Testimony of

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Mr. Chairman and Members of the Committee, I appreciate the opportunity to appear before you today to discuss the distillate fuel market and this year's distillate fuel prices.

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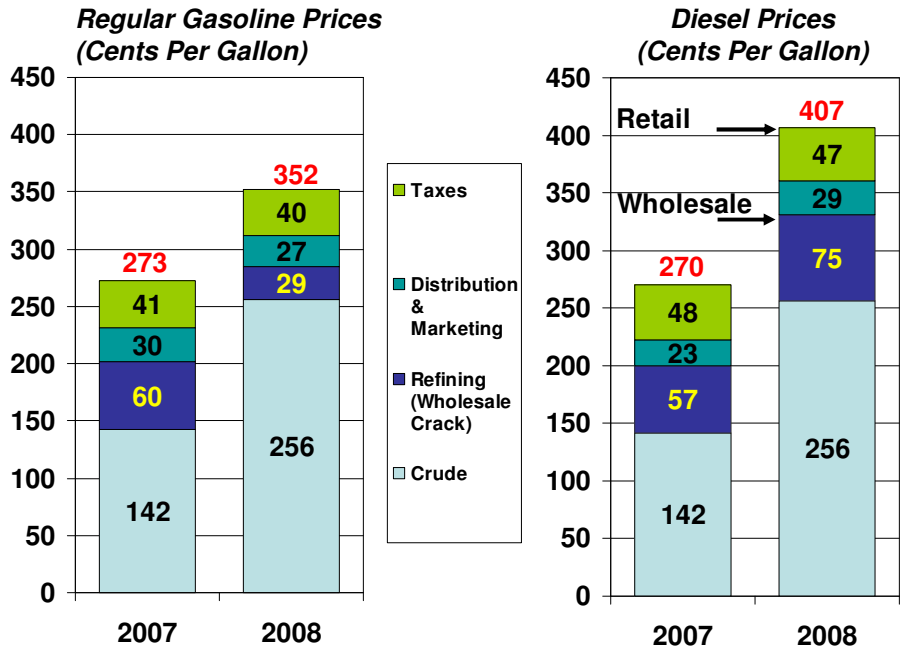
Pre-Hurricane Diesel and Gasoline Market Overview

Prices for crude oil, gasoline and diesel set new records in 2008. After rising above $4 per gallon in June, the national average regular gasoline price in EIA's weekly price survey peaked at just over $4.11 on July 7, about $1.13 higher than at the same time last year. Diesel prices experienced an even greater increase this year. Having passed the $4 per gallon mark in April, U.S. diesel prices peaked at $4.76 on July 14, $1.88 higher than the same time in 2007.

While crude oil and product prices were setting new records in the first 7 months of 2008, the markets for gasoline and distillate fuels (diesel and heating oil) exhibited very different behavior. Both gasoline and distillate prices were pushed up by record crude oil prices, but gasoline prices did not rise as much as crude oil prices, while distillate prices rose more than crude oil prices, as illustrated in **Figure 1**. (Note that both heating oil and diesel prices tend to move together since they are similar products,

derived from the same boiling range material from crude oil. The main difference is diesel has more sulfur removed than has heating oil.)

