Higher Heating Oil, Jet Fuel, and Diesel Fuel Prices Hurt U.S. Consumers and Businesses

Increases in the prices of these basic commodities affect nearly every American and every sector of the economy. Home heating fuel increases, for example, affect millions of families and businesses in the Northeast and Midwest. According to the Department of Energy, 70 percent of homes in the Northeast rely on home heating oil.[1] In Michigan, for example, the percentage is 3.5 percent, in Minnesota, it is 8 percent, and in Maine, 4 out 5 people, or 80 percent heat their homes with oil.[2]

The hardships caused by expensive heating fuel have long been recognized by Congress and the Administration which administer several programs to address them. For example, the Low Income Home Energy Assistance (LIHEAP) program assists more than 4.6 million low-income households each year. Recently, LIHEAP has provided about $1.5 billion each year to assist U.S. households with energy costs related to extreme heat and cold. At a 2002 event announcing the release of $200 million in LIHEAP funding for American families facing rising heating bills, U.S. Secretary of Health and Human Services Tommy Thompson noted, "Higher fuel prices pose a real hardship for many Americans. This emergency aid will give states the opportunity to help more of their citizens stay warm this winter."[3]

Congress also recently established the Northeast Heating Oil Reserve (NHOR) to stabilize home heating oil prices. This reserve was established to reduce the disruptive effects associated with home heating fuel shortages and sudden price hikes, such as occurred in December 1996 and early 2000. NHOR currently holds about 2 million barrels, all of which were acquired by exchanging crude oil from the SPR for heating oil delivered to NHOR storage facilities in New Jersey, Connecticut, and Rhode Island.

Programs like LIHEAP and NHOR mean that the 13 percent jump in heating fuel futures caused by the 2002 crude oil price spikes imposed not only higher costs on U.S. consumers and businesses in the Northeast and Midwest, but also on taxpayers across the country, since these government programs are funded with taxpayer dollars.

Jet fuel is another key petroleum product that was affected by the 2002 crude oil price increases. Jet fuel is the second largest airline cost after labor, and, each month,

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[1] http://www.eia.doe.gov/emeu/plugs/plheat.html.

[2] See, for example, Michigan Public Service Commission website, at http://cis.state.mi.us/mpsc/reports/energy/02-03winter/distill.htm; "More Minnesotans heating with natural gas," Minnesota Public Radio, December 4, 2002; "Agency predicts surge in oil prices; A study finds Mainers could pay 45 percent more this winter, depending on the chill - and the winds of war," Portland Press Herald, October 15, 2002.

[3] http://www.ncat.org/liheap/news/Jan03/emergen.htm

U.S. airlines consume approximately 1.6 billion gallons of jet fuel.[4] In 2002, the airlines were estimated to have consumed about 18 billion gallons altogether.[5]

Jet fuel price increases have a major impact on the airlines' finances and ability to keep operating. David Swierenga, chief economist at the Air Transport Association, informed the Subcommittee staff that "every penny increase per gallon translates into $180 million in added costs annually ... which the beleaguered industry can ill afford."[6] Another economist has estimated that when the price of crude oil increases by 1 percent, the price of jet fuel increases by 0.74 percent.[7] One low-cost operator, Southwest Airlines, indicated that, "Jet fuel accounts for 15 percent of our cost structure. When we see energy prices move, it has a very dramatic effect on us."[8] Another airliner, Northwest Airlines, has calculated that each penny increase in jet fuel costs it an additional $20 million annually.[9]

Media reports noted that, in 2000, high jet-fuel bills wreaked havoc on the airline industry, forcing bankruptcy filings of some start-up carriers, lowering earnings at major airlines, and widening losses at others.[10] In 2002, jet fuel prices increased 10 percent, from about 56 centers per gallon in January to about 78 cents in December. This added expense came on top of higher airline safety costs, higher debt levels, and reduced travel demand after the 9-11 tragedy in 2001. This added expense contributed to the airlines' ongoing financial woes, which have persisted even after the industry received a $5 billion cash infusion authorized by Congress in 2001. Altogether in 2002, the major U.S. airlines suffered losses estimated between $5 and $7 billion; increased jet fuel costs over the same period contributed to these losses.

Diesel fuel, a third key petroleum product, is also sensitive to crude oil price increases. Due to their reliability, efficiency, and safety, diesel engines play a key role in the U.S. economy, powering engines used in agriculture, construction, mining, transportation, and the military.[11] The Diesel Technology Forum has determined that locomotives, ships, trucks, and other forms of transportation utilizing diesel fuels move 94 percent of the nation's goods and materials, or more than 18 million tons of freight each day. Farm equipment, which is essential to not only the 2 million operating farms in

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[4] "Higher energy prices so far an irritant, but not a detriment, to U.S. economy," Associated Press, December 20, 2002.

