

Testimony of the American Public Gas Association before the Senate Committee on Energy and Natural Resources Hearing “Opportunities and Challenges for Natural Gas”

On behalf of the American Public Gas Association (APGA), thank you for the opportunity to submit testimony on the Senate Committee on Energy and Natural Resources hearing titled, “Opportunities and Challenges for Natural Gas.” APGA believes that the Committee should consider two issues critical for U.S. consumers of natural gas, which are reform of Section 5 of the Natural Gas Act (NGA) and the export of domestically produced natural gas in the form of liquefied natural gas (LNG). We sincerely appreciate the opportunity to present our views and stand ready to work with the Committee on these and any other natural gas issues that may be considered.

APGA is the national association for publicly-owned natural gas distribution systems. There are approximately 1,000 public gas systems located in 36 states. Publicly-owned gas systems are not-for-profit, retail distribution entities owned by, and accountable to, the citizens they serve. They include municipal gas distribution systems, public utility districts, county districts, and other public agencies that have natural gas distribution facilities.

Issue 1: Reform of Section 5 of the Natural Gas Act

Background

In 1938, Congress gave the Federal Power Commission (now the Federal Energy Regulatory Commission (FERC)) authority under the NGA to regulate transportation rates charged by interstate natural gas transmission pipelines. The NGA mandates that customers of interstate pipelines are to be charged “just and reasonable” rates, mirroring the core rate sections of the Federal Power Act (FPA), which mandate just and reasonable rates for electric utilities.

Periodically, Congress has updated both the FPA and the NGA as the electric and natural gas industries have evolved. Significantly for these purposes, Congress amended the FPA in 1988 and again in 2005 allowing FERC to provide refunds to the extent customers were charged unjust and unreasonable rates as found by FERC; with such refunds to be effective as of the refund-effective date, which may be set by FERC as early as the date that a complaint is filed under FPA Section 206. Unfortunately, no such amendments were made to the NGA.

Until 1992, interstate pipeline companies were required to have their rates evaluated every three years by the FERC to ensure that they were just and reasonable, so the need for such reform was not as pressing.

However, in 1992, FERC issued Order 636 as part of the transition to unbundled open access transportation and ended the three-year rate review process. The practical result of this has been that pipelines with increasing costs file for and receive rate increases under NGA Section 4; while

pipelines with decreasing costs, whose rates have long since ceased to be just and reasonable, simply continue charging consumers excessive rates, often for very extended periods of time, sometimes 10 or more years.

Even if customers or the FERC initiates an NGA Section 5 complaint case against an interstate pipeline company, and the FERC agrees that the just and reasonable standard was violated, the FERC can only change the company's rates prospectively from and after the date of the FERC final order, with no refunds to affected consumers during the often lengthy period required to process such a complaint case. It goes almost without saying that unless pipelines can settle such cases on terms very favorable to themselves, as is usually the case, they have every incentive and the resources to drag out the litigation of the complaint case for years since there are no refund repercussions at the end of the proceeding. This lack of parity between the complaint sections of the NGA and FPA leaves natural gas customers ranging from homeowners to industrial enterprises exposed to overcharges for extended periods in violation of the NGA's just and reasonable standard. This lack of protection has resulted in millions of customers paying excessive, unjust and unreasonable rates for natural gas transportation, affecting families' bottom lines and businesses' ability to compete and create jobs.

Recent Developments

Since November 2009, FERC has initiated approximately three Section 5 cases each year. Whether or not Section 5 cases are initiated at all is at the discretion of the Commissioners – there is no statutory requirement that FERC do so. APGA believes that the recent FERC Section 5 actions are important for a number of reasons. First, the Commission to its credit is taking the initiative to review pipeline Form 2 filings (annual filings containing pipeline financial data) and calling out the most egregious over-earners, most of which have not been before the Commission in many years for a rate review. The Form 2 data shows that these entities are often earning returns in excess of 20 percent, which, all seem to concede, is exorbitant for a regulated monopoly.¹

The second point that these cases illustrate is the futility of bringing such complaint cases if the goal is to achieve just and reasonable rates under the NGA. The pipelines are able to use delay tactics and threats of time-consuming NGA Section 4 filings to bully both the customers into settling the cases on terms very favorable to the pipelines and the commission into approving these unbalanced settlements. These points have been made by the various parties to these cases² and fully recognized by the commissioners themselves. For example, in one of the first complaint cases initiated by the commission, involving Northern Natural Gas Company, Docket No. RP10-148, Commissioner LaFleur observed as follows in a concurring statement:

¹ The annual report of the Natural Gas Supply Association, "Pipeline Cost Recovery Report: 32 Major Pipelines 2006-2010," shows that the twelve companies called on the carpet are but a small fraction of the total number of over-earners (see Report at pp. 4-5).

