DME

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FUTURES INSIGHTS

U.S. Hurricane Season and Global Energy Markets

Navigating Stormy Waters

OCTOBER 2020 CONTRACT

OSP	TOTAL DELIVERY	TOTAL EXCHANGE VOLUME	ADV
$44.32	11.474 MILLION BARRELS	92,226 CONTRACTS	4,392 CONTRACTS

Introduction

Energy traders were gripped late August as Hurricane Laura made its way across the Gulf of Mexico (GOM), disrupting offshore crude production and onshore processing facilities, and marking the first major storm of the 2020 Atlantic Hurricane season. While the disruption is felt directly along the U.S. Gulf (USG) coast, such events can have a global impact on energy prices -be it key crude oil benchmarks, gasoline in Europe or LNG in Asia.

The Atlantic Hurricane season is now a familiar fixture in the energy trading calendar, and the best laid trading or hedging strategies can be derailed by a major storm moving into the GOM. This often means energy traders need to take mitigating action once a storm looks threatening.

Hurricane watch

In the period June to November tropical storms form across the Atlantic, originating from as far afield as the west coast of Africa and fueled by the warmer post-summer oceans. Major storms are usually in the late-August to October period and those heading into the USG can be a significant threat to oil/gas production, refining/processing and disrupt shipping/bunkering operations.

Most energy traders outside of the U.S. were introduced to the impact of Atlantic storms on energy prices back in 2005, as hurricane Katrina helped push crude oil prices above $70 per barrel for the first time ever and sent US natural gas and gasoline prices soaring by 20%.

Energy markets in Asia face their own weather-related threats from the Pacific typhoon season, which runs throughout the year but peaks May-October.

Japan and South Korea shipping and bunkering operations were hit by Cyclone Haishen in early September, but no significant damage was reported.

The path and impact of Laura

Moving into the final week of August, energy traders were placed on high alert from the twin threats of storms Marco and Laura, and announcements that offshore oil/gas operators were shutting in production, while refiners along the USG coast were placed on high alert.

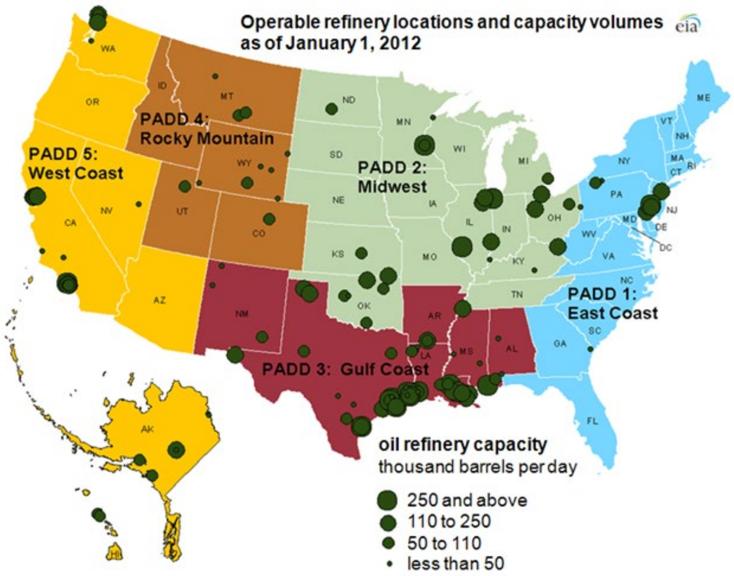
Over a million barrels per day (bpd) of crude production was initially shut in, representing 58% of the offshore output, while around 45% of natural gas production was taken offline.

Storm Marco was briefly upgraded to a category1 hurricane, before losing power and making landfall as a relatively minor tropical storm. Laura, however, continued to gain strength as it moved from the Atlantic and into the warm waters of the Gulf of Mexico.

As Laura intensified, further shuts-ins were announced and by August 25 some 80% of USG crude production, or around 1.5 million b/d, was taken offline in preparation. Reuters reported that energy industry was preparing for the biggest threat since Katrina 15 years earlier.

Predicting the exact landfall of a hurricane is notoriously difficult but as models were pinpointing key refining areas along the USG coast, refiners and processing plants prepared for the worst. Laura intensified to a category 4 hurricane storm on August 26, which means wind speeds of 130-156 miles per hour and the potential for catastrophic damage on landfall.

The Gulf Coast hosts the largest concentration of refineries in the US, in addition to major gas processing plants, petrochemicals and bunkering operations. These were all under threat not just from the devastating winds, but dire predictions of a huge storm surge put coastal plants at risk from major flooding.

