

**TESTIMONY OF  
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**BEFORE THE HOUSE COMMITTEE ON ENERGY AND COMMERCE  
ON**

**HURRICANE KATRINA'S EFFECT ON GASOLINE SUPPLY AND PRICES**

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Introduction

My name is Benjamin S. Cooper. I am the Executive Director of the Association of Oil Pipe Lines. AOPL is a 501 (c) (6) non-profit trade association of interstate oil pipelines, which includes pipeline transporters of crude oil, refined petroleum products, liquefied gases and anhydrous ammonia. Our Association's 53 members transport about 85 percent of the crude oil and refined petroleum products delivered by pipelines. AOPL members include pipelines that transport crude oil from production and import points to refineries, and pipelines that transport the refined products produced in those refineries to end users and distributors (retailers, wholesalers, airports, railroads, etc.). AOPL's membership is comprised of domestic U.S. oil pipeline companies and two Canadian oil pipeline companies.

My testimony will first discuss the impact that hurricane Katrina has had on oil pipeline operations and lessons learned during the past week. I then will cover the role played by oil pipelines in petroleum supply, describe government oversight of that role and sketch the challenges faced by the industry in providing sufficient capacity to meet our nation's current and future petroleum transportation needs.

### Impact of Hurricane Katrina

As the Committee knows, the major impact of the hurricane was felt in Louisiana and Mississippi. Four effects of the storm have been important to oil pipelines with operations in these states:

- The lives of local pipeline personnel have been severely disrupted;
- Key pipeline facilities have been flooded;
- Electric power has not been available; and
- The supply of crude oil and products to ship in pipelines has been disrupted

The major affected pipelines have been Colonial and Plantation, which together account for a major share of the refined petroleum products transported along the eastern seaboard, as much as 60% of the supply in some areas of the southeast. Both pipelines were shut down in an orderly way to maintain product quality and pipeline integrity in anticipation of the storm. They then were prevented from restarting by the severity of the storm's impact, in particular, by the loss of electric power. Both companies were able to resume limited service on Wednesday, August 31, when they were able to arrange for alternative power sources. As of September 3, both were receiving some utility electric power. Colonial was running at 80% of capacity, and Plantation was running at 95% of capacity.

Capline, a crude oil pipeline that transports crude oil from the Gulf of Mexico to refineries in the mid west, and one of the pipelines that would carry oil from the Louisiana Strategic Petroleum Reserve sites, was also shut down. As of September 3, service on Capline was restored to 80% of capacity after the integrity of the pipeline was established and utility electric supply to some pumps was re-established.

Dixie, a propane pipeline serving markets in the Southeast could not reopen after the storm due to loss of power. Dixie has also partially resumed service with the restoration of some utility electric power, and as of September 3 was operating at 50% of capacity.

Finally, Louisiana Offshore Oil Pipeline, which operates facilities for receipt and transport of crude oil imported in large tankers was also shut down, but as has since resumed operation at 75% of capacity.

The common denominator in these shut downs is the location of key facilities in areas in the direct path of the storm where flooding was extensive and electric power was out for considerable periods of time. All have substantially recovered as facilities formerly isolated by flooding are reactivated and electric power comes on line. The impact of the shut down of Colonial and Plantation continues to be felt in areas where alternative supply, for example, from imports or waterborne carriers, is not feasible. Of course, the massive shut down of refining capacity in the storm's wake meant and will mean for some time that quantities of supply from these sources will be limited, even after the transportation system is fully restored.

Some questions have arisen regarding whether these pipeline companies were economically advantaged by the hurricane and contributed to the sudden increase in gasoline prices by raising the rates charged for transportation. The facts are that pipeline rates did not change during the past week. For example, Colonial Pipeline's tariff from Pasadena, Texas to Atlanta Georgia (82.82 cents/barrel – less than 2 cents/gallon) was set on July 1<sup>st</sup> and remains unchanged. In fact, several pipeline companies were negatively impacted by the loss of revenue and extraordinary costs incurred to bring their operations back in service as soon as possible.

#### Lessons Learned from Hurricane Katrina

- The decision by the EPA to act quickly to waive temporarily area specific fuel requirements under the Clean Air Act in the widest possible area allows the petroleum distribution system to make the most effective use of existing supplies. Several pipelines serving the Midwest immediately began receiving nominations of alternative gasolines to move north and east. This was an important action that was taken in a timely manner.
- Federal policy should assign a leadership role from within the federal family to address oil pipeline problems during these events. In the wake of hurricane Katrina, DOT's Pipeline and Hazardous Materials Safety Administration performed highly useful services in coordinating with the Federal Emergency Management Agency and addressing bottlenecks as oil pipeline operators sought

to locate and deliver emergency equipment and specialized generators to particular pump stations. PHMSA is the federal agency most knowledgeable about oil pipelines, and is an excellent choice for the role of assisting oil pipelines during emergencies.