² Natural Gas Pipeline Co. of America, RP10-147, comments of PGC et al at 1-3, comments of Missouri Public Service Commission at 3-6; comments of APGA at 1-3; comments of Pennsylvania Public Utility Commission at 1; and in Northern Natural Gas Co., RP10-148, comments of Northern Municipal Distributors Group et al at 2-3, 5-6; comments of Michigan Public Service Commission at 1-2; response of APGA at 1-4.

“I recognize the concerns raised by the Industrials on rehearing regarding the unfair advantage pipelines may have in a section 5 proceeding vis-à-vis their customers. The Commission can only act, however, within the existing statutory scheme. I believe that this proceeding clearly demonstrates the need for reform of section 5 of the NGA to prevent the asymmetry of leverage between applicants under section 4 and complainants or the Commission under section 5. As happened here, without Commission authority to set a refund effective date upon institution of a complaint or investigation under section 5, a pipeline can threaten to file a general section 4 rate case and move those rates into effect prior to the date by which a Commission order in the section 5 proceeding could lower those rates. This situation places the parties supporting the section 5 proceeding in a difficult situation in that they may be forced to pay even higher rates without refund relief for some period of time. It also hampers the Commission’s efforts to ensure just and reasonable rates. I therefore support legislative action to amend the NGA to provide the Commission with refund authority in section 5, similar to that provided under section 206 of the Federal Power Act.³”

Similarly, in a dissenting statement in that same case Chairman Wellinghoff stated:

“As a general matter, the lack of refund authority under section 5 of the NGA allows the regulated community to defeat the purpose of section 5 at least in some circumstances. This is not the case under the Federal Power Act (FPA). The Commission must establish a refund effective date for a section 206 proceeding and has the authority to order refunds for the period ending 15 months after the refund effective date. Thus, the incentive for game-playing is removed and the Commission can determine on the merits that a public utility’s rates are just and reasonable. For this reason, I support legislative changes providing for NGA refund authority paralleling that provided to the Commission in the FPA.⁴”

In fact, all of the sitting commissioners including (newly appointed Commissioner Clark has expressed his support for Section 5 reform in a meeting with APGA), being fully familiar with the outcomes in these Section 5 proceedings, have stated their support for amendment of NGA Section 5 to provide refund authority comparable to that available under FPA Section 206.

The prospect of continuing to pay excessive rates for natural gas transportation has brought together a diverse group of stakeholders that is growing. Groups that have supported reform include: the Industrial Energy Consumers of America; American Iron and Steel Institute; American Forest and Paper Association; American Public Power Association; National Farmers Union; Public Citizen; and, most recently, the National League of Cities, which represents 19,000 cities, villages, and towns. This growing coalition of organizations recognizes that the only way to protect individual consumers as well as the competitiveness of major industrial users of natural gas is to reform Section 5 of the NGA. As significant as the number and type of entities supporting reform is the absence of entities opposing reform. To date, only pipelines and their trade association have opposed the efforts to amend NGA Section 5 to afford consumers meaningful protection against rate overcharges.

The arguments for reform are straight-forward and persuasive. First and foremost is the NGA mandate that pipelines charge just and reasonable rates and that customers be protected from paying

³ Comm’r LaFleur concurring statement (p. 2) in Northern Natural Gas Co., RP10-148, Oct. 29, 2010

⁴ Chairman Wellinghoff dissenting statement (p. 4) in Northern Natural Gas Co., RP10-148, Nov. 2, 2010

unjust and unreasonable rates for natural gas transportation. The fact that overcharges are an ongoing problem is illustrated both by the pipeline's own (Form 2) data cited in the Section 5 complaints initiated by the commission and by the data released each year by the Natural Gas Supply Association (NGSA). In 2012, NGSA released a study of the 32 largest interstate pipelines (representing 80 percent of the transmission market), which found that these companies overcharged customers by \$4.2 billion from 2006-2010 (this is an increase of \$100 million compared to the 2011 report).⁵ The study also used Form 2 data submitted by interstate pipeline companies and assumed an average return on equity (ROE) of 12 percent to be acceptable.⁶ Over the five year period, several companies averaged an ROE above 20 percent and one above 42 percent.⁷

Overcharging for natural gas transportation does not simply mean fewer dollars available for businesses and consumers, but also means fewer jobs in an economy where job growth is more critical than ever. Major industrial enterprises spend millions of dollars on natural gas, which constitutes a major input cost. The fact that many of these enterprises are paying excessive rates for natural gas transportation limits their ability to create new jobs in the midst of strong competition from companies around the world. The money spent on excessive natural gas rates could be better spent by creating new jobs here in the U.S. and taking advantage of our nation's vast, newly accessible shale gas reserves.⁸

Addressing Pipeline Arguments Against Reform

The benefits to businesses and consumers of reforming Section 5 of the NGA to limit pipelines to rates that are just and reasonable are clear and compelling: lower costs and greater domestic job creation. However, to date, interstate pipelines continue to resist reform since it affects their bottom line, so it is important to address each of their arguments to determine their merit or lack thereof.