Figure 1. Comparing Gasoline & Diesel Price Components January-July



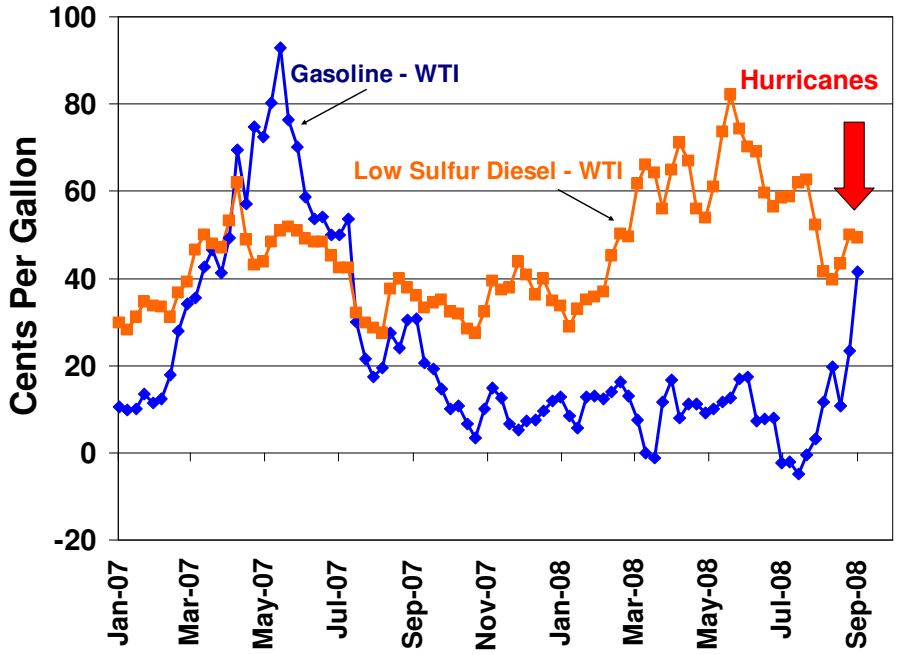
Source: EIA. Web site pump price components
Note: Taxes exclude local taxes and State taxes based on gross or net receipts

Figure 1 displays the basic components of average gasoline and diesel prices during the first 7 months of this year in relation to their values for the comparable 2007 period. For example, diesel prices averaged $4.07 per gallon from the beginning of this year through July. Crude oil, the feedstock for gasoline and diesel, averaged $2.56 per gallon. Refiners processed the crude oil and received an average of $3.31 per gallon, providing 75 cents per gallon of diesel fuel above crude oil costs to cover refining costs and profits. Pipelines, terminal operators, distributors and retailers received about 29 cents per gallon to store and move the product to retail stations, and taxes accounted for

about 47 cents per gallon. Separating product prices into these components helps to explain different elements of the petroleum market, but the relationship between crude oil and product prices can be a two-way street. For example, strong demand for distillate products is one factor that can add pressure to crude oil prices.

Figure 1 shows that higher crude oil prices accounted for about $1.14 of the per-gallon increase in the January-July gasoline and diesel prices over their levels in the comparable 2007 period. Figure 1 also shows that average prices at the wholesale level were higher for diesel than for gasoline. During the first 7 months of 2007, the diesel price spread (the difference between wholesale diesel and crude oil prices) averaged about the same as the gasoline spread, but, in 2008, the average diesel price spread expanded significantly over 2007, while the average gasoline spread narrowed. The combination of abundant gasoline supply and relatively weak demand depressed gasoline margins this year. With gasoline accounting for nearly half the output volume of a typical U.S. refinery, refiners in the United States responded by pulling back on crude oil inputs. At the same time, world distillate (diesel and heating oil) markets tightened, affecting U.S. diesel and heating oil prices. Although refinery utilization dropped in 2008 as a result of the gasoline market weakness, higher diesel margins led refiners to increase refinery distillate yields (the ratio of distillate output to crude oil input), allowing for increased distillate production in spite of the decline in crude oil inputs.

Figure 2. Distillate and Gasoline Crack Spreads (Spot Product Price Minus WTI Crude Price)

