LOUISIANA ENERGY FACTS

ANNUAL 2010

Department of Natural Resources Scott A. Angelle Secretary of Natural Resources



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General Questions and Comments

The Louisiana Energy Facts Annual - 2010 (Annual) was published by the Technology Assessment Division of the Louisiana Department of Natural Resources under the direction of Manuel Lam. The division director is Christopher Knotts, William J. Delmar, Jr., is assistant director.

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Louisiana Energy Facts Annual 2010

INTRODUCTION

ABOUT THIS PUBLICATION

The Louisiana Energy Facts Annual (Annual) is published to provide a comprehensive compendium of Louisiana related energy production and use statistics on a yearly basis. The data tables are supplemented with numerous graphs and charts to aid in the interpretation of the data and the discernment of trends. The Annual is published as soon as sufficient data for the previous calendar year is available. Due to time lags in the availability of some of the data, there is approximately a nine month lag before the current Annual can be published. Some changes have been introduced in order to incorporate the latest available data.

If you receive our monthly **Louisiana Energy Facts** newsletter, you may find that some of the previously published data has been revised in the **Annual**. This data, by its nature, continues to be revised, sometimes years after its initial publication. We try to bring attention to these changes by marking them as revisions.

The most recent **Louisiana Energy Facts** monthly newsletter may contain even more updates. Please refer to the recent monthlies for the very latest data. The **Louisiana Energy Facts** monthly newsletter is available in print and online at our website:

http://www.dnr.louisiana.gov/tad

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Note: the data in these tables will be updated throughout the year. The data files are not audited and will change as more reliable data becomes available.

The state oil and gas production data has been modified. Starting with the 2002 Annual, current production data and all future reports will reflect changes due to modifications in the reporting system by the DNR Office of Conservation, Production Audit Section. The new data for oil does not include crude oil, condensate, or raw make recovered from gas plants. In the past, these products were added to the state production as crude oil or condensate. A separate report on gas plant liquids production is not available at present. The gas data system was adjusted to reflect production from the well on the date produced. It was previously reported on the date first purchased.

Also the producing oil and gas well data since 2000 reflect changes due to modifications in the reporting system by the Department of Natural Resources Office of Conservation. The new data for oil and natural gas producing wells count them as productive if they had any production in the month, previous system counted only the producing wells at the end of the month.

This new reporting system aims to produce more accurate and timely data. The Technology Assessment Division is not the source of the data, but merely reports data provided to us by the responsible agency. We understand that users of our time series data need consistency and, for that reason, our time series have been adjusted backward to reflect these new modifications.

We hope you find this document useful, and we appreciate your feedback. Please fill, detach and return the survey form at the back of this report.

Additional comments or suggestions about this publication can be directed to the Technology Assessment Division staff members listed on the General Questions and Comments page.

2010 HIGHLIGHTS

The data in the 2010 **Louisiana Energy Facts Annual** contains some recent trends.

Crude Oil and Natural Gas Prices

Gas spot price average was \$4.07 per MCF in 2009, and it was \$4.55 per MCF in 2010; which is 11.8% higher than in 2009. The Louisiana natural gas spot market average in January 2010 was \$6.12 per MCF, bottom out in October at \$3.55 per MCF, and recovered to \$4.74 per MCF on December. The 2011 average price for gas is expected to be around \$4 per MCF.

Light Louisiana Sweet (LLS) average spot crude oil price was 82.72 per barrel in 2010 and it was \$64.28 per barrel in 2009, a 28.7% increase. The LLS crude oil spot market average in January 2010 was \$80.16 per barrel, bottom out in February at \$77.43 per barrel, and rose to \$94.31 per barrel in December. The 2011 LLS average spot price is expected to be around \$83 per barrel.

Oil and Gas Production

Louisiana state crude oil and condensate production, excluding the federal Outer Continental Shelf (OCS), was 67 million barrels in 2010, a 2.9% decrease from 2009. Louisiana state natural gas and casinghead, excluding OCS production was 2.0 TCF in 2010, a 33.3% increase over 2009. The decline in oil was caused by low drilling and depletion; the increase in gas was driven by new production in the Haynesville area.

Drilling

Louisiana rig count, including the OCS area, increased 28% from an average of 150 rigs operating in 2009 to 192 in 2010. On state areas the South showed drilling activity increased 29% and the North Louisiana shows an increase of 51% over 2009, while the OCS declined 28% due to the offshore moratorium. The North LA drilling rigs increased due to high activities in the Haynesville shale areas; and the South LA increase was caused by rising oil prices and the new interest in oil production.

Other significant items

Louisiana state areas proved oil reserves were lower in 2009 than in 2008. The state areas were lower even though the OCS proved oil reserves increased. Louisiana state areas proved gas reserves were higher in 2009 than in 2008, while the OCS proved gas reserves declined. The high gas reserves were the result of strong drilling activities in the Haynesville shale areas.

Louisiana refineries' 2010 daily crude oil average runs to stills were 2.62 million barrels per day, 9.1% higher than the 2009 average reflecting the increase in refinery capacity.

Average employment in the oil and gas extraction industries was 46,956 in 2009, a 7% decrease from 2008.

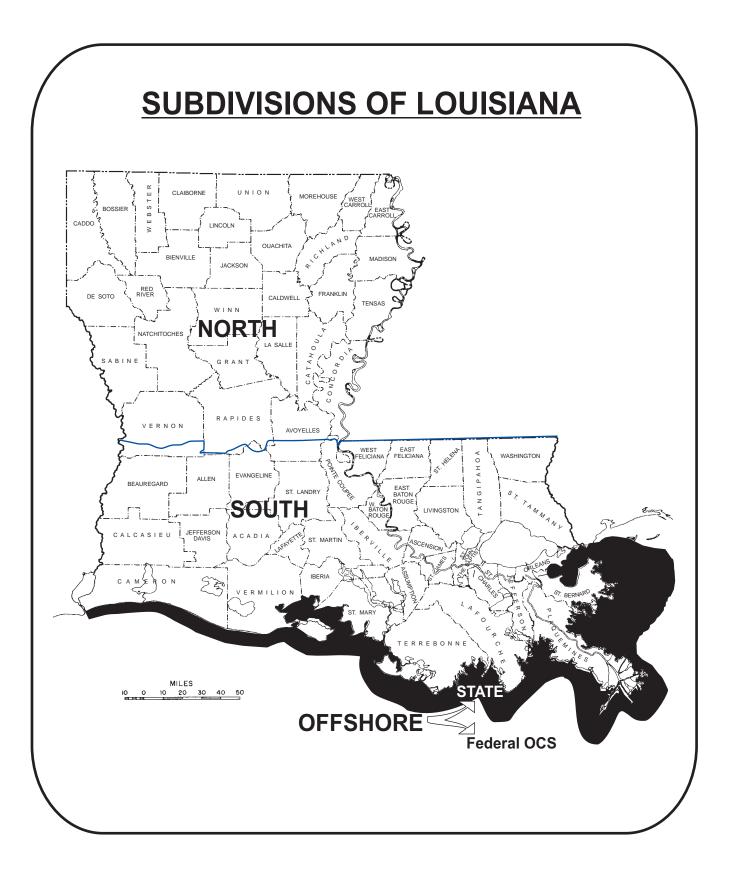


Table 1

LOUISIANA STATE CRUDE OIL PRODUCTION

Excluding OCS (Barrels)

DATE	NORTH	SOUTH	OFFSHORE	TOTAL
1989	22,249,645	78,352,396	20,890,198	121,492,239
1990	22,681,173	72,770,216	21,356,618	116,808,007
1991	22,693,470	69,567,532	22,498,111	114,759,114
1992	21,914,801	68,285,536	21,820,087	112,020,424
1993	20,088,542	65,698,407	21,593,063	107,380,012
1994	17,236,407	59,754,375	21,163,672	98,154,453
1995	16,643,923	59,472,528	20,140,864	96,257,315
1996	16,900,516	58,970,676	19,117,088	94,988,280
1997	17,099,931	60,458,696	17,213,800	94,772,427
1998	15,607,719	60,784,952	15,120,246	91,512,918
1999	12,904,010	56,035,888	12,098,536	81,038,434
2000	11,740,980	53,090,500	11,131,564	75,963,044
2001	10,894,643	51,355,403	9,330,512	71,580,558
2002	9,783,288	43,558,030	7,664,577	61,005,894
2003	9,249,374	42,407,022	8,491,699	60,148,095
2004	8,755,584	41,804,382	7,032,177	57,592,143
2005	8,628,554	37,316,842	5,606,166	51,551,562
2006	8,405,302	36,905,015	4,655,982	49,966,299
2007	8,228,068	39,307,081	5,473,474	53,008,624
2008	8,245,198 r	36,616,971 r	3,988,829 r	48,850,998 r
January	673,953 r	2,995,399 r	270,584 r	3,939,936 r
February	624,848 r	2,739,837 r	249,378 r	3,614,063 r
March	687,424 r	3,027,314 r	281,710 r	3,996,448 r
April	664,348 r	2,967,613 r	343,518 r	3,975,479 r
May	660,631 r	3,059,003 r	341,078 r	4,060,712 r
June	634,914 r	2,975,055 r	317,314 r	3,927,283 r
July	652,111 r	2,975,601 r	320,525 r	3,948,237 r
August	663,933 r	3,041,050 r	338,898 r	4,043,881 r
September	646,957 r	3,083,567 r	350,792 r	4,081,316 r
October	644,709 r	3,140,500 r	389,659 r	4,174,868 r
November	633,534 r	2,859,110 r	291,285 r	3,783,929 r
December	643,282 r	2,971,867 r	328,787 r	3,943,936 r
2009 Total	7,830,644 r	35,835,916 r	3,823,528 r	47,490,088 r
I a a common	047.040	0.047.004	007.000	0.704.000
January	617,612	2,817,064	297,233	3,731,909
February	567,939	2,672,064	294,311	3,534,314
March	659,516	3,129,845	339,877	4,129,238
April	672,176	2,975,152	340,011	3,987,339
May	689,334	3,142,696	386,385	4,218,415
June	661,208	3,052,918	413,394	4,127,520
July	693,725	3,119,110	435,984	4,248,819
August	637,673	3,095,073	399,101	4,131,847
September	660,696	2,880,892	378,720	3,920,307
October	666,057 p	2,887,451 p	381,868 p	3,935,376 p
November	629,859 p	2,879,359 p	385,898 p	3,895,117 p
December	662,899 p	2,995,164 p	398,068 p	4,056,131 p
2010 Total	7,818,693 p	35,646,789 p	4,450,850 p	47,916,331 p

e Estimated r Revised p Preliminary

Table 2

LOUISIANA STATE CONDENSATE PRODUCTION

Excluding OCS (Barrels)

DATE	NORTH	SOUTH	OFFSHORE	TOTAL
1989	2,979,706	26,767,411	1,856,899	31,604,016
1990	3,341,804	26,878,867	1,686,289	31,906,959
1991	4,009,441	26,227,271	1,685,555	31,922,267
1992	3,787,973	25,395,894	1,601,573	30,785,440
1993	3,647,665	25,236,291	1,629,298	30,513,254
1994	3,726,903	23,751,352	1,497,320	28,975,575
1995	3,927,927	22,866,531	2,177,611	28,972,069
1996	5,162,593	26,495,266	2,313,383	33,971,242
1997	4,397,384	24,247,395	2,737,982	31,382,760
1998	3,962,756	24,405,878	2,400,173	30,768,807
1999	3,555,355	24,032,940	2,233,271	29,821,566
2000	3,670,053	25,212,928	2,339,594	31,222,575
2001	3,352,988	28,003,761	1,933,594	33,290,343
2002	2,926,737	27,980,334	1,761,536	32,668,607
2003	2,789,398	25,616,633	1,850,882	30,256,912
2004	2,926,460	21,468,353	1,684,363	26,079,176
2005	3,270,729	19,685,719	1,171,950	24,128,398
2006	3,682,224	18,262,702	2,063,292	24,008,218
2007	4,193,850	18,062,445	2,117,929	24,374,224
2008	4,878,509 r	16,668,316 r	2,243,840 r	23,790,665 r
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January	443,381 r	1,327,489 r	166,302 r	1,937,172 r
February	398,372 r	1,223,439 r	151,498 r	1,773,309 r
March	418,298 r	1,378,343 r	163,648 r	1,960,289 r
April	377,561 r	1,346,246 r	166,555 r	1,890,362 r
May	370,397 r	1,340,161 r	189,707 r	1,900,265 r
June	331,036 r	1,292,684 r	183,610 r	1,807,330 r
July	324,720 r	1,302,856 r	195,172 r	1,822,748 r
August	329,499 r	1,262,300 r	191,421 r	1,783,220 r
September	321,490 r	1,203,796 r	159,571 r	1,684,857 r
October	315,239 r	1,238,475 r	196,498 r	1,750,212 r
November	305,691 r	1,156,671 r	195,231 r	1,657,593 r
December	330,411 r	1,226,038 r	207,311 r	1,763,760 r
2009 Total	4,266,095 r	15,298,498 r	2,166,524 r	21,731,117 r
January	321,595	1,180,148	189,619	1,691,362
February	293,152	1,111,811	168,958	1,573,921
March	311,122	1,195,993	126,571	1,633,686
April	279,924	1,134,381	145,818	1,560,123
May	269,462	1,142,505	189,638	1,601,605
June	256,686	1,104,665	164,299	1,525,650
July	249,554	1,136,817	157,189	1,543,560
August	248,520	1,110,150	173,234	1,531,904
September	342,057	1,150,651	145,412	1,638,119
October	364,336 p	1,199,204 p	153,340 p	1,716,879 p
November	346,707 p	1,136,127 p	159,325 p	1,642,159 p
December	340,475 p	1,151,045 p	166,241 p	1,657,761 p
2010 Total	3,623,589 p	13,753,497 p	1,939,644 p	19,316,730 p
2010 10tai	0,020,000 p	10,100, 1 01 p	1,555,0TT P	13,510,130 β

e Estimated r Revised p Preliminary

Table 3

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

DATE	NORTH	SOUTH	OFFSHORE	TOTAL
1989	25,229,350	105,119,808	22,747,097	153,096,255
1990	26,022,976	99,649,083	23,042,907	148,714,966
1991	27,366,301	101,809,303	17,498,281	146,673,885
1992	25,927,357	100,590,634	16,202,453	142,720,444
1993	24,176,815	97,956,877	15,596,342	137,730,034
1994	21,324,702	90,907,553	14,892,953	127,125,208
1995	20,595,093	87,613,455	17,016,027	125,224,575
1996	22,078,179	89,743,267	17,010,027	128,959,111
1997	21,829,276 r	88,295,426 r	16,030,812 r	126,959,111 126,155,514 r
1998	20,304,949 r	87,523,706 r	14,312,144 r	122,140,799 r
1999	20,304,949 r 16,711,501 r	81,260,610 r	12,850,588 r	110,822,699 r
2000	15,307,562 r	80,304,828 r	12,630,366 r 11,549,975 r	107,162,365 r
2001	14,274,475 r	79,328,486 r	11,264,058 r	104,867,019 r
2002	12,726,261 r	71,523,765 r	9,440,089 r	93,690,115 r
2002	12,720,201 r 12,049,211 r	67,975,624 r	10,349,488 r	90,374,323 r
2004	11,696,648 r	63,270,406 r	8,725,050 r	83,692,104 r
2005	11,909,370 r	56,993,657 r	6,782,960 r	75,685,987 r
2006	12,101,998 r	55,150,979 r	6,717,312 r	73,970,289 r
2007	12,101,998 r 12,428,707 r	57,380,373 r	7,591,511 r	77,400,591 r
2007	13,106,830 r	53,229,244 r	6,282,009 r	72,618,083 r
2000	13,100,0301	33,229,244	0,202,0091	72,010,0031
January	1,117,334 r	4,322,888 r	436,886 r	5,877,108 r
February	1,023,220 r	3,963,276 r	400,876 r	5,387,372 r
March	1,105,722 r	4,405,657 r	445,358 r	5,956,737 r
April	1,041,909 r	4,313,859 r	510,073 r	5,865,841 r
May	1,031,028 r	4,399,164 r	530,785 r	5,960,977 r
June	965,950 r	4,267,739 r	500,924 r	5,734,613 r
July	976,831 r	4,278,457 r	515,697 r	5,770,985 r
August	993,432 r	4,303,350 r	530,319 r	5,827,101 r
September	968,447 r	4,287,363 r	510,363 r	5,766,173 r
October	959,948 r	4,378,975 r	586,157 r	5,925,080 r
November	939,225 r	4,015,781 r	486,516 r	5,441,522 r
December	973,693 r	4,197,905 r	536,098 r	5,707,696 r
2009 Total	12,096,739 r	51,134,414 r	5,990,052 r	69,221,205 r
January	939,207	3,997,212	486,852	5,423,271
February	861,091	3,783,875	463,269	5,108,235
March	970,638	4,325,838	466,448	5,762,924
April	952,100	4,109,533	485,829	5,547,462
May	958,796	4,285,201	576,023	5,820,020
June	917,894	4,157,583	577,693	5,653,170
July	943,279	4,255,927	593,173	5,792,379
August	886,193	4,205,223	572,335	5,663,751
September	1,002,753	4,031,542	524,131	5,558,426
October	1,030,392 p	4,086,655 p	535,208 p	5,652,256 p
November	976,566 p	4,015,486 p	545,223 p	5,537,276 p
December	1,003,373 p	4,146,210 p	564,309 p	5,713,892 p
2010 Total	11,442,283 p	49,400,285 p	6,390,494 p	67,233,062 p
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e Estimated r Revised p Preliminary

Figure 1

LOUISIANA STATE OIL PRODUCTION Actual and Forecasted Through Year 2030

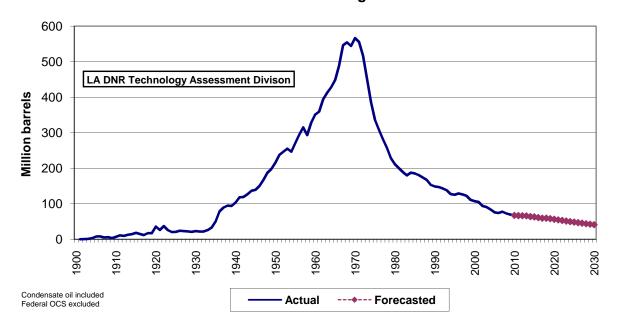


Figure 2

2009 UNITED STATES OIL PRODUCTION BY STATE

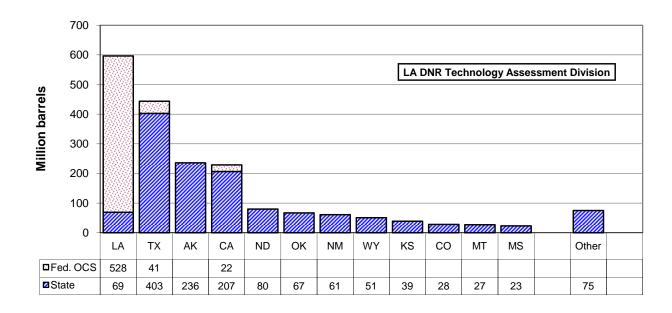


Table 4

LOUISIANA TOTAL CRUDE OIL and CONDENSATE PRODUCTION (Barrels)

	ONSHORE	OFFSH	IORE	TOTAL
DATE		State	Federal OCS	
1989	130,349,158	22,747,097	246,207,653	399,303,908
1990	125,672,059	23,042,907	264,670,535	413,385,501
1991	122,492,061	24,183,350	262,647,733	409,323,144
1992	119,379,190	23,421,386	288,918,208	431,718,784
1993	114,666,029	23,222,089	293,443,881	431,331,999
1994	104,464,211	22,660,730	293,077,191	420,202,132
1995	102,907,063	22,318,172	320,255,087	445,480,322
1996	107,529,051	21,430,471	349,101,048	478,060,570
1997	106,203,405	19,951,782	399,536,004	525,691,191
1998	104,761,306	17,520,419	425,865,901	548,147,626
1999	96,528,193	14,331,807	451,391,454	562,251,454
2000	93,714,460	13,471,159	477,645,662	584,831,281
2001	93,606,795	11,264,106	502,115,031	606,985,932
2002	84,248,389	9,426,112	508,630,349	602,304,850
2003	80,062,426	10,342,581	505,203,116	595,608,123
2004	74,954,779	8,716,540	477,182,586 e	560,853,905 e
2005	68,901,844	6,778,116	407,154,253 e	482,834,213 e
2006	67,255,244	6,719,273	419,555,392 e	493,529,909 e
2007	69,809,080 r	7,591,511 r	427,033,161 e	504,433,752 e r
2008	66,336,074 r	6,282,009 r	385,638,041 e	458,256,124 e r
2000	00,000,07	0,202,000	000,000,011	100,200,1210.
January	5,440,222 r	436,886 r	36,742,134 e	42,619,242 e r
February	4,986,496 r	400,876 r	34,142,987 e	39,530,359 e r
March	5,511,379 r	445,358 r	38,559,023 e	44,515,760 e r
April	5,355,768 r	510,073 r	40,267,643 e	46,133,484 e r
May	5,430,192 r	530,785 r	44,282,113 e	50,243,090 e r
June	5,233,689 r	500,924 r	42,999,256 e	48,733,869 e r
July	5,255,288 r	515,697 r	49,785,823 e	55,556,808 e r
August	5,296,782 r	530,319 r	50,013,969 e	55,841,070 e r
September	5,255,810 r	510,363 r	49,029,761 e	54,795,934 e r
October	5,338,923 r	586,157 r	49,894,562 e	55,819,642 e r
November	4,955,006 r	486,516 r	43,672,879 e	49,114,401 e r
December	5,171,598 r	536,098 r	48,442,716 e	54,150,412 e r
2009 Total	63,231,153 r	5,990,052 r	527,832,867 e	597,054,072 e r
			, ,	
January	4,936,419	486,852	47,575,404 e	52,998,675 e
February	4,644,966	463,269	44,426,557 e	49,534,792 e
March	5,296,476	466,448	46,161,374 e	51,924,298 e
April	5,061,633	485,829	40,455,697 e	46,003,159 e
May	5,243,997	576,023	42,154,703 e	47,974,723 e
June	5,075,477	577,693	41,522,549 e	47,175,719 e
July	5,199,206	593,173	39,771,186 e	45,563,565 e
August	5,091,416	572,335	38,248,293 e	43,912,044 e
September	5,034,295	524,131	41,970,517 e	47,528,943 e
October	5,117,047 p	535,208 p	, -,-	5,652,256 p
November	4,992,053 p	545,223 p		5,537,276 p
December	5,149,583 p	564,309 p		5,713,892 p
2010 Total	60,842,568 p	6,390,494 p	382,286,279 e	449,519,341 p

e Estimated r Revised p Preliminary

Table 5

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

		(Barrolo)		
DATE	FULL RATE	INCAPABLE	STRIPPER	TAXED
		WELLS RATE	WELLS RATE	VOLUME
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	148,212,765
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	6,347,047 e	128,148,807 e
1995	108,373,913	4,239,717	6,230,454 e	118,844,084 e
1996	103,524,192	3,786,147	6,240,956 e	113,551,295 e
1997	101,772,533	3,466,389	6,101,247 e	111,340,169 e
1998	89,083,365	2,878,225	5,892,007 e	97,853,597 e
1999	85,207,438	2,786,515	5,690,984 e	93,684,937 e
2000	88,411,207	2,783,268	5,322,515	96,516,990
2001	83,994,058	2,576,683	5,175,142	91,745,883
2002	79,038,703 e	2,571,901 e	4,681,607 e	86,292,211 e
2003	75,070,785	2,565,017	4,912,890	82,548,691
2004	73,133,821	2,852,851	4,838,681	80,825,353
2005	61,356,971	2,754,911	4,784,530	68,896,412
2006	61,520,365	2,621,592	4,786,820	68,928,778
2007	64,036,607	2,612,497	4,531,456	71,180,560
2008	61,520,109	2,564,615	4,974,960	69,059,684
January	5,217,007	168,996	390,949	5,776,953
February	4,509,139	90,707	330,351	4,930,197
March	5,710,417	181,508	400,459	6,292,384
April	3,409,997	126,093	321,008	3,857,098
May	4,520,571	183,832	328,228	5,032,630
June	5,183,681	187,830	422,785	5,794,296
July	5,363,386	213,601	360,739	5,937,726
August	4,579,529	75,485	379,369	5,034,382
September	3,188,873	120,165	255,944	3,564,982
October	5,020,463	231,161	480,000	5,731,624
November	4,204,575	175,688	368,839	4,749,102
December	4,304,837	172,412	326,325	4,803,573
2009 Total	55,212,475	1,927,478	4,364,995	61,504,949
January	3,731,155	145,780	332,128	4,209,063
February	4,610,852	175,544	340,738	5,127,134
March	4,357,554	259,944	380,313	4,997,812
April	3,397,268	149,749	301,750	3,848,767
May	4,732,328	147,431	338,519	5,218,278
June	4,581,386	169,103	365,929	5,116,418
July	4,934,142	212,539	387,935	5,534,616
August	4,241,808	160,400	367,152	4,769,360
September	4,899,184	182,008	365,556	5,446,748
October	5,051,887	199,885	413,774	5,665,546
November	3,844,643	142,678	333,575	4,320,895
December	4,616,349	199,678	388,312	5,204,339
2010 Total	52,998,554	2,144,740	4,315,681	59,458,975
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^{*} Due to reporting time lag and well exemptions the above figures are different from actual production. See footnote in Appendix B.

