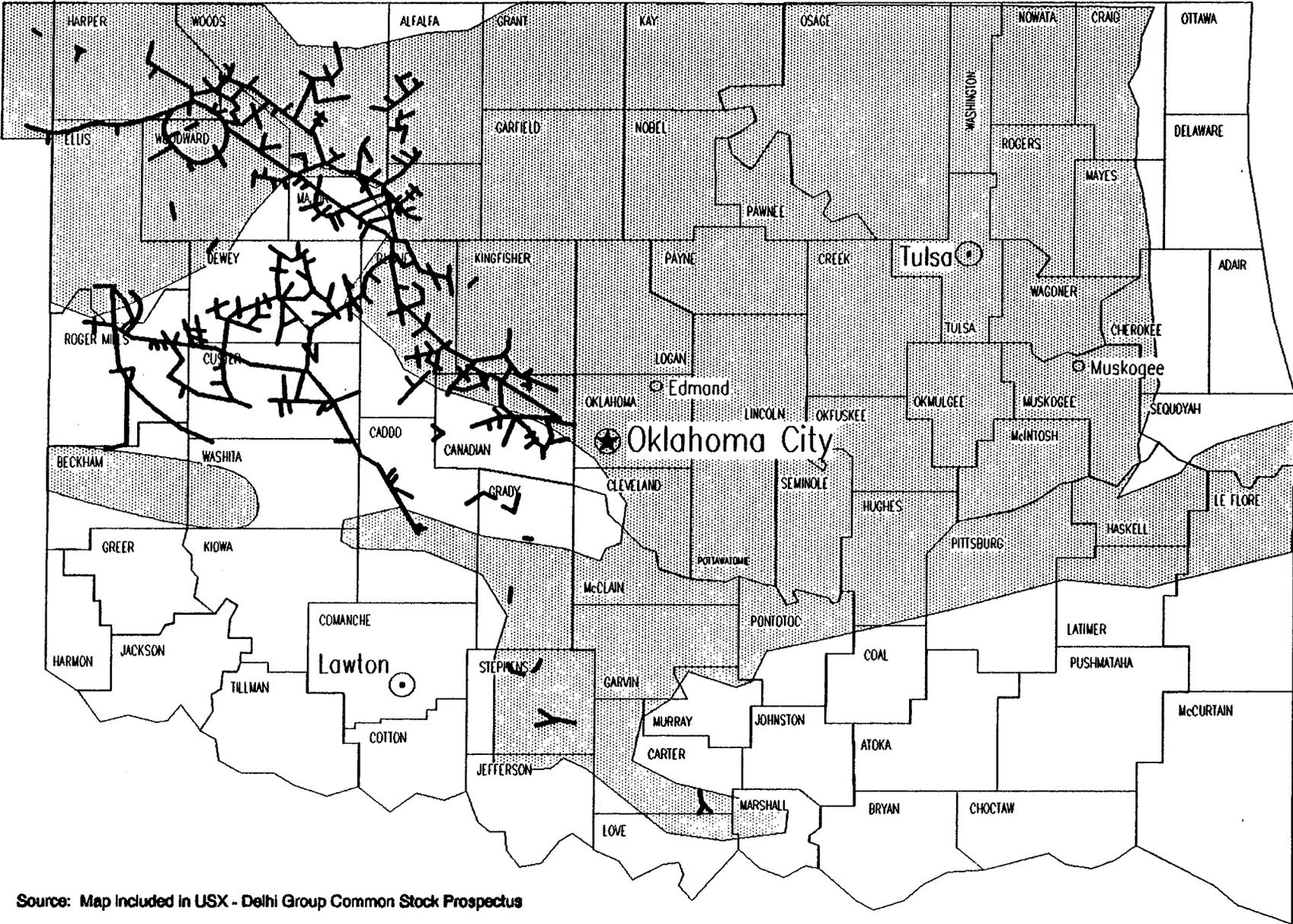
LOUISIANA



Source: Transok Louisiana System Map - 2nd Ed. - 1993,
by Transok, a Central and Western Company

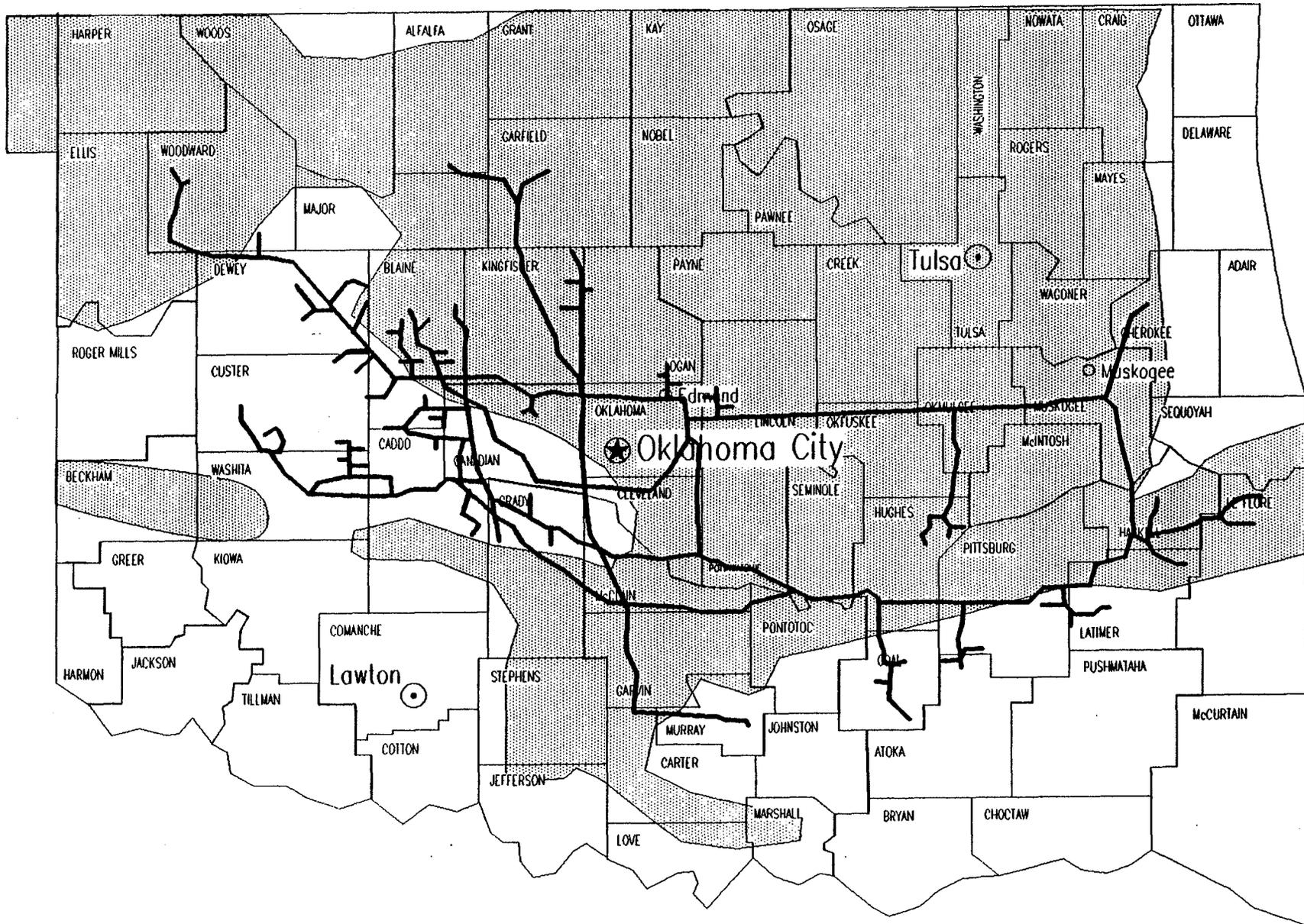
31st Parallel

DELHI GAS PIPELINE SYSTEM OKLAHOMA



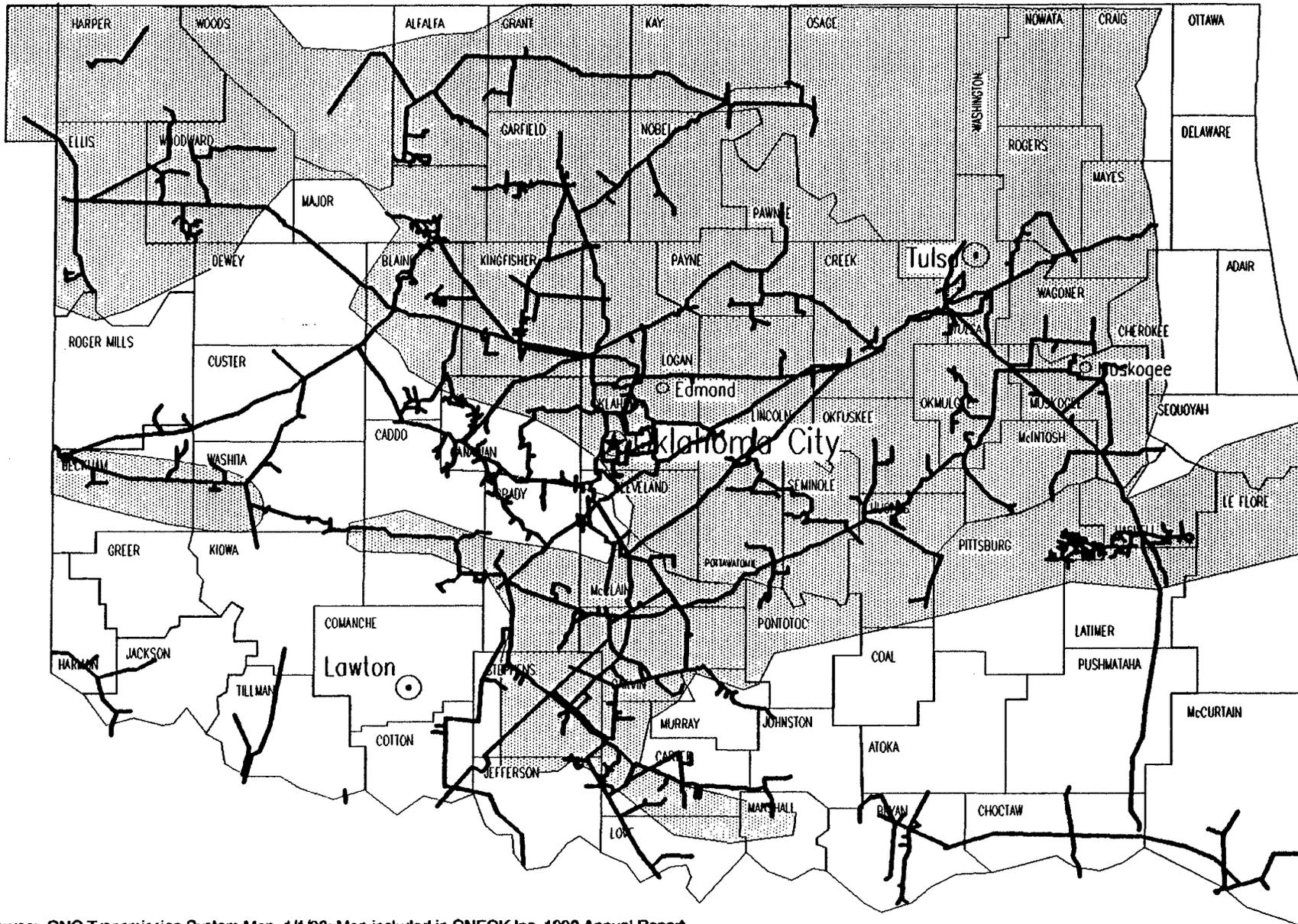
Source: Map Included in USX - Delhi Group Common Stock Prospectus

ENOGEX PIPELINE OKLAHOMA

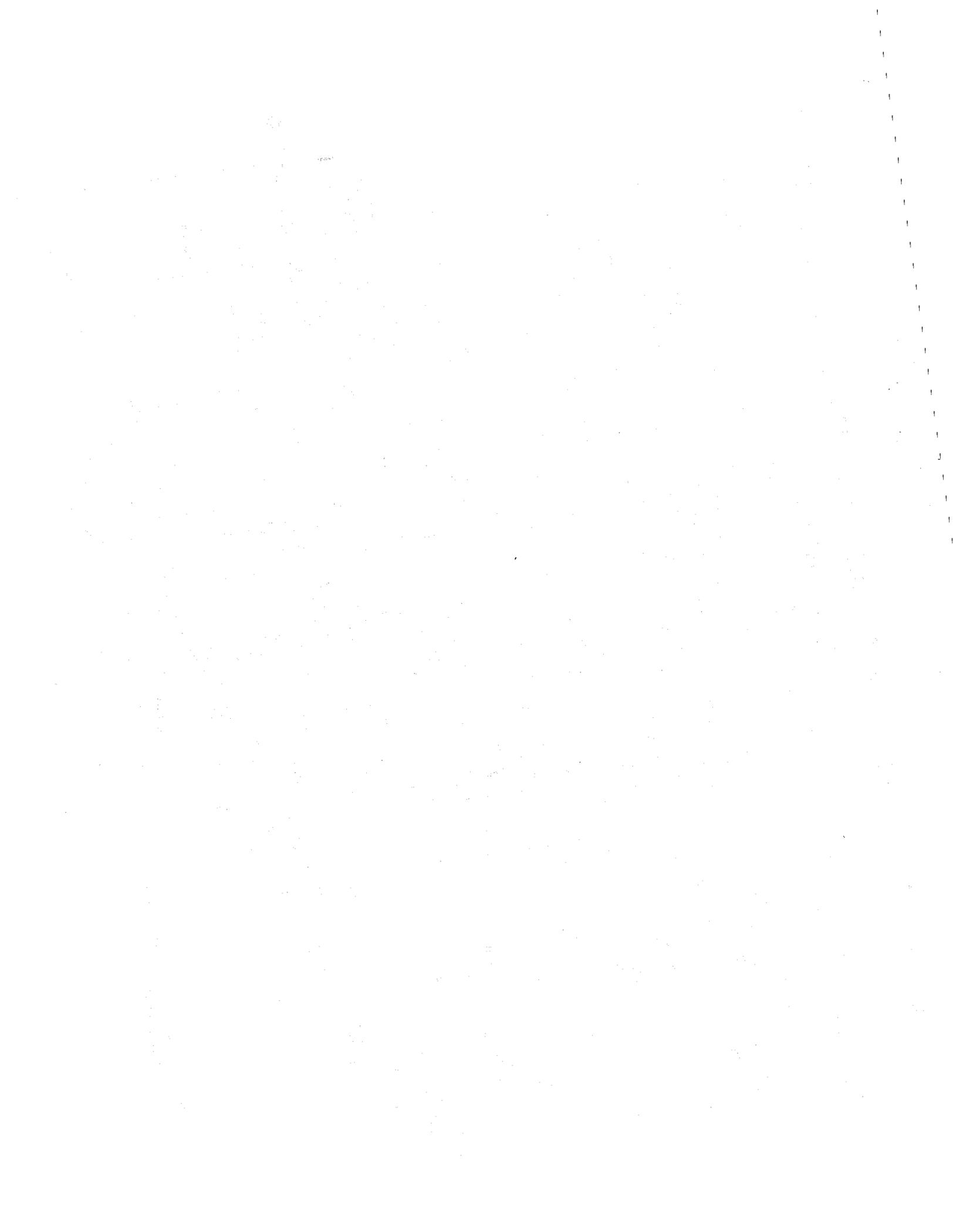


Source: Oklahoma Gas and Electric Company, 1992 Annual Report;
1988 Oklahoma Natural Gas Pipelines, prepared by DTC, Inc., 1988

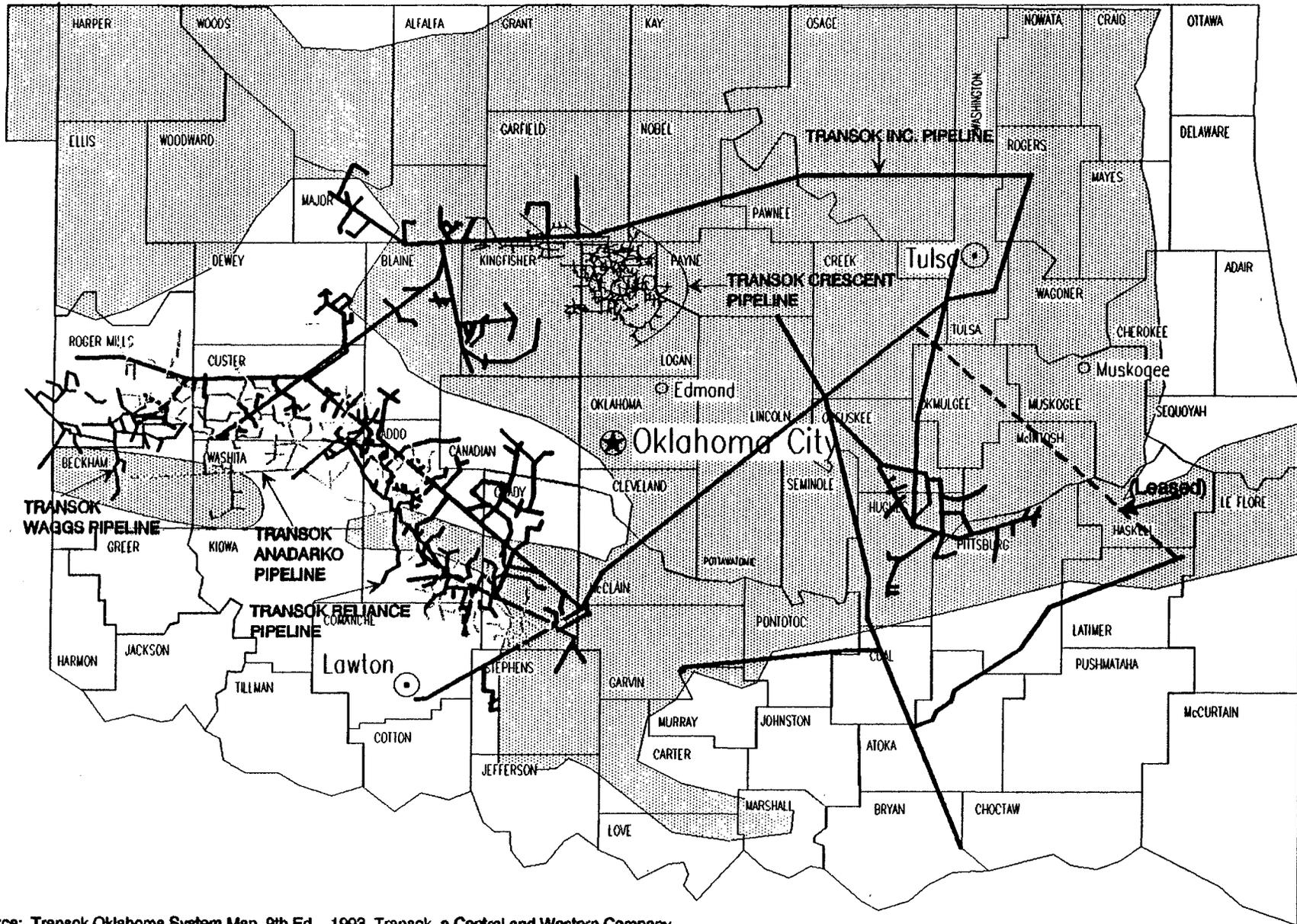
ONG TRANSMISSION SYSTEM (ONEOK, INC.) OKLAHOMA



Source: ONG Transmission System Map, 1/1/93; Map included in ONEOK Inc. 1992 Annual Report