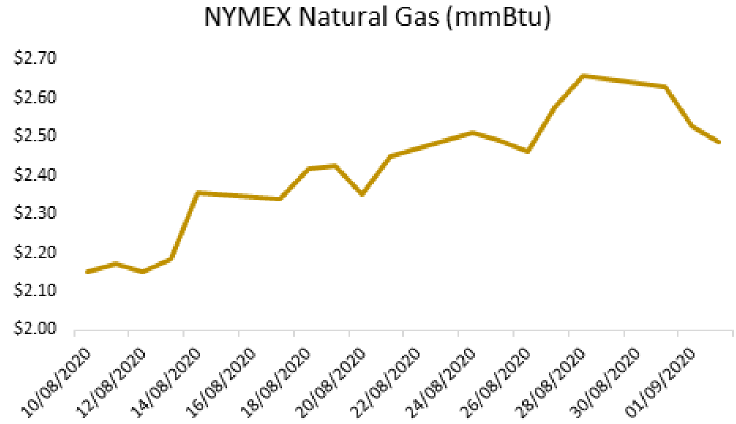


Energy market price reaction

Natural gas prices in the U.S. were already in an uptrend from the historic lows earlier in the year and as Laura made landfall on August 27, Reuters reported a fresh

9-month high in benchmark natural gas prices.

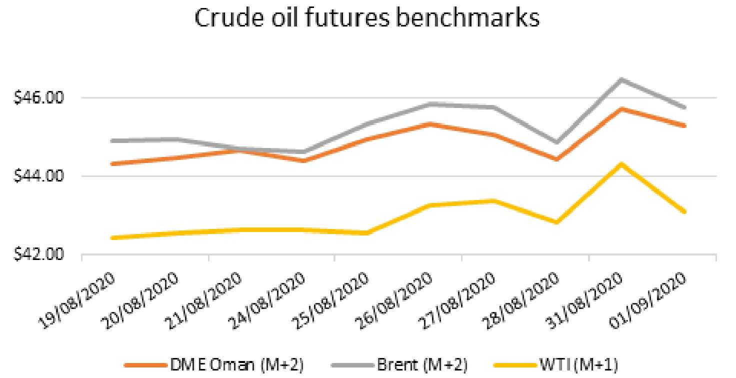
Natural gas futures NGc1 for September delivery rose 12.4 cents, or 5.0%, to $2.585 per million British thermal units putting the contract on track for its highest close since Nov 2019. In turn, LNG prices in Asia topped $4/MMBtu for the first time since January.



Oil markets were initially more muted, but with the offshore crude disruption lasting into September major oil benchmarks including WTI, Brent and Oman registered 5-month highs in the wake of Laura, before erasing off on renewed fears of muted global demand.

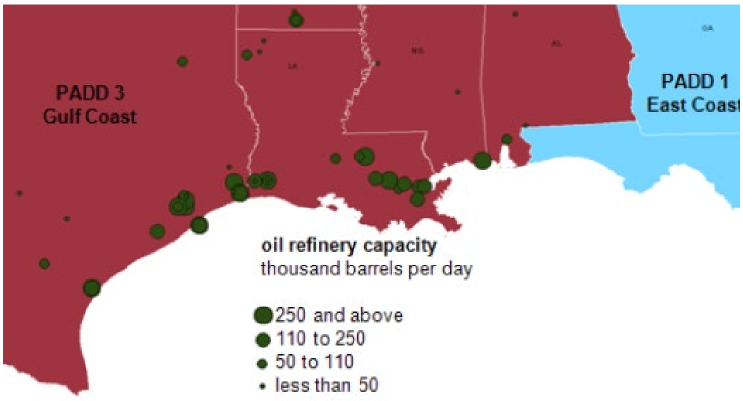
Following Laura U.S. crude oil exports were down by around 1 million b/d with export facilities along the coast temporarily suspended.

As Laura made landfall Reuters reported that U.S. producers had shut 1.56 million bpd of crude output, or 83% of the Gulf of Mexico's production, while nine refineries had shut around 2.9 million bpd of capacity, or 15% of U.S. processing capacity.



Impact on refining and product prices

As Laura intensified into a category 4 hurricane, refineries along the Texas/Louisiana coast were placed on high alert, with clusters located in the Houston region and Port Arthur/Lake Charles on the Texas/Louisiana border.



The Port Arthur/Lake Charles facilities, which includes the key Sabine Pass LNG export terminal, took the direct hit from Laura and while the storm surge was relatively minimal operational disruptions continued into September.

Oil markets well supplied during the covid-19 demand retreat, but margins for gasoline and diesel saw a short-term bounce with the volatility felt as far away as Singapore.

Conclusion

Laura was a relatively early super storm in that it was only the eighth Category 4+ August storm since 1950. While the damage was not as bad as initially feared and the predicted surge failed to materialize, a category 4 hurricane was a timely reminder that energy traders need to keep an eye on developing storms in the Atlantic.

When Katrina hit the U.S. Gulf in 2005, globalized on-line trading was in its relative infancy, so the market impact was predominantly felt in the U.S. and at a time when the States did not export crude oil.

But in a world of fully globalized trading and energy trade routes, energy watchers from Houston to Shanghai will be keeping a close eye on Atlantic storm activity over the next few weeks.

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