Donald F. Santa, Jr.
President

October 31, 2007

The Honorable Joseph Lieberman
Chairman
Subcommittee on Private Sector and
Consumer Solutions to Global Warming
United States Senate
Washington, DC 20510

The Honorable John Warner
Ranking Minority Member
Subcommittee on Private Sector and
Consumer Solutions to Global Warming
United States Senate
Washington, DC 20510

Dear Senators Lieberman and Warner:

As you begin Subcommittee deliberations on climate change legislation, the Interstate Natural Gas Association of America (INGAA) would like to provide you with its initial comments on S. 2191, the "America's Climate Security Act of 2007" (ACSA). INGAA represents the interstate and interprovencial natural gas pipeline industry in North America. Our members transport more than 90 percent of the natural gas consumed in the U.S., through a 200,000-mile pipeline network.

The natural gas pipeline industry faces enormous opportunities and challenges as the United States considers enacting and implementing a national program for reducing greenhouse gases (GHGs). INGAA recognizes the importance of an effective national policy for addressing climate change and appreciates your leadership on this issue. With that said, we have concerns with several provisions in S. 2191, which we describe below.

Importance of Natural Gas

While natural gas has received little attention in the Congressional debate around global climate change thus far, this fuel undoubtedly will play a critical role in reducing U.S. and global GHG emissions. As you know, natural gas is the cleanest burning of all fossil fuels and emits half the carbon dioxide per unit of energy as coal when burned. INGAA believes that natural gas will be a "bridge" between our current carbon-intensive economy and a low- carbon future. We agree that significant new low emissions energy resources such as nuclear and renewable generation, as well as coal generation with

carbon sequestration, and energy efficiency advances will be part of the worldwide solution for GHG reductions. Yet some of these technologies remain several decades away from large-scale commercial deployment. Natural gas provides affordable and reliable energy *today* and can be counted on to contribute to both near-term and mid-term GHG emission reductions. Still, natural gas can be a part of the climate change solution only if the United States has the supplies and infrastructure it needs to meet growing natural gas demand.

We emphasize this point because Congress now is considering energy policy legislation that would decrease domestic natural gas supply availability at the same time that policymakers are beginning to develop climate change legislation that would increase the demand for clean fuels such as natural gas. INGAA respectfully suggests that, unless the Congress harmonizes its approach to natural gas supply with the demands that will be created by climate change legislation, it will be setting the stage for higher and more volatile natural gas prices that will burden the U.S. economy and individual consumers with costs that could be avoided through a coordinated policy response. For example, public lands should be made more accessible for responsible development and transportation of domestic natural gas supplies. The majority of new domestic natural gas resource supplies are from unconventional reservoirs such as tight sands or shale that have steeper decline rates than conventional reservoirs and thus require more wells to be drilled just to maintain our current domestic production deliverability. With the proper policies supporting supply and infrastructure development, natural gas can make a meaningful contribution to reducing GHG emissions and to mitigating the costs that will be incurred in making the transition to a carbon-constrained energy economy.

INGAA Support for General Framework

INGAA supports the general approach taken in S. 2191. Specifically, INGAA commends you for relying on the following framework in the current bill:

- Regulation would be economy-wide, yet would take into account the unique characteristics of certain sectors of the economy, including the impact on national greenhouse gas levels.
- The legislation takes a "hybrid" approach to determining the point-of-regulation, of motor vehicles being regulated upstream and the electric power and industrial sectors being regulated downstream at the point of emissions.
- The commercial and residential sectors would contribute to GHG reductions via appliance/equipment efficiency standards and building codes, rather than being included within a cap-and-trade program, which we believe would be unmanageable for this set of energy consumers.

Applicability - Accuracy of Emissions Measurement is Critical to the Environmental and Economic Integrity of a Cap-and-Trade Program

To be successful, a cap-and-trade program must provide environmental and economic integrity through rigorous and complete emissions data. Carbon dioxide emissions from

combustion account for almost 81 percent of total United States GHG emissions. These emissions are relatively easy to measure and therefore should be the primary focus of cap-and-trade regulation. Facilities included in a cap-and-trade program must be able to measure or calculate their emissions reliably and with accuracy. In addition, the appropriate regulatory agency must be able to verify the accuracy of such emission reports. To support emission allowance trading among facilities, emission reports must be prepared with similar precision across facilities. The standard for successful cap-and-trade programs to date has been accuracy comparable to continuous emissions monitors (CEMS).

For these and other reasons, a cap-and-trade program is not necessarily the best approach for reducing emissions from all types of sources. Including sources, whose emissions cannot be adequately measured, such as fugitive emissions of non-CO_2 gases, would reduce the environmental integrity of the cap-and-trade program and devalue the program currency.

The U.S. Environmental Protection Agency defines fugitive emissions as those emissions from a stationary source that could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening. Thus, fugitive emissions include unintentional leaks from sealed surfaces such as valve seals and threaded components including piping and associated equipment. While emissions from most combustion sources can be directly calculated or accurately measured at a discrete release point, fugitive emissions are diffuse and cannot be readily measured on a facility wide basis.