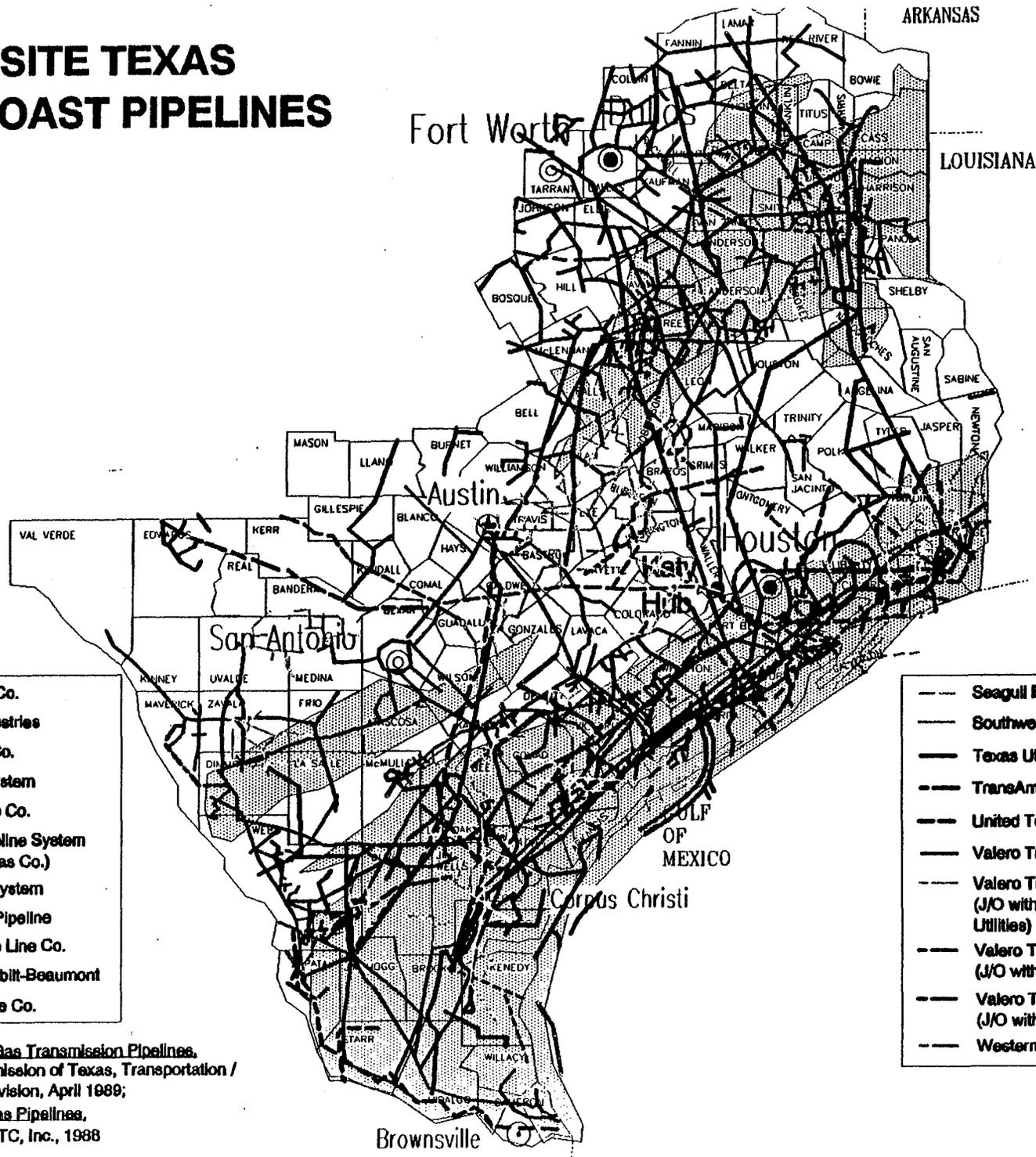


TRANSOK INC. PIPELINE SYSTEM OKLAHOMA



Source: Transok Oklahoma System Map, 9th Ed. - 1983, Transok, a Central and Western Company

COMPOSITE TEXAS GULF COAST PIPELINES



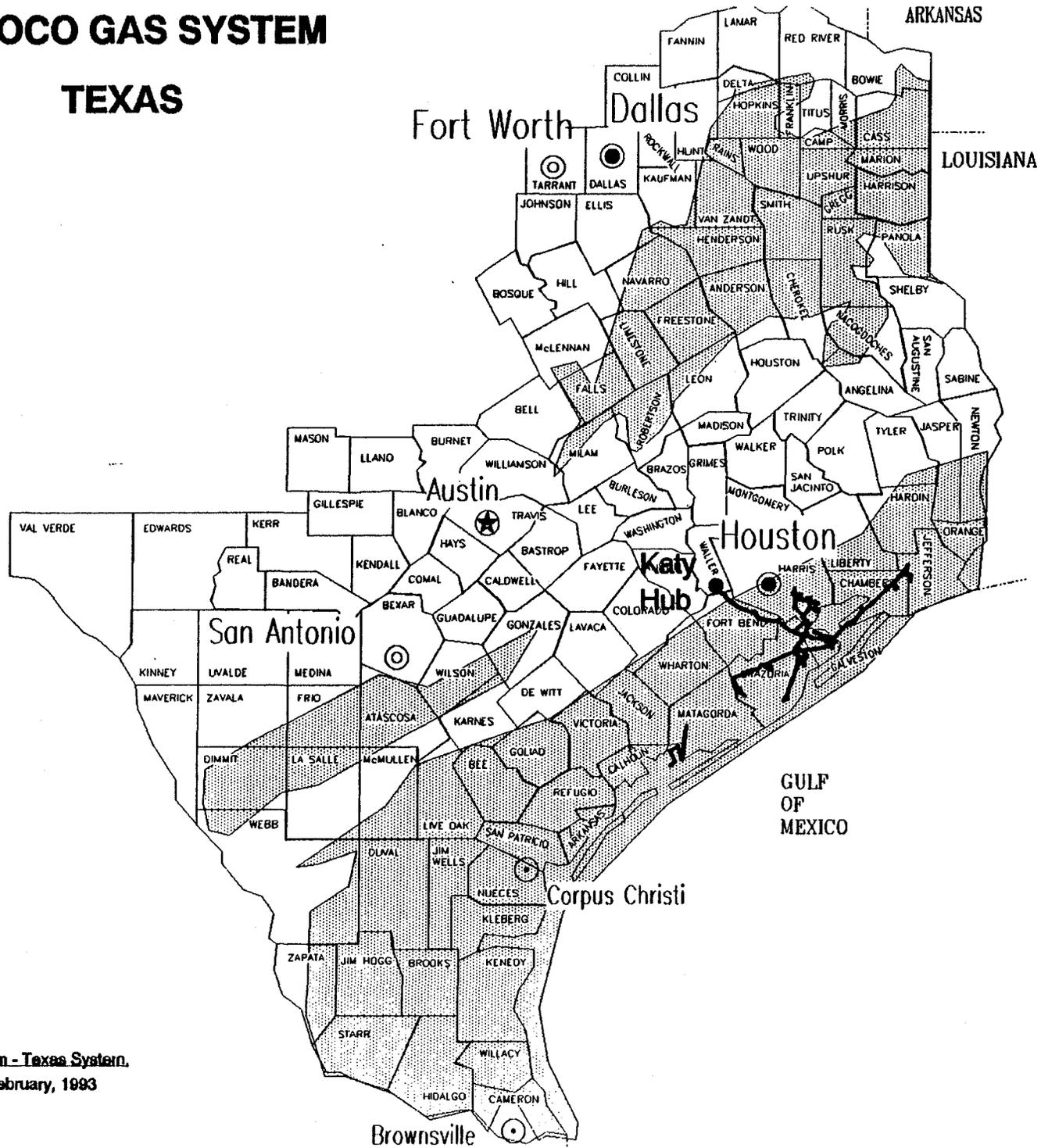
- Amoco Gas Co.
- Channel Industries
- Clajon Gas Co.
- Delhi Gas System
- Dow Pipeline Co.
- Enerch Pipeline System (Lone Star Gas Co.)
- Exxon Gas System
- Gulf Energy Pipeline
- Houston Pipe Line Co.
- Mobil-Vanderbilt-Beaumont
- Oasis Pipeline Co.

- Seagull Energy
- Southwestern Gas System
- Texas Utilities Fuel Co.
- TransAmerican Pipeline
- United Texas Trans. System
- Valero Transmission System
- Valero Transmission System (J/O with Lone Star & Texas Utilities)
- Valero Transmission System (J/O with Texas Utilities)
- Valero Transmission System (J/O with Tecco Pipelines)
- Western Gas Corp.

Source: Major Natural Gas Transmission Pipelines, Railroad Commission of Texas, Transportation / Gas Utilities Division, April 1989;
 1988 Texas Gas Pipelines,
 Prepared by DTC, Inc., 1988

AMOCO GAS SYSTEM

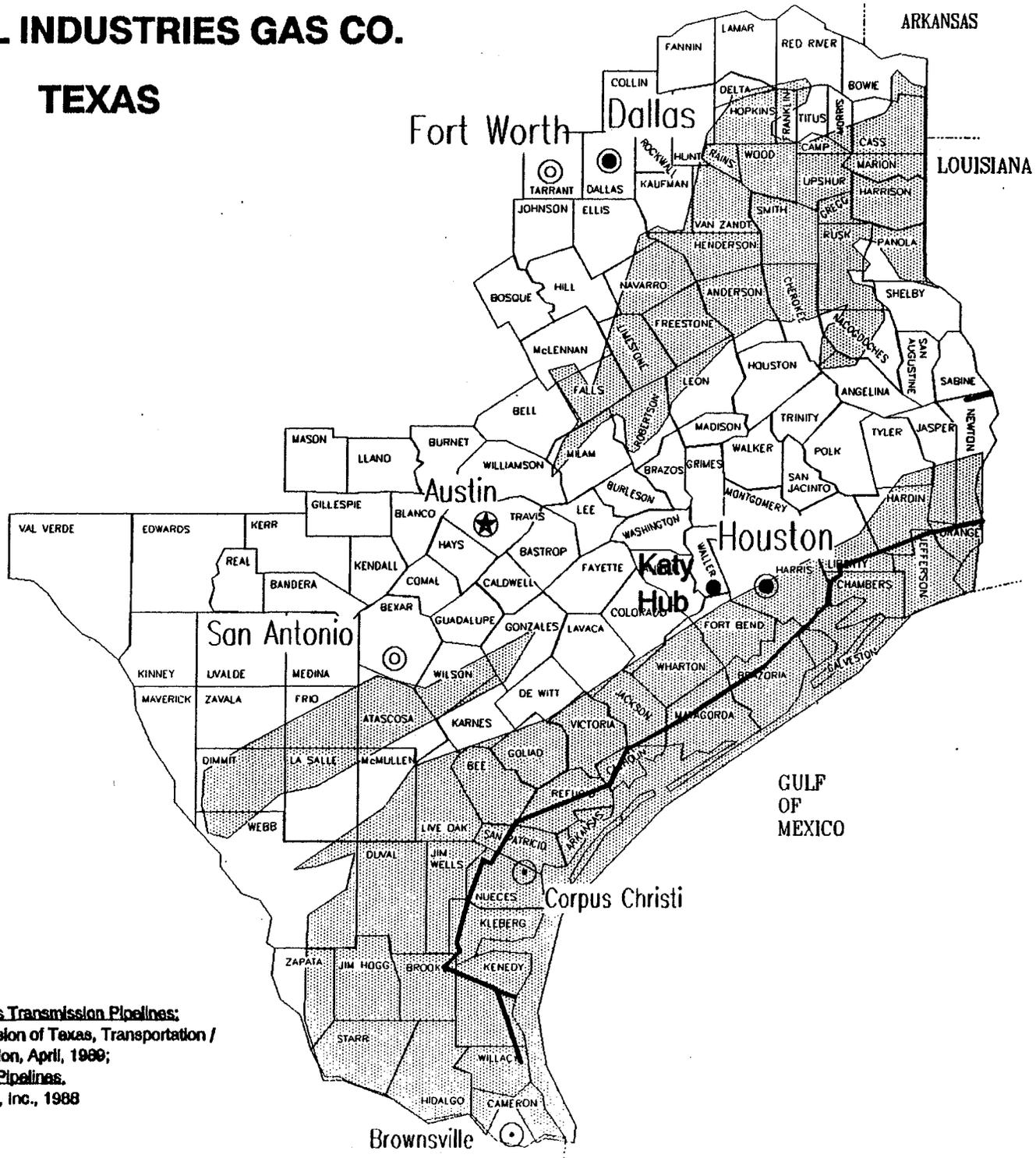
TEXAS



Source: Amoco Gas System - Texas System.
Amoco Gas Co., February, 1993

CHANNEL INDUSTRIES GAS CO.

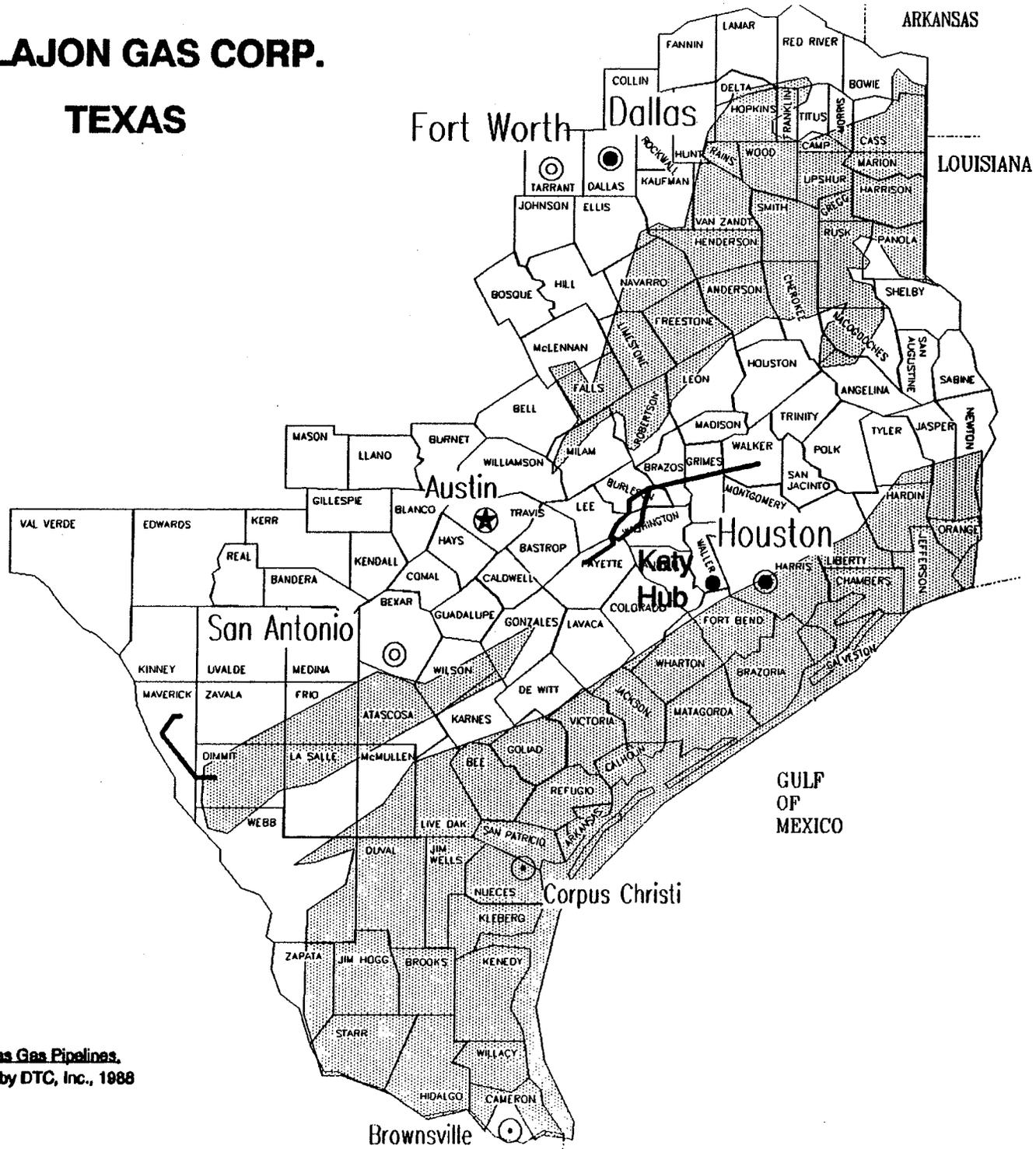
TEXAS



Source: Major Natural Gas Transmission Pipelines;
Railroad Commission of Texas, Transportation /
Gas Utilities Division, April, 1988;
1988 Texas Gas Pipelines.
Prepared by DTC, Inc., 1988

