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Louisiana Energy Topics

Department of Natural Resources

Technology Assessment Division

A Supplement to LOUISIANA ENERGY FACTS on Subjects of Special Interest

JANUARY 1999 LOUISIANA CRUDE OIL REFINERY REPORT NOW AVAILABLE

by Sam Stuckey, P.E.

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

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

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

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

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

Recent Changes

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

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

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

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

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

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LOUISIANA OPERATING REFINERIES
CRUDE CAPACITY (Barrels per Calendar Day, BCD) and PERCENT PRODUCT SLATE
Louisiana FY 1998 DNR Survey

REFINERY NAME	OPERATING CAPACITY As of June 30, 1998 (BCD)	OPERATING RATE * (%)	IDLE CAP. (BCD)	OPERABLE RATE (%)	12-MONTH THROUGHPUT 1 July 97- 30 June 98 (Barrels)	% OF TOTAL PRODUCT SLATE										ALL OTHER
						GASOLINE				OTHER FUELS			MISCELLANEOUS			
						REG	MID	PREM	RFG	DIESEL	JET/ KERO	FUEL OIL	LPGs	NAPTH	COKE/ RESID	
American International Refinery, Lake Charles <i>Note A</i>	35,000	2.2	0	2.2	280,151					11.0 Feedstk	9.0 Feedstk		2.0 Feedst.	11.0 Refmrd		67
B. P. Oil Co. - Alliance	245,300	99.9	14,700	94.4	89,606,307	32.3		13.2		27.3	16.4	0.3	2.6	0.5	1.8	5.7
Calcasieu Refining Co.	15,300	93.2	0	93.2	5,206,404					25.6	17.1	18.3	3.8	34.6		
Calumet Lubricants - Cotton Valley	7,700	84.5	2,500	63.8	2,375,304					2.3				51.2		46.5
Calumet Lubricants - Princeton	5,546	106.3	2,754	71.1	2,152,405					11.0						89.0
Citgo Petroleum Corp.	310,000	91.7	0	91.7	103,723,118	29.0		15.0	8.6	10.2	16.0	3.1	2.1		6.5	9.5
Conoco, Inc. - Lake Charles	236,000	83.0	0	83.0	71,593,618	12.0		10.0	14.0	32.0	17.0	2.0	1.0	3.0	9.0	
Exxon Co. U.S.A.	450,000	100.5	0	100.5	165,053,000	22.4		9.1	6.6	15.6	13.8	4.0	2.7	1.1	4.5	20.2
Marathon Ashland Petroleum, LLC	255,000	87.9	0	87.9	81,769,250	41.1		11.0			1.8	29.5	4.8	0.2	10.0	1.6
Chalmette Refining, LLC (was Mobil Oil)	175,560	97.6	14,440	92.4	62,546,639	30.7	0.7	8.2		15.5	12.7	4.1	1.2	0.3	7.3	19.4
Motiva Enterprises, LLC - Convent (was Star Enterprise)	225,000	98.8	0	98.8	81,104,400	34.7	0.5	5.8	5.9	19.4	13.3		2.2		13.0	5.2
Motiva Enterprises, LLC - Norco (was Shell Oil)	235,000	81.8	0	81.8	70,186,900	21.2		17.4	5.7	23.7	12.1	2.2	14.0		1.8	2.0
Murphy Oil U.S.A., Inc.	101,000	101.7	2,000	99.8	37,504,500	37.0		9.0		28.0	9.0	15.0	3.0		2.0	
Pennzoil Products Co.	46,200	89.0	0	89.0	15,003,292	33.9	1.8	1.5		18.1	14.7		1.9	1.2	2.9	23.9
Placid Refining Co.	48,000	95.2	0	95.2	16,678,539	36.1		6.0		28.9	10.2	5.6	0.5			12.7
Shell Chemical Co. - St. Rose	55,000	100.0	0	100.0	20,075,000					18.0	5.0				15.0	62.0
Orion Refining Corp. (was TransAmerican) <i>Note A</i>	110,000	1.6	0	1.6	622,758					6.6	3.0	38.0	0.2	12.0		
Valero Refining Co. - La.	70,000	99.9	0	99.9	25,533,641	29.5		2.3		20.2	12.0		1.5	11.4		23.1
WEIGHTED STATE AVERAGE (%)		93.9		92.5		27.4	0.1	10.1	4.5	18.1	12.6	5.6	3.3	1.3	6.0	11.1
TOTAL LA. CAPACITY	2,625,606		36,394		851,015,226											

Note A - Not used in weighted average calculation.

* Operating rates are calculated by dividing the 12-month total crude input by the operating capacity provided by survey respondents.