Similar concerns related to the large number of small emitting sources and the issues related to inaccurate measurement were raised by the House Energy and Commerce staff in a white paper issued on October 3, 2007 with respect to not regulating the Agricultural sector under a cap-and-trade program. However the "white paper" does recommend considering such sources under an offset program. Non-CO_2 methane fugitive emissions would be an example of an offset that could contribute to natural gas supply. INGAA believes that fugitive emissions from natural gas transmission and distribution systems should be removed from the cap and the offset provisions of S. 2191 amended to include these sources.

As noted above, while process and fugitive emissions are less suited to measurement or calculation at the facility level, some such emissions nevertheless could pass the rigor of a well-designed offset program. S. 2191 appears to limit offsets to the agricultural sector, leaving important process emissions, such as fugitive emissions of methane, HFCs, PFCs and SF6 from various industrial processes, off the table. INGAA believes S. 2191 should recognize and credit all offset projects, regardless of sector, that achieve real, surplus, verifiable, permanent and enforceable reductions in greenhouse gas emissions – including projects to reduce methane emissions at pipeline compressor stations, for which there are now rigorous international standards and a proven track record of success.

Offsets – A Robust Pool is Critical

Offsets – domestic and international – will be a key aspect of a GHG reduction program. Given the level of emissions reductions that S. 2191 is proposing, offsets that achieve real, surplus, verifiable, permanent and enforceable reductions in greenhouse gas emissions represent an indispensable component of a workable and achievable approach to climate change.

First, offsets will create an economic incentive to pursue GHG reductions that may not be economically or physically achievable under a cap-and-trade program. Second, offsets can be implemented quickly and offer an opportunity to mitigate the societal cost of achieving a reduction in GHG emissions. INGAA believes that S. 2191 unnecessarily limits the pool of available offset sources and that this will cause the supply of allowable offsets available in the market to fall short of what will be needed.

S. 2191 limits domestic offsets to 15 percent of the cap, and limits international offsets to 15 percent of the cap and to projects in countries that have agreed to hard GHG emission caps. This means that international offsets only can be generated through the Joint Implementation (JI) Program (a project-based mechanism of the Kyoto Protocol that may be used by Annex I Parties to fulfill their Kyoto targets) rather than through the Clean Development Mechanism (CDM), the mechanism that allows Annex I parties to invest in projects in developing countries. While INGAA supports mechanisms that encourage developing and transition economies to adopt mandatory targets, we are concerned that the JI Program is far from ready to provide 15 percent of the offsets that will likely be needed to meet the reductions that would be mandated by S. 2191.

To our knowledge, every analysis, including one performed by the Energy Information Agency (EIA)[1] on S. 280, shows a very large reliance on the availability of offsets, mostly from international CDM credits. The EIA S. 280 analysis showed the U.S. using about 1 billion tonnes[2] of international, primarily CDM credits per year. This is greater than the 15 percent limit on international credits in S. 2191 and much more than can be provided through JI projects.

The S. 2191 would compel a significant decarbonization of the U.S. economy by 2030. Sufficient offsets will be critical to achieving that goal. A recent study funded by the Natural Gas Council[3] (NGC) illustrates how the number of authorized offsets, and the actual availability of such offsets in the market, could make a significant difference in outcomes and costs to the economy. The study results strongly suggest that the limit on offsets included in S. 2191 likely would place a huge burden on natural gas to fuel new power

[1] *Energy Market and Economic Impacts of S. 280, the Climate Stewardship and Innovation Act of 2007,* issued July 2007 by EIA; Report #: SR-OIAF/2007-04

[2] A tonne (t) or metric ton (M/T), also referred to as a *metric tonne*, is a measurement of mass equal to 1,000 kilograms.

[3] The American Gas Association (AGA), the Independent Petroleum Association of America (IPAA), the Interstate Natural Gas Association of America (INGAA), and the Natural Gas Supply Association (NGSA).

generation, and thus cause significant natural gas price increases. (A copy of the NGC study is included with this correspondence.)

A general lesson learned is that the number of offsets available will make a very large difference in outcomes, almost as much as the choice of technologies used to curb emissions. For example, 30 percent offsets allow traditional coal to continue to play a major role in power generation through 2030, while 15 percent offsets result in dramatic decreases in coal use and increases in natural gas use as shown by the results for both generating capacity and electricity generation (NGC study, page 23, Figure 4 of report). A 15 percent limit on offsets would require rapid expansion of natural gas supplies to meet power generation needs. Fifteen percent offsets resulted in both wellhead and residential natural gas price increases relative to business as usual by an average of roughly $1.30 per Mcf from 2020 through 2029, spiking to just over $2.70 per Mcf in 2030. A 30 percent level would result in only 40 to 50 cents greater than business as usual in 2020 and rising sharply in 2030 to greater than $4.00 per Mcf. (NGC study, page 32, Figure 9 and 10).

A more robust offset opportunity, as suggested by the study, would result in a more balanced power generation portfolio spread among natural gas, coal, nuclear and renewable fuels, and therefore would be less disruptive to the economy. INGAA urges you to amend S. 2191 to allow a broader variety (and therefore a greater number) of domestic offsets (especially offsets that complement energy policies), and to broaden eligible international offset opportunities to include all international market-based programs that incorporate offsets, provided that the programs are of high quality and environmental integrity.

