

LOUISIANA ENERGY FACTS

ANNUAL 1998

Department of Natural Resources
Jack C. Caldwell
Secretary of Natural Resources



Prepared by
Manuel Lam, Senior Energy Analyst

Technology Assessment Division
T. Michael French, Director

P.O. Box 94396
Baton Rouge, LA 70804-9396
[E-mail:techasmt@dnr.state.la.us](mailto:techasmt@dnr.state.la.us)

October 29, 1999

The **Louisiana Energy Facts Annual - 1998** was published by the Technology Assessment Division of the Louisiana Department of Natural Resources under the direction of Manuel Lam. The Director of the Division is T. Michael French, and the Assistant Director is William J. Delmar, Jr.

General questions and comments regarding the **Annual** may be referred to John Harter at (225) 342-4593. Questions concerning specific areas of the **Annual** may be directed to the Technology Assessment Division staff members listed below.

Oil & gas production, drilling, revenue, reserves, prices:

Manuel Lam
Program Manager
(225) 342-8919
E-mail: MANUELL@DNR.STATE.LA.US

Petroleum refineries, cogeneration, independent power producers, alternative motor fuels, coal, lignite:

Sam Stuckey
Energy Engineer Manager
(225) 342-2122
E-mail: SAMS@DNR.STATE.LA.US

Electric utilities, drilling incentives, petroleum economics:

Bob Sprehe
Energy Economist
(225) 342-7967
E-mail: BOBS@DNR.STATE.LA.US

Additional copies of the **Annual** may be obtained by contacting:

John Harter
Energy Engineer
Department of Natural Resources
Technology Assessment Division
P.O. Box 94396
Baton Rouge, LA 70804-9396
Phone: (225) 342-4593 FAX: (225) 342-2707
E-mail: JOHNHA@DNR.STATE.LA.US

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INTRODUCTION

ABOUT THIS PUBLICATION

The purpose of the **Louisiana Energy Facts Annual** is to provide a comprehensive compendium of Louisiana related energy production and use statistics on an annual basis. To aid in the interpretation of the data and the discernment of trends, we supplemented the data tables with numerous graphs and charts. We publish the **Annual** as soon as we have as close as feasible to a complete set of all of the data for the previous full calendar year. Due to time lags in the availability of some of the data, this means that it is about ten months past the end of a year before that year's **Annual** can be published. Even then, there are a few data sets that are not yet available when the **Annual** is prepared.

If you receive our monthly **Louisiana Energy Facts**, you might find some data published in the monthly prior to publication of the **Annual** has been revised in the **Annual** and is more current than when first published in an earlier monthly. This data, by its nature, continues to be revised, sometimes years after it is first published. We try to bring attention to these changes as we republish them.

Our most recent monthly **Louisiana Energy Facts** publication may contain more recent data, but on a much smaller set of data than covered in this **Annual**. Please refer to the recent monthlies for the very latest data that they cover. The monthly **Louisiana Energy Facts** is available in print as well as online at our web site at <http://www.dnr.state.la.us/SEC/EXECDIV/TECHASMT/>. Click on Energy Facts. We plan to have the **Annual** online in the future.

We hope you find this **Annual** useful, and we welcome any comments or suggestions.

1998 HIGHLIGHTS

The data in the **1998 Louisiana Energy Facts Annual** contains some recent trends.

Crude oil prices in 1998 declined dramatically.

Louisiana and United States average crude oil prices declined to some of the lowest levels in the past twenty years. The average price for state royalty oil dipped to \$9.72 per barrel in December of 1998. In that same period average OPEC import FOB price dropped to \$7.54 per barrel. This now appears to have been a bottoming out of a short term trend, but it had major impacts on Louisiana and other domestic producers. As the report went to press oil prices had recovered to above \$20 per barrel as a result of increasing demand and OPEC production constraints.

Oil production decreased slightly. Gas production increased slightly.

Louisiana state crude oil and condensate production, excluding OCS, decreased in 1998 to 100,813,339 barrels, down 1.7% from 1997. Louisiana state natural gas and casinghead, excluding OCS, also was down by 1% to 1366,752,360. Total natural gas and casinghead gas production was up slightly, by .1%, to 5,435,275,979, due to a 3% increase in the federal OCS area.

Drilling permits were down slightly

Overall drilling activity, as measured by permits issued in the state jurisdiction of Louisiana, was down 30% in 1998 to 1,286 permits. Offshore permitting seemed to be increasing by 12.9% in 1998 to 96 permits. The major changes were in October, November and December when oil prices plummeted. While wildcatting increased 22.2%, development well permits dropped to 44.1% of the previous year's level during those three months.

Other significant items.

Louisiana's mineral royalty and severance taxes were also down. This decrease by far overshadowed a slight increase in mineral bonuses and rentals. Louisiana received \$529 million from bonuses, rentals, royalty and severance, down 25.6% from 1997.

Louisiana's proved reserves and non agricultural employment were higher than the previous year's measure.

SUBDIVISIONS OF LOUISIANA



Table 1

LOUISIANA STATE CRUDE OIL PRODUCTION
Excluding OCS
(Barrels)

DATE	NORTH	SOUTH	OFFSHORE	TOTAL
1980	29,004,703	116,638,403	24,834,002	170,477,108
1981	30,736,984	103,284,948	23,924,888	157,946,820
1982	31,485,800	96,155,535	22,793,085	150,434,420
1983	29,831,731	93,737,027	22,806,268	146,375,026
1984	29,590,376	96,690,421	25,117,916	151,398,713
1985	29,436,551	97,622,513	24,292,173	151,351,237
1986	26,795,748	97,853,602	24,619,169	149,268,519
1987	25,036,758	95,476,492	23,372,480	143,885,730
1988	23,958,703	88,673,893	22,792,851	135,425,447
1989	22,224,981	78,275,666	20,869,917	121,370,564
1990	22,445,972	72,017,903	21,128,443	115,592,318
1991	22,704,171	69,546,140	22,499,961	114,750,272
1992	21,996,120	68,545,982	21,903,380	112,445,482
1993	20,210,421	66,097,947	21,722,455	108,030,823
1994	17,338,342	60,110,579	21,295,476	98,744,397
1995	17,777,074	63,581,242	21,499,649	102,857,965
1996	18,070,355	63,047,549	20,450,966	101,568,870
January	1,538,148	4,944,697	1,752,745	8,235,590
February	1,575,031	4,766,901	1,526,771	7,868,703
March	1,552,052	5,413,013	1,698,696	8,663,761
April	1,367,301	5,073,863	1,541,072	7,982,236
May	1,412,246	5,355,123	1,609,713	8,377,082
June	1,419,514	4,873,585	1,553,762	7,846,861
July	1,524,423	5,508,817	1,272,136	8,305,376
August	1,487,124	5,499,383	1,341,679	8,328,186
September	1,467,766	5,600,740	1,495,390	8,563,896
October	1,636,286	5,900,652	1,625,470	9,162,408
November	1,600,225	5,891,995	1,470,083	8,962,303
December	1,655,093	5,642,198 r	1,443,157 r	8,740,448 r
1997	18,235,209	64,470,967 r	18,330,674 r	101,036,850 r
January	1,587,649	5,577,822	1,494,237	8,659,708
February	1,380,780	5,107,361	1,343,142	7,831,283
March	1,531,006	5,571,803	1,448,327	8,551,136
April	1,495,358	5,198,766	1,499,612	8,193,736
May	1,526,679	5,552,348	1,508,251	8,587,278
June	1,437,516	5,841,761	1,507,776	8,787,053
July	1,435,454	6,180,346	1,599,090	9,214,890
August	1,401,222	5,956,367	1,496,728	8,854,317
September	1,282,935	5,207,059	1,000,162	7,490,156
October	1,429,678	5,642,351	1,138,143	8,210,172
November	1,352,563 e	5,570,796 e	1,321,944 e	8,245,303 e
December	1,323,544 e	5,573,871 e	1,290,893 e	8,188,307 e
1998	17,184,383 e	66,980,651 e	16,648,305 e	100,813,339 e

^e Estimated ^r Revised

Table 2

LOUISIANA STATE CONDENSATE PRODUCTION Excluding OCS (Barrels)

DATE	NORTH	SOUTH	OFFSHORE	TOTAL
1980	3,222,000	34,744,956	2,757,941	40,724,897
1981	4,371,074	35,181,456	2,348,549	41,901,079
1982	4,120,663	32,663,371	2,147,896	38,931,930
1983	3,598,850	27,638,588	1,996,504	33,233,942
1984	3,140,006	30,785,661	1,918,564	35,844,231
1985	2,668,233	29,260,762	1,721,098	33,650,093
1986	2,755,749	26,709,496	2,176,970	31,642,215
1987	2,512,024	25,594,838	1,811,598	29,918,460
1988	2,718,031	26,401,604	1,700,428	30,820,063
1989	2,943,821	26,446,428	1,835,017	31,225,266
1990	3,356,554	27,602,203	1,701,098	32,659,855
1991	4,078,811	26,726,276	1,715,899	32,520,986
1992	3,746,271	25,295,694	1,587,450	30,629,415
1993	3,597,292	24,893,887	1,606,131	30,097,310
1994	3,657,646	23,302,750	1,468,993	28,429,389
1995	3,799,922	22,117,549	2,105,782	28,023,253
1996	5,037,558 r	25,912,614 r	2,264,077 r	33,214,249 r
January	420,078	2,138,314	339,791	2,898,183
February	368,018	1,899,907	193,949	2,461,874
March	387,027	2,105,181	242,504	2,734,712
April	397,443	1,981,373	229,693	2,608,509
May	346,778	2,044,920	260,155	2,651,853
June	322,661	1,830,617	203,184	2,356,462
July	329,967	1,916,720	225,625	2,472,312
August	316,306	1,903,281	217,320	2,436,907
September	312,012	1,840,800	205,369	2,358,181
October	340,656	1,971,080	172,262	2,483,998
November	358,227	1,923,921	180,306	2,462,454
December	383,575	2,062,735 r	200,792 r	2,647,102 r
1997	4,282,748	23,618,849 r	2,670,950 r	30,572,547 r
January	353,111	2,000,851	196,221	2,550,183
February	324,442	1,736,971	165,642	2,227,055
March	358,520	1,997,430	219,563	2,575,513
April	344,835	1,911,774	203,922	2,460,531
May	337,185	1,912,964	205,585	2,455,734
June	296,310	1,891,527	183,841	2,371,678
July	286,977	1,970,921	203,832	2,461,730
August	277,219	1,921,643	190,772	2,389,634
September	277,971	1,811,525	146,274	2,235,770
October	259,624	1,744,217	156,084	2,159,925
November	286,560 e	1,867,769 e	180,136 e	2,334,465 e
December	278,123 e	1,860,237 e	175,894 e	2,314,254 e
1998	3,680,877 e	22,627,829 e	2,227,766 e	28,536,473 e

^e Estimated ^r Revised

Table 3

LOUISIANA STATE CRUDE OIL and CONDENSATE PRODUCTION Excluding OCS (Barrels)

DATE	NORTH	SOUTH	OFFSHORE	TOTAL
1980	32,226,703	151,383,359	27,591,943	211,202,005
1981	35,108,058	138,466,404	26,273,437	199,847,899
1982	35,606,463	128,818,906	24,940,981	189,366,350
1983	33,430,581	121,375,615	24,802,772	179,608,968
1984	32,730,382	127,476,082	27,036,480	187,242,944
1985	32,104,784	126,883,275	26,013,271	185,001,330
1986	29,551,497	124,563,098	26,796,139	180,910,734
1987	27,548,782	121,071,330	25,184,078	173,804,190
1988	26,676,734	115,075,497	24,493,279	166,245,510
1989	25,168,802	104,722,094	22,704,934	152,595,830
1990	25,802,526	99,620,106	22,829,541	148,252,173
1991	26,782,982	96,272,416	24,215,860	147,271,258
1992	25,742,391	93,841,676	23,490,830	143,074,897
1993	23,807,713	90,991,834	23,328,586	138,128,133
1994	20,995,988	83,413,329	22,764,469	127,173,786
1995	21,576,996	85,698,791	23,605,431	130,881,218
1996	23,107,913	88,960,163	22,715,043	134,783,119
January	1,958,226	7,083,011	2,092,536	11,133,773
February	1,943,049	6,666,808	1,720,720	10,330,577
March	1,939,079	7,518,194	1,941,200	11,398,473
April	1,764,744	7,055,236	1,770,765	10,590,745
May	1,759,024	7,400,043	1,869,868	11,028,935
June	1,742,175	6,704,202	1,756,946	10,203,323
July	1,854,390	7,425,537	1,497,761	10,777,688
August	1,803,430	7,402,664	1,558,999	10,765,093
September	1,779,778	7,441,540	1,700,759	10,922,077
October	1,976,942	7,871,732	1,797,732	11,646,406
November	1,958,452	7,815,916	1,650,389	11,424,757
December	2,038,668	7,704,933 r	1,643,949 r	11,387,550 r
1997	22,517,957	88,089,816 r	21,001,624 r	131,609,397 r
January	1,940,760	7,578,673	1,690,458	11,209,891
February	1,705,222	6,844,332	1,508,784	10,058,338
March	1,889,526	7,569,233	1,667,890	11,126,649
April	1,840,193	7,110,540	1,703,534	10,654,267
May	1,863,864	7,465,312	1,713,836	11,043,012
June	1,733,826	7,733,288	1,691,617	11,158,731
July	1,722,431	8,151,267	1,802,922	11,676,620
August	1,678,441	7,878,010	1,687,500	11,243,951
September	1,560,906	7,018,584	1,146,436	9,725,926
October	1,689,302	7,386,568	1,294,227	10,370,097
November	1,639,123 e	7,438,565 e	1,502,080 e	10,579,768 e
December	1,601,666 e	7,434,108 e	1,466,787 e	10,502,561 e
1998	20,865,261 e	89,608,480 e	18,876,071 e	129,349,812 e

^e Estimated ^r Revised

Figure 1

LOUISIANA STATE OIL PRODUCTION Actual and Forecasted Through Year 2030

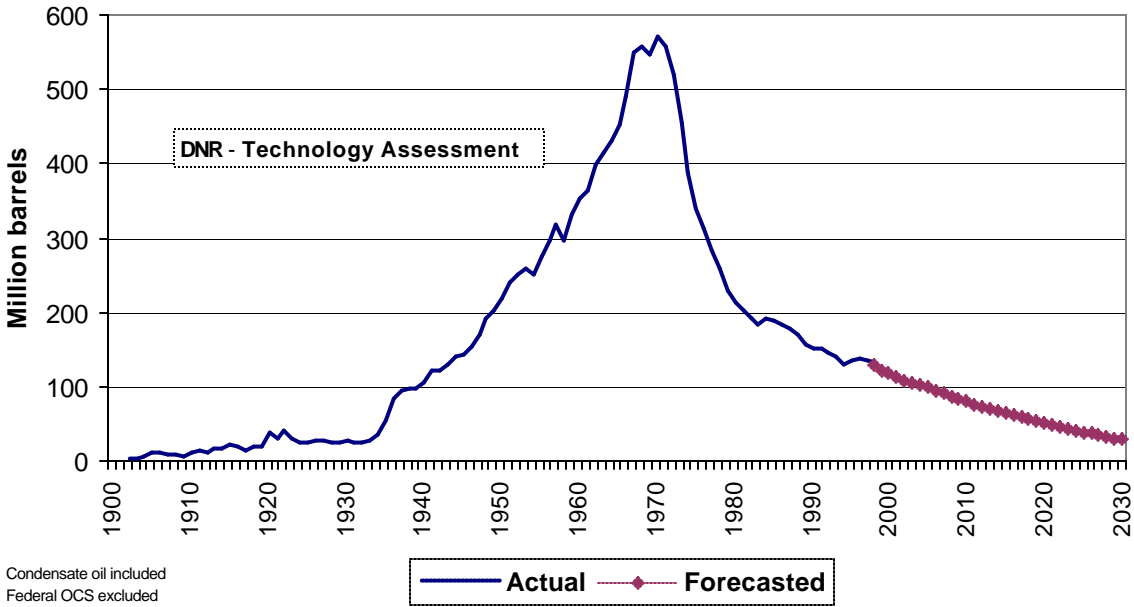


Figure 2

1998 UNITED STATES OIL PRODUCTION BY STATE

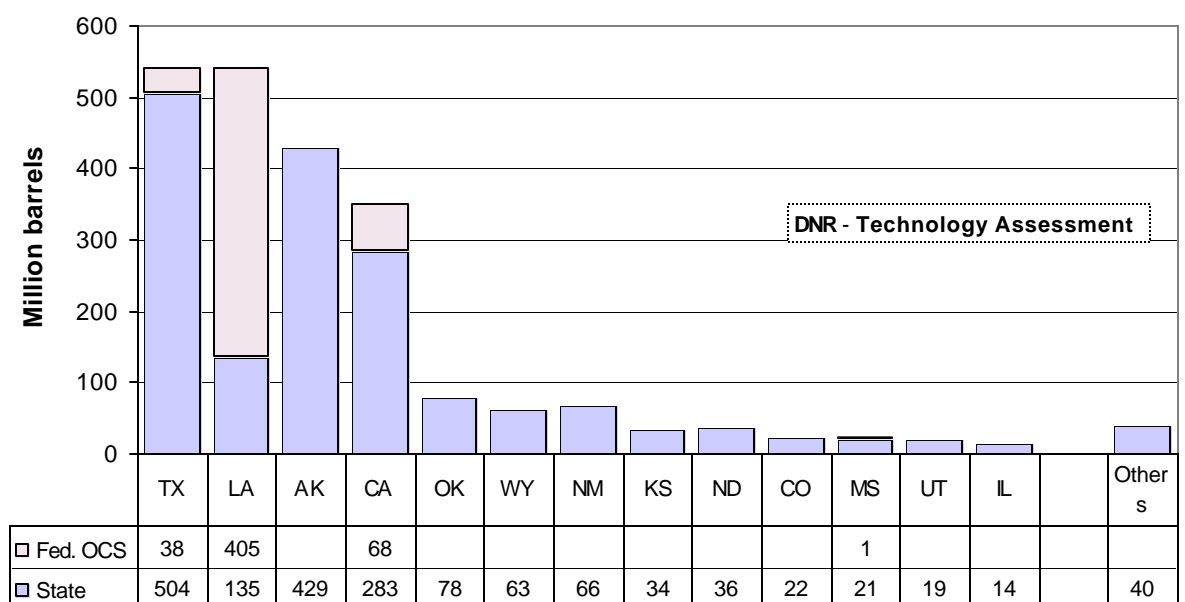


Table 4

**LOUISIANA TOTAL CRUDE OIL and CONDENSATE PRODUCTION
(Barrels)**

DATE	ONSHORE	OFFSHORE		TOTAL
		State	Federal OCS	
1980	183,610,062	27,591,943	256,688,082	467,890,087
1981	173,574,462	26,273,437	255,875,717	455,723,616
1982	164,425,369	24,940,981	275,513,489	464,879,839
1983	154,806,196	24,802,772	298,093,559	477,702,527
1984	160,206,464	27,036,480	318,024,622	505,267,566
1985	158,988,059	26,013,271	338,901,863	523,903,193
1986	154,114,595	26,796,139	340,152,276	521,063,010
1987	148,620,112	25,184,078	307,950,881	481,755,071
1988	141,752,231	24,493,279	261,936,530	428,182,040
1989	129,890,896	22,704,934	246,207,653	398,803,483
1990	125,422,632	22,829,541	264,670,535	412,922,708
1991	123,055,398	24,215,860	262,647,733	409,918,991
1992	119,584,067	23,490,830	288,918,208	431,993,105
1993	114,799,547	23,328,586	293,443,881	431,572,014
1994	104,409,317	22,764,469	293,077,191	420,250,977
1995	107,275,787	23,605,431	320,255,087	451,136,305
1996	112,068,076	22,715,043	349,101,048	483,884,167
January	9,041,237	2,092,536	32,064,307 r	43,198,080 r
February	8,609,857	1,720,720	31,357,966 r	41,688,543 r
March	9,457,273	1,941,200	34,753,768 r	46,152,241 r
April	8,819,980	1,770,765	33,299,063 r	43,889,808 r
May	9,159,067	1,869,868	33,354,497 r	44,383,432 r
June	8,446,377	1,756,946	32,396,019 r	42,599,342 r
July	9,279,927	1,497,761	32,899,399 r	43,677,087 r
August	9,206,094	1,558,999	33,400,991 r	44,166,084 r
September	9,221,318	1,700,759	32,315,550 r	43,237,627 r
October	9,848,674	1,797,732	34,514,148 r	46,160,554 r
November	9,774,368	1,650,389	33,429,602 r	44,854,359 r
December	9,743,601 r	1,643,949 r	35,750,692 r	47,138,242 r
1997	110,607,773 r	21,001,624 r	399,536,004 r	531,145,401 r
January	9,519,433	1,690,458	35,046,193 e	46,256,084 e
February	8,549,554	1,508,784	34,199,764 e	44,258,102 e
March	9,458,759	1,667,890	36,857,904 e	47,984,553 e
April	8,950,733	1,703,534	35,678,941 e	46,333,208 e
May	9,329,176	1,713,836	29,388,303 e	40,431,315 e
June	9,467,114	1,691,617	35,836,079 e	46,994,810 e
July	9,873,698	1,802,922	37,231,639 e	48,908,259 e
August	9,556,451	1,687,500	36,728,796 e	47,972,747 e
September	8,579,490	1,146,436	30,960,538 e	40,686,464 e
October	9,075,870	1,294,227	36,843,465 e	47,213,562 e
November	9,077,689 e	1,502,080 e	34,808,308 e	45,388,077 e
December	9,035,774 e	1,466,787 e	35,404,585 e	45,907,146 e
1998	110,473,741 e	18,876,071 e	418,984,515 e	548,334,326 e

^e Estimated ^r Revised

TABLE 5

**LOUISIANA STATE OIL PRODUCTION* BY WELL RATES
AS PUBLISHED IN SEVERANCE TAX REPORTS⁸
(Barrels)**

DATE	FULL RATE	INCAPABLE WELLS RATE	STRIPPER WELLS RATE	TAXED VOLUME
1980	192,285,668	2,521,676	7,679,875	202,487,219
1981	193,725,528	2,579,437	9,072,057	205,377,024
1982	180,197,905	2,955,008	9,103,966	192,301,881
1983	172,094,095	2,884,691	9,731,435	184,710,221
1984	171,425,402	3,099,053	9,830,262	184,354,717
1985	173,545,432	3,110,740	10,513,745	187,169,920
1986	180,108,437	3,208,451	10,059,344	193,376,232
1987	155,987,737	3,201,095	8,809,543	168,015,044
1988	142,605,746	3,288,994	8,242,330	154,150,151
1989	139,442,253	3,265,429	7,429,510	150,165,554
1990	131,140,448	3,274,774	7,154,125	141,577,610
1991	136,212,521	3,888,128	8,112,117	148,220,451
1992	133,399,849	3,665,298	7,718,696	144,783,843
1993	128,699,431	3,448,387	7,240,065	139,387,883
1994	118,109,958	3,691,802	6,614,164 e	128,415,924 e
1995	108,373,913	4,239,717	6,461,647 e	119,075,277 e
1996	103,524,192	3,786,147	6,083,397 e	113,393,735 e
January	9,536,307	303,876	468,399	10,308,583
February	8,868,632	249,791	535,988	9,654,411
March	6,910,802	273,727	448,056	7,632,585
April	8,639,167	292,612	494,714 e	9,426,493 e
May	8,072,918	313,206	495,613 e	8,881,737 e
June	8,762,795	339,899	390,222 e	9,492,915 e
July	8,348,114	332,209	477,552 e	9,157,875 e
August	8,649,435	238,818	514,351 e	9,402,604 e
September	9,111,981	270,133	495,335 e	9,877,449 e
October	7,872,480	304,582	452,785 e	8,629,847 e
November	8,537,850	271,453	456,090 e	9,265,393 e
December	8,462,052	276,084	416,583 e	9,154,718 e
1997	101,772,533	3,466,389	5,645,687 e	110,884,610 e
January	6,669,052	276,121	462,775 e	7,407,948 e
February	8,493,483	262,166	438,182 e	9,193,831 e
March	8,472,943	115,231	459,838 e	9,048,013 e
April	7,961,101	229,644	506,350 e	8,697,096 e
May	7,637,023	271,257	470,775 e	8,379,054 e
June	7,764,078	263,104	501,636 e	8,528,818 e
July	8,014,289	242,023	563,745 e	8,820,057 e
August	7,525,850	257,016	429,463 e	8,212,329 e
September	8,069,413	278,312	540,506 e	8,888,232 e
October	6,364,226	225,117	486,738 e	7,076,081 e
November	5,070,571	221,198	576,213 e	5,867,982 e
December	7,041,336	237,035	455,785 e	7,734,156 e
1998	89,083,365	2,878,225	5,892,007 e	97,853,597 e

* Due to reporting time lag and well exemptions the above figures are different from actual production.

See footnote in Appendix B.

