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PREPARED TESTIMONY:

The Unconventional Energy Revolution: Estimated Energy Savings for Public School Districts, and State and Local Governments

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Chairman Lamborn, Ranking Member Holt, and members of the Committee on Natural Resources, thank you for the opportunity to speak with you today on the effect the unconventional energy revolution is having on energy spending by public school districts, and by state and local governments.

The US is experiencing an energy production boom by obtaining an increasing share of our oil and natural gas from domestic, unconventional resources. Wholesale prices for electricity and natural gas have declined, so that energy users have been able to reduce their spending. IHS noted in volume 3 of our *America's New Energy Future - a Manufacturing Renaissance* study that the unconventional energy revolution produced an increase in the real disposable personal income of the average US household of \$1,200 in 2012.

IHS was retained by the American Petroleum Institute to extend its ANEF results to estimate savings in energy spending from the unconventional energy revolution by public elementary and secondary school districts, and by state & local governments. I was the project manager of that study. The purpose of my testimony this afternoon is to summarize the main findings of our study. I am also a 6-term, elected school board member in the School District of Haverford Township in Delaware County, PA, so I will also briefly share the experience of our District.

The savings are the differences between: 1) actual spending under the base case - which includes unconventional energy production, and 2) the higher spending that would have occurred under the without unconventional energy case. Our reference year was the 2012/13 fiscal year.

The two types of governments are large annual users and purchasers of energy because of their high levels of spending, even though they are not energy-intensive activities. According to the Census Bureau, in FY 2010-11 total expenditures by state and local governments (excluding transfers) was about \$3.1 trillion, consisting of \$1.5 trillion by state governments and \$1.6 trillion by local governments, which also included \$558 billion by public elementary and secondary school districts. As a result, even small changes in prices generate large, aggregate savings across the US.

The key steps in our methodology for both types of governments were:

- Estimate spending for electricity and natural gas as % shares of total general fund expenditures
- Determine the differences between the wholesale prices of electricity and natural gas under the base case and without unconventional energy.
- Estimate the differences in energy expenditures between the two cases.

For public elementary and secondary school districts:

- Energy spending was lowered by \$740.9 million for electricity and \$466.9 million for natural gas
- The percent savings were 9.3% for electricity and 21.3% for natural gas
- The estimated energy savings is equivalent to the cost of 8,796 full-time equivalent (FTE) teachers, due to electricity, and 5,450 FTEs from natural gas

For state and local governments:

- Energy spending was reduced by \$467.2 million for electricity and \$252.9 million for natural gas.
- The percent savings were 9.5% for electricity and 21.6% for natural gas.
- The estimated energy savings is equal to the cost of 7,006 additional FTE government workers from the electricity, and 3,989 workers due to natural gas

Many districts, such as ours, take steps to reduce energy prices by agreeing to interruptible contracts or partnering with other districts to aggregate loads and negotiate lower rates from utilities. In our judgment, the vast majority of the savings in energy expenditures are due to the lower wholesale prices from the unconventional energy revolution.

In our district, between the 2010-11 and 2012-13 fiscal years spending fell by \$242,600 for electricity, and by \$88,800 for natural gas, % declines of 20% and 22% respectively. Our business and facility managers attribute the vast majority of these savings to lower retail energy prices, even as we have continued to implement energy conservation measures and renovated a middle school that was air conditioned for the first time.

How do local public school districts, such as ours, use the energy spending savings? Funds not spent remain in the general fund and are available for other uses such as retaining or hiring staff, purchasing new curricular materials and equipment, staff development, etc. It is not possible to identify a specific action we took due to energy savings, which is why our study presented the savings in teacher and worker equivalents. If the energy savings are not spent, but increase the fund balance and are carried forward into the next fiscal year, they would reduce the amount of revenues that have to be raised from local sources such as the real property tax on dollar for dollar basis.

In conclusion, the decline in wholesale energy prices produced by the unconventional energy revolution lowered combined energy spending of public school districts, and state and local governments, by \$1.92 billion in fiscal year 2012/13, equivalent to the cost of 15,241 teachers and workers. This occurred during a time when revenues for both types of governments were flat or declining due to the lingering effects of the Great Recession. Thank you for your attention.