Figure 3

Table 6

UNITED STATES OCS CRUDE OIL AND CONDENSATE PRODUCTION¹²
(Barrels)

YEAR	LOUISIANA	TEXAS	CALIFORNIA	TOTAL
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	24,970,114	33,312,719	324,423,181
1991	262,647,733	24,380,908	29,146,090	323,831,064
1992	288,918,208	23,639,788	41,222,801	346,053,626
1993	293,443,881	20,376,996	50,078,144	358,655,540
1994	293,077,191	26,819,958	57,229,464	371,300,873
1995	320,255,087	20,419,104	71,254,440	416,293,300
1996	349,101,048	25,841,553	67,804,200	436,634,538
1997	399,536,004	28,718,405	58,279,489	469,873,968
1998	425,865,901	27,837,631	40,636,231	484,861,417
1999	451,391,454	31,758,296	42,071,101	537,198,889
2000	477,645,662	35,044,216	34,373,524	557,370,524
2001	502,115,031	42,991,844	34,763,192	592,514,727
	GULF OF N	IEXICO	PACIFIC	TOTAL
	CENTRAL	WESTERN		
2002	478,652,767	88,169,359	29,783,000	596,606,889
2003	476,746,239	83,696,697	30,001,000	590,477,590
2004	447,625,460	86,932,724	27,052,000	561,629,979
2005	327,825,527	74,791,038	26,554,000	429,172,427
2006	393,445,174	76,794,758	26,113,000	496,352,933
2007	407,038,554	59,225,206	24,599,000	490,878,085
2008	371,922,492	48,984,103	24,145,000	445,092,125
2009	509,620,599	52,002,772	22,231,000	583,912,795

NOTE: Starting in 2002 MMS has not formally published production by state adjacent areas

Table 7

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

DATE	ALL OCS	DOMESTIC PRODUCTION ⁷	IMPORTS TOTAL ⁷	IMPORTS SPR ⁷
1000	312,002	2,778,745	2,132,761	
1989 1990	299,835	2,776,745 2,684,575	2,151,387	20,348 9,772
1991	323,274	2,707,205	2,110,532	9,772
1992	335,258	2,617,998	2,226,341	3,594
1992	349,179	2,495,933	2,477,230	5,367
1994	365,107	2,418,981	2,578,072	4,485
1995	408,872	2,383,404	2,638,810	4,465
1996	431,807	2,368,535	2,747,839	0
1997	446,857	2,339,981	3,002,299	0
1998	490,777	2,293,763	3,177,584	0
1999	515,782	2,293,763	3,186,663	3,041
2000	557,989	2,130,706	3,319,816	3,006
2001	588,855	2,130,700	3,404,894	3,912
2001	596,605	2,117,312	3,336,175	5,767
2002	590,444	2,097,124	3,527,696	0
2003	561,610	1,983,300	3,692,063	0
2004	494,332	1,890,107	3,695,971	18,889
2005	500,113			3,086
2007		1,862,259	3,693,081 3,661,404	2,703
2007	490,712	1,848,450		
2006	490,009	1,811,816	3,580,694	7,113
January	41,526	159,764	303,136	1,019
February	38,610	147,269	254,061	958
March	43,010	162,040	290,728	6,842
April	45,524	158,200	281,218	4,630
May	49,772	166,749	272,716	1,600
June	48,555	158,443	274,054	2,305
July	55,500	167,469	281,911	0
August	55,294	167,950	273,235	499
September	53,991	166,398	277,619	973
October	54,792	170,522	265,536	0
November	49,817	162,807	262,201	1,052
December	54,511	168,985	253,260	490
2008 Total	590,902	1,956,596	3,289,675	20,368
January	54,636	168,413	262,083	0
February	49,453	153,010	243,044	0
March	54,644	170,559	288,060	0
April	52,086	164,871	292,219	0
May	54,772	169,503	298,275	0
June	51,548	163,963	296,169	0
July	50,740	167,575	306,587	0
August	N/A	170,679	294,057	0
September	N/A	166,999	275,038	0
October	N/A	N/A	N/A	N/A
November	N/A	N/A	N/A	N/A
December	N/A	N/A	N/A	N/A
2010 Total	367,879	1,495,572	2,555,532	0

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Table 8

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

		3	PLANT
DATE	OIL	GAS	LIQUIDS
	(Barrels)	(MCF)	(Barrels)
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	6,385,269	57,013,225	925,825
1996	6,489,394	60,326,587	477,640
1997	6,534,913	60,778,002	1,440,435
1998	6,604,124	56,691,269	331,767
1999	6,030,138	51,051,870	204,124
2000	6,366,604	53,780,835	355,112
2001	7,059,789	65,034,347	983,641
2002	4,707,772	53,434,290	800,697
2003	4,910,469	53,135,969	1,459,006
2004	4,222,899	45,261,610	2,185,235
2005	3,340,640	34,454,802	1,101,153
2006	3,603,987	40,571,954	1,397,470
2007	4,561,171	42,954,419	1,410,975
2008	4,243,502 r	44,041,174 r	1,482,044 r
	, -,	,• ,	.,,
January	335,595 r	3,414,871 r	76,924 r
February	299,910 r	3,547,826 r	45,254 r
March	342,642 r	3,495,982 r	58,156 r
April	340,217 r	3,483,812 r	52,243 r
May	347,797 r	3,778,482 r	57,805 r
June	338,008 r	3,323,202 r	45,994 r
July	336,855 r	4,325,746 r	49,940 r
August	336,525 r	3,387,916 r	77,840 r
September	348,387 r	3,104,306 r	60,206 r
October	366,487 r	3,241,377 r	64,357 r
November	320,551 r	3,017,651 r	66,840 r
December	379,223 r	3,171,453 r	64,553 r
2009 Total	4,092,197 r	41,292,625 r	720,111 r
January	304,151	3,039,577	54,470
February	304,833	2,624,736	326,178
March	324,984	2,509,664	418,448
April	328,402	3,037,742	431,237
May	325,077	3,019,842	461,112
June	314,280	3,095,545	397,349
July	327,182	3,443,984	497,930
August	339,658	3,103,475	417,568
September	323,773	3,066,858	421,629
October	336,724	3,000,838 N/A	421,029 N/A
November	N/A	N/A	N/A
December	N/A N/A	N/A	N/A
2010 Total	3,229,064	26,941,425	3,425,921
2010 IOlai	5,223,004	20,071,720	J,72J,32 I

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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
1989	340,409,320	1,091,038,511	135,162,280	1,566,610,111
1990	363,815,835	1,073,173,565	128,747,309	1,565,736,709
1991	353,306,368	1,053,556,868	98,562,669	1,505,425,905
1992	347,457,229	1,027,264,984	95,668,773	1,470,390,986
1993	337,285,840	1,000,882,139	106,161,644	1,444,329,623
1994	334,991,404	963,252,221	111,049,367	1,409,292,992
1995	348,385,615	942,253,430	117,647,934	1,408,286,979
1996	390,027,306	968,846,558	142,807,837	1,501,681,701
1997	406,306,877	900,334,348	143,913,520	1,450,554,745
1998	386,628,112	891,315,044	127,056,460	1,404,999,616
1999	355,536,417	858,338,237	100,525,024	1,314,399,678
2000	358,193,670	880,522,742	94,251,610	1,332,968,022
2001	370,998,160	903,068,572	97,208,445	1,371,275,177
2002	370,358,148	803,816,704	87,069,617	1,261,244,469
2003	401,217,674	779,381,241	72,327,053	1,252,925,968
2004	462,100,053	741,913,556	59,881,419	1,263,895,028
2005	526,863,613	645,073,330	46,609,741	1,218,546,684
2006	562,603,788	659,253,087	62,090,849	1,283,947,724
2007	603,091,131	611,343,569	65,570,627	1,280,005,327
2008	677,228,483	542,367,086	79,879,793	1,299,475,362 r
	,,,	,,	,,	,, ,, _,,
January	63,858,550 r	42,004,722	5,900,404	111,763,676 r
February	59,726,585 r	38,260,721	5,430,770	103,418,076 r
March	67,278,755 r	41,891,721	5,802,061	114,972,537 r
April	68,354,247 r	40,057,244	5,256,422	113,667,913 r
May	73,517,903 r	40,294,102	6,297,500	120,109,505 r
June	73,395,686 r	37,305,532	6,160,037	116,861,255 r
July	79,651,163 r	37,245,240	6,333,950	123,230,353 r
August	85,418,382 r	36,192,041	6,593,154	128,203,577 r
September	86,398,366 r	34,091,830	5,561,802	126,051,998 r
October	95,618,980 r	33,876,590	6,241,255	135,736,825 r
November	98,935,778 r	32,022,284	5,591,618	136,549,680 r
December	101,889,646 r	32,701,514	5,679,191	140,270,351 r
2009 Total	954,044,041 r	445,943,541	70,848,164	1,470,835,746 r
January	108,778,578	31,151,276	5,324,576	145,254,430
February	104,179,490	29,199,664	4,522,770	137,901,924
March	123,790,045	32,205,541	2,945,496	158,941,082
April	120,878,114	30,691,708	5,730,315	157,300,137
May	130,245,713	31,223,140	5,225,411	166,694,264
June	133,392,161	29,597,056	5,575,732	168,564,949
July	139,750,150	30,357,852	5,879,311	175,987,313
August	140,204,447	30,231,118	5,713,593	176,149,158
September	143,154,447	30,180,217	5,137,688	178,472,353
October	140,799,520 p	29,914,665 p	5,260,875 p	175,975,060 p
November	143,642,408 p	29,528,499 p	5,260,873 p 5,193,341 p	178,364,247 p
December	146,485,296 p	29,328,499 p 29,285,394 p	5,150,180 p	180,920,870 p
2010 Total	1,575,300,368 p	363,566,131 p	61,659,289 p	2,000,525,788 p
ZUIU IUIAI	1,373,300,300 P	303,300,131 p	υ1,033,203 β	2,000,323,700 P

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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
1989	43,249,443 r	100,117,054 r	17,925,577 r	161,292,074 r
1990	40,085,857 r	97,770,641 r	16,731,341 r	154,587,839 r
1991	33,434,906 r	102,249,162 r	15,933,292 r	151,617,360 r
1992	25,980,476 r	137,859,672 r	18,335,536 r	182,175,684 r
1993	23,009,433 r	136,674,314 r	17,880,673 r	177,564,420 r
1994	19,873,183 r	105,685,162 r	17,346,385 r	142,904,730 r
1995	18,829,476 r	104,638,062 r	18,858,344 r	142,325,882 r
1996	25,253,140 r	95,560,699 r	16,692,314 r	137,506,153 r
1997	35,537,210 r	107,984,665 r	17,042,997 r	160,564,872 r
1998	42,629,820 r	117,397,217 r	17,264,409 r	177,291,446 r
1999	29,943,303 r	99,043,293 r	15,304,875 r	144,291,471 r
2000	23,214,008 r	98,062,634 r	13,295,103 r	134,571,745 r
2001	19,843,912 r	90,200,751 r	14,001,877 r	124,046,540 r
2002	16,711,388 r	72,739,365 r	11,166,555 r	100,617,308 r
2003	15,270,654 r	65,328,195 r	11,086,256 r	91,685,105 r
2004	13,325,138 r	64,252,316 r	8,252,738 r	85,830,192 r
2005	11,006,284 r	48,525,678 r	6,876,708 r	66,408,670 r
2006	9,217,910 r	51,561,634 r	5,183,113 r	65,962,657 r
2007	8,385,311 r	60,946,975 r	5,841,867 r	75,174,153 r
2008	7,729,253 r	48,663,524 r	4,055,693 r	60,448,470 r
lonuoni	E00 C44 -	2 745 697 -	204 424 -	4 600 740 -
January	588,641 r	3,715,687 r 3,523,817 r	304,421 r 265,165 r	4,608,749 r 4,332,066 r
February March	543,084 r 602,713 r	3,914,360 r	289,252 r	4,806,325 r
April	589,269 r	4,116,270 r	277,384 r	4,982,923 r
May	610,601 r	4,1164,292 r	290,251 r	5,065,144 r
June	570,714 r	3,885,401 r	265,513 r	4,721,628 r
July	601,312 r	3,856,078 r	322,089 r	4,779,479 r
August	614,809 r	3,851,253 r	392,936 r	4,858,998 r
September	601,815 r	3,708,672 r	504,743 r	4,815,230 r
October	613,414 r	3,761,027 r	484,433 r	4,858,874 r
November	604,372 r	3,601,748 r	329,658 r	4,535,778 r
December	580,040 r	3,669,911 r	301,072 r	4,551,023 r
2009 Total	7,120,784 r	45,768,516 r	4,026,917 r	56,916,217 r
January	551,522	3,522,430	295,618	4,369,570
February	495,118	3,462,154	277,658	4,234,930
March	561,548	3,878,281	507,376	4,947,205
April	533,883	3,807,669	595,357	4,936,909
May	580,154	4,265,553	633,684	5,479,391
June	532,234	4,121,852	522,099	5,176,185
July	519,931	4,171,057	561,361	5,252,349
August	588,165	4,321,466	469,483	5,379,114
September	527,506	3,942,418	436,884	4,906,808
October	503,461 p	4,068,700 p	347,478 p	4,919,639 p
November	511,878 p	3,831,027 p	326,995 p	4,669,900 p
December	517,673 p	4,025,157 p	343,371 p	4,886,202 p
20010 Total	6,423,073 p	47,417,764 p	5,317,365 p	59,158,202 p

e Estimated r Revised p Preliminary

Figure 4

LOUISIANA STATE GAS PRODUCTION Actual and Forecasted Through Year 2030

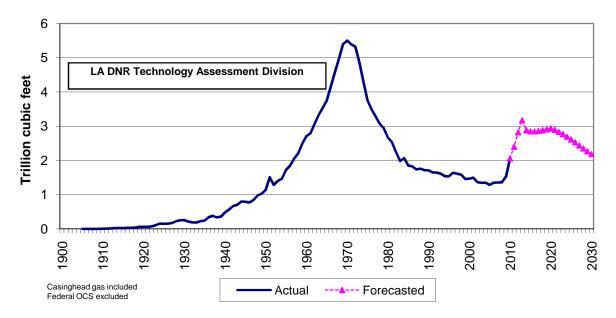


Figure 5

2009 UNITED STATES MARKETED GAS PRODUCTION BY STATE

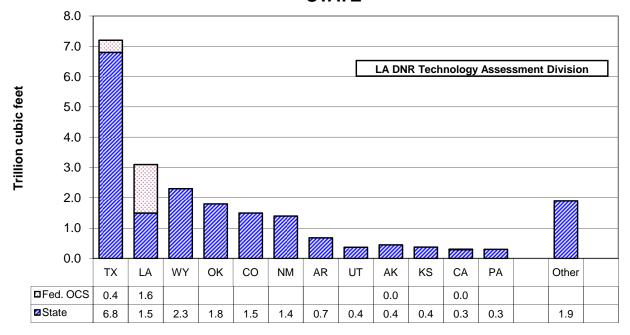


Table 11

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
1989	383,658,763	1,191,155,565	153,087,857	1,727,902,185
1990	403,901,692	1,170,944,206	145,478,650	1,720,324,548
1991	386,741,274	1,155,806,030	114,495,961	1,657,043,265
1992	373,437,705	1,165,124,656	114,004,309	1,652,566,670
1993	360,295,273	1,137,556,453	124,042,317	1,621,894,043
1994	354,864,587	1,068,937,383	128,395,752	1,552,197,722
1995	367,215,091	1,046,891,492	136,506,278	1,550,612,861
1996	415,280,446	1,064,407,257	159,500,151	1,639,187,854
1997	441,844,087	1,008,319,013	160,956,517	1,611,119,617
1998	429,257,932	1,008,712,261	144,320,869	1,582,291,062
1999	385,479,720	957,381,530	115,829,899	1,458,691,149
2000	381,407,678	978,585,376	107,546,713	1,467,539,767
2001	390,842,072	993,269,323	111,210,322	1,495,321,717
2002	387,069,536	876,556,069	98,236,172	1,361,861,777
2003	416,488,328	844,709,436	83,413,309	1,344,611,073
2004	475,425,191	806,165,872	68,134,157	1,349,725,220
2005	537,869,897	693,599,008	53,486,449	1,284,955,354
2006	571,821,698	710,814,721	67,273,962	1,349,910,381
2007	611,476,442	672,290,544	71,412,494	1,355,179,480
2008	684,957,736	591,030,610	83,935,486	1,359,923,832 r
	, ,		, ,	, , ,
January	64,447,191	45,720,409	6,204,825	116,372,425 r
February	60,269,669	41,784,538	5,695,935	107,750,142 r
March	67,881,468	45,806,081	6,091,313	119,778,862 r
April	68,943,516	44,173,514	5,533,806	118,650,836 r
May	74,128,504	44,458,394	6,587,751	125,174,649 r
June	73,966,400	41,190,933	6,425,550	121,582,883 r
July	80,252,475	41,101,318	6,656,039	128,009,832 r
August	86,033,191	40,043,294	6,986,090	133,062,575 r
September	87,000,181	37,800,502	6,066,545	130,867,228 r
October	96,244,614	37,637,617	6,725,688	140,607,919 r
November	99,621,346	35,624,032	5,921,276	141,166,654 r
December	102,660,560	36,371,425	5,980,263	145,012,248 r
2009 Total	961,449,115	491,712,057	74,875,081	1,528,036,253 r
lanuary	100 330 100	34 673 706	5 620 104	140 624 000
January	109,330,100	34,673,706 32,661,818	5,620,194	149,624,000
February March	104,674,608 124,351,593	36,083,822	4,800,428 3,452,872	142,136,854 163,888,287
April	121,411,997	34,499,377	6,325,672	162,237,046
May	130,825,867	35,488,693	5,859,095	172,173,655
June	133,924,395	33,718,908	6,097,831	173,741,134
July	140,270,081	34,528,909	6,440,672	181,239,662
•	140,792,612	34,552,584	6,183,076	181,528,272
August		34,122,635		
September October	143,681,953 141,302,980 p	33,983,365 p	5,574,572 5,608,354 p	183,379,161 180,894,699 p
November	144,154,285 p	33,359,526 p	5,520,336 p	183,034,148 p
December	147,002,969 p	33,310,552 p	5,493,551 p	185,807,072 p
2010 Total	1,581,723,441 p	410,983,895 p	66,976,654 p	2,059,683,990 p
ZUIU IUIAI	1,301,723,441 P	4 CEO,COE,OIF	00,970,004 p	2,003,003,330 P

e Estimated r Revised p Preliminary

^{*} See Appendix D-1 for corresponding volumes at 14.73 psia and footnote in Appendix B.

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)*

	ONSHORE	OFFSHORE		TOTAL
DATE		State	Federal OCS ¹²	
1989	1,574,814,328	153,087,857	2,947,545,132	4,675,447,317
1990	1,574,845,898	145,478,650	3,633,554,307	5,353,878,855
1991	1,542,547,304	114,495,961	3,225,373,562	4,882,416,827
1992	1,538,562,361	114,004,309	3,272,561,370	4,925,128,040
1993	1,497,851,726	124,042,317	3,320,312,261	4,942,206,304
1994	1,423,801,970	128,395,752	3,423,837,064	4,976,034,786
1995	1,414,106,583	136,506,278	3,564,677,663	5,115,290,524
1996	1,479,687,703	159,500,151	3,709,198,609	5,348,386,463
1997	1,450,163,100	160,956,517	3,825,354,038	5,436,473,655
1998	1,437,970,193	144,320,869	3,814,583,541	5,410,100,330
1999	1,342,861,250	115,829,899	3,836,619,562	5,400,353,243
2000	1,359,993,054	107,546,713	3,761,812,062	5,347,968,497
2001	1,384,111,395	111,210,322	3,818,657,416	5,215,724,146
2002	1,263,625,605	98,236,172	3,457,864,868	5,226,088,080
2003	1,261,197,764	83,413,309	3,276,387,510 e	5,313,924,369 e
2004	1,281,591,063	68,134,157	2,840,552,489 e	4,819,726,948 e
2005	1,231,468,905	53,486,449	2,185,591,643 e	4,621,738,908 e
2006	1,282,636,419	67,273,962	2,048,437,877 e	4,190,453,534 e
2007	1,283,766,986	71,412,494	2,022,058,582 e	3,470,444,734 e
2008	1,275,988,346	83,935,486	1,644,624,969 e	3,004,548,801 e
January	110,167,600 r	6,204,825 r	134,639,088 e	251,011,513 er
February	102,054,207 r	5,695,935 r	126,349,399 e	234,099,541 er
March	113,687,549 r	6,091,313 r	142,117,716 e	261,896,578 er
April	113,117,030 r	5,533,806 r	138,575,343 e	257,226,179 e r
May	118,586,898 r	6,587,751 r	142,309,205 e	267,483,854 e r
June	115,157,333 r	6,425,550 r	148,271,161 e	269,854,044 e r
July	121,353,793 r	6,656,039 r	159,548,384 e	287,558,216 er
August	126,076,485 r	6,986,090 r	151,005,985 e	284,068,560 e r
September	124,800,683 r	6,066,545 r	145,985,493 e	276,852,721 er
October	133,882,231 r	6,725,688 r	150,632,979 e	291,240,898 er
November	135,245,378 r	5,921,276 r	139,475,398 e	280,642,052 er
December	139,031,985 r	5,980,263 r	146,290,252 e	291,302,500 er
2009 Total	1,453,161,172 r	74,875,081 r	1,725,200,404 e	3,253,236,657 er
January	144,003,806	5,620,194	146,298,736 e	295,922,736 e
February	137,336,426	4,800,428	136,897,616 e	279,034,470 e
March	160,435,415	3,452,872	150,808,428 e	314,696,715 e
April	155,911,374	6,325,672	138,016,709 e	300,253,755 e
May	166,314,560	5,859,095	136,280,213 e	308,453,868 e
June	167,643,303	6,097,831	128,283,799 e	302,024,933 e
July	174,798,990	6,440,672	125,793,267 e	307,032,929 e
August	175,345,196	6,183,076	127,552,721 e	309,080,993 e
September	177,804,588	5,574,572	112,532,106 e	295,911,266 e
October	175,286,345 p	5,608,354 p	N/A	180,894,699 p
November	177,513,811 p	5,520,336 p	N/A	183,034,148 p
December	180,313,521 p	5,493,551 p	N/A	185,807,072 p
2010 Total	1,992,707,336 p	66,976,654 p	1,202,463,595 e	3,262,147,584 p
e Estimated r	Revised p Preliminary			

^{*} See Appendix D-2 for corresponding volumes at 14.73 psia and footnote in Appendix B.

Table 13

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

	MARKETED			EXTRACTION		
DATE	State	ocs	Total ³	LOSS ³	DRY^3	
1968	4,918 e	1,372 ¹²	6,416	138	6,153	
1969	5,317 e	1,769 ¹²	7,228	176	6,910	
1970	5,429 e	2,206 ¹²	7,788	189	7,446	
1971	5,367 e	2,556 ¹²	8,082	191	7,732	
1972	5,020 e	2,797 ¹²	7,973	194	7,622	
1973	5,115 e	2,966 ¹²	8,242	203	7,878	
1974	4,351 e	3,251 ¹²	7,754	191	7,411	
1975	3,717 e	3,234 ¹²	7,091	186	6,766	
1976	3,472 e	3,397 ¹²	7,007	169	6,700	
1977	3,533 e	3,540 ¹²	7,215	163	6,910	
1978	3,302 e	4,028 ¹²	7,476	158	7,171	
1979	3,087 e	4,036 ¹²	7,266	162	6,961	
1980	2,908 e	3,896 ¹²	6,940	139	6,664	
1981	2,661 e	3,986 ¹²	6,780	140	6,507	
1982	2,359 e	3,692 ¹²	6,172	126	5,924	
1983	2,147 e	3,080 ¹²	5,332	122	5,106	
1984	2,237 e	3,473 ¹²	5,825	130	5,581	
1985	1,890 e	3,025 ¹²	5,014	115	4,800	
1986	1,958 e	2,842 ¹²	4,895	113	4,686	
1987	1,935 e	3,086 ¹²	5,123	122	4,899	
1988	2,073 e	3,006 ¹²	5,180	118	4,961	
1989	2,060 e	2,918 ¹²	5,078	119	4,859	
1990	1,542 e	3,597 ¹²	5,242	117	5,022	
1991	1,841 e	3,193 ¹²	5,034	127	4,809	
1992	1,713 e	3,201 ¹²	4,914	130	4,688	
1993	1,740 e	3,252 ¹²	4,991	128	4,765	
1994	1,759 e	3,410 ¹²	5,170	126	4,942	
1995	1,750 e	3,358 ¹²	5,108	143	4,865	
1996	1,700 e	3,590 ¹²	5,290	137	5,049	
1997	1,505	3,725 ¹²	5,230	144	4,882	
1998	1,552	3,725 ¹²	5,277	139	4,933	
1999	1,567	3,645 ¹²	5,212	158	4,912	
2000	1,455	3,576 ¹²	5,031	165	4,928	
2001	1,502	3,618 e	5,120 e	153 e	4,967 e	
2002	1,362	3,270 e	4,631 e	157 e	4,474 e	
2003	1,350	3,193 e	4,544 e	140 e	4,404 e	
2004	1,353	2,876 e	4,230 e	133 e	4,096 e	
2005	1,296	2,254 e	3,550 e	127 e	3,423 e	
2006	1,361	2,074 e	3,435 e	119 e	3,316 e	
2007	1,365	1,986 e	3,351 e	115 e	3,236 e	
2008	1,377	1,640 e	3,017 e	114 e	2,903 e	
2009	1,607	1,737 e	3,344 e	124 e	3,220 e	

e Estimated r Revised p Preliminary

^{*} See Appendix D-3 for corresponding volumes at 14.73 psia and footnote in Appendix B.

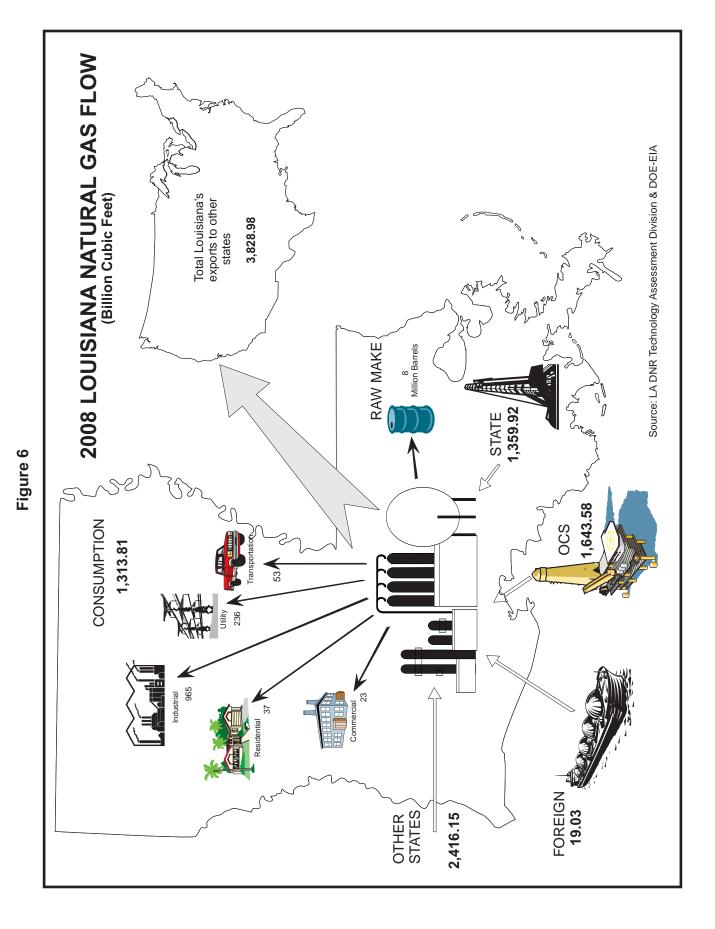


Table 14

LOUISIANA STATE GAS PRODUCTION BY TAX 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
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
1997	1,343,182,922	57,663,413	9,951,387	1,410,797,722
1998	1,191,471,607	60,242,544	11,733,098	1,263,447,249
1999	1,151,493,116	57,308,865	10,617,631	1,219,419,612
2000	1,217,171,149	53,797,867	8,195,799	1,279,164,815
2001	1,264,513,132	74,687,708	7,806,688	1,347,007,528
2002	1,068,512,639	75,724,074	7,748,258	1,151,984,971
2003	1,091,483,424	80,659,914	7,963,553	1,180,106,891
2004	1,139,626,885	83,441,736	5,507,456	1,235,308,986
2005	1,130,014,025	91,951,579	4,642,451	1,227,085,699
2006	1,134,544,485	113,490,843	5,545,802	1,253,870,355
2007	1,070,511,169	122,399,829	7,365,200	1,200,461,343
2008	1,044,876,723	137,853,642	6,398,792	1,189,129,157
January	95,461,922	14,142,443	453,524	110,057,889
February	66,148,399	9,842,570	402,867	76,393,836
March	109,481,245	17,111,665	432,463	127,025,373
April	54,931,970	9,886,569	-884,588	63,933,951
May	87,682,229	13,931,510	373,025	101,986,764
June	89,722,650	12,510,568	408,603	102,641,821
July	98,845,266	17,674,895	512,376	117,032,537
August	78,816,556	12,224,659	406,178	91,447,393
September	89,280,595	17,510,353	556,701	107,347,649
October	76,248,240	12,224,816	479,822	88,952,878
November	67,970,265	15,667,336	536,278	84,173,879
December	79,767,302	16,066,447	812,559	96,646,308
2009 Total	994,356,639	168,793,831	4,489,808	1,167,640,278
January	57,187,283	12,928,334	572,230	70,687,847
February	58,146,871	13,155,265	496,928	71,799,064
March	81,179,432	16,903,948	531,969	98,615,349
April	21,337,851	12,197,276	531,448	34,066,575
May	80,278,858	13,502,213	713,690	94,494,761
June	108,737,781	13,502,213	713,690	122,953,684
July	96,276,663	19,466,723	425,726	116,169,112
August	94,040,001	15,079,779	865,506	109,985,286
September	18,186,836	16,114,840	857,380	35,159,056
October	66,441,528	15,116,228	655,841	82,213,597
November	96,611,661	14,622,287	683,207	111,917,155
December	96,165,626	15,357,343	689,585	112,212,554
2010 Total	874,590,391	177,946,449	7,737,200	1,060,274,040
e Estimated	r Revised in Preliminary			

e Estimated r Revised p Preliminary 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
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	5,417,963	3,666,552,825
1978	4,068,255,571	227,305,175	5,166,292	4,300,727,039
1979	4,076,873,552	501,546,069	5,431,822	4,583,851,442
1980	3,934,902,550	612,378,333	5,900,023	4,553,180,906
1981	4,025,867,929	715,937,640	12,763,307	4,754,568,877
1982	3,729,057,653	841,173,981	17,751,924	4,587,983,558
1983	3,111,576,348	834,112,318	24,168,292	3,969,856,958
1984	3,508,475,799	913,008,621	46,363,899	4,467,848,319
1985	3,055,687,773	818,533,627	64,558,213	3,938,779,613
1986	2,870,347,386	959,161,285	59,078,021	3,888,586,692
1987	3,117,669,167	1,180,839,487	54,805,158	4,353,313,812
1988	3,036,077,646	1,155,285,485	49,167,638	4,240,530,769
1989	2,947,545,132	1,142,237,197	50,791,912	4,140,574,242
1990	3,633,554,307	1,321,607,333	49,972,764	5,005,134,404
1991	3,225,373,562	1,161,671,524	51,855,577	4,438,900,663
1992	3,272,561,370	1,215,055,449	55,231,660	4,608,807,577
1993	3,320,312,261	1,007,755,289	52,150,277	4,455,275,861
1994	3,423,837,064	994,291,314	53,560,686	4,578,282,175
1995	3,564,677,663	890,682,224	54,790,061	4,619,222,806
1996	3,709,198,609	953,772,416	66,783,677	4,955,474,989
1997	3,825,354,038	946,381,458	73,344,546	5,010,736,875
1998	3,814,583,541	850,572,237	74,984,850	4,789,522,576
1999	3,836,619,562	798,140,396	77,809,430	4,935,623,726
2000	3,761,812,062	869,068,079	76,074,550	4,919,901,921
2001	3,818,657,416	898,035,393	70,946,682	5,145,905,423
	GULF OF	MEXICO	PACIFIC	TOTAL
	CENTRAL	WESTERN		
2002	3,510,522,709	999,720,152	67,816,000	4,607,640,353
2003	3,326,281,736	1,065,770,532	58,095,000	4,503,195,666
2004	2,883,809,634	1,099,125,084	54,655,000	4,104,828,091
2005	1,935,105,938	773,450,925	54,088,000	2,764,108,550
2006	2,122,733,551	779,987,637	40,407,000	2,943,406,324
2007	2,095,397,494	635,587,701	45,516,000	2,822,458,130
2008	1,704,274,579	481,863,516	42,961,500	2,368,172,160
2009 NOTE:	1,762,863,958	464,479,738	41,684,250	2,448,590,935

NOTE: Starting in 2002 MMS has not formally published production by state adjacent areas e Estimated r Revised p Preliminary

^{*} See Appendix D-4 for corresponding volumes at 14.73 psia and footnote in Appendix B.

