

**Statement of
The American Gas Association**

U.S. Senate Committee on Environment and Public Works

**Hearings on
S. 1733, Clean Energy Jobs and American Power Act**

October 27-29, 2009

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Executive Summary

- Natural gas is America's clean, secure, efficient, and abundant fossil fuel.
- Allocating allowances for the benefit of energy consumers – as favored in the bill from 2012 through 2030 – is the best way to protect these consumers from significantly higher energy bills as America transitions to a lower carbon energy future.
 - Natural gas utilities should be allocated 12% of allowances, and they should be phased out by 2040 rather than 2030.
 - All allowances allocated to natural gas local distribution companies should be used to benefit consumers, as required in the bill, but a mandatory one-third of this allocation directed towards energy efficiency programs is not necessary, is costly to consumers, and is inconsistent with the treatment of other similar industries.
 - Natural gas local distribution utilities generally support the planning and reporting requirements in the bill, although some greater state level latitude is recommended.
 - The formula for distributing allowances should be based on deliveries to non-covered entities
- Require full-fuel-cycle energy analysis in making energy efficiency determinations
- Grant parity in treatment of renewable natural gas burned for essential human needs with that granted to renewable natural gas used to make electricity
- Residential natural gas consumers, who use the fuel for essential human needs, have a 40-year record of reducing consumption and greenhouse gas emissions.
- History demonstrates that programmatic measures, such as appliance efficiency standards and building codes and standards, are most effective in terms of reducing greenhouse gas emissions and AGA has a preference for such measures rather than a cap-and-trade approach.

Introduction

The American Gas Association (AGA) represents 202 local energy utility companies that deliver natural gas to more than 65 million homes, small businesses, and industries throughout the United States. AGA member companies deliver gas to approximately 171 million Americans in all fifty states. Natural gas meets one-fourth of the United States' energy needs.

AGA continues to believe, as it has for a number of years, that programmatic measures (which are discussed below) are the most appropriate and effective means for small natural gas consumers to achieve the reductions in greenhouse gas emissions

sought by S. 1733, the Clean Energy Jobs and American Power Act and by its House counterpart, H.R. 2454, the American Clean Energy and Security Act. AGA believes the successful track record of the residential and commercial sector at finding efficiencies while also controlling demand should serve as the basis for continuing and expanding existing programs that have yielded such success. That said, AGA greatly appreciates that the Committee recognized that the sector, and the customers affected by this policy, should be protected for unnecessary price shocks by including us in the allocation scheme of emissions allowances.

Allocate 12% of Allowances to Natural Gas Local Distribution Companies

S. 1733 allocates the bulk of emissions allowances from 2012 through 2030 for consumer relief – that is, to ease the burden on consumers as they transition to an economy that puts a price on carbon. As a whole, allocated allowances are roughly proportional to the contribution of various sectors to overall greenhouse gas emissions in 2005. AGA agrees with this approach for a number of reasons. Fundamentally, the focus of the bill should be on the reduction of greenhouse gases. Whether allowances are allocated or auctioned has no impact on the level of greenhouse gas reduction – the cap will be the same regardless. The outcome of the decision whether to auction or allocate will, however, significantly affect consumer prices. Simply put, energy consumers can reduce emissions to a certain level and pay more for energy as a result of the pass-through of the cost of auctioned allowances or they can reduce emissions to that same level but not face higher energy costs as a result of the allocation of free allowances. On this basis AGA strongly recommends the allocation approach that is prevalent through 2025 in S. 1733 instead of the auction approach that prevails from 2030-2050. The auction approach may or may not provide economic relief to those energy consumers most responsible for greenhouse gas emission reductions.

Natural gas local distribution companies (LDCs) are fully regulated by state public utility commissions (PUCs). ***They do not profit from higher natural gas prices, nor would they profit from allocated allowances.*** S. 1733 requires that all benefits from allocated allowances flow entirely to the customers of LDCs and not to the LDCs or their shareholders. This federal mandate coupled with state regulatory oversight guarantees that this will be the case.