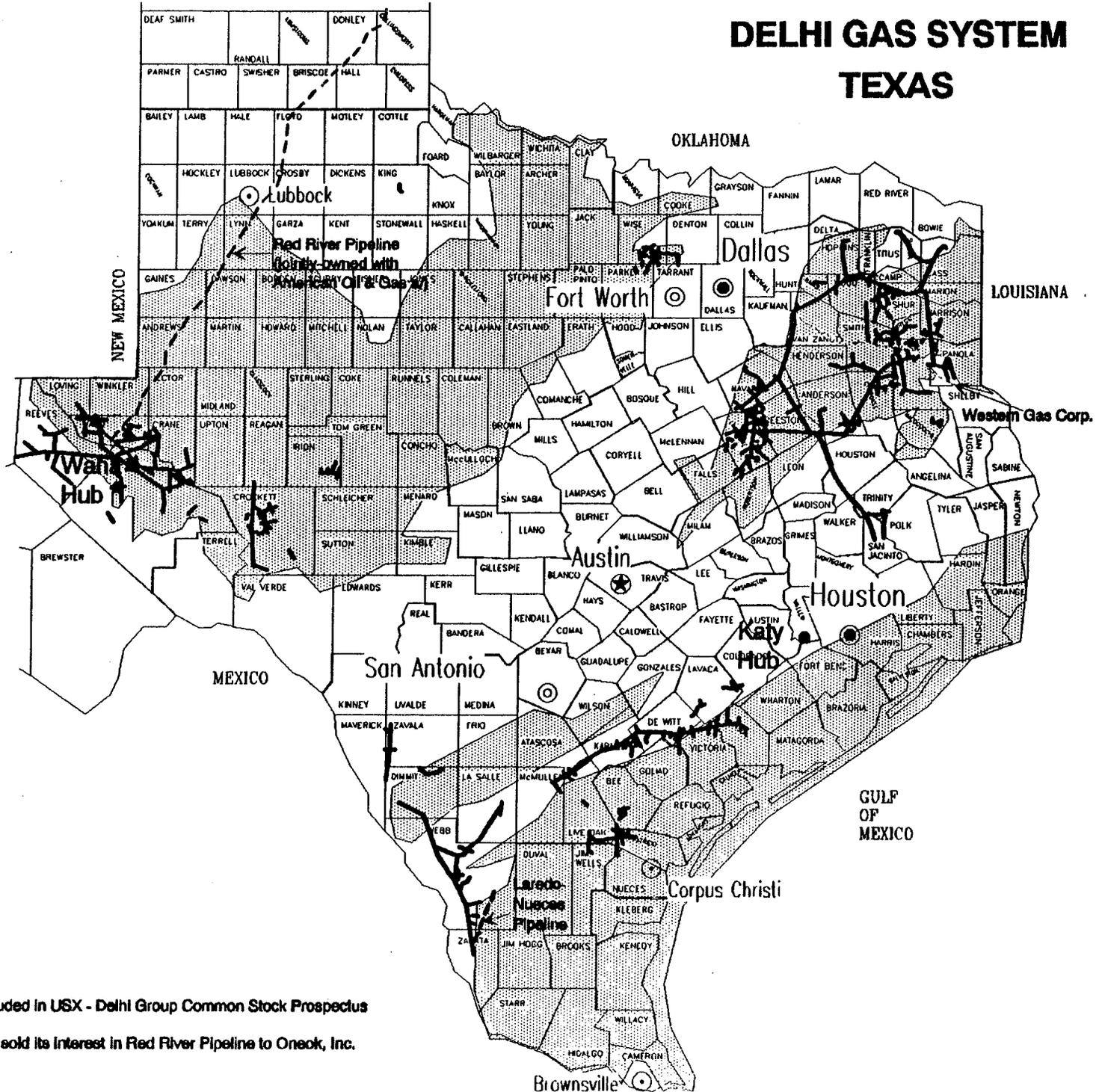
CLAJON GAS CORP.

TEXAS



Source: 1968 Texas Gas Pipelines.
Prepared by DTC, Inc., 1988

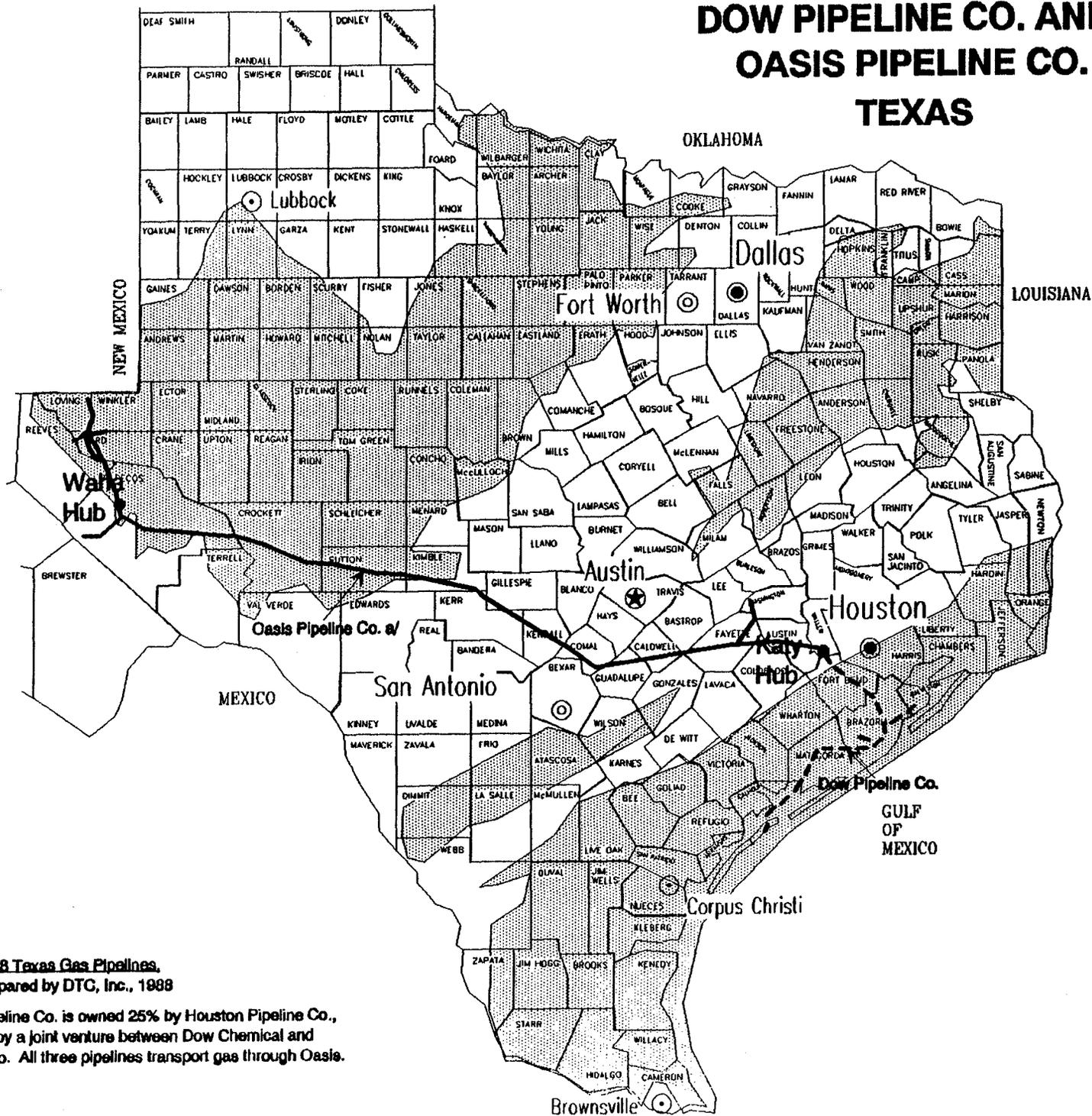
DELHI GAS SYSTEM TEXAS



Source: Map included in USX - Delhi Group Common Stock Prospectus

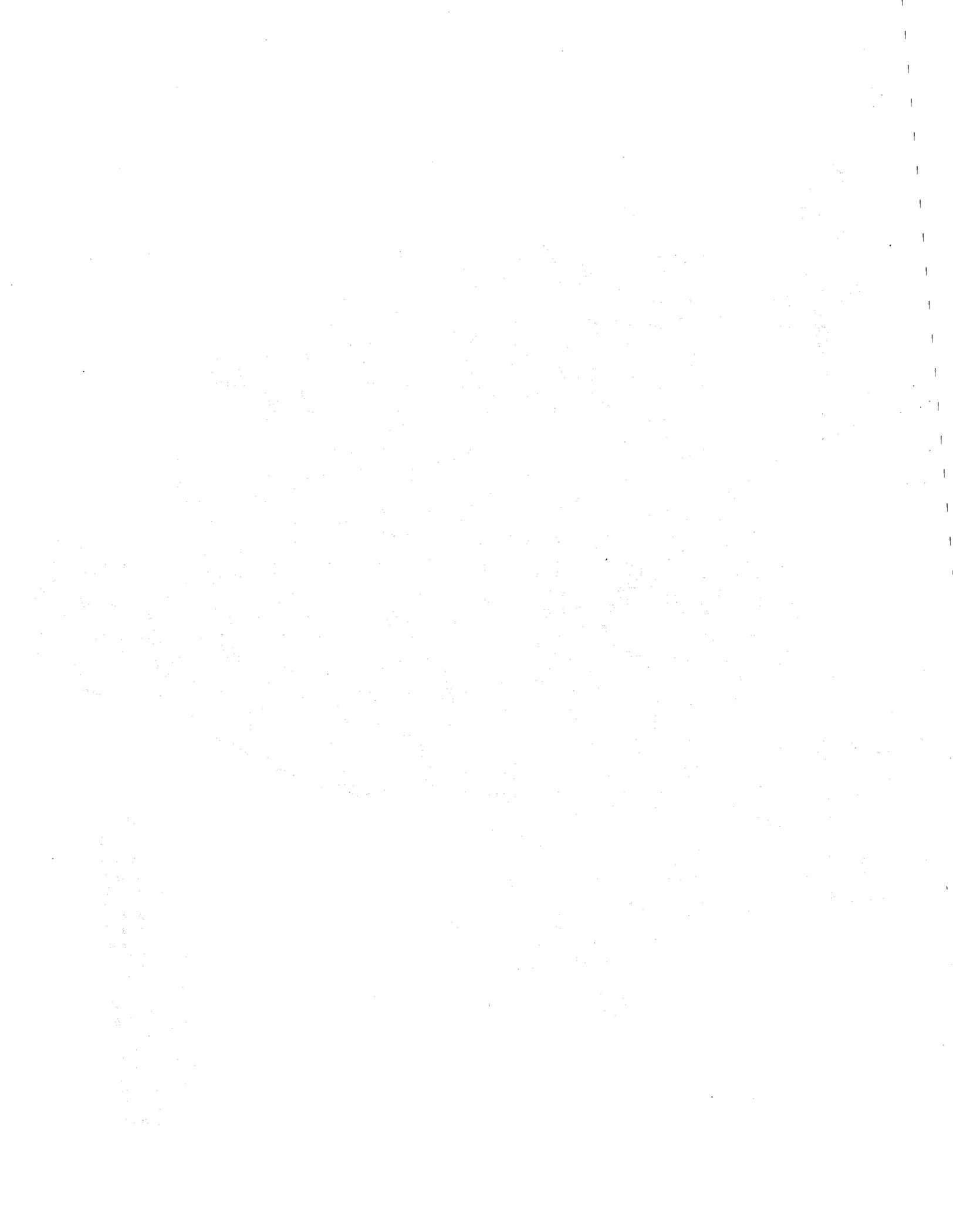
a/ Delhi recently sold its interest in Red River Pipeline to Oneok, Inc.

DOW PIPELINE CO. AND OASIS PIPELINE CO. TEXAS



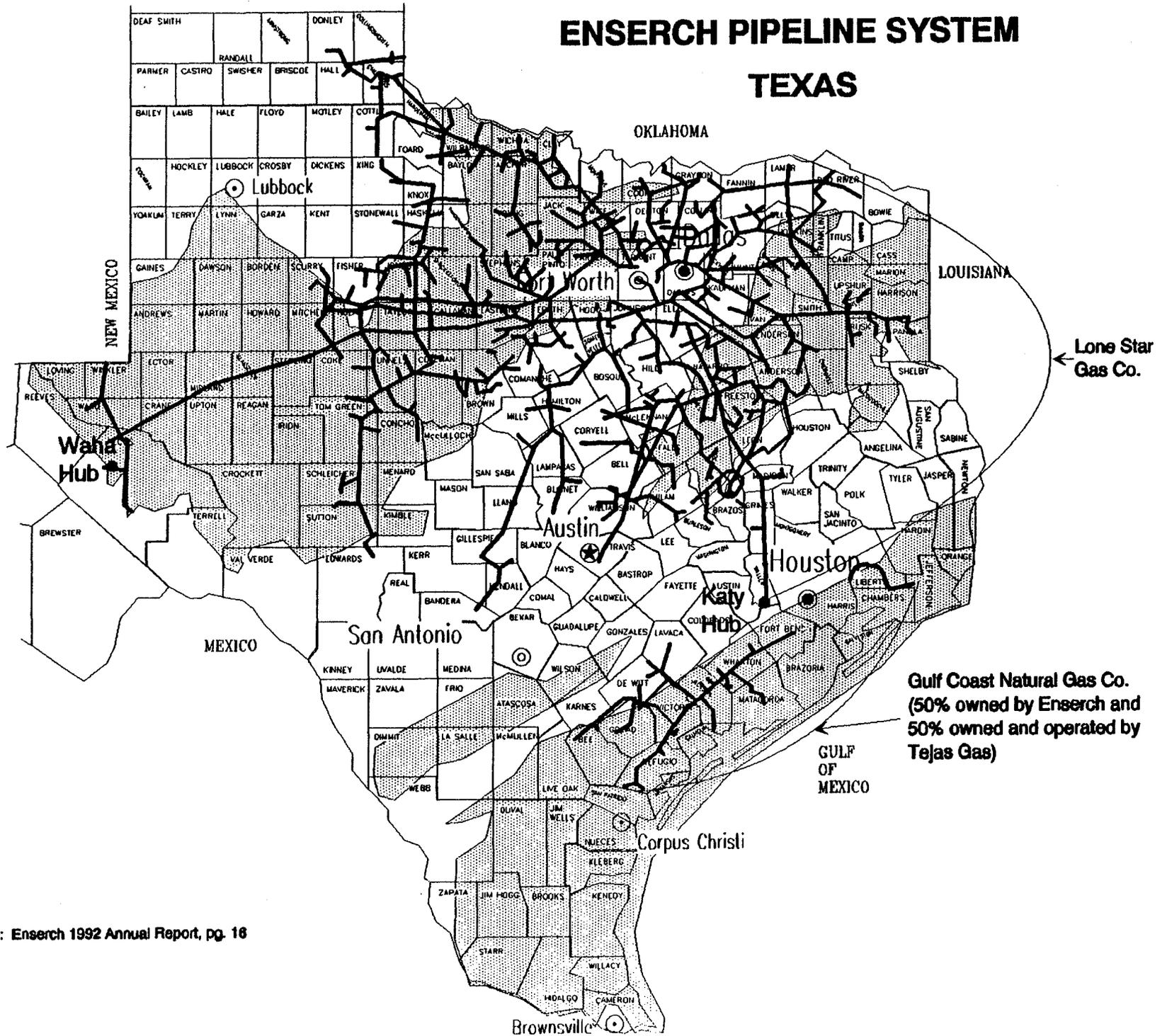
Source: 1988 Texas Gas Pipelines,
Prepared by DTC, Inc., 1988

a/ Oasis Pipeline Co. is owned 25% by Houston Pipeline Co.,
and 75% by a joint venture between Dow Chemical and
Tenngasco. All three pipelines transport gas through Oasis.

