May 11, 2009

The Honorable Jon Wellinghoff
Chairman
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

RE: Proposed Policy Statement and Action Plan on Smart Grid Policy,
Docket No. PL09-4-000

Dear Chairman Wellinghoff:

The Independent Petroleum Association of America (IPAA), the Interstate Natural Gas Association of America (INGAA) and the Natural Gas Supply Association (NGSA) support the Commission's efforts to spur advances in innovation and technology through its proposed Smart Grid policies. We understand that Smart Grid policies are intended to enhance efficiency in the operation of our nation's electric transmission network and increase reliability, lower congestion, reduce costs, and increase access to all forms of existing and future power sources.

Together, IPAA, INGAA and NGSA wish to highlight the role that the Nation's abundant natural gas resources and robust natural gas transmission and distribution networks can make to achieve the stated goals of the Commission's Smart Grid policies. We ask the Commission to support policies that allow natural gas to realize its potential in meeting our long-term energy goals, including reliably integrating renewable energy sources into the electric grid and ensuring sufficient power generation for the future.

Clean burning natural gas will continue to be a primary fuel source for power generation as well as a fundamental component of our long-term energy supply. Natural gas will facilitate the integration of intermittent renewable energy into the grid. By providing a low-carbon complement to renewable energy, natural gas will ensure electric power reliability through on-demand gas-fired generation. In addition, localized natural gas storage and distributed gas-fired generation will provide needed flexibility to the grid for new technologies. Smart Grid as well as intermittent

renewable generation will depend upon the natural gas network to ensure reliability with a minimal carbon footprint, not only through the use of central generation plants but also through the increased penetration of gas-fueled distributed energy options, such as combined heat and power (CHP), micro-CHP, and fuel cells that help stabilize and provide regulation services to the electric grid. Alignment of the natural gas delivery system (supply, transportation and storage) with the Smart Grid via integrated forecasting, timely communication and aligned economic goals will be important to realizing the goals of the Commission's Smart Grid policies.

In the March 19, 2009 Proposed Policy Statement and Action Plan on Smart Grid Policy, the Commission states "it is evident that in a relatively short period of time, some parts of the bulk-power system may face the need to effectively integrate unprecedented amounts of variable generation resources. This is significant because operators of variable generation have less control over when the resource is available to produce electricity, in contrast with more conventional fossil and nuclear generation." To solve these problems, the Commission concludes that "[g]iven sufficient time and resources, a variety of solutions to these concerns may be feasible…" and specifically suggests possible Smart Grid solutions including electricity storage and Smart Grid-enabled demand response capabilities. (Proposed Policy Statement, paragraphs 18 and 19, footnotes omitted.)

These developing Smart Grid technologies stand to expand the options available to utilities and regional operators beyond those available today. With an expanded list of solutions, market participants will be able to determine the mix of options that can best meet the needs of their customers as the level of renewable sources increases. Natural gas is part of a practical holistic approach to solving these problems. As Daniel Yergin, co-founder and chairman of Cambridge Energy Research Associates, stated recently in an interview with the American Gas Association, "Intermittency is a real issue for sources like wind. Among other things, they require additional generation that is fueled by natural gas." (American Gas Magazine, April 2009, p. 22.)

Natural gas will continue to play a key role in providing power generation to the grid. Natural gas currently supplies over 20 percent of the country's total electric demand and, with reasonable access to reserves, domestic natural gas will be available to meet the demand for clean low-carbon natural gas for more than one hundred years. While annual generation from quick-start gas-fired units currently accounts for less than 1.5 percent of total generation, these units represent approximately 15 percent of the total U.S annual generation capacity. A total of 418 gas-fired peaking facilities was built between 1995 and 2008. As a result of this building boom, quick-start gas-fired units or "peakers" increased from approximately 66 GW in 1998 to 146 GW in 2008. These units are critical to maintaining reliability and meeting peak load requirements.

The share of annual generation from quick-start gas-fired generators stands to increase considerably as more renewables are integrated into the transmission grid.

Dispatchable resources, particularly quick-start generation technologies, can offset the reliability challenges posed by renewable resources, and represent an ideal complement to growing intermittent renewable resources. Quick-start gas-fired units can come online in as little as ten minutes, and can respond reliably in real time when renewable generation is interrupted. In fact, certain regions of the country, such as the Electric Reliability Council of Texas, have found that having a significant number of efficient, complementary quick-start, gas-fired generators has assisted in integrating increased levels of variable output

Moreover, in a recent study entitled "Accommodating High Levels of Variable Generation," the North American Electric Reliability Corporation (NERC) listed natural gas storage as an additional source of system flexibility that can be utilized to deal with system ramping and reserve needs. The NERC study states that, in areas where there are inherently lesser amounts of dispatchable or flexible generation, "a large penetration of variable generation would require the **addition of added flexible resources** or access to additional resources (via interconnections) and requirements for increased flexible performance including from variable resources themselves." (April 2009, p. 48, emphasis added.)

The possibility of high instantaneous demand for natural gas created by the need to firm up intermittent renewable generation could create demands upon the natural gas delivery system that will need to be addressed by the Commission. These challenges might include the need for supplementary pipeline and storage infrastructure, as well as advanced communication and information systems, to meet such demand and the design and pricing of services tailored to what could be the unique needs of a new class of natural gas customers. We encourage the Commission to be supportive of the natural gas infrastructure and services that may be required to ensure that natural gas can be provided to power plants when accommodating higher demands for variable generation.

Additionally, the Commission, together with other executive branch agencies responsible for policies that affect natural gas supply, must support policies that promote reasonable access to U.S. natural gas resource basins and the seamless importation of LNG into the natural gas supply system. We also urge support for policies that will encourage consumers to transition to more direct-use high-efficiency gas appliances, such as natural gas water heaters, end-use equipment, and natural gas fueled distributed power systems that can contribute to managing electric loads as part of the Smart Grid.

We appreciate the opportunity to provide a natural gas perspective in response to the Proposed Policy Statement on Smart Grid. Recognizing natural gas will play a fundamental role in our nation's long-term energy supply, we look forward to working with the Commission as it works to make our energy systems function in a cleaner and more efficient manner.

Sincerely,

Barry Russell
President and CEO
Independent Petroleum Association of America

Donald F. Santa
President
Interstate Natural Gas Association of America

R. Skip Horvath
President and CEO
Natural Gas Supply Association

cc: Hon. Suedeen Kelly, Commissioner, Federal Energy Regulatory Commission
Hon. Philip D. Moeller, Commissioner, Federal Energy Regulatory Commission
Hon. Marc Spitzer, Commissioner, Federal Energy Regulatory Commission