Interstate pipeline companies' arguments against reform may be summarized as follows: FERC-established rates remain just and reasonable until changed; ordering refunds would constitute "retroactive ratemaking"; providing for refunds would undermine infrastructure development; and reform is unnecessary because transportation rates themselves are a relatively small component of the total bundled cost of natural gas to consumers. Each of those points will be addressed below.

The pipelines argue that since the rates being charged by a pipeline at any given point in time were previously approved by the FERC, they must still be just and reasonable, and thus refunds should be denied. This contention is self-evidently inaccurate since a rate that is just and reasonable at any given point in time may become unjust and unreasonable at a subsequent point in time if costs materially increase or decrease. Pipelines are not bashful about filing to increase their rates when costs are rising, and such rate increases go into effect virtually immediately subject to refund after a nominal suspension period under NGA Section 4. The suggestion that pipelines should be allowed to supersede previous rates determined to be just and reasonable after a nominal suspension period but that consumers should have to wait potentially years before getting relief from unjust and

⁵ Natural Gas Supply Association, "Pipeline Cost Recovery Report: 32 Pipelines 2006-2010" pgs 4-5.

⁶ Of course, in today's financial markets, the assumed 12% ROE is several hundred basis points above what could be justified.

⁷ Natural Gas Supply Association, "Pipeline Cost Recovery Report: 32 Pipelines 2006-2010", p. 5

⁸ Energy Information Administration "Annual Energy Outlook 2012 Early Release," pgs: 1 and 5.

unreasonable rates is absurd on its face. This argument was obviously found wanting in 1988 when Congress amended FPA Section 206 to provide for refunds where rates were ultimately determined to be excessive.

Interstate pipelines also argue that reform of Section 5 to provide refund protection for consumers is tantamount to “retroactive ratemaking.” This statement is legally inaccurate and is designed to conjure fears amongst policymakers of overzealous regulators intrusively altering pipeline rates, creating uncertainty and harming pipelines’ business. In reality, if a customer files a complaint under a reformed Section 5, the Commission, if it believes that the complainant has shown good cause to set the matter down for hearing, will set a refund-effective date, *which date may not precede the date the complaint is filed*. Hence, all refunds are prospective from the refund-effective date, and there will be no refunds unless the Commission at the end of the proceeding determines that the pipelines’ rates are excessive under the “just and reasonable” standard. In short, unless FERC determines that interstate pipelines are violating the NGA, no refunds will be required. The identical provision under the FPA has been upheld against charges of retroactive ratemaking.

The interstate pipeline companies also argue that reforming Section 5 will harm their ability to build infrastructure. This argument is a red-herring and is misleading in at least five different ways:

First, new infrastructure projects are certificated to earn healthy equity returns, usually in the 12 percent range. NGA Section 5 reform does not affect by one iota the ability of these projects to earn such returns; rather, NGA Section 5 reform is only applicable to those egregious over-earners whose customers are underwriting returns far in excess of the allowed returns.

Second, almost all significant new infrastructure projects are undertaken on the basis of “negotiated” contracts between the transporter and the shippers. Negotiated contracts are not subject to rate changes by the transporter under NGA Section 4 or rate challenges by shippers under NGA Section 5; the rate is fixed for the term through bilateral negotiations. These negotiated contracts form the basis for the project developer to go to the marketplace and provide the developer with known returns for the contract terms. Thus, the argument that NGA Section 5 reform would deter new infrastructure development is false and misleading.

Third, the FERC is required by law in setting rates to provide for a rate of return that permits the affected pipeline to recover all debt costs plus raise capital in the marketplace at reasonable rates. FERC has done just that, and the financial markets understand this, so NGA Section 5 reform will not affect at all the ability of interstate pipelines to raise capital in the marketplace.

Fourth, the FERC itself, which is pro-business and pro-infrastructure, understands that the argument that Section 5 reform would be bad for infrastructure development and thus bad for job development is rash, for all of the reasons noted above, which explains why all sitting commissioners, including the Chairman and prior two Chairmen, support NGA Section 5 reform. Commissioner Clark has also expressed his support in a private meeting with APGA.