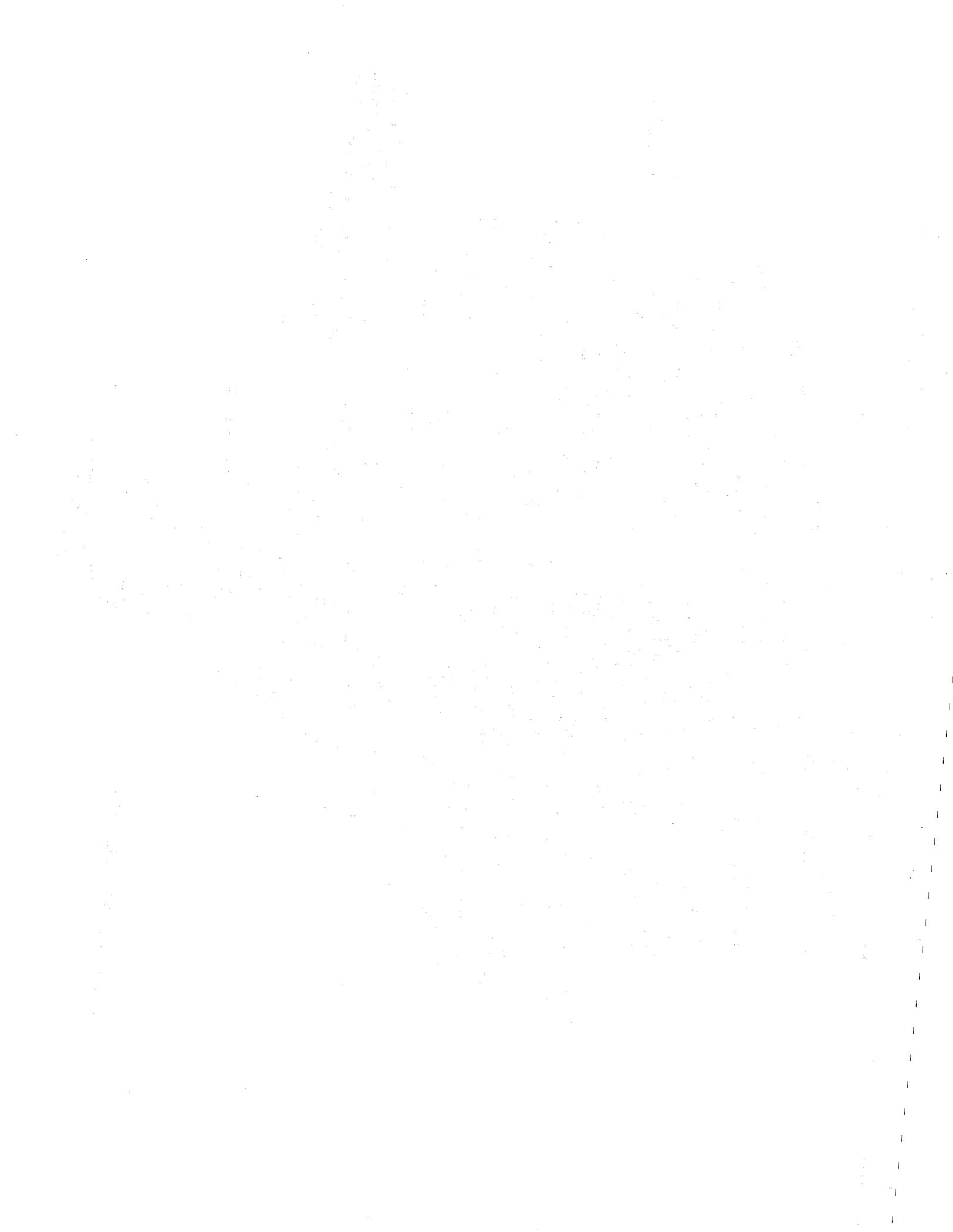


ENSERCH PIPELINE SYSTEM

TEXAS

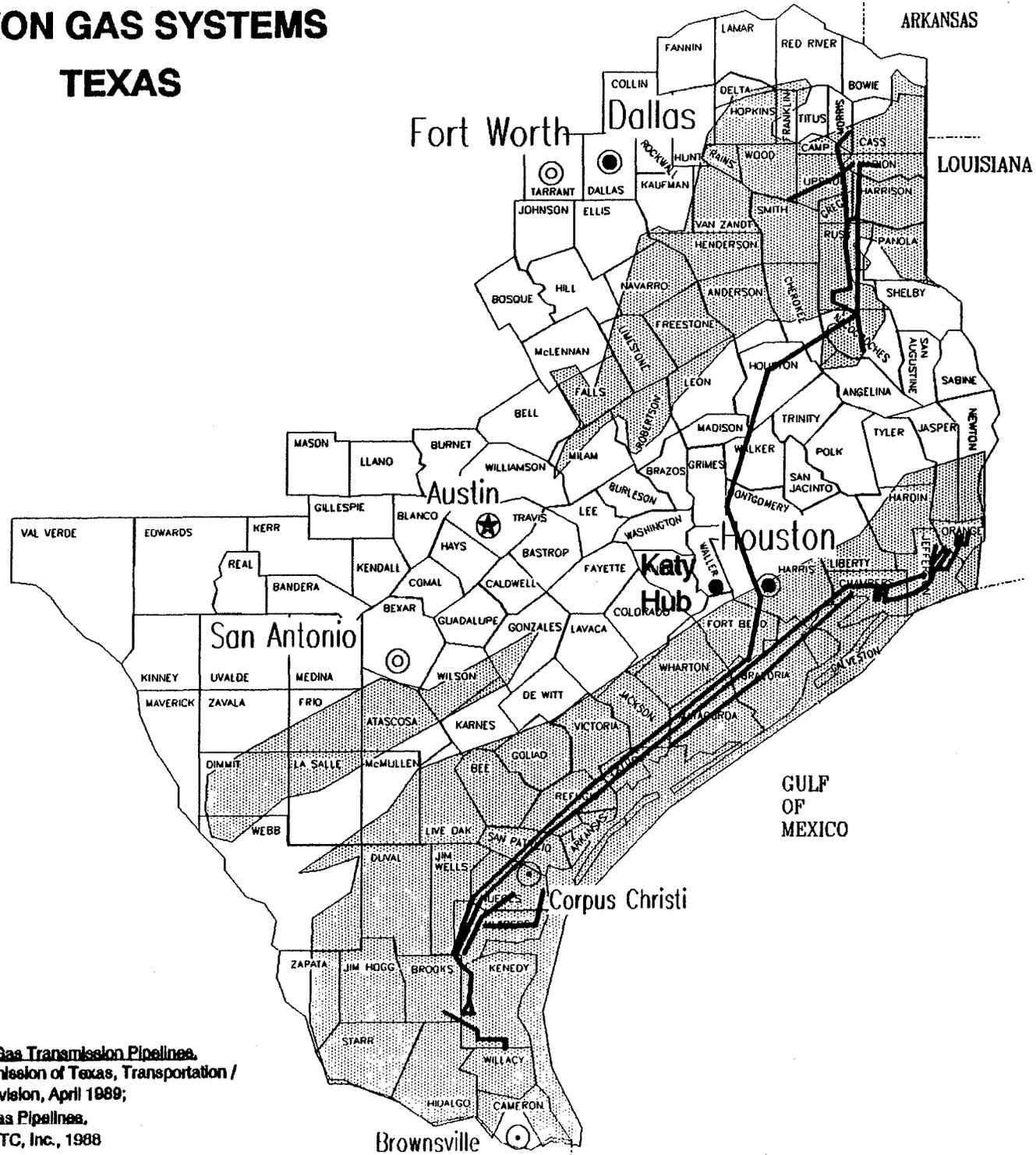


Source: Enserch 1992 Annual Report, pg. 18



EXXON GAS SYSTEMS

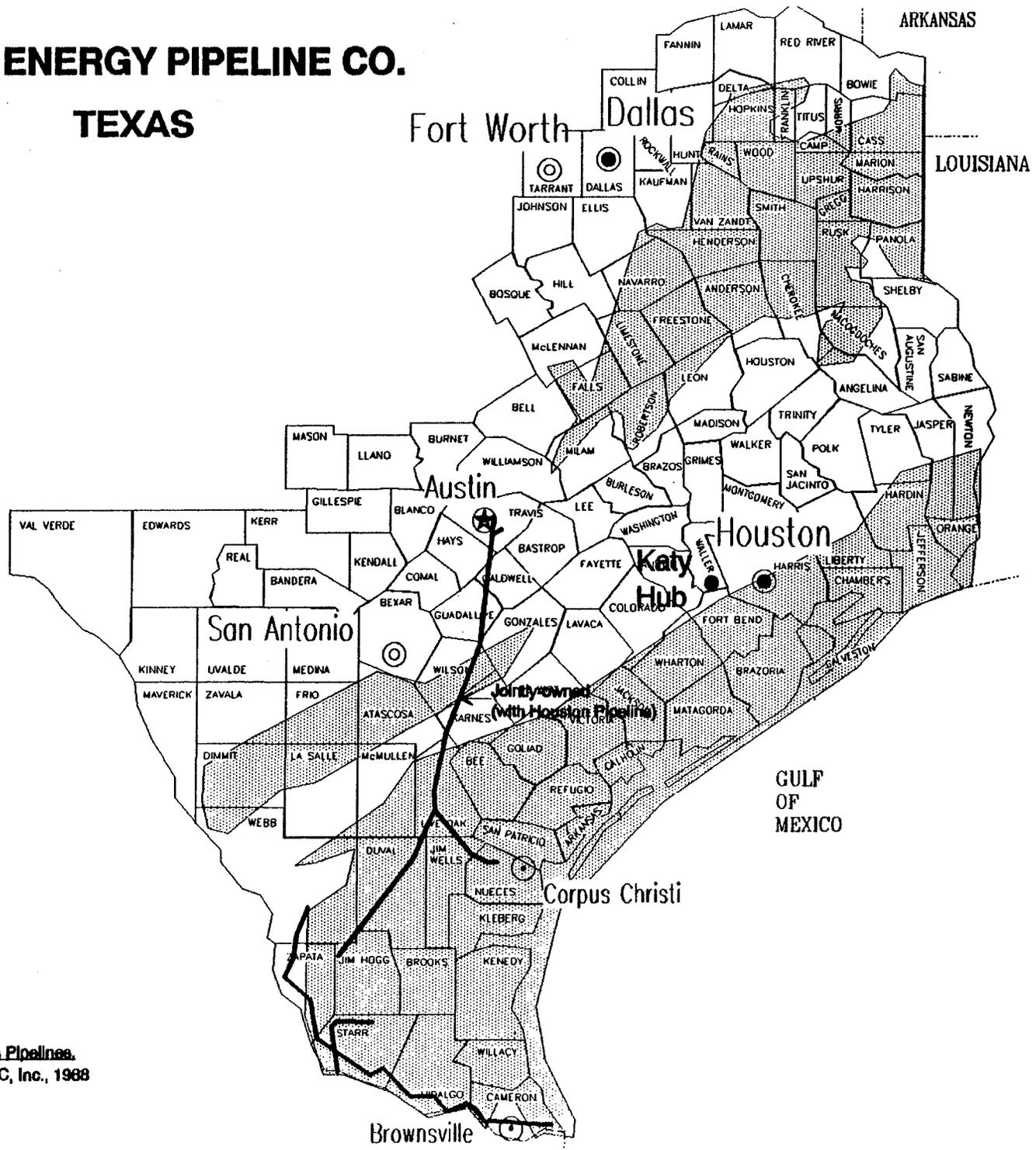
TEXAS



Source: Major Natural Gas Transmission Pipelines,
Railroad Commission of Texas, Transportation /
Gas Utilities Division, April 1989;
1988 Texas Gas Pipelines,
Prepared by DTC, Inc., 1988

GULF ENERGY PIPELINE CO.

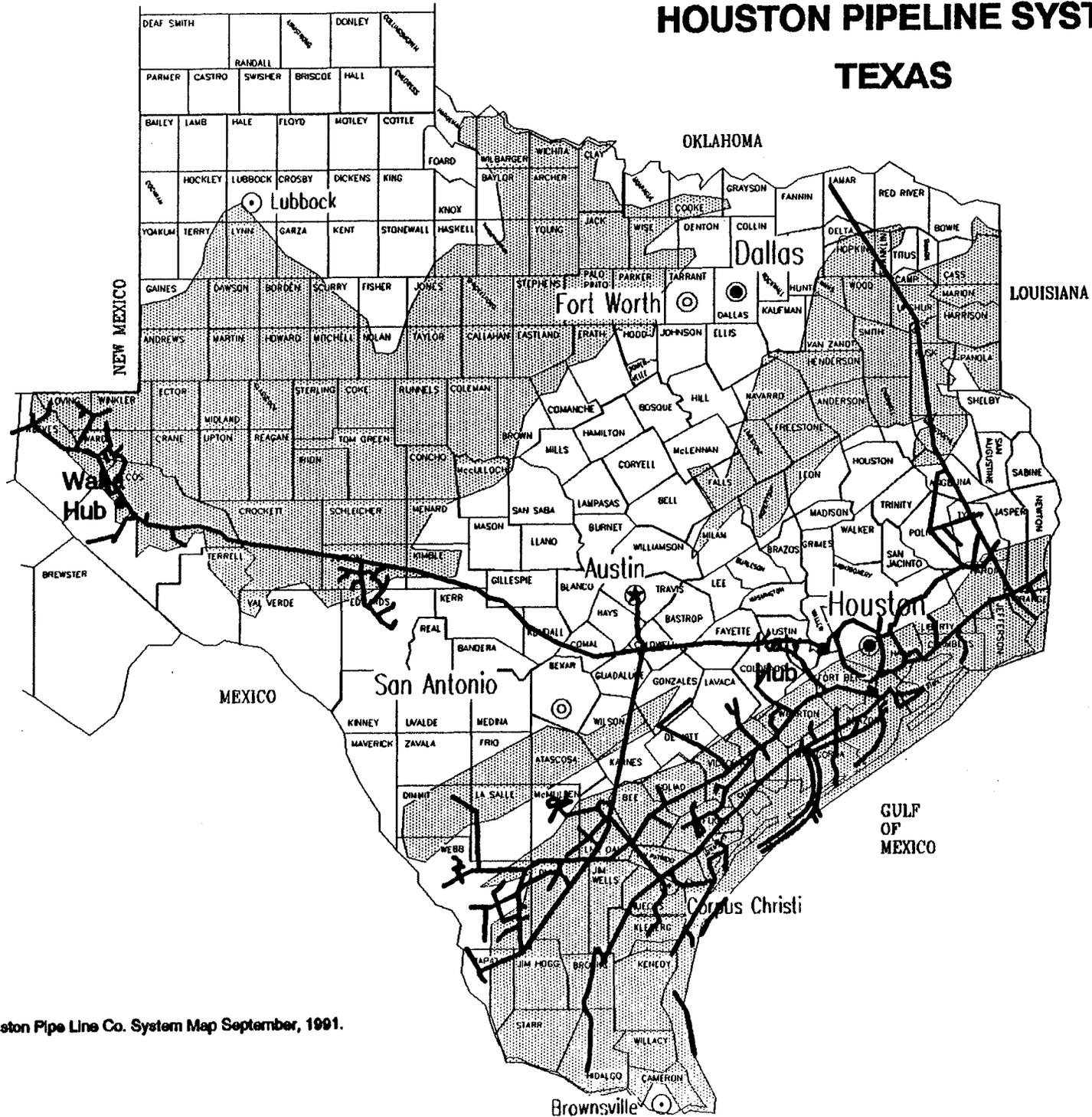
TEXAS



Source: 1988 Texas Gas Pipelines.
Prepared by DTC, Inc., 1988

HOUSTON PIPELINE SYSTEM

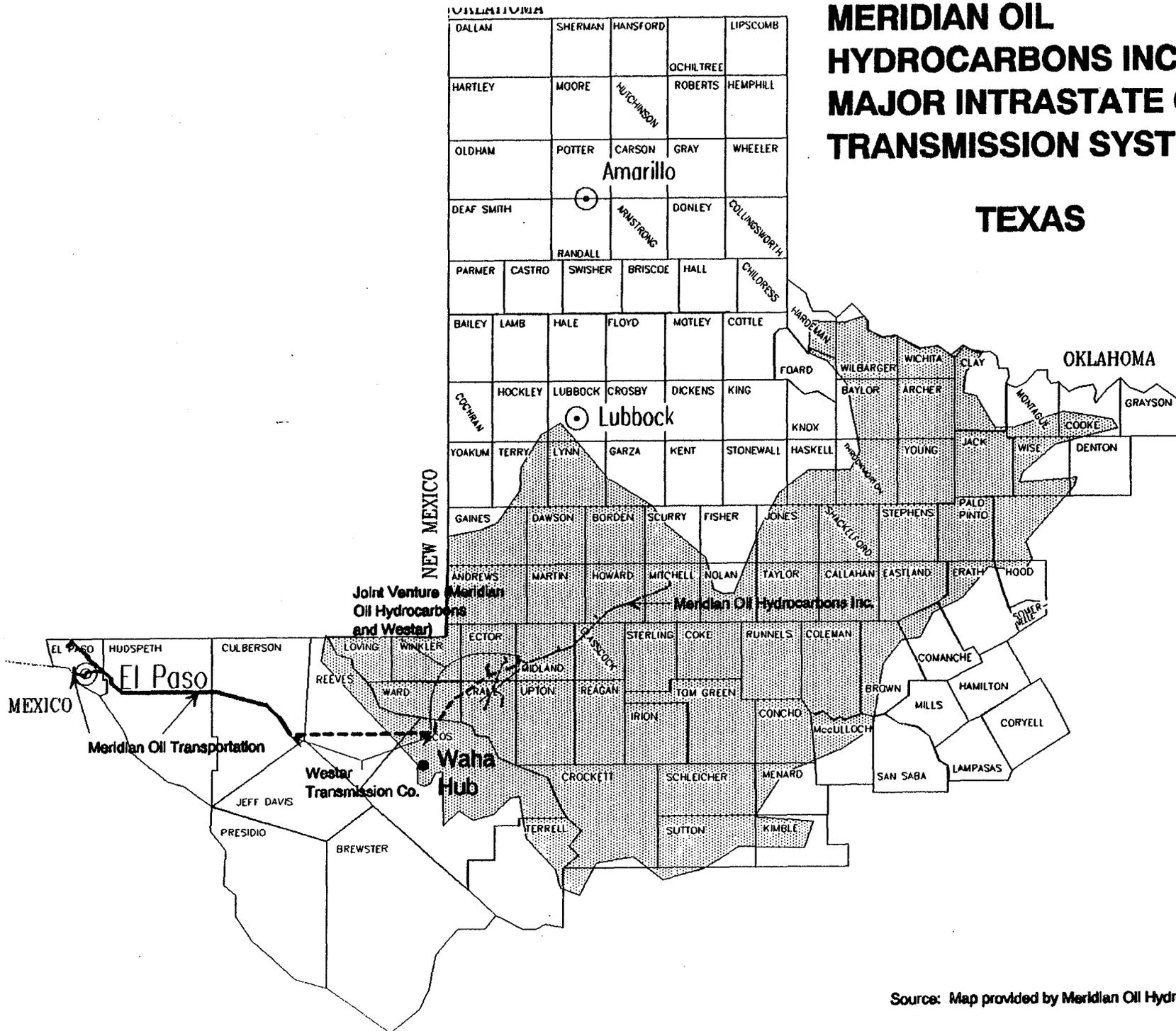
TEXAS



Source: Houston Pipe Line Co. System Map September, 1991.

