



## California Gasoline Situation Stabilises

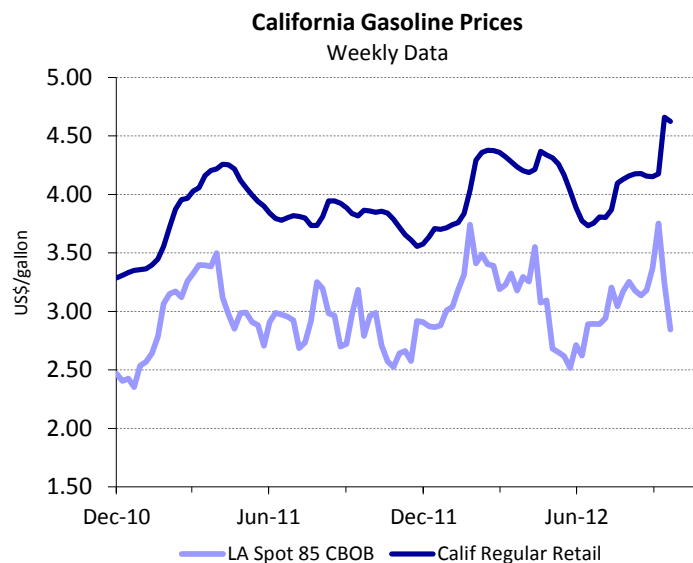
**California refinery outages sent gasoline prices soaring**

Following a 50-cent per gallon spike that sent California retail gasoline prices to record levels and as high as \$5/gallon in some areas, gasoline supply is finally stabilising in the region. An upset at ExxonMobil's 149.5 kbpd Torrance refinery on October 1, following a prolonged outage at Chevron's 257 kbpd Richmond refinery that began in August, sparked a short burst of panic buying and led to closures of petrol stations that were unable to secure supplies. The consumer outcry at the magnitude of the gasoline price surge and legislators' impassioned calls for regulatory investigation were inevitable, but the entire episode served as a reminder of the isolated geography of that market and its dependency on local refining.

**Retail prices for regular gasoline hit \$5/gal in some areas**

The price event was sudden and violent, leaving car-loving California motorists stunned, as the average price for regular gasoline rose to \$4.69/gal, according to EIA data, consistent with other price surveys. As shown in the chart below, retail prices had ticked lower in the EIA mid-week data, with some surveys now indicating \$4.55/gal.

**A \$0.50/gal spike in spot prices fed into retail prices, but...**



Sources: EIA, Bloomberg

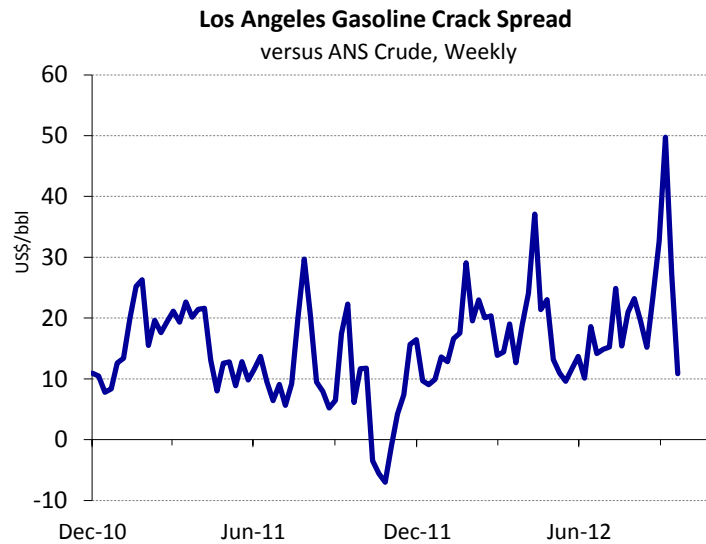
**...subsequent drop in spot prices yet to bring retail prices lower**

The chart also illustrates the \$0.50/gal spike in wholesale gasoline prices, which fed the retail price jump, but now revealing the downward stickiness of retail prices, as spot gasoline prices have reversed and crashed below \$3.00/gal.