This bill allocates 9 percent of all allowances to natural gas LDCs from 2016-2025, declining to 0 percent in 2030. (Section 111/771.) Based on data contained in the EPA Greenhouse Gas Inventory, residential and commercial natural gas consumers accounted for 7.1 percent of the emissions from covered entities included in this bill in 2005 (or just under 6 percent of total U.S. greenhouse gas emissions; emissions from covered entities are 84.5 percent of total U.S. emissions). However, natural gas LDCs are the covered entities for residential, commercial and small industrial customers. Adding in the small industrial customers (emissions less than 25,000 tons per year per customer) increases the share of emissions that LDCs are responsible for from 7.1 percent to roughly 12 percent of total emissions from covered entities. (Estimation performed by AGA using EPA and other governmental data. See Appendix 1.) It is on this basis that AGA has recommended that the appropriate allowance allocation for natural gas utilities should be 12 percent rather than the 9 percent provided in the bill.

AGA agrees with the stated purpose of allocating allowances, which is to protect energy consumers from unnecessary economic disruption. However, phasing out these allowances entirely between 2025 and 2030 is too abrupt. A more gradual phase-out, through 2040 for example, would lessen the compliance price shock to consumers, with no change in the overall reduction in greenhouse gas emissions.

Eliminate or Modify the Mandate that One-Third of Allowances be Used for Energy Efficiency Programs

S. 1733, like its House counterpart H.R. 2454, requires that emissions allowances distributed to natural gas LDCs be used only to benefit the customers served by those LDCs – essentially, either to protect customers from higher bills or to establish energy efficiency programs on their behalf. (Section 111/773.) AGA agrees that all allocated allowances should be used only to benefit the customers of LDCs, and it also agrees that benefits should be in the form of bill protection or energy efficiency programs. AGA does not agree, however, that at least one-third of the value of allowances should be directed towards energy efficiency programs. The optimal ratio of allowance funds for bill protection relative to energy efficiency programs is best determined at the state level through the interaction of the state regulatory agency, LDCs and the general public. States and LDCs that have been particularly active in the promotion of energy efficiency in the past may find the “minimum of one-third” requirement to be excessive, recognizing that this is an annual requirement. Also, in low-income areas with high energy prices, rate relief may be deemed preferable to energy efficiency programs. For example, a program offering rebates for high efficiency equipment may not be viewed as optimal by a poor family trying to heat its home in a winter of high prices.

Many misunderstand the nature of the mandate that one-third of the value of emissions allowances be spent on energy efficiency. What is overlooked is that **virtually all allowances allocated to LDC’s will be turned in to EPA to cover the emissions of their customers. There is, therefore, only one source for the money for this “one-third of the allowance value”– that is, these same small volume natural gas consumers.** The mandate for energy efficiency therefore amounts to a mandate to levy a charge on these customers. AGA strongly agrees that energy efficiency programs can provide significant consumer benefits for many years and that rate relief tends to be shorter lived. However, the arbitrary establishment of the one-third minimum could lead to inefficient spending. Such determinations, which involve the weighing of myriad factors, should be made at the state level between each utility and its regulator with appropriate input from all stakeholders, including the customers involved.

If one-third of allocated allowances are directed towards energy efficiency programs, LDCs will be required to purchase allowances in an amount equal to this one-third, passing on the cost of the purchased allowances to their customers. Alternatively, if all allowances are surrendered to EPA annually, the mandated spending will necessarily be funded with customer charges. (Assuming for a moment that allocated allowances are just equal to the number required for the LDC, based on the consumption and emissions of its customers.) With a cap of over 5 billion allowances per year, a carbon price of roughly \$30 per allowance, and a 9 percent allocation to LDCs, a requirement to purchase one-third of all allowances to offset the one-third directed at energy efficiency programs

would increase the annual natural gas bill to residential, commercial, and small industrial customers by roughly \$5 billion per year. Doing so may or may not be the optimal course of action in specific states, depending on multiple factors – current energy prices, previous promotion of energy efficiency programs, local economic climate, etc.

Regulatory Requirements Related to the Allocation of Allowances to Natural Gas Local Distribution Companies

Section 111/773 of S. 1733 deals with regulatory proceedings, plans, and reporting required of natural gas LDCs and public utility commissions. AGA agrees with the overall intent of this section – that LDCs should submit plans regarding the use of allowances to their public utility commissions for review, that plans should be submitted to the Administrator regarding how allowances will be used, and that reports should be submitted to the Administrator regarding how allowances have been used. AGA believes, however, that this section is unduly prescriptive and could become burdensome to LDCs and state public service commissions. For example, the bill requires “regulations or rate proceedings” at least every 5 years. Rate proceedings are extremely costly for both utilities and regulators. AGA recommends that the timing and extent of proceedings (not rate proceedings) be left up to the states, which have historically dealt with similar issues effectively. AGA does believe that utilities should submit their plans for compliance with the bill to PSCs for review, but plan submittals should not be limited to treatment of allocated allowances only. Rather, utilities should submit their compliance plans regarding allocated allowances, purchased allowances, the proposed ratio of rate relief funds to energy efficiency funds, and other related issues. The fundamental mission of PSCs is consumer protection and AGA believes that LDCs can work with their PSCs to structure effective plans in terms of minimizing consumer costs and maximizing public benefit. There may, however, be some variation from state to state in terms of achieving these goals.