^e Estimated

Figure 3

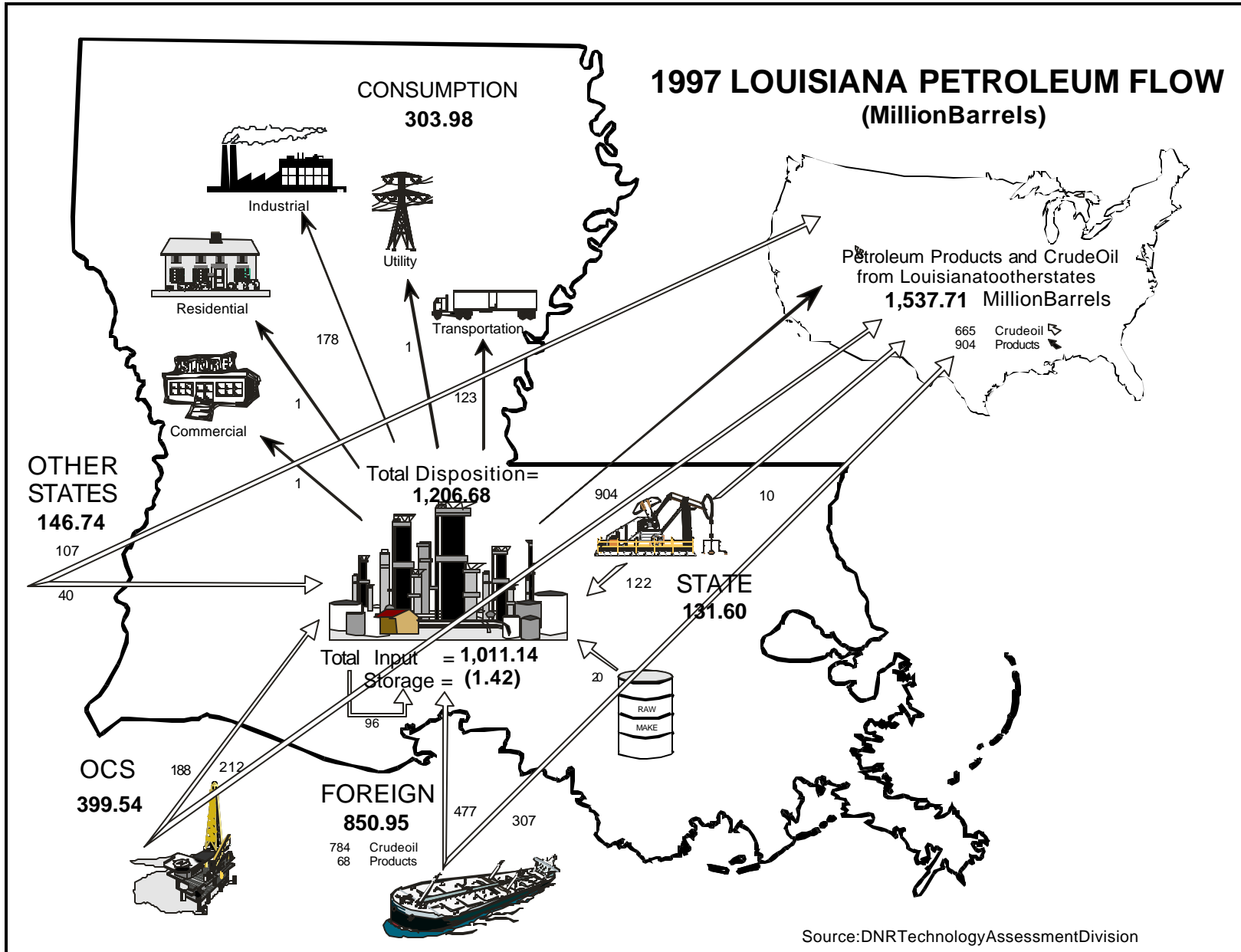


Table 6**UNITED STATES OCS CRUDE OIL AND CONDENSATE PRODUCTION¹²**
(Barrels)

YEAR	LOUISIANA	TEXAS	CALIFORNIA	TOTAL
PRIOR	1,150,697	0	0	1,150,697
1954	3,342,230	0	0	3,342,230
1955	6,703,528	1,956	0	6,705,484
1956	11,001,248	13,284	0	11,014,532
1957	16,064,395	5,792	0	16,070,187
1958	24,769,037	0	0	24,769,037
1959	35,697,264	257	0	35,697,521
1960	49,665,891	98	0	49,665,989
1961	64,330,078	0	0	64,330,078
1962	89,733,099	3,483	0	89,736,582
1963	104,526,436	52,804	0	104,579,240
1964	122,495,173	4,953	0	122,500,126
1965	144,964,868	3,747	0	144,968,615
1966	187,831,472	882,598	0	188,714,070
1967	218,995,828	2,865,786	0	221,861,614
1968	263,825,359	3,110,642	2,059,889	268,995,890
1969	300,159,292	2,759,851	9,940,844	312,859,987
1970	333,411,492	2,247,048	24,987,628	360,646,168
1971	385,760,351	1,685,047	31,103,548	418,548,946
1972	387,590,662	1,733,018	22,562,213	411,885,893
1973	374,196,856	1,617,829	18,915,314	394,729,999
1974	342,435,496	1,381,825	16,776,744	360,594,065
1975	313,592,559	1,340,136	15,304,757	330,237,452
1976	301,887,002	1,054,554	13,978,553	316,920,109
1977	290,771,605	909,037	12,267,598	303,948,240
1978	278,071,535	2,107,599	12,085,908	292,265,042
1979	271,008,916	3,595,546	10,961,076	285,565,538
1980	256,688,082	10,502,007	10,198,886	277,388,975
1981	255,875,717	14,284,661	19,605,027	289,765,405
1982	275,513,489	17,263,766	28,434,202	321,211,457
1983	298,093,559	19,710,197	30,527,487	348,331,243
1984	318,024,622	21,960,086	30,254,306	370,239,014
1985	338,901,863	20,640,957	29,781,465	389,324,285
1986	340,152,276	19,835,882	29,227,846	389,216,004
1987	307,950,881	24,634,142	33,556,686	366,141,709
1988	261,936,530	26,115,776	32,615,118	320,667,424
1989	246,207,653	25,887,841	33,072,161	305,167,655
1990	264,670,535	26,439,927	33,312,719	324,423,181
1991	262,647,733	23,899,428	29,146,090	315,693,251
1992	288,918,208	23,582,162	41,222,801	353,726,380
1993	293,443,881	19,151,111	50,078,144	362,675,766
1994	293,077,191	19,121,540	57,229,464	369,474,307
1995	320,255,087	17,347,391	71,254,440	408,875,006
1996	349,101,048	21,078,663	67,804,200	438,003,670
1997	399,536,004	20,927,592	58,279,489	478,775,008

See footnote in Appendix B.

Table 7

UNITED STATES CRUDE OIL AND CONDENSATE PRODUCTION AND IMPORTS
(Thousand barrels)

DATE	ALL OCS ¹²	DOMESTIC PRODUCTION ⁷	IMPORTS OTHER ⁷	IMPORTS SPR ⁷
1980	277,389	3,146,502	1,910,154	16,104
1981	289,765	3,128,780	1,511,465	93,440
1982	321,211	3,156,885	1,212,895	60,225
1983	348,331	3,171,120	1,130,040	85,410
1984	370,239	3,249,714	1,181,814	72,102
1985	389,324	3,274,415	1,125,295	43,070
1986	389,216	3,168,200	1,507,450	17,520
1987	366,142	3,047,385	1,679,365	26,645
1988	320,667	2,979,240	1,850,130	18,666
1989	305,168	2,778,745	2,112,255	20,440
1990	324,423	2,684,575	2,141,455	9,855
1991	315,693	2,707,205	2,110,430	0
1992	353,726	2,617,998	2,212,470	3,660
1993	362,676	2,495,933	2,451,415	5,367
1994	369,474	2,418,981	2,560,220	4,485
1995	408,875	2,383,404	2,642,689	0
1996	438,004	2,368,535	2,738,387	0
January	38,424	197,982	229,180	0
February	37,577	182,394	206,749	0
March	41,646	200,563	237,604	0
April	39,903	194,487	234,296	0
May	39,970	198,423	256,640	0
June	38,821	190,242	252,078	0
July	39,424	195,800	246,090	0
August	40,025	194,747	258,312	0
September	38,725	191,629	256,121	0
October	41,359	199,484	264,847	0
November	40,060	193,494	243,219	0
December	42,841	200,736	233,289	0
1997	478,775	2,339,981	2,918,425	0
January	35,862	199,582	253,743	0
February	35,072	183,072	217,553	0
March	38,870	200,429	247,669	0
April	37,243	194,525	255,698	0
May	37,305	197,904	277,677	0
June	36,233	188,691	261,753	0
July	36,796	195,982	288,574	0
August	37,357	194,556	283,436	0
September	36,143	182,065	251,752	0
October	38,602	190,706	262,181	0
November	37,389	182,161	264,635	0
December	39,985	184,090	256,120	0
1998	446,857	2,293,763	3,120,791	0

See footnote in Appendix B.

Table 8

**LOUISIANA STATE ROYALTY OIL, GAS AND PLANT PRODUCTS
CALCULATED VOLUMES, Excluding OCS**

DATE	OIL (Barrels)	GAS (MCF)	PLANT LIQUIDS (Barrels)
1980	10,156,242	111,210,699	1,017,183
1981	9,460,901	100,944,844	966,222
1982	8,756,198	95,448,648	808,946
1983	8,956,936	88,029,268	694,641
1984	8,786,732	86,315,477	944,965
1985	8,404,223	76,612,605	845,349
1986	8,859,310	81,463,285	1,751,664
1987	8,040,773	78,166,315	511,790
1988	7,544,770	69,991,244	456,976
1989	7,184,774	69,936,929	461,237
1990	6,781,765	66,417,089	348,776
1991	6,923,565	61,809,109	933,307
1992	6,837,552	57,911,258	1,689,942
1993	6,721,350	67,052,274	698,857
1994	6,288,843	54,798,617	600,660
1995	6,301,254	57,032,170	938,660
1996	6,409,411 r	61,011,126 r	485,746
January	573,459 r	5,271,771 r	35,440 r
February	439,300 r	4,774,822 r	39,073 r
March	569,798 r	5,284,630 r	51,792 r
April	534,772 r	5,023,714 r	38,451 r
May	577,156 r	4,698,117 r	47,784 r
June	502,794 r	4,641,946 r	16,088 r
July	507,559 r	4,741,730 r	370,862 r
August	540,933 r	6,938,938 r	503,441 r
September	533,258 r	5,084,112 r	26,380 r
October	555,475 r	4,760,061 r	158,681 r
November	523,926 r	5,190,984 r	30,366 r
December	525,094 r	5,189,707 r	30,485 r
1997	6,383,523 r	61,600,531 r	1,348,842 r
January	542,682	5,000,450	36,565
February	475,175	4,700,050	28,229
March	549,138	4,931,284	31,594
April	501,691	4,920,468	22,568
May	560,586	5,765,680	42,280
June	514,179	5,047,799	18,409
July	537,806	4,999,527	17,911
August	520,462	4,906,334	26,026
September	374,786	3,716,317	12,388
October	445,274	4,214,868	15,887
November	462,797	4,127,122	21,637
December	486,928	4,055,520	16,353
1998	5,971,503	56,385,419	289,846

^r Revised

Table 9

**LOUISIANA STATE NATURAL GAS PRODUCTION
WET AFTER LEASE SEPARATION
Excluding OCS and Casinghead Gas
(Thousand Cubic Feet (MCF) at 15.025 psia and 60 degrees Fahrenheit)**

DATE	NORTH	SOUTH	OFFSHORE	TOTAL
1980	330,884,663	1,767,558,650	386,259,849	2,484,703,162
1981	365,532,522	1,619,182,208	352,913,474	2,337,628,204
1982	322,562,084	1,401,264,770	336,247,316	2,060,074,170
1983	309,779,141	1,197,313,110	295,223,244	1,802,315,495
1984	330,928,158	1,265,569,410	288,926,246	1,885,423,814
1985	300,663,731	1,158,015,879	224,447,933	1,683,127,543
1986	313,753,687	1,125,245,664	216,313,931	1,655,313,282
1987	307,115,420	1,055,195,652	201,763,178	1,564,074,250
1988	325,963,115	1,067,940,357	193,310,392	1,587,213,864
1989	338,950,374	1,044,297,352	182,501,789	1,565,749,515
1990	348,400,863	1,019,951,674	158,125,352	1,526,477,889
1991	347,794,923	1,028,714,344	130,244,999	1,506,754,266
1992	340,962,480	986,842,710	123,004,591	1,450,809,781
1993	333,365,443	970,558,217	130,644,180	1,434,567,840
1994	334,405,155	924,936,273	134,041,559	1,393,382,987
1995	347,924,294	916,828,845	142,193,576	1,406,946,715
1996	389,744,507	927,296,675	165,836,112	1,482,877,294
January	34,558,590	76,607,055	14,703,723	125,869,368
February	30,922,655	69,381,754	13,263,140	113,567,549
March	34,368,166	78,001,123	14,775,330	127,144,619
April	32,982,871	73,204,237	13,904,146	120,091,254
May	33,665,463	74,948,560	14,233,496	122,847,519
June	32,955,450	70,041,381	13,139,855	116,136,686
July	34,020,173	70,949,518	13,143,344	118,113,035
August	32,998,613	70,969,585	13,376,193	117,344,391
September	34,422,624	73,127,978	13,815,394	121,365,996
October	34,782,469	71,554,464	13,458,238	119,795,171
November	33,956,565	69,044,412	13,403,656	116,404,633
December	34,926,545 r	71,509,665 r	13,705,684 r	120,141,894 r
1997	404,560,184 r	869,339,732 r	164,922,199 r	1,438,822,115 r
January	35,050,914	69,827,249	13,705,945	118,584,108
February	31,755,518	65,497,587	12,487,872	109,740,977
March	34,421,725	70,566,384	13,899,175	118,887,284
April	33,171,187	69,990,348	13,752,569	116,914,104
May	33,220,069	69,467,791	16,043,593	118,731,453
June	31,809,386	68,877,976	14,676,225	115,363,587
July	31,358,818	70,771,220	14,217,289	116,347,327
August	31,595,773	71,661,307	13,242,516	116,499,596
September	30,660,367	67,108,007	9,242,962	107,011,336
October	31,247,319	66,424,125	10,152,968	107,824,412
November	30,721,585 e	68,049,406 e	12,102,143 e	110,873,134 e
December	30,504,025 e	67,883,692 e	11,587,326 e	109,975,043 e
1998	385,516,686 e	826,125,091 e	155,110,583 e	1,366,752,360 e

^e Estimated ^r Revised

Table 10

**LOUISIANA STATE CASINGHEAD GAS PRODUCTION,
WET AFTER LEASE SEPARATION**

Excluding OCS

(Thousand Cubic Feet (MCF) at 15.025 psia and 60 degrees Fahrenheit)

DATE	NORTH	SOUTH	OFFSHORE	TOTAL
1980	38,744,387	164,256,351	22,524,274	225,525,012
1981	54,461,955	145,002,268	21,922,829	221,387,052
1982	55,863,596	134,358,406	23,337,433	213,559,435
1983	54,943,524	124,511,997	26,206,906	205,662,427
1984	55,963,897	125,127,837	29,081,452	210,173,186
1985	55,735,829	112,306,864	29,635,701	197,678,394
1986	55,221,898	110,422,742	33,507,683	199,152,323
1987	53,856,458	111,715,474	29,145,755	194,717,687
1988	51,713,587	111,548,808	22,788,966	186,051,361
1989	43,151,092	95,472,705	22,389,901	161,013,698
1990	34,770,189	93,283,902	20,537,696	148,591,787
1991	36,210,214	93,599,557	20,340,594	150,150,365
1992	29,465,495	133,236,937	23,609,696	186,312,128
1993	20,583,938	134,533,415	23,284,224	178,401,577
1994	21,493,345	113,311,545	23,065,762	157,870,652
1995	18,654,876	99,813,508	23,468,538	141,936,922
1996	24,817,079	94,326,300	18,777,372	137,920,751
January	3,072,598	7,728,710	1,642,638	12,443,946
February	2,987,487	7,100,737	1,545,453	11,633,677
March	3,112,732	8,756,438	1,616,225	13,485,395
April	2,700,608	7,861,084	1,779,248	12,340,940
May	2,613,375	8,725,264	1,883,745	13,222,384
June	2,536,463	8,353,746	1,752,375	12,642,584
July	2,668,860	8,673,774	1,248,205	12,590,839
August	2,792,189	8,410,477	1,526,896	12,729,562
September	2,672,275	8,760,736	1,447,225	12,880,236
October	3,247,082	8,348,661	1,815,446	13,411,189
November	3,059,820	8,323,483	1,625,890	13,009,193
December	3,443,754 r	8,858,569 r	1,763,212 r	14,065,535 r
1997	34,907,243 r	99,901,679 r	19,646,558 r	154,455,480 r
January	3,861,392	8,857,220	1,619,103	14,337,715
February	3,195,393	8,400,249	1,387,923	12,983,565
March	3,607,430	9,547,134	1,592,719	14,747,283
April	3,648,789	9,274,312	1,994,776	14,917,877
May	4,074,996	10,119,429	1,976,342	16,170,767
June	3,829,158	9,716,507	2,059,465	15,605,130
July	3,665,575	9,889,136	2,141,932	15,696,643
August	3,370,195	9,525,420	1,851,362	14,746,977
September	2,969,873	8,975,334	1,137,297	13,082,504
October	2,926,923	8,903,218	1,222,330	13,052,471
November	3,345,707 e	9,391,711 e	1,675,328 e	14,412,746 e
December	3,249,016 e	9,326,751 e	1,598,501 e	14,174,269 e
1998	41,744,447 e	111,926,421 e	20,257,079 e	173,927,947 e

^e Estimated ^r Revised

Figure 4

LOUISIANA STATE GAS PRODUCTION Actual and Forecasted Through Year 2030

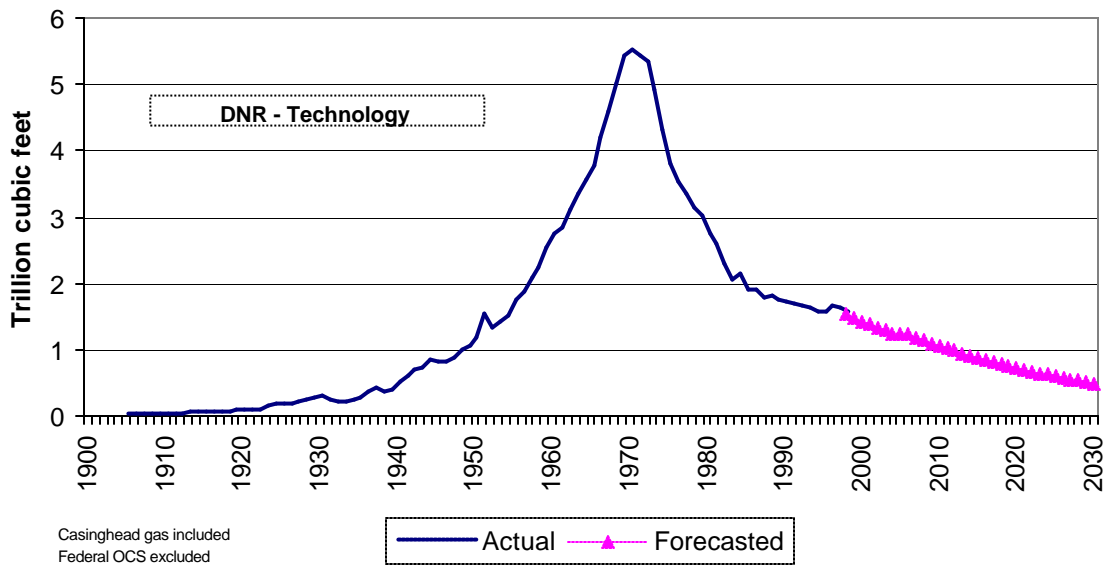


Figure 5

1998 UNITED STATES GAS PRODUCTION BY STATE

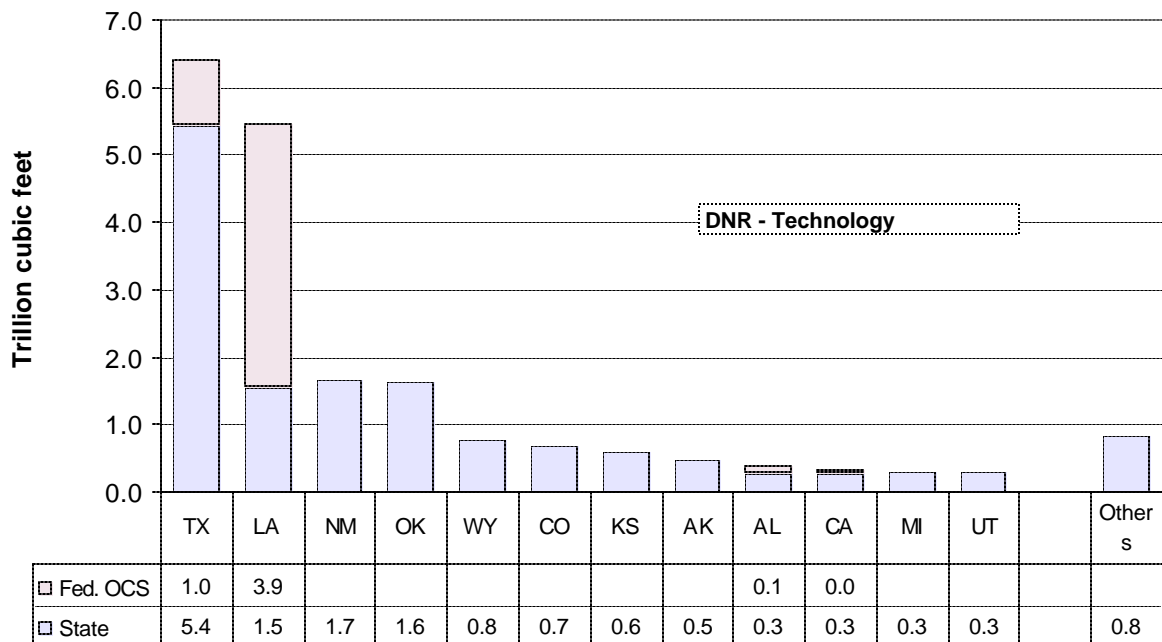


Table 11

LOUISIANA STATE GAS PRODUCTION, WET AFTER LEASE SEPARATION Natural Gas and Casinghead Gas, Excluding OCS (Thousand Cubic Feet (MCF) at 15.025 psia and 60 degrees Fahrenheit)*

DATE	NORTH	SOUTH	OFFSHORE	TOTAL
1980	369,629,050	1,931,815,001	408,784,123	2,710,228,174
1981	419,994,477	1,764,184,476	374,836,303	2,559,015,256
1982	378,425,680	1,535,623,176	359,584,749	2,273,633,605
1983	364,722,665	1,321,825,107	321,430,150	2,007,977,922
1984	386,892,055	1,390,697,247	318,007,698	2,095,597,000
1985	356,399,560	1,270,322,743	254,083,634	1,880,805,937
1986	368,975,585	1,235,668,406	249,821,614	1,854,465,605
1987	360,971,878	1,166,911,126	230,908,933	1,758,791,937
1988	377,676,702	1,179,489,165	216,099,358	1,773,265,225
1989	382,101,466	1,139,770,057	204,891,690	1,726,763,213
1990	383,171,052	1,113,235,576	178,663,048	1,675,069,676
1991	384,005,137	1,122,313,901	150,585,593	1,656,904,631
1992	370,427,975	1,120,079,647	146,614,287	1,637,121,909
1993	353,949,381	1,105,091,632	153,928,404	1,612,969,417
1994	355,898,500	1,038,247,818	157,107,321	1,551,253,639
1995	366,579,170	1,016,642,353	165,662,114	1,548,883,637
1996	414,561,586	1,021,622,975	184,613,484	1,620,798,045
January	37,631,188	84,335,765	16,346,361	138,313,314
February	33,910,142	76,482,491	14,808,593	125,201,226
March	37,480,898	86,757,561	16,391,555	140,630,014
April	35,683,479	81,065,321	15,683,394	132,432,194
May	36,278,838	83,673,824	16,117,241	136,069,903
June	35,491,913	78,395,127	14,892,230	128,779,270
July	36,689,033	79,623,292	14,391,549	130,703,874
August	35,790,802	79,380,062	14,903,089	130,073,953
September	37,094,899	81,888,714	15,262,619	134,246,232
October	38,029,551	79,903,125	15,273,684	133,206,360
November	37,016,385	77,367,895	15,029,546	129,413,826
December	38,370,299	80,368,234 r	15,468,896 r	134,207,429 r
1997	439,467,427	969,241,411 r	184,568,757 r	1,593,277,595 r
January	38,912,306	78,684,469	15,325,048	132,921,823
February	34,950,911	73,897,836	13,875,795	122,724,542
March	38,029,155	80,113,518	15,491,894	133,634,567
April	36,819,976	79,264,660	15,747,345	131,831,981
May	37,295,065	79,587,220	18,019,935	134,902,220
June	35,638,544	78,594,483	16,735,690	130,968,717
July	35,024,393	80,660,356	16,359,221	132,043,970
August	34,965,968	81,186,727	15,093,878	131,246,573
September	33,630,240	76,083,341	10,380,259	120,093,840
October	34,174,242	75,327,343	11,375,298	120,876,883
November	34,067,292 e	77,441,116 e	13,777,471 e	125,285,879 e
December	33,753,041 e	77,210,443 e	13,185,828 e	124,149,312 e
1998	427,261,133 e	938,051,512 e	175,367,662 e	1,540,680,307 e

^e Estimated ^r Revised

* See Appendix D-1 for corresponding volumes at 14.73 psia.

Table 12

LOUISIANA TOTAL GAS PRODUCTION, WET AFTER LEASE SEPARATION

Natural Gas and Casinghead Gas

(Thousand Cubic Feet (MCF) at 15.025 psia and 60 degrees Fahrenheit)*

DATE	ONSHORE	OFFSHORE		TOTAL
		State	Federal OCS ¹²	
1980	2,301,444,051	408,784,123	3,934,902,550	6,645,130,724
1981	2,184,178,953	374,836,303	4,025,867,929	6,584,883,185
1982	1,914,048,856	359,584,749	3,729,057,653	6,002,691,258
1983	1,686,547,772	321,430,150	3,111,576,348	5,119,554,270
1984	1,777,589,302	318,007,698	3,508,475,799	5,604,072,799
1985	1,626,722,303	254,083,634	3,055,687,773	4,936,493,710
1986	1,604,643,991	249,821,614	2,870,347,386	4,724,812,991
1987	1,527,883,004	230,908,933	3,117,669,167	4,876,461,104
1988	1,557,165,867	216,099,358	3,036,077,646	4,809,342,871
1989	1,521,871,523	204,891,690	2,947,545,132	4,674,308,345
1990	1,496,406,628	178,663,048	3,633,554,307	5,308,623,983
1991	1,506,319,038	150,585,593	3,225,373,562	4,882,278,193
1992	1,490,507,622	146,614,287	3,272,561,370	4,909,683,279
1993	1,459,041,013	153,928,404	3,320,312,261	4,933,281,678
1994	1,394,146,318	157,107,321	3,423,837,064	4,975,090,703
1995	1,383,221,523	165,662,114	3,564,677,663	5,113,561,300
1996	1,436,184,561	184,613,484	3,821,696,407	5,442,494,452
January	121,966,953	16,346,361	310,336,468 r	448,649,782 r
February	110,392,633	14,808,593	315,345,218 r	440,546,444 r
March	124,238,459	16,391,555	329,467,778 r	470,097,792 r
April	116,748,800	15,683,394	323,864,332 r	456,296,526 r
May	119,952,662	16,117,241	334,651,204 r	470,721,107 r
June	113,887,040	14,892,230	310,009,024 r	438,788,294 r
July	116,312,325	14,391,549	328,374,031 r	459,077,905 r
August	115,170,864	14,903,089	345,407,384 r	475,481,337 r
September	118,983,613	15,262,619	301,161,840 r	435,408,072 r
October	117,932,676	15,273,684	302,960,531 r	436,166,891 r
November	114,384,280	15,029,546	303,739,093 r	433,152,919 r
December	118,738,533 r	15,468,896 r	331,723,169 r	465,930,598 r
1997	1,408,708,838 r	184,568,757 r	3,837,040,071 r	5,430,317,666 r
January	117,596,775	15,325,048	314,991,515 e	447,913,338 e
February	108,848,747	13,875,795	320,075,396 e	442,799,938 e
March	118,142,673	15,491,894	334,409,795 e	468,044,362 e
April	116,084,636	15,747,345	328,722,297 e	460,554,278 e
May	116,882,285	18,019,935	339,670,972 e	474,573,192 e
June	114,233,027	16,735,690	314,659,160 e	445,627,877 e
July	115,684,749	16,359,221	333,299,641 e	465,343,611 e
August	116,152,695	15,093,878	350,588,494 e	481,835,067 e
September	109,713,581	10,380,259	305,679,267 e	425,773,107 e
October	109,501,585	11,375,298	307,504,939 e	428,381,822 e
November	111,508,408 e	13,777,471 e	308,295,179 e	433,581,059 e
December	110,963,484 e	13,185,828 e	336,699,016 e	460,848,328 e
1998	1,365,312,645 e	175,367,662 e	3,894,595,672 e	5,435,275,979 e

^e Estimated ^r Revised

* See Appendix D-2 for corresponding volumes at 14.73 psia.