Emission Allocations for Natural Gas Pipelines

The rates that can be charged for interstate natural gas pipeline transportation, and the terms and conditions of interstate pipeline service, are regulated exclusively by the Federal Energy Regulatory Commission (FERC). Interstate pipelines do not own the natural gas moving through their systems; rather, pipelines sell transportation capacity on their systems much like a railroad. The FERC is ultimately responsible for setting rates of individual pipelines, typically on a cost-of-service basis.

INGAA supports a 100 percent free emission allocation to entities that are subject to comprehensive economic regulation, such as interstate natural gas pipelines. Still, if such regulated entities must pay for allowances or spend capital to comply with S. 2191, then Congress should guarantee the ability to pass such costs through to customers. Therefore, S. 2191 should include provisions:

- Clarifying that the cost of emissions allocations and related S. 2192 compliance costs for FERC-jurisdictional pipelines are a “just and reasonable” cost that can be recouped as part of the rates charged by such pipelines;

- Stating that FERC-jurisdictional pipelines are not required to re-state their rates (i.e., file a complete rate case) in order to include emissions allowance costs and other related S. 2191 costs in their rates; and
- Requiring the FERC to create a process for jurisdictional pipelines to pass these costs through to customers on the most efficient basis.

In addition, INGAA is concerned about the liquidity of allowances under a program in which regulated entities must purchase most of their allowances for compliance from the government or from a non-emitting entity that has received an allocation. The market is expected to be very tight under the proposed reduction requirements and the system should be designed to ensure that allowances will efficiently be available to those entities who must comply with an emission limit rather than purchased and hoarded by speculators in the allowance market. This kind of activity could be very costly in the much larger CO_2 market. Since consumers will ultimately pay for the cost of allowances, the bill should be designed to prevent artificial run-ups in the market. This can be done by permitting only entities with a CO_2 compliance obligation to purchase allowances in the market.

Federal Preemption

Achieving the targeted level of GHG emissions reductions in a manner that minimizes the costs to the United States economy and individual consumers will require a consistent, nationwide program. Consequently, the issue of national consistency must be a central part of the debate over global climate change legislation in the United States. Unfortunately, S. 2191 goes in the wrong direction on this critical issue and gives states expressed authority to go beyond any federal requirements. Competing state and federal GHG programs would exacerbate the existing accumulation of inconsistent state and regional regulatory efforts – with no substantive policy justification. Inconsistent federal, regional and state programs will increase the cost of compliance under a market-based cap and trade program to the detriment of the United States economy and individual consumers.

Congress should differentiate regulating GHGs from earlier regulatory initiatives that focused on air emissions such as NO_x and SO_x. Pollutants such as NO_x and SO_x can cause local and regional air quality problems, which is why the Congress under the Clean Air Act authorized the states to act if local air quality conditions justified going beyond federal standards. Carbon dioxide, on the other hand, does not create localized air quality problems. The concentration of GHGs in the atmosphere, resulting in climate change, is an *international issue*, not a state or regional issue. Carbon regulation will be onerous enough on business and the economy without compounding the problem with multi-layered governmental regulations. INGAA therefore believes that the federal government should exercise leadership and "occupy the field" of GHG regulation in the United States, to the exclusion of state and local governments.

There are clearly interstate commerce implications that justify a uniform, federal approach. Our members' pipeline systems span multiple states and regions of the

country. Like many other businesses throughout the United States, the interstate pipeline industry needs one set of regulations governing GHG emissions, not 51. Federal minimum standards, as currently included in S. 2191, are not enough. As the Congress moves forward on climate change legislation then federal preemptive authority must be a central tenet of such legislation. INGAA cannot support a bill that does not include clear and consistent federal national approach.

Feasibility Relating to Construction of CO_2 Pipelines and Sequestration

Sec. 8003 outlines the parameters of a feasibility study by the Secretary of Energy, in coordination with the Administrator, the Federal Energy Regulatory Commission, the Secretary of Transportation, and the Secretary of Interior relating to the transportation of carbon dioxide for the purpose of sequestration or enhanced oil recovery. This study is to be completed not later than 180 days after the date of enactment of this Act. INGAA supports this study and suggests that industry experts be consulted for their insight and expertise by members of the study team. The study should also include such items as the right of eminent domain, regulatory oversight, cost recovery and recommend a method to include such items as part of this Act or for future legislation.

Conclusion

We appreciate the opportunity to share our views and applaud your efforts to produce a consensus bill on climate change. INGAA seeks to contribute constructively as you develop this legislation, particularly with regard to the role of natural gas and natural gas infrastructure as part of a comprehensive approach to climate change policy. We hope that you specifically examine the natural gas-related implications of a climate change mitigation program in future hearings, as this issue has received scant attention so far.

INGAA firmly believes that with the proper policies supporting supply and infrastructure development, natural gas can assist in meeting the greenhouse gas reduction goals in your legislation.

Respectfully,

Donald F. Santa, Jr.
President