Correct the Distribution of Allowances Among Natural Gas Local Distribution Companies

S. 1733 sets out formulas by which the total number of allowances allocated to all natural gas local distribution companies would be divided up among individual utilities. The formulas, in both the initial period and in subsequent periods, are based on the total deliveries of the natural gas distribution companies to all customers. (Section 111/773(b).) These formulas should be based on deliveries of the LDCs to customers that are not covered entities rather than to all customers. This approach would be more equitable for the affected utilities, and it would also be more consistent with the structure of the rest of the bill. Natural gas utilities are responsible for obtaining allowances for only those customers that they serve that are not themselves covered entities. The current formulas in the bill would bias the overall distribution of allowances, allocating too many allowances to those serving relatively high numbers of covered entities and allocating too few allowances to LDCs serving relatively few covered entities. **This recommended clarification would have no impact whatsoever on the total number of allowances allocated to natural gas local distribution companies in aggregate** – 9 percent (or 12 percent as AGA has suggested) of the total allowance pool from 2016-2025 and declining thereafter. This 9 percent (or 12 percent as AGA has suggested) allowance allocation

excludes consideration of any customers served by LDCs that are covered entities, and AGA recommends that the distribution of allowances among individual utilities also exclude consideration of such covered entities. This minor modification could be implemented by merely inserting the words “**to non-covered entities**” after “natural gas deliveries” in Section 711/773(b)(1), and also after “natural gas deliveries per customer” in Section 111/773(b) (2)(A).

The language of S. 1733 in this regard was drawn from early versions of Chairmen Waxman’s and Markey’s H.R. 2454 ACES bill. The correction suggested here by AGA was adopted in the version of the ACES bill passed by the House on June 26, 2009.

Adopt the Full-Fuel-Cycle Energy and Emission Analysis as Recommended by the National Academy of Sciences

AGA strongly urges that Congress adopt the recommendations of the National Academy of Sciences, which found full-fuel-cycle measurement to be the most accurate method to capture energy consumption and environmental impact. Most government energy conservation programs calculate efficiency based solely on the energy consumed at the point of use, or site. Site-based measurement of energy use does not account for energy lost in the production, generation and transportation of energy to the point of end use. Site measurement also fails to provide a basis for calculation of carbon emissions and other impacts that can only be completely accounted for by considering the full-fuel-cycle — or source-based energy measurement. By contrast, source-based — sometimes called total energy efficiency analysis — accounts for all of the energy consumed from production, transportation, distribution and end-use, and is therefore a more accurate measurement of total energy use, efficiency and emissions. Although this may seem a minor and arcane matter, it is in fact a serious error in the way in which the nation has approached energy efficiency for decades. It would be more than unfortunate if this error were replicated and multiplied as the nation seeks to impose limits on carbon. If this is not corrected in this context, we will in decades future look back and recognize that we missed a historic opportunity.

We also recommend that S. 1733 include the requirement that the label on appliances display its carbon footprint. (*See* H.R. 2454, Section 213(h).)

Treat Renewable Energy Sources Supplementing Natural Gas Supplies the Same as Renewable Energy Sources Supplementing Electricity Supplies

Allowances would not be required for renewable energy sources used to generate electricity, but they would be required for renewable energy that is delivered to natural gas consumers via pipelines. We agree with the concept of not requiring allowances for renewable energy supplies, but it must be universally and consistently applied. AGA therefore urges that the bill be modified to require that natural gas utilities not be required to hold emissions allowances for renewable biogas that they deliver to customers.

AGA Recommends a Programmatic Approach to Reducing Emissions

AGA believes that pursuing appliance efficiency and building efficiency policies is the preferable, indeed optimal, means to achieve further carbon reduction in the residential and commercial sectors. AGA remains of the view that it would be counter-productive to make natural gas residential and commercial customers subject to cap-and-trade regulation. Instead, AGA believes that this sector can continue its admirable record of reducing carbon emissions by continuing an intensive focus upon energy efficiency and building codes and standards measures, which for four decades have led to dramatically reduced natural gas consumption (and emissions).