[5] Information supplied by Air Transport Association.

[6] *Id.* See also testimony of Susan Donofrio, Deutsche Bank Securities, before the Senate Committee on Commerce, Science, and Transportation, October 2, 2002.

[7] Subcommittee interview with Gene Huang, FedEx economist, February 5, 2003.

[8] "Crude awakening," San Francisco Chronicle, April 10, 2002.

[9] "Rising fuel prices hit NWA," Star Tribune, July 6, 2001.

[10] See, for example, " Southwest's Fuel Hedging Yields Lower Prices, Savings," Wall Street Journal, January 16, 2001.

[11] See "Diesel Technology and the American Economy," a report prepared for the Diesel Technology Forum, October 2000.

this country but also millions of consumers that buy U.S. food, generally relies on diesel fuel. Diesel fuel also powers most buses, including intercity, transit, and school buses, and a number of post office vehicles. Overall, the Diesel Technology Forum calculates that the gross output of the diesel industry in 1997, the last year for which figures are available, totaled more than $85 billion.

The American Trucking Association estimates that for every dollar increase in crude oil prices, retail diesel fuel prices increase 2.8 cents.[12] An economist at FedEx, Gene Huang, estimates that when the price of crude oil increases by 1 percent, diesel prices increase by 43 percent.[13] Figure IV-23 demonstrates how closely diesel prices tracked crude oil prices in the first part of 2002.

Higher diesel prices hike costs in each of the sectors that rely on diesel fuel, often with attendant, negative ripple effects across the U.S. economy. One example is the trucking industry. Nearly all large trucks that transport freight in the United States run on diesel fuel, with the trucking industry consuming roughly 32 billion gallons each year.[14] According to the American Trucking Association, the trucking industry employs almost 10 million people, including over 3 million drivers, and accounts for nearly 5 percent of U.S. gross domestic product. Bob Costello, chief economist at the American Trucking Association, estimates that for every 10 cent increase in the price of diesel an average 1,000 motor carriers with five trucks or more in their fleet go bankrupt. According to a transportation analyst with A.G. Edwards, Donald Broughton, the large numbers of trucking company failures in 2000 and 2001 generally coincided with the rise in diesel prices.

In addition to trucking business failures, trucking disruptions can impose an immediate, widespread drag on the U.S. economy by delaying shipment of goods and materials. "There is more dependence on just-in-time deliveries," Mark Whitenton of the National Association of Manufacturers said. "Even a couple of days disruption could cause factories to close."[15] In 2000, for example, a price spike in diesel fuel stalled truckers in parts of New England. "Diesel fuel cost between $2.50 and $2.60 a gallon, and trucks would not even go into Maine because there was not enough freight to pick up on the return trip to offset the cost," said Todd Spencer of the Owner-Operator Independent Drivers Association.[16] After Iraq invaded Kuwait in 1990, and crude oil prices nearly doubled to $41 per barrel, one long-haul trucker, Lee Klass, stopped

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[12] Subcommittee interview with Diego Saltes, economist at the American Trucking Association, February 3, 2003.

[13] Subcommittee interview with Gene Huang, FedEx economist, February 5, 2003.

[14] Information provided to Subcommittee staff.

[15] "Fuel price escalation already spills into cost of other goods," Chicago Tribune, January 26, 2003.

[16] *Id.*

driving.[17] "The price of diesel fuel jumped 40 cents a gallon," Klass recounted. Rather than pay the price at the pump, he parked his truck. "It reaches a point that unless rates are doubled it doesn't make sense to haul any freight."

Home heating oil, jet fuel, and diesel fuel prices spiked in the spring of 2002 as a result of the increase in the price of crude oil. Since that time, the prices of these petroleum products have continued to climb along with crude oil prices. They have been joined by increases in gasoline prices. Since these an other costs took place after the period examined in this case study, they are discussed in the next section of this Report. Their attendant negative effects on the U.S. economy have continued to hurt U.S. consumers and businesses.

In light of the economic harm to U.S. consumers and business from higher prices for home heating fuel, jet fuel, and diesel fuel, as well as other costs associated with high-priced crude oil, it is critical that DOE recognize these costs and take steps to minimize the costs associated with depositing oil into the SPR.

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[17] *Id.*