June 2004

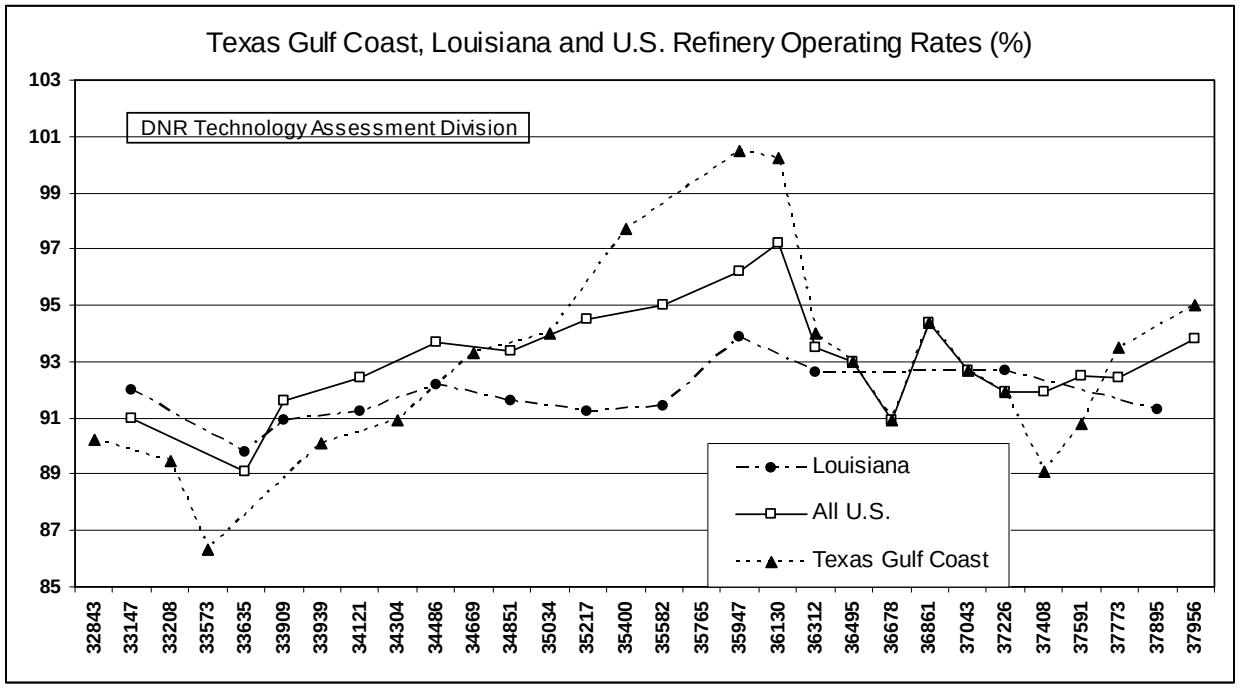
Louisiana Energy Topic

Department of Natural Resources Technology Assessment Division
A Supplement to LOUISIANA ENERGY FACTS on Subjects of Special Interest

2003 Louisiana Crude Oil Refinery Survey Report

Report Highlights

Louisiana refinery capacity shrank slightly from our last survey. Most refineries showed increased capacity, but they were overshadowed by the shutdown of the American International refinery in Lake Charles. The current operating capacity is 2,734,070 barrels per calendar day. The Louisiana refinery operating rate was 91.3% for this survey period. The total U.S. refinery operating rate was 92.3% for the same period. The figure below shows the Louisiana, Texas gulf coast, and total U.S. refinery operating rates since 1989.



Note: Data points generally represent 6-month or 12-month averages
Source: LA Refineries: LA DNR, Technology Assessment Division ***Louisiana Crude Oil Refinery Survey Report 2003***
TX & U.S. Refineries: EIA, *Petroleum Supply Annual*, Vol. 1 & 2

Gulf coast refineries experienced a rebound in profit margins in 2003, from $2.02 per barrel in 2002 to $3.23 per barrel in 2003, as reported by Muse, Stancil & Co. in the Dec. 22, 2003 edition of the *Oil & Gas Journal*.

Changes since our last survey include Valero's acquisition of the Orion refinery in Norco, and the merger between Conoco and Phillips Petroleum.

EIA statistics show that, after declining in 2001, overall petroleum product demand increased to slightly over 20 million barrels per day. Finished motor gasoline supply rose 1% in 2003 to 8.94 million barrels per day, and jet fuel continued its two year decline, down 2.5% to 1.57 million barrels per day.

Gasoline remains the largest share of refinery production in Louisiana at about 40% of the total. The table below lists the top ten refinery products based on percent of total refinery production.

Product	Percent of Refinery Products
Regular gasoline	27.0
Diesel	17.8
Jet fuel/Kerosene	10.3
Premium gasoline	8.0
Residual/Coke	6.3
Fuel oil	6.1
Reformed gasoline	4.6
LPG	4.2
Petrochemical feed	4.1

Source: Louisiana Department of Natural Resources, Technology Assessment Division
Louisiana Crude Oil Refinery Survey 2003

Five refineries in Louisiana produced reformulated gasoline (RFG) during this survey period. Approximately 12% of the gasoline produced was RFG. In the U.S., about 33% of gasoline produced is RFG. A chart showing areas of the country that are required to use RFG can be seen on the EPA's website at: http://www.epa.gov/otaq/rfgmap.jpg. Currently, no RFG is used in Louisiana, but that is about to change. The EPA has, recently, downgraded the five parish area surrounding Baton Rouge from "serious" to "severe" for ground-level ozone. The Clean Air Act of 1990 requires the use of RFG in any area classified as "severe". This requirement is set to take effect on June 23, 2004, but lawsuits and/or federal energy legislation may delay or negate the requirement. Even if the requirement is waived, refiners have already geared up to deliver RFG to the five parish area and would need time to revert back. Ozone, or smog, is produced when oxides of nitrogen (NOx) and volatile organic compounds (VOCs) react with sunlight. It has been reported that only16.8% of NOx and 14% of VOCs comes from mobile sources, so requiring the use of RFG in the Baton Rouge area would do little to alleviate the high ozone levels.

The thirteenth edition of the Louisiana Crude Oil Refinery Survey Report will soon be published. It is, currently, available on our website at www.dnr.state.la.us/tad under Energy Data & Reports/Oil &Gas Production. If you are a current subscriber on our mail list, you will automatically receive a copy. If you are not and would like to be added, contact Jan Janney at 225-342-1270 or techasmt@la.gov.