The costs, direct and indirect, of a cap-and-trade system will simply add to already high energy costs and will have only a modest incremental impact in achieving the desired end result - reducing carbon emissions. Unlike electricity, where there are a number of options for reducing consumption in the relatively near term, almost all natural gas in the home is consumed by furnaces, water heaters, and stoves - durable appliances with relatively long lives. In addition, electricity generators can alter their generating sources, which is not an option for natural gas. While “dialing down” is certainly an option, it has its limits, and consumers have already dialed down dramatically with the natural gas price increases of this decade.

AGA and its members believe, of course, that both natural gas utilities and their customers should contribute to reducing greenhouse gas emissions in order to meet the nation’s environmental goals. Our collective experience with energy efficiency, however, informs our view that natural gas residential and commercial customers should not be included under the cap-and-trade aspects of a climate-change program. Instead, there are other ways which could be equally productive and less costly, that can, and should, be applied to these sectors. Further, a cap-and-trade program can penalize those who have previously and most aggressively pursued efficiency gains and carbon reductions.

In light of the above factors, a national programmatic-focused effort, rather than a cap-and-trade effort for these customers, is the best way to ensure equity while not subjecting consumers to unnecessary and unpredictable allowance costs. AGA believes, and history proves, that programmatic measures uniformly applied can accomplish what the nation wants without the undue costs and complexities of a cap-and-trade system. This approach would not penalize those who acted early, and it is focused on the only things these residential and commercial customers can do—tighten their homes, install efficient appliances and use less wherever possible.

A Reminder: Natural Gas is America’s Clean, Secure, Efficient, and Abundant Fossil Fuel

Natural gas is America’s cleanest and most secure fossil fuel. Natural gas is a naturally-occurring substance that contains only one carbon atom. When burned, natural gas is the most environmentally-friendly fuel because it produces low levels of unwanted byproducts (SO₂, particulate matter, and NO_x) and less carbon dioxide (CO₂) than other fuels. Upon combustion natural gas produces 43% less CO₂ than coal and 28% less than fuel oil. Moreover, almost all of the natural gas that is consumed in America is produced

in North America, either in the United States or Canada, with the vast majority of that being produced in the United States. Only a small portion - 1 to 2% - is imported from abroad as liquefied natural gas.

Natural gas is also the most efficient of the fossil fuels. Approximately 90% of the energy value of natural gas is delivered to consumers. In contrast, less than 30% of the primary energy involved in producing electricity reaches the consumer. Additionally, natural gas is an abundant fuel, with estimated domestic reserves of well over 100 years. Recent prodigious discoveries of shale gas have significantly added to this abundant resource base. Changes in economics and technology will continue to increase our resource base estimates in the future, as they have consistently done in the past.

Natural gas is an essential fuel for America. The natural gas delivered by AGA members to residential and commercial customers is consumed almost entirely to meet essential human needs - space heating, water heating, and cooking.

AGA and its members would like to highlight two important facts about natural gas that are little known and often overlooked:

- **America's residential natural gas customers have led the nation in reducing the emission of greenhouse gases over the last 40 years and can continue, with appropriate policies, to reduce those emissions. It takes less natural gas to serve 65 million homes today than it took to serve 43 percent fewer homes in 1970.**
- **Natural gas is not part of the climate change problem; rather, it is part of the climate change solution because it offers an immediate solution with existing technology and has the smallest carbon footprint of all fossil fuels.**

We hope that the committee will be mindful of these two critical pieces of information as it proceeds with climate change legislation. They are important facts that bear upon formulating the best policies for achieving the nation's carbon-regulation goals.

Residential Natural Gas Consumers Have an Unrivaled Record in Reducing Greenhouse Gases

Residential natural gas customers have consistently reduced their per-household consumption of this fuel - and the carbon emissions resulting from its use - for roughly 40 years. On a national basis, residential customers have reduced their average natural gas consumption by approximately 40% over these years. Both research and anecdotal evidence make clear that there are proven drivers for reducing natural gas consumption and the carbon emissions associated with natural gas consumption - increased appliance efficiency and increased building efficiency, supplemented by a variety of education and incentive programs. Further:

Carbon emissions from residential use of natural gas are already at 1970s levels. While the number of natural gas customers has grown substantially, greenhouse gas emissions have been reduced. In fact, total annual residential natural gas consumption is lower today than it was in the 1970s, despite the fact that the number of natural gas households has increased by roughly 70%, from 38 million to more than 65 million. Customers of natural gas utilities continue to lead the nation in reducing energy consumption and the accompanying greenhouse gas emissions. AGA believes that few, if any, sectors of the economy can claim a comparable record of achievement.

