For release on delivery
2:00 p.m. EDT
June 10, 2003

Statement of

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Chairman

Board of Governors of the Federal Reserve System

before the

Committee on Energy and Commerce

United States House of Representatives

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In recent months, in response to very tight supplies, prices of natural gas have increased sharply. Working gas in storage is currently at very low levels relative to its seasonal norm because of a colder-than-average winter and a seeming inability of increased gas well drilling to significantly augment net marketed production. Canada, our major source of imported natural gas, has had little room to expand shipments to the United States, and our limited capacity to import liquefied natural gas (LNG) effectively restricts our access to the world's abundant supplies of gas.

Our inability to increase imports to close a modest gap between North American demand and production (a gap we can almost always close in oil) is largely responsible for the marked rise in natural gas prices over the past year. Such price pressures are not evident elsewhere. Competitive crude oil prices, after wide gyrations related to the war in Iraq, are now only slightly elevated from a year ago, and where spot markets for natural gas exist, such as in Great Britain, prices exhibit little change from a year ago. In the United States, rising demand for natural gas, especially as a clean-burning source of electric power, is pressing against a supply essentially restricted to North American production.

Given the current infrastructure, the U.S. market for natural gas is mainly regional, is characterized by relatively longer term contracts, and is still regulated, but less so than in the past. As a result, residential and commercial prices of natural gas respond sluggishly to movements in the spot price. Thus, to the extent that natural gas consumption must adjust to limited supplies, most of the reduction must come from the industrial sector and, to a lesser extent, utilities.

Yesterday the price of gas for delivery in July closed at $6.31 per million Btu. That contract sold for as low as $2.55 in July 2000 and for $3.65 a year ago. Futures markets project further price increases through the summer cooling season to the peak of the heating season next January. Indeed, market expectations reflected in option prices imply a 25 percent probability that the peak price will exceed $7.50 per million Btu.

Today's tight natural gas markets have been a long time in coming, and futures prices suggest that we are not apt to return to earlier periods of relative abundance and low prices anytime soon. It was little more than a half-century ago that drillers seeking valuable crude oil bemoaned the discovery of natural gas. Given the lack of adequate transportation, wells had to be capped or the gas flared. As the economy expanded after World War II, the development of a vast interstate transmission system facilitated widespread consumption of natural gas in our homes and business establishments. On a heat-equivalent basis, natural gas consumption by 1970 had risen to three-fourths of that of oil. But natural gas consumption lagged in the following decade because of competitive incursions from coal and nuclear power. Since 1985, natural gas has gradually increased its share of total energy use and is projected by the Energy Information Administration to gain share over the next quarter century, owing to its status as a clean-burning fuel.

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Recent years' dramatic changes in technology are making existing energy reserves stretch further while keeping long-term energy costs lower than they otherwise would have been. Seismic techniques and satellite imaging, which are facilitating the discovery of promising new natural gas reservoirs, have nearly doubled the success rate of new-field wildcat wells in the

United States during the past decade. New techniques allow far deeper drilling of promising fields, especially offshore. The newer recovery innovations reportedly have raised the average proportion of gas reserves eventually brought to the surface. Technologies are facilitating Rocky Mountain production of tight sands gas and coalbed methane. Marketed production in Wyoming, for example, has risen from 3.4 percent of total U.S. output in 1996 to 7.1 percent last year.

One might expect that the dramatic shift away from hit-or-miss methods toward more advanced technologies would have lowered the cost of developing new fields and, hence, the long-term marginal costs of new gas. Indeed, those costs have declined, but by less than might have been the case because much of the innovation in oil and gas development outside of OPEC has been directed at overcoming an increasingly inhospitable and costly exploratory physical environment.

