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ONE SIZE FITS ALL? Or, If The Shoe Pinches Should You Still Wear It?

There is a serious move under way led by a group of heating oil marketers and regulators that would force a reduction in the sulfur level for distillates used for space heating.

Those supporting this position would require that distillates used for space heating have the same sulfur level as that mandated for on-highway diesel.

To the best of our knowledge, there is no study in the public domain that deals with the supply of low sulfur distillates (we've checked with several industry associations and have had meetings with the DOE, EIA on this issue).

Discussions with energy specialists at EIA confirm that these studies do not exist.

They also share our nervousness that during a cold snap that supply may not be sufficient to meet low sulfur demand without a sharp run up in price.

Ironically even if a study were undertaken, one couldn't conclude definitively that under business as usual conditions that there is sufficient (insufficient) supply to meet normal demand.

Thus, if the answer about the adequacy of supply can't comfortably be quantified, then what can we say about the issue – qualitatively?

What is it that we actually know that would let us form an intelligent opinion given the lack of quantitative information?

Global oil demand has been growing at a very strong rate and demand will likely remain relatively strong during the next several years. Interestingly, demand has continued to surprise the markets and forecasts have steadily been revised upward.

Despite the sharp growth in demand, net additions to global refining have been enemic.

Global demand has grown 4.6 MMB/D in the past two years, yet additions to refining have been only about 15% of the additions to demand.

Refinery utilization has been rising dramatically throughout the world and this trend will continue for at least the next two years.

Thus, conforming product availability will stay tight, relative to crude oil availability.

The fastest growth in petroleum demand has been in middle distillates, (ex. jet fuel) heating oil and diesel, with diesel demand representing virtually all of the growth.

In 2003/2004, gasoline accounted for 17% of global product demand growth while distillates were significantly stronger. Distillates accounted for almost twice the share of growth of gasoline, representing 33% of product demand growth.

Thus the pressure at the margin has been in the low sulfur distillate category.

Unfortunately, the crude oil that is available at the margin is high sulfur low gravity crudes.

Therefore, not only is there insufficient growth in net refining additions, but substantially more investment is necessary in down-stream capability to handle these lower quality crudes.

We know the distillate demand has been strong globally, led by China and the U.S. and demand is likely to remain relatively strong. China has become an importer of low sulfur diesels as has Europe where diesel-refining capability is insufficient to meet demand. Thus the U.S. is already competing with these regions for low sulfur supply.

This past Fall (September and October) high sulfur distillate demand (space heating use) actually declined by approximately 5% vs. comparable year-ago levels.

Despite this decline, N.Y. Harbor spot heating oil prices jumped by 32 ¢/gallon (\$13 per barrel).

How much higher would distillate prices have risen if heating degree-days and distillate demand been higher, is anyone's guess. But it's hard to see why marketers would want to reduce the flexibility of the supply chain by supporting a low sulfur mandate. It would reduce the ability to shop the world and eliminate the ability to blend high sulfur supply. The tighter the quality specs, the more boutique the product, the greater the price volatility.

Given the tightness in global refining and the lack of any cushion in spare sweet crude oil capacity why would the heating oil marketers want to expose themselves not only to the "normal' volatility of the space heating market, but to the added volatility in crude oil production problems that crop up from time to time from sweet crude oil producers like the North Sea and more recently Nigeria.

The substantial reduction in sulfur imposed by Federal requirements for on-highway diesel in June of next year coupled with the Tier II sulfur reductions in gasoline will undoubtedly stretch the refining and distribution system at least through 2007 (non-road diesel sulfur reduction in 2007).

It's important to see how effectively these programs work before we mandate further restrictions on the industry.

In the interim, the industry should utilize this period to more thoroughly examine what the most cost efficient sulfur level should be for the home heating. The dealers, NORA, the DOE and the Northeast states should undertake a study, probably at the DOE lab in Brookhaven to determine that level.

While the current level of sulfur in distillate heating oil (2,500 ppm) is too high, it would be a pure coincidence if the diesel sulfur level of 500 ppm turned out to be the most cost effective. There is no question that a lower sulfur level reduces the cost of servicing the burner, but the appropriate level may turn out to be closer to 1,000 ppm rather than 500 ppm. We should use this time to find out.

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