



Telephone: (212) 867-0052
Fax: (212) 972-9849

Petroleum Industry Research Foundation, Inc.

1 2 2 E A S T 4 2 n d S T R E E T

New York, N. Y. 10168

The Alaskan Oil Spill and Gasoline Prices:

A Case of Non Sequitur

Testimony by

John H. Lichtblau

**Before the Executive Office of Energy Resources
Commonwealth of Massachusetts**

June 20, 1989

The subject of this hearing is the recent increase in U.S. gasoline prices. Gasoline is an essential commodity for most Americans. Thus, when its price rises as quickly and as sharply as it did earlier this year the public has a right to know the underlying reasons. Your hearing accomplishes this purpose. However, my first point is that we are not talking about an ongoing trend but about a recent historical price run-up which ended at the beginning of May. Gasoline retail prices, ex-tax, rose by about 14.5 cents/gal from the beginning of March to the beginning of May. Since then they have fractionally declined. So our concern is more with recent historic events than current developments.

In your letter of invitation you cite four potential factors contributing to the price increase: increased crude oil prices, the Exxon oil spill, new gasoline volatility regulations and seasonal demand. I have the impression that the oil spill loomed largest among these in your decision to call this hearing. This was certainly the case with a U.S. Senate hearing last April on the same subject. New York State, too, is currently investigating the gasoline price increase to determine whether it was somehow connected with the Alaskan oil spill.

I would therefore like to address myself first to this question since the answer lies more in concepts than in numbers. The numbers are clear. The Alaskan oil spill occurred on March 24th and was followed by a partial disruption of Alaskan oil supplies until about April 6th. The spot price of WTI, the most widely quoted U.S. reference crude, did not rise during this period. It did move up between April 10th and April 20th, then returned to its pre-oil spill level of about \$20 by the end of the month and has remained there since. Clearly, then, the Alaskan oil spill did not cause an increase in gasoline prices through an increase in crude prices.

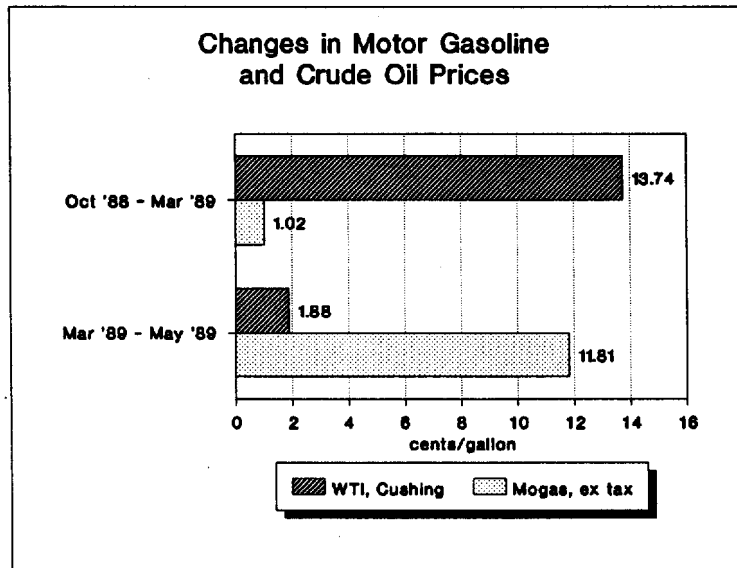
The only other causal connection between the spill and gasoline prices was the temporary fear of a gasoline shortage on the West Coast because of that region's high dependence on Alaskan crude. To a lesser degree the same was true of the Gulf Coast which also receives substantial volume of Alaskan crude. This did cause the widely publicized sharp increases in wholesale spot prices for gasoline. But by late-April when the physical supply situation had become normal again and the anxiety over gasoline supplies had abated, spot prices started to drop.

What, then, is the basis for the still widespread assertions that the two events are functionally related? The time sequence: though the gasoline price rise had started before the oil spill, it accelerated sharply thereafter. It is argued that the sequence indicates a connection between the two. Obviously, this is a logical fallacy unless a causal connection can be established. This is presumably provided by the assertion that the oil industry used the Alaskan oil spill as a justification to raise gasoline prices. I don't really know what this means. Companies do not need justifications for changing the price of any of their products in either direction and generally do not offer any. But even if the oil companies had wanted to justify a price increase by tying it to an extraneous event, the Alaskan oil

spill would have been wrong for this purpose, precisely because no logical connection can be established. Furthermore, it would violate every public relations canon to tie the justification for a price increase of this nature to a major environmental disaster caused by the largest U.S. oil company.

The principal reason for the gasoline price rise is the earlier rise in crude oil prices, the first item on your list of potential causes. The numbers here are also clear and indisputable: the spot price of WTI rose from a low of \$12.60/bbl in October 1988 to over \$20 by the time of the Alaskan oil spill.

This represented an increase of 18.5 cents/gal. During the same period gasoline retail prices declined slightly to mid-January and then rose slightly. By the time of the oil spill (March 24) they were just about 1 cent/gal above the end October 1988 price. The same was true of gasoline wholesale prices, i.e. the dealer tankwagon (DTW) prices at which gasoline is sold to retail operators.