Fifth, many of the leading builders of infrastructure are not the more egregious over-earners, and they have successfully gone to the marketplace for billions of dollars for new infrastructure construction. For example, El Paso Natural Gas Company touts on their website that in 2010 they

invested \$318 million in new infrastructure projects.⁹ According to the NGS study, El Paso had an ROE of 8.3 percent for 2010 and a five year average ROE of 10.7 percent.¹⁰ In other words, there is no correlation between over-earning pipelines and infrastructure construction.

In brief, this “infrastructure” argument is nothing but a strawman raised by the pipelines *because* they have no defense on the merits against Section 5 reform – they are overcharging customers because the rates of many of them are no longer just and reasonable. Absent NGA Section 5 reform, FERC, which is supposed to ensure that pipelines charge and consumers pay just and reasonable rates, is basically helpless to prevent allowing pipelines to defeat the purpose of the NGA.

Finally, the interstate pipelines also argue that transportation rates for natural gas are a small part of the overall cost to consumers, so policymakers should ignore it. First, this contention tries to obscure the fact that excessive rates for transportation cost consumers and businesses some \$4.2 billion over a five-year period¹¹ - money that should remain in the communities of the customers that are being overcharged. The fact of the matter is that the price of gas at the wellhead, which is the major component of the blended gas cost paid by consumers, is deregulated and thus that component is not at issue here. What is at issue is the FERC-regulated component: pipeline rates to move the gas from the field to local distribution companies and industrial loads and the issue that there is no basis for a regulated entity under the Natural Gas Act to over-recover its allowed return by hundreds of millions of dollars, as is the case today, simply because the production component of the ultimate charge paid by consumers is unregulated.

Conclusion

APGA believes that it is critical that businesses and individual consumers pay a fair price for natural gas and for its transportation. FERC is charged with ensuring this result, but in contrast to the situation under the FPA, it is handcuffed from carrying out its mandate by the same flaw in the NGA that handicapped the Commission under the FPA until Congress acted in 1988. As FERC Chairman Wellinghoff (and his predecessors) and all sitting FERC commissioners have observed publically and/or privately, no credible public policy reason exists to treat electric and natural gas customers differently in regard to ensuring that rates of jurisdictional companies are just and reasonable.

APGA thanks the Committee for its interest in this important issue and respectfully requests a hearing at the Senate Committee on Energy and Natural Resources so these issues can be debated in an open, on-the-record forum.

Issue 2: LNG Export

The Department of Energy Office of Fossil Energy (“DOE/FE”) commissioned two studies regarding the effects of LNG exports. The first, conducted by the U.S. Energy Information Administration (“EIA”), studied the impact of LNG exports on domestic prices and concluded that

⁹ El Paso Natural Gas Company website:

<http://investor.eppipelinepartners.com/phoenix.zhtml?c=215819&p=irol-newsArticle&ID=1532478&highlight=>

¹⁰ Natural Gas Supply Association, “Pipeline Cost Recovery Report: 32 Pipelines 2005-2009,” pg. 5.

¹¹ Natural Gas Supply Association, “Pipeline Cost Recovery Report: 32 Major Pipelines 2006-2010,” pgs 4-5.

the exports will increase prices, with higher volumes causing more drastic increases.¹² The second, conducted by NERA Economic Consulting, focused on the macroeconomic effects of LNG exports, which it found would be a net positive while at the same time confirming that LNG exports would raise domestic natural gas prices, which would burden the U.S. consumers who can least afford the increase and disadvantage domestic manufacturing.¹³ Policymakers must consider both of these studies and the many non-governmental studies, but also go beyond them to consider the profound tradeoffs entailed by exporting away an increasingly valuable U.S. fuel rather than supporting its use domestically.

Increased production of natural gas in the U.S. provides the nation with an unprecedented opportunity to pursue energy independence and sustained economic growth through a manufacturing renaissance grounded in plentiful, low cost natural gas. Price increases will also jeopardize the viability of natural gas as a “bridge-fuel” in the transition away from carbon-intensive and otherwise environmentally problematic coal-fired electric generation and inhibit efforts to foster natural gas as a major transportation fuel, which is important to wean the U.S. from its historic and high-risk dependence on foreign oil.

Background

To date, 22 applications have been submitted to DOE to export domestic LNG from the contiguous United States to Free Trade Agreement (FTA) or non-FTA nations based on the promise of huge unconventional domestic gas reserves. Many of those 22 applicants own or are affiliated with companies that own existing or previously planned LNG import terminals. Also to date, the total export capacity applied for is 29.41Bcf/d and 24.8 Bcf/d to FTA and non-FTA nations, respectively. Total marketed natural gas production was approximately 66 Bcf/d in the U.S. in 2011; therefore, based on current marketed production data, the total applied-for export capacity would have the effect of increasing the demand for natural gas by nearly 48 percent.