Figure 7

LOUISIANA OIL PRODUCTION AND PRICE

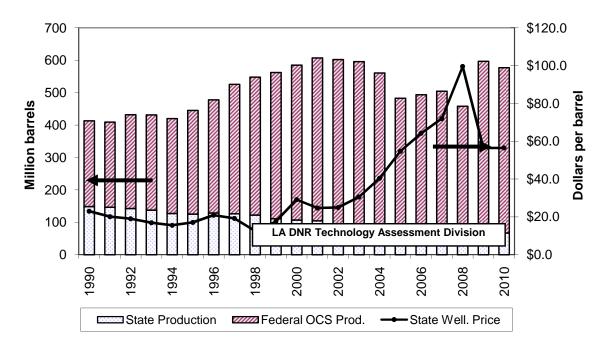


Figure 8

LOUISIANA GAS PRODUCTION AND PRICE

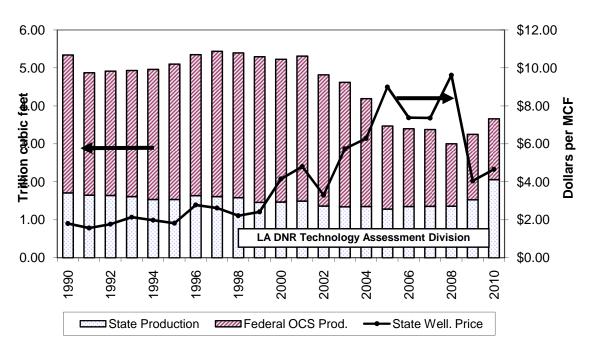


Table 16

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

		WET AFTER			GROSS
DATE	GROSS	LEASE SEPARATION	MARKETED	DRY	IMPORTS
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	19,402	19,123	18,233	2,785
1996	23,640	19,690	19,423	18,484	2,880
1997	23,737	19,727	19,475	18,531	2,935
1998	23,635	19,670	19,569	18,650	3,090
1999	23,355	19,524	19,416	18,462	3,515
2000	23,699	19,890	19,801	18,805	3,707
2001	24,020	20,261	20,166	19,231	3,899
2002	23,471	19,592	19,530	18,591	3,937
2003	23,645	19,678	19,582	18,724	3,866
2004	23,499	19,230	19,134	18,226	4,175
2005	22,996	18,672	18,555	17,696	4,256
2006	23,046	19,156	19,001	18,113	4,104
2007	24,108	19,940	19,626	18,714	4,517
2008	25,249	20,986	20,823	19,888	3,902
January	2,206 r	1,838 r	1,830 r	1,758 r	350 r
February	2,030 r	1,679 r	1,670 r	1,603 r	315 r
March	2,236 r	1,853 r	1,842 r	1,766 r	319 r
April	2,140 r	1,789 r	1,778 r	1,704 r	316 r
May	2,187 r	1,834 r	1,823 r	1,744 r	261 r
June	2,098 r	1,780 r	1,769 r	1,693 r	276 r
July	2,134 r	1,821 r	1,810 r	1,732 r	310 r
August	2,124 r	1,833 r	1,822 r	1,744 r	330 r
September	2,057 r	1,738 r	1,727 r	1,650 r	301 r
October	2,169 r	1,828 r	1,817 r	1,736 r	268 r
November	2,121 r	1,776 r	1,765 r	1,686 r	289 r
December	2,162 r	1,820 r	1,809 r	1,726 r	343 r
2009 Total	25,663 r	21,589 r	21,463 r	20 ,544 r	3,678 r
January	2,196	1,838	1,827	1,748	377
February	2,023	1,686	1,676	1,602	317
March	2,273	1,894	1,882	1,799	312
April	2,178	1,835	1,823	1,744	292
May	2,222	1,896	1,885	1,801	292
June	2,114	1,808	1,797	1,718	277
July	2,166	1,880	1,867	1,788	321
August	2,202	1,916	1,904	1,821	298
September	2,210	1,871	1,859	1,775	280
October	N/A	N/A	N/A	N/A	N/A
November	N/A	N/A	N/A	N/A	N/A
December	N/A	N/A	N/A	N/A	N/A
2010 Total	19,582	16,624	16,519	15,797	2,767

e Estimated r Revised p Preliminary

^{*} See Appendix D-5 for corresponding volumes at 14.73 psia and footnote in Appendix B.

Table 17

LOUISIANA AVERAGE CRUDE OIL PRICES (Dollars per Barrel)

	LIGHT LOUISIA		ALL GRADES AT WELLHEAD			
	Spot	Refinery		ocs	Severance	State
DATE	Market ¹⁰	Posted	State ⁶	Gulf ⁶	Tax ⁸	Royalty
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	21.70	20.60	20.15	19.40	21.13	19.90
1992	20.77	19.72	19.01	18.38	19.31	19.10
1993	18.56	17.27	16.72	16.17	17.39	16.84
1994	17.25	15.84	15.61	14.72	15.46	15.52
1995	18.60	17.16	17.06	16.16	16.98	17.06
1996	22.32	20.77	20.87	20.00	20.56	21.24
1997	20.69	18.90	19.23	18.63	19.80	19.22
1998	14.21	12.17	12.52	12.03	13.47	12.31
1999	19.00	16.73	17.55	16.46	16.09	17.22
2000	30.29	27.88	29.14	27.57	28.10	25.96
2001	25.84	23.23	24.70	23.36	26.23	19.81
2002	26.18	23.14	24.92	23.36	25.17	24.39
2003	31.20	27.88	30.50	28.69	30.28	29.77
2004	41.47	37.85	40.43	37.54	38.34	39.06
2005	56.86	52.75	54.68	50.97	54.62	52.20
2006	67.44	62.41	64.17	60.62	63.55	63.08
2007	74.60	68.96	71.98	67.62	64.14	71.87
2008	102.29	96.57	99.53	100.00	104.86	97.60
January	47.17	37.87	38.11	39.16	58.12	36.71
February	45.63	35.50	36.31	38.77	39.23	36.29
March	50.08	44.58	46.68	44.36	39.06	45.38
April	52.32	46.78	48.27	46.32	34.55	45.74
May	60.29	55.43	56.13	50.57	46.72	54.93
June	71.15	65.97	66.52	58.59	47.33	63.79
July	66.79	72.50	62.41	64.26	54.12	60.70
August	74.31	67.41	69.02	64.65	64.92	68.55
September	70.18	65.72	68.23	68.96	56.03	66.75
October	76.43	71.95	72.94	68.84	65.52	72.04
November	79.62	73.94	74.47	71.78	63.35	72.47
December	77.33	70.85	72.09	74.57	64.40	65.61
2009 Average	64.28	59.04	59.27	57.57	52.78	57.41
January	80.16	74.74	76.12	73.91	69.75	75.20
February	77.43	72.66	74.34	76.38	70.18	76.08
March	82.04	77.41	78.45	75.11	74.29	76.88
April	87.90	80.80	81.90	79.06	82.92	76.44
May	79.73	70.99	73.39	78.52	76.64	75.55
June	78.87	71.88	74.95	76.33	78.28	75.75
July	79.00	72.62	75.45	74.51	72.81	76.66
August	79.61	73.07	75.80	74.55	75.14	77.11
September	80.14	71.82	74.75	74.92	74.13	76.04
October	85.23	78.38	81.41	76.31	71.50	81.43
November	88.16	80.72	N/A	N/A	78.08	81.82
December	94.31	85.76	N/A	N/A	79.20	85.60
2010 Average	82.72	75.90	76.66	75.96	75.24	77.88

e Estimated r Revised p Preliminary See footnote in Appendix B.

Figure 9

CRUDE OIL AVERAGE PRICES

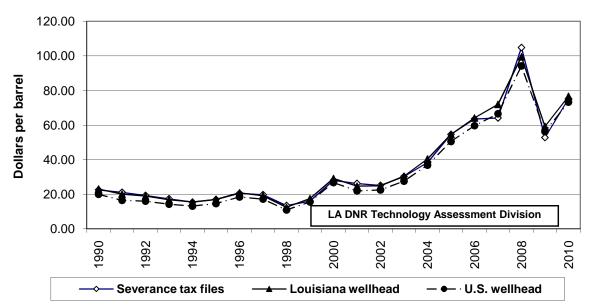


Figure 10

NATURAL GAS AVERAGE PRICES

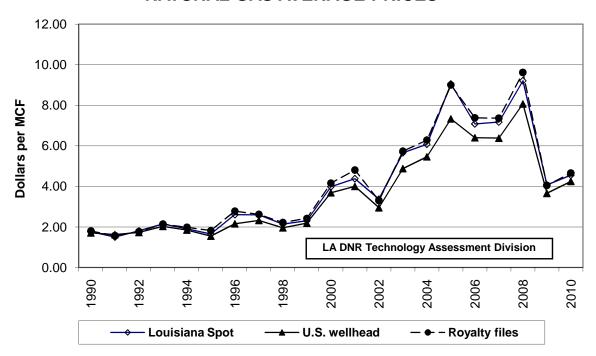


Table 18

UNITED STATES AVERAGE CRUDE OIL PRICES²
(Dollars per Barrel)

	REFINERY AC	QUISITION	DOMESTIC	IMPORTS	IMPORTS	IMPORTS
DATE	Domestic	Imports	WELLHEAD	LANDED	FOB	OPEC
	Costs	Costs				FOB
1990	22.59	21.76	20.03	21.13	20.37	20.40
1991	19.35	18.74	16.53	18.02	16.91	17.01
1992	18.62	18.12	16.00	17.65	16.66	16.76
1993	16.66	16.17	14.24	15.75	14.72	14.72
1994	15.64	15.41	13.19	15.07	14.13	13.94
1995	17.32	17.15	14.62	16.77	15.69	15.35
1996	20.81	20.60	18.46	20.27	19.24	18.87
1997	19.65	18.55	17.23	18.14	16.98	16.33
1998	13.15	12.35	10.94	11.86	10.75	10.17
1999	17.64	17.27	15.53	17.38	16.48	16.01
2000	29.08	27.68	26.72	27.54	26.26	25.55
2001	24.34	21.99	21.90	21.77	20.45	19.56
2002	24.56	23.63	22.50	23.82	22.57	22.19
2003	29.78	27.87	27.54	27.83	26.06	25.61
2004	38.97	35.79	36.86	36.05	33.73	33.99
2005	53.05	48.93	50.53	49.41	47.74	49.75
2006	62.50	58.89	59.65	59.03	57.03	59.17
2007	69.56	67.13	66.56	67.86	66.12	68.98
2008	98.09	92.30	94.22	92.14	89.45	91.23
January	38.67	36.84	35.00	38.74	36.87	37.61
February	37.51	38.56	34.14	40.27	38.08	39.71
March	44.92	45.96	42.45	46.74	44.34	45.75
April	47.52	49.58	45.19	51.43	47.67	48.82
May	54.58	56.77	52.67	58.27	55.61	56.30
June	64.65	66.37	63.09	65.89	64.82	65.37
July	63.79	63.46	60.44	64.78	62.32	63.25
August	67.81	68.09	65.28	68.53	67.47	67.65
September	67.87	67.65	65.28	68.50	65.41	65.91
October	72.09	72.06	69.82	72.58	70.45	70.54
November	74.60	74.40	71.99	74.41	73.16	73.60
December	73.35	72.67	70.42	73.50	71.24	72.48
2009 Average	58.95	59.37	56.31	60.30	58.12	58.92
January	76.04	75.07	72.89	74.78	72.96	73.42
February	75.91	73.73	72.74	75.01	71.50	71.77
March	78.52	76.77	75.77	77.65	75.41	75.83
April	82.12	80.03	78.80	79.34	78.27	78.88
May	75.23	71.15	70.90	72.00	69.21	70.45
June	73.93	71.91	70.77	72.62	70.17	71.39
July	74.54	73.25	71.37	73.43	71.01	72.16
August	76.21	73.50	72.07	73.63	71.27	72.38
September	74.87	73.20	71.23	74.02	71.74	73.23
October	78.88	77.02	76.02	75.73	75.12	77.32
November	83.09	87.72	N/A	N/A	N/A	N/A
December	N/A	N/A	N/A	N/A	N/A	N/A
2010 Average	77.21	75.76	73.26	74.82	72.67	73.68

e Estimated r Revised p Preliminary See footnote in Appendix B.

Table 19

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

	GOM	DNR	HENRY	HUB	SPO	OT MARK	ET⁵
DATE	Federal	State	Settled	Cash	Low	High	Average
	OCS ¹²	Royalty	NYMEX	Spot		_	_
1990	1.87	1.79	N/A	N/A	1.35	2.60	1.77
1991	1.77	1.57	N/A	N/A	1.43	1.56	1.50
1992	1.77	1.77	N/A	N/A	1.74	1.85	1.80
1993	2.18	2.14	2.19	N/A	2.08	2.21	2.15
1994	2.10	1.98	1.97	N/A	1.86	1.95	1.91
1995	1.61	1.78	1.70	1.75	1.62	1.68	1.65
1996	2.37	2.78	2.69	2.87	2.47	2.69	2.60
1997	2.63	2.62	2.69	2.63	2.54	2.67	2.60
1998	2.36	2.22	2.19	2.17	2.08	2.18	2.14
1999	2.18	2.42	2.36	2.36	2.25	2.36	2.31
2000	3.59	4.16	4.04	4.39	3.92	4.03	3.98
2001	4.05	4.55	4.44	4.11	4.27	4.47	4.38
2002	2.98	3.29	3.39	3.48	3.29	3.43	3.37
2003	5.12	5.74	5.61	5.71	5.32	5.92	5.66
2004	6.04	6.29	6.39	6.14	5.98	6.18	6.08
2005	8.58	9.03	8.96	9.19	8.84	9.26	9.05
2006	6.77	7.35	7.54	7.00	6.91	7.24	7.08
2007	7.30	7.39	7.13	7.26	7.08	7.29	7.17
2008	13.53	9.17	9.40	9.23	9.12	9.34	9.21
January	N/A	5.88	6.38	5.24	5.70	5.84	5.77
February	N/A	4.40	4.66	4.53	4.68	4.93	4.78
March	N/A	4.24	4.22	3.96	4.03	4.20	4.13
April	N/A	3.79	3.78	3.50	3.60	3.74	3.68
May	N/A	3.69	3.45	3.83	3.70	3.91	3.79
June	N/A	3.96	3.68	3.80	3.74	3.85	3.81
July	N/A	2.91	4.11	3.38	3.46	3.66	3.59
August	N/A	3.39	3.51	3.14	3.24	3.35	3.31
September	N/A	3.05	2.96	2.96	2.70	2.98	2.89
October	N/A	4.03	3.88	4.00	3.85	3.98	3.92
November	N/A	4.21	4.46	3.70	3.82	3.98	3.89
December	N/A	5.00	4.67	5.34	5.21	5.44	5.30
2009 Average	4.34	4.05	4.15	3.95	3.98	4.16	4.07
January	N/A	5.85	6.05	5.82	6.05	6.20	6.12
February	N/A	5.66	5.48	5.32	5.53	5.68	5.60
March	N/A	4.77	5.01	4.29	4.56	4.68	4.63
April	N/A	4.19	4.00	4.04	3.97	4.11	4.05
May	N/A	4.80	4.44	4.12	4.19	4.32	4.26
June	N/A	4.86	4.32	4.81	4.75	4.95	4.84
July	N/A	4.87	4.91	4.63	4.69	4.83	4.76
August	N/A	4.70	4.96	4.32	4.60	4.68	4.62
September	N/A	4.01	3.80	3.89	3.87	4.00	3.95
October	N/A	3.87	3.99	3.43	3.57	3.72	3.65
November	N/A	3.73	3.42	3.71	3.59	3.71	3.66
December	N/A	N/A	4.44	4.26	4.31	4.47	4.39
2010 Average	5.16	4.66	4.57	4.39	4.47	4.61	4.55

e Estimated r Revised p Preliminary See footnote in Appendix B.

Table 19A

LOUISIANA NATURAL GAS WELLHEAD PRICES (MMBTU)

(Dollars/MMBTU)

	GOM	DNR	HENR	•	SPC	T MARK	FT ⁵
DATE	Federal	State	Settled	Cash	Low	High	Average
DAIL	OCS ¹²	Royalty	NYMEX	Spot	LOW	ı ııgıı	Average
1990	1.80	1.73	N/A	N/A	1.30	2.50	1.70
1991	1.70	1.51	N/A	N/A	1.38	1.50	1.44
1992	1.70	1.70	N/A	N/A	1.68	1.78	1.73
1993	2.10	2.05	N/A	N/A	2.00	2.12	2.06
1994	2.02	1.91	1.89	N/A	1.79	1.88	1.84
1995	1.55	1.75	1.63	1.69	1.56	1.61	1.59
1996	2.28	2.67	2.59	2.76	2.37	2.58	2.50
1997	2.53	2.52	2.59	2.53	2.44	2.57	2.50
1998	2.27	2.13	2.10	2.08	2.00	2.10	2.05
1999	2.10	2.33	2.27	2.27	2.17	2.27	2.22
2000	3.45	4.00	3.88	4.23	3.77	3.88	3.83
2001	3.89	4.28	4.27	3.95	4.11	4.30	4.21
2002	2.87	3.16	3.26	3.35	3.16	3.30	3.24
2003	4.92	5.52	5.40	5.49	5.11	5.69	5.44
2004	5.81	6.04	6.15	5.90	5.75	5.95	5.85
2005	8.25	8.65	8.62	8.83	8.50	8.90	8.70
2006	6.51	7.10	7.25	6.73	6.64	6.96	6.81
2007	7.02	7.08	6.86	6.98	6.80	7.01	6.89
2008	13.01	9.25	9.03	8.88	8.77	8.99	8.86
_000		0.20	0.00	0.00	• • • • • • • • • • • • • • • • • • • •	0.00	0.00
January	N/A	5.65	6.14	5.04	5.48	5.62	5.55
February	N/A	4.23	4.48	4.36	4.50	4.74	4.60
March	N/A	4.08	4.06	3.81	3.87	4.04	3.97
April	N/A	3.64	3.63	3.37	3.46	3.60	3.54
May	N/A	3.55	3.32	3.68	3.56	3.76	3.65
June	N/A	3.81	3.54	3.65	3.59	3.71	3.66
July	N/A	2.80	3.95	3.25	3.33	3.52	3.46
August	N/A	3.26	3.38	3.02	3.12	3.22	3.18
September	N/A	2.93	2.84	2.85	2.60	2.86	2.78
October	N/A	3.87	3.73	3.85	3.70	3.82	3.77
November	N/A	4.05	4.29	3.56	3.67	3.83	3.74
December	N/A	4.81	4.49	5.13	5.01	5.23	5.09
2009 Average	4.17	3.89	3.99	3.80	3.82	4.00	3.92
January	N/A	5.62	5.81	5.60	5.82	5.96	5.89
February	N/A	5.44	5.27	5.12	5.31	5.46	5.39
March	N/A	4.58	4.82	4.13	4.38	4.50	4.46
April	N/A	4.03	3.84	3.88	3.82	3.95	3.89
May	N/A	4.61	4.27	3.96	4.03	4.16	4.09
June	N/A	4.67	4.16	4.63	4.56	4.76	4.65
July	N/A	4.68	4.72	4.45	4.50	4.76	4.58
August	N/A N/A	4.50 4.52	4.72 4.77	4.45 4.15	4.51 4.42	4.65	4.36 4.45
September	N/A N/A	4.52 3.86	3.65	3.74	3.72	3.85	3.80
October	N/A N/A	3.72	3.84	3.74	3.72 3.44	3.58	3.51
November	N/A N/A	3.72 3.58	3.04 3.29	3.57	3.44 3.45	3.56 3.57	3.52
December	N/A N/A	3.56 N/A	3.29 4.27	4.10	3.45 4.14	4.30	3.52 4.22
2010 Average	4.96	4.48	4.27 4.39	4.10 4.22	4.14 4.30	4.30 4.44	4.22 4.37
ZUIU AVEIAYE	4.30	4.40	4.33	4.22	4.30	4.44	4.31

e Estimated r Revised p Preliminary See footnote in Appendix B.

Table 20

LOUISIANA AVERAGE NATURAL GAS PRICES

DELIVERED TO CONSUMER ³ (MCF) (Dollars/Thousand Cubic Feet)

DATE	CITY GATES	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	UTILITY
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	5.15	1.82	1.88
1996	3.13	6.76	6.09	2.84	2.94
1997	3.04	7.16	6.22	2.87	2.79
1998	2.33	6.68	5.64	2.31	2.37
1999	2.70	6.83	5.73	2.54	2.59
2000	4.61	8.34	7.41	4.03	4.55
2001	5.55	10.47	8.58	5.04	4.30
2002	4.07	8.06	6.74	3.69	3.63
2003	5.78	10.29	8.81	5.53	5.94
2004	6.56	11.20	9.56	6.58	6.50
2005	8.56	13.26	11.41	9.11	9.14
2006	7.67	14.66	11.84	7.42	7.66
2007	7.22	14.20	11.83	7.08	7.53
2008	9.58	15.49	13.52	9.32	10.01
January	7.95	12.93	12.35	6.29	6.41
February	6.86	12.50	11.39	4.91	5.09
March	6.26	13.34	11.54	4.39	4.57
April	5.32	12.81	9.76	3.99	4.06
May	4.62	13.50	8.62	3.85	4.03
June	4.81	15.50	9.28	3.92	4.24
July	4.37	16.47	9.45	3.70	4.12
August	4.12	15.64	8.96	3.54	3.71
September	3.83	15.65	8.80	3.12	3.30
October	4.99	14.24	9.69	4.24	4.22
November	6.54	13.61	11.07	4.28	4.38
December	6.65	11.22	10.52	5.25	5.49
2009 Average	5.53	13.95	10.12	4.29	4.47
January	6.88	11.05	10.80	5.92	6.43
February	6.76	10.67	10.19	5.74	5.65
March	6.04	10.83	10.22	4.75	5.45
April	4.99	12.10	9.47	4.11	4.27
May	5.08	15.37	9.88	4.40	4.53
June	4.89	16.14	9.91	4.65	4.92
July	5.21	17.05	10.32	4.90	4.99
August	5.14	17.58	10.37	4.77	4.85
September	4.30	16.61	9.49	4.01	4.14
October	4.67	N/A	9.66	3.57	N/A
November	N/A	N/A	N/A	N/A	N/A
December	N/A	N/A	N/A	N/A	N/A
2010 Average	5.40	14.16	10.03	4.68	5.03

e Estimated r Revised p Preliminary

Table 20A

LOUISIANA AVERAGE NATURAL GAS PRICES DELIVERED TO CONSUMER ³ (MMBTU) (Dollars/MMBTU)

DATE	CITY GATES	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	UTILITY
1990	2.86	5.86	5.06	1.92	1.66
1991	2.46	5.55	4.71	1.67	1.53
1992	2.38	5.38	4.61	1.86	1.84
1993	2.62	5.86	5.13	2.21	2.39
1994	2.44	6.00	5.21	2.09	2.09
1995	2.13	5.78	4.95	1.75	1.81
1996	3.01	6.50	5.86	2.73	2.83
1997	2.92	6.88	5.98	2.76	2.68
1998	2.24	6.42	5.42	2.22	2.28
1999	2.60	6.57	5.51	2.44	2.49
2000	4.43	8.02	7.13	3.88	4.38
2001	5.34	10.07	8.25	4.85	4.13
2002	3.91	7.75	6.48	3.55	3.49
2003	5.56	9.89	8.47	5.32	5.71
2004	6.31	10.77	9.19	6.33	6.25
2005	8.23	12.75	10.97	8.76	8.79
2006	7.38	14.10	11.38	7.13	7.37
2007	6.94	13.65	11.38	6.81	7.24
2008	9.21	14.89	13.00	8.96	9.63
	-				
January	7.64	12.43	11.88	6.05	6.16
February	6.60	12.02	10.95	4.72	4.89
March	6.02	12.83	11.10	4.22	4.39
April	5.12	12.32	9.38	3.84	3.90
May	4.44	12.98	8.29	3.70	3.88
June	4.63	14.90	8.92	3.77	4.08
July	4.20	15.84	9.09	3.56	3.96
August	3.96	15.04	8.62	3.40	3.57
September	3.68	15.05	8.46	3.00	3.17
October	4.80	13.69	9.32	4.08	4.06
November	6.29	13.09	10.64	4.12	4.21
December	6.39	10.79	10.12	5.05	5.28
2009 Average	5.31	13.41	9.73	4.13	4.30
January	6.62	10.63	10.38	5.69	6.18
February	6.50	10.26	9.80	5.52	5.43
March	5.81	10.41	9.83	4.57	5.24
April	4.80	11.63	9.11	3.95	4.11
May	4.88	14.78	9.50	4.23	4.36
June	4.70	15.52	9.53	4.47	4.73
July	5.01	16.39	9.92	4.71	4.80
August	4.94	16.90	9.97	4.59	4.66
September	4.13	15.97	9.13	3.86	3.98
October	4.49	N/A	9.29	3.43	N/A
November	N/A	N/A	N/A	N/A	N/A
December	N/A	N/A	N/A	N/A	N/A
2010 Average	5.19	13.61	9.65	4.50	4.83

e Estimated r Revised p Preliminary See footnote in Appendix B.