- Hoarding and panic buying exacerbate petroleum fuel shortages. Officials need to be active early and continuously to discourage, to the extent possible, these reactions. In addition, dissemination of false information by the media can make hoarding and panic buying worse and generally has a negative impact on markets.
- Restoration of grid electric power is critical to the resumption of pipeline service and should receive the highest priority during these events. The federal government should be doing everything in its power to assist the electric utility industry generally and utilities individually to enhance the ability of utilities to overcome threats and recover rapidly where power is lost despite all best efforts.
- Finally, hurricane Katrina provides a sobering data point in the nation's understanding of the interdependency of the energy supply system and a highly painful real world experience with the impact of a loss of key energy services and infrastructure that approximates many homeland security emergency scenarios.

## The Role of Oil Pipelines in the U.S.

Oil pipelines provide about 2/3 of the petroleum transportation in the U.S., measured in barrel miles. Unlike natural gas, which can only be transported by pipeline, alternatives to petroleum pipeline transportation exist and include tankers, barges, rail and trucks. However, each of these alternatives has significant limitations, and, as a result, pipelines are the primary method of bulk transportation of petroleum over medium to long distances. It is difficult to imagine how our transportation network, which is 95% powered by petroleum, could operate without oil pipelines.

Pipeline transportation has dual advantages of efficiency and safety. About 17% of the annual ton-miles of our nation's freight are carried by petroleum pipelines, at a cost of about 2% of the total U.S. freight bill. Pipelines share with tanker vessels the safest record in petroleum transportation, safer than barge, rail or truck. Deaths and injuries from petroleum pipeline transportation are rare and the environmental impact of pipeline transportation is less than any of its alternatives. Oil pipelines are able to deliver petroleum safely to nearly every region of the U.S. for a few pennies per gallon. A typical rate to transport petroleum product from the Gulf Coast to the Southeast is about 2 cents per gallon, to the Northeast is about 3 cents per gallon and to Chicago is about 2.5 cents per gallon.

## Economic Regulation of Oil Pipelines

The federal government regulates the economics of interstate oil pipelines – in fact oil pipelines are the only part of the petroleum supply system that is under federal economic regulation.

The Federal Energy Regulatory Commission administers the provisions of the Interstate Commerce Act to ensure that interstate oil pipelines:

- Function as common carrier providers of transportation to any qualified shipper;
- Charge no more than publicly available rates filed in advance with the FERC, which are typically limited to a few cents per gallon;
- Assign space on the pipeline based on monthly nominations from all interested shippers and prorate access to that space among all applicants in a posted, non-discriminatory way when the line is full;
- Exercise no undue discrimination among shippers;
- Maintain confidentiality of shipper records and not share information of any shipper with any other shipper; and
- File annual reports on pipeline company income and cost data with the FERC that are available to the public.

Oil pipelines provide transportation services and charge fees that do not fluctuate with the price of the products that are transported. Because oil pipelines do not own the products that they transport, they do not benefit from any product price increases. In fact, refined

products pipelines are generally adversely impacted by high commodity prices, as higher prices increase power costs and marginally result in lower consumption levels. Even when an oil pipeline is an affiliate of a major integrated oil company, the Interstate Commerce Act and FERC oversight establishes a wall between the pipeline portion of the firm and the owners' transportation operations.

### Oil Pipeline Transportation Rates

Typical oil pipeline rates range from 1 to 5 cents per gallon and are independent of the value of the oil being transported. Thus the revenue received by the oil pipeline is a few cents per gallon, regardless of the sale price of that gallon, whether that sale price is \$1.00, \$2.00, \$3.00 or more.

Oil pipeline rates are posted in FERC-filed tariffs that normally take effect after 30 days and are subject to protest during that period. Oil pipeline rate changes must be justified using one of four rate mechanisms: indexation, a settlement rate agreed to by all affected shippers, market-basis or cost-of-service. In calendar years 2003 and 2004, there were 1096 oil pipeline tariff rate filings. Of those, 937 (88%) were index-based, and 159 were justified on another basis. Of the 159 others, roughly 49% were market-based, 30% were settlement rates, 14% resulted from previous settlements and 7% were cost of service based.

Most oil pipeline tariffs cover a specific group of products. For instance, a "Products Tariff" would apply the same tariff rate to gasoline, diesel, jet fuel and kerosene product

shipments between the same points. For instance, Colonial's tariff defines "Petroleum Products" to mean "gasolines and petroleum oil distillates", which would include jet fuel, diesel fuel and heating oil. There are also crude oil tariffs, propane tariffs, etc.

Pipeline tariffs do not tend to change frequently and, unlike commodity prices, are not adjusted as a result of short-term market circumstances. Since nearly 90% of tariffs are indexed, most adjustments are done on an annual basis and occur on July 1 of each year when the new FERC index takes effect. Even market based rate changes occur infrequently, with some changes actually rate decreases to meet competitive market conditions.