NOTE: The 1998 Federal OCS production is estimated from the marketed production

Table 13

LOUISIANA MARKETED AND DRY GAS PRODUCTION (Billion Cubic Feet (BCF) at 15.025 psia and 60 degrees Fahrenheit)*

DATE	MARKETED			EXTRACTION	DRY ³
	State	OCS	Total ³	LOSS ³	
1980	2,391	4,118	6,509	139	6,370
1981	2,219	4,428	6,647	140	6,507
1982	1,974	4,077	6,050	126	5,924
1983	1,722	3,505	5,227	122	5,106
1984	1,835	3,875	5,711	130	5,581
1985	1,656	3,259	4,915	115	4,800
1986	1,625	3,174	4,799	113	4,686
1987	1,544	3,478	5,022	122	4,899
1988	1,664	3,415	5,079	118	4,961
1989	1,620	3,359	4,978	119	4,859
1990	1,597	3,542	5,139	117	5,022
1991	1,544	3,391	4,936	127	4,809
1992	1,658	3,160	4,818	130	4,688
1993	1,599	3,294	4,893	128	4,765
1994	1,549	3,519	5,068	126	4,942
1995	1,471	3,537	5,008	143	4,865
1996	1,488	3,650	5,138	137	5,001
January	134	303 r	436 r		
February	129	270 r	398 r		
March	119	322 r	441 r		
April	123	307 r	430 r		
May	126	313 r	440 r		
June	116	308 r	425 r		
July	127	311 r	439 r		
August	120	320 r	440 r		
September	120	301 r	421 r		
October	128	283 r	411 r		
November	116	299 r	415 r		
December	122	310 r	431 r		
1997	1,480	3,647 r	5,127 r	147	4,980
January	121	336 e	457		
February	108	309 e	417		
March	98	364 e	462		
April	98	352 e	450		
May	133	327 e	461		
June	111	334 e	445		
July	121	338 e	459		
August	112	348 e	460		
September	120	321 e	441		
October	117	313 e	430		
November	90	345 e	435		
December	98	353 e	451		
1998	1,327	4,041 e	5,368	N/A	N/A

^e Estimated ^r Revised

See footnote in Appendix B.

* See Appendix D-2 for corresponding volumes at 14.73 psia.

Figure 6

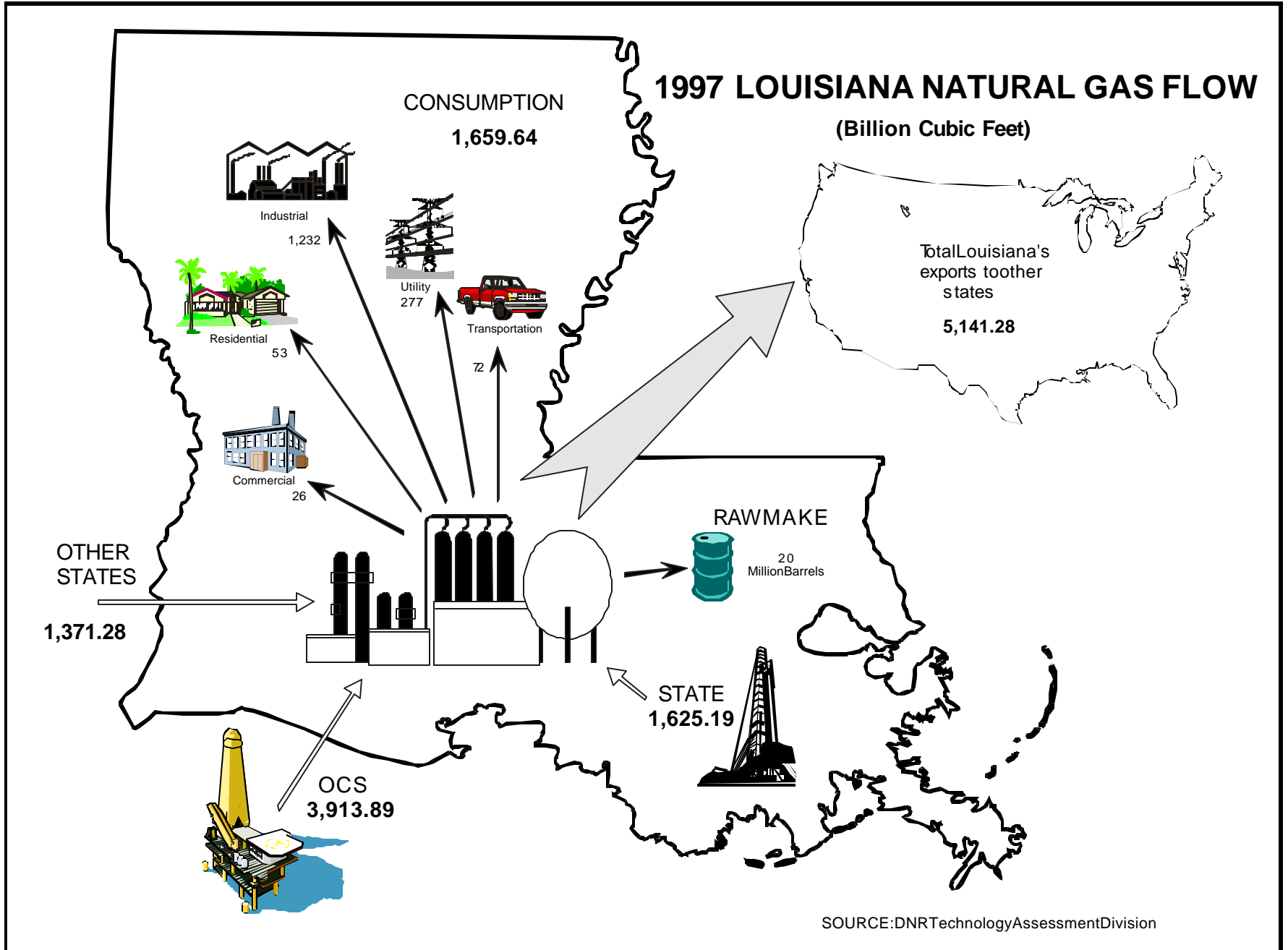


Table 14

LOUISIANA STATE GAS PRODUCTION BY WELL RATES
AS PUBLISHED IN SEVERANCE TAX REPORTS⁸
(MCF at 15.025psia and 60 degrees Fahrenheit)

DATE	FULL RATE	INCAPABLE GAS WELLS RATE	OTHER RATES	TAXED VOLUME
1980	2,287,994,563	64,299,362	25,614,034	2,378,154,110
1981	2,259,226,741	69,127,132	27,821,281	2,356,175,154
1982	2,040,417,849	67,415,215	23,885,266	2,131,718,329
1983	1,830,549,223	66,037,859	20,750,463	1,917,337,545
1984	1,849,689,870	61,394,328	22,460,870	1,933,548,068
1985	1,710,600,175	56,471,054	22,020,986	1,789,092,195
1986	1,748,310,878	56,729,077	22,829,692	1,827,869,647
1987	1,577,841,418	56,316,278	20,374,445	1,654,532,141
1988	1,487,438,834	54,709,819	22,370,768	1,564,519,421
1989	1,529,057,929	54,419,642	31,800,386	1,615,277,957
1990	1,525,451,737	53,547,797	19,438,902	1,598,438,436
1991	1,492,986,396	52,500,178	35,820,609	1,581,307,183
1992	1,499,489,622	55,146,661	25,466,874	1,580,103,157
1993	1,463,723,027	46,017,071	13,839,450	1,523,579,548
1994	1,410,035,722	52,417,334	13,688,870	1,476,141,926
1995	1,334,980,887	53,491,942	13,759,192	1,402,232,021
1996	1,354,105,430	52,368,159	11,191,715	1,417,665,304
January	120,970,961	5,665,003	841,126	127,477,090
February	117,221,779	4,745,414	781,808	122,749,001
March	108,498,137	4,164,877	846,194	113,509,208
April	112,247,883	3,906,552	707,626	116,862,061
May	115,105,640	4,511,549	935,326	120,552,515
June	105,231,586	5,048,351	695,323	110,975,260
July	115,520,928	4,982,463	902,214	121,405,605
August	109,223,317	4,345,923	796,869	114,366,109
September	109,295,862	4,460,542	814,972	114,571,376
October	115,663,713	5,374,920	829,409	121,868,042
November	106,207,720	3,633,717	751,030	110,592,467
December	107,995,396	6,824,102	1,049,490	115,868,988
1997	1,343,182,922	57,663,413	9,951,387	1,410,797,722
January	108,769,175	5,366,514	957,524	115,093,213
February	96,843,852	5,114,774	909,243	102,867,869
March	86,726,178	5,494,880	960,487	93,181,545
April	87,773,875	4,434,648	766,060	92,974,583
May	119,871,444	5,589,649	1,629,882	127,090,975
June	98,993,733	5,103,411	1,245,201	105,342,345
July	108,429,794	5,927,777	1,032,695	115,390,266
August	100,965,036	4,788,666	928,371	106,682,073
September	108,116,824	5,549,884	1,046,821	114,713,529
October	106,030,310	4,059,332	997,509	111,087,151
November	80,391,487	4,139,972	724,199	85,255,658
December	88,559,899	4,673,037	535,106	93,768,042
1998	1,191,471,607	60,242,544	11,733,098	1,263,447,249

See footnote in Appendix B.

Table 15

UNITED STATES OCS GAS PRODUCTION¹² Natural Gas and Casinghead Gas (MCF at 15.025 psia and 60 degrees Fahrenheit)*

YEAR	LOUISIANA	TEXAS	CALIFORNIA	TOTAL
PRIOR	19,490,712	0	0	19,490,712
1954	55,219,200	0	0	55,219,200
1955	79,683,214	0	0	79,683,214
1956	81,265,031	0	0	81,265,031
1957	80,947,656	4,703	0	80,952,359
1958	125,185,735	0	0	125,185,735
1959	203,089,002	0	0	203,089,002
1960	267,673,709	0	0	267,673,709
1961	312,031,003	0	0	312,031,003
1962	443,079,048	0	0	443,079,048
1963	553,272,142	0	0	553,272,142
1964	609,524,401	0	0	609,524,401
1965	632,914,005	0	0	632,914,005
1966	946,433,484	41,233,595	0	987,667,078
1967	1,065,915,553	97,990,476	0	1,163,906,029
1968	1,385,715,670	107,752,805	783,984	1,494,252,460
1969	1,786,760,423	124,601,568	4,750,708	1,916,112,699
1970	2,228,516,212	130,683,192	11,989,041	2,371,188,444
1971	2,582,297,962	124,857,371	15,363,786	2,722,519,119
1972	2,824,792,196	144,267,198	9,836,582	2,978,895,976
1973	2,995,634,220	145,754,588	7,143,485	3,148,532,293
1974	3,283,413,450	156,838,375	5,464,209	3,445,716,035
1975	3,266,745,456	120,166,178	3,874,047	3,390,785,681
1976	3,431,149,749	90,764,667	3,406,969	3,525,321,386
1977	3,575,898,616	85,236,246	3,225,368	3,664,360,230
1978	4,068,255,571	227,305,175	3,404,117	4,298,964,864
1979	4,076,873,552	501,546,069	2,810,535	4,581,230,155
1980	3,934,902,550	612,378,333	3,046,020	4,550,326,904
1981	4,025,867,929	715,937,640	12,515,654	4,754,321,224
1982	3,729,057,653	841,173,981	17,402,403	4,587,634,037
1983	3,111,576,348	834,112,318	15,709,672	3,961,398,338
1984	3,508,475,799	913,008,621	27,260,940	4,448,745,360
1985	3,055,687,773	818,533,627	48,198,926	3,922,420,326
1986	2,870,347,386	959,161,285	41,850,867	3,871,359,539
1987	3,117,669,167	1,180,839,487	40,181,438	4,338,690,093
1988	3,036,077,646	1,155,285,485	33,891,880	4,225,255,011
1989	2,947,545,132	1,142,237,197	28,013,874	4,117,796,204
1990	3,633,554,307	1,321,607,333	37,775,234	4,992,936,873
1991	3,225,373,562	1,161,671,524	39,828,917	4,426,874,003
1992	3,272,561,370	1,215,055,449	40,071,149	4,593,647,066
1993	3,320,312,261	1,007,755,289	41,255,853	4,444,381,437
1994	3,423,837,064	994,291,314	40,860,740	4,565,582,229
1995	3,564,677,663	890,682,224	35,710,325	4,600,143,070
1996	3,821,696,407	953,772,416	37,080,328	4,925,771,640
1997	3,837,040,071	946,381,463	39,922,549	4,977,314,905

See footnote in Appendix B.

* See Appendix D-4 for corresponding volumes at 14.73 psia.

Figure 7

LOUISIANA OIL PRODUCTION AND PRICE

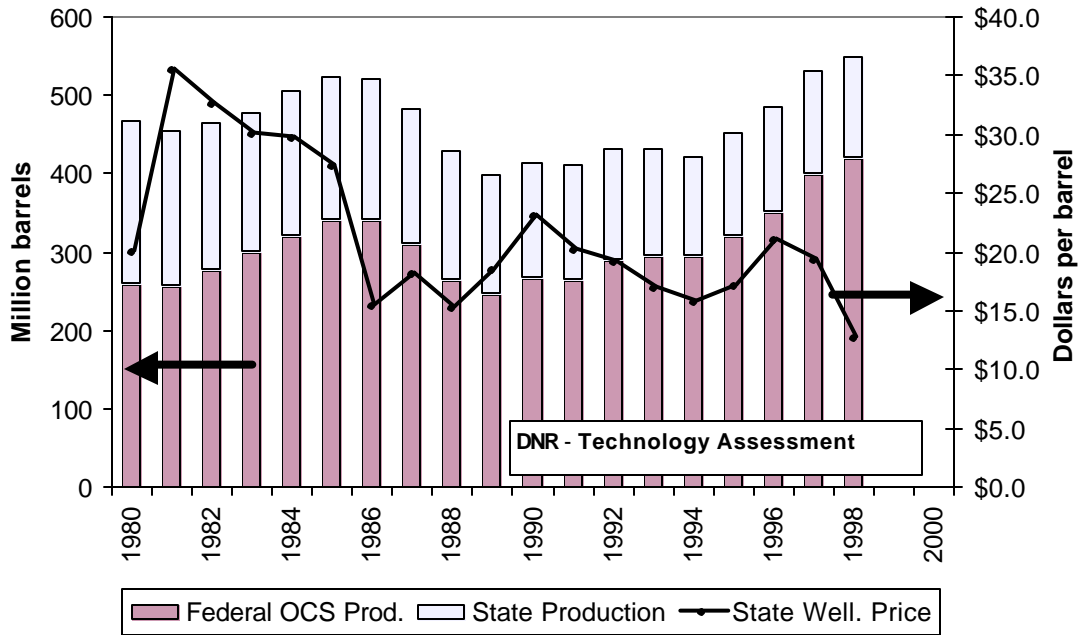


Figure 8

LOUISIANA GAS PRODUCTION AND PRICE

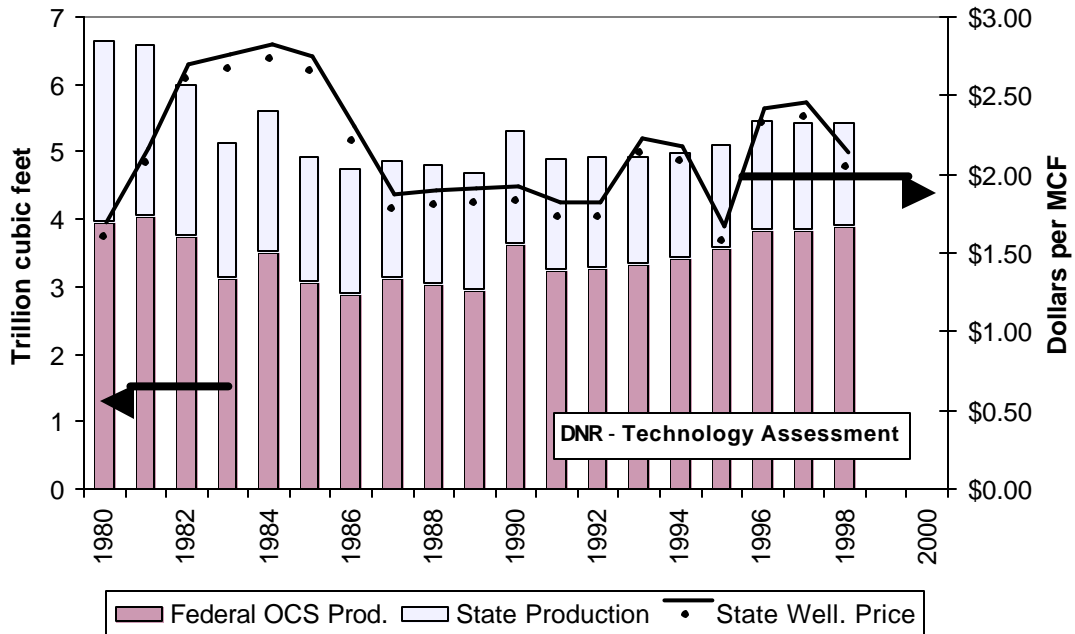


Table 16

UNITED STATES NATURAL GAS AND CASINGHEAD GAS PRODUCTION³
 (Billion Cubic Feet (BCF) at 15.025 psia and 60 degrees Fahrenheit)*

DATE	GROSS	WET AFTER LEASE SEPARATION	MARKETED	DRY	GROSS IMPORTS
1980	21,440	19,907	19,784	19,022	965
1981	21,164	19,660	19,564	18,805	886
1982	19,874	18,309	18,217	17,470	915
1983	18,293	16,646	16,553	15,778	900
1984	19,869	18,051	17,945	17,124	827
1985	19,222	17,024	16,931	16,131	931
1986	18,755	16,623	16,528	15,744	736
1987	19,745	17,212	17,091	16,294	973
1988	20,587	17,706	17,567	16,767	1,268
1989	20,661	17,879	17,740	16,971	1,354
1990	21,100	18,376	18,229	17,460	1,502
1991	21,322	18,336	18,169	17,351	1,738
1992	21,698	18,509	18,344	17,490	2,096
1993	22,279	18,832	18,609	17,740	2,304
1994	23,118	19,547	19,323	18,451	2,572
1995	23,277	19,401	19,123	18,233	2,785
1996	23,579	19,631	19,363	18,424	2,880
January	2,048 r	1,700 r	1,675 r	1,594 r	273 r
February	1,868 r	1,540 r	1,519 r	1,445 r	236 r
March	2,062 r	1,709 r	1,686 r	1,604 r	252 r
April	1,954 r	1,628 r	1,607 r	1,528 r	234 r
May	2,001 r	1,690 r	1,669 r	1,587 r	237 r
June	1,914 r	1,598 r	1,580 r	1,504 r	228 r
July	1,980 r	1,664 r	1,641 r	1,562 r	231 r
August	1,982 r	1,659 r	1,638 r	1,559 r	240 r
September	1,949 r	1,621 r	1,600 r	1,503 r	235 r
October	2,017 r	1,665 r	1,645 r	1,566 r	247 r
November	1,960 r	1,613 r	1,594 r	1,517 r	267 r
December	2,004 r	1,644 r	1,623 r	1,544 r	258 r
1997	23,737 r	19,734 r	19,475 r	18,530 r	2,935 r
January	2,048	1,705	1,683	1,601	278
February	1,864	1,534	1,517	1,443	243
March	2,042	1,683	1,663	1,581	258
April	1,964	1,621	1,600	1,523	243
May	2,022	1,669	1,649	1,569	246
June	1,959	1,626	1,605	1,527	246
July	1,988	1,656	1,632	1,553	258
August	2,002	1,672	1,648	1,569	251
September	1,972	1,622	1,599	1,522	263
October	2,053	1,667	1,644	1,564	264
November	1,982	1,607	1,583	1,506	251
December	2,062	1,664	1,641	1,562	278
1998	23,958	19,724	19,464	18,518	3,080

^r Revised

See footnote in Appendix B.

* See Appendix D-5 for corresponding volumes at 14.73 psia.

TABLE 17

LOUISIANA AVERAGE CRUDE OIL PRICES
(Dollars per Barrel)

DATE	SOUTH LOUISIANA SWEET		ALL GRADES AT WELLHEAD			
	Spot Market ¹⁰	Refinery Posted	State ⁶	OCS Gulf ⁶	Severance Tax ⁸	State Royalty
1980	N/A	37.79	19.87	18.87	17.64	17.74
1981	N/A	36.13	35.45	35.07	33.07	35.08
1982	N/A	32.91	32.44	32.61	33.55	32.33
1983	30.63	30.63	30.02	29.77	30.38	28.64
1984	29.64	30.04	29.67	29.36	29.98	29.44
1985	28.42	27.86	27.22	27.33	27.18	27.40
1986	14.72	15.71	15.32	15.27	17.23	15.78
1987	19.38	18.52	17.97	17.54	17.55	17.85
1988	16.13	15.75	15.22	14.71	16.38	14.67
1989	19.75	18.97	18.39	17.83	17.87	17.92
1990	25.11	23.35	23.04	22.40	22.54	22.76
1991	21.36	20.59	20.14	19.41	21.13	19.90
1992	20.75	19.72	19.00	18.35	19.31	19.10
1993	18.56	17.27	16.90	16.15	17.39	16.84
1994	17.22	15.84	15.60	14.75	15.46	15.52
1995	18.60	17.16	17.06	16.17	16.98	17.06
1996	22.32	20.77	20.88	20.03	20.56	21.38
January	25.33	23.92	24.30	23.56	23.94	24.68 r
February	22.57	20.94	21.40	20.90	24.35	21.59
March	20.72	19.21	19.52	18.96	20.55	19.76
April	19.51	17.94	18.38	17.53	19.96	18.76 r
May	20.78	19.11	19.35	18.45	18.55	19.25 r
June	19.17	17.30	17.66	17.14	19.34	17.78 r
July	19.83	17.78	17.98	17.44	17.91	18.08 r
August	19.96	18.01	18.27	17.76	17.99	18.02 r
September	20.00	18.01	18.27	17.77	18.53	18.52 r
October	21.39	19.57	19.88	19.10	18.17	19.93 r
November	20.41	18.42	18.75	18.40	19.74	18.93 r
December	18.66	16.63	17.00	16.56	18.61	17.39 r
1997	20.69	18.90	19.22	18.63	19.80	19.39 r
January	16.68	14.89	15.23	14.59	17.05	15.19
February	15.79	14.05	14.33	13.60	15.48	14.45
March	14.59	12.68	13.03	12.44	14.84	13.07
April	14.79	12.90	12.99	12.19	13.36	13.85
May	14.96	12.88	13.04	12.57	13.03	12.53
June	13.54	11.27	11.58	11.37	13.16	12.19
July	13.92	11.76	11.97	11.45	11.71	12.34
August	13.31	11.28	11.60	11.00	11.89	11.95
September	14.94	12.80	13.15	12.28	11.15	13.66
October	14.15	12.09	12.60	12.29	13.08	13.00
November	12.60	10.47	11.04	10.90	15.73	11.18
December	11.27	8.98	9.69	9.34	11.18	9.72
1998	14.21	12.17	12.52	12.00	13.47	12.76

^r Revised

See footnote in Appendix B.

Figure 9

CRUDE OIL AVERAGE PRICES

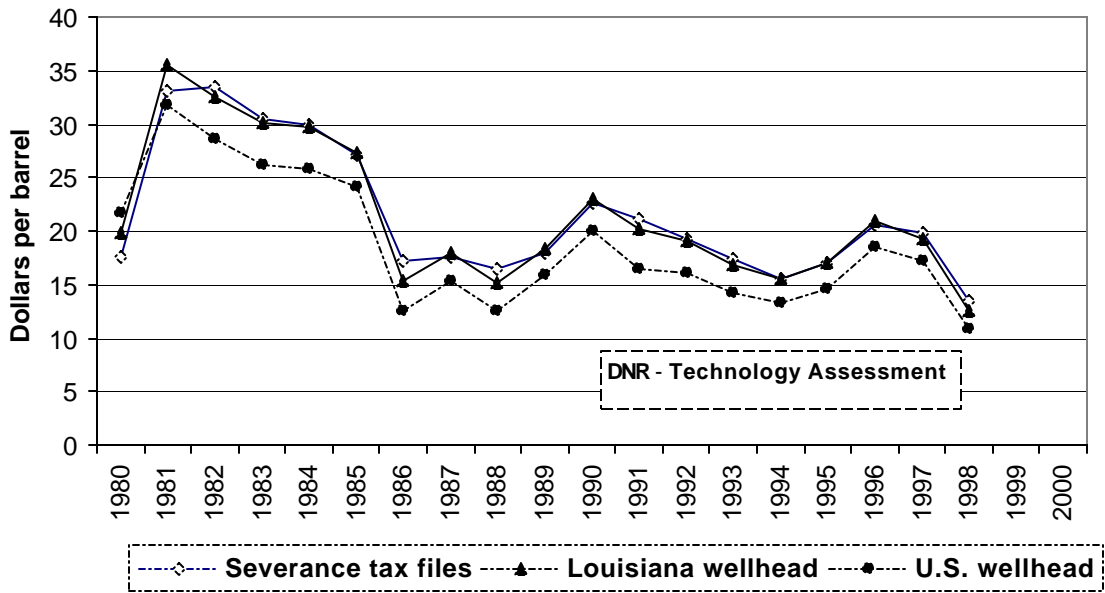


Figure 10

NATURAL GAS AVERAGE PRICES

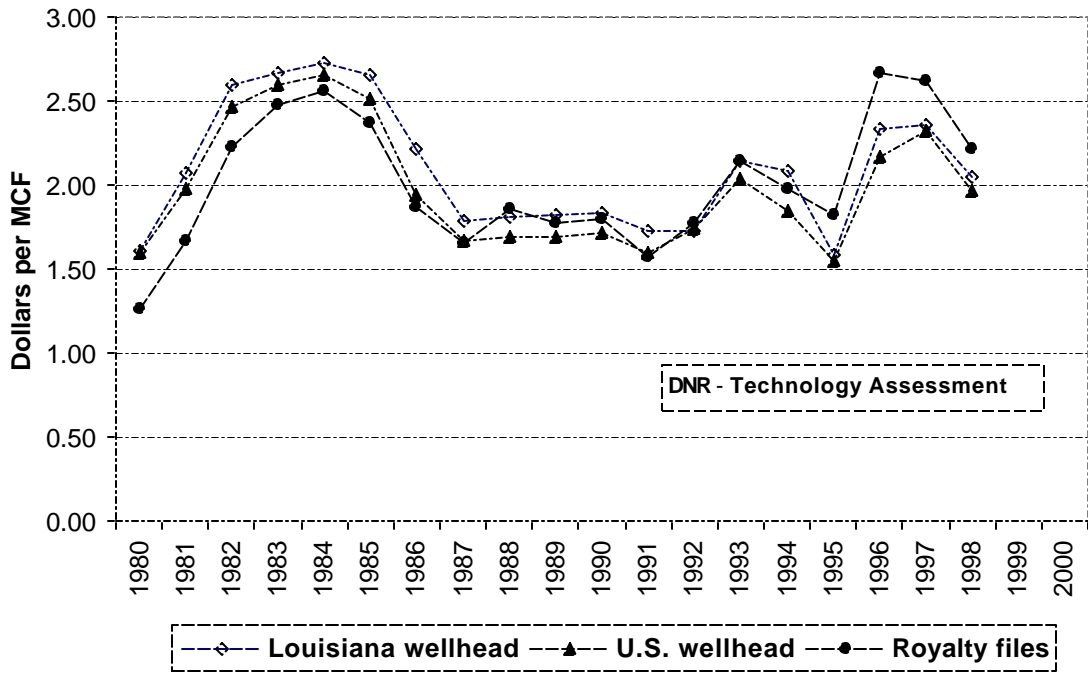


TABLE 18

UNITED STATES AVERAGE CRUDE OIL PRICES²
(Dollars per Barrel)

DATE	REFINERY ACQUISITION		DOMESTIC WELLHEAD	IMPORTS LANDED	IMPORTS FOB	IMPORTS OPEC FOB
	Domestic Costs	Imports Costs				
1980	24.23	33.89	21.59	33.67	32.37	32.21
1981	34.33	37.05	31.77	36.47	35.15	35.17
1982	31.32	33.55	28.52	33.18	32.02	33.48
1983	28.87	29.30	26.19	28.93	27.81	28.46
1984	28.53	28.88	25.88	28.54	27.60	27.79
1985	26.66	26.99	24.09	26.67	25.84	25.67
1986	14.82	14.00	12.51	13.49	12.52	12.21
1987	17.76	18.13	15.40	17.65	16.69	16.43
1988	14.74	14.56	12.58	14.08	13.25	13.43
1989	17.87	18.06	15.86	17.68	16.89	17.06
1990	22.59	21.76	20.03	21.13	20.37	20.40
1991	19.33	18.70	16.54	18.02	16.89	16.99
1992	18.63	18.12	16.00	17.75	16.77	16.87
1993	16.66	16.17	14.24	15.72	14.71	14.78
1994	15.67	15.41	13.19	15.18	14.18	14.00
1995	17.33	17.15	14.62	16.78	15.69	15.36
1996	20.78	20.64 r	18.46	20.31	19.32	18.94
January	24.25 r	23.02 r	21.76	22.21 r	21.19 r	20.20 r
February	22.49 r	20.88 r	19.38	19.98	18.99	17.94 r
March	20.57	19.16	17.83 r	18.45	17.11	16.49
April	19.02 r	17.83 r	16.63 r	17.52	16.20	15.92
May	19.08 r	18.54	17.23 r	17.87	16.81	16.28 r
June	18.31 r	17.35 r	15.88 r	17.12	15.99	15.61
July	18.25 r	17.49 r	15.89 r	17.28	16.38	16.02 r
August	18.47 r	17.96	16.19 r	17.78	16.68	16.37
September	18.48 r	17.85 r	16.41 r	17.85	16.76	16.51
October	19.68 r	18.73 r	17.66 r	18.51	17.26	16.32
November	19.23 r	17.88 r	16.83 r	17.35	16.12 r	14.99 r
December	17.92 r	15.95 r	15.04 r	15.70 r	14.21	13.31
1997	19.61 r	18.53 r	17.23 r	18.11	16.94	16.33 r
January	15.87	14.55	13.48	14.12	12.76	12.24
February	14.77	13.41	12.16	13.11	11.72	11.42
March	13.52	12.36	11.53	12.39	11.08	10.92
April	13.47	12.85	11.64	12.34	11.18	10.60
May	13.52	12.66	11.49	12.24	11.28	10.53
June	12.43	11.67	10.00	11.27	10.17	9.76
July	12.39	11.56	10.46	11.41	10.37	9.76
August	12.45	11.34	10.18	11.29	10.20	9.69
September	13.40	12.78	11.28	12.47	11.75	11.45
October	13.42	12.12	11.32	11.97	11.00	10.22
November	12.49	10.99	9.65	10.48	9.36	8.04
December	10.52	9.39	8.05	9.30	8.18	7.54
1998	13.21	12.10	10.88	11.84	10.75	10.18

^r Revised

See footnote in Appendix B.