MERIDIAN OIL HYDROCARBONS INC. MAJOR INTRASTATE GAS TRANSMISSION SYSTEM

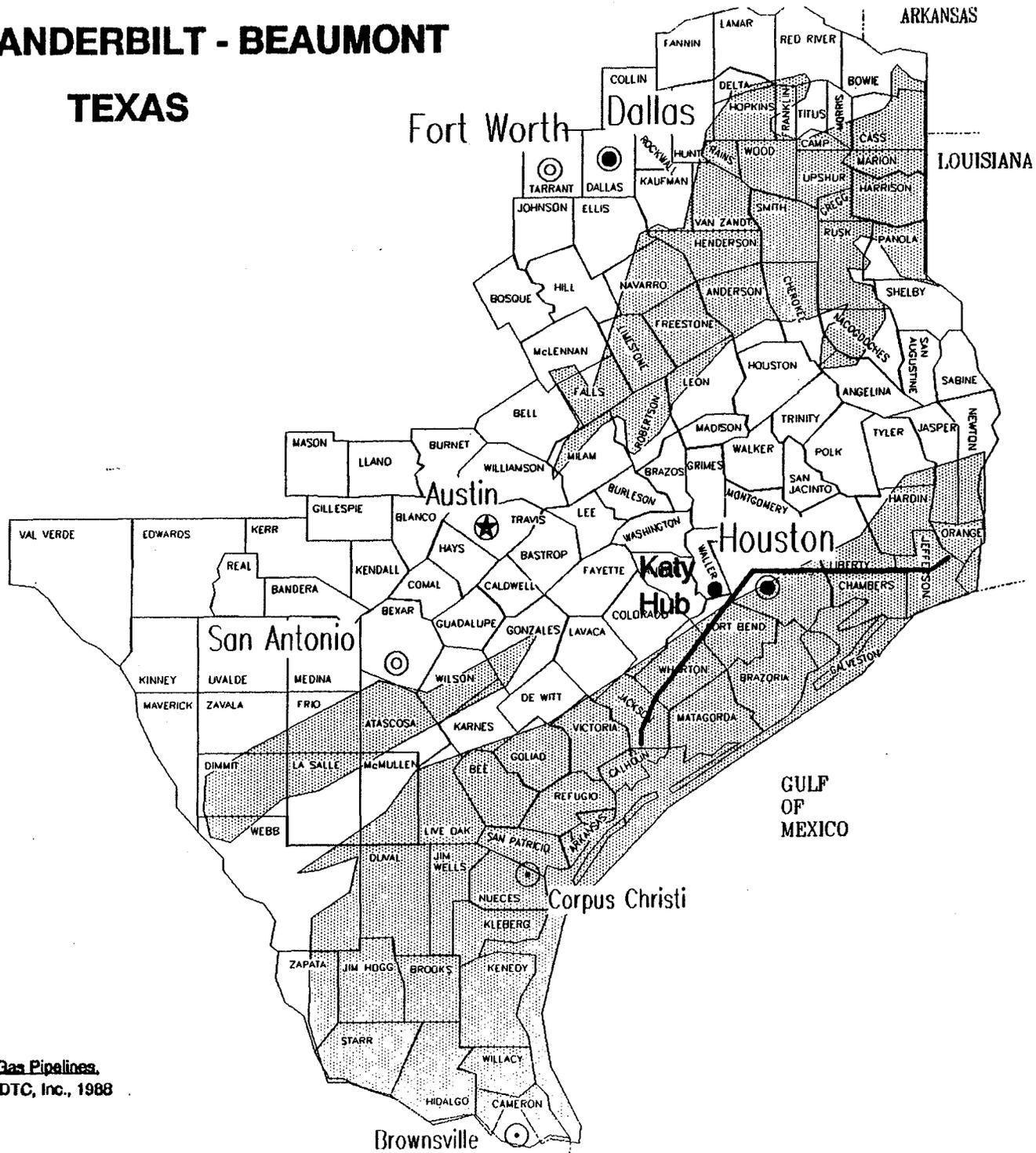
TEXAS



Source: Map provided by Meridian Oil Hydrocarbons Inc.

MOBIL VANDERBILT - BEAUMONT

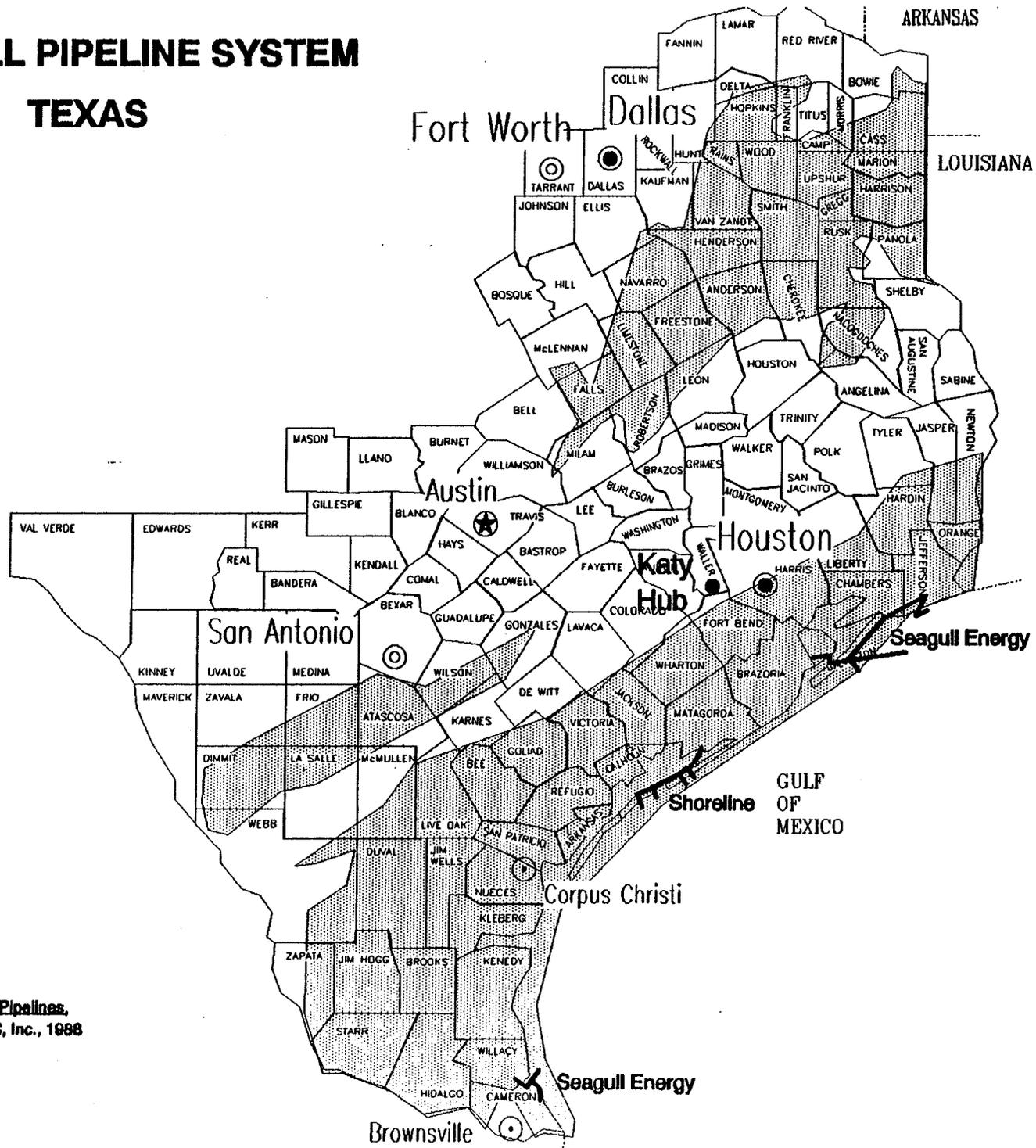
TEXAS



Source: 1988 Texas Gas Pipelines.
Prepared by DTC, Inc., 1988

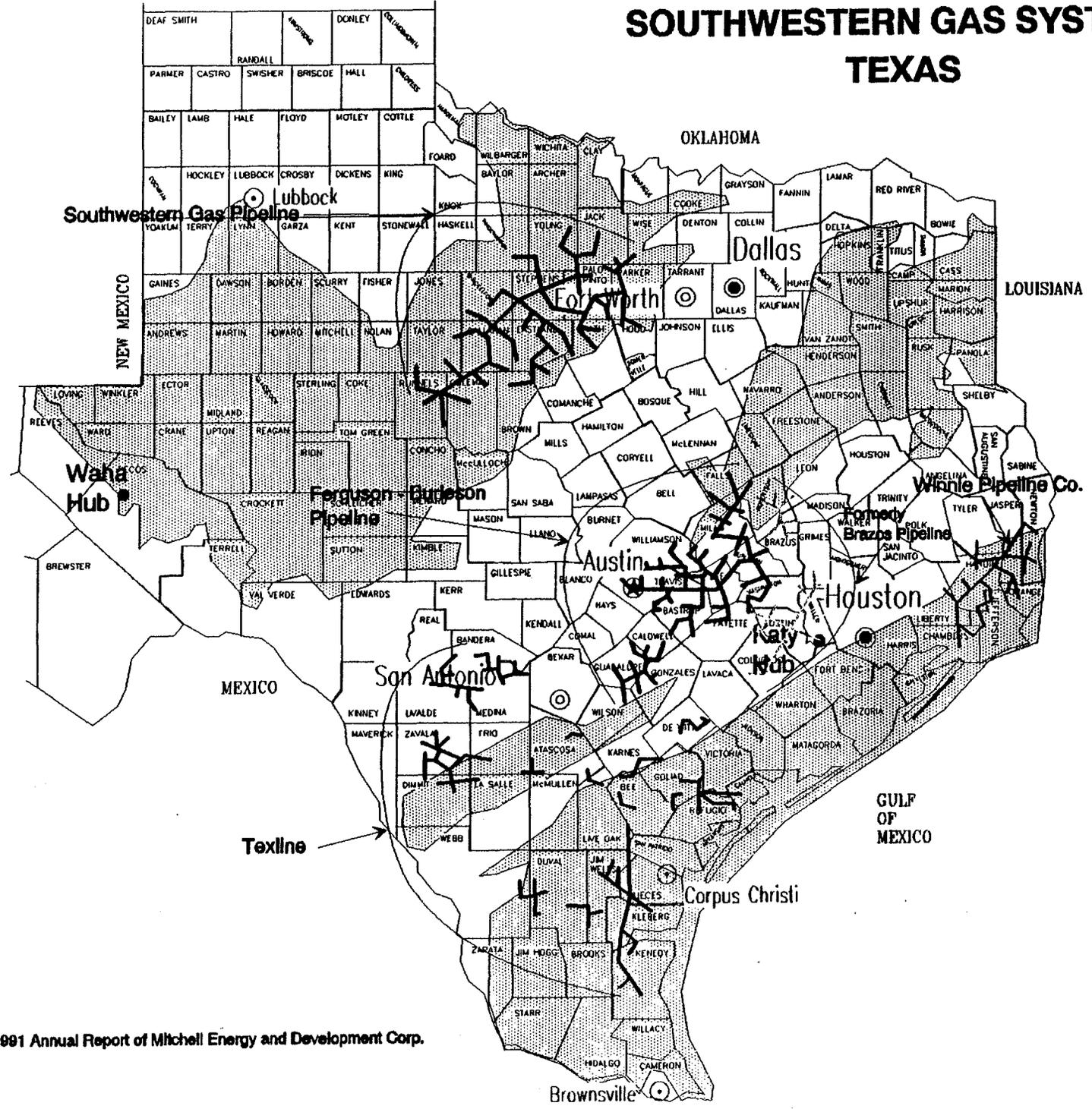
SEAGULL PIPELINE SYSTEM

TEXAS



Source: 1988 Texas Gas Pipelines,
Prepared by DTC, Inc., 1988

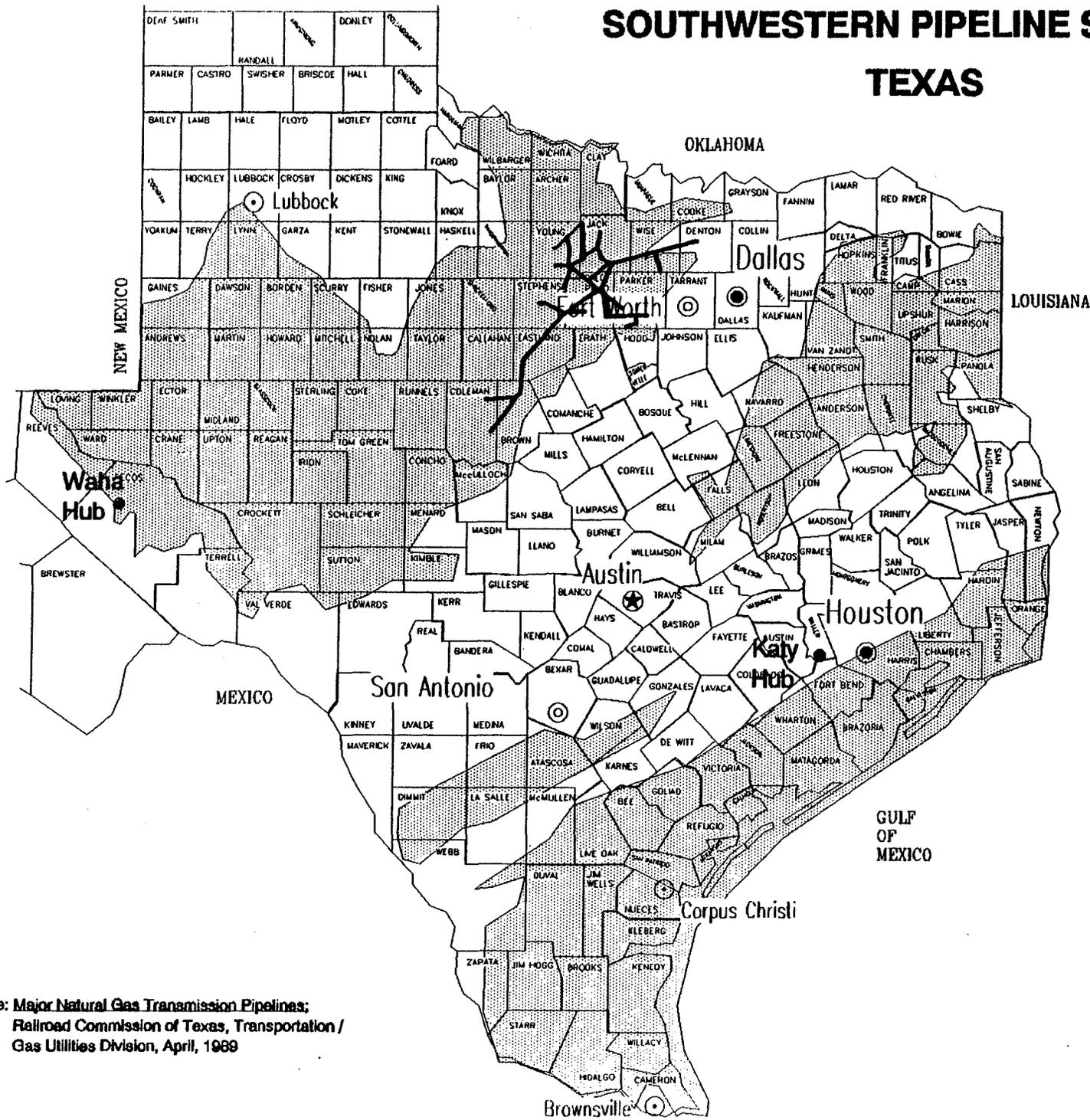
SOUTHWESTERN GAS SYSTEM TEXAS



Source: 1991 Annual Report of Mitchell Energy and Development Corp.