**Power outage at ExxonMobil's Torrance refinery sparked the drama**

The drama began with a power outage at ExxonMobil's 149.5 kbpd Torrance refinery on Monday, October 1 that forced the shutdown of several units and tightened local product supply. The refinery was back on line and at full production by the end of that week, but a number of other factors contributed to the market response that sent Los Angeles gasoline crack spreads against Alaska North Slope (ANS) crude soaring to \$50/bbl, as shown in the chart below.

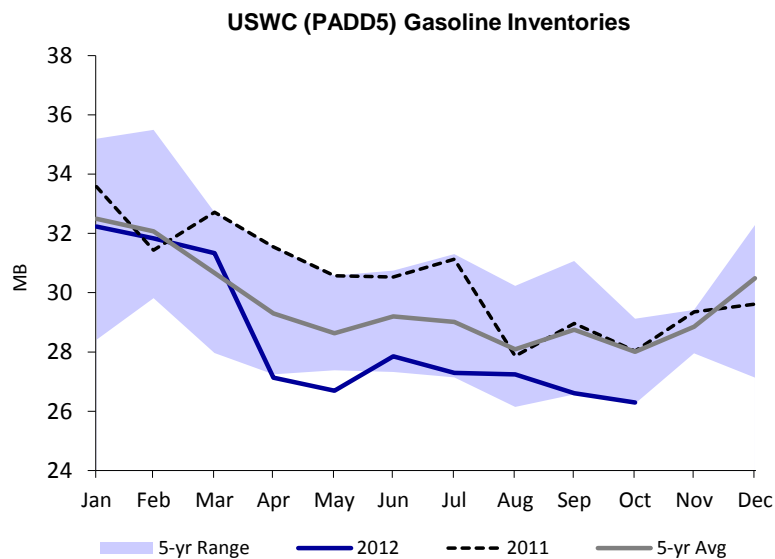
**Leading to \$50/bbl crack spreads for gasoline**



Source: Bloomberg

Historically-low gasoline inventories occurring at the time of the seasonal switch-over from summer grade to winter grade gasoline was a major culprit, as shown below.

**PADD5 gasoline inventories running 6-7% below historical average**



Source: EIA

**Seasonal switch from summer to winter grades always an opportunity for mayhem**

**Days inventories were at historical lows also**

**Despite drama, local refiners adapting well**

EIA data indicates that last week, USWC (PADD5) gasoline inventories slipped to 26.3 MB, a decline of 0.3 MB since the end of September, just prior to the Torrance mishap. These low stock levels are occurring during the seasonal low in gasoline inventories, as refiners typically draw down stock of summer-grade gasoline, before building inventories of winter grade. Although the weak macro-economic environment in California has pushed PADD5 gasoline demand 1.9% lower year-over-year (yoy) for 2012 to date, inventory levels were also low in terms of days of forward gasoline demand. Current total gasoline stocks represent 18.0 days of demand, very close to the 17.6-17.9 day minimum levels witnessed during the past several years. Some industry observers have remarked that the price spike was the natural outcome of tighter inventory management in a constrained and geographically-isolated refining environment such as California.

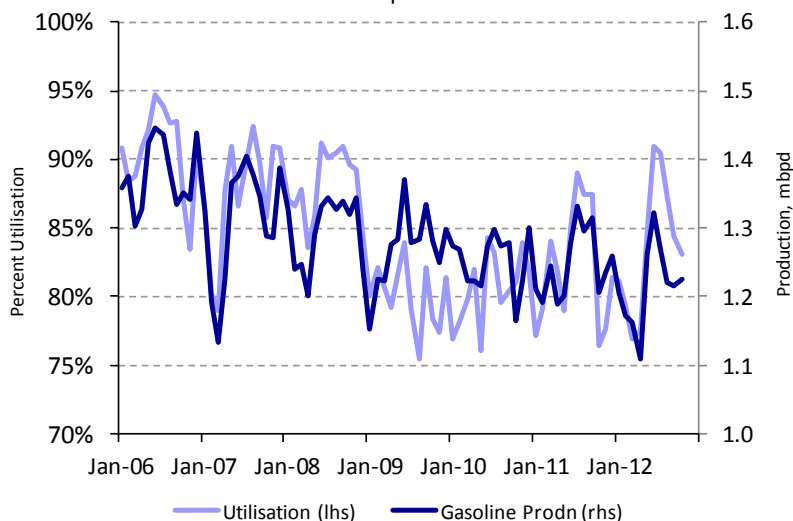
Although the price spike could be attributed to bad luck in refining mishaps -- or something more nefarious in Senate sub-committee hearings -- the regional refiners have actually adjusted to the loss of distillation capacity in a rational manner.