Table 19

LOUISIANA NATURAL GAS WELLHEAD PRICES
(Dollars/Thousand Cubic Feet)

DATE	MMS OCS ¹²	DOE STATE WELLS ³	DNR STATE ROYALTY	SPOT MARKET ⁵		
				Low	High	Average
1980	1.64	1.61	1.27	N/A	N/A	N/A
1981	2.11	2.07	1.67	N/A	N/A	N/A
1982	2.65	2.60	2.22	N/A	N/A	N/A
1983	2.72	2.67	2.48	N/A	N/A	N/A
1984	2.70	2.73	2.56	N/A	N/A	N/A
1985	2.72	2.66	2.37	2.13	3.07	2.61
1986	2.26	2.21	1.87	1.46	2.34	1.76
1987	1.82	1.78	1.65	1.40	1.82	1.55
1988	1.84	1.81	1.86	1.40	2.29	1.79
1989	1.86	1.82	1.77	1.40	2.29	1.76
1990	1.87	1.83	1.79	1.35	2.60	1.77
1991	1.77	1.73	1.57	1.09	2.03	1.50
1992	1.77	1.73	1.77	0.99	2.81	1.80
1993	2.18	2.14	2.14	1.61	2.76	2.15
1994	2.10	2.08	1.98	1.40	2.44	1.91
1995	1.61	1.58	1.82	1.35	2.34	1.65
1996	2.37	2.33	2.67 r	1.77	4.00	2.60
January			4.19 r	3.90	4.42	4.06
February			2.96 r	2.86	2.96	2.94
March			1.89 r	1.72	1.87	1.78
April			1.85	1.82	1.87	1.83
May			2.47 r	2.08	2.24	2.15
June			2.43 r	2.29	2.44	2.37
July			2.27	2.13	2.24	2.18
August			1.63 r	2.18	2.24	2.21
September			2.61	2.55	2.60	2.57
October			3.36 r	3.07	3.17	3.14
November			3.24	3.33	3.43	3.37
December			2.54 r	2.50	2.60	2.57
1997	2.63	2.36	2.62 r	1.72	4.42	2.60
January			2.33	2.24	2.34	2.31
February			1.95	1.98	2.08	2.05
March			2.33	2.24	2.29	2.28
April			2.39	2.29	2.44	2.36
May			2.24	2.29	2.39	2.33
June			2.20	1.98	2.13	2.06
July			2.52	2.34	2.44	2.41
August			2.03	1.92	1.98	1.95
September			1.73	1.56	1.72	1.63
October			2.29	2.03	2.08	2.06
November			2.21	1.98	2.08	2.05
December			2.26	2.08	2.18	2.15
1998	2.15 e	2.05 e	2.21	1.56	2.44	2.14

^e Estimated ^r Revised
See footnote in Appendix B.

Table 20

LOUISIANA AVERAGE NATURAL GAS PRICES DELIVERED TO CONSUMER³
(Dollars/Thousand Cubic Feet)

DATE	CITY GATES	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	UTILITY
1980	1.85 e	3.40	2.69	1.28	2.09
1981	2.38 e	4.15	3.69	1.88	2.82
1982	3.38 e	5.32	4.93	3.16	3.23
1983	3.59 e	6.12	5.71	3.13	3.30
1984	3.78	5.96	5.54	3.18	3.18
1985	3.55	5.67	5.28	3.03	2.86
1986	2.95	5.77	5.25	1.91	1.94
1987	2.38	5.56	4.97	1.80	1.67
1988	2.93	5.74	5.14	1.99	1.70
1989	3.01	5.97	5.19	1.97	1.78
1990	2.97	6.09	5.26	2.00	1.73
1991	2.56	5.77	4.90	1.74	1.59
1992	2.48	5.60	4.79	1.93	1.91
1993	2.72	6.09	5.33	2.30	2.49
1994	2.54	6.24	5.42	2.17	2.17
1995	2.21	6.01	5.14	1.82	1.88
1996	3.13	6.76	6.08	2.84	2.94
January	3.84	7.26 r	7.10 r	4.15 r	4.35
February	3.46 r	6.89 r	6.59 r	3.31 r	2.93
March	2.44	6.27 r	5.84 r	2.04 r	2.10
April	2.37 r	5.96 r	5.01 r	2.27 r	2.18
May	2.41 r	7.25 r	5.84 r	2.34 r	2.45
June	2.64 r	8.21 r	6.00 r	2.65 r	2.65
July	2.58	8.21 r	5.31 r	2.69 r	2.44
August	2.50 r	8.49 r	5.66 r	2.43 r	2.60
September	3.02 r	8.96 r	6.03 r	2.78 r	3.03
October	3.44 r	9.43 r	7.14 r	3.27 r	3.40
November	3.75 r	7.88 r	7.00 r	3.42 r	3.61
December	2.86 r	6.34 r	5.91 r	2.91 r	2.86
1997	2.94 r	7.60 r	6.12 r	2.86 r	2.80
January	2.81	6.10	5.73	2.90	2.61
February	2.25	5.60	5.19	2.22	2.47
March	2.53	5.28	4.94	2.89	2.51
April	2.29	6.46	5.49	2.19	2.66
May	2.36	8.95	6.10	2.62	2.52
June	2.19	8.36	5.58	2.43	2.40
July	2.45	8.85	5.85	2.30	2.59
August	2.05	8.84	5.68	1.98	2.17
September	2.01	8.91	5.82	1.85	2.12
October	2.01	8.75	5.79	1.85	2.25
November	2.20	7.93	6.19	1.26	2.32
December	3.10	7.00	6.06	1.20	2.16
1998	2.35	7.59	5.70	2.14	2.40

^e Estimated ^r Revised
 See footnote in Appendix B.

Table 21

UNITED STATES AVERAGE NATURAL GAS PRICES (Dollars/Thousand Cubic Feet)

DATE	WELLHEAD ³	SPOT MARKET ⁵	FOREIGN IMPORTS ³	CITY GATES ³	DELIVERED TO RESIDENTIAL ³
1980	1.59	N/A	4.42	2.41	3.68
1981	1.98	N/A	4.84	2.89	4.29
1982	2.46	N/A	4.94	3.60	5.17
1983	2.59	N/A	4.51	4.04	6.06
1984	2.66	N/A	4.08	3.89	6.12
1985	2.51	2.49	3.19	3.75	6.12
1986	1.94	1.68	2.53	3.22	5.83
1987	1.67	1.48	2.17	2.87	5.54
1988	1.69	1.69	2.00	2.92	5.47
1989	1.69	1.64	2.04	3.01	5.64
1990	1.71	1.67	1.94	3.03	5.80
1991	1.64	1.45	1.83	2.90	5.82
1992	1.74	1.75	1.85	3.01	5.89
1993	2.04	2.10	2.03	3.21	6.16
1994	1.85	1.84	1.87	3.07	6.41
1995	1.55	1.56	1.49	2.78	6.06
1996	2.17	2.39	1.97	3.34	6.34
January	3.40 r	4.12	3.26 r	4.28 r	6.74 r
February	2.49 r	2.89	2.52 r	3.76 r	6.79 r
March	1.79 r	1.72	1.72 r	3.04 r	6.52 r
April	1.81 r	1.80	1.67 r	2.92 r	6.53 r
May	2.00 r	2.06	1.83 r	3.11 r	6.83 r
June	2.06 r	2.25	1.88 r	3.41 r	8.30 r
July	2.00 r	2.11	1.84 r	3.44 r	8.78 r
August	2.08 r	2.15	1.83 r	3.34 r	8.99 r
September	2.33 r	2.50	2.01 r	3.50 r	8.84 r
October	2.68 r	3.06	2.33 r	3.86 r	7.69 r
November	2.92 r	3.32	2.72 r	3.92 r	6.86 r
December	2.28 r	2.48	2.19 r	3.42 r	6.54 r
1997	2.32 r	2.54	2.15 r	3.50 r	7.45 r
January	1.99	2.28	2.05	3.28	6.47
February	2.00	2.01	1.98	3.08	6.40
March	2.08	2.25	2.00	3.22	6.27
April	2.22	2.31	2.01	3.21	6.78
May	2.03	2.30	1.99	3.11	7.59
June	1.97	2.03	1.94	2.99	8.41
July	2.08	2.35	1.88	3.39	8.62
August	1.84	1.96	1.80	3.13	9.19
September	1.83	1.64	1.75	2.76	8.94
October	1.84	2.02	1.99	3.02	7.55
November	1.94	2.05	2.13	3.01	6.61
December	1.73	2.14	2.14	2.44	6.36
1998	1.96	2.11	1.97	3.05	7.43

^r Revised

See footnote in Appendix B.

Table 22

LOUISIANA STATE OIL AND GAS DRILLING PERMITS ISSUED BY TYPE Excluding OCS

DATE	DEVELOPMENTAL	+ WILDCATS	= TOTAL =	OFFSHORE	+ ONSHORE
1980	5,344	893	6,237	N/A	N/A
1981	5,195	1,086	6,281	N/A	N/A
1982	4,454	727	5,181	N/A	N/A
1983	4,852	642	5,494	201	5,293
1984	6,929	702	7,631	231	7,400
1985	4,811	599	5,410	165	5,245
1986	1,984	298	2,282	84	2,198
1987	2,148	284	2,432	73	2,359
1988	1,601	249	1,850	94	1,756
1989	1,486	204	1,690	75	1,615
1990	1,526	181	1,707	85	1,622
1991	1,209	100	1,309	77	1,232
1992	1,044	92	1,136	59	1,077
1993	1,040	109	1,149	76	1,073
1994	1,015	98	1,113	74	1,039
1995	979	86	1,065	68	997
1996	1,248	133	1,381	121	1,260
January	100	11	111	7	104
February	91	22	113	6	107
March	86	8	94	6	88
April	130	12	142	12	130
May	111	19	130	3	127
June	151	5	156	3	153
July	135	10	145	10	135
August	121	13	134	6	128
September	131	12	143	9	134
October	156	11	167	9	158
November	100	12	112	6	106
December	112	3	115	8	107
1997	1,424	138	1,562	85	1,477
January	95	8	103	8	95
February	101	7	108	5	103
March	79	16	95	12	83
April	117	9	126	11	115
May	138	8	146	8	138
June	100	9	109	7	102
July	90	9	99	10	89
August	147	11	158	8	150
September	98	3	101	9	92
October	83	12	95	5	90
November	55	10	65	6	59
December	68	13	81	7	74
1998	1,171	115	1,286	96	1,190

Figure 11

**LOUISIANA STATE DRILLING PERMITS ISSUED,
Federal OCS Excluded**

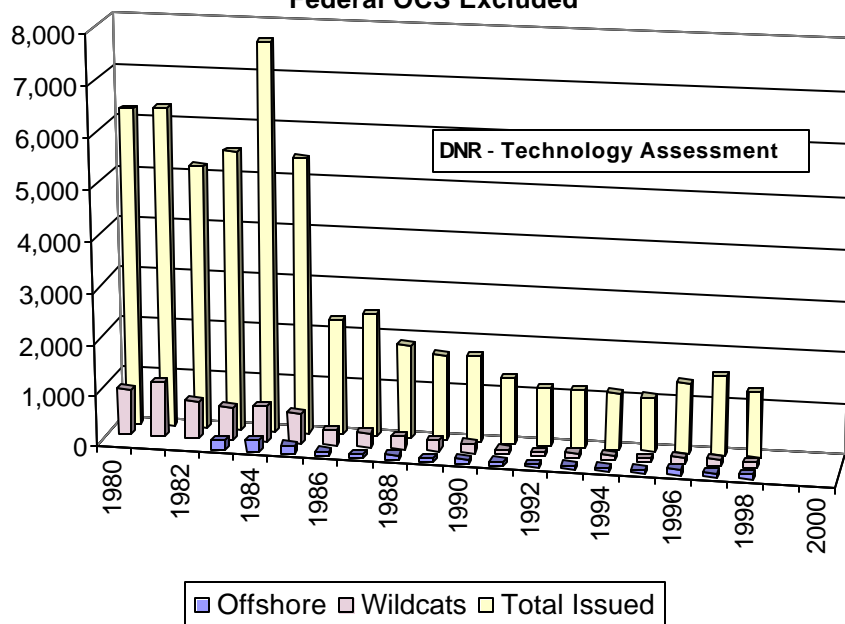


Figure 12

LOUISIANA AVERAGE ACTIVE RIGS

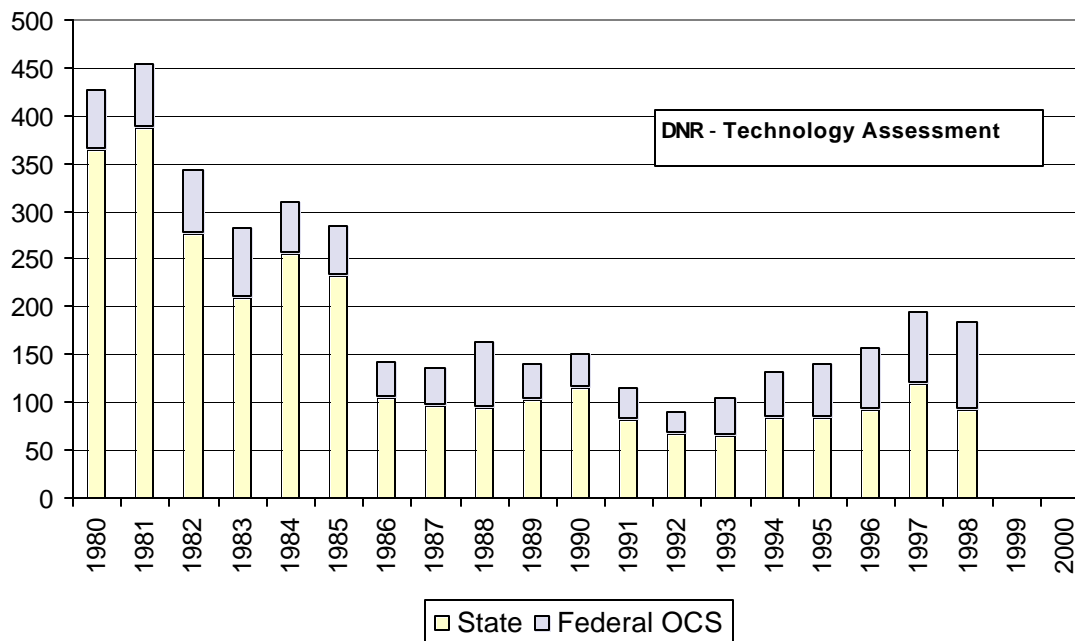


Table 23

LOUISIANA AVERAGE RIGS RUNNING

DATE	NORTH ⁴	SOUTH INLAND		OFFSHORE			TOTAL RIGS ⁴
		Water ⁴	Land ⁴	State	O C S	(State+OCS) ⁴	
1980	55	77	156	76	63	139	427
1981	58	83	160	85	69	154	455
1982	40	60	108	69	67	136	344
1983	29	47	82	51	73	124	283
1984	30	51	96	78	54	132	310
1985	25	44	86	78	52	130	283
1986	12	20	42	31	38	69	143
1987	11	23	36	26	39	65	135
1988	14	27	35	20	68	88	163
1989	16	17	35	34	38	72	140
1990	19	20	36	40	36	76	151
1991	11	16	31	23	34	57	115
1992	9	13	27	16	23	39	88
1993	11	12	22	19	40	59	104
1994	14	16	25	29	48	78	132
1995	16	15	28	23	58	82	141
1996	19	19	31	25	63	88	156
January	17	22	35	28	57	85	159
February	22	22	32	34	47	81	157
March	21	25	38	29	69	98	181
April	26	27	44	21	79	100	196
May	22	25	43	36	62	98	188
June	24	24	46	34	71	105	199
July	23	25	46	30	79	109	203
August	19	24	52	27	80	107	202
September	20	22	58	19	89	108	208
October	21 ^r	19 ^r	60	25 ^r	78	103 ^r	203 ^r
November	16 ^r	22	60	32 ^r	81	112 ^r	210 ^r
December	18	23	61	17	98	115	217
1997	21	23	48	28	74	102	194
January	21	24	56	8	108	116	216
February	17	24	58	13	103	116	215
March	15	24	24	16	98	116	179
April	17	22	53	17	104	121	213
May	19	24	48	15	104	119	210
June	21	28	40	9	101	110	199
July	21	21	38	12	93	105	185
August	21	20	32	16	83	99	171
September	20	18	26	23	75	97	161
October	17	18	29	14	77	91	156
November	19	16	28	14	78	92	155
December	17	18	24	15	74	89	147
1998	19	21	38	14	92	106	184

^r Revised

See footnote in Appendix B.

Table 24

LOUISIANA STATE PRODUCING CRUDE OIL WELLS
Excluding OCS

DATE	NORTH	SOUTH	OFFSHORE	TOTAL
1980	13,981	6,832	1,073	21,885
1981	15,084	6,777	1,105	22,966
1982	15,540	6,608	1,112	23,259
1983	16,299	6,374	1,037	23,710
1984	17,544	6,300	1,038	24,882
1985	18,794	6,223	1,014	26,031
1986	19,346	6,061	1,001	26,408
1987	18,630	5,768	945	25,343
1988	17,953	5,698	964	24,615
1989	16,849	5,474	927	23,250
1990	17,369	5,215	906	23,490
1991	17,731	5,143	868	23,742
1992	17,449	5,155	842	23,446
1993	16,810	5,015	814	22,640
1994	15,904	4,682	805	21,392
1995	15,260	4,451	769	20,479
1996	15,148	4,295	719	20,163
January	14,685	4,136	709	19,530
February	14,761	4,131	697	19,589
March	14,484	4,179	691	19,354
April	14,391	4,144	689	19,224
May	14,264	4,140	692	19,096
June	14,581	4,089	689	19,359
July	14,775	4,252	553	19,580
August	14,580	4,199	538	19,317
September	14,744	4,203	530	19,477
October	14,682	4,159	544	19,385
November	14,602	4,175	549	19,326
December	14,332	4,173	552	19,057
1997	14,573	4,165	619	19,358
January	14,494	4,168	550	19,212
February	14,255	4,074	551	18,880
March	14,451	4,035	543	19,029
April	14,286	4,031	551	18,868
May	14,309	4,031	550	19,096
June	14,140	3,983	547	18,670
July	13,976	3,971	541	18,488
August	13,745	3,748	541	18,034
September	13,688	3,727	533	17,948
October	13,400	3,663	550	17,613
November	13,320 e	3,679 e	555 e	17,554 e
December	13,050 e	3,677 e	558 e	17,285 e
1998	13,926 e	3,899 e	548 e	18,373 e

^e Estimated

Figure 13

LOUISIANA WELL COMPLETIONS BY TYPE

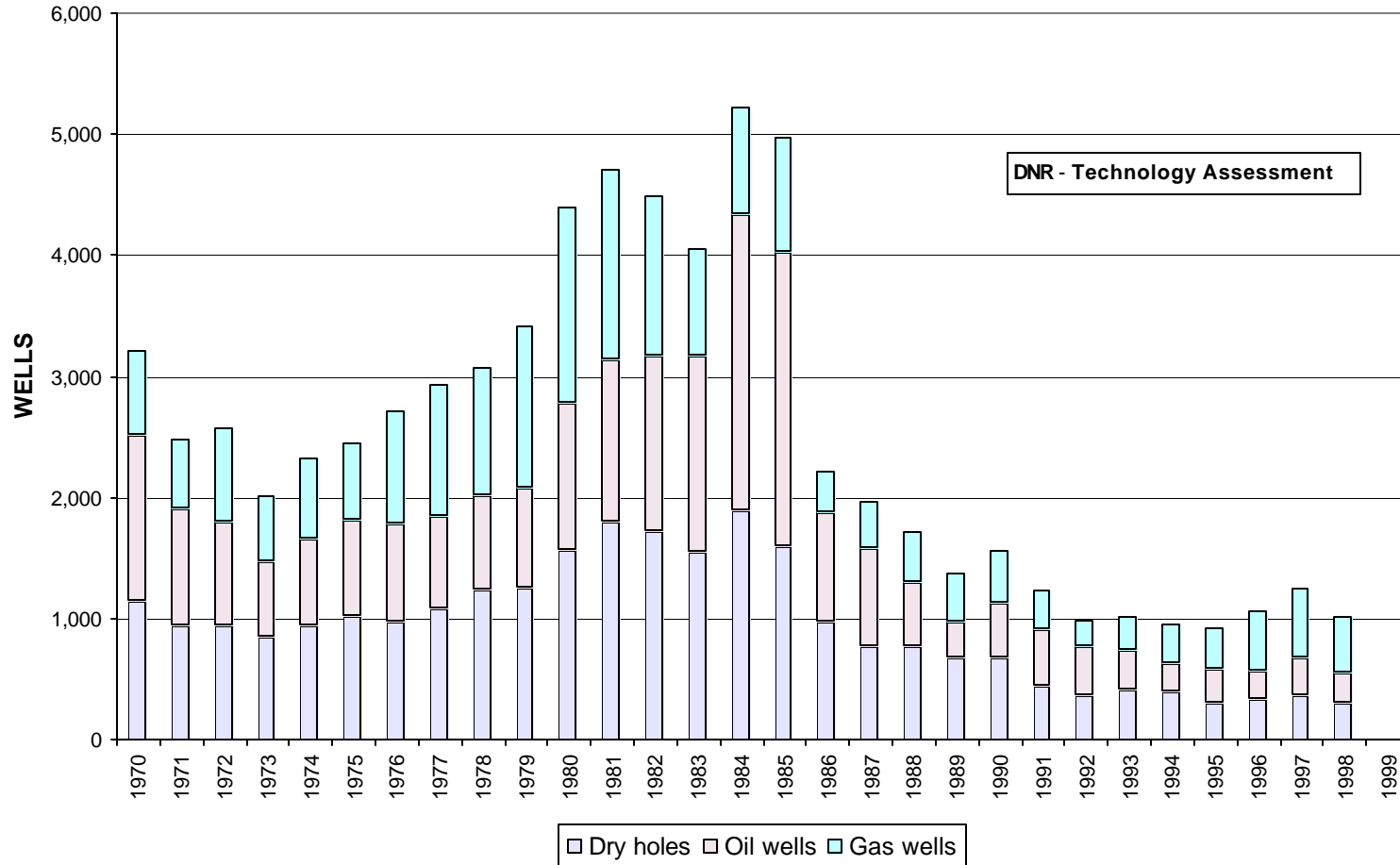


Table 25

LOUISIANA STATE PRODUCING NATURAL GAS WELLS
Excluding OCS

DATE	NORTH	SOUTH	OFFSHORE	TOTAL
1980	8,360	3,277	551	12,188
1981	9,479	3,226	557	13,262
1982	10,154	3,136	564	13,855
1983	10,502	3,065	549	14,116
1984	10,812	2,955	532	14,299
1985	11,026	2,887	511	14,424
1986	11,049	2,730	436	14,216
1987	10,726	2,635	413	13,774
1988	10,813	2,539	445	13,796
1989	10,861	2,474	501	13,836
1990	10,802	2,407	512	13,721
1991	10,702	2,261	496	13,459
1992	10,498	2,149	496	13,143
1993	10,506	2,192	490	13,189
1994	10,596	2,260	473	13,329
1995	10,452	2,200	335	12,987
1996	10,376	2,148	274	12,799
January	10,287	2,145	300	12,732
February	10,331	2,139	296	12,766
March	10,447	2,199	300	12,946
April	10,336	2,186	305	12,827
May	10,385	2,157	303	12,845
June	10,436	2,144	296	12,876
July	10,497	2,127	292	12,916
August	10,590	2,130	291	13,011
September	10,565	2,123	307 r	12,995 r
October	10,534	2,124	290	12,948
November	10,390	2,150	296	12,836
December	10,556	2,166	297	13,019
1997	10,446	2,149	298	12,893 r
January	10,523	2,135	299	12,957
February	10,639	2,021	271	12,931
March	10,568	2,014	272	12,854
April	10,530	1,951	254	12,735
May	10,650	1,944	255	12,845
June	10,604	1,932	255	12,876
July	10,703	1,953	241	12,897
August	10,570	1,981	245	12,796
September	10,639	1,916	246	12,801
October	10,553	1,900	217	12,670
November	10,409 e	1,926 e	223 e	12,558 e
December	10,575 e	1,942 e	224 e	12,741 e
1998	10,580 e	1,968 e	250 e	12,798 e

^e Estimated

Table 26

LOUISIANA STATE WELL COMPLETION BY TYPE AND BY REGION
Excluding OCS

	YEAR	OFFSHORE	SOUTH	NORTH	TOTAL
C R O U I D L E	1984	89	440	1,926	2,455
	1985	27	448	1,965	2,440
	1986	24	241	640	905
	1987	21	348	434	803
	1988	11	211	312	534
	1989	7	126	170	303
	1990	9	164	288	461
	1991	22	178	266	466
	1992	19	163	222	404
	1993	24	136	173	333
	1994	13	103	117	233
	1995	31	100	137	268
	1996	34	67	122	223
	1997	39	168	106	313
1998	24 re	100 re	64 re	188 re	
N A T G U A R S A L	1984	28	240	628	896
	1985	28	240	678	946
	1986	9	145	198	352
	1987	5	124	264	393
	1988	11	149	258	418
	1989	17	132	254	403
	1990	11	157	258	426
	1991	9	126	192	327
	1992	8	111	113	232
	1993	6	89	176	271
	1994	9	141	180	330
	1995	8	126	216	350
	1996	22	154	325	501
	1997	22	160	383	565
1998	23 re	170 re	407 re	600 re	
D H R O Y L E	1984	41	734	1,106	1,881
	1985	37	571	974	1,582
	1986	17	442	503	962
	1987	14	302	435	766
	1988	17	325	418	760
	1989	13	281	373	667
	1990	15	283	366	664
	1991	11	205	228	444
	1992	5	158	190	353
	1993	4	168	234	406
	1994	12	141	236	389
	1995	8	138	155	301
	1996	12	151	170	333
	1997	9	165	188	362
1998	7 re	104 re	121 re	232 re	