Policymakers in Congress and at DOE have a duty to ensure that any application before it for export authority is not inconsistent with the public interest pursuant to NGA section 3(a).¹⁴ The “public interest analysis of export applications” should be “focused on *domestic* need for natural gas,” threats to *domestic* supply, and “other factors to the extent they are shown to be relevant.”¹⁵

¹² *Effect of Increased Natural Gas Exports on Domestic Energy Markets*, U.S. Energy Information Administration (Jan. 2012) (“EIA Export Report”). As requested by the DOE/FE, the EIA Export Report considered four scenarios: (1) 6 Bcf/d phased in at a rate of 1 Bcf/d per year (low/slow scenario); (2) 6 Bcf/d phased in at a rate of 3 Bcf/d per year (low/rapid scenario); (3) 12 Bcf/d phased in at a rate of 1 Bcf/d per year (high/slow scenario); and (4) 12 Bcf/d phased in at a rate of 3 Bcf/d per year (high/rapid scenario).

¹³ *Macroeconomic Impacts of LNG Exports from the United States*, NERA Economic Consulting (Dec. 2012) (“NERA Study”). APGA understands (and applauds the fact) that the merits and demerits of the NERA Study will be assessed independently by DOE/FE in a separate proceeding (77 Fed. Reg. 73627); and hence APGA’s comments here on the NERA Study are only preliminary and not intended to represent its complete assessment of the NERA Study.

¹⁴ 15 U.S.C. § 717b(a).

¹⁵ *Sabine Pass Liquefaction, LLC*, Opinion and Order Denying Request for Review Under Section 3(c) of the Natural Gas Act, October 21, 2010, FE Docket No. 10-111-LNG.

LNG Exports Will Increase Domestic Natural Gas Prices

According to the EIA Export Report, “[l]arger export levels lead to larger domestic price increases.”¹⁶ EIA also concluded that “rapid increases in export levels lead to large initial price increases,” but that slower increases in export levels will “eventually produce higher average prices during the decade between 2025 and 2035.”¹⁷

Even under the “low/slow” baseline scenario in the EIA Export Report, price impacts will peak at about 14 percent.¹⁸ Under the low/rapid baseline scenario, EIA projects that wellhead prices will be approximately 18 percent higher in 2016 than they otherwise would be.¹⁹ In fact, under all of the “low” scenarios accounting for different economic and shale reserve conditions, EIA predicts price impacts well above 10 percent that then moderate.²⁰ Under the “high/rapid scenario,” EIA projects that prices will increase by 36 percent to 54 percent by 2018 depending on natural gas supplies and economic growth.

The NERA study also concluded that the higher the volume of LNG exports, the more domestic natural gas prices will rise. Both studies underestimate potential price increases because they are based on outdated projections of domestic demand for natural gas and the questionable assumption that the demand for natural gas is sufficiently elastic to prevent significant price spikes.

Domestic Demand Underestimated

On December 5, 2012, the EIA issued the Early Release of its Annual Energy Outlook for 2013 (“*AEO2013*”). The *AEO2013* projects greater increases in domestic demand for natural gas than projected in prior Annual Energy Outlooks. In particular, the *AEO2013* projects greater increases in demand for natural gas from domestic industry, particularly from the bulk chemicals and primary metals industries and as a result of “higher output in the manufacturing sector.”²¹ However, even *AEO2013* appears to underestimate the coming growth in natural gas use for manufacturing, if domestic prices remain low.²²

¹⁶ *Id.* at 6. As requested by the DOE/FE, the EIA Export Report considered four scenarios: (1) 6 Bcf/d phased in at a rate of 1 Bcf/d per year (low/slow scenario); (2) 6 Bcf/d phased in at a rate of 3 Bcf/d per year (low/rapid scenario); (3) 12 Bcf/d phased in at a rate of 1 Bcf/d per year (high/slow scenario); and (4) 12 Bcf/d phased in at a rate of 3 Bcf/d per year (high/rapid scenario).

¹⁷ *Id.*

¹⁸ *Id.* at 8.

¹⁹ *Id.*

²⁰ *Id.* at 9.

²¹ *AEO2013* Early Release Overview at 2.

²² See Steven Mufson, *The New Boom: Shale Gas Fueling an American Industrial Revival*, Washington Post (Nov. 14 (2012) (reporting that manufacturers have plans to invest as much as \$80 billion in U.S. chemical, fertilizer, steel, aluminum, tire and plastics plants); Letter from Edward J. Markey, Ranking Member, House of Representatives Committee on Natural Resources, to Steven Chu, Secretary of Energy (Dec. 14, 2012)(“Markey Letter”) (stating that *AEO2013* domestic demand projections “fail to capture many of the more than 100 newly announced natural gas-intensive manufacturing projects that have been announced over the past 18 months. Those projects represent of \$90 billion in investment and billions of cubic feet of additional future daily natural gas use.”).