Pipelines also file rules and regulations tariffs that set forth the pipeline's conditions of service. These filings explain such things as the pipeline's tendering process, minimum batch size, allocation policy and product specifications. Such rules and regulations are required to be administered in a non-discriminatory manner. A system of checks and balances on oil pipeline behavior operates through the ability of any shipper to protest any alleged deviation from FERC requirements.

Oil pipelines are providers of transportation services for generally fixed fees for our customers, who determine what to ship, where to ship or when to ship. The decision on how much to ship of each commodity and to which destination is made by our shipper customers. Pipelines then ship multiple products on a regular cycle of products. On a

normal basis, we provide transportation for all products to all destinations on a regular cycle.

The oil pipeline business is volume driven, and the incentive for pipelines from both a revenue and customer relations standpoint is to transport as much product as possible. Any inference that oil pipeline operators are purposely contributing to product shortages by reducing or shutting down capacity to cause higher product prices is simply false. In fact, the oil pipeline industry's drive to transport more volumes contributes to market liquidity, which on the margin should contribute to more competition and lower prices. The extraordinary efforts of our member companies to return their systems to service as fast as possible in the aftermath of hurricane Katrina provides ample evidence of the pipeline industry's motivation and commitment to resume business and recognition of the critically important role played by pipelines in enabling adequate supplies of petroleum products to reach destination markets..

The oil pipeline industry is not a large generator of revenue by comparison with other sectors of U.S. industry, including other sectors of the energy industry. For 2003 (the most recent data available) the entire FERC-regulated oil pipeline industry received gross revenue of \$7.7 billion to deliver 13.2 billion barrels of crude oil and refined petroleum products to its various customers. A single company's revenue in many other sectors of the economy would far exceed the oil pipeline industry's revenue as a whole

Pipeline ownership is diverse, with several forms of ownership as detailed below:

- Major integrated oil companies (for example: Exxon Mobil Pipeline Company, Marathon Pipe Line LLC, Chevron Pipeline Company, Shell Pipeline Company);
- Joint venture pipelines owned by shippers and other pipeline companies (for example: Colonial, Explorer, Trans-Alaska Pipeline, Capline); and
- Independents engaged primarily in oil pipeline transportation (Buckeye, TEPPCO, KinderMorgan, Enbridge, Plains All American).

A substantial percentage of the pipelines are independently owned and operated, with the current trend towards increased independent ownership of oil pipeline assets. Major integrated oil company ownership of oil pipelines has been steadily decreasing in recent years, with major oil companies now representing a minority of oil pipeline asset ownership.

In sum, the amount charged to transport oil by pipeline is controlled by either regulation or market forces and is quite small in relation to the value of oil itself. The cost of transporting oil and petroleum products by pipeline has a minimal, if any, impact on consumer prices.

## Oil Pipeline Capacity

While the cost of transporting oil by pipeline has a minimal impact on consumer prices, access to adequate pipeline capacity can make a substantial difference in consumer prices. As we have seen following hurricane Katrina, when adequate pipeline capacity is not available, shortages, price increases and price volatility for petroleum consumers are the result. Even before hurricane Katrina, we saw this, for example, in Arizona in 2004 and in the Midwest in 2003 when key pipelines were out of service.

The U.S. oil pipeline infrastructure is a large system created over many years. Volumes moving on those pipelines grow only in response to increases in oil demand, that is, a few percent a year. Volumes can sometimes also increase or decrease dramatically due to changes in supply patterns such as refinery closures, new crude supplies and other significant changes. Additions to capacity often present large hurdles to individual companies in terms of capital requirements and perhaps more importantly, acquisition of right of way and required permitting. The current system, constructed principally in the 1950s and 1960s with excess capacity for that time, is quite close to full capacity at today's levels of domestic petroleum consumption, and pipelines have had to adjust to a just-in-time inventory mentality and to seasonal fuel switches that put additional strain on the system.

Oil pipelines are another component of the U.S. energy infrastructure that will require expansion in coming years to meet the needs of consumers. A supportive public policy, including continuation of the recent trend to market based and indexed rate treatment,

permitting assistance and creative approaches to rights of way, will be required to ensure that oil pipeline expansions are made when needed.

### Key Aspects of Oil Pipeline Operations

Oil is moved through pipelines by large pumps powered by electricity. Oil pipeline companies are large consumers of base-load electricity. Pumps are located at the origin point of the pipeline and at intervals typically 30 to 50 miles apart, depending on terrain and the location of major facilities for pickup or delivery of oil. For a pipeline of significant size, pumps at these stations of 3,000-5,000 horsepower are typically used, requiring megawatt quantities of electric power. The only feasible method for delivery of electricity in these quantities is through connection to the utility grid.

Oil pipelines maintain tanks at points along the line to facilitate the scheduling of pipeline transportation. For refined product pipelines, the need for tankage is a significant issue as the number of distinct products shipped increases. Pipeline transportation tanks hold oil that is owned and controlled by shippers. The volume in these tanks typically only represents a limited supply in relation to overall petroleum demand.

I will be glad to try to answer any of your questions, and our Association would be pleased to work with the Committee on any follow up from this hearing.