^e Estimated ^r Revised

Table 27

**LOUISIANA STATE MINERAL BONUSES, RENTALS AND
ROYALTY OVERRIDE REVENUES, Excluding OCS
(Million Dollars)**

DATE	BONUSES	OVERRIDE ROYALTY	RENTALS	TOTAL
1980	140.29	0.51	31.55	172.36
1981	150.70	0.81	49.31	200.82
1982	61.23	0.70	53.66	115.60
1983	53.03	0.67	27.73	81.43
1984	67.98	0.80	21.21	89.99
1985	32.08	0.90	20.86	53.84
1986	15.89	0.50	12.25	28.64
1987	26.82	0.39	6.70	33.90
1988	17.65	0.29	9.28	27.22
1989	11.59	0.29	8.34	20.21
1990	19.02	0.32	6.76	26.10
1991	9.82	0.32	8.71	18.85
1992	4.26	0.32	6.97	11.55
1993	13.29	0.20	4.20	17.68
1994	15.31	0.19	6.15	21.65
1995	31.96	0.69	9.47	42.12
1996	39.63	-0.27	18.40	57.76
January	0.53	0.02	1.65	2.20
February	3.08	0.03	2.12	5.23
March	10.76	0.03	0.99	11.78
April	2.44	0.04	1.78	4.25
May	7.95	0.06	1.93	9.94
June	2.79	0.03	3.19	6.01
July	1.84 r	0.05 r	0.88 r	2.77 r
August	2.70 r	0.02 r	1.78 r	4.50 r
September	0.00	0.02	2.26	2.29
October	3.20	0.10	2.16	5.46
November	1.48	0.42	3.87	5.78
December	1.48	0.03	2.40	3.91
1997	38.27 r	0.84 r	25.00 r	64.11 r
January	2.31	0.14	4.47	6.92
February	1.60	0.20	1.05	2.85
March	1.28	0.05	2.14	3.47
April	6.93	0.05	3.94	10.92
May	2.88	0.08	1.92	4.88
June	14.74	0.02	1.52	16.28
July	4.23	0.02	2.68	6.93
August	3.50	0.08	2.13	5.71
September	0.94	0.01	1.26	2.21
October	2.49	0.02	0.67	3.17
November	1.39	0.01	2.34	3.74
December	0.00	0.01	1.73	1.75
1998	42.27	0.69	25.86	68.82
r Revised				

Table 28

LOUISIANA STATE MINERAL ROYALTY REVENUE
Excluding OCS
(Million Dollars)

DATE	OIL	GAS	PLANT LIQUIDS	OTHERS	TOTAL
1980	158.27	131.95	17.05	3.34	310.61
1981	291.90	160.24	18.20	3.28	473.62
1982	248.44	204.25	14.35	1.82	468.86
1983	224.62	211.84	13.00	1.83	451.29
1984	226.64	210.99	13.06	2.29	452.98
1985	201.14	174.45	9.55	2.62	387.76
1986	122.22	154.83	6.34	1.96	285.34
1987	125.72	120.54	4.90	1.60	252.76
1988	98.55	124.06	4.39	1.35	228.35
1989	112.30	116.18	3.92	1.42	233.82
1990	135.44	113.14	3.80	0.90	253.28
1991	120.49	91.43	4.08	0.34	216.34
1992	113.29	97.07	4.69	0.00	215.04
1993	99.20	125.01	4.53	0.00	228.74
1994	85.72	102.95	4.05	0.00	192.72
1995	95.12	97.95	4.59	0.00	197.66
1996	122.55 r	156.49 r	6.65	0.00	273.69 r
January	12.65 r	21.57 r	0.68	0.00	34.90 r
February	8.55	13.69 r	0.58	0.00	22.81 r
March	10.13 r	9.49 r	0.62	0.00	20.23 r
April	8.93 r	8.85 r	0.46	0.00	18.25 r
May	9.95 r	11.11 r	0.51	0.00	21.57 r
June	8.00 r	10.82 r	0.52	0.00	19.34 r
July	8.14 r	10.22 r	0.42	0.00	18.78 r
August	8.69 r	10.74 r	0.61 r	0.00	20.04 r
September	8.82 r	12.73 r	0.43	0.00	21.98 r
October	9.87 r	15.46 r	0.35 r	0.00	25.69 r
November	8.86 r	16.29 r	0.34 r	0.00	25.48 r
December	8.02 r	12.63 r	0.35 r	0.00	20.99 r
1997	110.61 r	153.59 r	5.87 r	0.00	270.07 r
January	7.31	11.13	0.42	0.00	18.86
February	6.13	8.68	0.30	0.00	15.10
March	6.40	10.93	0.27	0.00	17.61
April	6.17	11.21	0.24	0.00	17.62
May	6.30	12.25	0.20	0.00	18.75
June	5.53	10.55	0.18	0.00	16.26
July	5.92	12.02	0.14	0.00	18.09
August	5.55	9.40	0.19	0.00	15.14
September	4.59	6.04	0.11	0.00	10.74
October	5.19	9.19	0.15	0.00	14.52
November	4.64	8.65	0.18	0.00	13.47
December	4.20	8.73	0.12	0.00	13.04
1998	67.93	118.76	2.50	0.00	189.19

^r Revised

Table 29

LOUISIANA STATE MINERAL SEVERANCE TAX REVENUE⁸

Excluding OCS
(Million Dollars)

DATE	OIL	GAS	OTHER MINERALS	SEVERANCE TOTAL
1980	427.68	161.87	N/A	589.55
1981	815.38	164.07	N/A	979.44
1982	766.49	147.53	N/A	914.02
1983	662.00	131.52	2.45	795.98
1984	652.39	130.99	3.62	787.00
1985	598.67	120.96	3.73	723.37
1986	389.87	125.14	3.42	518.42
1987	345.18	111.84	2.99	460.01
1988	296.45	106.29	2.65	405.39
1989	312.99	108.84	2.43	424.26
1990	373.21	124.61	2.75	500.58
1991	367.13	146.83	1.97	515.93
1992	326.07	126.24	1.63	453.94
1993	283.68	107.32	1.76	392.76
1994	229.40	114.58	2.02	346.00
1995	233.37	114.58	1.85	349.80
1996	270.36	98.60	1.88	370.84
January	29.03	10.06	0.20	39.30
February	27.51	9.14	0.09	36.73
March	19.82	8.81	0.13	28.77
April	21.76	8.60	0.14	30.50
May	18.85	8.89	0.15	27.89
June	21.35	8.23	0.14	29.72
July	18.82	8.99	0.17	27.98
August	19.45	9.95	0.17	29.58
September	21.13	11.04	0.14	32.32
October	17.99	12.02	0.15	30.15
November	21.64	11.40	0.17	33.22
December	19.77	11.13	0.20	31.10
1997	257.13	118.27	1.85	377.25
January	14.29	11.35	0.12	25.77
February	16.41	10.03	0.09	26.54
March	15.61	11.17	0.16	26.94
April	13.25	9.04	0.09	22.37
May	12.42	12.20	0.10	24.71
June	12.76	10.13	0.11	23.00
July	11.65	11.03	0.15	22.83
August	11.13	10.13	0.12	21.37
September	11.19	10.18	0.13	21.49
October	10.40	9.83	0.13	20.36
November	10.08	7.59	0.10	17.77
December	9.76	8.31	0.11	18.18
1998	148.96	120.98	1.40	271.34

See footnote in Appendix B.

Table 30**STATE SECTION 8(g) REVENUE FROM LOUISIANA'S OCS¹³****(Dollars)**

YEAR	RENTALS	BONUSES	ROYALTIES	8G ESCROW	SETTLE- MENT	TOTAL
1986	610,567	1,912,734	66,176,203			68,699,504
1987	148,578	3,150,519	11,043,115	572,000,000	2,520,000	588,862,212
1988	153,561	5,528,006	8,708,079		2,520,000	16,909,646
1989	175,817	2,890,298	7,163,105		2,520,000	12,749,220
1990	430,198	5,570,375	6,239,368		2,520,000	14,759,941
1991	303,824	2,220,094	8,461,261		2,520,000	13,505,179
1992	258,787	1,189,989	6,405,279		5,880,000	13,734,055
1993	235,250	965,504	7,373,550		5,880,000	14,454,304
1994	1,016,932	1,913,682	11,780,932		5,880,000	20,591,546
1995	255,213	890,002	8,012,718		5,880,000	15,037,933
1996	292,445	4,666,400	12,283,395		5,880,000	23,122,240
1997	686,051	5,689,689	11,855,454		8,400,000	26,631,194
1998	N/A	N/A	N/A		8,400,000	N/A
1999	N/A	N/A	N/A		8,400,000	N/A
2000	N/A	N/A	N/A		8,400,000	N/A
2001	N/A	N/A	N/A		8,400,000	N/A

N/A Not Available

See footnotes on Appendix B

Royalty revenues from Federal offshore leases on the Outer Continental Shelf (OCS) are distributed to the Land and Water Conservation Fund, the Historic Preservation Fund, and the General Fund of the U.S. Treasury. Transfers are made in each fiscal year from OCS royalties, rentals and bonuses in order to maintain the Land and Water Conservation Fund's annual authorization of \$900 million. Annually, \$150 million is put into the Historic Preservation Fund. The balance of offshore revenue receipts is directed to the General Fund of the U.S. Treasury.

Section 8(g) of the Outer Continental Shelf Lands Act Amendments of 1978 provided that the states were to receive a "fair and equitable" division of revenues generated from the leasing of lands within 3 miles of the seaward boundary of a coastal state that contains one or more oil and gas pools or fields underlying both the OCS and lands subject to the jurisdiction of the state. The states and the federal government, however, were unable to reach agreement concerning the meaning of the term "fair and equitable". Revenues generated in the 3-mile boundary zone were subsequently placed into an escrow fund in August 1979.

Congress resolved the dispute over the meaning of "fair and equitable" in the Outer Continental Shelf Lands Act Amendments of 1985, Public Law 99-272. The law provided for the following distribution of revenues to the states under section 8(g):

Before 1986: Louisiana did not receive any shared revenue from OCS production prior to 1986.

1986: Louisiana received a payment of \$68.7 million from royalties, rentals and bonuses collected in 1986 and prior years.

1998-2000: In 1987 Louisiana received an initial settlement payment of \$572 million from the escrow funds. A series of annual settlement payments have been disbursed to the states over a 15-year period along with an annual disbursement of 27 percent of royalty, rental, and bonus revenues received within each affected state's 8(g) zone. The annual settlement payments are: From 1987 through 1991, Louisiana received an annual settlement payment of \$2.52 million per year. From 1992 through 1996, the state received an annual settlement payment of \$5.88 million per year. Beginning in 1997 until the last payment in 2001, Louisiana will receive an annual settlement payment of approximately \$8.40 million per year.

2002 and After: No further settlement payments; states receive only a recurring annual disbursement of 27 percent of royalty, rental, and bonus revenues received within each affected state's 8(g) zone. Louisiana will receive an annual disbursement of 27 percent of royalty, rental, and bonus revenues received within Louisiana's affected 8(g) zone.

TABLE 31**LOUISIANA STATE TOTAL MINERAL REVENUE
(Dollars)**

YEAR	FEDERAL OCS (8g)	FEDERAL ONSHORE	STATE BOUNDARIES	TOTAL
1980	0	355,000	1,072,513,958	1,072,868,958
1981	0	612,000	1,653,883,820	1,654,495,820
1982	0	617,000	1,498,482,501	1,499,099,501
1983	0	637,000	1,328,700,057	1,329,337,057
1984	0	905,000	1,329,965,030	1,330,870,030
1985	0	795,000	1,164,969,360	1,165,764,360
1986	68,699,504	555,000	832,406,385	901,660,889
1987	588,862,212	517,000	746,675,897	1,336,055,109
1988	16,909,646	545,000	660,959,699	678,414,345
1989	12,749,220	452,000	678,301,987	691,503,207
1990	14,759,941	542,000	779,963,703	795,265,644
1991	13,505,179	328,000	751,117,246	764,950,425
1992	13,734,055	376,000	680,527,788	694,637,843
1993	14,454,304	782,000	639,175,728	654,412,032
1994	20,591,546	532,000	560,371,998	581,495,544
1995	15,037,933	728,000	589,581,584	605,347,517
1996	23,122,240	943,209	702,289,659	726,355,108
1997	26,631,194	817,329	711,432,048	738,880,571
1998	20,179,017	996,000	529,346,674	550,521,691

See footnote in Appendix B.

Federal OCS: See table 30.

Federal Onshore: Revenue distributed to the state under section 35 of the Mineral Leasing Act (MLA). MLA provides to the state 50% of mineral revenue from federal lands located within the state boundaries. Revenues came from royalties, rents and bonuses.

State Boundaries: Revenue from mineral production such as bonuses, override royalties, rents, royalties and severance taxes within state lands.

Table 32**FEDERAL REVENUE FROM LOUISIANA OCS OIL AND GAS LEASES
(Dollars)**

YEAR	BONUS¹² PAYMENTS	RENTAL¹² PAYMENTS	MINIMUM¹² ROYALTIES	PRODUCTION¹² ROYALTIES	TOTAL^a COLLECTION
1960	246,909,784	2,422,790	299,695	36,807,678	286,439,947
1961	0	1,984,441	291,790	46,733,742	49,009,973
1962	488,923,341	7,707,267	497,202	65,253,373	562,381,183
1963	0	7,059,246	632,376	75,347,238	83,038,860
1964	60,340,626	7,040,422	823,439	112,999,967	181,204,454
1965	0	5,909,553	1,021,505	126,121,728	133,052,786
1966	238,958,065	4,736,294	1,327,830	131,253,307	376,275,496
1967	510,079,178	5,500,516	1,888,758	149,096,032	666,564,484
1968	149,868,789	5,275,979	2,140,858	190,907,982	348,193,608
1969	110,945,535	5,584,162	1,922,340	226,504,238	344,956,275
1970	945,064,773	6,243,362	1,692,274	262,709,833	1,215,710,242
1971	96,304,523	5,687,848	1,564,845	324,815,819	428,373,035
1972	2,251,347,556	6,396,291	1,725,573	342,476,302	2,601,945,722
1973	193,031,709	5,272,797	2,005,785	380,509,177	580,819,468
1974	3,528,744,084	8,350,760	1,739,159	535,836,029	4,074,670,032
1975	325,424,688	8,947,571	1,837,253	593,359,397	929,568,909
1976	482,592,035	12,974,770	1,879,704	682,922,971	1,180,369,480
1977	813,991,004	7,740,185	1,248,616	899,016,863	1,721,996,668
1978	1,015,873,944	8,616,027	1,502,963	1,086,517,424	2,112,510,358
1979	2,521,190,635	7,328,999	1,105,865	1,344,995,442	3,874,620,941
1980	2,676,927,673	7,361,904	1,277,987	1,866,737,837	4,552,305,401
1981	3,308,009,881	8,205,515	1,211,959	2,825,271,285	6,142,698,640
1982	1,110,172,751	7,288,316	1,349,850	3,166,294,042	4,285,104,959
1983	3,796,644,766	13,620,158	2,540,294	2,764,348,600	6,577,153,818
1984	1,154,495,009	16,323,567	2,010,462	3,195,995,282	4,368,824,320
1985	830,710,260	33,756,447	2,139,530	2,940,519,737	3,807,125,974
1986	113,731,609	34,110,029	3,199,547	2,006,205,199	2,157,246,384
1987	247,344,486	52,115,828	19,239,027	1,803,208,740	2,121,908,081
1988	388,730,457	35,752,757	8,727,373	1,571,981,500	2,005,192,087
1989	386,710,637	48,498,402	26,261,190	1,618,163,065	2,079,633,294
1990	421,375,632	55,568,777	16,028,740	2,068,487,831	2,561,460,980
1991	276,234,849	59,126,732	15,444,167	1,857,392,914	2,208,198,662
1992	53,716,797	49,087,621	33,533,897	1,848,599,157	1,984,937,472
1993	61,454,861	29,268,366	119,445,091	2,009,644,653	2,219,812,971
1994	256,271,643	30,003,884	141,190,812	1,888,953,102	2,316,419,441
1995	296,254,733	62,526,069	19,803,444	1,764,875,791	2,143,460,037
1996	511,555,568 ^b	53,231,380	40,394,227	2,549,759,516	3,154,940,691
1997	810,843,418 ^b	55,761,920	65,651,370	2,857,126,443	3,789,383,151

^a Total collection, including state 8G shares.^b Gulf of Mexico-Central

See footnote in Appendix B.

Table 33

**LOUISIANA ESTIMATED CRUDE OIL PROVED RESERVES⁹
EXCLUDING LEASE CONDENSATE**

As of December 31st of Each Year
(Million Barrels)

YEAR	NORTH	SOUTH ONSHORE	SOUTH OFFSHORE	FEDERAL OCS	TOTAL STATE
1980	248	682	1,821	N/A	2,751
1981	317	642	2,026	N/A	2,985
1982	240	611	1,677	N/A	2,528
1983	223	569	1,915	N/A	2,707
1984	165	585	1,911	N/A	2,661
1985	196	565	122	1,759	2,642
1986	160	547	119	1,640	2,466
1987	175	505	127	1,514	2,321
1988	154	511	135	1,527	2,327
1989	123	479	143	1,691	2,436
1990	120	435	150	1,772	2,477
1991	127	408	144	1,775	2,454
1992	125	417	126	1,643	2,311
1993	108	382	149	1,880	2,519
1994	108	391	150	1,922	2,571
1995	108	387	142	2,269	2,906
1996	128	382	148	2,357	3,015
1997	136	427	151	2,587	3,301

NOTE: Federal OCS is included in the south offshore figure from 1980 through 1984.

N/A Not Available

See footnotes on Appendix B

Figure 14

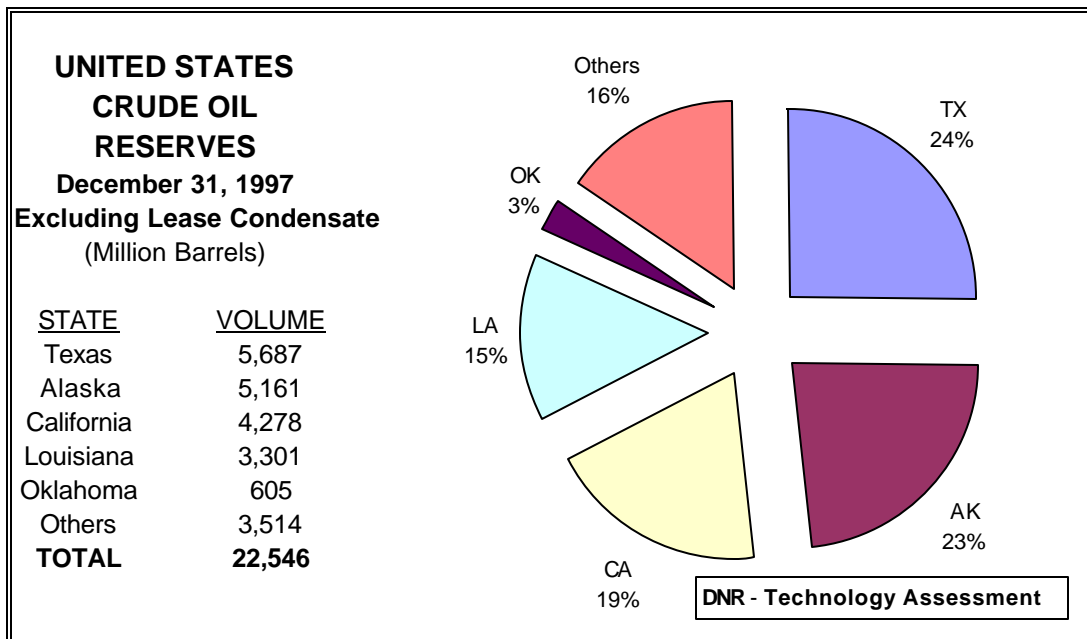


Table 34

LOUISIANA ESTIMATED LEASE CONDENSATE PROVED RESERVES⁹
As of December 31st of Each Year
(Million Barrels)

YEAR	NORTH	SOUTH ONSHORE	SOUTH OFFSHORE	FEDERAL OCS	TOTAL STATE
1980	36	267	296	N/A	599
1981	36	253	280	N/A	569
1982	26	243	310	N/A	579
1983	24	238	300	N/A	562
1984	19	229	269	N/A	517
1985	18	220	257	N/A	495
1986	18	208	11	230	467
1987	17	194	13	223	447
1988	17	193	13	223	446
1989	20	196	12	278	506
1990	20	182	12	258	472
1991	21	175	9	253	458
1992	19	151	8	226	404
1993	19	133	9	235	396
1994	21	123	9	233	386
1995	24	136	11	305	476
1996	24	127	11	422	584
1997	23	125	10	422	580

NOTE: Federal OCS is included in the south offshore figure from 1980 through 1985.

N/A Not Available

See footnotes on Appendix B

Figure 15

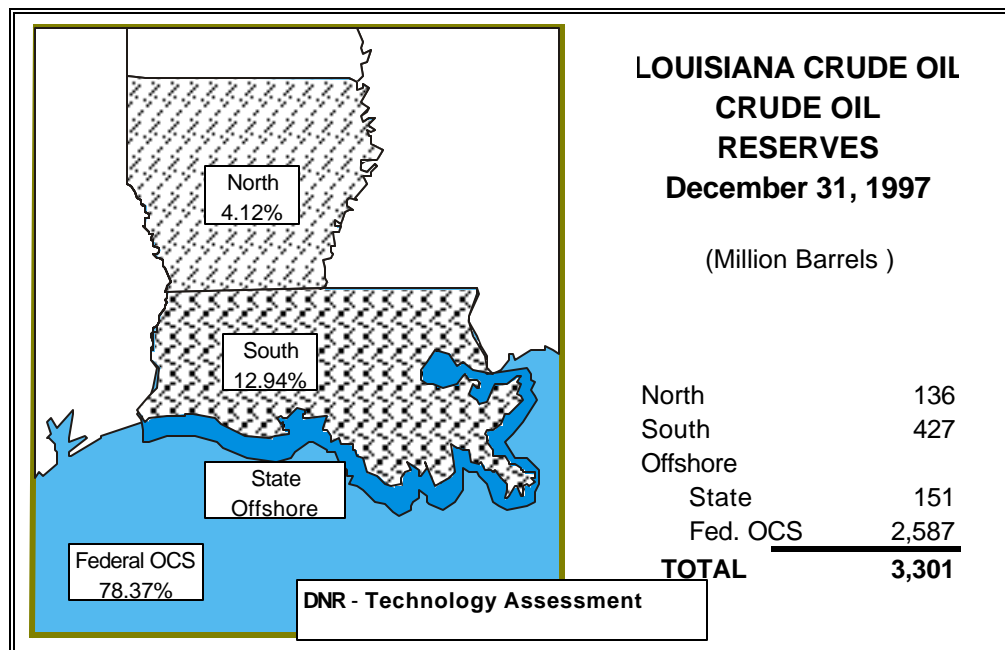


Table 35

LOUISIANA ESTIMATED DRY NATURAL GAS PROVED RESERVES⁹

As of December 31st of Each Year
(Billion Cubic Feet, at 14.73 psia and 60 degrees Fahrenheit)

YEAR	NORTH	SOUTH ONSHORE	SOUTH OFFSHORE	FEDERAL OCS	TOTAL STATE
1980	3,076	13,026	31,223	N/A	47,325
1981	3,270	12,645	31,462	N/A	47,377
1982	2,919	11,801	30,203 c	N/A	44,923
1983	2,939	11,142	28,480 c	N/A	42,561 c
1984	2,494	10,331	28,574 c	N/A	41,399 c
1985	2,587	9,808	1,643	26,113 c	40,151 c
1986	2,515	9,103	1,312	25,454 c	38,384 c
1987	2,306	8,693	1,431	23,260 c	35,690 c
1988	2,398	8,654	1,172	23,471 c	35,695 c
1989	2,652	8,645	1,219	24,187 c	36,703 c
1990	2,588	8,171	969	22,679 c	34,407 c
1991	2,384	7,504	1,024	21,611 c	32,523 c
1992	2,311	6,693	776	19,653 c	29,433 c
1993	2,325	5,932	917	19,383 c	28,557 c
1994	2,537	6,251	960	20,835 c	30,583 c
1995	2,788	5,648	838	21,392 c	30,666 c
1996	3,105	5,704	734	21,856 c	31,399 c
1997	3,093	5,855	725	21,934 c	31,607 c

NOTE: Federal OCS is included in the south offshore figure from 1980 through 1984.

N/A Not Available

See footnotes on Appendix B

^c Alabama State and Federal Offshore are included.

Figure 16

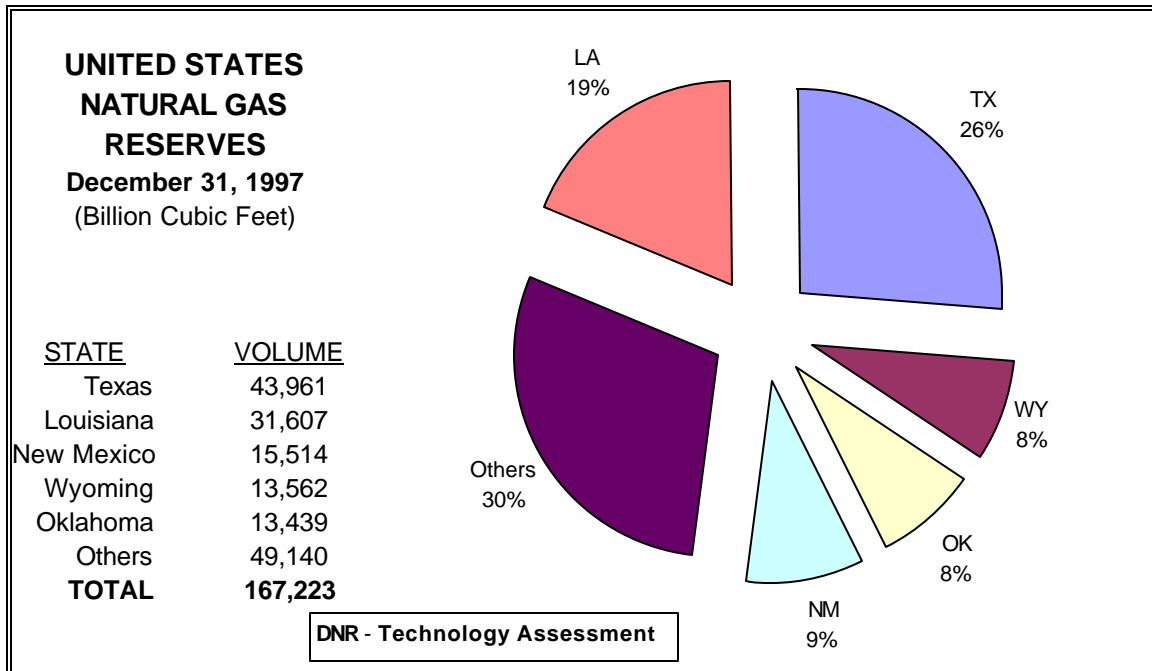


Table 36

**LOUISIANA ESTIMATED NATURAL GAS LIQUIDS PROVED RESERVES⁹
EXCLUDING LEASE CONDENSATE**

As of December 31st of Each Year
(Million Barrels)

YEAR	NORTH	SOUTH ONSHORE	SOUTH OFFSHORE	FEDERAL OCS	TOTAL STATE
1980	60	409	356	N/A	825
1981	59	287	431	N/A	777
1982	73	301	374	N/A	748
1983	61	263	409	N/A	733
1984	55	298	462	N/A	815
1985	39	234	420	N/A	693
1986	39	220	28	336	623
1987	33	235	33	309	610
1988	39	228	27	289	583
1989	40	215	39	297	591
1990	38	249	37	261	585
1991	38	242	41	292	613
1992	41	229	47	246	563
1993	38	201	21	255	515
1994	48	214	19	267	548
1995	55	359	16	191	621
1996	61	284	36	199	580
1997	57	208	14	363	642

NOTE: Federal OCS is included in the south offshore figure from 1979 through 1985.