Table 21

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

DATE	WELLHEAD ³	SPOT MARKET⁵	FOREIGN IMPORTS ³	CITY GATES ³	DELIVERED TO RESIDENTIAL ³
1990	1.71	1.67	1.94	3.03	5.80
1991	1.63	1.45	1.82	2.90	6.22
1992	1.73	1.75	1.85	3.01	6.28
1993	2.03	2.10	2.03	3.21	6.67
1994	1.85	1.84	1.87	3.07	6.89
1995	1.55	1.56	1.49	2.78	6.58
1996	2.16	2.39	1.96	3.27	6.97
1997	2.32	2.54	2.15	3.66	6.94
1998	1.96	2.11	1.97	3.07	7.45
1999	2.19	2.28	2.23	3.10	7.34
2000	3.69	3.94	3.88	4.62	8.51
2001	4.00	4.34	4.36	5.24	9.91
2002	2.95	3.26	3.14	4.10	8.60
2003	4.88	5.48	5.18	5.84	10.62
2004	5.46	5.94	5.78	6.61	11.64
2005	7.33	8.67	8.09	8.72	13.72
2006	6.40	6.81	6.87	8.28	14.16
2007	6.38	6.89	6.87	8.02	14.19
2008	8.07	8.80	8.77	9.59	15.45
2000	0.01	0.00	0	0.00	10.10
January	4.60	5.72	6.18	7.98	12.49
February	3.70	4.56	5.21	7.25	12.26
March	3.38	3.83	4.34	6.83	11.98
April	3.18	3.49	3.67	5.68	11.68
May	3.23	3.63	3.48	5.47	12.86
June	3.38	3.53	3.51	5.53	14.26
July	3.45	3.48	3.50	5.67	15.27
August	3.37	3.30	3.29	5.58	15.61
September	2.98	2.97	2.91	5.32	14.80
October	3.83	4.05	3.92	5.62	11.78
November	4.20	4.00	4.40	6.31	11.48
December	4.66	5.49	5.23	6.23	10.30
2009 Average	3.66	4.00	4.14	6.12	12.90
January	5.14	6.29	5.95	6.82	10.45
February	4.89	5.78	5.62	6.61	10.57
March	4.36	4.70	4.87	6.42	10.83
April	3.92	4.08	4.13	5.86	11.70
May	4.04	4.24	4.13	5.82	12.71
June	4.25	4.73	4.24	6.08	14.24
July	4.36	4.51	4.40	6.32	15.50
August	4.22	4.43	4.14	6.23	15.91
September	3.78	3.92	3.76	5.71	15.03
October	3.51	3.70	N/A	5.83	13.06
November	N/A	3.79	N/A	N/A	N/A
December	N/A	4.79	N/A	N/A	N/A
2010 Average	4.25	4.58	4.58	6.17	13.00

e Estimated r Revised p Preliminary See footnote in Appendix B.

Table 21A
UNITED STATES AVERAGE NATURAL GAS PRICES (MMBTU)
(Dollars/MMBTU)

	2	SPOT	FOREIGN	CITY	DELIVERED TO
DATE	WELLHEAD ³	MARKET ⁵	IMPORTS ³	GATES ³	RESIDENTIAL ³
1990	1.64	1.61	1.87	2.91	5.58
1991	1.57	1.40	1.75	2.79	5.98
1992	1.67	1.68	1.78	2.89	6.04
1993	1.95	2.02	1.95	3.09	6.42
1994	1.78	1.77	1.80	2.95	6.63
1995	1.49	1.50	1.43	2.67	6.33
1996	2.08	2.30	1.88	3.14	6.70
1997	2.23	2.44	2.07	3.52	6.67
1998	1.88	2.03	1.89	2.95	7.16
1999	2.11	2.19	2.15	2.98	7.06
2000	3.54	3.79	3.73	4.44	8.19
2001	3.85	4.17	4.19	5.04	9.53
2002	2.83	3.14	3.02	3.94	8.27
2003	4.69	5.27	4.98	5.62	10.21
2004	5.25	5.71	5.56	6.35	11.19
2005	7.05	8.34	7.77	8.38	13.19
2006	6.15	6.55	6.60	7.96	13.62
2007	6.13	6.63	6.61	7.72	13.64
2008	7.76	8.46	8.44	9.22	14.85
January	4.42	5.50	5.94	7.67	12.01
February	3.56	4.38	5.01	6.97	11.79
March	3.25	3.68	4.17	6.57	11.52
April	3.06	3.36	3.53	5.46	11.23
May	3.11	3.49	3.35	5.26	12.37
June	3.25	3.40	3.38	5.32	13.71
July	3.32	3.35	3.37	5.45	14.68
August	3.24	3.18	3.16	5.37	15.01
September	2.87	2.86	2.80	5.12	14.23
October	3.68	3.89	3.77	5.40	11.33
November	4.04	3.85	4.23	6.07	11.04
December	4.48	5.28	5.03	5.99	9.90
2009 Average	3.52	3.85	3.98	5.89	12.40
January	4.94	6.05	5.72	6.56	10.05
February	4.70	5.56	5.40	6.36	10.16
March	4.19	4.52	4.68	6.17	10.41
April	3.77	3.92	3.97	5.63	11.25
May	3.88	4.08	3.97	5.60	12.22
June	4.09	4.55	4.08	5.85	13.69
July	4.19	4.34	4.23	6.08	14.90
August	4.06	4.26	3.98	5.99	15.30
September	3.63	3.77	3.62	5.49	14.45
October	3.38	3.55	N/A	5.61	12.56
November	N/A	3.64	N/A	N/A	N/A
December	N/A	4.60	N/A	N/A	N/A
2010 Average	4.08	4.40	4.41	5.93	12.50

e Estimated r Revised p Preliminary See footnote in Appendix B.

Table 22

LOUISIANA STATE OIL AND GAS DRILLING PERMITS ISSUED BY TYPE

Excluding OCS

DATE	DEVELOPMENTAL +		= TOTAL =		ONSHORE
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
1997	1,424	138	1,562	85	1,477
1998	1,171	115	1,286	96	1,190
1999	908	109	1,017	79	938
2000	1,363	90	1,453	151	1,302
2001	1,277	88	1,365	96	1,269
2002	902	123	1,025	90	935
2003	1,152	112	1,264	83	1,181
2004	1,535	98	1,633	57	1,576
2005	1,882	114	1,996	74	1,922
2006	2,040	97	2,137	61	2,076
2007	2,082	68	2,150	34	2,116
2008	2,296	78	2,374	40	2,334
January	123	6	129	0	129
February	117	1	118	0	118
March	101	5	106	1	105
April	105	3	108	2	106
May	96	1	97	1	96
June	118	0	118	1	117
July	122	1	123	2	121
August	101	4	105	1	104
September		2	93	1	92
October	131	4	135	1	134
November		2	113	2	111
December		1	120	0	120
2009 Total	1,335	30	1,365	12	1,353
January	169	3	172	1	171
February	118	2	120	2	118
March	192	0	192	1	191
April	182	1	183	2	181
May	118	0	118	4	114
June	181	5	186	0	186
July	163	6	169	1	168
August	179	3	182	4	178
September		4	191	9	182
October	135	4	139	4	135
November		8	148	3	145
December		6	156	1	155
2010 Total	1,914	42	1,956	32	1,924

e Estimated r Revised p Preliminary

Figure 11

LOUISIANA STATE DRILLING PERMITS ISSUED Federal OCS Excluded

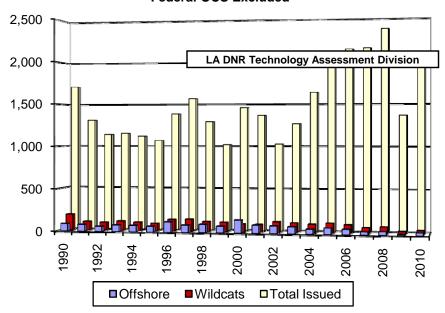


Figure 12

LOUISIANA AVERAGE ACTIVE RIGS

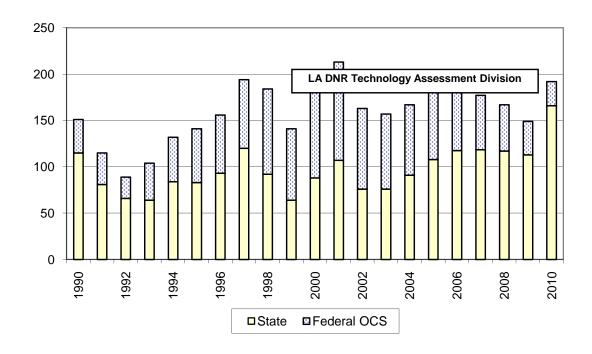


Table 23
LOUISIANA AVERAGE RIGS RUNNING

DATE	State	State Sout	h Inland	State	Total	Federal	Total	LA ⁴
DATE	North ⁴	Water ⁴	Land ⁴	Offshore	State	Offshore	Offshore ⁴	TOTAL
	NOTUI	water	Land	Offshore	State	Offshore	(State+OCS)	IOIAL
1989	16	17	35	34	102	38	72	140
1990	19	20	36	40	115	36	76	151
1991	11	16	31	23	81	34	57	115
1992	9	13	27	16	66	23	39	88
1993	11	12	22	19	64	40	59	104
1994	14	16	25	29	84	48	78	132
1995	16	15	28	23	82	58	81	141
1996	19	19	31	25	93	63	88	156
1997	21	23	48	28	120	74	102	194
1998	19	21	38	14	93	92	106	184
1999	16	16	21	12	65	76	88	141
2000	24	16	37	10	86	108	118	195
2001	30	20	44	10	104	108	119	213
2002	23	16	32	5	76	87	92	163
2003	29	14	29	4	76	81	85	157
2004	39	18	30	3	91	76	79	167
2005	48	23	32	4	108	74	79	182
2006	57	19	38	3	118	70	73	188
2007	58	24	34	2	118	59	61	177
2008	68	20	26	3	117	50	53	167
2000	00			· ·		00	00	
January	90	9	23	3	126	51	54	177
February	80	6	22	2	110	47	49	157
March	71	6	18	1	95	39	40	134
April	74	5	14	0	93	41	41	134
May	77	6	11	2	96	45	47	141
June	76	6	11	1	94	40	41	134
July	81	8	11	1	101	32	34	133
August	89	7	14	1	111	24	25	135
September	96	6	17	1	120	26	27	146
October	106	11	13	1	131	29	30	160
November	112	13	12	1	138	31	32	169
December	121	13	12	1	147	32	33	179
2009 Average	89	8	15	1	113	36	38	150
2000 / (Volugo	00	Ū	10	•		00	00	100
January	130	13	12	1	156	37	38	193
February	136	13	18	2	169	37	39	206
March	137	14	16	3	170	39	42	209
April	140	14	15	3	172	42	45	215
May	140	12	19	2	172	40	42	213
June	139	13	17	1	169	15	16	185
July	138	12	16	1	167	13	14	180
August	137	12	16	2	167	17	19	184
September	136	13	15	1	166	19	20	184
October	131	14	17	2	165	18	20	182
November	127	16	17	2	162	18	20	180
December	127	14	17	1	154	20	21	175
2010 Average	134	13	16	2	166	20 26	28	175 192
e Estimated		p Preliminary	10	2	100	20	20	134
e Laminateu	i ivenisen	priomimary						

Table 24

LOUISIANA STATE PRODUCING CRUDE OIL WELLS

Excluding OCS

DATE	NORTH	SOUTH	OFFSHORE	TOTAL
1963	12,833	14,144	N/A	26,977
1964	13,901	13,661	1,265	28,826
1965	14,505	11,558	3,938	30,001
1966	14,419	12,165	4,330	30,915
1967	14,191	12,183	4,677	31,051
1968	13,856	11,698	4,767	30,321
1969	13,670	11,131	4,954	29,756
1970	13,166	10,363	1,179	24,707
1971	12,889	9,626	1,107	23,623
1972	12,475	8,912	1,048	22,436
1973	11,698	8,249	1,025	20,972
1974	11,984	8,262	985	21,230
1975	12,259	8,094	936	21,288
1976	12,393	7,730	1,073	21,196
1977	12,915	7,444	1,067	21,425
1978	13,019	7,219	1,086	21,324
1979	12,961	6,859	1,078	20,898
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
1997	14,573	4,165	619	20,358
1998	13,975	3,962	546	18,484
1999	13,747	3,971	546	18,264
2000	16,795	3,914	408	21,117
2001	16,494	4,257	393	21,144
2002	16,531	4,071	423	21,026
2003	16,516	3,583	467	20,566
2004	16,148	3,485	462	20,095
2005	17,153	3,648	317	21,117
2006	17,072	3,615	241	20,928
2007	16,994 e	3,711 e	262 e	20,966
2008	17,080 e	3,742 e	266 e	21,088
e Estimated	r Revised p Preliminary	J,. 12 J	200 0	,000
	р			

Figure 13

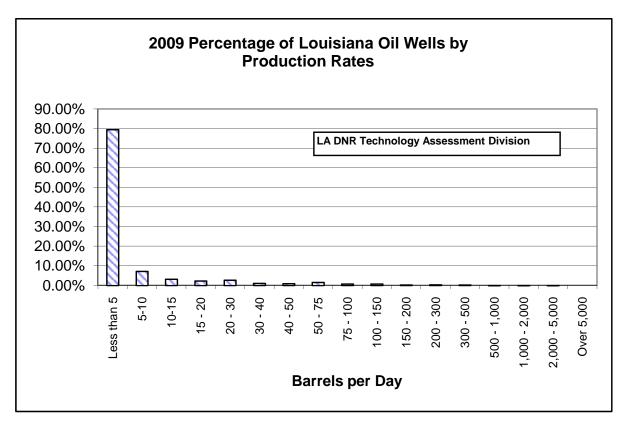


Figure 14

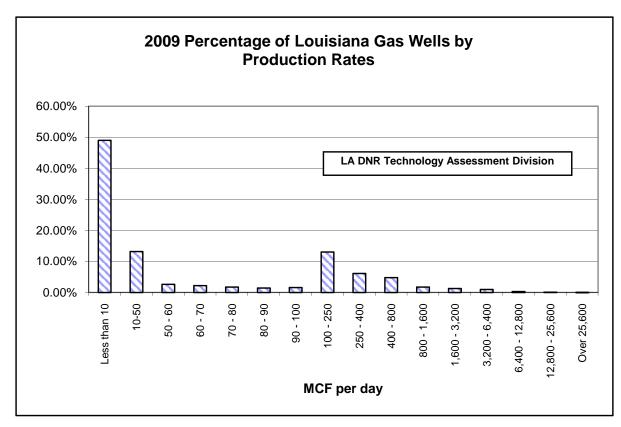


Table 25

LOUISIANA STATE PRODUCING NATURAL GAS WELLS

Excluding OCS

DATE	NORTH	SOUTH	OFFSHORE	TOTAL
1963	4,103	3,545	0	7,648
1964	4,336	3,502	187	8,025
1965	4,477	3,227	618	8,321
1966	4,566	3,381	748	8,694
1967	4,548	3,448	882	8,878
1968	4,563	3,582	1048	9,194
1969	4,558	3,451	1297	9,306
1970	4,511	3,438	311	8,260
1971	4,449	3,389	327	8,164
1972	4,664	3,397	316	8,378
1973	4,927	3,449	332	8,707
1974	5,159	3,458	313	8,929
1975	5,373	3,331	308	9,012
1976	5,851	3,289	362	9,502
1977	6,343	3,331	449	10,123
1978	6,915	3,253	472	10,640
1979	7,372	3,214	514	11,100
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	14,115
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
1997	10,446	2,149	296	12,891
1998	10,579	1,995	259	12,833
1999	10,581	2,010	262	12,853
2000	13,704	3,194	333	17,231
2001	13,054	3,369	311	16,734
2002	13,438	3,309	344	17,092
	13,607			16,944
2003		2,952	384	
2004	13,924	3,005	398	17,327
2005	13,996	2,977	258	17,231
2006	14,478	3,066	204	17,748
2007	14,707 e	3,211 e	227 e	18,145
2008	15,187 e	3,312 e	239 e	18,738

e Estimated r Revised p Preliminary

Table 26

LOUISIANA STATE WELL COMPLETION BY TYPE AND BY REGION Excluding OCS

	YEAR	OFFSHORE	SOUTH	NORTH	TOTAL
	1994	13	103	117	233
	1995	31	100	137	268
	1996	34	67	122	223
С	1997	39	168	106	313
R O	1998	24	100	64	188
UΙ	1999	4	35	60	99
DL	2000	10	51	77	138
Ε	2001	11	92	97	200
	2002	5	91	89	185
	2003	1	106	53	160
	2004	2	106	69	177
	2005	1	86	113	200
	2006	4	137	164	305
	2007	3	125	149	277
	2008	5	101	228	334
	1994	9	141	180	330
	1995	8	126	216	350
	1996	22	154	325	501
N	1997	22	160	383	565
Α	1998	23	170	407	600
ΤG	1999	17	169	287	473
UA	2000	21	166	359	546
R S	2001	20	279	426	725
Α	2002	15	215	249	479
L	2003	15	194	383	592
	2004	7	186	649	842
	2005	9	197	769	975
	2006	6	190	826	1,022
	2007	5	104	923	1,032
	2008	9	97	984	1,090
	1994	12	141	236	389
	1995	8	138	155	301
	1996	12	151	170	333
D 11*	1997	9	165	188	362
D H*	1998	7	104	121	232
RO	1999	8	80	135	223
ΥL	2000	9	98	154	261
E	2001	10	184	205	399
	2002	4	122	147	273
	2003	6	166	134	306
	2004	10	144 166	105	259
	2005	12	166	142	320
	2006	5	197	165	367
	2007	3	164	116	283
	2008	4	94	121	219

^{*} Includes non-producing wells

Table 27

LOUISIANA STATE MINERAL BONUS, RENTAL AND ROYALTY OVERRIDE REVENUES, Excluding OCS

(Million Dollars)

OVERRIDE							
DATE	BONUSES	ROYALTY	RENTALS	TOTAL			
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			
1997	38.27	0.84	25.00	64.11			
1998	42.27	0.69	25.86	68.82			
1999	14.17	0.45	20.27	34.89			
2000	21.12	1.13	14.16	36.41			
2001	29.70	1.89	13.75	45.34			
2002	24.74	2.29	14.26	41.28			
2003	19.54	3.36	12.93	35.83			
2004	29.79	5.05	9.47	44.31			
2005	35.78	2.03	13.75	51.56			
2006	33.49	2.05	21.64	57.18			
2007	45.91	3.35	22.59	71.85			
2008	171.28	5.89	23.09	200.26			
	0	0.00	_0.00	_000			
January	0.91	0.24	1.30	2.44			
February	0.53	0.94	1.23	2.70			
March	1.06	0.23	2.87	4.16			
April	0.76	0.27	1.94	2.96			
May	3.55	0.23	0.85	4.64			
June	0.36	0.57	3.98	4.91			
July	1.76	0.28	1.64	3.67			
August	1.75	0.23	2.23	4.21			
September	0.03	0.28	1.75	2.06			
October	3.04	0.34	1.50	4.88			
November	2.65	0.31	0.90	3.86			
December	1.30	0.35	4.94	6.59			
2009 Total	17.70	4.26	25.13	47.09			
January	3.16	0.69	1.31	5.16			
February	2.29	1.00	0.92	4.21			
March	3.03	0.34	1.11	4.48			
April	1.37	-0.19	0.73	1.91			
May	1.38	0.30	2.53	4.21			
June	5.31	0.30	2.53 1.49	7.07			
	1.12						
July		0.17	1.92	3.21			
August	3.11	0.16	0.89	4.16			
September	1.02	0.15	1.63	2.80			
October	2.53	0.34	1.05	3.92			
November	5.57	1.05	2.05	8.67			
December	2.13	0.31	3.72	6.16			
2010 Total	32.01	4.60	19.35	55.96			
e Estimated	r Revised p Preliminary						

Table 28

LOUISIANA STATE MINERAL ROYALTY REVENUE

Excluding OCS (Million Dollars)

DATE	011	040	PLANT	OTHER	TOTAL
DATE	OIL	GAS	LIQUIDS	OTHER	TOTAL
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	4.51	0.34	216.76
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	95.82 123.51	146.60	4.60	0.00	247.02
1996	123.51	211.31	6.72	0.00	341.54
1997		154.62	5.93 2.58	0.00	273.31
1998 1999	68.85 91.52	121.17 115.10		0.00	192.60
			2.05	0.00	208.66
2000	145.80	212.71	3.46	0.00	361.97
2001	122.16	252.68	6.33	0.00	381.17
2002	100.10	165.24	8.03	0.00	273.37
2003	127.61	288.91	9.31	0.00	425.83
2004	143.84	274.64	14.82	0.00	433.30
2005	149.97	279.03	10.51	0.00	439.50
2006	201.33 r	284.45 r	14.09 r	0.00	499.87 r
2007	288.07 r	304.05 r	18.85 r	0.00	610.98 r
2008	371.84 r	418.86 r	32.13 r	0.00	822.84 r
2000	371.04	410.00	32.13	0.00	022.04
January	10.92 r	19.17 r	0.85 r	0.00	30.94 r
February	9.59 r	14.53 r	0.85 r	0.00	24.97 r
March	13.73 r	13.54 r	0.87 r	0.00	28.14 r
April	13.79 r	12.04 r	0.85 r	0.00	26.67 r
May	17.00 r	12.95 r	1.06 r	0.00	31.01 r
June	19.13 r	12.22 r	1.17 r	0.00	32.51 r
July	18.28 r	11.64 r	1.10 r	0.00	31.02 r
August	20.57 r	10.51 r	1.52 r	0.00	32.60 r
September	20.78 r	8.54 r	1.41 r	0.00	30.74 r
October	23.55 r	12.15 r	1.74 r	0.00	37.44 r
November	20.82 r	11.42 r	1.73 r	0.00	33.97 r
December	22.14 r	15.00 r	1.73 r	0.00	38.88 r
2009 Total	210.30 r	153.71 r	14.89 r	0.00	378.89 r
January	20.71	16.97	1.75	0.00	39.43
February	20.63	14.06	1.78	0.00	36.47
March	22.29	11.35	1.18	0.00	34.82
April	22.36	11.83	1.26	0.00	35.45
May	21.60	12.55	1.86	0.00	36.00
June	21.36	14.19	1.40	0.00	36.95
July	22.27	15.28	1.87	0.00	39.42
August	22.95	14.13	2.03	0.00	39.11
September	21.86	11.10	2.15	0.00	35.11
October	24.34	N/A	N/A	N/A	24.34
November	N/A	N/A	N/A	N/A	N/A
December	N/A	N/A	N/A	N/A	N/A
2010 Total	220.36	121.47	15.28	0.00	357.11
a Estimated a	Revised a Prelimi	inary			

Table 29

LOUISIANA STATE MINERAL SEVERANCE TAX REVENUE⁸ Excluding OCS (Million Dollars)

			OTHER	SEVERANCE
DATE	OIL	GAS	MINERALS	TOTAL
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
1997	257.13	118.27	1.85	377.25
1998	148.96	120.98	1.40	271.34
1999	171.29	102.48	1.82	275.60
2000	337.51	104.33	1.50	443.34
2001	281.95	165.77	1.65	449.38
2002	235.84	173.51	1.33	410.67
2003	316.70	152.13	1.70	470.53
2004	359.77	216.73	1.73	578.23
2005	439.00	243.62	1.61	681.50
2006	506.31	331.40	1.69	839.41
2007	529.75	354.11	1.67	885.52
2008	842.94	293.66	1.65	1,138.25
January	39.09	27.38	0.15	66.61
February	22.82	18.26	0.10	41.18
March	28.68	31.48	0.23	60.38
April	15.17	15.21	0.06	30.43
May	27.42	25.19	0.15	52.76
June	31.75	25.62	0.16	57.54
July	37.52	27.49	0.19	65.20
August	38.23	21.61	0.15	59.98
September	23.07	29.05	0.09	52.20
October	43.02	24.17	0.14	67.33
November	34.59	22.48	0.14	57.21
December	36.15	24.25	0.09	60.49
2009 Total	377.51	292.18	1.63	671.32
January	33.68	17.17	0.13	50.98
February	41.89	19.54	0.06	61.48
March	42.40	27.55	0.16	70.10
April	36.80	6.96	0.09	43.86
May	46.96	27.08	0.16	74.19
June	46.44	35.13	0.17	81.74
July	46.56	29.74	0.11	76.41
August	41.55	30.47	0.19	72.21
September	46.97	-8.38	0.11	38.70
October	47.02	6.88	0.16	54.06
November	39.07	15.63	0.12	54.82
December	47.57	16.41	0.13	64.11
2010 Total	516.90	224.18	1.58	742.67
e Estimated	r Revised p Preliminary			

Table 30
STATE REVENUE FROM LOUISIANA'S OUTER CONTINENTAL SHELF 13 (Dollars)

			(20)	OTHERS		
YEAR	RENTALS	BONUSES	ROYALTIES	REVENUE	GOMESA	TOTAL
				_		
1986	610,567	1,912,734	66,176,203	0		68,699,504
1987	148,578	3,150,519	11,043,115	574,520,000		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	412,229	1,744,928	9,621,860	8,400,000		20,179,017
1999	357,379	241,659	6,284,879	8,400,000		15,283,917
2000	321,695	1,268,244	12,690,937	15,254,978		22,680,876
2001	303,675	2,148,111	30,454,058	7,735,941		40,641,785
2002	94,841	0	11,768,383	28,363		11,891,587
2003	284,563	2,842,662	26,447,045	21,775		29,596,045
2004	490,745	7,620,500	30,145,237	6,613		38,256,482
2005	374,717	2,521,931	27,995,948	7,849		30,900,445
2006	494,362	5,947,411	24,325,787	1,304,257		32,071,817
2007	196,129	-2,695,489	25,498,932	89,134		23,088,706
2008	412,813	6,196,386	36,547,175	2,607,022		45,763,396
2009r	339,802	463,332	21,433,896	80,201	6,347,321	28,664,552
2010	355,697	2,892,749	19,321,141	35,844	699,757	23,305,188

See footnotes on Appendix B: "OCSLA" & "GOMESA"

Table 31

LOUISIANA STATE TOTAL MINERAL REVENUE
(Dollars)

YEAR	FEDERAL OCS	FEDERAL ONSHORE	STATE BOUNDARIES	TOTAL
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	639,182,812	654,412,032
1994	20,591,546	532,000	560,371,998	581,495,544
1995	15,037,933	728,000	638,942,698	654,708,631
1996	23,122,240	943,209	770,137,601	794,203,050
1997	26,631,194	817,329	714,672,685	742,121,208
1998	20,179,017	996,000	532,755,940	553,930,957
1999	15,283,917	1,276,465	519,144,200	535,704,582
2000	22,680,876	1,024,730	839,883,694	863,589,300
2001	40,641,785	1,481,176	875,887,102	918,010,063
2002	11,891,587	730,156	725,323,377	737,945,120
2003	29,596,045	1,182,451	932,191,569	962,970,065
2004	38,256,482	1,364,965	1,055,838,962	1,095,460,408
2005	30,900,445	1,569,882	1,166,491,860	1,198,962,188
2007	23,088,706	940,888	1,545,321,941	1,569,351,535
2008	45,763,396	3,703,240	2,160,050,125	2,209,516,761
2009	28,664,552	914,421	1,097,296,119	1,126,875,091
2010	23,305,188	3,123,211	1,233,993,657 e	1,260,422,056 e

e Estimated r Revised p Preliminary

Federal OCS: See footnotes on Appendix B "OCSLA" & "GOMESA"

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. It is fiscal year data.

