

January 21, 2016

The Honorable Gina McCarthy, Administrator United States Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington, DC 20460

## RE: Comments on the Proposed Federal Plan and Model Rules for the Clean Power Plan (Docket ID: EPA-HQ-OAR-2015-0199)

Dear Administrator McCarthy:

The Natural Gas Supply Association<sup>1</sup> (NGSA)urges the Environmental Protection Agency (EPA) to ensure that the federal implementation plan (FIP) and model rules allow market forces to establish a sustainable, cost effective path for carbon reduction by adopting key principles.

Over the last five years, Lower-48 marketed natural gas production levels have increased more than 25 percent and the U.S. has emerged as a world leader in natural gas production. Natural gas has positioned the U.S. to lead the world in cost-effective carbon emissions reductions.

While fuel diversity is always essential and smart, natural gas remains the most economically and environmentally sound power generation investment available today. Natural gas-fired electricity generation is essential to sustainable, cost-effective achievement of the EPA's Clean Power Plan goals.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Established in 1965, NGSA encourages the use of natural gas within a balanced national energy policy, and promotes the benefits of competitive markets, thus encouraging increased supply and the reliable and efficient delivery of natural gas to U.S. customers.

<sup>&</sup>lt;sup>2</sup> See NGSA Comparison of Fuels Used for Electricity Generation 2014 Update available at <u>http://www.ngsa.org/leidos-data-2014-update/</u>.

Proven by experience, greater use of natural gas for electricity generation has produced significant reductions in U.S. carbon emissions because, over its lifecycle, natural gas emits only about half the carbon dioxide of other fossil fuels when combusted, whether to make electricity, forge steel or provide heat. With these and additional advantages over other fuels in sulfur dioxide, mercury, nitrogen oxide and particulate matter emissions, natural gas is poised to become an even more important part of energy portfolios. Beyond serving as baseload and ramping units, natural gas-fired power generation also provides necessary back-up to intermittent resources that is essential to ensuring reliability. Natural gas generation resources will be essential to support continued reliable operation of the electric grid as the deployment of renewable resources increases. A fuel neutral approach will allow natural gas resources to continue in the role of supporting the reliable operation of the electric grid as we reduce overall carbon emissions associated with the electric supply industry. Market-driven natural gas consumption to generate electricity has already helped the U.S. achieve power sector carbon emissions reductions that were below 2005 levels.<sup>3</sup> Considering the big picture, natural gas use reduces carbon dioxide emissions, the most prevalent greenhouse gas, and other pollutants.

The role that natural gas-fired electricity generation can play in achieving the Clean Power Plan's (CPP) objectives is clear and has been proven in the market. However, implementation paths are varied and complex with costeffective implementation hinging on a mix of factors. For instance, a viable implementation path might depend on a variety of intertwined factors including economic growth, the speed of technological breakthroughs, infrastructure development, local availability of renewable resources, regional electricity market structures, and decades of prior energy investments and policies. Even local weather patterns and energy load profiles are important variables.

Within the control of EPA and state and local regulators is the ability to ensure that consumers benefit from the competitive market signals throughout and beyond CPP implementation. Cost-effective and sustainable implementation of the CPP requires the availability of compliant electricity resources, adequate affordable capital and workable state implementation plans. Natural gas production and infrastructure growth are central to each of these keystones of energy reliability and affordability.

Energy reliability and affordability will be at the heart of any long-term carbon reduction initiative. Achieving both depends on one thing -- sound

<sup>&</sup>lt;sup>3</sup>See U.S. Department of Energy - Energy Information Administration, U.S. Energy-Related Carbon Dioxide Emissions, 2012 Report issued October 2013 and available at http://www.eia.gov/environment/emissions/carbon/archive/2012/pdf/2012\_co2analysis.pdf.

competitive market signals. The risk of market distortions that drive inefficient capital deployment is high when policies are changed. The following foundational principles are essential to preserving competitive market signals through the FIP and model rules:

- 1. <u>Maximize implementation flexibility</u> so that states can meet their goals with the lowest long-term cost while minimizing the impact on future economic growth. Paths to achieving the carbon reduction goal vary. A viable compliance path in one state may be cost prohibitive in another. Flexibility in the approach is key to affordability; while affordability is vital to sustainability.Allowing unique market circumstances to drive the lowest cost compliance path will produce the most viable long-term outcome.
- 2. <u>Establish fuel-neutral, technology-neutral set asides and Emission</u> <u>Reduction Credits (ERCs)</u> under a mass-based system and a rate-based system, respectively. Technologies and economic conditions evolve over time. Set asides and ERCs should be open to all technologies and fuels that reduce carbon emissions. Reward early action toward reductions, not specific technology. Consumers benefit when competitive market forces determine the best path for investment needed to achieve a goal.
- 3. <u>Foster the benefits and efficiencies that stem from market</u> <u>interdependencies</u> when finalizing the FIP and model rules. To facilitate the lowest long-term cost solution for the state under review, the FIP should consider how state operations and state plans interact so that the FIP maximizes operational efficiencies to reduce costs. Markets are often interconnected regardless of state boundaries. The inability to take full advantage of operational connectedness among states or to trade emission allowances among markets with different compliance approaches could result in higher compliance costs. The FIP should recognize the value of market linkages and the resulting operational efficiencies that stem from facilitating market interconnectedness across states. The FIP should not deny consumers the benefit of a reliable, cost effective compliance solution simply because it is across the state line.

Long-term efficiency in any market stems from sound competitive market signals that deploy resources and capital to where they are needed and consequently valued. This drives both efficiency and technological innovation, which are perhaps the two biggest unknowns that will ultimately determine the consumer impact of CPP implementation. It is imperative for U.S. energy consumers and economic health that competitive market forces be allowed to spur technological innovations and compliance solutions. Importantly, U.S. economic growth and achievement of U.S. environmental objectives are successfully poised to work hand-in-hand. In addition to facilitating emissions reductions, natural gas is spurring U.S. economic revitalization. Consumption of natural gas in the U.S. industrial sector now exceeds pre-recession levels, indicating an economic revival of U.S. manufacturing. Consumer demand for natural gas has been steadily growing since 2009, and for all the right reasons: it is abundant, burns clean and it is affordable. Responding to U.S. natural gas supply growth, U.S. industry is expected to invest \$100 billion over the next half decade to restart previously shuttered industrial facilities or expand approximately 100 new U.S. facilities in the fertilizer, steel, petrochemical and paper industries.<sup>4</sup> Access to abundant domestic natural gas has given U.S. industrial companies a competitive advantage over their global competition, leading to the resurgence of natural gas-intensive manufacturing in the United States and the creation of more jobs to construct and staff the resulting new and expanded industrial facilities.

There is more than enough natural gas to accommodate both exports and domestic consumers to the benefit of the U.S. economy and environment. If the 1966 natural gas resource estimate of 600 trillion cubic feet (TCF) had remained static, the U.S. would have run out of natural gas 10 years ago. Instead, estimates doubled by 2002 and in 2013 grew to nearly 2,400 TCF. U.S. natural gas exports position the U.S. as a catalyst for achievement of international economic and climate objectives.

Clearly, plentiful natural gas is good news for consumers for a variety of economic and environmental reasons. It means lower GHG emissions, lower household energy bills, lower overhead costs for businesses, and lower costs for products as diverse as pantyhose and fertilizer.<sup>5</sup> Of course, that's in addition to the tax and revenue base generated by natural gas production.<sup>6</sup>

Growth in natural gas supplies, expansive natural gas delivery infrastructure, unrivalled natural gas storage capability, and robust natural gas commodity markets have facilitated increased use of natural gas by U.S. industry

<sup>&</sup>lt;sup>4</sup> See NGSA 2014-2015 Winter Outlook available at

http://www.ngsa.org/download/FINAL%20Winter%20Outlook%20%2714-15%20Presentation.pdf.

<sup>&</sup>lt;sup>5</sup> See NGSA "Stuff of Everyday Life- Understanding the Uses of Natural Gas in Industrial Processes" issue paper illustrating consumer products made from natural gas available at <u>http://www.ngsa.org/download/issues/fact-</u>sheets/the%20stuff%20of%20everyday%20life.pdf.

<sup>&</sup>lt;sup>6</sup>See IHS Global Insight, The Contributions of the Natural Gas Industry to the U.S. National and State Economies, September, 2009 available <u>here</u>.

and utilities. There is little doubt that natural gas is paving the way for reduced carbon emissions from the electricity generation sector and U.S. manufacturing growth. Achievement of U.S. climate objectives <u>and</u> economic revitalization can and should go hand-in-hand. It is the competitive market that makes this possible.

Both climate objectives and economic revitalization hinge on environmentally sound and efficient natural gas production and infrastructure growth. Today, energy consumers and policymakers have at their fingertips, the most cost-effective source of carbon emissions reductions – natural gas. We owe it to the American energy consumer to begin the work toward a lower carbon environment by building on the most cost-effective source of carbon emission reductions-- natural gas.

Sincerely,

/s/ Jennifer Fordham

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