N/A Not Available

See footnotes on Appendix B

Figure 17

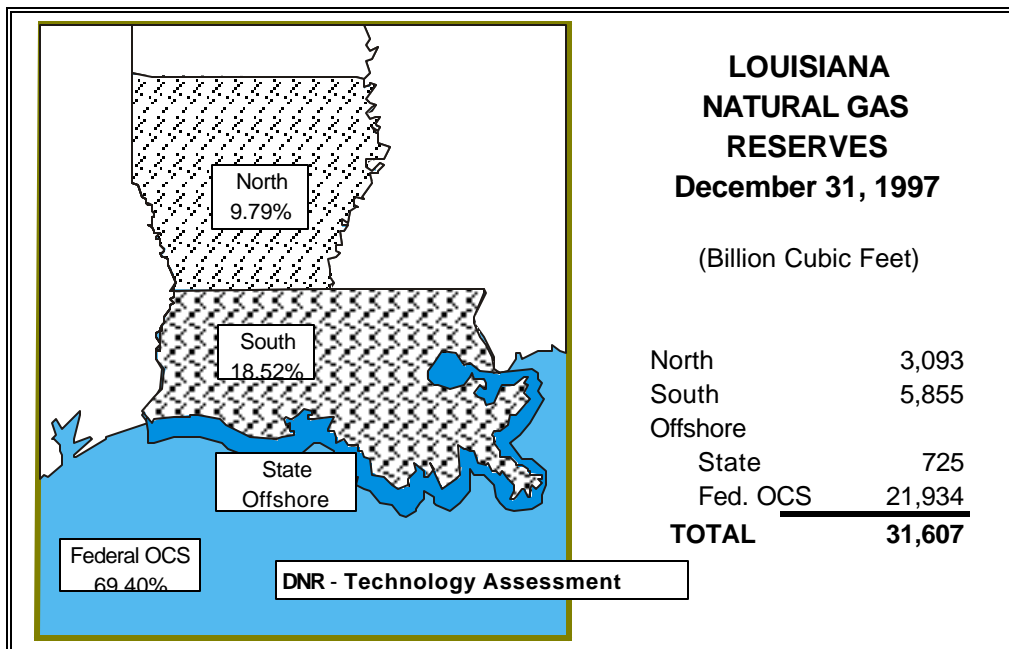


Table 37

LOUISIANA NONAGRICULTURAL EMPLOYMENT¹

DATE	OIL & GAS PRODUCTION	CHEMICAL INDUSTRY	OIL REFINING	OIL PIPLINE	TOTAL EMPLOYMENT
1980	85,778	33,490	13,287	1,200	1,599,600
1981	94,772	32,711	16,314	1,200	1,627,796
1982	92,225	33,984	13,111	1,033	1,571,017
1983	77,283	30,272	13,140	1,282	1,531,480
1984	78,032	29,104	13,053	1,247	1,568,064
1985	77,781	28,093	12,458	1,144	1,550,443
1986	58,888	25,998	12,233	1,168	1,475,318
1987	52,117	25,345	12,225	1,051	1,438,793
1988	54,565	26,957	11,258	1,039	1,468,508
1989	52,509	27,717	11,321	1,016	1,492,051
1990	54,063	29,083	11,535	1,041	1,546,820
1991	54,412	29,412	12,268	1,073	1,566,779
1992	45,869	30,349	12,543	1,095	1,583,423
1993	44,422	30,419	12,728	1,078	1,613,577
1994	44,885	30,014	13,037	1,014	1,671,087
1995	44,279	30,168	11,603	932	1,721,651
1996	46,885	30,096	11,262	789	1,757,619
January	47,970	29,559	11,197	802	1,749,814
February	48,734	29,539	11,210	802	1,755,194
March	48,928	29,646	11,144	794	1,772,440
April	50,295	29,926	11,060	788	1,787,108
May	51,380	30,116	11,047	793	1,802,123
June	51,911	30,117	11,093	798	1,811,193
July	52,613	30,073	11,033	806	1,780,851
August	53,242	30,079	10,959	800	1,787,234
September	53,166	30,053	10,973	788	1,819,214
October	53,583	29,969	10,902	786	1,824,762
November	53,313	30,382	10,957	781	1,831,548
December	53,618	30,073	10,981	785	1,842,116
1997	51,559 r	29,935 r	11,038 r	792 r	1,797,225 r
January	54,953	30,160	10,910	699	1,797,949
February	55,436	30,037	11,161	696	1,807,569
March	55,708	30,209	11,197	697	1,818,940
April	55,826	30,091	11,042	700	1,841,371
May	56,386	30,148	11,095	698	1,855,007
June	56,706	30,335	11,189	700	1,863,575
July	56,732	30,581	10,992	700	1,828,690
August	56,303	30,682	10,986	696	1,830,271
September	54,922	30,742	10,882	699	1,852,095
October	52,314	29,748	10,827	706	1,846,722
November	51,923	29,831	10,766	704	1,848,988
December	51,286	29,791	10,761	734	1,858,885
1998	54,875	30,196	10,984	702	1,837,505

^r Revised

Figure 18

LOUISIANA ENERGY CONSUMPTION BY SOURCE

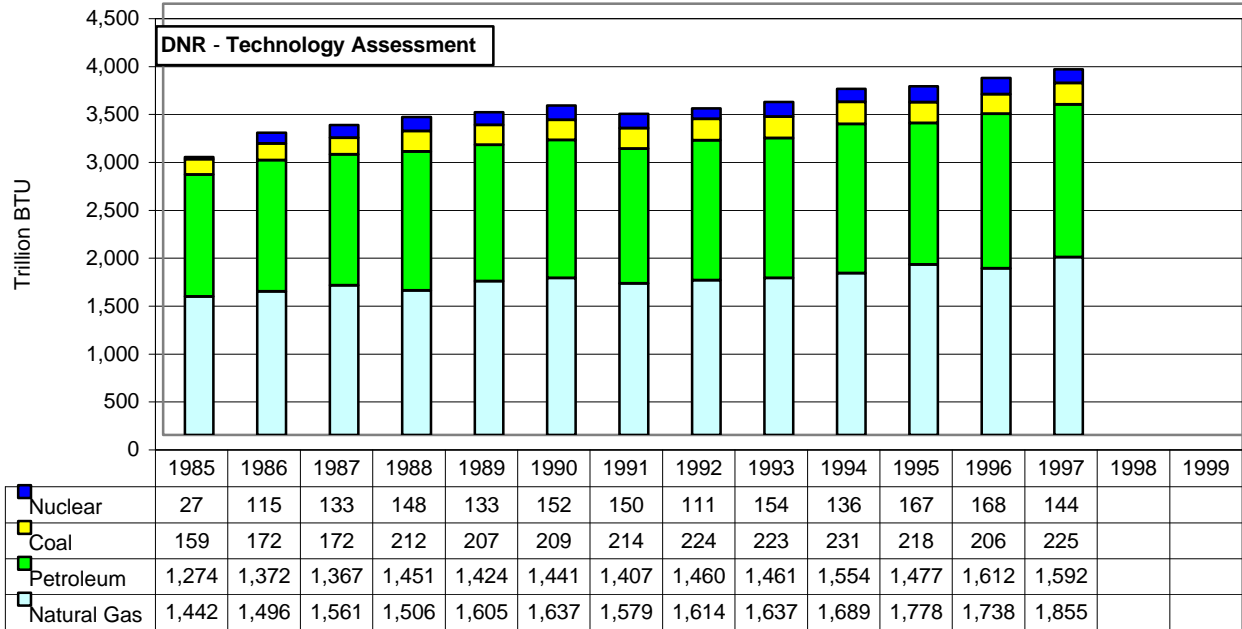


Figure 19

LOUISIANA REFINERY CRUDE OIL INPUT BY SOURCE

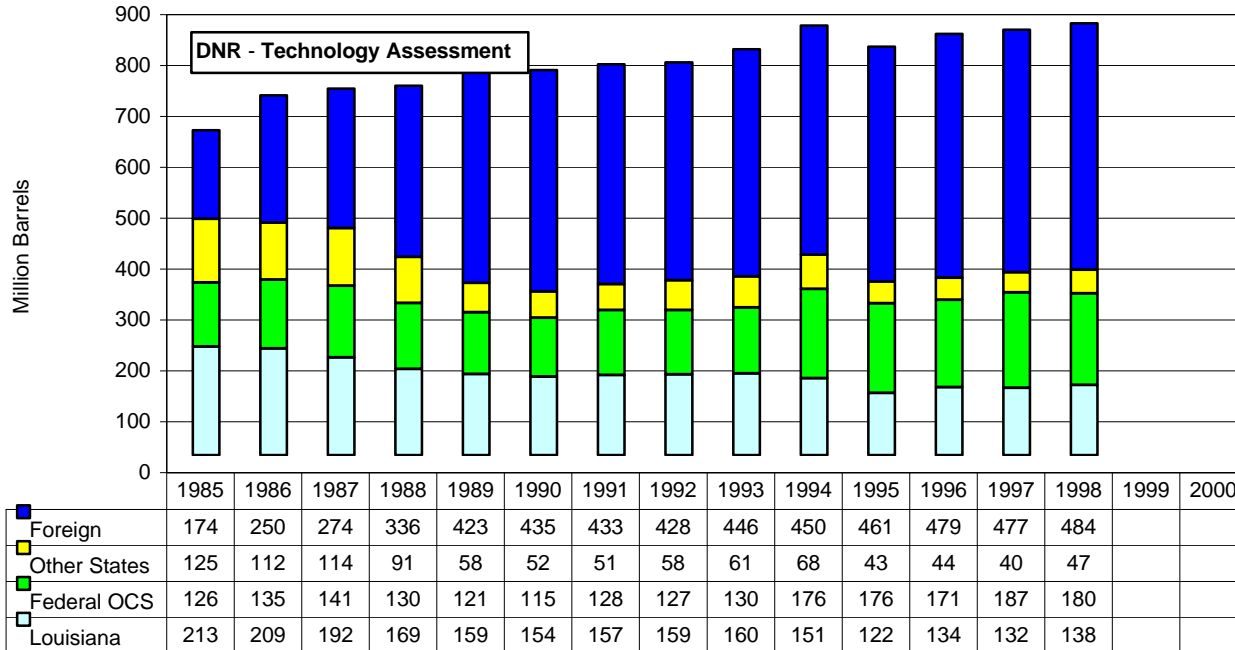


Table 38

LOUISIANA ENERGY CONSUMPTION ESTIMATES BY SOURCE¹¹

Year	Total Energy (TBTU)	Total Natural Gas (BCF)	Total Petroleum (MBBLS)	Total Coal (MST)	Total Nuclear (Million KWH)
1960	1,507.9 r	970	88,852	N/A	0
1961	1,570.7 r	1,029	89,889	N/A	0
1962	1,584.7 r	1,015	94,051	N/A	0
1963	1,689.5 r	1,091	99,427	N/A	0
1964	1,794.1 r	1,144	106,260	N/A	0
1965	1,766.8 r	1,110	109,325	N/A	0
1966	1,882.9 r	1,202	115,895	N/A	0
1967	2,124.1 r	1,394	123,074	N/A	0
1968	2,295.0 r	1,521	134,822	N/A	0
1969	2,572.3 r	1,763	148,052	N/A	0
1970	2,701.4 r	1,841	150,124	0	0
1971	2,809.3 r	1,884	163,298	0	0
1972	2,989.3 r	1,940	186,445	0	0
1973	3,225.9 r	2,010	212,662	0	0
1974	3,313.3 r	2,008	222,611	0	0
1975	3,028.8 r	1,789	214,065	0	0
1976	3,419.1 r	2,044	237,208	0	0
1977	3,794.6 r	2,191	270,987	79	0
1978	3,930.1 r	2,249	279,482	172	0
1979	3,823.5 r	1,978	307,896	118	0
1980	3,655.2 r	1,794	296,347	111	0
1981	3,678.3 r	1,782	295,551	1,363	0
1982	3,431.6 r	1,556	287,818	3,724	0
1983	3,278.0 r	1,413	276,220	6,154	0
1984	3,403.5 r	1,594	248,977	6,855	0
1985	3,184.5 r	1,386	248,339 r	9,217	2,457
1986	3,346.5 r	1,439	261,599 r	10,459	10,637
1987	3,341.0 r	1,501	258,487 r	10,391	12,324
1988	3,464.1 r	1,446	272,626 r	12,848	13,785
1989	3,573.7 r	1,538	267,202 r	12,471	12,391
1990	3,615.8 r	1,571	269,813 r	12,547	14,197
1991	3,549.6 r	1,508	264,880 r	12,965	13,956
1992	3,631.8 r	1,546	275,065 r	13,674	10,356
1993	3,682.0 r	1,578	275,830 r	13,676	14,398
1994	3,822.8 r	1,624	296,655 r	14,100	12,779
1995	3,823.5 r	1,718	283,321	13,357	15,686
1996	4,015.3 r	1,664	307,630	12,534	15,765
1997	4,093.0 r	1,659	303,986	13,874	13,511

^r Revised

TBTU = Trillion BTU

MBBLS = Thousand Barrels

See footnote in Appendix B.

BCF = Billion Cubic Feet

MST = Thousand Short Tons

KWH = Kilowatt-hours

TABLE 39

LOUISIANA REFINERIES STATISTICS

DATE	AVERAGE STOCK ON HAND (Barrels)	DAILY AVERAGE RUNS TO STILL (Barrels)	LICENSED REFINERIES
1980	16,403,667	1,781,168	32
1981	14,207,520	1,727,400	31
1982	12,905,202	1,716,091	31
1983	13,317,761	1,649,283	27
1984	13,182,207	1,720,172	25
1985	13,425,129	1,735,402	24
1986	13,391,258	1,901,450	23
1987	13,967,381	1,947,187	22
1988	14,295,591	1,946,861	21
1989	14,158,306	2,051,304	23
1990	13,783,012	2,045,697	23
1991	14,197,185	2,071,276	23
1992	14,331,412	2,090,248	22
1993	13,763,497	1,883,531	25
1994	15,126,534	2,150,403	19
1995	14,325,305	2,109,245	19
1996	14,462,108 r	2,252,573 r	19
January	15,105,779	1,963,000	20
February	14,860,922	2,244,776	20
March	13,405,563	2,381,808	20
April	14,578,842	2,389,720	20
May	15,320,972	2,365,867	20
June	15,324,716	2,399,137	20
July	14,711,431	1,943,821	20
August	14,591,207	2,143,025	20
September	12,688,709	2,134,846	20
October	13,156,239	2,414,272	20
November	14,237,890	2,309,952	20
December	13,320,384	2,397,077	20
1997	14,275,221	2,257,275	20
January	15,223,197	2,147,129	19
February	15,506,134	2,084,959	19
March	14,578,697	2,330,932	19
April	15,334,701	2,389,358	19
May	16,100,186	2,370,185	19
June	15,264,669	2,352,807	19
July	15,522,598	2,407,108	19
August	15,453,322	2,471,082	19
September	14,413,579	2,274,242	19
October	14,218,613	2,125,462	19
November	13,261,480	2,341,508	19
December	14,704,225	2,452,100	19
1998	14,965,117	2,312,239	19
r Revised			

Figure 20

**AVERAGE PRICE OF PURPA QUALIFIED FACILITY (QF)
ELECTRICITY SOLD TO LOUISIANA ELECTRIC UTILITIES**

Louisiana and Texas QFs
(Cents/KWH)

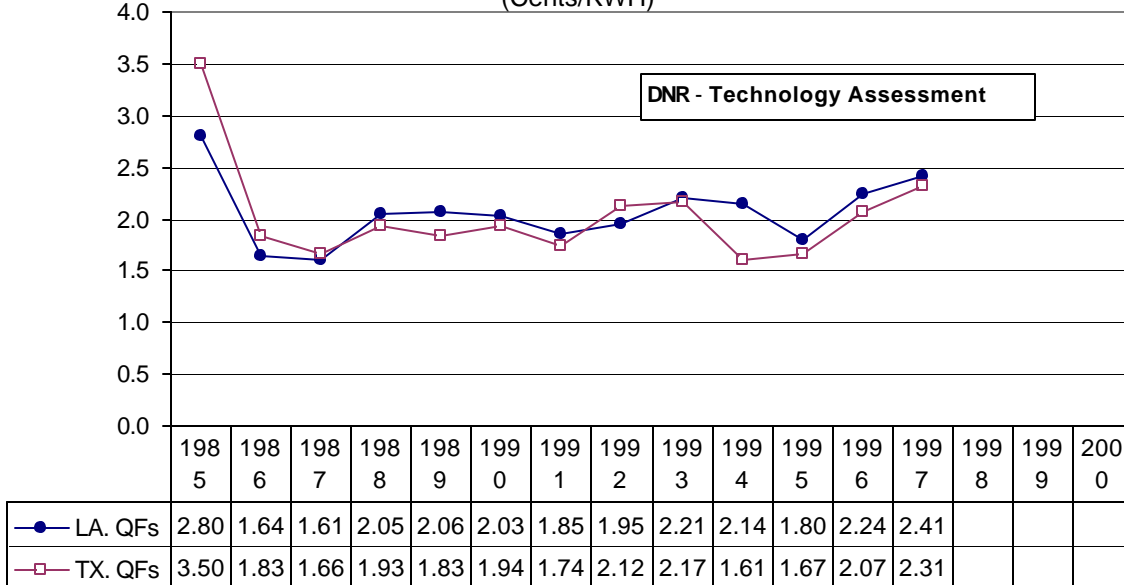


Figure 21

**LOUISIANA ELECTRIC UTILITIES NET ELECTRICITY PURCHASES
FROM PURPA QUALIFIED FACILITIES (QF) SUPPLIERS**

Louisiana and Texas QFs
(Million KWH)

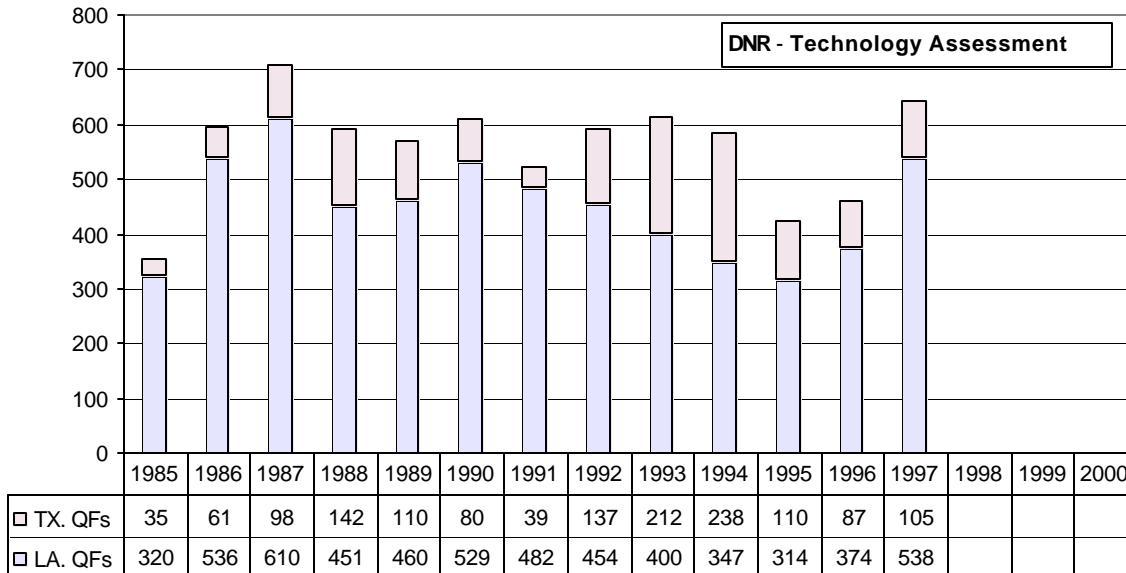


Table 40

**LOUISIANA ELECTRIC UTILITIES NET ELECTRICITY GENERATION¹⁴
1960-1998 BY FUEL TYPE
(Million KWH)**

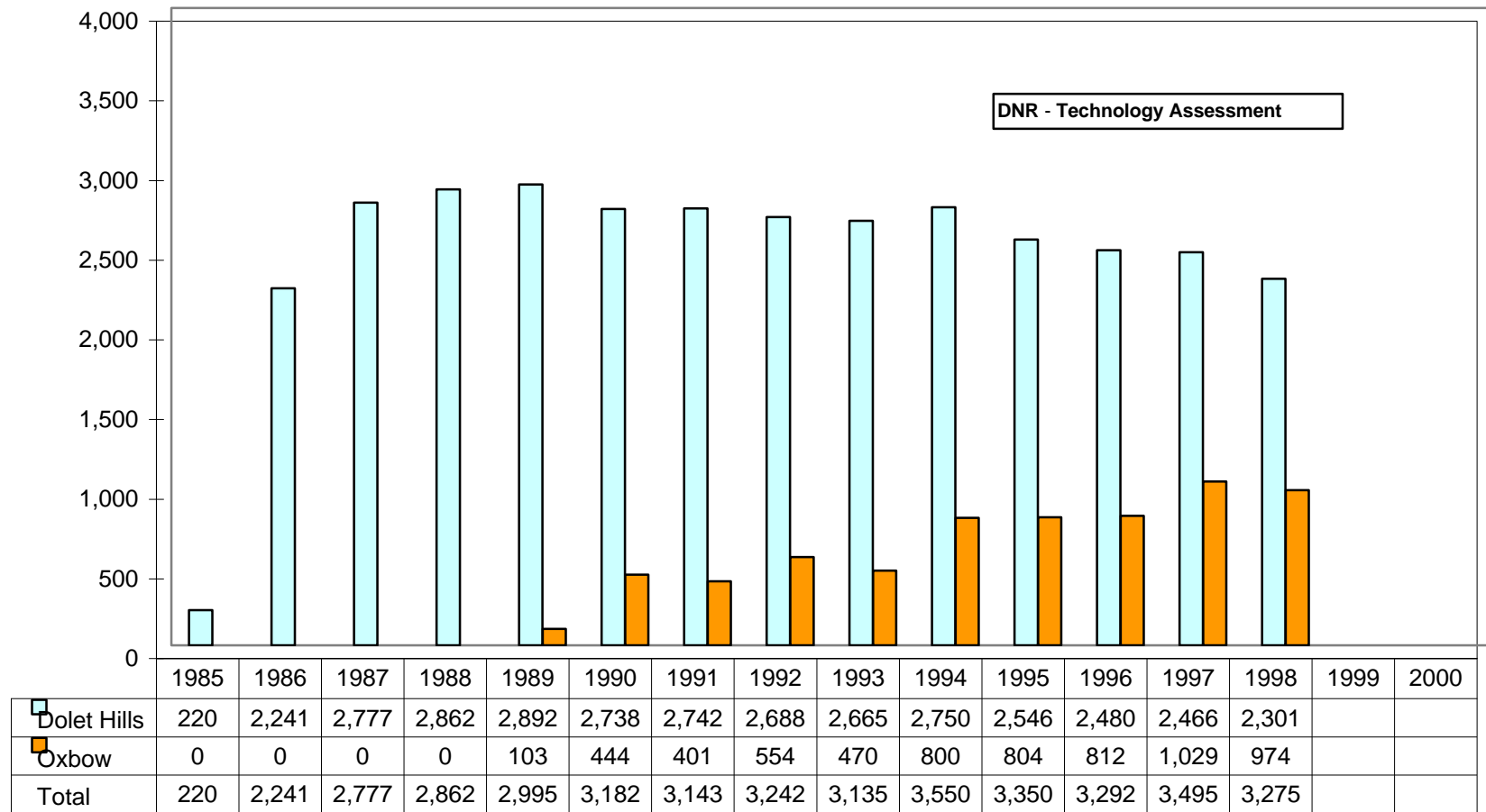
YEAR	COAL	LIGNITE	OIL	GAS	NUCLEAR	TOTAL
1960	0	0	28	11,837	0	11,865
1961	0	0	23	12,605	0	12,628
1962	0	0	34	13,541	0	13,575
1963	0	0	37	14,808	0	14,845
1964	0	0	54	16,007	0	16,061
1965	0	0	26	17,819	0	17,845
1966	0	0	24	21,643	0	21,667
1967	0	0	20	23,132	0	23,152
1968	0	0	32	26,123	0	26,155
1969	0	0	26	32,301	0	32,327
1970	0	0	79	33,623	0	33,702
1971	0	0	N/A	N/A	0	37,118
1972	0	0	N/A	N/A	0	39,348
1973	0	0	14,353	36,351	0	40,704
1974	0	0	5,034	34,472	0	39,506
1975	0	0	3,257	35,967	0	39,224
1976	0	0	7,773	37,343	0	45,116
1977	0	0	13,255	35,196	0	48,451
1978	0	0	14,568	36,935	0	51,503
1979	0	0	8,259	38,396	0	46,655
1980	0	0	4,787	40,952	0	45,739
1981	1,529	0	2,634	39,947	0	44,110
1982	4,998	0	940	35,594	0	41,532
1983	8,377	0	356	28,311	0	37,044
1984	9,830	0	140	29,360	0	39,330
1985	13,968	0	100	27,736	2,457	44,261
1986	12,642	2,884	419	26,202	10,637	52,784
1987	12,176	2,926	60	23,823	12,324	51,309
1988	14,372	4,059	272	24,286	13,785	56,774
1989	14,227	3,854	298	21,900	12,391	52,670
1990	13,890	3,910	130	26,061	14,197	58,188
1991	14,786	4,126	45	24,245	13,956	57,158
1992	15,613	4,183	483	24,554	10,356	55,189
1993	15,794	3,572	1,838	23,751	14,398	59,353
1994	15,761	4,364	680	26,586	12,779	60,170
1995	14,632	4,321	49	30,867	15,686	65,555
1996	14,630	4,002	273	23,972	15,765	58,642
1997	16,453	4,499	645	26,580	13,511	61,688
1998	16,131 e	4,630 e	600	28,299	16,427	66,088

^e Estimated

See footnotes on Appendix B

Figure 22

LOUISIANA LIGNITE PRODUCTION BY MINE SOURCE
(Thousand Tons Shipped)



APPENDICES

Abbreviations ¹	A-1
Data Sources	B-1
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Gas Production at 14.73 psia	D-1
Louisiana Energy Briefs and Topics	E-1



The Sol of New Orleans II
The University of New Orleans's solar powered car

Appendix A

Abbreviations

BCF	Billion Cubic Feet
BTU	British Thermal Unit
DNR	Louisiana Department of Natural Resources
DOE	United States Department of Energy
DOI	United States Department of the Interior
EIA	Energy Information Administration, DOE
FOB	Free on Board
KWH	Kilowatt-hours
MBBLS	Thousand Barrels
MCF	Thousand Cubic Feet
MMS	Minerals Management Service, DOI
MST	Thousand Short Tons
NGC	Natural Gas Clearinghouse
OCS	Outer Continental Shelf
OPEC	Organization of Petroleum Exporting Countries
RAC	Refinery Acquisition Costs
SLS	South Louisiana Sweet Crude Oil
SPR	Strategic Petroleum Reserve
TBTU	Trillion BTU
TCF	Trillion Cubic Feet

State Abbreviations Used in the Louisiana Energy Facts Annual

AL	Alabama	MS	Mississippi
AK	Alaska	ND	North Dakota
CA	California	NM	New Mexico
CO	Colorado	OK	Oklahoma
IL	Illinois	TX	Texas
KS	Kansas	UT	Utah
LA	Louisiana	WY	Wyoming
MI	Michigan		

Appendix B
Data Sources

Unless otherwise specified, data is from the Louisiana Department of Natural Resources.