AEO2013 also projects greater increases in future reliance on natural gas for electric generation than projected by the EIA in previous Annual Energy Outlooks. The increased reliance on natural gas for electric generation is partially based on low natural gas prices, but also on implementation of the Environmental Protection Agency's (EPA) pending Mercury Air Toxic Standards ("MATS"), which will force the retirement of a number of coal-fired generators.

Both studies commissioned by DOE/FE rely on projected natural gas demand from *AEO2011*. These outdated projections fail to account for current EIA expectations regarding future demand and tend to overestimate demand elasticity, or the ability of natural gas consumers to curtail their purchases in response to higher prices in the electric generation sector. Once a coal plant is retired due to MATS, or for any other reason, the operator of the retired plant cannot switch it back on in response to higher natural gas costs. Meanwhile, the EPA's new greenhouse gas standards for new electric generators virtually ensure that new coal plants will not be constructed to replace those that are retired.²³ Soon, electric generation companies will not only demand more gas but also rely on it more heavily for base load production, altering expectations about demand elasticity that prognosticators have relied on when assuming that natural gas prices will not raise sharply due to LNG exports.²⁴ This same trend would also exacerbate the increases in the price of electricity caused by LNG exports that are projected by the EIA and NERA.

While demand elasticity will shrink in the electric sector, leading to sharper increases in natural gas and electricity prices than previously forecasted, manufacturers will continue to be "responsive" to increases in the price of natural gas - meaning that manufacturers will curtail consumption and hence production due to higher prices. Congress and the DOE need to examine what this means for the economy and the broader public interest of the nation in its consideration of this and other LNG export applications.

Effects of Higher Prices

Increases in the price of natural gas will impact the U.S. consumers who can least afford the price increase, inhibit the expansion of domestic manufacturing, and forestall the further use of natural gas as a bridge fuel away from the carbon-intensive coal and foreign sourced oil for transportation. The NERA study specifically describes the effects of LNG exports and the attendant price increases in terms of a "wealth transfer." The DOE/FE must examine what this wealth transfer would entail for the public interest when evaluating LNG export applications.

Hurts Economically Vulnerable Households

Proposed LNG exports would raise domestic natural gas prices, which will increase costs to households that rely on natural gas for heating and cooking. NERA projects that these higher costs will be offset by increases in the value of natural gas resources and related companies, which NERA

²³ "Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units" 77 C.F.R. 22392 (Apr. 13, 2012).

²⁴ See Energy Information Administration, *Fuel Competition in Power Generation and Elasticities of Substitution* (June 2012) (general description of fuel switching and price elasticity among fuels in the power generation sector) available at <http://www.eia.gov/analysis/studies/fuelelasticities/pdf/eia-fuelelasticities.pdf>.

assumes many Americans own through retirement savings and other investments.²⁵ NERA admits, however, that “[h]ouseholds with income solely from wages or government transfers,” will not share in the benefits of increased profits from natural gas.²⁶ Therefore, the increase in natural gas prices due to exports will impact most those consumers without investments or retirement savings, those living paycheck-to-paycheck or relying on government assistance - in other words, the most needy in our society.

Suppresses Other Domestic Industries

The NERA study indicates that as the price of natural gas increases, the economy demands or produces fewer goods and services. This results in lower wages and capital income for consumers; under such economic conditions, consumers save less of their income for investment.

As a result, industries that rely on natural gas will experience “a reduction in overall output,” mitigated by a “switch to fuels that are relatively cheaper.”²⁷ The latter argument assumes that alternatives to natural gas are affordable and available, which is an invalid assumption for fertilizer manufacturers and other industries.

Moreover, the NERA study identified chemical manufacturing as one of the natural gas and energy intensive industries that will be among the most severely disadvantaged due to natural gas price increases caused by LNG exports.²⁸ According to NERA “[d]omestic industries for which natural gas is a significant component of their cost structure will experience increases in their cost of production, which will adversely impact their competitive position in a global market and harm U.S. consumers who purchase their goods.”²⁹ Leaders in the chemical sector have voiced concern regarding LNG exports and adverse impacts on the industry caused by inflated natural gas prices.³⁰

When evaluating whether export applications are consistent with the public interest, policymakers must ask not only “what will we gain from LNG exports,” but also “what will we give up.” A U.S. manufacturing renaissance that promises greater economic growth and job creation with positive effects rippling throughout the economy hangs in the balance. Right now, industry is poised to invest billions of dollars in new natural gas intensive facilities in the U.S. premised on the promise of low domestic natural gas prices. For example, Sasol North America, Inc. is currently considering investing in the first gas to liquids plant in the U.S., an innovative technology for producing diesel and other liquid fuels without oil, and U.S. natural gas prices are a primary consideration regarding whether the investment will go forward.³¹

²⁵ See Markey Letter (casting doubt on the assumption that benefits to the natural gas sector will be widely enjoyed by ordinary American via retirement investments).