**Gasoline output stable, despite drop in refinery utilisations**

**Other regional refiners boosted runs and offset loss of capacity**

**USWC (PADD5) Refinery Utilisation**

Gasoline Output vs Utilisation



Source: EIA

As shown in the above chart, this summer, PADD5 refiners had been running their units at the highest level of utilisations since 2008, helping to boost their level of gasoil exports, principally to Latin America. Then, in early August, the shutdown of Chevron's 257 kbpd Richmond refinery removed 8.5% of PADD5 operable distillation capacity. Regional utilisations dropped from 90.5% in July to 87.3% in August, and then to 84.4% in September. The 6% drop in utilisations between July and September suggests that other refiners were able to increase throughput to offset the loss of Richmond partially. Meanwhile, the five-day loss of the Torrance refinery, representing 4.9% of PADD5 operable capacity, only produced a one percentage point decline in utilisations in early

October, as other regional refiners were happy to increase throughput and take advantage of the \$50/bbl gasoline crack spread.

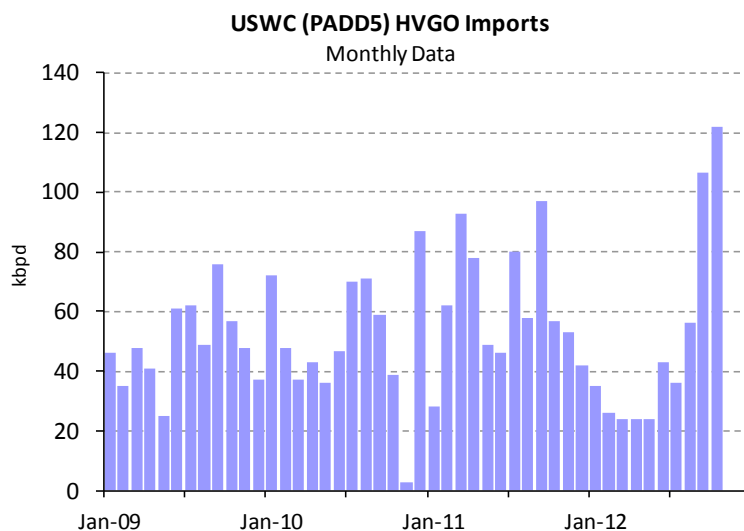
## PADD5 Gasoline output stabilising

Although refinery gasoline output fell sharply from June levels of 1.32 mbpd (0.30 mbpd of finished gasoline and 1.02 mbpd of blendstocks), gasoline production has stabilised near 1.22 mbpd since the Richmond mishap, despite the drop in utilisations.

## Richmond hydrocracker and FCC still operating

As we suggested in August, PADD5 refiners have been able to boost gasoline output and yields by importing additional heavy vacuum gasoil (HVGO) as a cracker feedstock. Both the hydrocracker and fluid catalytic cracking units at its Richmond refinery are still operating, despite the loss of distillation capacity. As shown in the chart below, PADD5 imports of HVGO have surged since the Richmond incident, with imports hitting 122 kbpd during the first two weeks of October.