SOUTHWESTERN PIPELINE SYSTEM

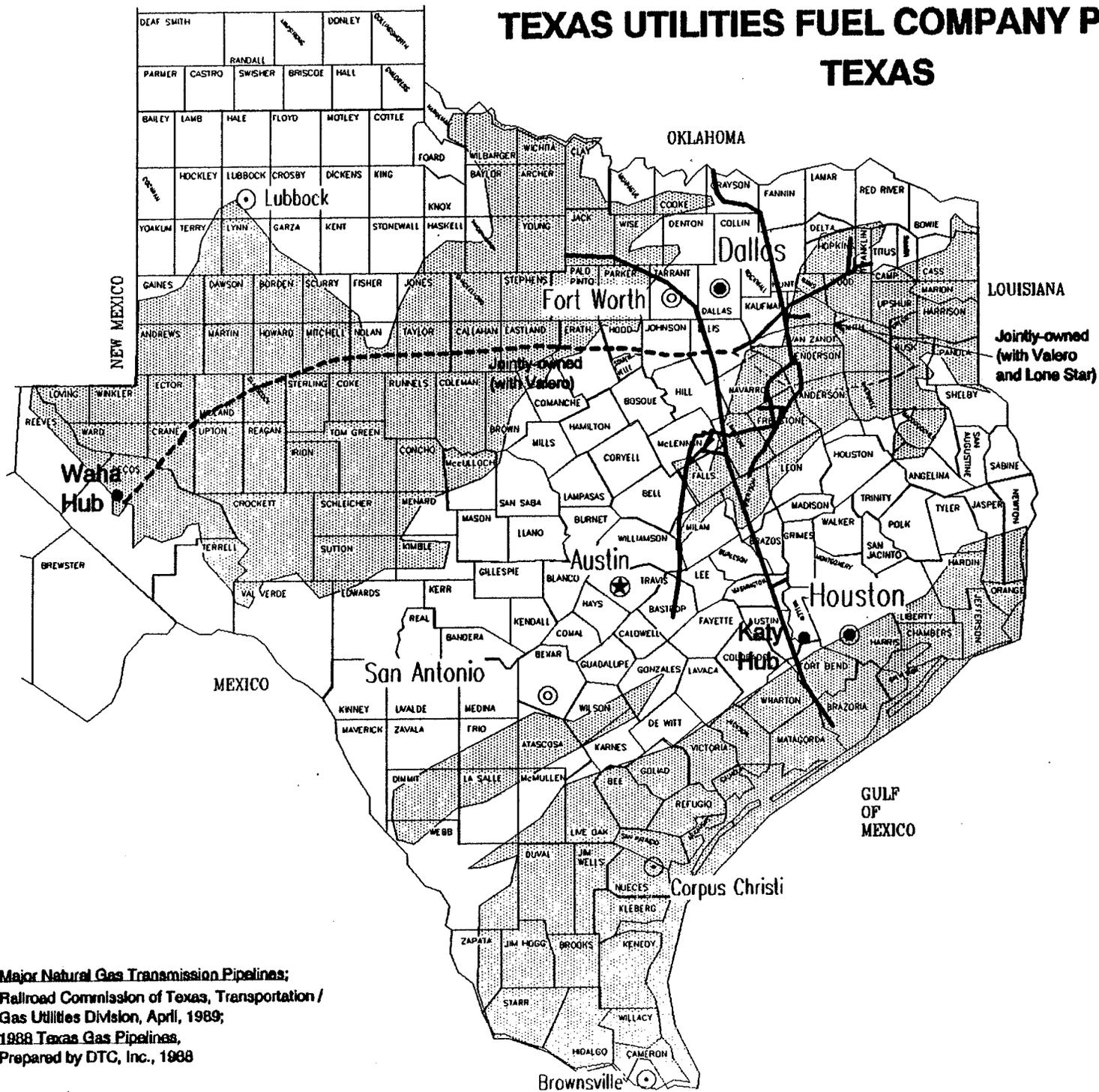
TEXAS



Source: Major Natural Gas Transmission Pipelines;
Railroad Commission of Texas, Transportation /
Gas Utilities Division, April, 1989

TEXAS UTILITIES FUEL COMPANY PIPELINE

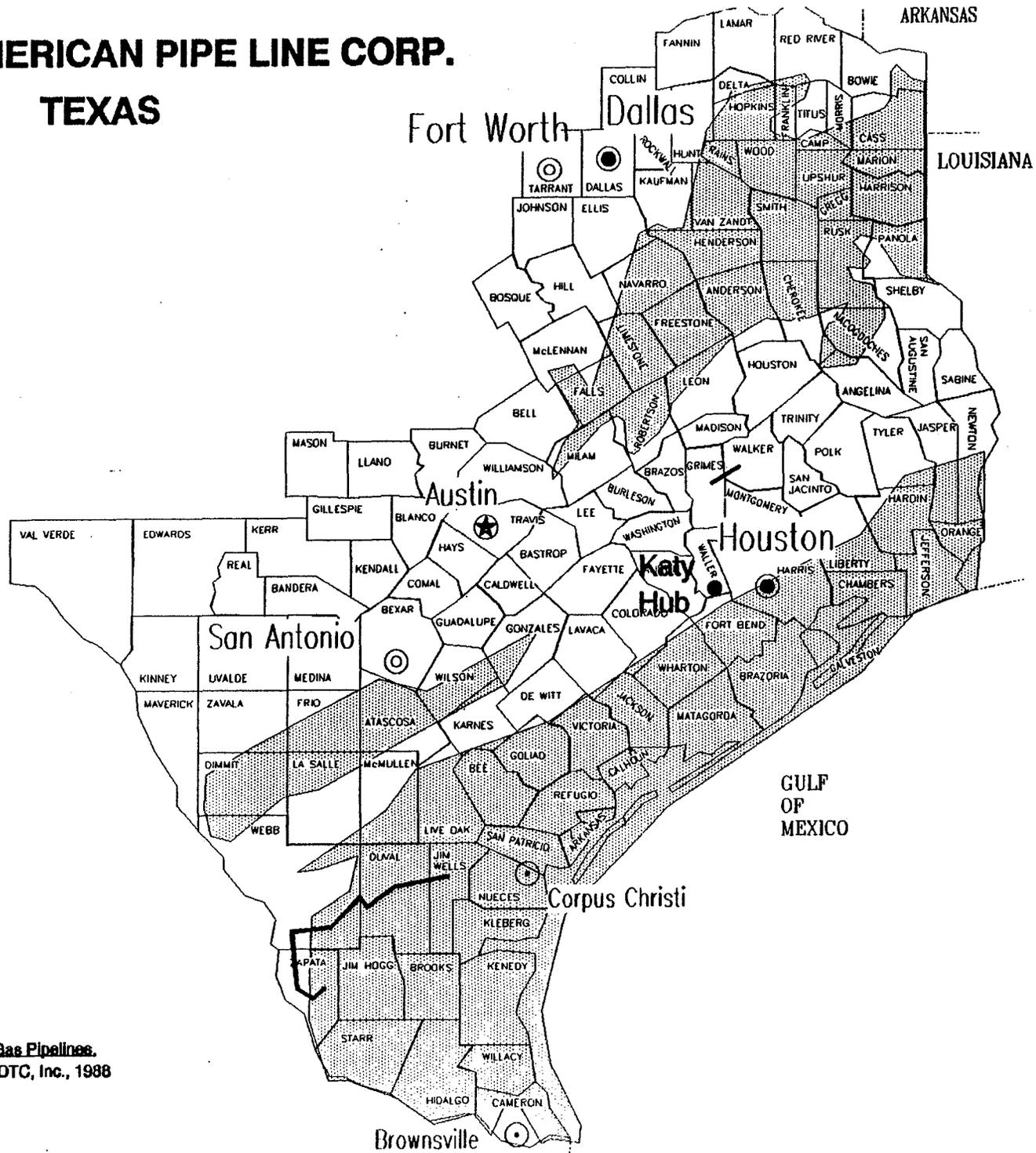
TEXAS



Source: Major Natural Gas Transmission Pipelines;
 Railroad Commission of Texas, Transportation /
 Gas Utilities Division, April, 1989;
 1988 Texas Gas Pipelines,
 Prepared by DTC, Inc., 1988

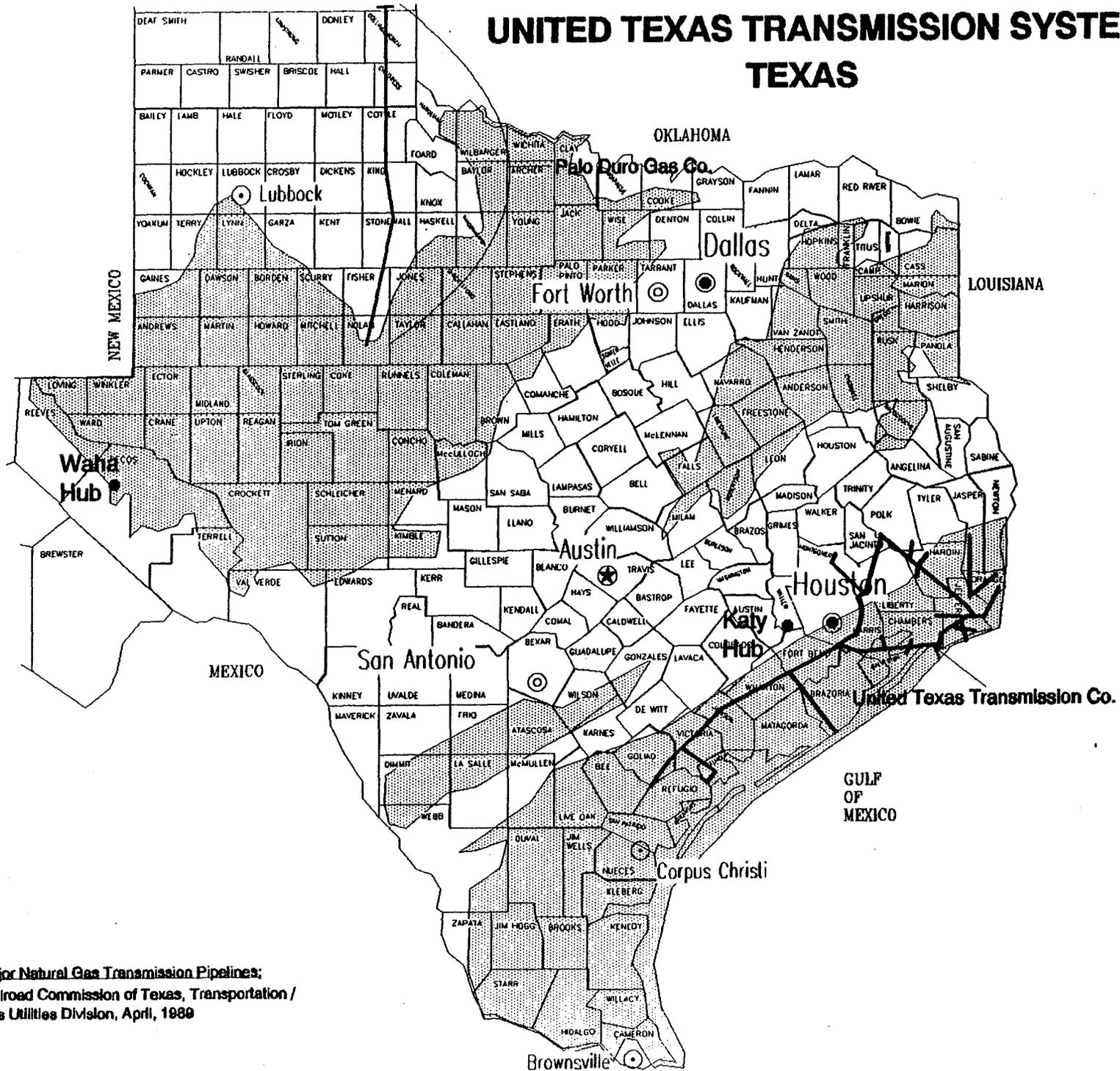
TRANSAMERICAN PIPE LINE CORP.

TEXAS



Source: 1988 Texas Gas Pipelines.
Prepared by DTC, Inc., 1988

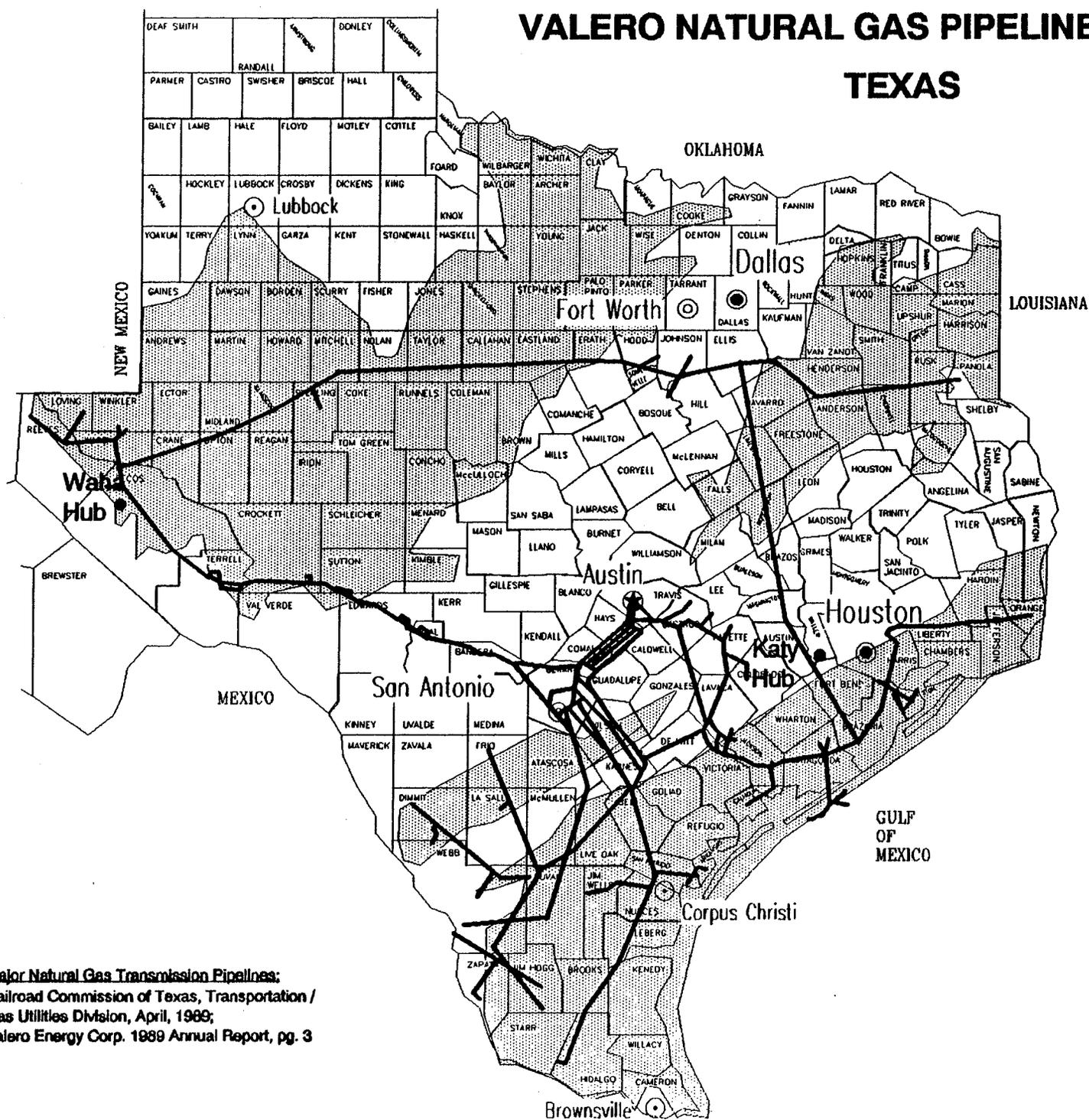
UNITED TEXAS TRANSMISSION SYSTEM TEXAS



Source: Major Natural Gas Transmission Pipelines;
Railroad Commission of Texas, Transportation /
Gas Utilities Division, April, 1989

VALERO NATURAL GAS PIPELINE SYSTEM

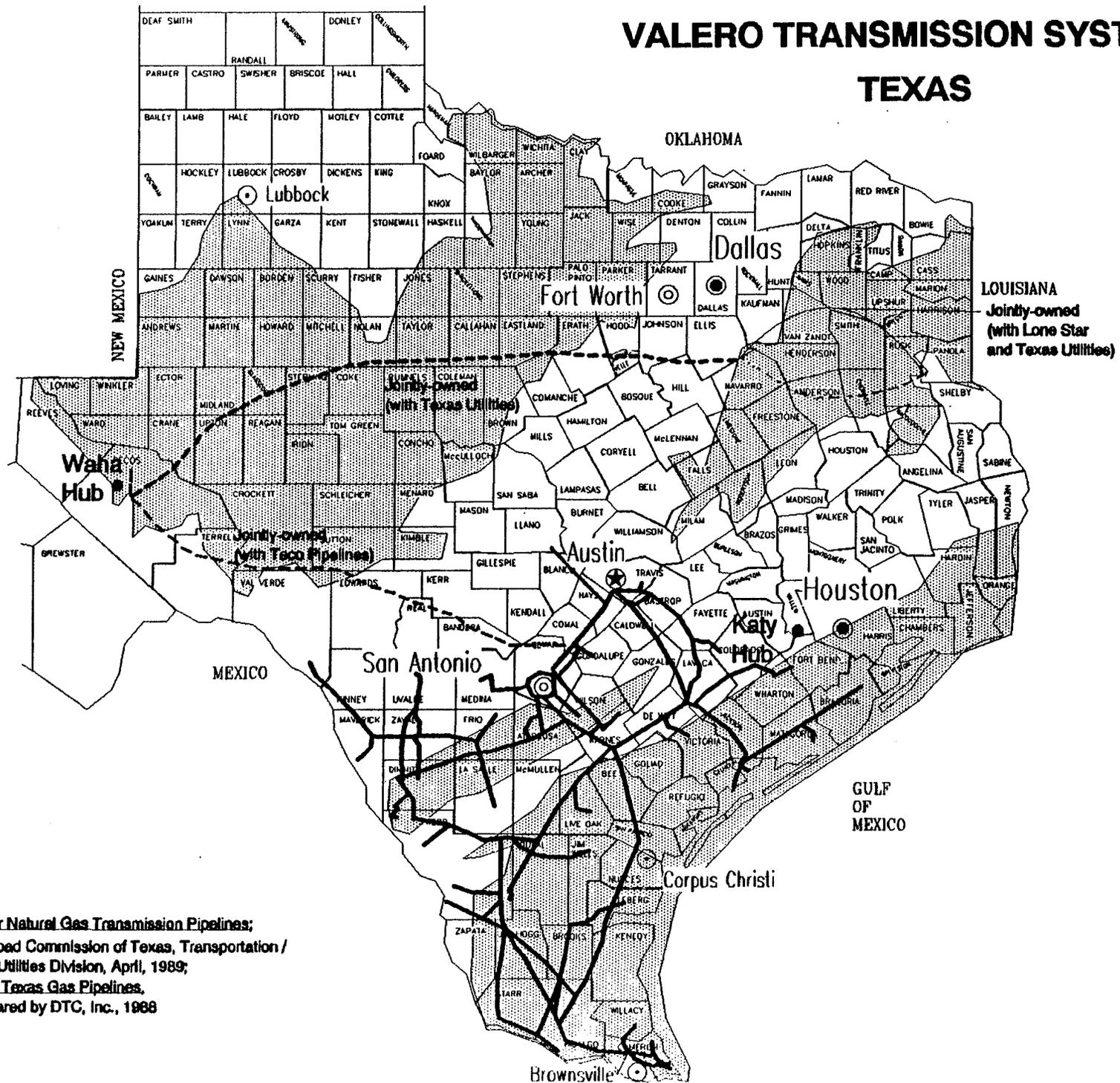
TEXAS



Source: Major Natural Gas Transmission Pipelines;
Railroad Commission of Texas, Transportation /
Gas Utilities Division, April, 1989;
Valero Energy Corp. 1989 Annual Report, pg. 3