²⁶ NERA Study at 8.

²⁷ NERA Study at 53.

²⁸ NERA Study at 64.

²⁹ NERA Study at 13.

³⁰ Press Release, Dow Chemical, *DOE Report on LNG Exports Short Changes Manufacturing and U.S. Competitiveness* (Dec. 6, 2012) available at <http://www.dow.com/news/press-releases/article/?id=6138>

³¹ Clifford Kraus, *South African Company to Build U.S. Plant to Convert Gas to Liquids*, New York Times (Dec. 3, 2012) available at: <http://www.nytimes.com/2012/12/04/business/energy-environment/sasol-plans-first-gas-to-liquids-plant-in-us.html? r=0>.

Last year, in his State of the Union address, President Obama spoke of “an America that attracts a new generation of high-tech manufacturing and high-paying jobs - a future where we’re in control of our own energy, and our security and prosperity aren't so tied to unstable parts of the world,” and “an economy built on American manufacturing, American energy.”³² Low natural gas prices in the U.S. provide the path forward. Higher natural gas prices due to LNG exports threaten this nascent return to American manufacturing, and prior economic data demonstrate that when domestic energy prices increase, the country loses manufacturing jobs, particularly in the fertilizer, plastics, chemicals, and steel industries.³³

Rather than trading a few existing manufacturing jobs for a few natural gas and construction jobs, the DOE/FE should pursue policies that create new manufacturing jobs and broader economic growth in the U.S. Using natural gas for manufacturing provides a value-added benefit to the economy because industry multiplies the value of every dollar it expends on natural gas for energy or as a raw material. Rather than investing in natural gas exports, which squeeze out investments from other sectors of the economy, the U.S. should pursue policies that allow industry to invest in natural gas dependent manufacturing. Energy and natural gas intensive manufacturing produces chemicals, metals, cement and other materials that may be low-value adding but create positive ripple effects up the value-chain and throughout the economy.³⁴ Rather than exporting natural gas as a raw natural resource, the U.S. could export processed materials, such as steel, or higher value-added goods at more competitive prices, with greater benefits to the U.S. job market and GDP.

Threaten Transition from Coal

Current low natural gas prices provide an opportunity to wean the U.S. off of carbon-intensive coal. Inflated natural gas prices due to LNG exports will decrease the viability of natural gas as a bridge-fuel to a lower carbon future. Current low prices make natural gas-fired electricity generation an economically sound alternative to coal-fired generation. Sustained low prices may encourage this transition by private initiative regardless of increased environmental regulations as investors find natural gas competitive with coal. If exports inflate natural gas prices, the economics turn against cleaner burning natural gas.³⁵

In addition, as discussed above, new environmental regulations will soon force coal retirements. Future greenhouse gas regulation could cause additional retirements in the future. If natural gas prices remain low, the U.S. may be able to transition away from carbon intensive coal without causing electricity prices to increase significantly. If natural gas prices are high, however, electricity prices will spike as relatively cheap coal-fired generators are forced to retire for

³² President Barack Obama, State of the Union Address (Jan. 24, 2011), transcript available at: <http://www.whitehouse.gov/state-of-the-union-2012>.

³³ U.S. House Committee on Natural Resources Democrats, *Drill Here, Sell There, Pay More: The Painful Price of Exporting Natural Gas* (March 2012) available at <http://democrats.naturalresources.house.gov/reports/drill-here-sell-there-pay-more>.

³⁴ NERA claims that harm resulting from exports will “likely be confined to very narrow segments of industry,” namely low value-added, energy intensive manufacturing. NERA Study at 67-69. NERA, however, ignores the benefits of producing materials in the U.S. that can then be used by other U.S. manufactures that are less energy intensive and higher up the value chain. For instance, if plastics are produced at competitive prices in the U.S., toy manufacturers may find it economical to “re-shore” toy manufacturing plants. Steven Mufson, *The New Boom: Shale Gas Fueling an American Industrial Revival*, Washington Post (Nov. 14, 2012).

³⁵ EIA Export Report at 17.

regulatory reasons. Spiking electricity rates will have rippling effects on the U.S. economy, especially energy intensive, cost-sensitive manufacturing.