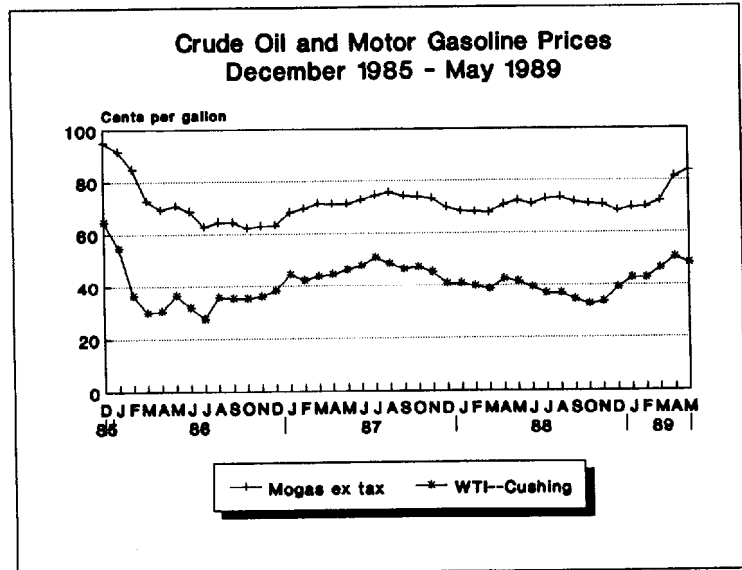
The reason for the discrepancy between crude oil and gasoline price increases is the delay in passing through the changes all the way to the retail level. For refiners, crude oil markets signal the direction of refiner acquisition costs, but spot market changes are not instantly felt in the actual booked value of the oil. For instance, while WTI spot prices hit their recent low point on October 5, the low point of refiner acquisition cost was November. Crude oil is refined and product shipped to consumption centers. It thus routinely takes one to two months for changes in crude oil prices to be passed through the wholesale segment to retail prices. (It is important to note that product markets may also move independently of crude prices, as discussed throughout my testimony.) Generally, the longer lag occurs between the crude and wholesale levels, while increases at the wholesale level are reflected in retail prices relatively promptly.

Over time, both significant increases and significant decreases in crude oil costs will be reflected at the retail level. As shown in Figure II, the change since the oil price drop of 1986 has been similar for the two price series. In 1986, for instance, retail prices dropped faster than crude oil and in 1987, retail prices rose faster than crude oil. Between Decem-

ber 1985 and April 1989, the cumulative net change in crude oil and retail gasoline prices (regular unleaded) has been the same, 14 cents per gallon. In May the relationship changed temporarily, with gasoline prices rising and crude prices falling.

Wholesale and retail prices started to rise in early March 1989. The rise accelerated at the end of March and peaked in Mid-May. Currently (early June) retail prices are 15.4 cents above their

autumn 1988 low, wholesale prices are up by 18.3 cents while the WTI spot price is 16.8 cents above its mid-October low. This indicates a close relationship between these prices. However, one must also take into account that the mandatory reduction in gasoline volatility starting between June 1 and July 1, has increased the cost of gasoline production by about 3 cents/gal for the mandated Northeast quality. Thus, the retail price increases are actually still somewhat below the combined increase in crude prices and manufacturing cost.



One can come up with any number of explanations for the accelerated price increase after the Alaskan oil spill. But they are not relevant for our purpose. The fact is that refiner margins in the first quarter of 1989 were depressed relative to both the previous quarter and the same quarter of 1988. The reason was, of course, the narrower margin between crude costs and refined product prices in the first quarter of 1989. The industry was intent on restoring the margin and was able to do so in the second quarter of 1989. Trying to regain lost profit margins by passing through cost increases is normal rational business policy. It is of course not always achievable. But for an industry working at virtually full capacity, such as the gasoline conversion units of the U.S. refinery industry since early this year, this is not a surprising or puzzling feat and certainly not an indication of lack of competitiveness.

This brings me to my last point, competition in the U.S. gasoline market. There have been repeated charges that the gasoline price increase reflects an absence of real competition. I would just point out a few facts in this regard. The U.S. gasoline market is highly diversified. The largest seller has only 8% of the total market and the 10 largest sellers, which include all the major international companies, account for slightly more than 50%. In most U.S. industries the concentration ratio of the largest firms is considerably

higher. Furthermore, the oil refining companies do not directly control or operate most retail outlets. Of the 150,000 gasoline outlets in the U.S. the vast majority is operated by independent dealers who set their own prices.

Another competitive factor is imports. They are of particular importance at the U.S. East Coast where they currently account for 15% of total gasoline supplies. A large share of these imports is not in the hands of the integrated refining companies but is brought in directly by independent marketers such as Getty Petroleum, Cumberland Farms or Northville Industries. These imports provide the marginal U.S. gasoline supply source, thereby expanding the competitiveness of the East Coast gasoline market into the international arena.

Finally, the New York Mercantile Exchange has a commodity market for unleaded gasoline which provides continuous, instant price transparency and trading and hedging opportunities.

All of these features make for a highly competitive market where prices are determined by supply and demand. If they move too far or too fast, either up or down, they don't hold, but correct to the new equilibrium.