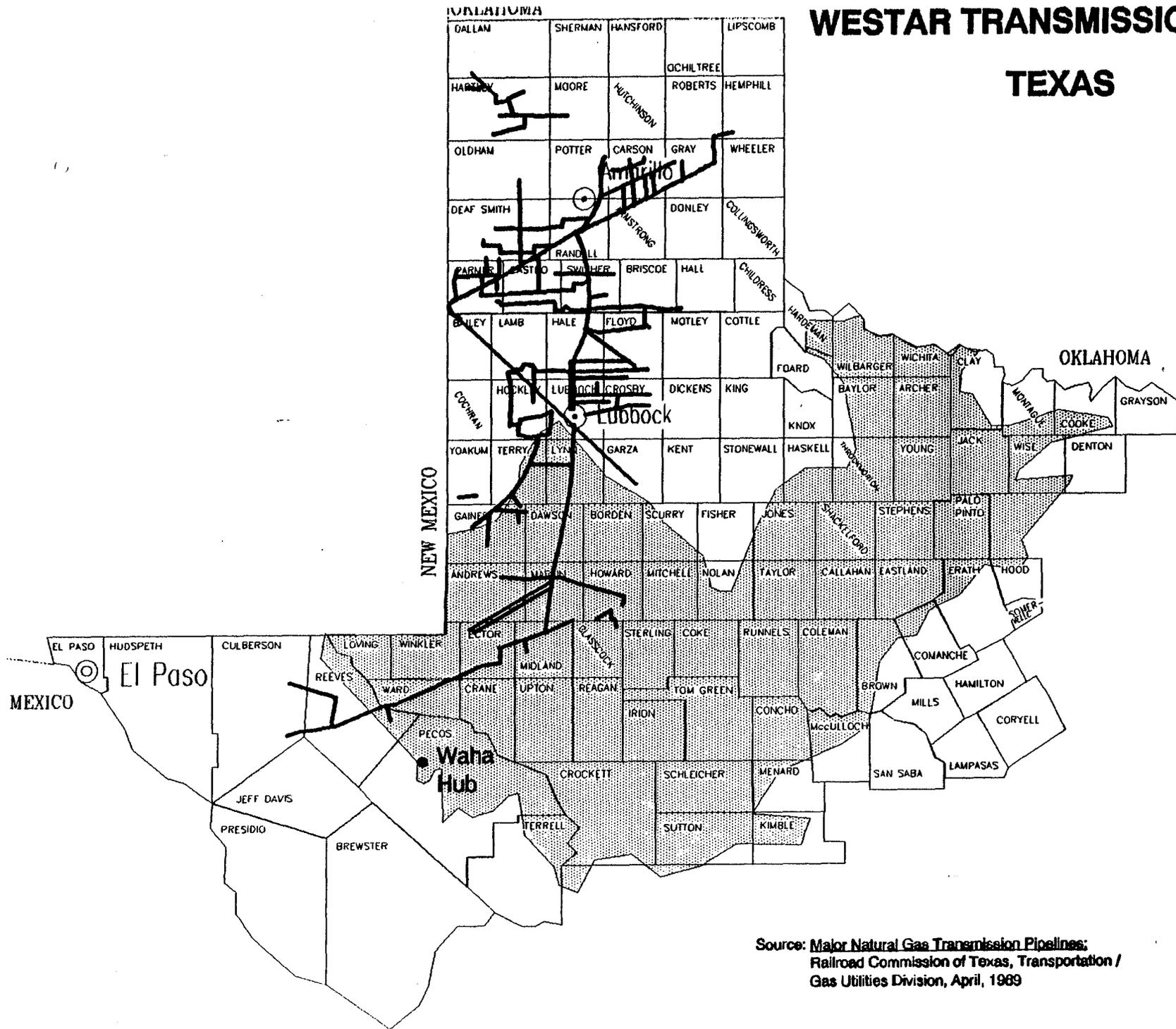
VALERO TRANSMISSION SYSTEM

TEXAS



Source: Major Natural Gas Transmission Pipelines;
Railroad Commission of Texas, Transportation /
Gas Utilities Division, April, 1989;
1988 Texas Gas Pipelines,
Prepared by DTC, Inc., 1988

WESTAR TRANSMISSION CO. TEXAS



Source: Major Natural Gas Transmission Pipelines;
Railroad Commission of Texas, Transportation /
Gas Utilities Division, April, 1969

APPENDIX III

**RELEVANT RULES AND REGULATIONS
AFFECTING INTRASTATE PIPELINES
IN LOUISIANA, OKLAHOMA, AND TEXAS**

**RELEVANT RULES AND REGULATIONS
AFFECTING INTRASTATE PIPELINES
IN LOUISIANA, OKLAHOMA, AND TEXAS**

A. LOUISIANA

The parts of the Louisiana statutes dealing with intrastate gas pipelines and pertinent regulations of the Conservation Commission are shown below. The Office of Conservation authority derives from the Natural Resources and Energy Act of 1973 (Act 16 of the Extraordinary Session of 1973).

1. Louisiana Statute - R.S. 45

Section 301. Pipe lines; gas; affected with a public interest

The transportation or sale of natural gas by pipe lines to local distributing systems for resale is affected with a public interest and such pipe lines, appurtenances and facilities to the extent of such transportation or sales are public utilities subject to the jurisdiction of the Louisiana Public Service Commission.

Section 302. Powers of the commission; scope

The commission shall supervise, govern regulate and control the transportation or sale of natural gas moving by pipe line to local distributing systems for resale for the purpose of fixing and regulating the rates charged and the service furnished by such public utilities in connection with such transportation or sale.

The power, authority and duties of the Commission shall affect and include all matters and things directly connected with, concerning and growing out of the service given or rendered by such pipe lines transporting or selling natural gas to local distributing systems for resale with respect to any such transportation or sales.

Section 303. Powers of the commission; limitations

The provisions of this Part shall not apply to the production and gathering of natural gas or its conservation.

Nor shall those provisions apply to any public utilities, the title to which is in the state or any of its political subdivisions or municipalities; or any public utility already subject to regulations by any municipality under the laws of Louisiana, except as to operation by the utility beyond the corporate limits of such municipality.

Whenever the commission is required in administering the provisions of this Part to find the value of gas in the field where produced, that value shall be determined at the amount paid therefor by the pipe line company in the field pursuant to arm's-length contract; and in the absence of such arm's-length contracts, the fair market value of the gas as a commodity in the field.

The commission has no jurisdiction over direct industrial sales by such public utilities unless after investigation the commission shall find that any particular direct industrial sale is prima facie prejudicial to the rates charged for natural gas sold to local distributing systems for resale, in which event the commission has authority after a hearing on the matter to order such adjustment in the rates charged for gas sold to local distributing systems for resale, as may be necessary to remove the prejudicial effect of such rate of such direct industrial sale.

The power and authority conferred by this Section shall not apply to the transportation or sale of natural gas to direct industrial consumers by such utilities but shall, in respect of such transportation or sale, be restricted to the determination by the commission of the cost of service properly allocable to such transportation or sale and to the allocation of the cost to that service.

2. Summary of Conservation Commission Regulations

Regulation No. 1 -- Definitions:

Intrastate Natural Gas: shall mean that gas produced, transported, and utilized wholly within the State of Louisiana, through the use of intrastate pipelines where such use of intrastate pipelines is or may hereafter be exempt from the control of the Federal Energy Regulatory Commission under the Natural Gas Act or rules and regulations promulgated by the Federal Energy Regulatory Commission thereunder, and gas, wherever produced, which is or may be transported into this state and delivered to an intrastate pipeline in this state to be used or consumed wholly within this state.

Intrastate Natural Gas Pipeline: shall mean a pipeline which is located and operated wholly within the State of Louisiana, which does not extend beyond the boundaries of the State of Louisiana, and which is not merely a local branch of an interstate pipeline system but does not include producer-owned producing and gathering lines and facilities associated and used in connection therewith, provided such lines and facilities are not used for hire in the transportation of natural gas for others, except as provided in R.S. 30:607.

Intrastate Natural Gas Transporter: shall mean any person owning or operating an intrastate natural gas pipeline.

Natural Gas Company: shall mean a person engaged in the sale of intrastate natural gas beyond the wellhead.

Regulation No. 2 -- Certificate of Transportation:

Any qualified person desiring a certificate of transportation shall apply to the Commissioner for an order on such forms and in the manner prescribed by the Commissioner. The Commissioner shall issue an order granting a certificate of transportation after hearing with due notice if he finds the applicant able and willing to perform properly the service proposed and to conform to the rules and regulations established.

Regulation No. 3 -- Requirements for Abandonment of All or Any Portion of Facility or Service Rendered:

Applications for abandonment must be filed with the Commissioner at least 30 days, and not more than 6 months, prior to contract termination date or prior to the proposed date of abandonment. All interested parties, which include the signatory parties to the contracts affected and owners or operators of facilities to be abandoned, must be notified. The Commissioner shall issue permission and approval for abandonment only after the intrastate natural gas transporter has demonstrated that the available supply is depleted to the extent that continuance of service is unwarranted or that the public interest and energy needs permit such abandonment.

Regulation No. 4 -- Transportation of Intrastate Natural Gas, and the Construction, Extension, Acquisition, and Operation of Facilities or Extension Thereof:

All applications filed under this regulation must be in writing, verified under oath, and shall contain information as to the legal name of the applicant; the nature of the service rendered; a concise description of applicant's existing operations; a map of the pipeline system; parties, including seller, purchaser, owner, transporter; date of contract; term

of contract; quantities, including maximum and minimum daily quantities; pressure base; whether service is firm or interruptible, and conditions for interruption or curtailment and minimum level of daily volumes during curtailment; types of service; points of delivery; delivery pressures; price; and location of interconnects. Subsequent filings may be required by the Commissioner to assist in evaluation of each pipeline system. All interested parties must be notified. A hearing may be held. The Commissioner, upon proper showing, shall issue his order in accord with the application submitted. Applications shall expire at the end of one year if construction of facilities has not begun.

Each transporter shall file by April 1 annually an updated map of its intrastate natural gas pipeline facilities showing the location and size of all compressors, all points of connection between facilities and pipelines of other persons, all major points of supply, and the normal size of all lines.

Regulation No. 5 -- Price of Intrastate Natural Gas Sold By a Natural Gas Company Under Contracts Executed After December 8, 1973:

Each natural gas company (defined as a person engaged in the sale of intrastate natural gas beyond the wellhead) shall file all contracts for sale of intrastate natural gas with the Commissioner within thirty days of execution of the contract. Unless the Commissioner gives notice to the contrary to the parties within fifteen days of filing, the contract shall be deemed to have been accepted or approved by the Commissioner without objection. If the Commissioner finds it advisable to consider the proposal further, he will notify the parties. If a petition is received from any party to the contract complaining of anything done or omitted to be done, the Commissioner will forward the complaint to the natural gas company which shall have twenty days from receipt to satisfy the complaint or to answer the same in writing.

(Note: While the Commissioner has some authority to examine and set rates under this regulation, this authority has not been exercised at any time up to the present.)

Regulation No. 6 -- Requirements for Connections:

All applications requesting approval for an intrastate natural gas transporter to connect its system with or move gas from another pipeline system within the State of Louisiana, shall contain information on points of connection; status of each pipeline involved; anticipated volumes to be transferred or exchanged; terms of the exchange or transfer; and reasons for the interconnections.

Regulation No. 7 -- Governing the Issuance of Orders Relative to the Transporting of Gas Using the Excess Capacity of Intrastate Gas Pipelines:

The Commissioner has the right to determine whether or not excess capacity exists and to investigate the need for using such excess capacity of an intrastate natural gas transporter to transport a gas supply owned by a person other than the proposed transporter.

Any applicant requesting use of excess capacity must submit to the Commissioner very detailed filings, which include, among other things, written evidence that the applicant has explored in good faith with the proposed transporter the feasibility of utilizing the transporter's pipeline. The Commissioner shall notice and hear the matter. The Commissioner will consider the following factors, among others in making a decision: the specific intrastate pipeline system and points of entry and discharge; the period of time that the gas is to be transported; whether or not quality specifications of the gas to be transported meet or exceed the highest quality specifications of gas currently transported through the pipeline; volume of gas required for the transporter's own use; existing condition and all operating data of the transporter's pipelines, including whether any of the involved pipelines are now, or have ever been engaged in the transportation of intrastate gas; and any requirements which would cause the transporter to alter or modify any of its existing pipeline facilities or operating procedures.

Every order issued by the Commissioner hereunder shall set the effective term, quality, quantity, measurement and balancing, and further, after notice and hearing, if the parties cannot agree, shall fix the rates and charges to be paid by the owner of the gas to the transporter for the transportation of the gas.

(Note: This provision has not been exercised to the current time.)

Regulation No. 8 -- Establishment of a Gas Supply Acquisition Service Area:

Transporters of natural gas may apply to the Commissioner to establish gas supply acquisition service areas for the transporter. The Commissioner upon proper showing, and after a hearing if necessary, may issue such an order. Nothing contained in this regulation limits the power of the Commissioner to order overlapping gas supply acquisition service areas for service of an area already being served by another transporter.

B. OKLAHOMA

Oklahoma intrastate pipeline regulation is the subject of Statute Title 52 (Oil and Gas), Sections 8, 9 and 10 dealing with the authorization to build and operate a pipeline, and Sections 23 through 26 dealing with common carrier regulations, as set forth below.

Section 8. Plat and information showing trunk lines -- Filing with Corporation Commission

Before any gas pipeline corporation shall acquire any right-of-way, or exercise the right of eminent domain within this state, or construct any pipelines for the transportation of gas, it shall file in the office of the Corporation Commission a plat showing in detail the points in this state between which, and the route along which its trunk line is proposed to be constructed, the intended size and capacity, thereof, and the location and capacity of all pumping stations, gate valves, check valves and connections of all kinds on said trunk lines; and upon the demand of the Corporation Commission, it shall file a plat showing in detail all the lines owned or operated by it, with full information as to their capacity and size, location and capacity of its pumping station, gate valves, check valves and connections of all kinds in existence.

Section 9. Domestic pipeline companies -- Erection of pumping stations

All domestic gas pipeline corporations in this state are hereby authorized to build and operate, and for that purpose to acquire, whether by purchase or the exercise of eminent domain, sites for the erection of pumping stations in this state wherever the same may be necessary, due consideration being had for the size, capacity, pressure, facilities and power of all other gas pipeline corporations and gas consumers and gas producers, in the same gas district which may be affected by the use of said pumps.

Section 10. Pipeline companies may cross highways, bridges, etc. -- Supplying gas to landowner

Every gas pipeline corporation or individual in this state is hereby given authority to build, construct and maintain gas pipelines, over, under, across or through all highways, bridges, streets, or alleys in this state, or any public place therein, under the supervision of the inspector of oil and gas as to where and how in said highways, bridges, streets, alleys and public places said pipelines shall be laid, subject to the control of the local

municipalities as to how the business of distribution in that municipality shall be conducted, and subject to responsibility as otherwise provided by law; provided, however, that whenever any gas pipeline crosses the land or premises of anyone outside of a municipality, said corporation shall, by request of the owner of said premises, connect said premises with a pipeline and furnish gas to said consumer at the same rate as charged in the nearest city or town.

Section 23. Pipeline operators common purchases -- Requirements -- Exemptions

Every corporation, joint-stock company, limited copartnership, partnership or other person, now or hereafter claiming or exercising the right to carry or transport natural gas by pipeline or pipelines, for hire, compensation, or otherwise, within the limits of this state, is allowed by, and upon compliance with the requirements of this act, as owner, lessee, licensee, or by virtue of any other right or claim, which is now engaged or hereafter shall engage in the business of purchasing natural gas shall be a common purchaser thereof, and shall purchase all the natural gas in the vicinity of, or which may be reasonably reached by its pipelines, or gathering branches, without discrimination in favor of one producer or one person as against another, and shall fully perform all the duties of a common purchaser; but if it shall be unable to perform the same, or be legally excused from purchasing and transporting all the natural gas produced or offered, then it shall purchase and transport natural gas from each person or producer ratably, in proportion to the average production, and such common purchasers are hereby expressly prohibited from discriminating in price or amount for like grades of natural gas or facilities as between producers or persons; and in the event it is likewise a producer, it is hereby prohibited from discrimination in favor of its own production, or production in which it may be interested directly or indirectly in whole or in part, and its own production shall be treated as that of any other person or producer. All persons, firms, associations, and corporations are exempted from the provisions of this act, except from the provisions of Section (9) nine hereof, where the nature and extent of their business is such that the public needs no use in the same, and the conduct of the same is not a matter of public consequence, and for this purpose the district courts of the state and the Corporation Commission are hereby vested with jurisdiction to determine such exemptions in any action or proceeding properly before them, and provided by the laws now in force in this state regulating the purchase and transportation of oil.