## Imports of HVGO have surged to support cracker feed



Source: EIA

## HVGO imports have bolstered dirty Panamax earnings

This import arrival pattern would be consistent with the delay inherent in securing HVGO cargoes from traditional HVGO sources in the Caribbean and Algeria, following the early-August shutdown at Richmond. This burst of import demand would also help to explain the relative strength in dirty Panamax earnings, particularly on trans-Atlantic routes.

## PADD5 gasoline demand has been in 1.5% annual descent

Meanwhile, the loss of refinery capacity and the subsequent gasoline price spike have not created any parallel drama in the clean tanker markets. Despite the large size of the California and PADD5 gasoline market, the regional gasoline balance has been manageable since the financial crisis. Since peaking at 1.63 mbpd in 2006, PADD5 gasoline demand has fallen at a 1.5% average annual pace through 2011 and is poised to decline another 1.6-1.8% in 2012. This collapse in demand, from weak macroeconomic fundamentals in California, as well as structural issues surrounding car fleet fuel economy and demographics, has brought consumption levels below 1.5 mbpd. At this

point, the local refining system can meet these gasoline demand levels with utilizations in the 83-84% level, even allowing for the occasional refinery mishap.

With a more relaxed gasoline balance, PADD5 gasoline import needs have diminished. As shown in the chart below, the international gasoline balance for PADD5 has reversed since 2007, when the district imported a net 93 kbpd of finished gasoline and blendstocks, to exporting a net 22 kbpd of gasoline during 1h12.

**Making for a relaxed gasoline balance**

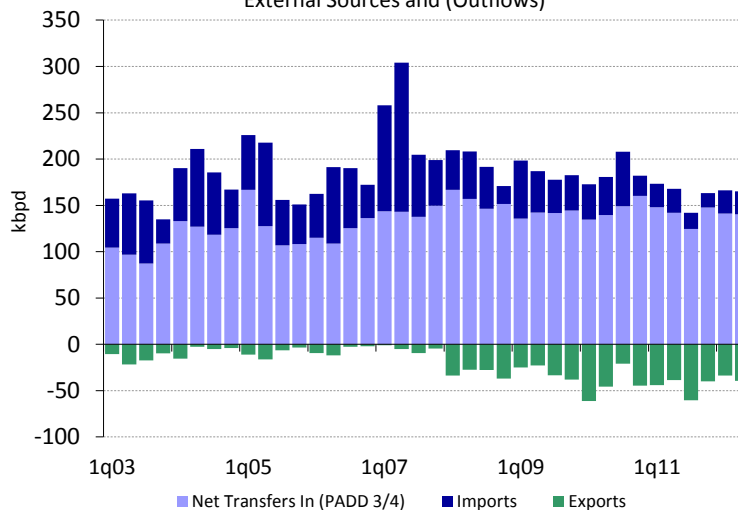
**PADD5 has become net exporter of gasoline...**

**...but still relies on other PADDs for modest transfers of gasoline and ethanol**

**PADD1 refiners provide only 10% of gasoline demand**

**...versus 80-85% from PADD5 refiners**

**USWC (PADD5) Gasoline Net Position**  
External Sources and (Outflows)



Source: EIA

The region is still reliant, however, on transfers in of gasoline from adjacent PADDs, which have averaged 144 kbpd during the past two years. The district also relies on another 130-150 kbpd of ethanol transfers from the other PADDs, not shown in the above chart, while its external trade in ethanol has not been material. In contrast to PADD1 on the US East Coast, which relies on inter-PADD transfers for 70% of its gasoline needs and net imports for another 20-25%, PADD5 depends upon its local refining system to provide 80-85% of its gasoline needs. For this reason, the region remains isolated and vulnerable to refinery upsets, and this month's Torrance episode will remain a vivid reminder of this reality.

Poten Tanker Market Opinions are published by the Commodity Consulting & Analytics department at Poten & Partners. For feedback on this opinion or to receive this via email every week please send an email to [tankerresearch@poten.com](mailto:tankerresearch@poten.com). For information on the services and research products offered by our Marine Projects & Consulting department or to contact our tanker brokers please visit our website at [www.poten.com](http://www.poten.com).