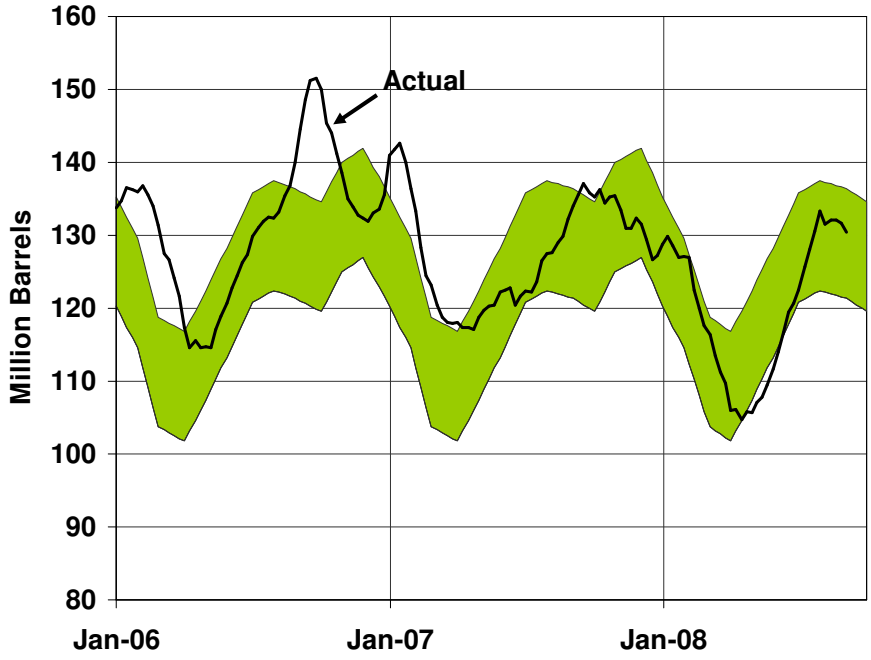


Source: Reuters weekly average spot prices for West Texas Intermediate, Gulf Coast low-sulfur diesel, and regular gasoline

Figure 2, which shows the crack spreads (spot product price minus spot West Texas Intermediate (WTI) crude oil price) for gasoline and low-sulfur distillate, details the different price paths for these two products relative to crude oil. Abundant gasoline supplies, as evidenced by very high inventories early in March 2008, drove the gasoline crack spread to low levels, creating incentives for refiners to reduce production. Gasoline crack spreads were relatively weak through July and into August, typically the peak gasoline demand periods. They did, however, increase towards the end of August before hurricanes Gustav and Ike. At the same time, wholesale (i.e., spot) distillate prices were very high relative to crude oil, keeping diesel and heating oil prices above that of gasoline

though the summer months. Yet, distillate inventories in the United States were generally not particularly low (**Figure 3**), indicating adequate U.S. supply.

Figure 3. Weekly U.S. Distillate Inventories

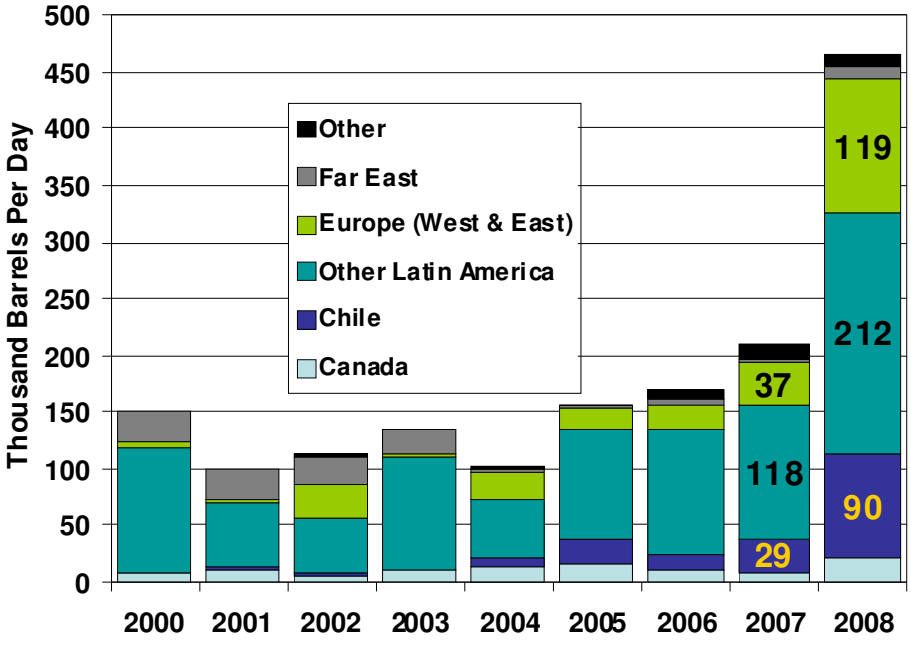


Note: Shaded band represents typical levels.
Source: EIA *Weekly Petroleum Status Report*