Oil and gas produced on federal onshore pay severance tax to the state by the producer on the non-royalty share of the production, and the royalty share of the production is exempted.

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

Table 32

REVENUE TO FEDERAL GOVERNMENT COLLECTED FROM OIL AND GAS LEASES IN THE LOUISIANA OUTER CONTINENTAL SHELF 12

(Area beyond the state's 3-mile offshore boundary) (Dollars)

YEAR	BONUS PAYMENTS	RENTAL PAYMENTS	OTHER REVENUES	PRODUCTION ROYALTIES	TOTAL ^a COLLECTION			
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	24,330,068	53,231,380	40,394,227	2,549,759,516	3,154,940,691			
1997	1,169,790	55,761,920	65,651,370	2,857,126,443	3,789,383,151			
1998	9,207,972	51,518,286	-14,452,431	2,267,502,514	2,313,776,341			
1999	1,169,790	40,463,226	49,219,184	2,228,250,265	2,319,102,465			
2000	83,630,219	32,710,256	167,647,231	3,045,847,943	3,329,835,649			
2001	160,037,859	30,078,009	177,773,259	5,126,344,201	5,494,233,328			
GULF OF MEXICO TOTAL								
2001	632,482,979	188,455,045	3,126,962	6,674,371,634	7,498,436,619			
2002	138,423,162	153,303,576	3,252,702	3,841,164,517	4,136,143,958			
2003	1,147,014,322	245,963,859	4,983,819	4,535,938,009	5,933,900,009			
2004	523,416,154	214,303,045	2,570,343	4,607,776,092	5,348,065,634			
2005	518,426,651	221,784,370	1,897,501	5,313,350,455	6,055,458,976			
2006	865,262,735	224,006,816	2,839,550	6,514,658,836	7,606,767,938			
2007	373,930,998	200,993,255	3,166,689	6,441,214,179	7,019,305,120			
2008	6,818,747,137	231,026,391	3,105,849	7,850,622,155	14,903,501,532			
2009	1,181,075,491 r	226,229,847 r	3,013,594 r	4,161,415,445 r	5,571,734,377 r			
2010	979,569,294	236,631,251	-3,531,170	3,743,286,144	4,955,955,519			

^a Total collection, including state 8G shares.

See footnote in Appendix B.

e Estimated r Revised p Preliminary

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 Louisiana	TOTAL US
1989	123	479	143	1,691	2,436	26,501
1990	120	435	150	1,772	2,477	26,254
1991	127	408	144	1,775	2,454	24,682
1992	125	417	126	1,643	2,311	23,745
1993	108	382	149	1,880	2,519	22,957
1994	108	391	150	1,922	2,571	22,457
1995	108	387	142	2,269	2,906	22,351
1996	128	382	148	2,357	3,015	22,017
1997	136	427	151	2,587	3,301	22,546
1998	101	357	97	2,483	3,038	21,034
1999	108	384	108	2,442	3,042	21,765
2000	97	310	122	2,751	3,280	22,045
2001	87	341	136	3,877	4,441	22,446
2002	75	335	91	4,088	4,589	22,677
2003	66	314	72	4,251	4,703	21,891
2004	58	304	65	3,919	4,346	21,371
2005	68	299	65	3,852	4,284	21,757
2006	68	312	48	3,500	3,928	20,972
2007	76	326	56	3,320	3,778	21,317
2008	60	277	51	3,388	3,776	19,121
2009	55	269	46	3,570	3,940	20,682

See footnotes on Appendix B

Figure 15

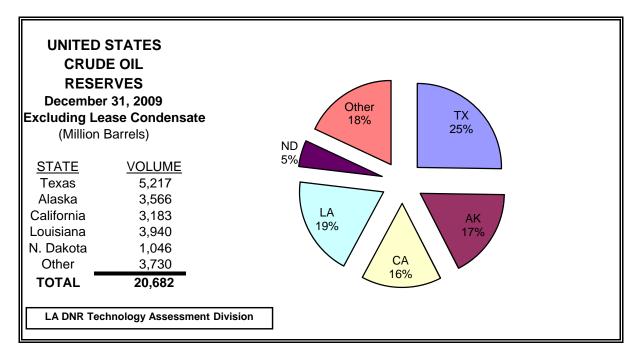


Table 34

LOUISIANA ESTIMATED LEASE CONDENSATE PROVED RESERVES⁹

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

YEAR	North	South Onshore	South Offshore	Federal OCS	Total Louisiana	TOTAL US
1989	20	196	12	278	506	1,389
1990	20	182	12	258	472	1,302
1991	21	175	9	253	458	1,244
1992	19	151	8	226	404	1,226
1993	19	133	9	235	396	1,192
1994	21	123	9	233	386	1,147
1995	24	136	11	305	476	1,197
1996	24	127	11	422	584	1,307
1997	30	134	12	433	609	1,341
1998	23	138	16	435	612	1,336
1999	25	134	15	435	609	1,295
2000	22	130	17	437	606	1,333
2001	27	141	19	325	512	1,398
2002	19	107	11	300	437	1,346
2003	19	82	11	251	363	1,215
2004	21	66	9	205	301	1,221
2005	23	72	9	228	332	1,218
2006	29	65	10	185	289	1,339
2007	31	69	11	180	291	1,415
2008	27	64	8	151	250	1,433
2009	26	74	10	134	244	1,633

See footnotes on Appendix B

Figure 16

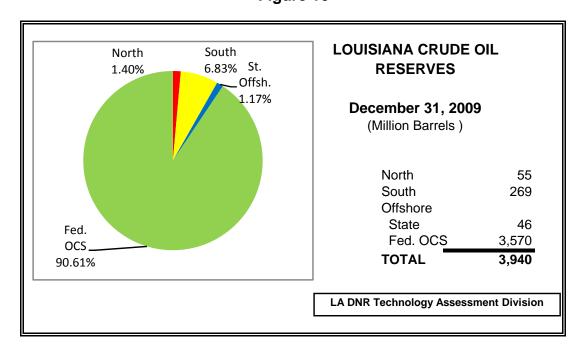


Table 35

LOUISIANA ESTIMATED DRY NATURAL GAS PROVED RESERVES

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 Louisiana	TOTAL US
1989	2,652	8,645	1,219	24,187 с	36,703 с	167,116
1990	2,588	8,171	969	22,679 c	34,407 c	169,346
1991	2,384	7,504	1,024	21,611 c	32,523 c	167,062
1992	2,311	6,693	776	19,653 с	29,433 с	165,015
1993	2,325	5,932	917	19,383 с	28,557 c	162,415
1994	2,537	6,251	960	20,835 c	30,583 с	163,837
1995	2,788	5,648	838	21,392 c	30,666 c	165,146
1996	3,105	5,704	734	21,856 с	31,399 c	166,474
1997	3,093	5,855	725	21,934 с	31,607 c	167,223
1998	2,898	5,698	551	20,774 с	29,921 c	164,041
1999	3,079	5,535	628	19,598 с	28,840 с	167,406
2000	3,298	5,245	696	19,788 с	29,027 c	177,427
2001	3,881	5,185	745	19,721 c	29,532 c	183,460
2002	4,245	4,224	491	18,500 c	27,460 c	186,946
2003	5,074	3,746	506	16,728 c	26,054 c	189,044
2004	5,770	3,436	382	14,685 с	24,273 c	192,513
2005	6,695	3,334	418	13,665 с	24,112 c	204,385
2006	6,715	3,335	424	11,824 c	22,298 c	211,085
2007	6,344	3,323	378	11,090 с	21,135 c	237,726
2008	7,876	2,799	898	10,450 с	22,023 с	244,656
2009	17,146	2,844	701	9,362 c	30,053 с	272,509

^C Includes Federal Offshore Alabama

Figure 17

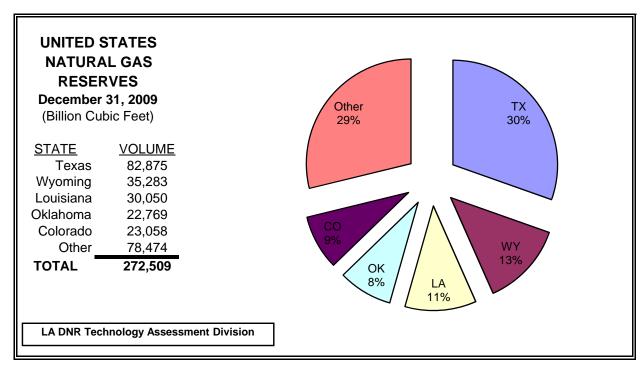


Table 36

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 Louisiana	TOTAL US
1989	40	215	39	297	591	4,991
1990	38	249	37	261	585	4,982
1991	38	242	41	292	613	4,978
1992	41	229	47	246	563	4,999
1993	38	201	21	255	515	4,838
1994	48	214	19	267	548	4,876
1995	55	359	16	191	621	5,005
1996	61	284	36	199	580	5,209
1997	50	199	12	352	613	5,291
1998	34	187	13	341	575	4,852
1999	36	230	19	398	681	5,316
2000	39	207	21	315	582	7,012
2001	35	128	41	273	477	6,595
2002	30	119	37	346	532	6,648
2003	48	100	35	235	418	6,244
2004	53	87	27	410	577	6,707
2005	61	96	32	375	563	6,947
2006	60	94	22	390	484	7,133
2007	69	99	24	348	540	7,728
2008	68	78	55	313	514	7,842
2009	98	90	43	301	532	8,557
See footnotes	on Appendix E	3				

Figure 18

LOUISIANA Fed. OCS 31.15% **NATURAL GAS RESERVES December 31, 2009** (Billion Cubic Feet) North **5**7.05% North 17,146 South 2,844 Offshore St. . State 701 Offsh. Fed. OCS 9,362 2.33% South **TOTAL** 30,053 9.46% LA DNR Technology Assessment Division

LA DNR Technology Assessment Division

Table 37
LOUISIANA NONAGRICULTURAL EMPLOYMENT¹

	OIL & GAS	CHEMICAL	PETROLEUM	ALL	TOTAL
DATE	PRODUCTION	INDUSTRY	MANUFACTURING	PIPELINE*	EMPLOYMENT
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
1997	51,559	29,935	11,038	792	1,797,225
1998	54,875	30,196	10,984	702	1,837,505
1999	44,645	28,898	11,046	693	1,846,026
2000	45,714	28,335	10,345	724	1,872,494
2001	47,009	27,337	10,643	2,417	1,868,902
2002	43,839	25,694	10,566	2,306	1,848,656
2003	42,339	24,558	10,395	2,334	1,851,570
2004	40,249	23,516	9,958	2,122	1,866,870
2005	41,179	23,269	10,240	2,179	1,843,237
2006	44,394	22,188	10,310	2,347	1,810,667
2007	46,764	22,612	10,764	2,454	1,869,965
	40.404	00.700	44.400	0.540	4 000 000
January	48,481	22,768	11,129	2,543	1,863,686
February	48,411	22,752	11,175	2,575	1,878,531
March	48,676	22,804	11,156	2,591	1,887,335
April	49,863	22,755	11,198	2,565	1,893,683
May	50,145	22,799	11,238	2,576	1,903,581
June	50,906	22,630	11,317	2,569	1,900,273
July	51,326	22,861	11,462	2,579	1,869,305
August	51,663	22,861	11,357	2,612	1,889,545
September	51,391	22,754	11,248	2,606	1,877,398
October	52,237	22,753	11,379	2,466	1,899,106
November	51,854	22,813	11,379	2,473	1,904,950
December	51,534	22,905	11,406	2,478	1,907,517
2008 Average	50,541	22,788	11,287	2,553	1,889,576
January	50,278	22,953	11,314	2,459	1,864,462
February	49,578	22,853	11,343	2,448	1,866,692
March	48,769	22,706	11,303	2,452	1,867,437
April	47,238	22,602	11,334	2,389	1,860,493
May	47,228	22,481	11,300	2,390	1,864,693
June	46,971	22,374	11,395	2,397	1,853,558
July	45,902	22,467	11,493	2,480	1,822,508
August	45,728	22,440	11,528	2,472	1,827,591
September	45,257	22,323	11,401	2,469	1,832,649
October	45,295	22,211	11,317	2,500	1,841,799
November	45,345	22,183	11,338	2,505	1,848,337
December	45,886	22,138	11,288	2,506	1,842,516
2009 Average	46,956	22,478	11,363	2,456	1,849,395
_	•	-	1 forward but avaluda	-	,,

^{*} Natural Gas Pipeline employment is included in 2001 forward but excluded in prior years. See footnote in Appendix B.

Figure 19

LOUISIANA ENERGY CONSUMPTION BY SOURCE

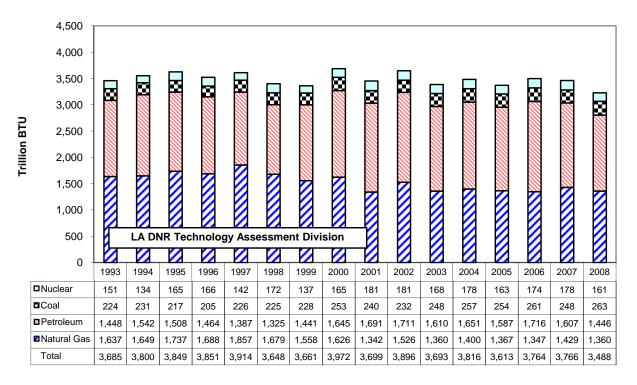


Figure 20
LOUISIANA REFINERY CRUDE OIL INPUT BY SOURCE

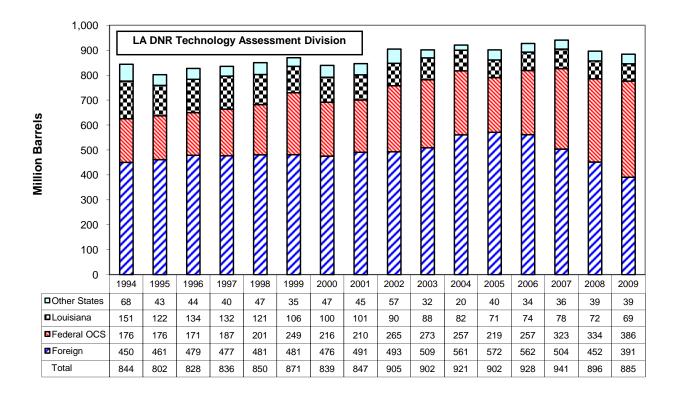


Table 38

LOUISIANA ENERGY CONSUMPTION ESTIMATES BY SOURCE 11

Year	Total Energy (TBTU)	Total Natural Gas (BCF)	Total Petroleum (MBBLS)	Total Coal (MST)	Total Nuclear (Million KWH)	Imp(+) Exp(-) Net Electic (Million KWH)
1968	2,295.0	1,521	134,583	N/A	0	0
1969	2,572.3	1,763	147,947	N/A	0	0
1970	2,701.4	1,841	150,456	0	0	0
1971	2,809.3	1,884	162,470	0	0	0
1972	2,989.3	1,940	184,947	0	0	0
1973	3,225.9	2,010	209,641	0	0	0
1974	3,313.3	2,008	218,882	0	0	0
1975	3,028.8	1,789	210,174	0	0	0
1976	3,419.1	2,044	234,995	0	0	0
1977	3,794.6	2,191	268,572	79	0	0
1978	3,930.1	2,249	277,765	172	0	0
1979	3,805.3	1,978	304,884	118	0	0
1980	3,651.3	1,794	293,743	111	0	0
1981	3,688.6	1,782	295,191	1363	0	0
1982	3,441.2	1,556	287,419	3724	0	0
1983	3,284.5	1,413	275,058	6,154	0	0
1984	3,413.5	1,594	248,344	6,855	0	0
1985	3,192.5	1,386	240,776	9,217	2457	0
1986	3,353.4	1,439	260,602	10,459	10637	0
1987	3,435.5	1,501	257,313	10,391	12,324	0
1988	3,473.1	1,446	271,773	12,848	13,785	0
1989	3,592.6	1,538	266,193	12,471	12,391	0
1990	3,623.8	1,571	259,533	12,547	14,197	0
1991	3,545.9	1,508	256,789	12,965	13,956	0
1992	3,636.0	1,546	268,559	13,674	10,356	656
1993	3,688.6	1,578	273,580	13,676	14,398	1232
1994	3,837.3	1,624	294,700	14,100	12,779	972
1995	3,837.2	1,718	288,998	13,357	15,686	952
1996	3,848.5	1,664	279,292	12,534	15,765	964
1997 1998	3,828.0	1,659	258,290	13,874 13,891	13,511	1036 1063
1996	3,564.0	1,568	248,094 278,926	13,953	16,428 13,112	802
	3,608.6	1,495			15,796	
2000	3,965.2	1,537	327,692	15,737		532
2001	3,712.6	1,306	325,828	14,934	17,336	732
2002	3,762.1	1,426	331,522	14,676	17,305	891
2003	3,693.3	1,308	300,899	15,592	16,126	892
2004	3,815.9	1,346	310,503	16,059	17,080	1099
2005	3,613.0	1,310	297,878	15,856	15,676	811
2006	3,763.8	1,298	320,703	16,410	16,735	955
2007	3,766.2	1,378	302,200	15,500	17,100	833
2008	3,593.0	1,305	291,623	14,950	17,111	811

e Estimated r Revised p Preliminary

TBTU = Trillion BTU BCF = Billion Cubic Feet

MBBLS = Thousand Barrels MST = Thousand Short Tons

See footnote in Appendix B.

KWH = Kilowatt-hours

Table 39
LOUISIANA REFINERY'S CRUDE OIL STATISTICS

DATE	AVERAGE STOCK ON HAND (Barrels)	DAILY AVERAGE RUNS TO STILL (Barrels)	LICENSED REFINERIES
1990	13,783,012	2,045,697	23
1991	14,197,185	2,043,097	23
1992	14,331,412	2,090,248	22
1993	14,521,046	2,159,422	20
1994	15,126,534	2,150,403	19
1995	14,325,305	2,109,245	19
1996	14,462,108	2,709,243	19
1997	14,275,221	2,257,275	19
1998	14,965,117	2,312,239	19
1999	15,467,674	2,414,781	17
2000	14,818,774	2,334,842	16
2001	15,425,670	2,480,357	17
2002	16,335,210	2,470,556	18
2003	15,246,004	2,469,756	17
2004	15,938,390	2,543,087	18
2005	16,217,856	2,458,189	18
2006	16,741,544	2,528,319	17
2007	16,108,022	2,687,658	17
2008	16,248,826	2,440,984	18
2000	10,240,020	2,440,304	10
January	12,684,605	2,315,025	19
February	14,021,148	2,337,882	19
March	14,447,035	2,455,252	19
April	12,227,132	2,547,519	19
May	13,031,211	2,477,907	19
June	13,993,456	2,494,736	19
July	13,199,715	2,324,515	19
August	12,108,032	2,481,945	19
September	12,987,613	2,487,827	19
October	12,135,677	2,394,014	19
November	12,361,075	2,302,466	19
December	13,038,545	2,335,085	19
2009 Average	13,019,604	2,412,848	19
January	13,621,850	2,117,149	19
February	13,361,331	2,039,755	19
March	15,158,713	2,376,899	19
April	14,754,289	2,810,551	19
May	14,234,034	2,799,208	19
June	13,631,902	2,829,975	19
July	15,282,793	2,841,795	19
August	14,722,037	2,727,811	19
September	14,595,680	2,766,679	19
October	11,641,982	2,735,788	19
November	11,987,613 e	2,723,856 e	19
December	12,015,677 e	2,710,863 e	19
2010 Average	13,750,658 e	2,623,361 e	19

e Estimated r Revised p Preliminary



Exxon-Mobil Refinery - Baton Rouge

Figure 21

LOUISIANA LIGNITE PRODUCTION BY MINE SOURCE
(Thousand Tons Shipped)

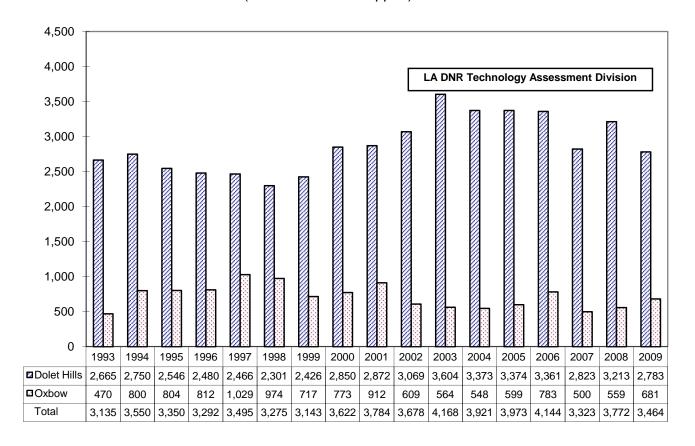


Table 40

LOUISIANA ELECTRIC UTILITIES NET ELECTRICITY GENERATION 14 BY FUEL TYPE

(Million KWH)

YEAR	COAL	LIGNITE	OIL	GAS	NUCLEAR	TOTAL
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	60 272	23,823	12,324 13,785	51,309
1988 1989	14,372 14,227	4,059 3,854	272 298	24,286 21,900	12,391	56,774 52,670
1999	13,890	3,910	130	26,041	14,197	58,168
1991	14,786	4,126	45	24,245	13,956	57,158
1992	15,613	4,183	483	24,554	10,356	55,188
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	58,643
1997	16,453	4,499	646	26,010	13,511	61,120
1998	16,131	4,631	600	28,318	16,428	66,107
1999	16,386	4,780	397	30,162	13,112	64,837
2000	14,484 *	N/A	625	26,696	15,796	57,601 *
2001	10,917 *	N/A	1,722	20,402	17,336	50,378 *
2002	12,259 [*]	N/A	68	25,086	17,305	54,922 *
2003	11,020 *	N/A	1,008	15,094	16,126	43,485 *
2004	11,324 *	N/A	3,694	15,139	17,080	47,604 [*]
2005	11,416 *	N/A	3,378	13,688	15,676	44,158 *
2006	11,545 *	N/A	1,757	10,854	16,735	40,891 *
2007	10,736 *	N/A	1,977	13,872	17,078	43,523 *
2008	11,213 *	N/A	1,901	14,680	15,371	43,164 *
2009	11,025 *		1,460	14,325	16,782	43,104 [*]
2003	11,025	N/A	1,700	17,020	10,762	43,392

^{*} Cajun Electric Power Cooperative's purchase by Louisiana Generating LLC changed their classification from electric utility to independent power producer.

e Estimated r Revised See footnotes on Appendix B

APPENDICES

Abbreviations	A-1
Data Sources	B-1
Glossary	C-1
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 BTU DNR DOE DOI EIA FOB	Billion Cubic Feet British Thermal Unit Louisiana Department of Natural Resources United States Department of Energy United States Department of the Interior Energy Information Administration, DOE Free on Board
GOM	Gulf of Mexico
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	MT	Montana
AR	Arkansas	ND	North Dakota
CA	California	NM	New Mexico
CO	Colorado	OK	Oklahoma
IL	Illinois	PA	Pennsylvania
KS	Kansas	TX	Texas
LA	Louisiana	UT	Utah
MI	Michigan	WY	Wyoming

Appendix B

Data Sources*

- 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. October 2002 to Present, NATURAL GAS WEEK, Washington, D.C.: Energy Intelligence Group. Prior, SURVEY OF DOMESTIC SPOT MARKET PRICES, Houston, TX: Dynegy Inc. (formerly Natural Gas Clearinghouse).
- 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, Bureau of Ocean Energy Management, Regulation, and Enforcement.
- 13. NATURAL RESOURCES REVENUE, Denver, CO: U.S. Department of the Interior, Office of Natural Resources Revenue.
- 14. ELECTRIC POWER MONTHLY, Washington, D.C.: U.S. Department of Energy, Energy Information Administration.
 - Unless otherwise specified, data is from the Louisiana Department of Natural Resources.

An Explanation of Changes in Oil and Gas Statistics

Note # 1

Current production data and all future reports will reflect changes due to modifications in the reporting system by the Department of Natural Resources Office of Conservation, Production Audit Section. Only the oil and gas production data in state jurisdiction is affected.

The new data for oil will not include crude oil, condensate or raw make recovered from natural gas processing plants. In the past these products were added to the state production as crude oil or condensate.

A separate report on gas plants liquids production is not available at the present.

In addition, the gas data system has been adjusted to reflect reporting production on the date produced. Previously it had been reported on the date first purchased.

The new reporting system should produce more accurate and timely data.

The Technology Assessment Division is not the source of these data sets, but merely reports data provided to us by the Office of Conservation. However, we understand that users of our time series data need consistency over time. For that reason our time series has been adjusted backwards to 1980 using these new definitions.

Note #2

Producing oil and gas well data since 2000 reflect changes due to modifications in the reporting system by the Department of Natural Resources Office of Conservation.

The new data for oil and natural gas producing wells count them as productive if they had any production in the month, previous system counted only the producing wells at the end of the month. The new reporting system should produce more accurate and timely data.

The Technology Assessment Division is not the source of these data sets, but merely reports data provided to us by the Office of Conservation. However, we understand that users of our time series data need consistency over time, but due to lack of accurate information the time series has been adjusted backwards to 2000 using the new system.

Other factors that affected the big increase on wells numbers are the big jump on energy prices around 2000, and the inactive wells

Outer Continental Shelf Lands Act (OCSLA)

The OCSLA of 1953 (67 Stat. 462), as amended (43 U.S.C. 1331 et seq. (1988)) established Federal jurisdiction over submerged lands on the Outer Continental Shelf (OCS) seaward of State boundaries. Under the OCSLA, the Secretary of the Interior is

responsible for the administration of mineral exploration and development of the OCS. The Act empowers the Secretary to grant leases to the highest qualified responsible bidder(s) on the basis of sealed competitive bids and to formulate such regulations as necessary to carry out the provisions of the Act. The Act, as amended, provides guidelines for implementing an OCS oil and gas exploration and development program. The basic goals of the Act include the following:

- To establish policies and procedures for managing the oil and natural gas
 resources of the OCS that are intended to result in expedited exploration and
 development of the OCS in order to achieve national economic and energy policy
 goals, assure national security, reduce dependence on foreign sources, and
 maintain a favorable balance of payments in world trade.
- 2. To preserve, protect, and develop oil and natural gas resources of the OCS in a manner that is consistent with the need
 - (a) to make such resources available to meet the nation's energy needs as rapidly as possible;
 - (b) to balance orderly resource development with protection of the human, marine, and coastal environments;
 - (c) to ensure the public a fair and equitable return on the resources of the OCS;
 - (d) to preserve and maintain free enterprise competition.
- 3. To encourage development of new and improved technology for energy resource production, this will eliminate or minimize risk of damage to the human, marine, and coastal environments.