The greenhouse gas emission reductions per household experienced during the past four decades are largely attributable to tighter homes and more efficient natural gas appliances. These factors will undoubtedly provide the foundation for continued future reductions in greenhouse gas emissions. Placing small-volume natural gas customers under a cap-and-trade system would make these homes, businesses, schools and hospitals compete (directly or indirectly) with electricity generators and industrial facilities for a limited number of allowances, thereby significantly increasing the energy costs of these consumers.

Natural gas utilities are aggressively promoting decoupled rate structures that align the interests of all stakeholders and allow the utilities to promote conservation and efficiency. Nearly 40% of all residential natural gas customers are served by gas utilities that have decoupled rates or that are engaged in state proceedings that are presently considering decoupled rates. Rate decoupling is important to energy efficiency and greenhouse gas emissions because it breaks the link between utility revenue recovery and customers' energy consumption.

Natural gas is used to meet essential human needs for small-volume customers. The majority of the homes in this country use natural gas, and in this sector 98% of all gas is used for space heating, water heating and cooking, while the remaining 2% is used for clothes drying and other purposes. This fuel is, therefore, used for essential human needs rather than for luxuries.

AGA and its members appreciate the opportunity to present their views on these important subjects. We look forward to working with the committee and its staff to be a constructive voice in this important national conversation.

Attachment I

Calculation of Allowance Allocation for Residential, Commercial and Small Industrial¹ Natural Gas Customers Served by Local Natural Gas Utility Distribution Companies²

AGA believes that local natural gas utilities be allocated 12 percent of the allowance total, if and when they are required to obtain allowances for their residential, commercial and small industrial customers. This percentage allocation is based on the percent of covered emissions that these sources accounted for in 2005. The methodology for the allocation is essentially the same as that underlying the request of electric utilities.

- Total greenhouse gas emissions in 2005 were 7,206 MMT³
- Emissions from all covered entities in 2005 were 84.5 percent of total emissions, or 6,089 MMT (84.5% of 7,206)
- Emissions from residential natural gas customers in 2005 were 263.4 MMT⁴
- Emissions from commercial natural gas customers in 2005 were 167.4 MMT⁴
- Emissions from industrial natural gas customers <25,000 tons estimated at 256 MMT
- Total emissions in 2005 were therefore 687 MMT; or 11.3 percent of covered emissions in 2005; 11.3 percent is rounded up to 12 percent (263.4 + 167.4 + 256 = 686.8; 687/6089 = 11.3%)

¹Does not include industrial natural gas customers that emit more than 25,000 tons per year of greenhouse gases (CO₂ equivalent).

²Assumes local natural gas distribution companies are the regulated entities required to obtain allowances for all customers that do not emit more than 25,000 tons per year of greenhouse gases (CO₂ equivalent).

³MMT = million metric tons

⁴Source: US EPA, *Trends in Greenhouse Gas Emissions, 2005*; Chapter 2.

⁴Source: US EPA, *Trends in Greenhouse Gas Emissions, 2005*; Chapter 2.

⁵EPA does not break out emissions from industrial sources that emit greater than 25,000 MT. They do give total emissions from all industrial natural gas sources of 387.9 MMT. We assume that two-thirds of these emissions are from sources less than 25,000 MMT based on a study performed by ICF International for the PEW Center on Global Climate Change (*Coverage of Natural Gas Emissions and Flows Under a Greenhouse Gas Cap-and-Trade Program*, December 2008, pg. 18). This ICF study, based on EIA and Census data, estimates that 65 percent of all industrial natural gas emissions are from sources that exceed a threshold of 10,000 MT. AGA has assumed that increasing the threshold to 25,000MT, as in the proposed legislation, would reduce the covered emissions of these large sources from 65 percent to 33 percent. Thus, under this assumption, two-thirds of all industrial natural gas emissions would come from industrial sources less than 25,000 tons that would be served by gas LDC's and requiring allowance allocations. (66% of 387.9 = 256)