



December 1, 2014

VIA ELECTRONIC MAIL

The Honorable Gina McCarthy
Administrator
U.S. Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

**Re: Carbon Pollution Emission Guidelines for Existing Stationary Sources:
Electric Utility Generating Units (Docket No. EPA-HQ-OAR-2013-0602)**

Dear Administrator McCarthy:

The Natural Gas Supply Association (NGSA) appreciates the opportunity to comment on the Environmental Protection Agency's (EPA) proposed Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34830 (June 18, 2014).

Established in 1965, NGSA represents integrated and independent companies that produce and market approximately 30 percent of the natural gas consumed in the United States. NGSA encourages the use of natural gas within a balanced national energy policy and promotes the benefits of competitive markets to ensure reliable and efficient transportation and delivery of natural gas and to increase the supply of natural gas to U.S. customers.

I. Introduction

Recent reductions in power sector carbon dioxide emissions due to increased natural gas generation demonstrate the ability of natural gas generation and competitive markets to help meet the Administration's climate goals. The proposed rule accurately recognizes the low-carbon attributes of natural gas generation by including natural gas generation within its scope to reduce emissions. The emission

benefits of natural gas generation witnessed over the last several years are consistent with competitive markets. These benefits can be further facilitated by the construction of needed natural gas infrastructure and by the diverse procurement options offered by a robust and transparent natural gas market.

II. Emission Benefits of Natural Gas Generation

Natural gas generation has proven to be an effective method of lowering carbon dioxide emissions from the power sector. When combusted for power generation, natural gas produces up to 50 percent less carbon dioxide than other fossil fuels and lower levels of other pollutants like nitrous oxide (NO_x) and sulfur dioxide (SO₂). Recent market-driven increases in natural gas used to generate electricity have already resulted in sizeable carbon dioxide reductions. According to the Energy Information Administration, U.S. energy-related carbon dioxide emissions have declined in four of the last seven years since 2007 and are down a total of 10 percent from 2005 levels due in part to increased natural gas-fired generation.¹

The increase in natural gas generation and corresponding emissions reductions have been made possible by significant growth in natural gas production. Since 2003, natural gas production has increased by nearly 30 percent from 19 trillion cubic feet per year to 24 trillion cubic feet per year.² Facilitating this dramatic growth in natural gas supply is an efficient natural gas market that ensures the stable and growing use of natural gas in the power sector and the overall economy.

The emissions reductions spurred by natural gas generation have helped make substantial progress toward President Obama's goal of reducing greenhouse gas emissions by 17 percent from 2005 levels by 2020. It is important to note that these reductions demonstrate the ability of the industry and competitive markets to deliver reductions without additional regulations while allowing all fuels to compete fairly. The U.S. can continue to reduce emissions by maintaining a clear path for investment to bring on more supplies of natural gas that can be used for power generation. These supplies, when allowed to compete in the electricity generation market with other fuels, have provided consumers with cost-effective and low-carbon electricity. Actions supporting environmental objectives to lower emissions should recognize the benefits

¹ U.S. Energy-Related Carbon Dioxide Emissions-2013, Energy Information Administration, October, 2014 (http://www.eia.gov/environment/emissions/carbon/pdf/2013_co2analysis.pdf).

² Natural Gas Gross Withdrawals & Production, (http://www.eia.gov/dnav/ng/ng_prod_sum_dcu_NUS_a.htm).

that well-functioning and competitive natural gas markets have brought in successfully delivering carbon dioxide reductions.

III. Role of Natural Gas Generation within the Proposed Rule

The inclusion of natural gas generation within the scope of the proposed rule to reduce emissions serves to accurately recognize the benefits of natural gas-fired electricity. In the proposed rule's base case year of 2012, electric generation from natural gas combined cycle (NGCC) units and other natural gas-fired units reached an all-time high of 30 percent and resulted in carbon dioxide emissions falling to a 20 year low.³ This exemplifies how competitive markets and robust natural gas supplies have enabled the greater use of natural gas for power generation and mitigation of carbon dioxide emissions.

Natural gas combined cycle units provide competitively-priced generation in addition to low-carbon electricity. According to EIA, newly constructed NGCCs are expected to account for over 70 percent of all new capacity additions through 2040.⁴ A modern NGCC unit features the lowest capital cost relative to other forms of generation and provides customers with the most cost-effective generation per thousand households served and thousand megawatt hours generated.⁵ The economic attributes of NGCC units offer affordable emissions reductions and are a clear market choice for future generation.