The price of distillate prior to the hurricanes appeared to reflect tight world distillate markets this year, not just the U.S. supply/demand balance. World diesel demand growth is coming both from increasing transportation use and increasing use of distillate as a fuel for electricity generation, particularly in developing countries where electricity demand is outstripping generating capability. Generally, oil product demand in the non-OECD countries, where oil demand is growing fastest, is more heavily weighted towards distillate than is product demand in the U.S. On top of this trend, several unusual circumstances were boosting distillate demand further. Chile has been

experiencing both a severe drought that reduced its hydropower generation and reduced imports of natural gas from Argentina. This, in turn, caused Chile to turn to more diesel fuel for electricity generation. As a result of these problems, Chile's diesel imports are expected to increase 5 to10 percent in 2008 over 2007. China's demand for diesel also continued to increase as it turned to diesel-powered generators to combat shortages, stemming in part from recent earthquake-related disruptions of coal and natural gas supplies, and to provide adequate electricity for the Olympic Games this summer. South African mining companies are turning to diesel generators to deal with a power crisis in that part of the world. Even Europe experienced some very tight supplies of ultra-low sulfur diesel this past fall and this year. This very tight international situation has been pushing up the price for diesel worldwide, including in the United States.

Figure 4. Distillate Exports January through June



Source: EIA *Petroleum Supply Monthly*

As a result of strong international diesel demand, the United States has exported more diesel than is typical, as shown in **Figure 4**. Both Europe and Latin America purchased unusually high volumes from the United States. Europe imported 119 thousand barrels per day from the United States during the first half of 2008, compared to 37 thousand barrels per day in the first half of 2007. At the same time, Latin America imported a record volume of distillate from the United States: 302 thousand barrels per day compared to 147 thousand barrels per day in the first half of 2007.

Prior to the recent hurricanes, product prices had declined from their peak July levels, mainly as a result of the decline in the price of crude oil. In addition, the supply-demand balance in the diesel market had eased, and is expected to ease further through the end of the year for several reasons. Specifically, the regional diesel balance in Asia is expected to improve due to the recent start of China's 200-thousand-barrel-per-day refinery expansion at Qingdao and the planned start later this year of the 600-thousand-barrel-per-day refinery at Jamnagar in India. Latin America's problems may ease a bit as their winter season ends, particularly if Chile sees some drought relief.

Refinery Response to Weak Gasoline and Strong Diesel Prices

Refiners typically modify their output of a product either by adjusting the inputs to the refinery, which affects the output of all products, or by adjusting the yield or fraction of a product produced from a barrel of crude oil. Both types of adjustments have been made by refiners in 2008 to meet the market conditions.

Normally, refinery utilization (refinery inputs divided by capacity) varies seasonally with demand and maintenance outages. Utilization generally is highest during

the summer months of May through August, where the industry frequently averages about 95 percent utilization. In the winter months of January through March, utilization frequently averages closer to 89 percent.

This year, with wholesale gasoline prices sometimes below the price of crude oil, increased use of ethanol, and plenty of inventory volumes to supply the market, refiners pulled back both on refinery utilization and on gasoline yields. Refinery utilization averaged 86.6 percent for January through July 2008, which is 5.6 percent lower than typical January through July utilizations seen before 2006, when damage following the hurricanes in 2005 affected utilization patterns.

Despite the reduction in refinery utilization rates in 2008, distillate production has been high due to yield adjustments. While the extent of changes in the product mix is limited in the short term by the equipment available at each refinery, even small yield shifts among products can still produce a significant swing in volumes. For example, if refinery inputs are at 15.4 million barrels per day, a one-percentage point change in yield represents a 154,000-barrels-per-day change in product volume. This year, many refiners made operating changes to increase the amount of distillate produced for each barrel of crude oil that they ran.

During early spring, refiners typically begin to adjust yields to maximize gasoline production. However, because of the much higher crack spreads for diesel fuel this year, this shift did not occur. Furthermore, preliminary data indicate distillate yields have been near or above historical highs for many months this year. At the extreme, data for the months of April and May indicated some refineries have been able to increase distillate

yields as much as 10 percentage points over last year while decreasing gasoline yields a similar amount.

