

Hurricane Response and Market Effect

Hurricane and tropical storm activity can put a strain on U.S. oil and natural gas operations, particularly if the storm tracks through the production-heavy Gulf of Mexico or makes landfall along the Gulf Coast region, which houses many of the nation's refinery and natural gas processing centers.

When gasoline production is lost and demand surges, fuel prices sometimes rise—even in areas far from hurricane-affected states. API has assembled this fact sheet to help consumers better understand the interconnected nature of the U.S. fuel supply system and what happens when a supply shock, such as a hurricane, occurs.

Safety



The oil and natural gas industry has developed standards to ensure the safety of personnel on drilling rigs and platforms leading up to and following a hurricane.

During a hurricane, it is important to understand the environmental conditions in and around the Gulf of Mexico and to apply that knowledge to make offshore and onshore facilities less vulnerable. Days in advance of a tropical storm or hurricane moving toward or near their drilling and production operations, companies will evaluate the situation and may decide to evacuate personnel and may relocate drillships to a safe location. After a storm has passed, operators initiate "flyovers" of onshore and offshore facilities to evaluate damage from the air. Once safety concerns are addressed, operators will send assessment crews to offshore facilities to physically assess the damage. If facilities and supporting infrastructure are undamaged and ready to accept shipments, operators will begin restarting production and drilling rigs will commence operations.

Gulf of Mexico



The Gulf Coast region of Louisiana, Mississippi, Alabama and Texas is the heart of the nation's oil and natural gas industry. According to Energy Information Administration (EIA) statistics in 2015, this area accounted for over 50 percent of U.S. refining capacity and Federal waters in the Gulf of Mexico accounted for about 18 percent of the oil and 5 percent of total natural gas production.

In advance of a tropical storm or hurricane, companies will evaluate and may decide to evacuate all non-essential personnel and begin the process of shutting down production, refining operations and pipelines. After a storm passes, companies must perform extensive inspections and damage evaluations to determine when it is safe to resume operations. Even if there is no damage, operations cannot always resume immediately. For example, restarting a refinery is complicated and it may take several days to restore full production. The restoration of power supplies is crucial, and electricity disruptions are common after a hurricane.

Supply System

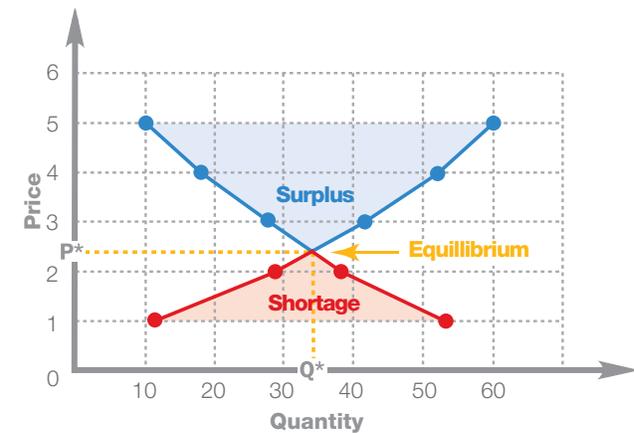


Refinery operations also can be hampered by a lack of crude oil feedstock if offshore production platforms or ports and pipelines have sustained damage or loss of power supply. Refineries and pipelines originating in the Gulf Coast region are major suppliers to other parts of the nation which is why motorists in states far from Texas and Louisiana can sometimes feel the price effects of a hurricane.

According to the EIA data, half the gasoline used on the East Coast and about one quarter of the crude oil run in refineries in the Midwest are shipped from the U.S. Gulf Coast region of the United States. The country relies on pipelines, barges and tankers to deliver crude oil and refined petroleum products reliably to where they are needed throughout the country. In order for pipelines to move these commodities they must have a steady supply to push forward what is already in the lines and electric power to run the pumps that move the commodities along.

Source: PennWell 2016

Market Response



When a hurricane disrupts refinery or pipeline operations, the combination of an immediate loss of gasoline and diesel production and a lack of demand for crude can result in a two-tier market – the price of fuel can rise and the price of crude can fall. At the same time, there can also be pockets of rising demand for fuel.

Market forces and the cooperation of government and the oil and natural gas industry are often the most effective path to restoration of supplies taken off line by hurricanes. The industry seeks to resume normal operations as quickly and safely as possible to continue to meet consumer demand. The government also steps in to alleviate supply concerns by issuing multi-state fuel waivers which encourage imports and lending crude oil from the nation's Strategic Petroleum Reserve (SPR).

Consumer Tips



When a hurricane threatens to disrupt fuel production, it is important for consumers to conserve energy.

According to Federal Emergency Management Agency, consumers in the path of a hurricane or tropical storm should have a proper safety and evacuation plan and secure their homes. As a storm approaches, consumers around the country should conserve energy use in homes and maintain regular buying habits for their vehicles, which can help alleviate a sudden surge in demand.