

Hurricane Harvey's impact on energy markets

Supply chain disruptions and skyrocketing 'cracks'



Houston Texas, August 2017

Source: Shutterstock

Refined products

Wikipedia: 'Crack spread is a term used in the oil industry and futures trading for the differential between the price of crude oil and petroleum products extracted from it.'

The biggest impact on energy markets from hurricane Harvey has been in refined products. 3-2-1 cracks in the US Gulf Coast have rallied 33% to US\$24/bbl currently. It is not too much of a surprise though, with nearly 4.3MMbbls/d of refining capacity shut in the Gulf Coast, along with a string of logistical disruptions.

The gasoline market has felt the full effect of hurricane Harvey

Spot gasoline cracks rallying from US\$20/bbl to US\$37/bbl in just a week. The shutting of almost 4.3MMbbls/d of refining capacity, combined with strong driving activity ahead of the Labor Day

holiday, has pushed the crack to levels last seen in 2013. Among the refineries shut are Motiva's 605Mbbls/d Port Arthur refinery, the largest in the US, and Exxon Mobil's 560Mbbls/d Baytown and 345Mbbls/d Beaumont refineries. Following hurricane Rita in 2005, it took up to two months for refinery run rates to return to levels prior to the storm. How quickly refineries return to normal this time around will depend on how severe the damage is and how accessible some of the facilities are, owing to flood waters.

Effects of supply constraints

As a result of supply constraints, the nation's largest fuel system, the 2.5MMbbls/d Colonial pipeline that delivers gasoline, diesel and jet fuel to the East Coast from the Gulf Coast, shut its lines carrying diesel and jet fuel on Wednesday and is scheduled to shut its other line carrying gasoline on Thursday. This follows the closing of the 660Mbbls/d Explorer Pipeline, which connects Gulf Coast refiners with Oklahoma.

The logistical issues in transporting US refined products have resulted in increased interest in shipping European cargoes to the US East Coast and even Latin America, lending support to European prices. The EIA's weekly report showed that US refined products stocks increased 4.3MMbbls for the week ending 25 August 2017, while crude oil stocks fell 5.4MMbbls over the week. Meanwhile, refinery utilisation rates hit a record 97%; however, the current data does not cover the full impact from Harvey. Data out next week is likely to be entirely different, with a sizeable drop in refinery utilisation (to c.70%) and product inventory.

Falling exports to tighten supplies elsewhere

The US is a large exporter of diesel (to Europe) and liquefied petroleum gas (to Asia); however, the refinery and export terminal shutdowns indicate that this supply has fallen significantly, forcing buyers in Europe and Asia to look elsewhere.

The US exports nearly 75-90% of its refined products cargoes from ports that were affected by Harvey.

In Europe, ICE gasoil cracks have traded to levels last seen in September 2015, as a result of the storm. Prior to Harvey, the US shipped c.500-550Mbbls/d of clean products (mostly diesel) to Europe. However, since 25 August, there have been no diesel loadings, meaning Europe will need to drawdown inventories or turn increasingly to Russia, the Middle East and Asia to meet the shortfall. Similarly, for LPG, Middle Eastern suppliers have raised prices by US\$40-60/t for September deliveries, with Asian demand soaring. The September propane contract in North East Asia is currently trading at a premium of US\$8-10/t to October, compared to a discount of US\$1/t prior to the storm.