1. EMPLOYMENT AND TOTAL WAGES PAID BY EMPLOYERS SUBJECT TO LOUISIANA EMPLOYMENT SECURITY LAW, Baton Rouge, LA: Louisiana Department of Labor, Office of Employment Security, Research and Statistics Unit.
2. MONTHLY ENERGY REVIEW and ANNUAL ENERGY REVIEW, Washington, D.C.: U.S. Department of Energy, Energy Information Administration.
3. NATURAL GAS MONTHLY and NATURAL GAS ANNUAL, Washington, D.C.: U.S. Department of Energy, Energy Information Administration.
4. Baker Hughes from OIL & GAS JOURNAL, Tulsa, OK: PennWell Publishing Co.
5. DYNEGY INC. (Formerly Natural Gas Clearinghouse.) SURVEY OF DOMESTIC SPOT MARKET PRICES, Houston, TX.
6. PETROLEUM MARKETING MONTHLY and PETROLEUM MARKETING ANNUAL, Washington, D.C.: U.S. Department of Energy, Energy Information Administration.
7. PETROLEUM SUPPLY MONTHLY and PETROLEUM SUPPLY ANNUAL, Washington, D.C.: U.S. Department of Energy, Energy Information Administration.
8. SEVERANCE TAX, Baton Rouge, LA: Louisiana Department of Revenue and Taxation, Severance Tax Section.
9. U.S. CRUDE OIL, NATURAL GAS and NATURAL GAS LIQUIDS RESERVES, Washington, D.C.: U.S. Department of Energy, Energy Information Administration.
10. THE WALL STREET JOURNAL, Gulf Coast Edition, Beaumont, TX: Dow Jones and Company.
11. STATE ENERGY DATA REPORT, Washington, D.C.: U.S. Department of Energy, Energy Information Administration.
12. FEDERAL OFFSHORE STATISTICS, Washington, D.C.: U.S. Department of the Interior, Minerals Management Service.
13. MINERAL REVENUE, Washington, D.C.: U.S. Department of the Interior, Minerals Management Service, Royalty Management Program.
14. ELECTRIC POWER MONTHLY, Washington, D.C.: U.S. Department of Energy, Energy Information Administration.

Appendix C

Glossary

Bonus. A cash payment by the lessee for the execution of a lease. A lease is a contract that gives a lessee the right: (a) to search for minerals, (b) to develop the surface for extraction, and (c) to produce minerals within the area covered by the contract.

Casinghead Gas. All natural gas released from oil during the production of oil from underground reservoirs.

City-Gate. A point or measuring station at which a gas distribution company receives gas from a pipeline company or transmission system.

Commercial Consumption. Gas used by nonmanufacturing organizations such as hotels, restaurants, retail stores, laundries, and other service enterprises. This also includes gas used by local, state, and federal agencies engaged in nonmanufacturing activities.

Condensate. (See *Lease Condensate*).

Crude Oil. A mixture of hydrocarbons that existed in the liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities.

Crude Oil Prices.

Domestic Wellhead. The average price at which all domestic crude oil is first purchased.

Imports FOB. The price actually charged at the producing country's port of loading. It is the responsibility of the buyer to arrange for transportation and insurance.

Imports Landed. The dollar per barrel price of crude oil at the port of discharge. It includes crude oil landed in the U.S. and U.S. company-owned refineries in the Caribbean, but excludes crude oil from countries that export only small amounts to the United States. The landed price does not include charges incurred at the port of discharge.

Imports OPEC FOB. The average price actually charged by OPEC at their country's port of loading. This price does not include transportation or insurance.

OCS Gulf. The average price at which all offshore, Outer Continental Shelf, Central Gulf region crude oil is first purchased as reported by the U.S. Department of Energy, Energy Information Administration.

Refinery Acquisition Costs (RAC). The average price paid by refiners in the U.S. for crude oil booked into their refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners.

a) **Domestic.** The average price of crude oil produced in the United States or from the Outer Continental Shelf of the U.S.

b) **Imports.** The average price of any crude oil not reported as domestic.

Refinery Posted. The average price from a survey of selected refiners' postings for South Louisiana Sweet (SLS) crude, which are effective on the middle and the end of the month.

Severance Tax. The average wellhead price calculated from oil severance taxes paid to the Louisiana Department of Revenue and Taxation.

Spot Market. The spot market crude oil price is the average of daily South Louisiana Sweet (SLS) crude price futures traded in the month and usually includes transportation from the producing field to the St. James, Louisiana terminal.

State. The average price at which all Louisiana crude oil, excluding Louisiana OCS, is first purchased as reported in a survey by the U.S. Department of Energy, Energy Information Administration.

State Royalty. The average wellhead price from its royalty share of oil produced in state lands or water bottoms. The price is calculated by the ratio of received oil royalty gross revenue divided by royalty volume share reported to the Louisiana Department of Natural Resources.

Developmental Well. Wells drilled within the proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive.

Dry Gas. (See *Natural Gas, "Dry"*).

Dry Hole. An exploratory or developmental well found to be incapable of producing either oil or gas in sufficient quantities to justify completion as an oil or gas well.

Electric Utility Consumption. Gas used as fuel in electric utility plants.

Exploratory Well. A well drilled to find and produce oil or gas in an unproved area, to find a new reservoir in an old field, or to extend the limits of a known oil or gas reservoir.

Exports. Crude oil or natural gas delivered out of the Continental United States and Alaska to foreign countries.

Extraction Loss. The reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

Federal Offshore or Federal OCS. (See *Louisiana OCS*)

FOB Price (Free on board). The price actually charged at the producing country's port of loading. The reported price includes deductions for any rebates and discounts or additions of premiums where applicable and should be the actual price paid with no adjustment for credit terms.

Gate. (See *City-Gate*)

Gross Revenue. Amount of money received from a purchaser, including charges for field gathering, transportation from wellhead to purchaser receiving terminal, and state production severance tax.

Gross Withdrawals. (See *Natural Gas, Gross Withdrawals*)

Imports. Crude oil or natural gas received in the Continental United States, Alaska, and Hawaii from foreign countries.

Industrial Consumption. Natural gas used by manufacturing and mining establishments for heat, power, and chemical feedstock.

Lease Condensate. A mixture consisting primarily of pentane and heavier hydrocarbons that is recovered as a liquid from natural gas in lease or field separation facilities, exclusive of products recovered at natural gas processing plants or facilities.

Lease Separator. A facility installed at the surface for the purpose of: (a) separating gases from produced crude oil and water at the temperature and pressure conditions of the separator, and/or (b) separating gases from that portion of the produced natural gas stream which liquefies at the temperature and pressure conditions of the separator.

Louisiana OCS. Submerged lands under federal regulatory jurisdiction that comprise the Continental Margin or Outer Continental Shelf adjacent to Louisiana and seaward of the Louisiana Offshore region.

Louisiana Offshore. A 3-mile strip of submerged lands under state regulatory jurisdiction located between the State coast line and the OCS region.

Louisiana Onshore. Region defined by the State boundary and the coast line.

Major Pipeline Company. A company whose combined sales for resale, and gas transported interstate or stored for a fee, exceeded 50 million thousand cubic feet in the previous year.

Marketed Production. (See *Natural Gas, Marketed Production*)

Natural Gas. A mixture of hydrocarbon compounds and small quantities of various non-hydrocarbons existing in the gaseous phase or in solution with crude oil in natural underground reservoirs at reservoir conditions. The principal hydrocarbons usually contained in the mixture are methane, ethane, propane, butanes and pentanes. Typical non-hydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide and nitrogen. Under reservoir conditions, natural gas and the liquefiable portions occur either in a single gaseous phase in the reservoir or in solution with crude oil, and are not distinguishable at the time as separated substances.

Natural Gas, "Dry". The actual or calculated volume of natural gas which remains after: (a) the liquefiable hydrocarbon portion has been removed from the gas stream, and (b) any volumes of non-hydrocarbon gases have been removed where they occur in sufficient quantity to render the gas unmarketable.

Natural Gas, Gross Withdrawals. Full well-stream volume, including all natural gas plant liquids and all non-hydrocarbon gases, but excluding lease condensate.

Natural Gas Liquids. Lease condensate plus natural gas plant liquids.

Natural Gas, Marketed Production. Gross withdrawals less gas used for repressurizing, quantities vented and flared, and non-hydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing operations.

Natural Gas, OCS Gas. OCS gas volume is as reported. It is mostly "dry" gas and some is "wet" gas.

Natural Gas Plant Liquids. Those hydrocarbons remaining in a natural gas stream after field separation and later separated and recovered at a natural gas processing plant or cycling plant through the processes of absorption, adsorption, condensation, fractionation or other methods. Generally such liquids consist of propane and heavier hydrocarbons and are commonly referred to as condensate, natural gasoline, or liquefied petroleum gases. Where hydrocarbon components lighter than propane (e.g., ethane) are recovered as liquids, these components are included with natural gas liquids.

Natural Gas Prices.

Spot Market. The average price of natural gas paid at the regional spot market receipt points or zones as reported by Dynegy Inc. (Formerly Natural Gas Clearinghouse.) in Houston, Texas. The data is from Dynegy's survey of the domestic natural gas spot market receipt points. The Louisiana natural gas spot market is a subset of the U.S. spot market. It only includes spot market receipt points or zones located in Louisiana. These points or zones are:

Eunice, Louisiana - Market accessed by ANR
Onshore Lateral, La - Market accessed by Columbia Gulf
Anywhere On System - Market accessed by Faustina, Louisiana Intrastate Gas,
Bridgeline and Monterrey
South Louisiana - Market accessed by Southern Natural
Vinton Louisiana - Market accessed by Tennessee Gas Pipeline
Northern Louisiana - Market accessed by Texas Gas Transmission
Onshore Louisiana - Market accessed by United

OCS. The average wellhead price calculated from sales and volumes from Louisiana OCS natural gas as reported by the U.S. Department of Interior, Minerals Management Service.

State Royalty. The average wellhead price calculated from revenue received and volumes reported to the Louisiana Department of Natural Resources.

State Wells. The average price of gas sold at Louisiana wellhead. This price includes: (a) value of natural gas plant liquids subsequently removed from the gas, (b) gathering and compression charges, and (c) State production, severance, and/or similar charges.

Major Pipelines Purchases.

a) **Domestic Producers.** The average price of natural gas produced in the United States or from the Outer Continental Shelf of the U.S.

b) **Foreign Imports.** The average price of any natural gas not reported as domestic.

Wellhead. The wellhead sales price including: (a) value of natural gas plant liquids subsequently removed from the gas, (b) gathering and compression charges, and (c) State production, severance, and/or similar charges.

Natural Gas, Wet After Lease Separation. The volume of natural gas, if any, remaining after: (a) removal of lease condensate in lease and/or field separation facilities, and (b) exclusion of non-hydrocarbon gases where they occur in sufficient quantities to render the gas unmarketable. Also excludes gas returned to formation in pressure maintenance and secondary recovery projects and gas returned to earth from cycling and/or gasoline plants. Natural gas liquids may be recovered from volumes of natural gas, wet after lease separation, at natural gas processing plants.

Organization of Petroleum Exporting Countries (OPEC). Countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights. Current members are Algeria, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

Outer Continental Shelf (OCS). All submerged lands that comprise the Continental Margin adjacent to the U.S. and seaward of the state offshore lands. Production in the OCS is under federal regulatory jurisdiction and ownership.

Processing Plant. A facility designed to recover natural gas liquids from a stream of natural gas which may or may not have passed through lease separators and/or field separation facilities. Another function of natural gas processing plants is to control the quality of the processed natural gas stream.

Proved Reserves of Crude Oil. As of December 31 of the report year, the estimated quantities of all liquids defined as crude oil which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions. Volumes of crude oil in underground storage are not considered proved reserves.

Proved Reserves of Lease Condensate. The volumes of lease condensate as of December 31 of the report year expected to be recovered in future years in conjunction with the production of proved reserves of natural gas as of December 31 of the report year.

Proved Reserves of Natural Gas. The estimated quantities of natural gas as of December 31 of the report year which analysis of geologic and engineering data demonstrates with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions. Volumes of natural gas in underground storage are not considered proved reserves.

Proved Reserves of Natural Gas Liquids. The volumes of natural gas liquids (including lease condensate) as of December 31 of the report year, which analysis of geologic and engineering data demonstrates with reasonable certainty to be separable in the future from proved natural gas reserves, under existing economic and operating conditions.

Rental. Money paid by the lessee to maintain the lease after the first year if it is not producing. A lease is considered expired when rental is not paid on time on an unproductive lease.

Reservoir. A porous and permeable underground formation containing an individual and separate natural accumulation of producible hydrocarbons (oil and/or gas) which is confined by impermeable rock or water barriers and is characterized by a single natural pressure system. Reservoirs are considered proved if economic producibility is supported by actual production or conclusive formation tests (drill stem or wire line), or if economic producibility is supported by core analysis and/or electric or other log interpretations. The area of a gas or oil reservoir considered proved includes: (a) that portion delineated by drilling and defined by gas-oil and/or gas-water contacts, if any; and (b) the immediately adjoining portions not yet drilled, but which can be reasonably judged as economically productive on the basis of available geological and engineering data.

Residential Consumption. Gas used in private dwellings, including apartments, for heating, cooking, water heating, and other household uses.

Royalty (Including Royalty Override) Interest. Those interests which entitle their owner(s) to a share of the mineral production from a property or to a share of the proceeds therefrom. These interests do not contain the rights and obligations of operating the property and normally do not bear any of the costs of exploration, development, or operation of the property.

Royalty Override (Or Overriding Royalty). An interest in oil and gas produced at the surface free of any cost of production. It is royalty in addition to the usual landowner's royalty reserved to the lessor. The Layman's Guide to Oil & Gas by Brown & Miller defines overriding royalty as a percentage of all revenue earned by a well and carrying no cost obligation.

State Offshore. (See *Louisiana Offshore*).

Wet After Lease Separation. (See *Natural Gas, Wet After Lease Separation*).

Wildcat Well . (See *Developmental Well*).

Appendix D

Louisiana Gas Volume at 14.73 psia

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Appendix D-1

LOUISIANA STATE GAS PRODUCTION, WET AFTER LEASE SEPARATION Natural Gas and Casinghead Gas, Excluding OCS (Thousand Cubic Feet (MCF) at 14.73 psia and 60 degrees Fahrenheit)*

DATE	NORTH	SOUTH	OFFSHORE	TOTAL
1980	377,031,666	1,970,503,750	416,970,904	2,764,506,320
1981	428,405,769	1,799,516,063	382,343,206	2,610,265,038
1982	386,004,468	1,566,377,332	366,786,207	2,319,168,006
1983	372,027,021	1,348,297,497	327,867,480	2,048,191,997
1984	394,640,400	1,418,548,949	324,376,486	2,137,565,835
1985	363,537,227	1,295,763,687	259,172,205	1,918,473,120
1986	376,365,114	1,260,415,323	254,824,829	1,891,605,266
1987	368,201,116	1,190,281,030	235,533,381	1,794,015,527
1988	385,240,490	1,203,110,971	220,427,212	1,808,778,674
1989	389,753,869	1,162,596,403	208,995,087	1,761,345,359
1990	390,844,876	1,135,530,512	182,241,160	1,708,616,548
1991	391,695,665	1,144,790,650	153,601,393	1,690,087,709
1992	377,846,592	1,142,511,650	149,550,553	1,669,908,795
1993	361,037,978	1,127,223,468	157,011,151	1,645,272,597
1994	363,026,133	1,059,040,963	160,253,733	1,582,320,828
1995	373,920,706	1,037,002,802	168,979,854	1,579,903,362
1996	422,864,073	1,042,083,172	188,310,766	1,653,258,011
January	38,384,833	86,024,770	16,673,732	141,083,335
February	34,589,266	78,014,217	15,105,167	127,708,650
March	38,231,534	88,495,068	16,719,831	143,446,432
April	36,398,117	82,688,828	15,997,488	135,084,433
May	37,005,400	85,349,572	16,440,023	138,794,995
June	36,202,715	79,965,158	15,190,479	131,358,352
July	37,423,810	81,217,920	14,679,771	133,321,500
August	36,507,590	80,969,818	15,201,555	132,678,964
September	37,837,804	83,528,712	15,568,286	136,934,801
October	38,791,175	81,503,357	15,579,572	135,874,104
November	37,757,718	78,917,353	15,330,545	132,005,616
December	39,138,747 r	81,977,781 r	15,778,694 r	136,895,221 r
1997	448,268,707 r	988,652,554 r	188,265,143 r	1,625,186,404 r
January	39,691,609	80,260,295	15,631,965	135,583,868
February	35,650,878	75,377,799	14,153,688	125,182,365
March	38,790,771	81,717,963	15,802,152	136,310,887
April	37,557,375	80,852,105	16,062,719	134,472,200
May	38,041,979	81,181,125	18,380,823	137,603,927
June	36,352,282	80,168,507	17,070,858	133,591,647
July	35,725,832	82,275,753	16,686,850	134,688,434
August	35,666,237	82,812,666	15,396,165	133,875,068
September	34,303,758	77,607,073	10,588,146	122,498,977
October	34,858,655	76,835,935	11,603,113	123,297,702
November	34,749,563 e	78,992,041 e	14,053,395 e	127,794,998 e
December	34,429,019 e	78,756,748 e	13,449,902 e	126,635,669 e
1998	435,817,956 e	956,838,010 e	178,879,776 e	1,571,535,743 e

^e Estimated ^r Revised

* See Table 9 for corresponding volumes at 15.025 psia.

Appendix D-2

LOUISIANA STATE GAS PRODUCTION, WET AFTER LEASE SEPARATION

Natural Gas and Casinghead Gas

(Thousand Cubic Feet (MCF) at 14.73 psia and 60 degrees Fahrenheit)*

DATE	ONSHORE	OFFSHORE		TOTAL
		State	Federal OCS ¹²	
1980	2,347,535,416	416,970,904	4,013,707,434	6,778,213,754
1981	2,227,921,833	382,343,206	4,106,494,590	6,716,759,628
1982	1,952,381,800	366,786,207	3,803,740,050	6,122,908,056
1983	1,720,324,517	327,867,480	3,173,892,354	5,222,084,351
1984	1,813,189,350	324,376,486	3,578,740,570	5,716,306,405
1985	1,659,300,915	259,172,205	3,116,884,490	5,035,357,610
1986	1,636,780,437	254,824,829	2,927,832,264	4,819,437,530
1987	1,558,482,146	235,533,381	3,180,107,195	4,974,122,722
1988	1,588,351,461	220,427,212	3,096,881,628	4,905,660,302
1989	1,552,350,272	208,995,087	3,006,576,061	4,767,921,420
1990	1,526,375,388	182,241,160	3,706,324,044	5,414,940,592
1991	1,536,486,315	153,601,393	3,289,968,602	4,980,056,311
1992	1,520,358,242	149,550,553	3,338,101,447	5,008,010,242
1993	1,488,261,446	157,011,151	3,386,808,653	5,032,081,250
1994	1,422,067,095	160,253,733	3,492,406,762	5,074,727,590
1995	1,410,923,508	168,979,854	3,636,067,997	5,215,971,359
1996	1,464,947,245	188,310,766	3,898,234,094	5,551,492,105
January	124,409,603	16,673,732	316,551,623 r	457,634,958 r
February	112,603,483	15,105,167	321,660,684 r	449,369,334 r
March	126,726,601	16,719,831	336,066,079 r	479,512,511 r
April	119,086,946	15,997,488	330,350,412 r	465,434,845 r
May	122,354,972	16,440,023	341,353,314 r	480,148,309 r
June	116,167,873	15,190,479	316,217,622 r	447,575,973 r
July	118,641,729	14,679,771	334,950,427 r	468,271,927 r
August	117,477,408	15,201,555	352,324,909 r	485,003,873 r
September	121,366,516	15,568,286	307,193,253 r	444,128,054 r
October	120,294,531	15,579,572	309,027,967 r	444,902,071 r
November	116,675,071	15,330,545	309,822,121 r	441,827,737 r
December	121,116,527 r	15,778,694 r	338,366,638 r	475,261,860 r
1997	1,436,921,261 r	188,265,143 r	3,913,885,048 r	5,539,071,452 r
January	119,951,903	15,631,965	321,299,897 e	456,883,766 e
February	111,028,677	14,153,688	326,485,594 e	451,667,959 e
March	120,508,734	15,802,152	341,107,070 e	477,417,956 e
April	118,409,480	16,062,719	335,305,668 e	469,777,868 e
May	119,223,104	18,380,823	346,473,613 e	484,077,540 e
June	116,520,789	17,070,858	320,960,886 e	454,552,533 e
July	118,001,585	16,686,850	339,974,683 e	474,663,117 e
August	118,478,902	15,396,165	357,609,783 e	491,484,850 e
September	111,910,831	10,588,146	311,801,152 e	434,300,129 e
October	111,694,590	11,603,113	313,663,387 e	436,961,089 e
November	113,741,604 e	14,053,395 e	314,469,453 e	442,264,451 e
December	113,185,767 e	13,449,902 e	343,442,138 e	470,077,806 e
1998	1,392,655,966 e	178,879,776 e	3,972,593,324 e	5,544,129,066 e

^e Estimated ^r Revised

NOTE: The 1998 Federal OCS production is estimated from the marketed production

* See Table 10 for corresponding volumes at 15.025 psia.

Appendix D-3

LOUISIANA MARKETED AND DRY GAS PRODUCTION (Billion Cubic Feet (BCF) at 14.73 psia and 60 degrees Fahrenheit)*

DATE	MARKETED			EXTRACTION	
	State	OCS	Total ³	LOSS ³	DRY ³
1980	2,439	4,200	6,639	142	6,497
1981	2,264	4,517	6,780	142	6,638
1982	2,013	4,159	6,172	129	6,043
1983	1,757	3,575	5,332	124	5,208
1984	1,872	3,953	5,825	133	5,693
1985	1,689	3,325	5,014	118	4,896
1986	1,658	3,238	4,895	116	4,780
1987	1,575	3,548	5,123	125	4,998
1988	1,697	3,483	5,180	120	5,060
1989	1,652	3,426	5,078	121	4,957
1990	1,629	3,613	5,242	119	5,123
1991	1,575	3,459	5,034	129	4,905
1992	1,691	3,223	4,914	133	4,782
1993	1,631	3,360	4,991	130	4,861
1994	1,580	3,590	5,170	129	5,041
1995	1,501	3,608	5,108	146	4,962
1996	1,517	3,723 r	5,241 r	140 r	5,101 r
January	136	309 r	445 r		
February	131	275 r	406 r		
March	121	328 r	450 r		
April	125	313 r	438 r		
May	129	320 r	449 r		
June	119	315 r	433 r		
July	130	318 r	448 r		
August	122	326 r	449 r		
September	123	307 r	430 r		
October	130	288 r	419 r		
November	118	305 r	423 r		
December	124	316 r	440 r		
1997	1,510	3,720 r	5,230 r	150 r	5,080 r
January	123	343 e	466		
February	110	315 e	425		
March	100	371 e	471		
April	100	359 e	459		
May	136	334 e	470		
June	113	341 e	454		
July	124	345 e	469		
August	114	355 e	470		
September	123	327 e	450		
October	119	320 e	439		
November	91	352 e	443		
December	100	360 e	460		
1998	1,353	4,122 e	5,475	N/A	N/A

^e Estimated ^r Revised

See footnote in Appendix B.

* See Table 11 for corresponding volumes at 15.025 psia.

APPENDIX D-4

UNITED STATES OCS GAS PRODUCTION¹² Natural Gas and Casinghead Gas (Thousand Cubic Feet (MCF) at 14.73 psia and 60 degrees Fahrenheit)*

YEAR	LOUISIANA	TEXAS	CALIFORNIA	TOTAL
Prior	19,881,055	0	0	19,881,055
1954	56,325,083	0	0	56,325,083
1955	81,279,042	0	0	81,279,042
1956	82,892,538	0	0	82,892,538
1957	82,568,807	4,797	0	82,573,604
1958	127,692,848	0	0	127,692,848
1959	207,156,296	0	0	207,156,296
1960	273,034,451	0	0	273,034,451
1961	318,280,095	0	0	318,280,095
1962	451,952,659	0	0	451,952,659
1963	564,352,606	0	0	564,352,606
1964	621,731,438	0	0	621,731,438
1965	645,589,469	0	0	645,589,469
1966	965,387,849	42,059,386	0	1,007,447,235
1967	1,087,262,804	99,952,946	0	1,187,215,750
1968	1,413,467,606	109,910,787	799,685	1,524,178,078
1969	1,822,544,142	127,096,982	4,845,851	1,954,486,975
1970	2,273,147,040	133,300,404	12,229,147	2,418,676,591
1971	2,634,014,031	127,357,908	15,671,479	2,777,043,418
1972	2,881,364,733	147,156,459	10,033,581	3,038,554,773
1973	3,055,628,236	148,673,637	7,286,549	3,211,588,422
1974	3,349,170,864	159,979,401	5,573,642	3,514,723,907
1975	3,332,169,057	122,572,764	3,951,633	3,458,693,454
1976	3,499,865,900	92,582,425	3,475,201	3,595,923,526
1977	3,647,513,674	86,943,285	3,289,963	3,737,746,922
1978	4,149,731,136	231,857,450	3,472,292	4,385,060,878
1979	4,158,521,710	511,590,607	2,866,822	4,672,979,139
1980	4,013,707,434	624,642,526	3,107,023	4,641,456,983
1981	4,106,494,590	730,275,831	12,766,307	4,849,536,728
1982	3,803,740,050	858,020,298	17,750,924	4,679,511,272
1983	3,173,892,354	850,817,211	16,024,292	4,040,733,857
1984	3,578,740,570	931,293,582	27,806,899	4,537,841,051
1985	3,116,884,490	834,926,523	49,164,213	4,000,975,226
1986	2,927,832,264	978,370,552	42,689,021	3,948,891,837
1987	3,180,107,195	1,204,488,337	40,986,158	4,425,581,690
1988	3,096,881,628	1,178,422,561	34,570,638	4,309,874,827
1989	3,006,576,061	1,165,112,953	28,574,912	4,200,263,926
1990	3,706,324,044	1,348,075,361	38,531,764	5,092,931,169
1991	3,289,968,602	1,184,936,494	40,626,577	4,515,531,673
1992	3,338,101,447	1,239,389,547	40,873,660	4,685,644,725
1993	3,386,808,653	1,027,937,755	42,082,090	4,533,389,731
1994	3,492,406,762	1,014,204,135	41,679,064	4,657,017,829
1995	3,636,067,997	908,520,050	36,425,501	4,692,270,825
1996	3,898,234,094	972,873,759	37,822,941	5,024,420,807
1997	3,913,885,048	965,334,787	40,722,084	5,076,996,337

See footnote in Appendix B.

* See Table 12 for corresponding volumes at 15.025 psia.