Section 24. Pipeline companies declared common carriers -- Discrimination -- Exemptions

Every corporation, joint-stock company, limited copartnership, partnership or other person, now or hereafter engaged in the business of carrying or transporting natural gas for hire, for compensation or otherwise, by pipeline, or pipelines within this state, and

by virtue of and in conformity to, any valid law incapable of revocation by any law of this state or of the United States, or by virtue of and in conformity to the provisions of this act, shall be a common carrier thereof as at common law, and no such common carrier shall allow or be guilty of any unjust or any unlawful discrimination, directly or indirectly, in favor of the carriage, transportation or delivery of any natural gas, offered to it, in its possession or control, or in which it may be interested, directly or indirectly, and, provided further, that any person, firm or corporation owning or operating a gas pipeline within the limits of any incorporated city or town in this state shall be exempted from the provisions of this section only as to its distributing lines located wholly within the corporate limits of said city or town.

Section 24.1 Refusal to purchase or transport natural gas -- Complaint -- Hearing -- Orders

Any person, firm or municipality aggrieved by reason of the refusal by a common carrier of natural gas to purchase or transport natural gas produced by such person or firm or gas production owned by said municipality may file a complaint before the Corporation Commission. The Corporation Commission shall conduct a hearing and take evidence as is necessary to determine the complaint. Notice shall be given to the common carrier at least ten (10) days prior to such hearing. The Corporation Commission shall order the common carrier to purchase or transport the natural gas, and fix a fair rate for such transportation, unless the common carrier establishes and the Commission determines that:

- (1) Such natural gas cannot reasonably be carried by the named common carrier, because of the difficulty or expense involved;
- (2) Some other common carrier of natural gas can more conveniently purchase or transport such natural gas; or
- (3) The gas might dilute or pollute the gas being carried in their line.

Section 24.2 Definitions

As used herein the term person, firm or municipality shall include all natural persons, corporations, business, municipal, and nonprofit, rural gas districts, municipal and industrial trusts.

Section 25. Parties not complying with act not to own gas wells, etc.

It shall be unlawful for any corporation, joint-stock company, limited copartnership, partnership or other person, now or hereafter engaged in the business of carrying or transporting natural gas for hire or compensation or otherwise, within the limits of this

act and not becoming a common purchaser as defined by, and accepting the provisions of this act, to own or operate, directly or indirectly any gas wells or wells, gas leases, or gas holdings or interests in this state, after six (6) months next after the approval of this act, and each and every of said corporations, joint-stock company, limited copartnership, partnership or other persons shall divest themselves of all legal or equitable ownership, interest or control, directly or indirectly, in gas wells or wells, gas leases or gas holdings or interest in this state.

C. Texas

The two acts affecting intrastate pipeline regulations in Texas are the Gas Utility Regulatory Act and the Cox Act, supplemented by Special Rules of Practice and Procedure and Substantive Rules found at 16 Tex. Admin. Code, Chapter 7. Pertinent parts of each are set forth below. The regulatory authority is the Railroad Commission of Texas.

1. Gas Utility Regulatory Act

ARTICLE I. LEGISLATIVE POLICY AND DEFINITIONS

1. Authority: The Gas Utility Regulatory Act, was originally an integral part of the Public Utility Regulatory Act, enacted in 1975. In 1983, the Gas Utility Regulatory Act was separated from the Public Utility Regulatory Act.
2. Legislative Policy and Purpose: The legislature finds that gas utilities are by definition monopolies in the areas they serve; the normal forces of competition which operate to regulate prices in a free enterprise society do not operate; therefore, utility rates, operations, and services are regulated by public agencies, with the objective that regulation shall operate as a substitute for competition.
3. Definitions: "Gas utility" or "utility" includes, among others, any person, corporation, or combination thereof which transmits or distributes combustible hydrocarbon natural or synthetic natural gas for sale or resale in a manner which is not subject to the jurisdiction of the Federal Energy Regulatory Commission under the Natural Gas Act (15 U.S.C.A, Section 717, et seq.).

ARTICLE II. JURISDICTION

1. Gas Utilities: (a) Subject to limitations imposed in the Act, and for the purpose of regulating rates and services so that rates may be fair, just, and reasonable, and the services adequate and efficient, the governing body of each municipality has exclusive original jurisdiction over all gas utility rates, operations, and services.

(b) The Railroad Commission has exclusive appellate jurisdiction to review all orders issued by municipalities. The Railroad Commission has exclusive original jurisdiction over rates and services of gas utilities distributing natural gas in areas outside the limits of municipalities, and also has exclusive original jurisdiction over the rates and services of gas utilities transmitting, transporting, delivering, or selling natural gas to gas utilities engaged in distributing gas to the public.

ARTICLE IV. RECORDS, REPORTS, INSPECTIONS, RATES AND SERVICES

1. Records of gas utility; rates, methods, and accounts: (a) every gas utility shall keep and render to the regulatory authority uniform accounts of all business transacted.

(b) The Railroad Commission shall fix proper and adequate rates and methods of depreciation, amortization, or depletion of the several classes of property of each gas utility. Rates, methods, and accounts shall be utilized uniformly and consistently throughout the rate setting and appeal proceedings.

2. Powers of Railroad Commission: The Railroad Commission shall have the power to:

- (1) require that gas utilities report such information relating to themselves and affiliated interests as it may consider useful in administration of the Act;
- (2) establish forms for all reports;
- (3) determine time and frequency of reports;
- (4) require that reports be made under oath;
- (5) require filing of copies of contracts or arrangements between any gas utility and any affiliated interest;

- (6) require filing of copies of any reports filed with any federal agency or a governmental agency of another state; and
- (7) require filing of annual reports showing all payments of compensation to residents of Texas.

ARTICLE V. PROCEEDINGS BEFORE REGULATORY AUTHORITY

Sec. 5.01. Power to ensure compliance; rate regulation. The Railroad Commission is vested with all authority and power to ensure compliance with the obligations of gas utilities in this Act. It is empowered to fix and regulate rates of gas utilities, including rules and regulations for determining the classification of customers and services and for determining the applicability of rates. A rule or order of the regulatory authority must not conflict with the ruling of any federal regulatory body.

Sec. 5.02. Just and reasonable rates: (a) Rates must be just and reasonable. Rates may not be unreasonably preferential, prejudicial, or discriminatory, but must be sufficient, equitable, and consistent in application to each class of consumers.

(b) Rates charged for pipeline-to-pipeline transactions and to transportation, industrial, and other similar large volume contract customers but excluding direct sales for resale to gas distribution utilities at the city gate, are considered to be just and reasonable and otherwise to comply with this section, and shall be approved by the regulatory authority, if: (1) neither the gas utility nor the customer had an unfair advantage during the negotiations; (2) the rates are substantially the same as rates between the gas utility and two or more of those customers under the same or similar conditions of service; or (3) competition does or did exist either with another gas utility, another supplier of natural gas, or with a supplier of an alternative form of energy.

(c) If a complaint is filed with the Railroad Commission by a transmission pipeline purchaser of gas sold or transported under a pipeline-to-pipeline or transportation rate, then provisions of subsection (b) shall not apply.

(d) Notwithstanding any provision in this Act to the contrary, the regulatory authority may approve administratively any decrease in rates proposed by the applicant and agreed upon by all affected parties, unless the regulatory authority finds the proposed decrease not to be in the public interest.

(e) The standard contained in subsection (b)(1) shall not apply to rates charged or offered to an affiliated pipeline utility.

Sec. 5.03. Fixing overall revenues: (a) The Commission will fix overall revenues at a level that will permit the utility a reasonable opportunity to earn a reasonable return

on invested capital used and useful in rendering service to the public over and above reasonable and necessary operating expenses.

(b) On application for a rate reduction, unless it is found not to be in the public interest, the Commission may administratively approve the proposed lower rates without reference to the cost of service standard of (a).

Sec. 5.04. Fair Return; burden of proof: (a) The Commission may prescribe any rate that will yield more than a fair return on adjusted value of invested capital used and useful.

(b) The burden of proof is on the gas utility.

Sec. 5.05. Components of adjusted value of invested capital: Utility rates shall be based on the adjusted value of property used and useful to the gas utility in providing service, including (if necessary to the financial integrity of the utility) construction work in progress at cost as recorded on the books of the utility. The adjusted value of the property shall be a reasonable balance between original cost less depreciation and current cost less any adjustment for both present age and condition. The Commission has discretion to determine a reasonable balance that reflects not less than 60 percent nor more than 75 percent of the original cost of the property at the time it was dedicated to public use, whether by the present owner or by a predecessor, less depreciation, and not less than 25 percent and not more than 40 percent of the current cost less adjustment for both present age and condition. The Commission may consider inflation, deflation, quality of service provided, growth rate of the service area, and the need for the gas utility to attract new capital in determining a reasonable balance.

[NOTE: Other sections and Articles cover unreasonable or violative rates; regulations for filings, hearings, suspension and determination of rate increases; equality of rates and services; restrictions on competition; sale of property and mergers; relations with affiliates; judicial review; violations and enforcement.]

2. Cox Act

Sec. 1. Authority: The Cox Act was originally enacted in 1920 and gives the Railroad Commission of Texas broad authority and responsibilities with respect to natural gas utilities in Texas.

Sec. 2. Definitions: "Gas utility" means a person owning, managing, operating, leasing or controlling any pipelines, plant, property, equipment, facility, franchise, license, or permit for either one or more of the following kinds of business:

(a) Transporting, conveying, distributing or delivering natural gas for public use or service for compensation;

(b) Owning or operating or managing a pipeline for the transportation or carriage of natural gas, whether for public hire or not, if any part of the right-of-way for said line has been acquired, or is hereafter acquired by exercise of the right of eminent domain;

(c) Producing or purchasing natural gas and transporting or causing it to be transported by pipelines to or near the limits of any municipality in which said gas is received and distributed or sold to the public by another public utility;

(d) Every such gas utility is declared to have a public interest and is subject to the jurisdiction, control and regulation of the Commission.

Exemptions (Sec. 2-5): Exemptions include: Transportation, delivery or sale for agricultural purposes; gas used for pumping water; transportation to processing plants or treating facilities; interstate transportation; delivery or sale for lease use, etc.; and sale for use as vehicle fuel.

Article 6053 Rate Regulation of Utilities: Sec. 1. (a) The Commission shall fix and establish and enforce the adequate and reasonable price of gas and fair and reasonable rates of charges and regulations for transporting, producing, distributing, buying, selling, and delivering gas by pipelines in Texas; and shall establish fair and equitable rules and regulations for the full control and supervision of gas pipelines and all their holdings as the Commission may from time to time deem proper; and establish a fair and equitable division of the proceeds of the sale of gas between the companies transporting or producing the gas and the companies distributing or selling it; and prescribe and enforce rules and regulations for the government and control of such pipelines with respect to their producing, receiving, transporting, and distributing facilities; and regulate and apportion the supply of gas between towns, cities, and corporations, and when the supply of gas controlled by any gas pipeline shall be inadequate, the Commission shall prescribe fair and reasonable rules requiring such gas pipelines to augment their supply of gas, when the Commission judges it practicable to do so; and it shall exercise its power, either on its own motion or on petition by interested parties, or on petition of the Attorney General, or of any County or District Attorney.

(b) If any transportation, industrial, or other large-volume contract customer who is an end-user (i) reduces or ceases purchases of natural gas or of natural gas service from the gas utility, and (ii) purchases natural gas from another supplier or purchases an alternative form of energy, then the gas utility shall have no obligation to serve or maintain the gas supply or physical capacity to serve such customer. Nothing herein

shall prevent the Commission from requiring that utilities comply with all orders of the Commission in apportioning gas under curtailment plans and orders.

[NOTE: Other sections deal with submetering; safety standards for transportation of gas and gas pipeline facilities; administrative penalties, refunds of excess charges; appeals; gas utility tax; and various administrative and reporting matters.]

3. SPECIAL RULES OF PRACTICE AND PROCEDURE

Procedure for abandonment or discontinuance of service: Discontinuance of service by a gas utility to any city gate or local distribution company shall require prior written Commission approval. The application must be filed at least 60 days prior to the proposed abandonment, except in emergency situations.

4. SUBSTANTIVE RULES

1. Annual Reports (Sec. 7.40): Each "gas utility" shall file each year a general annual report showing information required by the Commission.

Each "gas-gathering utility", defined as a gas utility or public utility which employs a pipeline in the first taking or first retaining of possession of gas produced by others which extends from a point where such is produced, purchased, or received to the trunk line or main line of transportation, thus having as its primary function the collecting or collecting and processing of gas produced by others as a preliminary incident to the transportation of gas, shall file a gathering annual report on a special form approved by the Gas Utilities Division.

2. Filing of Tariffs (Sec. 7.44): (a) General filing requirements: Each gas utility shall file a tariff with the Commission for all rates currently in force. Required contents of tariff filings are specified in the rules.

(b) Filings are required for changes in rates or services.

3. Gas Cost Recovery (Sec. 7.55): Each gas utility may be permitted to include a purchased gas adjustment clause in its rates. Criteria are spelled out.
4. Intrastate pipeline facility construction (Sec. 7.85): Pipelines must be constructed of steel pipe and placed in accordance with the requirement of 49 Code of

Federal Regulations Part 195, except that pipelines other than steel may be granted special exceptions.

5. Other special rules relate to: curtailment, taxes, accounting procedures, construction work in progress, depreciation and lost and unaccounted for gas.

APPENDIX IV

**MAJOR INTRASTATE PIPELINE COMPANIES
IN LOUISIANA, OKLAHOMA, AND TEXAS**

MAJOR INTRASTATE PIPELINE COMPANIES
IN LOUISIANA, OKLAHOMA and TEXAS

Louisiana

Acadian Gas Pipeline System
1600 Smith Street
Suite 4775
Houston, TX 77002

Bridgeline Gas Distribution Company
P O Box 60252
New Orleans, LA 70160

Dow Intrastate Gas Company
Route 1, Box 35
Plaquemine, LA 70764

Louisiana Gas System, Inc.
P O Box 2197 (CH-1016)
Houston, TX 77252

Louisiana Intrastate Gas Corporation
1000 Louisiana Street
Suite 3000
Houston, TX 77002

Louisiana Resources Co./
Louisiana Gas Marketing Co.
c/o Enron Gas Services Corp.
P O Box 1188
Houston, TX 77251

Monterey Pipeline Co.
P O Box 1244
Houston, TX 77251-1244

Transok Gas Transmission Co.
P O Box 3008
Tulsa, OK 74101-3008

Oklahoma

Delhi Gas Pipeline Corp.
First City Center
Suite 2500
1700 Pacific Avenue
Dallas, TX 75201-4696

Enogex, Inc.
515 Central Park Dr.
Suite 600
Oklahoma City, OK 73124-0300

ONG Transmission Co.
100 West Fifth Street
Tulsa, OK 74102-0871

Phillips Petroleum Gas Co.
6330 West Loop South
P O Box 1967
Houston, TX 77251-1967

Transok, Inc.
P O Box 3008
Tulsa, OK 74101-3008

Texas

Amoco Gas Company
550 WestLake Park Blvd.
P O Box 3092
Houston, TX 77253

Channel Industries Gas
1333 W. Loop South
Suite 1284
Houston, TX 77027

Clajon Gas Company
100 NE Loop 410
Suite 1000
San Antonio, TX 78216

Texas (Cont'd)

Delhi Gas Pipeline Corp.
First City Center
Suite 2500
1700 Pacific Ave.
Dallas, TX 75201-4696

Dow Pipeline Company
727 Underwood Rd.
Baytown, TX 77521

Enserch Gas Transmission Co.
10375 Richmond Avenue
Suite 300
Houston, TX 77042

Exxon Gas System Inc.
P.O. Box 1244
Houston, TX 77251-1244

Gulf Energy Pipeline Co.
1301 McKinney St.
Suite 700
Houston, TX 77010

Houston Pipe Line Company
1400 Smith Street
P O Box 1188
Houston, TX 77251-1188

Lone Star Gas Co.
301 S. Harwood
Dallas, TX 75201

Meridian Oil Hydrocarbons
801 Cherry Street
Suite 700
Fort Worth, TX 76102

Mobil Vanderbilt-Beaumont Pipeline
12450 Greenspoint Dr.
Houston, TX 77060-1991

Seagull Energy Corp.
1001 Fannin, Suite 1700
Houston, TX 77002

Southwestern Gas Pipeline Co.
2700 SW Fifth Avenue
P O Box 790
Mineral Wells, TX 76067

Tejas Gas Corp.
1301 McKinney
Suite 700
Houston, TX 77010

Texas Utilities Fuel Co.
400 N. Olive St.
Lock Box 82
Dallas, TX 75201

TransAmerican Pipeline Corp.
140 Cypress Station Dr.
Suite 200
Houston, TX 77090

United Texas Transmission Co.
P O Box 4758
Houston, TX 77251-4758

Valero Transmission
530 McCullough Ave.
San Antonio, TX 78292

Westar Transmission Co.
333 Clay Street
Suite 2000
Houston, TX 77002-4081