Looking Ahead -- Short-Term

The recent hurricanes have changed the market substantially. Although structural damage to refineries, pipelines, and platforms was less than had been feared, the lost production and the time required for system restart has put gasoline in short supply, and may somewhat delay the typical winter inventory build of distillate products, adding to gasoline, diesel and heating oil prices. In the week following Hurricane Ike, gasoline prices in EIA's weekly price survey rose substantially, particularly in the South Atlantic region (Petroleum Administration for Defense District , or PADD, 1c), the Midwest (PADD 2) and the Gulf Coast (PADD 3). Diesel prices did not show similar impacts – in fact, diesel prices fell on a national average basis, in all but one region. Information regarding the timing of the recovery from hurricane-related shutdowns of refining and oil and natural gas production is changing on a daily basis.

Recently, crude oil prices fell below $100 for the first time since early March. Perceptions have shifted from worries about having enough supply to meet demand to worries about demand significantly falling in the U.S. and spreading to other parts of the global economy. Additionally, some sizeable volumes of non-Organization of the Petroleum Exporting Countries (OPEC) production, such as in Brazil and Azerbaijan, recently came online, leading to an improved perception regarding non-OPEC supply growth for the second half of 2008 in comparison to the first half of the year.

EIA's most recent monthly *Short Term Energy Outlook*, published September 9 before Hurricane Ike and before additional signs of slowing global economic activity, forecast crude oil markets tightening further with WTI price averaging about $120 during the fourth quarter. Under these conditions, residential heating oil would average about $4.07 and diesel $4.11 per gallon under normal winter weather conditions. If, on the other hand, crude oil averages something closer to $100, these estimated prices could be reduced by as much as 50 cents per gallon. We will be looking closely at these uncertainties in our next *Outlook*.

Looking Ahead -- Longer Term

While we expect some near-term easing in the global distillate balance relative to conditions experienced in the first half of 2008, there is a long-term underlying trend that will continue to keep pressure on distillate fuel. Distillate fuel consumption has been growing at a higher percentage rate worldwide than gasoline for many years. Europe has been a primary factor in this shift. In response to concerns about energy efficiency and greenhouse gases, Europe has been shifting its light-duty vehicle fleet to more diesel-fueled vehicles--on top of the increases in diesel fuel used in commercial heavy-duty vehicles. The net result is that Europe consumes more distillate than gasoline, and distillate fuel use is growing while gasoline use is declining.

Looking ahead at U.S. demand over the next 15 years, EIA also expects a significant shift in demand from petroleum-based gasoline to distillates. The Energy Independence and Security Act (EISA) of 2007 substantially increased the renewable fuel mandate that was first established in the Energy Policy Act of 2005 and also significantly

increased corporate average fuel economy standards for light-duty vehicles. More use of renewable fuels, primarily ethanol, will displace petroleum-based gasoline, as will higher fuel economy standards. In addition, vehicle manufacturers are expected to produce more diesel vehicles as part of their strategy to comply with tougher fuel economy standards. While the shift towards diesel is likely to be smaller than the one Europe has seen, U.S. refiners will be facing a significant change in refinery product mix that will impact investments.

In the 15-year period from 2007 to 2022, the increased use of ethanol and increased light-duty vehicle efficiency standards projected in our 2008 *Annual Energy Outlook* reference case is expected to result in a decline in the demand for petroleum-based gasoline of about 610 thousand barrels per day (7 percent). However, continued growth in heavy-duty vehicle use of diesel over the same period is projected to push up distillate demand by about 690 thousand barrels per day (12 percent). As discussed in the *Annual Energy Outlook 2008*, EIA expects that a significant portion of the EISA mandate for cellulosic fuels could be met using a biomass-to-liquids (BTL) technology to produce a renewables-based diesel fuel from biomass.

Refiners are responding to the changing demand outlook and high distillate margins with short-term operating changes to increase distillate yields over gasoline. In addition, some refiners are installing hydrocracking units, which are designed to take heavy material from the crude tower and make distillate fuel. With additional operating changes and with the new hydrocracking capacity being planned, U.S. refiners might not need to do much more to satisfy U.S. distillate needs, although we are continuing to monitor and analyze this issue.

In summary, since hurricanes Rita and Katrina in 2005, we have seen continued strength in distillate prices relative to gasoline, buoyed by the continued world demand growth for this fuel. While diesel prices will probably fluctuate above and below gasoline prices from time to time, they may well remain at a premium to gasoline much more often in the future than they have historically.

This concludes my statement, Mr. Chairman, and I will be happy to answer any questions you and the other Members may have.