Keeps the U.S. Dependent on Foreign Oil

Currently, the U.S. imports billions of dollars worth of oil from around the globe, a great deal of which is used as gasoline to fuel vehicles. The replacement of current gasoline-powered fleets with natural gas vehicles would significantly reduce U.S. dependence on foreign oil, and thereby enhance U.S. security and strategic interests and reduce our trade deficit.³⁶ State governments and businesses are expending substantial resources today to put the needed infrastructure in place.³⁷

Automobiles are not the only modes of transportation that businesses are interested in transitioning to natural gas; a company in Canada is investing in commercial locomotives powered by LNG and teaming up with Caterpillar to employ similar technology in heavy duty equipment that currently runs on diesel.³⁸ If Congress and the DOE allow export applications to go through, the resulting increase in natural gas prices would undermine recent investments to expand natural gas as a transportation fuel.

Policymakers should not pursue an export policy that undermines the efficient, domestic use of a domestic fuel stock and America's first and best opportunity to move toward energy independence by decreasing reliance on foreign oil.

U.S. and Foreign Natural Gas Prices Will Converge

Currently, there are significant disparities between domestic natural gas commodity prices and prices in some nations that rely on LNG imports. These disparities provide would-be exporters with appealing arbitrage opportunities in the short-term, but they will not last. Gas rich shale deposits are a global phenomenon, just now beginning to be tapped. Also, despite relatively low domestic natural gas prices, certain countries, such as Qatar, can produce massive quantities of natural gas at even lower prices. As other nations develop their resources and export capacity and as U.S. natural gas prices increase due to export, international and domestic prices will converge, leaving the U.S. with higher domestic prices that thwart energy independence and that undermine the competitiveness of the manufacturing sector that relies heavily on natural gas as a process fuel.

³⁶ Cheniere and other exporters claim that their proposed exports will benefit the U.S. balance of trade, but it does not consider the benefits to the trade balance of cutting oil imports and exporting value-added goods manufactured in the U.S. with affordable natural gas.

³⁷ Officials are planning a series of compressed natural gas ("CNG") filling pumps at existing filling stations across the Pennsylvania US Route 6, stretching 400 miles from New York State near Milford, Pike County, Pa. in the east and through Crawford County, Pa. to the Ohio state line on the west, known as "PA Route 6 CNG Corridor;" at the same time, Chesapeake Energy is converting its vehicles in northeastern Pennsylvania to CNG and working with a local convenience-store chain and transit authority to foster further CNG integration. Eric Hrin, *Pennsylvania Looks to CNG*, The Daily Review Online (May 26, 2011) available at <http://thedailyreview.com/news/pennsylvania-looks-to-cng-1.1135267>; see also, Texas S.B. 20 (On July 15, 2011, the governor of Texas signed S.B. 20, supporting a network of natural gas-refueling stations along the Texas Triangle between Dallas/Ft. Worth, San Antonio, and Houston. The new legislation will lay a foundation for wider-scale deployment of heavy-duty, mid- and light-duty natural gas vehicles ("NGVs") in the Texas market).

³⁸ Rodney White, *Firm on Track to Build LNG-Fueled Locomotive*, Platts Gas Daily (Nov. 28, 2012).

The U.S. is at the forefront of technology in the development of shale gas reserves. A recent study by MIT concludes that the U.S. should export its technology and expertise.³⁹ According to MIT, the development of international non-conventional natural gas reserves will create a more liquid market with less disparity between prices around the globe.⁴⁰

The U.S. should follow this strategy, instead of spending billions of dollars to build facilities in order to export a commodity that will possibly be abundant world-wide before the LNG export facilities can even be completed.

The U.S. has an opportunity not even imagined two or three years ago to significantly expand its manufacturing sector, transition away from our reliance on coal-fired electricity generation (without risking price shocks), and finally make real progress towards energy independence. All of this, however, depends on relatively low and stable natural gas prices (which sharply contrasts with the history of natural gas price volatility). Congress and the DOE should not turn a blind eye and allow the same businesses that gambled and lost on projections of the need for future natural gas imports to now potentially squander our nation's future on what may well turn out to be another failed venture as natural gas production and export capacity develop throughout the world.

APGA respectfully requests that the Committee hold at least one hearing dedicated to examining the domestic impacts of LNG export on consumers and businesses.

Conclusion

APGA appreciates the opportunity to submit testimony to the Senate Committee on Energy and Natural Resources on these two critical natural gas issues. We stand ready to work with the Committee on these and all other natural gas issues.

³⁹ MIT Energy Initiative, *The Future of Natural Gas*, at 14 (2011).

⁴⁰ *Id.*