In addition to NGCC units, natural gas-fired combined heat and power (CHP) facilities produce thermal energy with the added benefit of producing efficient electricity. The proposed rule notes that “large energy users might see...additional opportunities for self-generation using options such as combined heat and power” and invites comment on whether industrial combined heat and power approaches warrant consideration as a potential way to avoid affected EGU emissions.⁶

Industrial CHP facilities are used primarily for manufacturing applications to produce on-site electricity and thermal energy and are not intended to replicate the role of utility generators. However, the proposed rule's applicability criteria defining affected electric generating units risks qualifying some industrial CHP units as affected

³ “Energy-Related Carbon Dioxide Emissions Declined in 2012” , Energy Information Administration, April 2013 (<http://www.eia.gov/todayinenergy/detail.cfm?id=10691>).

⁴ Annual Energy Outlook 2014, Energy Information Administration, May 2014 (http://www.eia.gov/forecasts/aeo/MT_electric.cfm).

⁵ Comparison of Fuels Used for Electric Generation in the U.S.-2014 Update, Leidos/SAIC, April 2014. (<http://www.ngsa.org/leidos-data-2014-update/>).

⁶ 79 Fed. Reg. at 34888 & 34924.

entities that must be addressed in state plans.⁷ Industrial CHP units further the intent of the proposed rule by providing efficient and less carbon-intensive electricity and thermal energy. They also provide industrial market participants with an effective way to hedge electricity costs. To ensure that these facilities are not defined as affected entities and to remove potential disincentives for the use of industrial CHP, EPA should clarify that affected units are units which primarily produce electricity and not units which primarily produce thermal energy.

IV. Infrastructure and Contracting Mechanisms Facilitating Natural Gas Use

Forecasted natural gas generation capacity additions and expected increases in natural gas use for electricity generation demonstrate that natural gas is a preferred fuel for the power sector.⁸ The U.S possesses abundant natural gas supplies that can meet greater demand from the electric sector and other industries. In order to facilitate the greater use of natural gas generation, and the resulting emissions benefits, natural gas markets must remain competitive and liquid to aid efficient delivery of natural gas to customers.

A critical component of a healthy and liquid natural gas market is adequate infrastructure. With increasing supplies of natural gas coming online, new pipeline capacity will play an essential role in transporting production to market. A recent study released by the INGAA Foundation found that new pipelines will need to accommodate an additional 43 billion cubic feet of natural gas per day by 2035 and annual capital expenditures of \$14 billion are necessary over the same period to support new natural gas infrastructure.⁹ The natural gas industry has shown its ability to expand and improve natural gas infrastructure in the past and can continue to do so given clear market signals prompting investment. NGSAs encourages regulators, including the Federal Energy Regulatory Commission (FERC), to remove any structural barriers that inhibit the construction of new natural gas pipelines and to support market stakeholders as they seek to ensure adequate and timely infrastructure is in place to allow the greater use of natural gas.

The natural gas market features an existing array of contracting tools that facilitate efficient, flexible and timely natural gas use. Asset management agreements, pipeline-park-and-leave services, storage contracts and no notice service are just a few

⁷ 79 Fed. Reg. at 34954.

⁸ Annual Energy Outlook 2014, Energy Information Administration, May 2014 (http://www.eia.gov/forecasts/aeo/MT_electric.cfm).

⁹ North American Midstream Infrastructure through 2035: Capitalizing on Our Energy Abundance, INGAA Foundation, March 2014.

options at the disposal of natural gas customers. These tools when secured in advance as part of a diverse procurement strategy can assist natural gas generators in reliably meeting their obligations. Further, physical and financial hedging tools can help mitigate price swings and exposure to the spot market. Taken together, these procurement tools can assist power market participants in accessing robust and reliable supplies of natural gas for their needs.

In addition to facilitating reliable natural gas use in the power sector, contracting tools and gas service options also play an important role in supporting greater investment in natural gas infrastructure. Infrastructure improvements and pipeline expansions are traditionally supported by customers contracting for firm transportation of natural gas. However, many generators find power market rules do not permit them to recover the costs of firm transportation agreements, which has resulted in natural gas power generators traditionally relying on interruptible contracts to transport needed gas supplies. While such arrangements have been adequate in the past, the recent polar vortexes during the winter of 2013-2014 demonstrate that continued reliance on interruptible transportation can have consequences in pipeline capacity-constrained regions. As the power sector increasingly relies on natural gas to meet additional demand, power market rules should allow generators to fully recover the cost of firm transportation agreements and other services supporting the required infrastructure facilitating natural gas generation.

V. Conclusion

The recent decline in power sector carbon dioxide emissions is a testament to the ability of natural gas generation and competitive markets to efficiently deliver emissions reductions. The EPA's proposed rule correctly notes the benefits of natural gas generation by including natural gas generation within its scope to reduce emissions. Natural gas generation can continue to play a leading role in reducing carbon dioxide emissions with the construction of needed natural gas infrastructure in addition to the use of diverse contracting tools already provided by a liquid natural gas market.

NGSA thanks EPA for the opportunity to comment on the proposed rule. Please feel free to contact NGSA with any questions or comments.

Sincerely,

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