Royalty revenues from Federal offshore leases on the 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 OCSLA 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 amendments required that the affected coastal state will receive 27 percent of the

revenues generated from the leasing and development of oil and natural gas resources located in the Federal 8(g) zone. The law provided for the following distribution of revenues to Louisiana 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.

Gulf of Mexico Energy Security Act (GOMESA)

On December 20, 2006, the President signed into law the GOMESA of 2006 (Pub. Law 109-432). The Act significantly enhances OCS oil and gas leasing activities and revenue sharing in the Gulf of Mexico (GOM). The Act:

- A. Stipulated that 8.3 million acres be offered for oil and gas leases. This acreage is included in both the Central Gulf Planning Area and the Eastern Gulf Planning Area. The 8.3 million acres consist of approximately 2 million acres in the Central Gulf was first that was offered for lease after enactment of the law was and was included in Lease Sale 205 in October 2007; additional .5 million acres in the Eastern Gulf received additional environmental review and was offered in Lease Sale 224 in March 2008; and the remaining 5.8 million acres in the Central Gulf was offered for leasing at Lease Sale 208 in March, 2009.
- B. Updated moratoria (bans) areas in the Gulf. Those tracts in the Eastern Gulf of Mexico that are within 125 miles of Florida, all tracts east of the Military Mission Line, and tracts in the Central Gulf of Mexico within 100 miles of Florida that are included in the moratorium area which extends until 2022.

- C. Created revenue sharing provisions for four Gulf oil and gas producing States Alabama, Louisiana, Mississippi and Texas, and their coastal political subdivisions. There are two phases in the GOMESA revenue sharing.
 - a. Phase 1: Covers Fiscal Year 2007 through Fiscal Year 2016, 37.5 percent of all qualified OCS revenues will be shared among the four States (30%) and subdivisions (7.5%) for those new leases in the .5 million acres in the Eastern Gulf and the 5.8 million acres in the Central Gulf. Qualified OCS revenues are bonuses, selected rentals and production royalty (including RIK sales, except SPR transfer). Additionally, 12.5 percent of revenues are allocated to the Land and Water Conservation Fund (LWCF). The final regulations for Phase I revenue sharing were issued on December 23, 2008 and specify that the MMS intends to disburse funds on or before March 31st of the fiscal year following the fiscal year to which the qualified OCS revenues were attributed.
 - b. Phase 2: Covers Fiscal Year 2017 and beyond, the four States and subdivisions will share 37.5 percent of revenues from all Gulf leases issued after December 20, 2006. GOMESA funds are to be used for coastal conservation, restoration and hurricane protection.
- D. Allowed for the exchange of existing leases in the moratorium areas for bonus or royalty credit to be used in the Gulf of Mexico. A credit will be provided to lessees who relinquish certain eligible leases in the Gulf of Mexico. Leases are considered eligible if they lie within 125 miles of the Florida coast in the Eastern Planning Area or within 100 miles of the Florida coast in the Central Planning Area. The lessees will be allowed to use the credits in lieu of monetary payment for either a lease bonus bid or royalty due on oil and gas production from most other leases in the Gulf of Mexico or transfer the credits to other Gulf of Mexico lessees for their use.

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 non-manufacturing 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 non-manufacturing 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 Light Louisiana Sweet (LLS) crude, which is effective at the middle and at 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 Light Louisiana Sweet (LLS) 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. It is the 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 pressurizing, quantities vented and flared, and non-hydrocarbon gases removed in treating or processing operations. It includes all quantities of gas used in field and processing operations.

Natural Gas, OCS Gas. OCS gas volume is as reported. Most are "dry" gas, though some are "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

Henry Hub Settled NYMEX. The last trading day price for the month before delivery posted in the New York Mercantile Exchange for natural gas at Henry Hub. **Spot Market.** The average price of natural gas paid at the regional spot market receipt points or zones as reported by the Energy Intelligence Group's NATURAL GAS WEEK. The data are a volume weighted average and reflect market activity information gathered during the entire month before the publication date, regardless of delivery date. The data are not an arbitrary weighting by production zone, but a true deal-by-deal volume weighting of prices gathered. Data prior to October 2002 were from Dynegy's survey of the domestic natural gas spot market receipt points or zones located in Louisiana. The new and old points or zones are as follows:

NATURAL GAS PIPELINES AND SALES POINTS FOR PRICES

ANR ANR Eunice, LA Patterson, LA COLUMBIA GULF COLUMBIA GULF TRANSMISSION CO. Average Louisiana onshore Average of Erath, Rayne, and Texaco Henry Plant in Louisiana laterals LOUISIANA INTRASTATES LOUISIANA INTRASTATES Average of Faustina, Bridgeline, Average of LIG, Bridgeline, LRC, LIG, and Monterrey pipelines and Acadian pipelines **SONAT** SOUTHERN NATURAL South Louisiana Saint Mary Parish, LA **TENNESSEE GAS TENNESSEE GAS** Average Zone 1 of 500 & 800 Vinton, LA TEXAS GAS TRANSMISSION **TEXAS GAS TRANSMISSION** Zone 1 (North Louisiana) Zone 1 (North Louisiana) **GULF SOUTH PIPELINE** TRUNKLINE GAS CO. **HENRY HUB**

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.

Dynegy

- 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.

Natural Gas Week

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 from there. 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)

Gas Production at 14.73 psia

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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
1989	391,342,357	1,215,011,023	156,153,771	1,762,507,151
1990	411,990,694	1,194,394,888	148,392,174	1,754,777,755
1991	394,486,602	1,178,953,537	116,788,989	1,690,229,128
1992	380,916,600	1,188,458,789	116,287,491	1,685,662,880
1993	367,510,962	1,160,338,473	126,526,532	1,654,375,967
1994	361,971,515	1,090,345,158	130,967,154	1,583,283,827
1995	374,569,365	1,067,857,751	139,240,110	1,581,667,226
1996	423,597,332	1,085,724,307	162,694,485	1,672,016,124
1997	450,692,967	1,028,512,775	164,180,018	1,643,385,760
1998	437,854,747	1,028,913,898	147,211,205	1,613,979,851
1999	393,199,782	976,555,159	118,149,642	1,487,904,583
2000	389,046,189	998,183,657	109,700,568	1,496,930,414
2001	398,669,527 r	1,013,161,682 r	113,437,548 r	1,525,268,757
2002	394,821,438 r	894,110,994 r	100,203,563 r	1,389,135,995
2003	424,829,404 r	861,626,563 r	85,083,840 r	1,371,539,808
2004	484,946,605 r	822,311,081 r	69,498,690 r	1,376,756,377
2005	548,641,901 r	707,489,823 r	54,557,630 r	1,310,689,355
2006	583,273,660 r	725,050,318 r	68,621,268 r	1,376,945,246
2007	623,722,576 r	685,754,611 r	72,842,683 r	1,382,319,870
2008	698,675,491 r	602,867,272 r	85,616,475 r	1,387,159,238 r
2000	000,070,101	002,007,272	00,010,1701	1,007,100,200
January	65,737,885 r	46,636,059 r	6,329,090 r	118,703,034 r
February	61,476,699 r	42,621,363 r	5,810,008 r	109,908,071 r
March	69,240,941 r	46,723,447 r	6,213,305 r	122,177,692 r
April	70,324,259 r	45,058,184 r	5,644,632 r	121,027,075 r
May	75,613,087 r	45,348,769 r	6,719,685 r	127,681,541 r
June	75,447,737 r	42,015,870 r	6,554,235 r	124,017,842 r
July	81,859,704 r	41,924,460 r	6,789,341 r	130,573,505 r
August	87,756,191 r	40,845,247 r	7,126,002 r	135,727,440 r
September	88,742,547 r	38,557,539 r	6,188,041 r	133,488,126 r
October	98,172,120 r	38,391,391 r	6,860,384 r	143,423,896 r
November	101,616,478 r	36,337,480 r	6,039,862 r	143,993,821 r
December	104,716,559 r	37,099,841 r	6,100,031 r	147,916,431 r
2009 Total	980,704,206 r	501,559,651 r	76,374,616 r	1,558,638,473 r
January	111,519,671	35,368,122	5,732,750	152,620,543
February	106,770,943	33,315,941	4,896,567	144,983,451
March	126,842,002	36,806,478	3,522,023	167,170,503
April	123,843,534	35,190,301	6,452,357	165,486,193
May	133,445,937	36,199,431	5,976,436	175,621,804
June	136,606,520	34,394,202	6,219,953	177,220,675
July	143,079,292	35,220,425	6,569,660	184,869,377
August	143,612,288	35,244,574	6,306,906	185,163,767
September	146,559,494	34,806,015	5,686,215	187,051,724
October	144,132,877 p	34,663,955 p	5,720,673 p	184,517,505 p
November	147,041,286 p	34,027,622 p	5,630,893 p	186,699,801 p
December	149,947,020 p	33,977,667 p	5,603,571 p	189,528,259 p
2010 Total	1,613,400,862 p	419,214,733 p	68,318,005 p	2,100,933,601 p

e Estimated r Revised p Preliminary

^{*} See Table 11 corresponding volumes at 15.025 psia and footnote in Appendix B.

LOUISIANA TOTAL GAS PRODUCTION, WET AFTER LEASE SEPARATION

Natural Gas and Casinghead Gas

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

	ONSHORE	OFFSHO		TOTAL
DATE	_	State	Federal OCS ¹²	
1989	1,606,353,379	156,153,771	3,006,576,077	4,769,083,228
1990	1,606,385,582	148,392,174	3,706,324,064	5,461,101,819
1991	1,573,440,139	116,788,989	3,289,968,620	4,980,197,748
1992	1,569,375,389	116,287,491	3,338,101,465	5,023,764,345
1993	1,527,849,435	126,526,532	3,386,808,671	5,041,184,638
1994	1,452,316,673	130,967,154	3,492,406,781	5,075,690,608
1995	1,442,427,115	139,240,110	3,636,068,016	5,217,735,242
1996	1,509,321,639	162,694,485	3,783,483,306	5,455,499,430
1997	1,479,205,742	164,180,018	3,901,964,998	5,545,350,758
1998	1,466,768,646	147,211,205	3,890,978,799	5,504,958,650
1999	1,369,754,941	118,149,642	3,913,456,139	5,401,360,722
2000	1,387,229,846	109,700,568	3,837,150,457	5,334,080,871
2001	1,411,831,209 r	113,437,548 r	3,895,134,261	5,420,403,019
2002	1,288,932,431 r	100,203,563 r	3,527,116,066	4,916,252,060
2003	1,286,455,968 r	85,083,840 r	3,342,004,232	4,713,544,040
2004	1,307,257,686 r	69,498,690 r	2,897,440,676 e	4,274,197,053 e
2005	1,256,131,724 r	54,557,630 r	2,229,362,826 e	3,540,052,181 e
2006	1,308,323,978 r	68,621,268 r	2,089,462,261 e	3,466,407,507 e r
2007	1,309,477,187 r	72,842,683 r	2,062,554,663 e	3,444,874,533 e r
2008	1,301,542,763 r	85,616,475 r	1,677,562,129 e	3,064,721,367 e r
January	112,373,944 r	6,329,090 r	137,335,526 e	256,038,560 e r
February	104,098,062 r	5,810,008 r	128,879,818 e	238,787,889 e r
March	115,964,387 r	6,213,305 r	144,963,930 e	267,141,622 e r
April	115,382,442 r	5,644,632 r	141,350,613 e	262,377,688 e r
May	120,961,856 r	6,719,685 r	145,159,254 e	272,840,795 e r
June	117,463,607 r	6,554,235 r	151,240,610 e	275,258,452 e r
July	123,784,164 r	6,789,341 r	162,743,684 e	293,317,189 e r
August	128,601,438 r	7,126,002 r	154,030,205 e	289,757,645 e r
September	127,300,086 r	6,188,041 r	148,909,168 e	282,397,294 e r
October	136,563,511 r	6,860,384 r	153,649,729 e	297,073,624 e r
November	137,953,958 r	6,039,862 r	142,268,693 e	286,262,514 e r
December	141,816,400 r	6,100,031 r	149,220,030 e	297,136,460 e r
2009 Total	1,482,263,857 r	76,374,616 r	1,759,751,260 e	3,318,389,733 e r
January	146,887,793	5,732,750	149,228,684 e	301,849,227 e
February	140,086,884	4,896,567	139,639,286 e	284,622,737 e
March	163,648,480	3,522,023	153,828,692 e	320,999,195 e
April	159,033,835	6,452,357	140,780,791 e	306,266,983 e
May	169,645,368	5,976,436	139,009,518 e	314,631,322 e
June	171,000,721	6,219,953	130,852,958 e	308,073,633 e
July	178,299,717	6,569,660	128,312,548 e	117,311,861 e
August	178,856,862	6,306,906	130,107,239 e	117,080,127 e
September	181,365,508	5,686,215	114,785,804 e	98,553,583 e
October	178,796,832 p	5,720,673 p	N/A	112,961,788 p
November	181,068,908 p	5,630,893 p	N/A	110,528,300 p
December	183,924,688 p	5,603,571 p	N/A	110,181,564 p
2010 Total	2,032,615,596 p	68,318,005 p	1,226,545,520 e	3,327,479,121 p

e Estimated r Revised p Preliminary

NOTE: The 2003 Federal OCS production is estimated from the marketed production

^{*} See Table 12 corresponding volumes at 15.025 psia and footnote in Appendix B.

LOUISIANA MARKETED AND DRY GAS PRODUCTION¹² (Billion Cubic Feet (BCF) at 14.73 psia and 60 degrees Fahrenheit)*

	N	MARKETED		EXTRACTION	
DATE	State	OCS ¹²	Total ³	LOSS ³	DRY ³
1968	5,017 e	1,399	6,545 e	140	6,276
1969	5,424 e	1,804	7,373 e	179	7,049
1970	5,538 e	2,250	7,944 e	193	7,595
1971	5,474 e	2,608	8,244 e	195	7,887
1972	5,120 e	2,853	8,132 e	198	7,775
1973	5,217 e	3,025	8,407 e	207	8,036
1974	4,438 e	3,316	7,909 e	194	7,559
1975	3,792 e	3,299	7,233 e	190	6,901
1976	3,542 e	3,465	7,147ı e	173	6,834
1977	3,604 e	3,611	7,360 e	166	7,049
1978	3,368 e	4,108	7,626 e	162	7,315
1979	3,149 e	4,117	7,412 e	166	7,101
1980	2,966 e	3,974	7,079 e	142	6,798
1981	2,715 e	4,065	6,916 e	142	6,638
1982	2,406 e	3,766	6,295 e	129	6,043
1983	2,190 e	3,142	5,439 e	124	5,208
1984	2,282 e	3,543	5,942 e	133	5,693
1985	1,928 e	3,086	5,114 e	118	4,896
1986	1,997 e	2,899	4,993 e	116	4,780
1987	1,974 e	3,148	5,225 e	125	4,998
1988	2,114 e	3,066	5,284 e	120	5,060
1989	2,102 e	2,977	5,180 e	121	4,957
1990	1,573 e	3,669	5,347 e	119	5,123
1991	1,878 e	3,257	5,135 e	129	4,905
1992	1,748 e	3,265	5,013 e	133	4,782
1993	1,774 e	3,317	5,091 e	130	4,861
1994	1,795 e	3,479	5,273 e	129	5,041
1995	1,785 e	3,425	5,211 e	146	4,962
1996	1,734 e	3,662	5,396 e	140	5,150
1997	1,535 e	3,799	5,335 e	147	4,980
1998	1,583 e	3,800	5,383 e	142	5,032
1999	1,598	3,718	5,316	162	5,011
2000	1,484	3,647	5,131	168	5,027
2001	1,532	3,691	5,223	156	5,067
2002	1,389	3,335 e r	4,724 e	160 e	4,564 e r
2003	1,377	3,257 e r	4,635 e r	143 e	4,492 e r
2004	1,380	2,934 e r	4,314 e r	136 e	4,178 e r
2005	1,322 r	2,299 e r	3,621 e r	130 e	3,492 e r
2006	1,388 r	2,115 e r	3,504 e r	121 er	3,382 e r
2007 2008	1,393 r 1,405 r	2,026 e r 1,673 e r	3,419 e r 3,077 e r	117 er 116 er	3,301 er 2,961 er
2008	1,403 r 1,639 r	1,772 e	3,411 e	126 e	3,284 e r
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^{*} See Table 13 corresponding volumes at 15.025 psia and footnote in Appendix B.

UNITED STATES OCS GAS PRODUCTION¹²

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

YEAR	LOUISIANA	TEVAC	CALIEODNIA	TOTAL
	LOUISIANA 645 580 472	TEXAS 0	CALIFORNIA	TOTAL
1965 1966	645,589,472 965,387,854	42,059,386	0	645,589,472 1,007,447,240
1967	1,087,262,810	99,952,947	0	1,187,215,756
1968	1,413,467,614	109,910,788	799,685	1,524,178,086
1969	1,822,544,152	127,096,983	4,845,851	1,954,486,985
1970	2,273,147,052	133,300,405	12,229,147	2,418,676,604
1971	2,634,014,045	127,357,909	15,671,479	2,777,043,433
1972	2,881,364,748	147,156,460	10,033,581	3,038,554,789
1973	3,055,628,252	148,673,638	7,286,549	3,211,588,439
1974	3,349,170,882	159,979,402	5,573,642	3,514,723,926
1975	3,332,169,075	122,572,765	3,951,633	3,458,693,473
1976	3,499,865,919	92,582,425	3,475,201	3,595,923,545
1977	3,647,513,694	86,943,285	5,526,469	3,739,983,448
1978	4,149,731,158	231,857,451	5,269,758	4,386,858,368
1979	4,158,521,732	511,590,610	5,540,606	4,675,652,948
1980	4,013,707,456	624,642,529	6,018,184	4,644,368,168
1981	4,106,494,612	730,275,835	13,018,920	4,849,789,367
1982	3,803,740,070	858,020,303	18,107,445	4,679,867,818
1983	3,173,892,371	850,817,216	24,652,314	4,049,361,901
1984	3,578,740,589	931,293,587	47,292,436	4,557,326,612
1985	3,116,884,507	834,926,527	65,851,130	4,017,662,165
1986	2,927,832,280	978,370,557	60,261,186	3,966,464,023
1987	3,180,107,212	1,204,488,343	55,902,749	4,440,498,305
1988	3,096,881,645	1,178,422,567	50,152,326	4,325,456,538
1989	3,006,576,077	1,165,112,959	51,809,130	4,223,498,166
1990	3,706,324,064	1,348,075,368	50,973,576	5,105,373,008
1991	3,289,968,620	1,184,936,500	52,894,097	4,527,799,217
1992	3,338,101,465	1,239,389,554	56,337,793	4,701,108,883
1993	3,386,808,671	1,027,937,761	53,194,699	4,544,502,364
1994	3,492,406,781	1,014,204,140	54,633,354	4,669,972,144
1995	3,636,068,016	908,520,055	55,887,350	4,711,732,699
1996	3,783,483,306	972,873,764	68,121,164	5,054,719,057
1997 1998	3,901,964,998 3,890,978,799	965,334,787	74,813,429	5,111,087,682 4,885,443,089
1999	3,913,456,139	867,606,779 814,124,878	76,486,583 79,367,732	5,034,470,230
2000	3,837,150,457	886,473,041	77,598,107	5,018,433,562
2001	3,895,134,261	916,020,487	72,367,542	5,248,963,271
2001	0,000,104,201	310,020,407	12,001,042	0,240,000,271
	GULF (OF MEXICO	PACIFIC	TOTAL
	CENTRAL	WESTERN		
2002	3,580,828,493	1,019,741,703	69,174,162	4,699,918,283
2003	3,392,897,697	1,087,114,884	59,258,478	4,593,381,866
2004	2,941,564,138	1,121,137,433	55,749,584	4,187,036,121
2005	1,973,860,605	788,940,947	55,171,229	2,819,465,782
2006	2,165,245,866	795,608,571	41,216,237	3,002,354,380
2007	2,137,362,345	648,316,715	46,427,556	2,878,983,938
2007	1,738,406,351	491,513,872	43,821,897	2,415,599,912
2009	1,798,169,109	473,781,946	42,519,067	2,497,629,246
NOTE: Starting	ig iti zuuz iviivio nas	s not formally published	production by state a	ujaceni areas

NOTE: Starting in 2002 MMS has not formally published production by state adjacent areas e Estimated r Revised p Preliminary

^{*} See Table 15 corresponding volumes at 15.025 psia and footnote in Appendix B.

UNITED STATES NATURAL GAS AND CASINGHEAD GAS PRODUCTION³ (Billion Cubic Feet (BCF) at 14.73 psia and 60 degrees Fahrenheit)*

		WET AFTER			GROSS
DATE	GROSS	LEASE SEPARATION	MARKETED	DRY	IMPORTS
1989	21,074	18,237	18,095	17,311	1,382
1990	21,523	18,744	18,594	17,810	1,532
1991	21,749	18,703	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	24,114	20,084	19,812	18,854	2,937
1997	24,213	20,122	19,865	18,902	2,994
1998	24,108	20,064	19,961	19,024	3,152
1999	23,823	19,915	19,805	18,832	3,586
2000	24,174	20,289	20,198	19,182	3,782
2001	24,501	20,667	20,570	19,616	3,977
2002	23,941	19,984	19,921	18,964	4,015
2003	24,119	20,072	19,974	19,099	3,944
2004	23,970	19,615	19,517	18,591	4,259
2005	23,457	19,046	18,927	18,051	4,341
2006	23,507	19,539	19,382	18,476	4,186
2007	24,591	20,340	20,019	19,089	4,608
2008	25,754	21,406	21,240	20,286	3,981
January	2,250 r	1,875 r	1,867 r	1,793 r	357 r
February	2,070 r	1,713 r	1,704 r	1,636 r	322 r
March	2,281 r	1,890 r	1,879 r	1,801 r	325 r
April	2,183 r	1,825 r	1,814 r	1,739 r	322 r
May	2,231 r	1,870 r	1,860 r	1,779 r	266 r
June	2,140 r	1,816 r	1,804 r	1,727 r	282 r
July	2,176 r	1,858 r	1,846 r	1,767 r	317 r
August	2,167 r	1,870 r	1,859 r	1,779 r	337 r
September	2,099 r	1,773 r	1,761 r	1,683 r	307 r
October	2,212 r	1,864 r	1,853 r	1,771 r	273 r
November	2,163 r	1,812 r	1,800 r	1,720 r	295 r
December	2,205 r	1,856 r	1,845 r	1,760 r	350 r
2009 Total	26,177 r	22,021 r	21,893 r	20,955 r	3,751 r
January	2,239	1,875	1,864	1,783	384
February	2,064	1,720	1,709	1,634	324
March	2,318	1,932	1,919	1,835	318
April	2,222	1,872	1,859	1,779	298
May	2,266	1,934	1,923	1,838	298
June	2,156	1,844	1,833	1,753	282
July	2,209	1,917	1,905	1,824	327
August	2,246	1,954	1,942	1,858	304
September	2,254	1,908	1,896	1,811	286
October	N/A	N/A	N/A	N/A	N/A
November	N/A	N/A	N/A	N/A	N/A
December	N/A	N/A	N/A	N/A	N/A
2010 Total	19,975	16,957	16,850	16,114	2,823

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^{*} See Table 16 corresponding volumes at 15.025 psia and footnote in Appendix B.

Appendix E

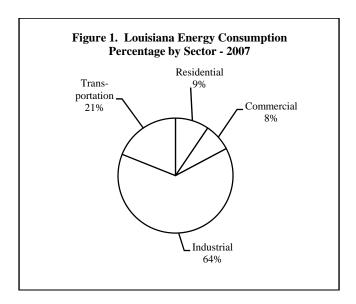
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LOUISIANA, AN ENERGY CONSUMING STATE: AN UPDATE USING 2007 DATA

by Bryan Crouch, P.E.

Louisiana ranks high among the states in overall energy consumption. In 2007, Louisiana ranked 8th in total energy consumption and 3rd in per capita energy consumption. The main reason for Louisiana's high energy consumption is the extremely energy intensive petrochemical and petroleum refining industry that is located in the state. The abundance of Louisiana's natural resources has historically meant low energy prices, which have attracted a large cluster of energy intensive industries to the state. Figures 1 & 2 below show Louisiana energy consumption by sector and source. The large amount of energy consumed by the petrochemical and petroleum refining industry is reflected in the high percentage for the industrial sector and the high percentages for natural gas and petroleum.



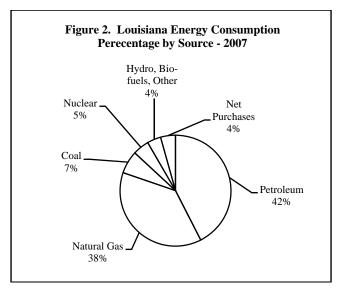


Table 1 shows where Louisiana ranks among the states in various energy consumption categories, and lists the top energy consuming state for each category.

Louisiana is also a large producer of energy, mainly in the form of crude oil and natural gas. Table 2 on the following page presents the Louisiana energy balance for 2007. Energy production from Louisiana's federal OCS area dwarfs state production. The energy balance is calculated both inclusive and exclusive of Louisiana's OCS oil and gas production.

Table 1. Louisian Am	•	gy Consun States - 20	•
Category	Rank	TBTU	#1 State (TBTU)
Residential	25	356.4	Texas (1,594.1)
Commercial	22	292.3	California (1,613.9)
Industrial	2	2,403.8	Texas (5,950.9)
Transportation	13	713.8	California (3,386.8)
Coal	31	249.8	Texas (1,609.1)
Natural Gas	3	1,423.1	Texas (3,641.4)
Petroleum	5	1,599.9	Texas (5,886.9)
Electricity	20	271.5	Texas (1,173.1)
Total	8	3,766.2	Texas (11,834.5)
Per Capita (MBTU)	3	861.2	Alaska (1,062.3)

3,030.2 TBTU

3,766.3 TBTU

TBTU

INCLUDING LOUISIANA OCS 6,796.5

Table 2. Louisiana Energy Balance - 2007 ¹

EN	ENERGY SOURCE		PRODUCTION	CTION	CON	CONSUMPTION	NET ST Exclu	NET STATE ENERGY PRODUCTION Excluding OCS Including OCS	GY PROD	PRODUCTION Including OCS
PETROLEUM:	STATE OIL 2 LOUISIANA OCS OIL 2	448.9 2,476.6	${ m TBTU}^4$	(77.4 MMBBL) (427.0 MMBBL)	1,599.9 TBTU	(302.2 MMBBL)	-1,151.0	TBTU	1,325.6	TBTU
NATURAL GAS:	STATE GAS ³ LOUISIANA OCS GAS ³	1,400.7	${ m TBTU}^4$	(1.356 TCF) (2.022 TCF)	1,423.1 TBTU	J (1.378 TCF)	-22.4	TBTU	2,066.3	TBTU
COAL:	LIGNITE	56.4	TBTU	(3.127 MMSTON)	249.8 TBTU	U (15.5 MMSTON)	-193.4	TBTU	-193.4	TBTU
NUCLEAR ELECTRIC POWER	WER	174.6	TBTU	(16.7 Billion kWH)	179.1 TBTU	U (17.1 Billion kWH)	-4.5	TBTU	-4.5	TBTU
HYDROELECTRIC, BIOFUELS & OTHER	UELS & OTHER	150.6	TBTU		150.6 TBTU	D	0.0	TBTU	0.0	TBTU
NET INTERSTATE PURCHASES OF INCLUDING ASSOCIATED LOSSES	NET INTERSTATE PURCHASES OF ELECTRICITY INCLUDING ASSOCIATED LOSSES				163.8 TBTU	ה	-163.8	TBTU	-163.8	TBTU
TOTALS:	EXCLUDING LOUISIANA OCS	2,231.2	TBTU		3,766.3 TBTU	J	-1,535.1	TBTU		

The Louisiana energy balance for 2007 shows that the state consumed 1,535 more TBTUs of energy than it produced if Louisiana OCS production is not included. If Louisiana OCS production is included, the state is a net producer of energy by 3,030 TBTUs.

