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Highlights

Highlights of GAO-07-315, a report to congressional requesters

CRUDE OIL

California Crude Oil Price Fluctuations Are Consistent with Broader Market Trends

Why GAO Did This Study

California is the nation's fourth largest producer of crude oil and has the third largest oil refining industry (behind Texas and Louisiana). Because crude oil is a globally traded commodity, natural and geopolitical events can affect its price. These fluctuations affect state revenues because a share of the royalty payments from companies that lease state or federal lands to produce crude oil are distributed to the states.

Because there are many varieties and grades of crude oil, buyers and sellers often price their oil relative to another abundant, highly traded, and high quality crude oil called a benchmark. West Texas Intermediate (WTI), a light crude oil, is the most commonly used benchmark in the United States. The price difference between a crude oil and its benchmark is commonly expressed as a price differential. In fall 2004, crude oil price differentials between WTI and California's heavier, and generally lower valued, crude oil rose sharply.

GAO was asked to examine (1) the extent to which crude oil price differentials in California have fluctuated over the past 20 years and (2) the factors that may explain the recent changes in the price differential between California's crude oil and others. GAO analyzed historical data on California and benchmark crude oil prices and discussed market trends with state and federal government officials and crude oil experts.

www.gao.gov/cgi-bin/getrpt?GAO-07-315.

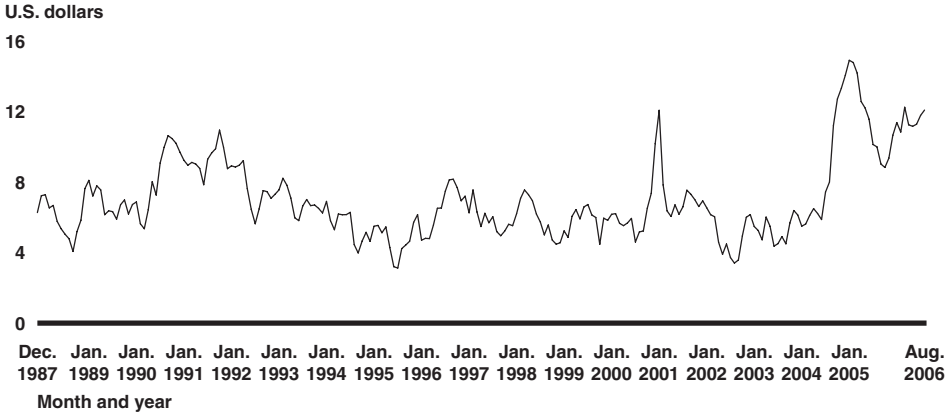
To view the full product, including the scope and methodology, click on the link above. For more information, contact Jim Wells at (202) 512-3841 or wellsj@gao.gov.

What GAO Found

California crude oil price differentials have experienced numerous and large fluctuations over the past 20 years. The largest spike in the price differential began in mid-2004 and continued into 2005, during which the price differential between WTI and a California crude oil called Kern River rose from about $6 to about $15 per barrel. This increase in the price differential between WTI and California crude oils occurred in a period of generally increasing world oil prices during which prices for both WTI and California crude oils rose. Differentials between WTI and other oils also expanded in the same time period. The differentials have since fallen somewhat but remain relatively high by historical standards.

Recent trends in California crude oil price differentials are consistent with a number of changing market conditions. First, beginning in mid-2004, Middle East producers began to increase the supply of heavy crude oils in the world marketplace, which helped depress prices for heavy crude oils, including those produced in California, and contributed to the expanding price differential between California crude oils and WTI. Second, the price differential of California crude oils to WTI increased when the rise in global crude oil prices caused prices of light crude oils to increase faster than the prices of heavier crude oils. This occurred because the petroleum products from heavy crude oils compete against other fuels, such as coal. Third, events that only impact regional crude oil markets or individual crude oils can also affect price differentials. For example, in September 2004, Hurricane Ivan disrupted crude oil production in the U.S. Gulf Coast region, resulting in decreases in the region's crude oil supply. The resulting scarcity of crude oil in the Gulf Coast region caused the prices of WTI and other regional oils to increase relative to crude oils produced outside the region. This also would have increased the price differentials between WTI and California crude oils. Finally, manipulation of crude oil prices could also affect price differentials, but experts and officials GAO interviewed generally believed that this was not a factor during this recent period.

WTI and Kern River Crude Oil Price Differentials, December 1987 to August 2006



Source: GAO analysis of Platts data.