Appendix D-5

UNITED STATES NATURAL GAS AND CASINGHEAD GAS PRODUCTION³

(Billion Cubic Feet (BCF) at 14.73 psia and 60 degrees Fahrenheit)*

DATE	GROSS	WET AFTER LEASE SEPARATION	MARKETED	DRY	GROSS IMPORTS
1980	21,870	20,305	20,180	19,403	985
1981	21,587	20,054	19,956	19,181	904
1982	20,272	18,675	18,582	17,820	933
1983	18,659	16,979	16,884	16,094	918
1984	20,267	18,412	18,304	17,466	843
1985	19,607	17,365	17,270	16,454	950
1986	19,131	16,956	16,859	16,059	750
1987	20,140	17,557	17,433	16,621	993
1988	20,999	18,061	17,918	17,103	1,294
1989	21,074	18,237	18,095	17,311	1,382
1990	21,523	18,744	18,594	17,810	1,532
1991	21,750	18,702	18,532	17,698	1,773
1992	22,132	18,879	18,712	17,840	2,138
1993	22,725	19,209	18,982	18,095	2,350
1994	23,581	19,938	19,710	18,821	2,624
1995	23,743	19,790	19,506	18,598	2,841
1996	24,052	20,024	19,751	18,793	2,937
January	2,089 r	1,734 r	1,709 r	1,626 r	278 r
February	1,905 r	1,571 r	1,549 r	1,474 r	241 r
March	2,103 r	1,743 r	1,720 r	1,636 r	257 r
April	1,993 r	1,661 r	1,639 r	1,559 r	238 r
May	2,041 r	1,724 r	1,702 r	1,619 r	242 r
June	1,952 r	1,630 r	1,612 r	1,534 r	232 r
July	2,020 r	1,697 r	1,674 r	1,593 r	236 r
August	2,022 r	1,692 r	1,671 r	1,590 r	245 r
September	1,988 r	1,653 r	1,632 r	1,533 r	239 r
October	2,057 r	1,698 r	1,678 r	1,597 r	252 r
November	1,999 r	1,645 r	1,626 r	1,547 r	272 r
December	2,044 r	1,677 r	1,655 r	1,575 r	263 r
1997	24,213 r	20,129 r	19,865 r	18,901 r	2,994 r
January	2,089	1,739	1,717	1,633	283
February	1,901	1,565	1,547	1,472	248
March	2,083	1,717	1,696	1,613	264
April	2,003	1,653	1,632	1,553	248
May	2,063	1,702	1,682	1,600	250
June	1,998	1,659	1,637	1,558	251
July	2,028	1,689	1,665	1,584	263
August	2,042	1,705	1,681	1,600	256
September	2,012	1,654	1,631	1,552	268
October	2,094	1,700	1,677	1,595	270
November	2,022	1,639	1,615	1,536	256
December	2,103	1,697	1,674	1,593	284
1998	24,438	20,119	19,854	18,889	3,141

^r Revised

See footnote in Appendix B.

* See Table 13 for corresponding volumes at 15.025 psia.

Appendix E

1997 Louisiana Energy Topics

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For a copy of reports listed in this appendix, please contact:

Louisiana Department of Natural Resources
Technology Assessment Division
P.O. Box 94396
Baton Rouge, LA 70804-9396
Phone (225) 342-4593
Fax (225) 342-2707

UPDATED NON-UTILITY GENERATION REPORT

In 1997, Louisiana electric utilities purchased over 643 million kilowatt hours (KWH) from non utility generators (NUGs). This power came from NUGs operated in both Louisiana and Texas and was the highest volume purchased since 1987. The quantity purchased was up over 39% from 1996, but the average price per KWH rose 9% for the same period.

The number of generators operated by Louisiana electric utilities remained unchanged at 109 units from 1995 through 1997, although nameplate capacity increased slightly from 17,019 megawatts (MW) to 17,185 MW. Annual generation varied from 65,555 million KWH in 1995 (44% of capacity) to 58,643 million KWH in 1996 (39% of capacity) to 61,120 million KWH in 1997 (41% of capacity).

Over this same period, non utility generators (which includes industrial cogenerators) sold a total of 429.5 million KWH in 1995, 461.7 million KWH in 1996, and 643.1 million KWH in 1997, exclusive of hydropower, to the Louisiana electric utilities. Total generation was 17,866 million KWH in 1995, 17,452 million KWH in 1996, and 21,713 million KWH in 1997. The overall average price paid to Louisiana NUGs was 1.80 cents/KWH in 1995, 2.24 cents/KWH in 1996, and 2.41 cents/KWH in 1997. The number of NUG generating units increased from 67 in 1995 and 1996 to 72 units in 1997; gas fired combustion turbines were the additional generators of choice.

The Murray Hydroelectric Plant sold approximately 94% of its generation to Entergy Louisiana, Inc. (ELI), with the remainder going to the Louisiana Energy and Power Authority (LEPA) for ultimate consumption, primarily by the Town of Vidalia. ELI purchased from the Murray plant 869.5 million KWH in 1995, 882 million KWH in 1996, and 944.1 million KWH in 1997.

In 1997, the six coal-fired generators operated by Louisiana electric utilities performed at an overall thermal efficiency of 32.0%, while the natural gas units operated at 31.1% overall. In 1995, these values were 30.8% and 31.5%, respectively. It is not clear, from data available, why gas units were not more efficient than coal-fired units in 1997.

Average utility sales price results for the most recent four years are shown in Table 1.

Table 1

Louisiana Electric Utility Average Sales Price per KWH (Cents per KWH)

Year	All Sectors	Residential	Commercial	Industrial	Other
1994	6.1	7.7	7.5	4.3	7.9
1995	5.7	7.2	6.7	4.0	6.9
1996	6.1	7.7	7.5	4.3	7.9
1997	6.1	7.6	7.1	4.4	6.7

On the next page, Figure 1 shows a comparison of capacity use levels for different prime mover types used by La. electric utilities; Figure 2 shows the average price paid by utilities for power purchased from qualified facilities (QFs).

Figure 1

Comparison of Capacity Use for Different Prime Mover Types for Louisiana Utilities

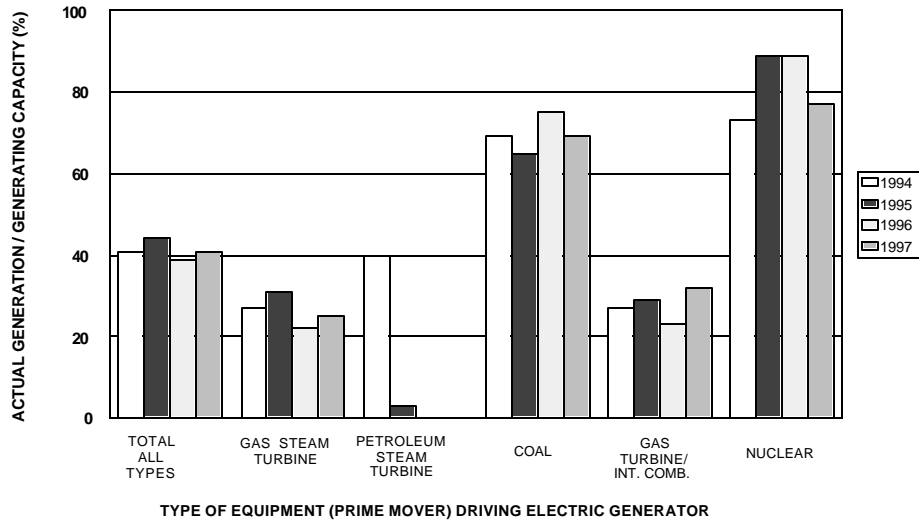
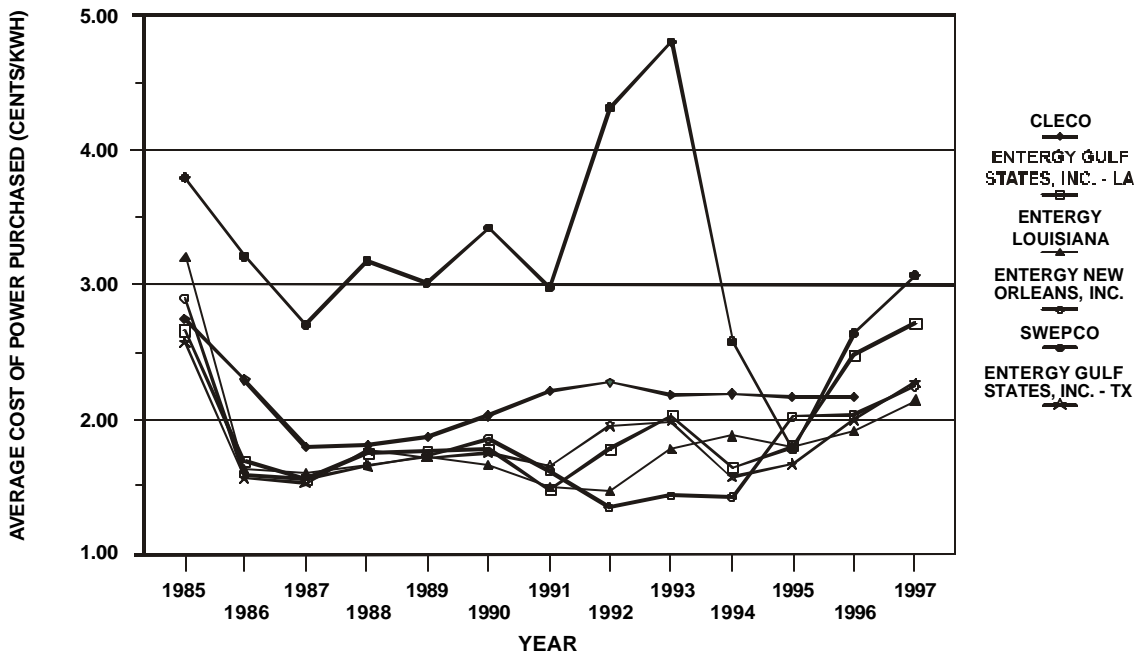


Figure 2

QF Electricity Purchases by Louisiana Electric Utilities
Utility Yearly Average Price Paid for Power Purchased



LOUISIANA AN ENERGY CONSUMING STATE AN UPDATE USING 1996 DATA

There have been some notable changes in energy consumption in Louisiana. Coupled with an overall increase of 5% in total energy use in Louisiana, there has been a decrease of 5% in coal use. This coal is used primarily in the production of electricity. More than offsetting the drop in coal use is increased importation of electricity and the use of petroleum-based fuels.

This increased total reflects the overall trend of energy use in the United States. As energy prices remain stable and to a degree relatively low, it is expected that energy use and energy use per capita will continue to rise. It is important to note that these 1996 statistics reflect a period when oil prices were considerably above where they are today.

The 9% increase in petroleum fuels reflects a 12% increase in residual and other categories. This would suggest, to a degree, low-priced residual and other "bottom of the barrel" fuels are making some inroads. This apparently is heavily used in the industrial sector of Louisiana's economy.

These statistics show a mix of fuels used in the generation of electricity. The state imports Wyoming Powder River Basin coal for the Big Cajun Two facility, and nuclear fuel for its Waterford & River Bend generating plants. These displace natural gas which traditionally had been used in power generation. Ultimately the direct importation of electricity, though a domestic power source, further increases Louisiana's dependence on outside energy.

Energy in the United States is the driving force of our industries. The same is true in Louisiana. Louisiana ranks fifth in total energy use when compared with the other fifty states in the union. This is a long way behind two of the most populous states California and Texas, who are the top two energy users. Louisiana also ranks second in per capita energy use this time behind Alaska, but in front of Wyoming and Texas.

Total energy use by Louisianians was 3994.9 trillion Btu's in 1996. Industry used 2617.3 trillion Btu's or 65.5 percent of this. Louisiana used 829.0 trillion Btu's in its transportation sector, of this 70.8 trillion Btu's were natural gas. The Energy Information Administration reports: "Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors ...". There also has been an addition to these natural gas uses in some motor vehicles. This is a minor component, but it has been growing slightly since the early 1990's.

Our perennial theme is that regardless of Louisiana's heritage as an energy producing state, we also are an industrial energy consuming state. Low energy prices affect our economy two ways; when outside markets are strong, low energy prices benefit manufacturing while at the same time hammering the core energy producers. There continues to be a delicate balance between these two major sectors in the Louisiana economy. As more overseas oil is imported, Louisiana will be importing its share for processing and redistribution throughout the nation. Louisiana, and the rest of the United States, use much more energy than we actually produce.

Louisiana Energy Production and Consumption - 1995

Energy Source	Production	Consumption	Net State Energy	
			Production by Source	
			Excluding OCS	Including OCS
Petroleum	State Oil*	781.1 TBTU ¹ (134.8 MMBBL)	-831.1 TBTU	1,193.7 TBTU
	LA. OCS Oil*	2,024.8 TBTU ³ (349.1 MMBBL)		
Natural Gas	State Gas**	1,677.5 TBTU ¹ (1.621 TCF)	-60.2 TBTU	3,895.3 TBTU
	LA. OCS Gas**	3,955.5 TBTU ³		
Coal	Lignite	48.1 TBTU ² (3.293 MMSTON)	-157.5 TBTU	-157.5 TBTU
Nuclear Electric Power		167.5 TBTU ² (15.765 Billion KWH)	167.5 TBTU ² (15.765 Billion KWH)	0.0 TBTU
Hydroelectric, Biofuels & Other		117.9 TBTU ²	117.9 TBTU ²	0.0 TBTU
Net Interstate Purchases of Electricity Including Associated Losses		154.3 TBTU ² (45.234 Billion KWH)	-154.3 TBTU	-154.3 TBTU
Net State Energy Production All Sources			-1,203.1 TBTU	4,777.2 TBTU

This balance indicates that in 1996, Louisiana was a net consumer of energy if OCS production were not credited to the state. Louisiana imported 1,203.1 TBTU more energy than it produced. In 1996, total energy production in Louisiana was 8,772.4 TBTU (2,792.1 TBTU if OCS is excluded), and consumption totaled 3,994.9 TBTU.

TCF = Trillion Cubic Feet
KWH = Kilowatt hour

OCS = Outer Continental Shelf
MMBL = Million Barrels

TBTU = Trillion BTU's
MMSTON = Million Short Tons

*Includes Condensate
**Includes Gas Plant Liquids

Data Sources

¹Louisiana Department of Natural Resources

²U.S. Department of Energy, Energy Information Administration, February 1999

³U.S. Department of the Interior

LOUISIANA ENERGY BRIEFS - SUMMER 1999

Insulation Education Demonstration Project

The Energy Section has an ongoing project that is running a comparison between standard batted fiberglass insulation and radiant barrier insulation. Three building shells of the same size, material and construction were assembled at The Greater Baton Rouge Zoo, the only difference in the three buildings is the insulating material. One of the three buildings is a control building and has no insulation installed. The interior temperature of all three buildings is thermostatically controlled and maintained at a constant 75 degrees Fahrenheit and the amount of energy required to maintain this interior temperature is recorded and summed to determine which of the two insulating materials is the most energy efficient. The demonstration is next to the elephant exhibit at the zoo and will remain in place through the end of 1999. The results of the comparison will be published in early 2000.

Photovoltaic Demonstration Project

The Energy Section has developed a project to demonstrate the application of photovoltaic power in an area where conventional electric power may not be possible or may be cost prohibited. In order to create a real world example, two solar panels were erected in the Louisiana Department of Wildlife and Fisheries Waddill Refugee's Outdoor Educational Pavilion. The Solar Panels are part of a complete stand-alone system that will totally power the pavilion's lights, fans, and skeet throwers which are housed in the same location. The pavilion will feature the most advanced technology currently available to automatically control the fans and lighting thus making the energy use characteristics of the building highly energy efficient. The undertaking is expected to be complete by the end of June 1999. The project, constructed primarily as an educational site, was a partnership effort between Departments of Natural Resources and Wildlife and Fisheries.

Trawl Door Research and Development in Louisiana

This program was designed to replace the hydrodynamically inefficient aluminum and wooden trawl doors on the shrimpers' nets with more efficient designs. Specifically the slotted polyvalent and cambered doors will be used to promote fuel conservation and reduce operating costs while having no more environmental degradation than the original design. This testing was the first of its kind in the southeastern region of the United States, and the results were even more successful than previously expected. During preliminary tests, it was found that boats used 50% less horsepower while maintaining the same level of drag pull. Such a cutback could result in a sizable decrease in shrimper overhead cost, and a significant reduction in fuel emissions.

AEE Awards Energy Project of the Year

Lafayette General Medical Center recently was the focus a U.S. DOE Institutional Conservation program administered by the Louisiana Department of Natural Resources. The program was recently lauded the Energy Project of the Year by the Association of Energy Engineers International. The Medical Center, located in Lafayette, LA, is a 463,000 square foot (SF), 332 bed, comprehensive regional medical facility built in 1965. The objectives, determined prior to this energy study, included the replacement of chillers in increments of 500 tons, and a comparison of high efficiency electric chillers versus gas adsorption chillers. Prior to DNR assistance in the energy conservation program, the hospital operated at 754,753 BTU/SF/Year, which resulted in an annual utility cost of \$1,120,000. After the study objectives were successfully met, the hospital was operating at an astounding 505,648 BTU/SF/Year. Cumulative savings over their benchmark year of 1983, with costs adjusted for utility rate changes, have exceeded \$5.6 million. The current annual utility cost is lower today than it was in 1983, in spite of adding 179,000 square feet. The total cost of this program was \$1,582,417, 50% of which was supplied by U.S. DOE's Institutional Conservation Program through the Department of Natural Resources, and was then matched by Lafayette General Medical Center.

JANUARY 1999 LOUISIANA CRUDE OIL REFINERY REPORT **by Sam Stuckey, P.E.**

For the twelve month fiscal year ending June 30, 1998 (FY98), the average Louisiana refinery operating rate increased to 93.9%. While there were some changes in the product mix of individual refineries, the overall mix remained about the same and the trend to less mid-grade gasoline production continued. Projects and process reconfigurations to improve efficiency or alter the product mix have resulted in a total crude capacity increase of almost 65,000 barrels per calendar day (bcd) since June 1997. Survey results are shown on the next page.

The total operating capacity of 2,625,606 barrels per calendar day (bcd) reported as of June 30, 1998, is up 3.2% from our FY97 survey. The overall operating rate improved to 93.9% from 91.4%. This compares with the national rate of 97.9% for calendar year 1997.

Of the eighteen refineries that operated during the fiscal year ending June 30, 1998, five produced reformulated gasoline (RFG) for sale in those markets where the U.S. Environmental Protection Agency (EPA) had mandated its use. RFG accounted for 10.8% of all gasoline production by Louisiana refineries, compared to 12.5% in FY97. Total gasoline production remained virtually the same as the previous twelve month period, up only 0.1%.

Louisiana refineries continued to obtain most of their crude supply from outside the state as oil production within the state continued to decline. Only about 16% came from Louisiana. Of the outside sources supplying crude to Louisiana refineries, foreign countries provided the most at 57%, the Offshore Continental Shelf (OCS) was next at 22%, and other states provided 5%. These percentages are essentially unchanged from FY97.

The monthly Gulf Coast Refinery Margin remained positive for FY98. The cash operating margin in calendar year 1998 reached a maximum of \$2.07 per barrel in May, and remained positive through September at \$0.84 per barrel.

Recent Changes

The Lisbon refinery previously operated by Padre Refining Company has remained idle since July 1997, but now has a new name: Lisbon Refinery J.V., LLC. It is for sale or lease.

Canal Refining Company's facility at Church Point was shut down in May 1997, but is expected to restart in June or July 1999.

TransAmerican Refining Company (Good Hope) has a new name effective in February 1999: Orion Refining Corp. The facility restarted its vacuum and crude units in June 1998 and began processing heavy, sour feedstocks at 110,000 bcd until the fluid catalytic cracking unit and alkylation unit come online. It is worth noting that the facility has been shut down since 1983, operating only intermittently from 1994 to June 1998.

Litigation involving the Texas NAPCO facility in St. James has been settled, with the refinery changing names to St. James Co., LLC. The owner states that eight storage tanks with 350,000 barrels capacity are available for lease; docking facilities and pipeline access are controlled by Koch Petroleum Group, LP, on adjacent property.

Other information in the **Louisiana Crude Oil Refinery Survey Report** includes key personnel, mailing addresses, and geographical location descriptions. Tabulated statistical data, charts, and graphs relating to oil production, refinery crude oil sources, refinery margins, capacities, operating rates, and product slates are also contained in the report.

SELECTED LOUISIANA ENERGY STATISTICS

Among the 50 states, Louisiana's rankings (in 1998 unless otherwise indicated) were:

PRIMARY ENERGY PRODUCTION

(Including Louisiana OCS)

2ND in total energy

2ND in natural gas

2ND in crude oil

REFINING AND PETROCHEMICALS

2ND in refining capacity

2ND in primary petrochemical production

PRIMARY ENERGY PRODUCTION

(Excluding Louisiana OCS)

4TH in natural gas

4TH in crude oil

4TH in total energy

ENERGY CONSUMPTION (1997)

2ND in industrial energy

2ND in per capita energy

3RD in natural gas

4TH in petroleum

5TH in total energy

23RD in residential energy

PRODUCTION

State controlled (i.e., excluding OCS) natural gas production peaked at 5.6 TCF per year in 1970, declined to 1.5 TCF in 1995, and rebounded 4.5% to 1.6 TCF in 1996. 1997 and 1998 production were around 1.6 TCF.

State controlled gas production in on a long term decline rate of 3.8% per year, though the current short term (1999-2003) forecast decline is around 3.6% per year.

State controlled crude oil and condensate production peaked at 566 million barrels per year in 1970, declined to 127 million barrels in 1994, recovered to 134 million barrels in 1996 and declined to 130 million barrels in 1998.

State controlled crude oil production in on a long term decline rate of 4.4% per year, though the current short term (1999-2003) forecast decline is around 4.5% per year. If oil stays around \$15.00 per barrel, the decline will remain as predicted. If the price goes above \$15.00 per barrel, the decline rate may be lower.

Louisiana OCS (federal) territory is the most extensively developed and matured OCS territory in the US.

Louisiana OCS territory has produced 89.0% of the 11.6 billion barrels of crude oil and condensate and 83.0% of the 126 TCF of natural gas extracted from all federal OCS territories from the beginning of time through the end of 1997.

Louisiana OCS gas production peaked at 4.16 TCF per year in 1979, declined to 3.0 TCF in 1989, and rose to 3.92 TCF in 1997.

Louisiana OCS crude oil and condensate production first peaked at 388 million barrels per year in 1972 and declined to 246 million barrels in 1989. In this decade the production has steadily risen from 264 million barrels in 1990 to 399 million barrels in 1997.

REVENUE

At the peak in Fiscal Year (FY) 1981/82, oil and gas revenues from severance, royalties and bonuses amounted to \$1.6 billion, or 41% of total state taxes, licenses and fees. For FY1998/99, these revenues are estimated to be in the vicinity of \$476 million or about 8% of total estimated taxes, licenses and fees.

At constant production, the State Treasury gains or loses about \$19.5 million of direct revenue from oil severance taxes and royalty payments for every \$1 per barrel change in oil prices. This figure rises to \$25 to \$40 million per dollar change when indirect revenue impacts are included (e.g., income tax, sales tax, etc.)

DRILLING ACTIVITY

Drilling permits issued on state controlled territory peaked at 7,631 permits in 1984 and declined to a low of 1,065 permits in 1995. During 1998, 1,286 drilling permits were issued.

The average active rotary rig count for Louisiana, excluding OCS, reached a high of 386 rigs in 1981 and reached a low of 64 rigs in 1993. There were 96 active rigs in 1996, 120 active rigs in 1997, and 92 active rigs in 1998.

In 1998, the average active rotary rig count for Louisiana OCS was the highest recorded. It was 92 active rigs, the previous average active rotary rigs high was 75 rigs recorded in 1979. The 1998 rigs average was 23.6% higher than the 1997 average of 74 active rotary rigs.

Note: Louisiana OCS or Outer Continental Shelf is federal offshore territory adjacent to Louisiana's coast beyond the three mile limit of the state's offshore boundary.

TCF= trillion cubic feet

LOUISIANA ENERGY BRIEFS - FALL 1999

Louisiana Project for Industrial and Academic Cooperation

Louisiana Project for Industrial and Academic Cooperation is designed to provide a mechanism to facilitate technology transfer from Louisiana's Academic Institutions and National Laboratories to Louisiana industries in order to assist Louisiana's industries to become more effective by decreasing costs, increasing energy efficiency, and reducing waste. Through this cooperative endeavor, statewide goals and technology maps will be developed for Louisiana's industry that will facilitate academia's and government's activities to meet Louisiana's industrial needs by directing university and government research activities to meet these needs. This partnership of Industry, Academia, and Government will identify industry's needs and exchange ideas, seek funding from outside sources for the industries, and provide research as needed. The five energy and waste intensive industries included in this project are agriculture, chemicals, forest products, oil and gas production, and petroleum refining. Louisiana Project for Industrial and Academic Cooperation is a Louisiana Department of Natural Resources sponsored project based upon the award of a competitive grant from U.S. Department of Energy, Office of Industrial Technology.

Engineering Students at UNO Place in Solar Competition

In June, students at the University of New Orleans competed in both national solar car and boat competitions. These projects were developed in an effort to provide engineering students the opportunity to design, test, and race a solar powered vehicle as part of a national investigation on the use of solar power as an alternative to internal combustion engines. The Sol of Mardi Gras, UNO's solar powered boat, recently participated in Solar Splash with much success. The team placed first in sprint, slalom, and solar array design, fourth in technical report and visual display, and sixth out of nineteen entries in overall points. Although successful in the race, the team ran into a significant road block when the endurance manufacturer failed to deliver an extra motor and motor controller, leaving the team with no backup motor. The Sol of New Orleans II, UNO's solar powered car, participated with 40 other universities in Sun Rayce '99, a solar race from Washington D.C. to Orlando, FL. The race which began June 20, occurred over 9 days and was over 1200 miles in length. Although they did not place, the team reached several milestones in car design over the previous year.

Home Energy Loan Program (HELP) Offers Cash At Closing

The new Home Energy Loan Program offers financial incentives in the form of low-interest loans or actual cash payments for Louisiana residents who build new homes to high levels of energy efficiency or homes at time of purchase or refinance. The HELP program will offer the homebuilders and home buyers two options: a reduced interest rate on a portion of the house loan or a one-time cash payment. Both the amount eligible for low-interest financing and the amount of the one-time cash payment are determined by a Home Energy Rating that must be performed on all houses participating in the program. The amount eligible is called the energy efficiency premium and will vary from house to house, based on their relative level of energy efficiency. Each new home built or improved under the program will save the home owner over \$600 annually in energy costs and at the same time reduce carbon dioxide emissions by 7,300 lbs/ year. There is tremendous potential in this program

considering there are 1.4 million homes in Louisiana. The Energy Section has provided training and education throughout the state to builders interested in the program. Widespread enthusiasm for the program has been evident by the exuberant number of individuals trained since the initiation of the program. During June alone, 524 builders attended these programs with 485 receiving continuing education credits. As evidenced through the ardent support experienced, this program has proven to be extremely successful and well needed.

Rebuild Louisiana

Rebuild Louisiana is part of a multi-state U.S. Department of Energy effort called Rebuild America. All across the nation, hundreds of Rebuild partners are working together to assist each other in a time tested way of improving business operations. In Louisiana, partners are encouraged to improve energy efficiency, reduce waste by participating in an audit of their facility which will help identify and prioritize the areas of greatest savings potential.

This Fall, the State Energy Office will launch the new "Student Building Efficiency Program" by providing funding for four universities to offer energy audits to the public. Patterned after the Department of Energy funded Rebuild America program, and authored by Lawrence Berkeley National Laboratories, this innovative course will provide students with the tools necessary to conduct onsite energy audits. Utilizing FEDS 4.0 software, a comprehensive analysis, along with suggestions for energy savings, provides valuable information for decision makers. These services and others will be provided to communities statewide free of charge with the most immediate impact expected to be felt by the municipalities, K-12 schools, and our colleges and universities.