OCS = Outer Continental Shelf (federal waters seaward of the state's 3-mile offshore boundary) kWH = Kilowatt hour MMSTON = Million Short Tons MMBBL = Million Barrels TCF = Trillion Cubic Feet TBTU = Trillion BTU's

^{1.} Unless otherwise noted, data is obtained from the Energy Information Administration's latest published figures for state energy consumption.

^{2.} Includes condensate

^{3.} Includes gas plant liquids

^{4.} Louisiana Department of Natural Resources data

DOE GUIDANCE: DAVIS-BACON ACT REQUIREMENTS ASSOCIATED WITH RECOVERY ACT FUNDS

by Patty Nussbaum

The U. S. Department of Energy (DOE) issued guidance on how to implement the Davis-Bacon Act (DBA) prevailing wage rate requirements for State Energy Program (SEP) grant recipients under the American Recovery and Reinvestment Act of 2009 (Recovery Act). Following is a summary of the DOE guidance.

ARRA DAVIS-BACON REQUIREMENTS

Section 1606 of **ARRA**:

Notwithstanding any other provision of law and in a manner consistent with other provisions in this Act, all laborers and mechanics employed by contractors and subcontractors on projects funded directly by or assisted in whole or in part by and through the Federal Government pursuant to this Act shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 3 1 of title 40, United States Code. With respect to the labor standards specified in this section, the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and section 3 145 of title 40, United States Code.

BACKGROUND

The DBA requires all contractors and subcontractors to pay laborers and mechanics employed under the contract prevailing wages and benefits for similar employees and projects in the locality.

DBA normally applies to contracts over \$2000.00 for construction, alteration, and/or repair of public buildings or public works. However, the Recovery Act specifies that all laborers and mechanics employed on any project funded by Recovery Act funds must be paid the DBA prevailing wage rate. If the entity that receives the work contracts out the work funded by the Recovery Act then it must ensure that the contractor that employs the laborers and mechanics pays them the DBA prevailing wage rate.

CONTRACT CLAUSES

The recipient of the Recovery Funds (for example the State Energy Office) is responsible for DBA compliance by its subgrantees and contractors. The recipient must include the DBA contract clauses in their contracts and grants and require that the DBA contract clauses apply to contracts/subcontracts for the performance of the work.

If an ongoing project later receives Recovery Act funding, the wage determinations must be included

effective as of the date the Recovery Act funding is approved for use on the project.

PAYROLL RECORDS

Grantees/sub-grantees and contractors/subcontractors on projects funded by Recovery Act funds must maintain payroll records for all laborers and mechanics and hold them for three years following the project. Laborers and mechanics must be paid on a weekly basis and the certified weekly payroll must be submitted to the contracting and administering agency.

PUBLISHED WAGE RATES

Wage determinations can be found at http://www.wdol.gov.

RECOVERY ACT FUNDED STATE ENERGY PROGRAM CONSUMER REBATE PROGRAMS

The Department of Labor (DOL) has determined that DBA prevailing wage rate requirements will not apply to consumer rebate programs which allow individual homeowners to apply for rebates either before or after energy efficiency/renewable energy improvements are completed.

The DOE notice can be found on the Technology Assessment website at: http://dnr.louisiana.gov/sec/execdiv/techasmt/programs/ARRA_2009/images/SEP_DBA_Program_Notice_10-003_123009_Final.pdf.

RESIDENTIAL ENERGY CODE UPDATE EXPECTED

by Billy Williamson

In the coming year, the Louisiana State Uniform Construction Code Council is expected to make changes to the Louisiana Uniform Construction Code, which includes residential energy efficiency requirements. Along with requirements of Louisiana State law, a portion of the American Recovery and Reinvestment Act of 2009 requires states to update building energy codes.

State and Federal Legislation Affects the Code

During the 1st Extraordinary Session of 2005, the Louisiana State Legislature passed Act 12, creating the Louisiana State Uniform Construction Code. The act adopted the 2006 International Residential Code (IRC) as the building code for one- and two-family homes. The bill also created the Louisiana State Uniform Construction Code Council "to review and adopt the state uniform construction code, provide training and education of code officials, and accept all requests for amendments of the code, except the Louisiana State Plumbing Code."

Current law states that the Council "shall review, evaluate, and update the state uniform construction code prior to the second regular legislative session after the release of the latest edition of the appropriate code as provided for in R.S. 40:1730.28." The 2009 version of the International Residential Code (2009 IRC) was published in March 2009, prior to the 2009 Regular Legislative Session, and the 2010 Regular Legislative Session convenes on March 29, giving the code council until that date to complete their evaluation and update the code.

The American Recovery and Reinvestment Act of 2009 (ARRA) also requires changes to building energy codes. Section 410 on page 33 of the ARRA states that:

- "(2) The State, or the applicable units of local government that have authority to adopt building codes, will implement the following:
 - (A) A building energy code (or codes) for residential buildings that meets or exceeds the most recently published International Energy Conservation Code, or achieves equivalent or greater energy savings."

Equivalence Discussed

On August 24, 2009 DNR staff received an email from the Building Codes Assistance Program (BCAP) alerting them to a report by Pacific Northwest National Laboratory (PNNL) which stated that, "the 2009 International Residential Code is not equivalent to the 2009 International Energy Conservation Code." However, if the 2009 International Residential Code is adopted with certain amendments, it would be equivalent. The report, which was amended on September 23, 2009, can be found in PDF format at http://www.energycodes.gov/news/irc_iecc_arra.stm.

The report states that in order for the 2009 IRC to be considered equivalent to the 2009 IECC, several changes would have to be made. However, most of the changes suggested do not affect Louisiana. Of those affecting Louisiana, the most notable would require the allowable solar heat gain coefficient (SHGC) for both Louisiana climate zones to be reduced from 0.35 to 0.30.

Table 1. Maximum U-Factors and SHGCs for Fenestration (Windows, Doors, etc)

		IRC 2006	IRC 2009	IECC 2009
*Fenestration	South Louisiana	0.75	0.65	0.65
U-Factor	North Louisiana	0.65	0.50	0.50
**Glazed	South Louisiana	0.40	0.35	0.30
Fenestration SHGC	North Louisiana	0.40	0.35	0.30

^{*}U-factor measures the amount of heat conducted through an element. A higher u-factor means that the element allows more heat to pass through it, leading to greater losses.

The report provided by PNNL provides modeled cost effects associated with these changes. These effects were found by simulating the energy consumption (heating and cooling only) of a model home. For climate zone 2 (South Louisiana), the report determines that the changes to the code would result in annual energy cost savings of \$8. For climate zone 3 (North Louisiana), the report determined the effects of the changes to 6 different cities, with effects ranging from an annual cost increase of \$5 for Atlanta, Georgia to an annual cost decrease of \$4 for Jackson, Mississippi. Taking the average effect for all cities modeled, the average energy cost savings per year in climate zone 3 is approximately \$1.

What It Means

The Code Council is required by law to update the building code and report to the Legislature by the March 29 start of the Regular Legislative Session. In order to meet this deadline, the IRC Subcommittee began evaluation of the 2009 IRC on September 10, 2009. The committee is expected to complete their review in time for the next Code Council meeting on February 9. The Council will then be able to take action on the code update prior to the Legislative Session

There is a delicate balance in home design and construction between initial costs and annual savings that should be considered not only by the homeowner, but also by the energy code development community. This is taken into consideration on all levels of code development. Building codes and standards are typically developed on a national, and occasionally international, level. However, the codes are implemented on a statewide or municipal level and each jurisdiction is unique. This puts the impetus on the code adopting authority to ensure that the changes being made are reasonable for the jurisdiction.

Changes will be made to the Louisiana State Uniform Construction Code in the very near future, including the adoption of a new energy code. The Code Council is expected to adopt the 2009 IRC in time for the 2010 Louisiana Regular Legislative Session. This will ensure that Louisiana stays on the cutting edge of residential energy code adoption and can be a model for other states.

^{**}SHGC measures the amount of radiant heat a fenestration product allows to enter the home. A higher SHGC means more radiant heat enters the home.

LANDSCAPED ROOF SYSTEMS

by Jerry Heinberg, AIA, NCARB, Architect

The Louisiana State Capitol has a green or landscaped roof system over subterranean House Committee meeting rooms (east side) and Senate Committee meeting rooms (west side). The idea to place the committee rooms below grade with a landscaped roof system was aimed at two distinctly different paths of logic. The obvious path is to save the energy which would be lost through exterior walls and a roof. The less obvious reason had to do with the historic significance of the 1931 Capitol's high rise structure. If the flanking meeting rooms were on or above grade, they would greatly change the massing of the bicameral house and senate chambers. By placing these additions underground and landscaping the roof, no changes to the lines and proportion of the existing building would be created. Additionally, the park like grade treatments on the east and west gives serenity as well as deference to the important work taking place inside the Capitol daily. Thus, the energy savings is almost a bonus along with gaining the necessary additional space and preserving the integrity of this National Historic monument.



Louisiana State Capitol 1931¹



Louisiana State Capitol – Green roof over subterranean house committee meeting rooms¹

¹ Photograph provided by Harvey Landry, LDNR.

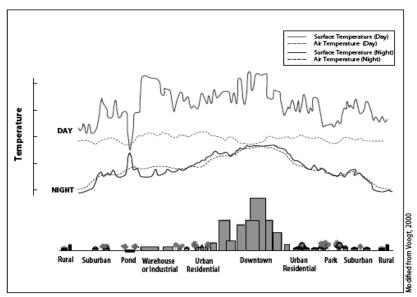
The National Roofing Council of America (NRCA) is beginning to use the term "landscaped roof systems" in lieu of "green roof systems" to prevent confusion in the building industry. Others may also be using the term "vegetative roof." Landscaped roof systems require the combination of roofing concepts and waterproofing concepts. A landscaped roof system is a wet environment, and a waterproofing membrane is mandatory. Roof system details are modified to accommodate growth medium and green components. On a typical low slope roof (≈1/4"/ft slope), the insulation would be found under the waterproof membrane. NRCA recommends a waterproofing membrane be adhered with insulation above it. Therefore, a landscaped roof system membrane is thermally stabilized and protected from damage and puncture by the insulation itself. However, in the case of green or landscaped roofs, the turf or planting will be at the surface, with soil drainage created by crushed stone or gravel below the plants, but above the rigid insulation which sits on top of the waterproof membrane at the lowest level. Positive drainage is strongly recommended. Water must be free to drain from all of the planted area, to collect at common points, and to be directed away from the building. There may be other areas designed specifically to hold the water for use by the planting.

Advantages of Landscaped Roofs	Disadvantages of Landscaped Roofs
Environmentally friendly.	Increased roof weight may require increased structural member sizes and cost.
Can create usable outdoor space.	 Safety/liability may be an issue for public access.
 Increases thermal efficiency of the building. 	•
 Reduces HVAC equipment and operating cost. 	•
Reduces interior noise levels.	•
Extends roof membrane service life.	 If a roof membrane leak does occur, it may be difficult to locate.
 Provides storm-water management, aesthetic benefits, rating system benefits (e.g., LEED™ and Green Globes). 	 Cost to repair roof and then to replace living flora and soil above may be very high by comparison.
 Reduces rooftop temperatures. 	•
Mitigates urban heat islands.	•

The Green Roofing Energy Efficiency Tax Act, (GREETA), March 2009, was bipartisan legislation to create green jobs and protect the environment. GREETA provides a solution to a problem that restricts the movement toward energy-efficient roofing products in the commercial building sector, a major source of carbon emissions. The problem is the Internal Revenue Code requires that commercial roofs be depreciated over a 39-year schedule. A study by Ducker Worldwide, a leading industrial research firm, found that the average life span of a commercial roof is only 17.5 years. This disparity is a major disincentive for building owners to replace older failing roofs with new green roof systems. GREETA will address this problem by allowing building owners to use a 20-year depreciation schedule for roof systems that meet the benchmark ASHRAE 90.1 energy-efficiency standard (set by the American Society of Heating, Refrigerating and Air-Conditioning Engineers). GREETA is projected to begin generating new "green-collar" jobs in the U.S. manufacturing and construction industries while also helping to conserve energy and enhance the environment by reducing carbon emissions. By accelerating demand for technologically advanced green roof systems, GREETA is estimated to:

- Create 40,000 new green jobs among roofing manufacturers and contractors
- Add \$1 billion of taxable annual revenue from the roofing industry
- Reduce carbon emissions by more than 20 million pounds annually
- Reduce U.S. energy consumption by 13.3 million kilowatt hours annually
- Save small businesses billions of dollars through a simpler and more equitable system of taxation

As urban areas develop, changes occur in their landscape. Buildings, roads, and other infrastructure replace open land and vegetation. Surfaces that were once permeable and moist become impermeable and dry.² These changes cause urban regions to become warmer than their rural surroundings, forming an "island" of higher temperatures in the landscape. Communities can take a number of steps to reduce the heat island effect, and creating landscaped roof systems is one of the strategies.



Surface and atmospheric temperatures vary over different land use areas.

Heat islands occur on the surface and in the atmosphere. On a hot, sunny summer day, the sun can heat dry, exposed urban surfaces, such as roofs and pavement, to temperatures 50–90°F (27–50°C) hotter than the air, while shaded or moist surfaces—often in more rural surroundings—remain close to air temperatures.³ Surface urban heat islands are typically present day and night, but tend to be strongest during the day when the sun is shining. In contrast, atmospheric urban heat islands are often weak during the late morning and throughout the day and become more pronounced after sunset due to the slow release of heat from urban infrastructure. The annual mean air temperature of a city with 1 million people or more can be 1.8–5.4°F (1–3°C) warmer than its surroundings.³ On a clear, calm night, however, the temperature difference can be as much as 22°F (12°C).³ Surface temperatures vary more

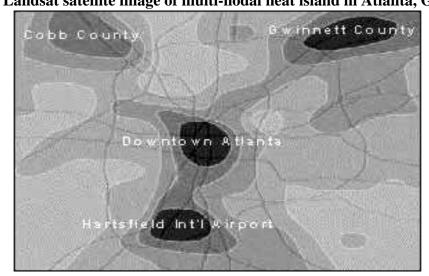
² Reducing Urban Heat Islands: compendium of Strategies. Environmental Protection Agency

³ Trenberth, K.E., P.D. Jones, P. Ambenje, R. Bojariu, D. Easterling, A. Klein Tank, D. Parker, F. Rahimzadeh, J.A. Renwick, M. Rusticucci, B. Soden and P. Zhai. 2007. Observations: Surface and Atmospheric Climate Change. (PDF) (102pp, 24MB)

than air temperatures during the day, but they both are fairly similar at night. The dip and spike in surface temperatures over the pond show how water maintains a fairly constant temperature day and night, due to its high heat capacity.

Elevated temperature from urban heat islands, particularly during the summer, can affect a community's environment and quality of life. While some heat island impacts seem positive, such as lengthening the plant-growing season, most impacts are negative. Higher temperatures in summer increase energy demand for cooling and add pressure to the electricity grid during peak periods of demand. One study estimates that the heat island effect is responsible for 5% - 10% of peak electricity demand for cooling buildings in cities. Increasing energy demand generally results in greater emissions of air pollutants and greenhouse gas emissions from power plants. Higher air temperatures also promote the formation of ground-level ozone. Warmer days and nights, along with higher air pollution levels, can contribute to general discomfort, respiratory difficulties, heat cramps and exhaustion, non-fatal heat stroke, and heatrelated mortality. Hot pavement and rooftop surfaces transfer their excess heat to storm water, which then drains into storm sewers and raises water temperatures as it is released into streams, rivers, ponds, and lakes. Rapid temperature changes can be stressful to aquatic ecosystems.

Surfaces emitting thermal energy do so in the infrared wavelengths. Instruments on satellites and other forms of remote sensing can identify and measure these wavelengths, providing an indication of temperature. By using radiometers mounted on aircraft or a satellite, researchers can easily collect many surface observations. The National Aeronautics and Space Administration (NASA) conducted flyovers using an aircraft-mounted sensor in many cities, including Baton Rouge, Sacramento, and Salt Lake City. Several cities also use Landsat satellite data to classify land cover and identify heat islands. The Landsat 7 satellite, a U.S. satellite used to acquire remotely sensed images of the Earth's land surface and surrounding coastal regions, provides information from which researchers can derive surface temperatures and evaluate heat islands.⁴



Landsat satellite image of multi-nodal heat island in Atlanta, GA

The Landsat 7 satellite was launched in 1999 and was designed to last five years. It continues to function at diminished capacity. The Landsat Data Continuity Mission, scheduled to be launched in 2011, will be the next satellite in the Landsat series.

NEW GUIDE TO ENERGY EFFICIENT HOMES

by Billy Williamson

The Louisiana State Energy Office (LA SEO) is pleased to announce the completion and availability of the new *Energy Efficient Homes in Louisiana*. Since the last revision, the State of Louisiana has adopted the 2006 version of the International Residential Code (IRC). The adoption of this code, specifically the energy efficiency provisions of chapter 11, has necessitated this revision.

Taking these code requirements into consideration, information was revised and baselines for comparison were increased to the stringency of the code. As well as updating existing chapters to agree with the IRC 2006, new chapters on Roofs and Site Selection have been added. To view or download *Energy Efficient Homes in Louisiana*, please visit:

http://dnr.louisiana.gov/sec/execdiv/techasmt/programs/residential/builders_guide_2009/index.htm.

The purpose of this book is to help the homeowner understand that if his home is energy efficient; not only will they benefit by lower energy bills, but the offshoot of using less energy will be a healthier environment, and more time for their family to utilize present energy resources.

This book is to help consumers become more conscious and capable of conserving energy resources. The more energy each family conserves, the less utility companies have to spend for plants and distribution facilities to provide for their customers' energy requirements. This translates into less disturbance and destruction of the natural environment, less use of its nonrenewable resources (such as natural gas and coal), and less pollution.

LA SEO hopes that updating and publishing the *Energy Efficient Homes in Louisiana* will enable homeowners and building professionals to make Louisiana homes as energy efficient as possible.

A History Lesson

The first edition of the *Builder's Guide to Energy Efficient Homes in Louisiana* was published in February 1999. In October 2002, the first revision was printed.

On November 11, 2005, Governor Kathleen Blanco signed Act 12 of the 2005 First Extraordinary Session into law, creating the Louisiana State Uniform Construction Code. The 2006 International Residential Code was officially adopted on January 1, 2007. This was a major step forward for the state, as Louisiana jumped to the forefront of energy code adoption. However, it meant major changes for home designers, builders, and other associated trade groups. In order to help homeowners and builders understand how the new code requirements affect the performance of a home, the LA SEO undertook this latest revision.

New and Revised Content

It does not take long to find changes to *Energy Efficient Homes in Louisiana*. The name has been shortened to incorporate a wider audience. The LA SEO understands that home improvements are

not always made through traditional resources, and as such, wants this book to help all homeowners save on utility costs.

Chapter 1 is a brand new chapter on <u>Site Planning</u> to start the book. Site planning is important to the success of any new construction. This goes beyond finding the best-looking lot. It is important for anyone choosing a site for a new home to match the location with the individual's or family's needs. Also, it is important to consider things like drainage, site access, and soil quality. After the site is selected, the design should take solar positioning very seriously. Louisiana is considered a cooling climate, so steps should be taken to reduce the amount of heat entering a home. To do so, the house should be oriented to reduce the amount of summer sun directly striking walls and windows.

Chapter 2 has been changed to <u>The House as a System</u>. This chapter incorporates portions of the old chapter on Natural Cooling. Because of the hot-humid Louisiana climate, natural cooling has limited applications. As such, a chapter dealing with the interactions between different systems in the home seems more beneficial. Because the chapter discusses issues that are prevalent in our climate, this chapter is important to anyone with home.

Chapter 3 introduces the reader to <u>Energy Efficient Features</u>. Along with describing overall energy efficiency techniques for the hot-humid climate, this chapter also discusses economics of many of the energy efficient improvements. The tables discussing the energy savings and broader economic impacts have been adjusted to current prices. The chapter also compares the requirements of the Energy Star Home program with the 2006 IRC.

Chapter 4 deals with one of the most important features of any home, <u>Air Leakage Sealing</u>. Air leakage can contribute more than 30% of the home's heating and cooling costs, as well as allowing moisture and other pollutants to enter the living area. The chapter discusses the different causes of air leakage, or infiltration. In order to best illustrate this, many of the figures have been recreated with improved image quality. After providing a list of common air leakage sites, a number of sealing techniques are provided. By using the materials and techniques in this chapter, a homeowner can help ensure that his home is efficient and provides a healthy environment for the inhabitants.

Chapter 5 deals with the different <u>Insulation Materials and Techniques</u>. Insulation works hand-in-hand with air sealing to provide a comfortable living space. Selecting the right insulation material for the application is only part of the equation. Proper installation of insulation materials is paramount to their effectiveness. Studies have shown that improper installation can reduce the performance of the insulation by over 30%. Because of this issue, a lot of emphasis was put on providing clear and accurate figures to demonstrate proper installation of the different materials. Many of the figures have been recreated and provide a clearer view of the correct installation techniques. The tables in the chapter were updated to take into consideration the provisions of the 2006 IRC.

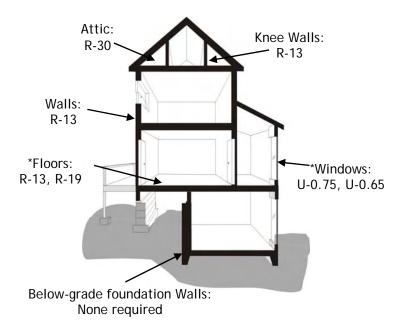
Chapter 6 describes the impacts of Windows and Doors. These are necessary additions to any home, but they can have severe impacts on energy costs. A window typically allows heat to pass through it over 5 times as easily as the surrounding wall. Although the overall area of windows in a home may be small, the amount of heat passing through that area is considerable. This chapter describes the different ways in which a window allows heat to enter or exit the home, conduction, and radiation. However, windows also help save energy at times by reducing the amount of electric lighting needed. New windows have been designed to manage radiant heat transfer and the transmittance of visible light. By understanding the different aspects of business performance, a person can make a much more educated window

selection.

Doors also have relatively low insulating values. However, not all doors are created equally. A lot of decorative doors perform very poorly. However, manufacturers have been making great improvements to these products with new materials, including insulated metal and fiberglass doors.

Chapter 7 discusses <u>Heating</u>, <u>Ventilation</u>, <u>and Air Conditioning</u> systems. Since the publication of the last edition, the federal government has increased the minimum efficiency of air conditioning units. As of January 1, 2006, all residential air conditioning units sold in the United States are required to have a Seasonal Energy Efficiency Rating (SEER) of 13, a significant increase from the prior standard of SEER 10. Along with making the changes associated with this higher SEER rating, the chapter was slightly reorganized

Figure 1. Insulation Requirements



*Where two numbers are listed, first number is for climate zone 2 and the second number is for climate zone 3.

to provide better flow between subject matter. Several tables discussing economics of different systems were removed because costs can vary greatly depending on system types, brands, and installation. Also, savings will vary depending on the way the system is used. For instance, if a person uses a programmable thermostat properly, the savings associated with installing a higher efficiency unit will be significantly reduced. The chapter closes with discussion of ventilation and indoor air quality.

Chapter 8 is dedicated to <u>Duct Design and Sealing</u>. In Louisiana, ductwork is typically installed in the attic of the home, which can get above 125°F on an average summer day. Working under these conditions, it is not hard to understand the importance of duct insulation and sealing. Duct leakage can result in the loss of over 50% of the efficiency of the unit. The chapter discusses several key locations to inspect for duct leakage, as well as describing the testing used for duct leakage. The design of the ducts is also an important subject. Undersized ducts can restrict air flow and force the blower to work extra hard to move the air.

Chapter 9 contains a discussion of <u>Water Heating</u>, <u>Appliances</u>, <u>and Lighting</u>. The chapter begins with a discussion of water heating and several simple techniques that can be used to reduce the energy consumption. The different types of water heaters are described, as well as their benefits and any problems associated with them. In discussing plug-in appliances, simple savings were found by comparing the typical energy costs of several off-the-shelf units. This information can be found on the Energy Guide label required for any model, which is also discussed. A quick list of important factors to consider when shopping for a new appliance is also included for convenience. Finally, the chapter concludes with a discussion on lighting systems. This section was updated to take into account the increased prevalence and significantly reduced cost of compact fluorescent lamps. A short section was added to discuss the concerns about mercury in fluorescent lighting, which has been exaggerated at times.

Chapter 10 is a new chapter on <u>Energy Efficient Roofing</u>. There are a large number of roofing options available. This chapter discusses many of the most common materials used in Louisiana, as well as newer materials which are taking their own place in the market. Tables 10-1 and 10-2 discuss cooling performance and annual savings associated with the different roofing materials. A subject that has never been discussed in the Guide is the "green roof," or "landscaped roof system." Green roofs incorporate landscaping on top of a waterproof membrane. Green roofs are being installed in an increasing number of buildings. However, they have not been widely used in residential construction.

Energy Efficient Homes in Louisiana concludes with Chapter 11, Fingertip Facts. It provides quick information such as common abbreviations, energy and power conversions, as well the heat content of many common fuels. Generalized insulation values, R-value per inch, are given for many common building materials. This chapter is nearly identical to the previous version. However, the climatic data was updated using weather data from more recent years. The changes are relatively small, but the tables are slightly more accurate.

Moving Forward

The Louisiana State Energy Office believes that this revision can help homeowners save precious dollars in these times of economic distress. Homeowners need to be educated to make the best decisions when building or renovating a home. By providing this guide, LA SEO can positively affect the level of energy efficiency throughout the Louisiana housing stock. By following the guidance provided, homeowners will be more prepared to weigh the costs and benefits of energy efficiency systems.

Louisiana law provides for regular adoption of new codes and standards. As new codes are adopted and new information becomes available, necessary changes will be recognized in this version. It is our goal to continue providing up-to-date information for the citizens of Louisiana.

