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Statement of
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House Subcommittee on Energy and Mineral Resources
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Madam Chairwoman Cubin, Representative Kind, and members of the Subcommittee, I am Eugene F. Peters, Vice President of Legislative Affairs for the Electric Power Supply Association (EPSA), and am here today on behalf of EPSA's member companies. EPSA is a national association that represents the competitive electric power supply industry. Our members include the leading developers of new power generation in the United States. I am pleased to testify before you concerning the use of natural gas as a fuel source in the electric power industry and the need for continued access to economic resources.

Natural gas represents an abundant, clean-burning energy resource that is available from secure sources. The growth of the natural gas industry has been critical to the continued economic expansion of the U.S. economy, and gas has become a vital fuel for electric power production. In many regions of the United States, natural gas is the clear fuel of choice for new electric generation. Given the affordability and availability of gas, its excellent environmental characteristics and the continued development of new highly efficient technologies, this should of be no surprise.

In the first six months of this year, roughly 90,000 MW of new power generation capacity came online (1 MW can provide enough power for about 700 families). Of this capacity, more than 97 percent was gas-fired. Our records show that there are about 350,000 MW of merchant capacity

currently in operation, under construction or in development in the United States today. While there is renewed and growing interest in fuels such as coal, nuclear and various renewable technologies, 90 percent or more of this capacity under development is likely to be gas-fired.

Let me describe in more detail each of the attributes that have brought about the strong interest in natural gas within the electric power sector:

Availability

The domestic gas industry has an excellent and reliable supply infrastructure. Natural gas pipelines are often less obtrusive and easier to site than other energy alternatives. Utilizing natural gas can allow power plants to be sited with flexibility, allowing better access to regional markets or particular pockets of electricity demand.

Affordability

Historically, natural gas prices have been very competitive with other fuels. The emergence of extremely efficient fuel-burning technologies (which I will further describe later in my testimony) strongly enhances this cost competitiveness. Recently, natural gas prices have showed significant price volatility. As you would expect, this volatility has led developers to broaden their focus to include a range of alternative fuels.

However, companies seeking to use gas take advantage of a wide variety of techniques to hedge prices and protect themselves and their customers against dangerous volatility. Long-term contracts for supply, "tolling agreements" with natural gas and power marketers and the direct acquisition of natural gas reserves are strategies that are commonly employed to guarantee profitable projects and affordable electric power.

Environmental Impact

Project development is difficult at any time. Local communities may not initially embrace power plant development, notwithstanding the significant tax and employment benefits that often result. In the inevitably difficult negotiations with host communities, it is often critical to demonstrate minimal environmental impact. Natural gas facilities benefit from their compact "footprint" and low emissions of the principal air pollutants – SO₂, NO_x and mercury. While the environmental attributes of competing fuels are steadily improving, natural gas facilities are likely to retain for some time a significant edge with respect to land-use issues and effects on air quality.

Advanced Technology

Few technologies have been more advanced and refined over the past twenty- five years than those used to convert natural gas to electricity. Until the early 1980s, a highly efficient fossil fuel power plant (gas-fired or otherwise) would typically convert only one-third of the input fuel's energy content to electricity. The rest would be lost as waste heat. For natural gas, this 33 percent efficiency rate has dramatically improved to where technologies now convert the energy content of natural gas to electricity at a rate of over 60 percent. This near doubling of energy efficiency has led to sharply lower operating costs over time.

In addition to cost-savings from increased efficiency, power plant developers have had access to equipment that is ever more reliable, with predictable plant performance and construction timetables. Prior to 1980, all electric power plants were essentially custom-designed and constructed. No longer. Turn-key projects, with performance guaranteed by the equipment manufacturer, are the rule, not the exception. In a competitive setting, there is a high premium placed on the technical sophistication and predictability that has been engineered into the modern natural gas-fired power plant.

Questions of Fuel Diversity

Given the attributes of natural gas and gas-fired power facilities, it is not surprising that the lion's share of projects in development today utilize this fuel. While concern about overdependence on any one fuel source is always an appropriate focus for policy makers, alarm about these trends certainly is not.

The competitive power plant developer is flexible and acutely aware of market trends. Although most companies are engaged in the development of gas facilities, these same companies also own and operate coal-fired, nuclear and renewable power plants. For example, one EPSC member, Calpine, is both a prominent natural gas plant developer and the largest operator of geothermal plants in the world. If supply constraints lead to higher gas prices, expect the power supply industry to react quickly and appropriately to these trends.

In addition, it is important to understand that the fundamental characteristics of the electric power supply portfolio will only change slowly, due to the size of the industry. The largest fuel resource for electric generation is currently, and is likely to remain, coal.

In an analysis performed by the U.S. Energy Information Administration, natural gas-fired power plants will more than double their capacity between 2000 and 2010. Yet, in spite of all this growth, the market share of gas should only increase from the present rate of 17 percent to 26 percent in 2010. Coal, which fuels 51 percent of the power market today, should still dominate with 49 percent of the capacity in 2010. If the move towards more gas capacity continues, we believe there will be plenty of time to make any appropriate policy adjustments to ensure a balanced energy portfolio for U.S. electricity consumers.

Gas Production from Federal Lands

Our industry strives to provide the most affordable power possible to American consumers. In a competitive marketplace that applies rigorous downward pressure on prices, the cost and reliability of natural gas supplies is no academic concern.

Abundant supply leads to lower prices and continued efforts to build gas-fired facilities. If that supply is threatened, our companies will shift to alternative fuels and technologies. We strongly encourage federal policies that make available access to economical gas resources. While it is clear that there may be some environmental costs to this new production, we believe these to be limited and open to mitigation. Furthermore, the environmental costs of production can be more than offset by the environmental benefits that flow from the development of clean-burning gas

power plants.

Conclusion

Once again, I thank you for the opportunity to testify before your Subcommittee. Natural gas is a critical fuel for the national economy and the electric power sector. Efforts to increase the supply of gas will pay dividends – both economic and environmental – for all Americans. We look forward to working with the Subcommittee to ensure a balanced energy strategy and continued access to clean, affordable and efficient electricity production.