Moreover, improving technologies have also increased the depletion rate of newly discovered gas reservoirs, placing a strain on supply that has required increasingly larger gross additions from drilling to maintain any given level of dry gas production. Depletion rates are estimated to have reached 27 percent last year, compared with 21 percent as recently as five years ago. The rise has been even more pronounced for conventionally produced gas because tight sands gas, which comprises an increasing share of new gas finds, exhibits a slower depletion rate than conventional wells.

Improved technologies, however, have been unable to prevent the underlying long-term price of natural gas in the United States from rising. This is most readily observed in markets for natural gas where contract delivery is sufficiently distant to allow new supply to be developed and brought to market. That price has risen gradually from $2 per million Btu in 1997 for

delivery in 2000, and presumably well beyond, to more than $4.50 for delivery in 2009, the crude oil heating equivalent of rising from less than $12 per barrel to $26 per barrel. Over the same period, the distant futures price of light sweet crude oil has edged up only $4 per barrel and is selling at a historically rare discount to comparably dated natural gas.

Because gas is particularly challenging to transport in its cryogenic form as a liquid, imports of LNG have been negligible. Environmental and safety concerns and cost have limited the number of LNG terminals and imports of LNG. In 2001, LNG imports accounted for only 1 percent of U.S. gas supply. Canada, which has recently supplied a sixth of our consumption, has little capacity to significantly expand its exports, in part because of the role that Canadian gas plays in supporting growing oil production from tar sands.

Given notable cost reductions for both liquefaction and transportation of LNG, significant global trade is developing. And high gas prices projected in the American distant futures market have made us a potential very large importer. Worldwide imports of natural gas in 2000 were only 26 percent of world consumption, compared to 50 percent for oil.

Even with markedly less geopolitical instability confronting world gas than world oil in recent years, spot gas prices have been far more volatile than those for oil, doubtless reflecting, in part, less-developed global trade. The updrift and volatility of the spot price for gas have put significant segments of the North American gas-using industry in a weakened competitive position. Unless this competitive weakness is addressed, new investment in these technologies will flag.

Increased marginal supplies from abroad, while likely to notably damp the levels and volatility of American natural gas prices, would expose us to possibly insecure sources of foreign

supply, as it has for oil. But natural gas reserves are somewhat more widely dispersed than those of oil, for which three-fifths of proved world reserves reside in the Middle East. Nearly two-fifths of world natural gas reserves are in Russia and its former satellites, and one-third are in the Middle East.

Creating a price-pressure safety valve through larger import capacity of LNG need not unduly expose us to potentially unstable sources of imports. There are still numerous unexploited sources of gas production in the United States. We have been struggling to reach an agreeable tradeoff between environmental and energy concerns for decades. I do not doubt we will continue to fine-tune our areas of consensus. But it is essential that our policies be consistent. For example, we cannot, on the one hand, encourage the use of environmentally desirable natural gas in this country while being conflicted on larger imports of LNG. Such contradictions are resolved only by debilitating spikes in price.

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In summary, the long-term equilibrium price for natural gas in the United States has risen persistently during the past six years from approximately $2 per million Btu to more than $4.50. The perceived tightening of long-term demand-supply balances is beginning to price some industrial demand out of the market. It is not clear whether these losses are temporary, pending a fall in price, or permanent.

Such pressures do not arise in the U.S. market for crude oil. American refiners have unlimited access to world supplies, as was demonstrated most recently when Venezuelan oil production shut down. Refiners were able to replace lost oil with supplies from Europe, Asia, and the Middle East. If North American natural gas markets are to function with the flexibility

exhibited by oil, unlimited access to the vast world reserves of gas is required. Markets need to be able to effectively adjust to unexpected shortfalls in domestic supply. Access to world natural gas supplies will require a major expansion of LNG terminal import capacity. Without the flexibility such facilities will impart, imbalances in supply and demand must inevitably engender price volatility.

As the technology of LNG liquefaction and shipping has improved, and as safety considerations have lessened, a major expansion of U.S. import capability appears to be under way. These movements bode well for widespread natural gas availability in North America in the years ahead.