SELECTED LOUISIANA ENERGY STATISTICS

Among the 50 states, Louisiana's rankings (in 2008, unless otherwise indicated) were:

PRIMARY ENERGY PRODUCTION

(Including Louisiana OCS*)

- 1st in crude oil
- 1st in OCS crude oil
- 1st in OCS natural gas
- 1st in OCS revenue generated for federal government
- 1st in mineral revenues from any source to the federal government
- 1st in LNG terminal capacity
- 1st in foreign oil import volume
- 2nd in natural gas
- 3rd in crude oil proved reserves
- 3rd in dry natural gas proved reserves
- 3rd in total energy from all sources

REFINING AND PETROCHEMICALS

- 1st in natural gas processing capacity
- 2nd in petroleum refining capacity
- 2nd in primary petrochemical production

PRIMARY ENERGY PRODUCTION

(Excluding Louisiana OCS)

- 5th in crude oil (2009)
- 4th in natural gas (2009)
- 6th in dry natural gas proved reserves
- 7th in crude oil proved reserves
- 12th in total energy (2007)
- 17th in nuclear electricity (2007)

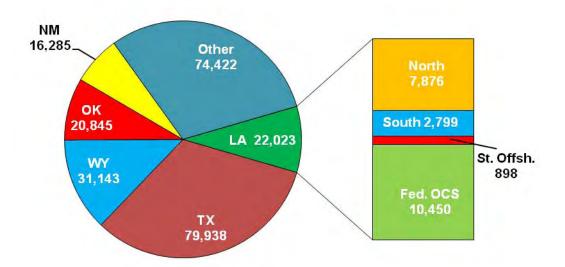
ENERGY CONSUMPTION (2007)

- 2nd in industrial energy
- 3rd in per capita energy
- 3rd in natural gas
- 4th in petroleum
- 8th in total energy
- 25th in residential energy

Figure 1

2009 U.S. Natural Gas Reserve

(Billion Cubic Feet)



PRODUCTION

State controlled (i.e., excluding OCS) natural gas production peaked at 5.6 trillion cubic feet (TCF) per year in 1970, declined to 1.5 TCF in 1995, and rebounded 4.5% to 1.6 TCF in 1996. Gas production was 1.28 TCF in 2005, 1.35 TCF in 2006 and 2007, 1.36 TCF in 2008, and 1.51 TCF in 2009.

State controlled gas production is on a long-term decline rate of 3.2% per year if the Haynesville Shale Play is put on hold, otherwise the decline trend would be reversed for the next decade. The current short term (2010-2015) forecast an average increase of 2.2% per year.

State controlled crude oil and condensate production peaked at 566 million barrels per year in 1970, declined to 129 million barrels in 1996, declined to 77.4 million barrels in 2007, declined to 72.5 million barrels in 2008, and in 2009 declined to 69.0 million barrels.

State controlled crude oil production is on a long-term decline rate of 2.7% per year, though the current short term (2010-2015) forecast an average decline of 1.0% per year. If oil stays above \$80 per barrel, the decline trend should be negligible for the next three years.

2009 U.S. Crude Oil Reserves (Million Barrels) North South 60 277 MM 654 Other St. Offsh. CA 3.409 51 3.062 Other Fed. OCS 3,776 AK 3,388 3,507 TX 4.713

Figure 2

Louisiana OCS (federal) territory is the most extensively developed and mature OCS territory in the U.S.

Louisiana OCS territory has produced approximately 88.1% of the 17.9 billion barrels of crude oil and condensate, and 80.3% of the 170 TCF of natural gas extracted from all federal OCS territories from the beginning of time through the end of 2009. Currently, Louisiana OCS territory produces 27.0% of the oil and 8.1% of the natural gas produced in the entire U.S., and 93.3% of the oil and 70.7% of the natural gas produced in the Gulf of Mexico OCS.

- Louisiana OCS gas production peaked at 4.07 TCF per year in 1979, declined to 2.95 TCF in 1989, then recovered to 3.84 TCF in 1999, fell to 2.05 TCF in 2006, 2.02 TCF in 2007, 1.62 TCF in 2008, and rose to 1.70 TCF in 2009.
- Louisiana OCS crude oil and condensate production first peaked at 388 million barrels per year in 1972 and then declined to 246 million barrels in 1989. The production has steadily risen from 264 million barrels in 1990 to 508 million barrels in 2002 due to the development of deep water drilling. Then production dropped to 419 million barrels in 2006, recovered to 427 million barrels in 2007, dropped to 375 million barrels in 2008, and increased to 524 million barrels in 2009. The roller coaster ride in oil production was weather related incidents.

REVENUE

- In Fiscal Year (FY) 2007/08, oil and gas revenue (severance tax, royalties, and bonuses) reached to an all time high at \$1.94 billion and it was 16% of state income (total state taxes, licenses, and fees); the previous peak occurred in FY 1981/82, it was \$1.62 billion but it was 41% of state income. In FY 2008/09, oil and gas revenue was \$1.54 billion, or 14% of state income. In FY2009/2010, it is expected to reach \$1.23 billion, or 13% of state income.
- At constant production, the state treasury gains or loses about \$10.1 million of direct revenue from oil severance taxes and royalty payments for every \$1 per barrel change in oil prices.
- For every \$1 per MCF change in gas price, at constant production, the state treasury gains or loses \$42.7 million in royalty payments, and increases or decreases gas full rate severance tax by 3.9 cents per MCF or about \$39.4 million dollars for the following fiscal year (there is a 7 cents floor on gas severance tax).

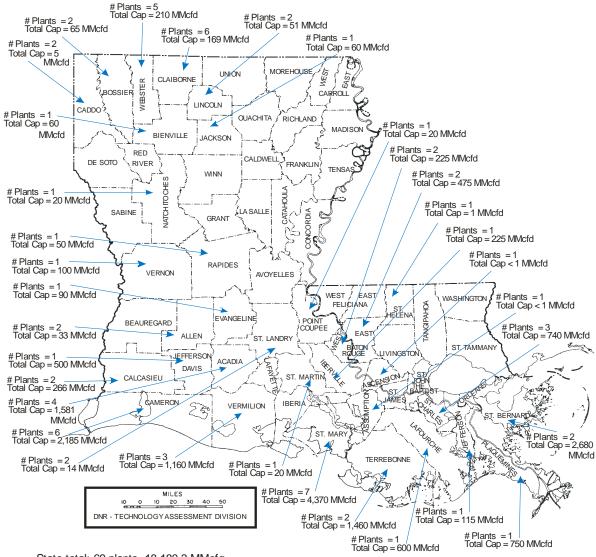
There are no studies available on indirect revenue to the state from changes in gas and oil prices.

DRILLING ACTIVITY

- Drilling permits issued on state controlled territory peaked at 7,631 permits in 1984 and declined to a low of 1,017 permits in 1999. In 2006 increased to 2,137 permits, in 2007 increased to 2,150 permits, in 2008 increased to 2,374 permits, and in 2009 decreased to 1365 permits.
- The average active rotary rig count for Louisiana, excluding OCS, reached a high of 386 rigs in 1981 and fell to 76 active rigs in 2002. In 2006, the active rigs average was 118 rigs, it increased to 119 active rigs in 2007, fell to 117 active rigs in 2008, and decreased to 113 active rigs in 2009. The lowest year average between 1981 and 2009 was 64 active rigs in 1993.
- The annual average active rotary rig count for Louisiana OCS reached a high of 109 rigs in 2001 and is in a downward trend. It was 74 in 2005, 70 in 2006, 59 in 2007, 50 in 2008, and 36 in 2009. The lowest year average between 1981 and 2009 was 23 active rigs in 1992.
 - 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.

Figure 3

Louisiana Gas Plants and Total Capacity by Parish As of January 1, 2009



State total: 69 plants, 18,180.3 MMcfg

Data source: Oil & Gas Journal (6/22/2009)

AIA Top Ten Green Projects: Special No. 9 House by Howard Hershberg, AIA



Completed House - Exterior

SOURCE FOR ALL PICTURES: John C. Williams Architects





Screen Detail and Completed House - Interior

The American Institute of Architects (AIA)¹ Committee on the Environment (COTE) has named the year's top ten examples of sustainable architecture and green design (Top Ten). Many of the new buildings were awarded, or are expected to earn, LEED Platinum Certification, the highest level in the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) certification program. The Special No. 9 House, located in New Orleans, Louisiana, was one of the projects. The full case study appears on the AIA website http://www.aiatopten.org/hpb/.²

This residence, "The Special No. 9 House," was designed for the Make it Right Foundation as a prototype for the 150 homes the Foundation plans to build in the lower Ninth Ward of New Orleans in the near future. It was designed by John C. Williams Architects, AIA. The house, built in New Orleans after the vast devastation wrought by Hurricane Katrina in 2005, is a specially designed home, code compliant architecturally, structurally, mechanically, and electrically. It is energy efficient, as well.

Many of the buildings comprising the AIA, COTE top ten sustainable buildings employ energy saving measures and energy efficient equipment, such as, geothermal heat pumps, daylighting, shading, natural ventilation, and passive solar heating. The winning designers also employed energy efficiency technologies, such as, radiant heating and cooling, cool roofs, energy efficient appliances and equipment, evaporative cooling with reclaimed water recycled materials, and green roofs. Several of the winners generate renewable energy with Solar Panels. One of the Top Ten features roof-mounted wind turbines.

Definitions of Terms

Green Building: A green building is a building that is located and constructed in a sustainable manner that allows its occupants to live, work and play in a sustainable manner. This means building in such a way that we don't use up or deplete our resources, that is, has the least environmental impact possible. The less the environmental impact, the "greener "the project.

LEED: Stands for Leadership in Energy and Environmental Design. LEED certification measures how well a building or a community performs as "sustainable" across the following metrics:

- 1. Sustainable siting
- 2. Water efficiency
- 3. Energy and atmosphere
- 4. Materials and resources
- 5. Indoor environmental quality
- 6. Innovation and design process

² AIA press release, "The American Institute of Architects select the 2010 COTE Top Ten Green Projects," (http://www.aia.org/press/releases/AIAB082801?dvid=&recspec=AIAB082801).

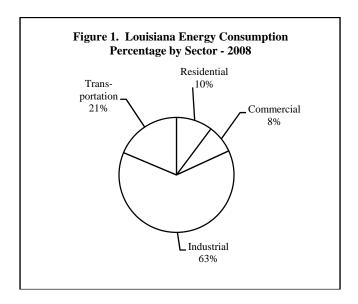
Special No. 9 House 2 July 2010

¹ For 150 plus years, members of the American Institute of Architects (AIA) have worked with each other and their communities to create more valuable, healthy, secure, and sustainable buildings and cityscapes. By using sustainable design practices, materials, and techniques, AIA Architects are uniquely poised to provide the leadership and guidance needed to combat climate change.

LOUISIANA, AN ENERGY CONSUMING STATE: AN UPDATE USING 2008 DATA

by Bryan Crouch, P.E.

Louisiana ranks high among the states in overall energy consumption. In 2008, Louisiana remained ranked 8th in total energy consumption and 3rd in per capita energy consumption. The main reason for Louisiana's high energy consumption is the extremely energy intensive petrochemical and petroleum refining industry that is located in the state. The abundance of Louisiana's natural resources has historically meant low energy prices, which have attracted a large cluster of energy intensive industries to the state. Figures 1 & 2 below show Louisiana energy consumption by sector and source. The large amount of energy consumed by the petrochemical and petroleum refining industry is reflected in high percentage for the industrial sector and the high percentages for natural gas and petroleum.



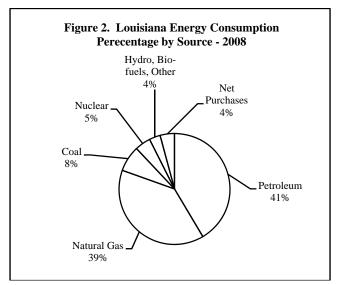


Table 1 shows where Louisiana ranks among the states in various energy consumption categories, and lists the top energy consuming state for each category.

Louisiana is also a large producer of energy, mainly in the form of crude oil and natural gas. Table 2 on the following page presents the Louisiana energy balance for 2008. Energy production from Louisiana's federal OCS area dwarfs state production. The energy balance is calculated both inclusive and exclusive of Louisiana's OCS oil and gas production.

Table 1. Louisia Am	-	gy Consur States - 20	-
Category	Rank	TBTU	#1 State (TBTU)
Residential	25	356.6	Texas (1,615.6)
Commercial	24	276.3	California (1,639.8)
Industrial	2	2,204.0	Texas (5,651.6)
Transportation	13	650.7	California (3,217.9)
Coal	30	262.5	Texas (1,605.9)
Natural Gas	3	1,359.8	Texas (3,656.2)
Petroleum	5	1,450.1	Texas (5,498.9)
Electricity	20	268.6	Texas (1,184.2)
Total	8	3,487.5	Texas (11,552.2)
Per Capita (MBTU)	3	783.4	Alaska (1,016.1)

2,616.8 TBTU

Table 2. Louisiana Energy Balance - 2008^{-1}

E	ENERGY SOURCE	PRODUCTION	CONSUMPTION	NET STATE ENERGY PRODUCTION Excluding OCS Including OCS	PRODUCTION Including OCS
PETROLEUM:	STATE OIL 2 LOUISIANA OCS OIL 2	420.9 TBTU^4 (72.6 MMBBL) 2,248.9 TBTU ⁴ (387.7 MMBBL)	1,445.9 TBTU (275.2 MMBBL)	-1,025.0 TBTU	1,223.9 TBTU
NATURAL GAS:	STATE GAS ³ LOUISIANA OCS GAS ³	1,407.4 TBTU ⁴ (1.360 TCF) 1,701.1 TBTU ⁴ (1.644 TCF)	1,359.8 TBTU (1.314 TCF)	47.6 TBTU	1,748.7 TBTU
COAL:	LIGNITE	52.7 TBTU (3.843 MMSTON)	262.5 TBTU (16.4 MMSTON)	-209.8 TBTU	-209.8 TBTU
NUCLEAR ELECTRIC POWER	RIC POWER	160.7 TBTU (15.4 Billion kWH)	160.7 TBTU (15.4 Billion kWH)	0.0 TBTU	0.0 TBTU
HYDROELECTRIC	HYDROELECTRIC, BIOFUELS & OTHER	112.7 TBTU	112.7 TBTU	0.0 TBTU	0.0 TBTU
NET INTERSTATE PURCHASES OF INCLUDING ASSOCIATED LOSSES	NET INTERSTATE PURCHASES OF ELECTRICITY INCLUDING ASSOCIATED LOSSES		146.0 TBTU	-146.0 TBTU	-146.0 TBTU
TOTALS:	EXCLUDING LOUISIANA OCS	2,154.4 TBTU	3,487.6 TBTU	-1,333.2 TBTU	

The Louisiana energy balance for 2008 shows that the state consumed 1,333 more TBTUs of energy than it produced if Louisiana OCS production is not included. If Louisiana OCS production is included, the state is a net producer of energy by 2,617 TBTUs.

3,487.6 TBTU

6,104.4 TBTU

INCLUDING LOUISIANA OCS

ion Cubic Feet OCS = Outer Continental Shelf (federal waters seaward of the state's 3-mile offshore boundary)	llion BTU's kWH = Kilowatt hour	Million Barrels MMSTON = Million Short Tons	
TCF = Trillion Cubic Feet		MMBBL = Million Barrels	

^{1.} Unless otherwise noted, data is obtained from the Energy Information Administration's latest published figures for state energy consumption.

^{2.} Includes condensate3. Includes gas plant liquids4. Louisiana Department of Natural Resources data

GLOSSARY OF GREEN BUILDING TERMS

by Howard Hershberg, AIA

GREEN BUILDING: A green building is a building that is located and constructed in a sustainable manner that allows its occupants to live, work and play in a sustainable manner. This means building in such a way that we don't use up or deplete our resources, that is, has the least environmental impact possible. The less the environmental impact, the "greener" the building or project.

USGBC: Stands for the U. S. Green Building Council. USGBC created the LEED Certification system as a "Report card" for owners, School Boards, or others seeking to build "Green Buildings" to see how their overall design will meet accepted Green Building standards. The U. S. Green Building Council Institute (USGBCI) also administers the LEED A. P. (the LEED Accredited Professional classification) for personnel passing the latest LEED certification exam.

LEED: Stands for Leadership in Energy and Environmental Design. LEED certification measures how well a building or a project performs as "Sustainable" across the following metrics:

- 1. Sustainable siting
- 2. Water efficiency
- 3. Energy and atmosphere
- 4. Materials and resources
- 5. Indoor environmental quality
- 6. Innovation and design process

As of April 2009, over 5 billion square feet of commercial building was being certified by LEED worldwide. (Source: USGBC "Green Building Facts," Apr 2009).

LEED CERTIFICATION: LEED certification is obtained after submitting an application documenting compliance with the LEED rating system. LEED certification was granted by the U. S. Green Building Council until April 27, 2009. As of April 27, 2009, the USGBCI is granting LEED Certification to projects.

LEED Certification Classifications:

- 1. Certified: 40% 50% of non-innovation points.
- 2. Silver Certification: 50% 60% of non-innovation points.
- 3. Gold: 60 80% of non-innovation points.
- 4. Platinum: 80% or more of non-innovation points.

COOL RATED ROOF: A "cool rated roof," or cool roof, is both highly reflective and highly emissive, transferring less heat into the building than a darker colored standard non-cool roof. A cool roof provides the following benefits in all climates throughout the U. S.:

- Cool roofs can be 70 degrees cooler during the summer when compared to traditional roofs.
- Cool roof systems save money and energy during peak cooling demand periods when electricity costs are highest.

- A cool roof can reduce the cost of operating a roof top HVAC unit because the unit will use cooler air than if mounted on a standard darker roof surface.
- Cool roof systems help reduce the urban heat island effect by reflecting solar heat rather than absorbing and transferring it to buildings.
- By keeping moisture out while reflecting ultraviolet (UV) and infrared (IR) radiation, a cool roof can help protect underlying insulation and the roofing substrate from deterioration. (Source: www.coolroofs.org)

SMART GRID: A Smart Grid delivers electricity from suppliers to consumers using digital technology to save energy, reduce cost, and increase reliability and transparency. Such a modernized electricity network is being promoted by many state and city governments as a way of addressing energy independence, global warming, and emergency resilience issues. Building the Smart Grid means adding computer and communications technology to the existing electricity grid. With an overlay of digital technology, the grid promises to operate more efficiently and reliably. The Smart Grid will also accommodate more solar and wind power, which are inconsistent energy sources that can become more reliable with better controls. The Smart Grid will deliver more detailed information to consumers' homes. This will enable families to have a real-time view of the energy the household is consuming and will hopefully be a major step in the reduction of the nation's overall energy consumption. (Source: Wikipedia)

VOLATILE ORGANIC COMPOUND (VOC): Gases or vapors emitted by solids or liquids, many of which have short- or long-term adverse health effects. VOCs are generally organic chemical compounds that have high enough vapor pressures under normal conditions to significantly vaporize and enter the atmosphere. Some household products that emit VOCs are paint, paint strippers, cleaning supplies, pesticides, glues and adhesives, building materials, and furnishings. Concentrations of many VOCs are higher indoors (up to ten times higher) than outdoors.

AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA): ARRA is a bill passed by President Obama in February 2009 as an economic stimulus package. The money set aside by this program is being utilized through a variety of agencies and is dedicated to improving education, building roads, public transportation, criminal justice, health care, and reducing energy consumption, among other things. The U. S. Government is hopeful that this package will create jobs, and provide many other economic benefits. (Source: www.investorwords.com)

The Obama administration dedicated \$346 million to expand and deploy energy efficient technologies in commercial and residential buildings. Commercial and residential buildings consume approximately 40% of the energy and produce approximately 40% of the CO₂ emissions in the United States. Buildings consume more energy than any other sector of the U. S. economy, including transportation and industry.

STATE ENERGY PROFILES - LOUISIANA

The U. S. Energy Information Administration (EIA) captures State energy data on the EIA website. The Louisiana information can be accessed using the link:

http://www.eia.doe.gov/state/state_energy_profiles.cfm?sid=LA.

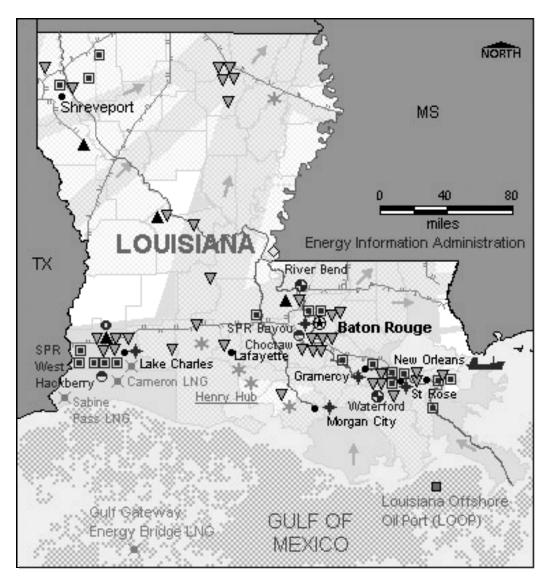
The profile is broken down as follows:

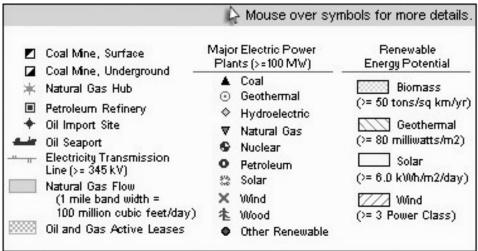
- Map &Facts
- Overview
- Data
- Related Reports
- Data Directory

Listed below is a sample of the information copied directly from the Louisiana profile:

- Louisiana ranks fourth among the States in crude oil production, behind Texas, Alaska, and California (excluding Federal offshore areas, which produce more than any single State).
- Two of the U. S. Strategic Petroleum Reserve's four storage facilities are located in Louisiana.
- Louisiana is rich in crude oil and natural gas. Including its federally administered reserves, Louisiana's crude oil reserves account for nearly one-fifth of total U. S. reserves, and its natural gas reserves account for nearly one-tenth of the U. S. total.
- State crude oil production and imports that are not sent to other States are processed at Louisiana's 16 operating refineries clustered mostly along the Lower Mississippi River and in the Lake Charles area. With a refining capacity of more than 2.5 million barrels per day, Louisiana produces more petroleum products than all other states except Texas.
- Louisiana has four natural gas market centers, including the Henry Hub, the most active and publicized natural gas market center in North America. The Henry Hub connects nine interstate and four intrastate pipelines, providing access to markets in the Midwest, Northeast, Southeast, and Gulf Coast.
- Natural gas is Louisiana's leading fuel for electric generation, typically accounting for nearly one-half of electricity produced within the State.
- Louisiana's two single-reactor nuclear power plants, both located along the Lower Mississippi River, typically account for almost one-fifth of State generation.

The data tables (page 2) contain statistics from the EIA surveys and the state map (page 2) shows energy infrastructure.





ENERGY LEGISLATION - 2010 REGULAR LEGISLATIVE SESSION

by Billy Williamson, E.I., CEM

During the 2010 Regular Legislative Session of the Louisiana State Legislature, the Technology Assessment Division of the Department of Natural Resources tracked 12 bills and resolutions that would affect the production, consumption, and/or conservation of energy in the state. This number includes six House Bills, two House Concurrent Resolutions, and four Senate Bills. Of the six bills submitted in the House of Representatives, four were signed into law by Governor Jindal. Only one of the two House Concurrent Resolutions passed. On the Senate side, two of the four bills proposed were signed into law. This report will discuss the legislation that was passed.

House Bill 495 (HB 495), proposed by Representative Harrison, provides for the ownership of monetary compensation from the sequestration of carbon. Carbon dioxide has been named as a primary greenhouse gas, and there is growing pressure from environmental advocacy groups and concerned citizens to regulate these emissions. Although there is no guarantee, many in the utilities industry and government expect controls to be put on carbon emissions in the coming years. Aside from production side emissions reductions, sequestration is seen as vital to reducing atmospheric carbon. HB 495 lays the groundwork for sequestration within any future "carbon market" by defining ownership of the monetary compensation. HB 495 became Act No. 193 when it was signed into law on June 6, 2010.

The second House Bill to be passed was House Bill 751 (HB 751) by Representative Foil. HB 751 provides for the right to install solar energy devices. Prior to this bill, neighborhood associations and similar groups could create rules that prohibit the installation of solar collectors on a property. This bill explicitly disallows these types of rules, except in the case of historic districts, historical preservations, or landmarks. HB 751 was signed into law on June 17, 2010, and it became Act No. 274.

House Bill 841 (HB 841) by Representative Arnold gives authority to the State Mineral and Energy Board to lease state lands for the purpose of alternative energy production. The bill, however, does not allow such lands to be used for cultivation, harvesting, or utilization of biomass fuels. The bill also reiterates that all hydrokinetic leases comply with the terms of any preliminary permit, license, exemption, or other authorization issued by the Federal Energy Regulatory Commission (FERC). HB 841 became Act No. 930 when it was signed into law on July 2, 2010.

The final House Bill to be passed was House Bill 699 (HB 699) by Representative Geyman. HB 699 provides for the review and audit process for performance based energy efficiency contracts by requiring approval of the Joint Legislative Committee on Budget. The bill requires the legislative auditor to post a schedule of performance audits on the website no later than February 1 of each year. HB 699 requires performance audits on each performance based energy efficiency contract in effect on or after January 1, 2010. HB 699 was signed into law on July 8, 2010 and it became Act No. 1021.

House Concurrent Resolution 184 (HCR 184), authored by Representative M. Jackson, directs the Department of Environmental Quality (DEQ) and the Department of Transportation and Development (DOTD) to study the feasibility of using compressed natural gas (CNG) buses in mass transit applications. The findings and recommendations of this study are to be reported to the House Committee on Transportation, Highways, and Public Works, as well as the House Committee on Natural Resources and Environment prior to December 31, 2010. Although the Department of Natural

Resources is not involved in the study, the Technology Assessment Division previously worked **CNG** on fleet conversions, including the conversion of the downtown trolley in Baton Rouge and an ongoing fleet conversion in Shreveport. Because of the knowledge and experience gained through these programs, Technology Assessment Division will be providing support to DEQ and DOTD in compiling their report. HCR 184 passed both chambers of the legislature without amendments and it was filed with the Secretary of State on June 18, 2010.

On the Senate side, Senate Bill 103 (SB 103) was proposed by Senator N. Gautreaux. SB 103 creates the Alternative Fuel Vehicle Revolving Loan Program within the Department of Natural Resources. The

Figure 1. Refueling CNG bus in Baton Rouge



program allows the state to provide financial assistance to "local government authorities" to cover the cost of converting all or part of their fleet to "qualified clean fuel vehicles" that run on "alternative fuels." The Department of Natural Resources is authorized by SB 103 to promulgate rules and regulations as are necessary to implement the program in accordance with the Administrative Procedure Act. SB 103 was signed into law by the Governor on June 8, 2010 and it became Act No. 118.

The final bill tracked by the Technology Assessment Division was Senate Bill 183 (SB 183), also proposed by Senator N. Gautreaux. SB 183 is very similar to HB 841 (Act 930), as both authorize the State Mineral and Energy Board to lease state lands for the development of alternative energy sources. SB 183 became Act No. 875 when it was signed by the Governor on July 2, 2010. Both Act No. 875 and Act No. 930 made changes to Revised Statute 30:124, which can be viewed at http://www.legis.state.la.us/lss/lss.asp?doc=86940.

LOUISIANA DEPARTMENT OF NATURAL RESOURCES - TECHNOLOGY ASSESSMENT DIVISION

SERVICE QUESTIONNAIRE

Dear Customer,

Our goal is to provide the best service possible by providing accurate and timely information on oil, gas and energy production and use in Louisiana.

Your comments will enable us to see how we are doing and suggest areas for improvement.

VERY GOOD

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Timeliness of Data Provided					
Quality of Analyses Provided					
Quality of Tables Provided					
Quality of Graphs Provided					
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