



Highlights of [GAO-09-87](#), a report to congressional requesters

Why GAO Did This Study

In recent years, global demand for petroleum products such as gasoline and diesel fuel has grown more quickly than the capacity to produce them, creating a tight market. U.S. refiners have been running near capacity, particularly during peak summer demand. In such conditions, unexpected refinery outages can result in price increases that adversely affect consumers. GAO was asked to evaluate (1) the trends in U.S. refinery outages over the last 5 years, in terms of reduced production capacity, frequency, and geographic location, and (2) the federal requirements for reporting outages at U.S. refineries. To evaluate these objectives, GAO obtained and analyzed Energy Information Administration (EIA) and commercial data, and obtained and analyzed federal legislation and policies, and interviewed federal agency, academic, and industry trade group officials.

What GAO Recommends

GAO is recommending that the Secretary of Energy direct the Administrator of EIA to (1) reevaluate its monthly refinery production survey and other data to determine whether those data allow EIA to adequately conduct future analyses of outage effects on petroleum product prices, and (2) report to the Congress on the costs and benefits of collecting any additional data on newer fuels. EIA officials provided verbal comments suggesting GAO distinguish between the types of outages and data collected, among other things, which we addressed as appropriate.

To view the full product, including the scope and methodology, click on [GAO-09-87](#). For more information, contact Frank Rusco, (202) 512-3841 or ruscof@gao.gov.

ENERGY MARKETS

Refinery Outages Can Impact Petroleum Product Prices, but No Federal Requirements to Report Outages Exist

What GAO Found

With the exception of impacts beginning in 2005 related to Hurricanes Katrina and Rita, GAO's analyses of commercial data on unplanned and planned refinery outages across the United States generally do not show discernible trends in reduced production capacity or in the frequency and location of outages from 2002 through 2007. GAO's analyses of commercial data from 2002 through 2007 indicate that the hurricanes resulted in two patterns of outages for refiners, depending on whether they were directly affected, specifically: (1) certain refiners that were forced to shut down due to the hurricanes opted to upgrade equipment and perform what maintenance they could during their unplanned outages, thus extending the length of time until the next round of planned outages for maintenance at these refineries; and (2) sometimes refiners not directly effected by the hurricanes deferred planned outages to continue to supply the market, thus partially increasing the need for planned outages in subsequent years as these refiners rescheduled their deferred outages. GAO's regional analyses showed few apparent trends, but some variation in reduced production capacity due to outages across regions, with the Gulf Coast region refineries experiencing a slightly higher rate of outages and related reductions in capacity than refineries in other regions, in part as a result of recurrent extreme weather events.

At present, there are no federal requirements for refiners to report planned or unplanned refinery outages, and available data may not allow EIA to adequately ascertain the effects of some outages on prices of petroleum products. EIA collects data on a monthly refinery survey and has used this data to estimate outages. However, GAO found estimating outages using this method has a number of limitations. Among other things, it does not identify whether the outage was planned or unplanned, and it is important to make this distinction because unplanned outages are likely to have a different impact on gasoline prices than planned outages. EIA is independently exploring whether to collect data directly on planned and unplanned outages from refiners, but has not established a time frame to determine if it will collect such data. In addition, in response to the Energy Independence and Security Act of 2007, EIA is preparing to enhance its monitoring of planned outages. EIA officials told GAO they plan to primarily rely on commercial data to perform the mandated semi-annual analyses. However, even if EIA collects or acquires reliable data on refinery outages, the agency lacks other data—such as data on special fuel blends—that could be important for the Department of Energy in meeting its obligations to conduct periodic analyses of the potential impacts of refinery outages on prices of petroleum products. While a full cost/benefit analysis of the merits of collecting additional data was outside the scope of this review, EIA has the authority and expertise to determine and suggest what other information for inclusion on the monthly refiner survey could be helpful in adequately evaluating the potential effects of both planned and unplanned outages on prices of petroleum products.