STATEMENT OF THOMAS J. GIBSON PRESIDENT AND CEO, AMERICAN IRON AND STEEL INSTITUTE

UNITED STATES SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES HEARING ON S. 2146, THE CLEAN ENERGY STANDARD ACT OF 2012 MAY 17, 2012

Introduction & Industry Background

Chairman Bingaman, Ranking Member Murkowski, and members of the Committee, thank you for your invitation to appear today. I am Tom Gibson, President and CEO of the American Iron and Steel Institute. AISI serves as the voice of the North American steel industry and is comprised of 25 member companies, including both integrated and electric arc furnace steelmakers. Our member companies represent over three quarters of both U.S. and North American steel capacity.

Steel and other manufacturing industries are the backbone of the U.S. economy. A strong manufacturing sector creates significant benefits for society, including good-paying jobs, investment in research and development, essential materials for our national defense, and high-value exports. A robust American steel industry is critical to leading the domestic economy into recovery.

AISI is concerned about increased electricity costs and reliability issues that may result from additional regulation of the utility sector, including a national Clean Energy Standard (CES). The consumers of electricity will ultimately have the compliance costs and reliability risks passed on to them.

AISI recently commissioned a report by Professor Timothy J. Considine of the University of Wyoming on the industry's impact on the U.S. economy. Professor Considine found that the steel industry's purchases of materials, energy, and supplies for the production of steel stimulate economic output and employment in a range of sectors across the economy. Steel's economic contributions are multiplied many times over, with Professor Considine finding that every \$1 increase in sales by our sector increases total output in the U.S. economy by \$2.66. Additionally, he found that every individual job in the steel industry supports seven additional jobs in other sectors of the economy. In aggregate, the steel industry accounts for over \$101 billion in economic activity and supports more than 1 million jobs across the country. A copy of that study is attached to my testimony and I request that it be made part of the hearing record.

Like the rest of our economy, the steel industry is recovering from the depths of the recession but far from fully recovered. As we near the midpoint of 2012, there are positive signs that the economy continues on a slow but steady recovery, although subject to volatility – particularly related to the downturn in Europe's economy and the slowdown of the Chinese economy. AISI's latest estimate is for shipments of 97 million tons for 2012, which would be an increase of

roughly 5 percent over the 92 million tons the industry shipped in 2011. Shipments of 97 million tons are only equivalent to our shipments in 1995, and represent only 90% of our five-year pre-recession average shipments of 108 million tons.

Domestic capacity utilization rose to 79 percent in the first quarter, a 6 percent improvement from the previous quarter. Total finished steel import market share year-to-date is at 23 percent, and imports are increasing at a faster rate than our domestic steel market is recovering. The most recent Department of Commerce Steel Import Monitoring and Analysis data for the month of April recorded another sharp rise in finished imports to the highest level since October of 2008. We are very concerned about this trend and sensitive to policy changes that could make production here more expensive and less internationally competitive.

Steel & Energy

The production of steel is inherently energy intensive, and the industry consumes substantial amounts of electricity, natural gas, and coal and coke to make our products. In 2010 our domestic industry consumed 45.7 billion kWh of electricity. Energy is typically 20% or more of the cost of making steel and, as such, energy efficiency is key to our industry's competitiveness.

AISI members are doing everything they can to increase energy efficiency, and we are leading the way by effectively setting the bar for steel industry efficiency worldwide. AISI members have made substantial gains in reducing their energy usage, as well as their environmental footprint, over the last two decades. The domestic steel industry has voluntarily reduced its energy intensity by 27% since 1990, while reducing its greenhouse gas (GHG) emissions by 33% over the same time period. In fact, data presented by the U.S. Department of Energy at a recent meeting of Global Superior Energy Partnership's Steel Task Group showed that the steel industry in the U.S. has the lowest energy intensity and second-lowest CO₂ emissions intensity of any major steel producing country.

While we approach the practical limits for efficiency using today's processes and continue to pursue incremental gains, AISI members are not resting on their laurels. We recognized in 2003 that in order to make any further significant improvement in energy use, new breakthrough technologies would be needed. It was at that time the industry began investing, often in partnership with DOE, in the CO₂ Breakthrough Program, a suite of research projects designed to develop new ironmaking technologies that emit little or no CO₂ while conserving energy. We have developed two key technologies to achieve those goals since that time, and they are now ready for pilot scale testing. The research is being done at MIT and University of Utah and both projects are the subject of proposals currently under consideration for DOE cost-sharing. This successful partnership with DOE, along with the continued support of Congress, will accelerate the development and deployment of critical technologies such as these.

Concerns with S. 2146

A national CES imposes its direct requirements on the utility sector, not on its customers, but it is the customers that will bear the costs associated with compliance. Our principal concern is that this will inevitably raise the costs of electricity to large industrial customers like steel, while

potentially lessening the quality and reliability of electricity supply. The analysis of S. 2146 performed by the Energy Information Administration (EIA) highlights key concerns about a CES raising the price of electricity to customers, and to large industrial facilities in particular. EIA projects that by 2035, national electricity prices will be 18% higher than the reference case. For industrial customers, the report concludes that electricity will cost 25% more under a CES than it otherwise would.

This economic impact will be exacerbated for the steel industry due to the regional differences in current fuel mix and the cost to switch to other fuels for the generation of electricity. EIA projects that S. 2146 will substantially reduce coal-fired generation. Compared with a reference case, coal generation would decline by 25 percent in 2025 and by over half -- 54 percent -- in 2035. Thus, within two decades, the electricity generation infrastructure of the United States would radically shift from the fuel mix that has been in place since the advent of significant nuclear power generation around 1970.

Certain areas of the country are better suited for renewable production from wind and solar sources, while others have an abundance of coal sources. As noted above, creating a national CES will have a disproportionate impact on coal-fired utilities, and there is a high correlation between the service areas of those utilities and the location of steel production facilities. Industrial customers, especially steel producers, will be charged to offset the cost of replacing coal capacity with other sources, including the cost of new transmission infrastructure.

The two leading states in terms of iron and steel production in the U.S. are Indiana and Ohio, while other important states for the industry are Alabama, Pennsylvania, Kentucky, and Michigan. All of these states are heavily dependent on coal for electricity production, and in turn, so is our industry. EIA projects in its Annual Energy Outlook 2012 Early Release that by 2035, 39% of electricity generation will be from coal. In its analysis of S. 2146, it projects this percentage to drop to 18.7% in 2035, a result that will disproportionately impact the steel industry.

Legislative and regulatory policy measures that impact energy availability and reliability influence each company's competitive situation in a unique way. And, as also noted above, the domestic steel industry is subject to substantial international competition. In particular, this competition comes from nations such as China, where the industry is largely state owned, controlled, and subsidized. In two recent countervailing duty cases, the Department of Commerce determined that Chinese steel pipe producers were receiving below market rates for electricity, which constitutes a subsidy. For the steel industry, operating in the U.S. under tight margins with substantial subsidized competition from overseas, policies that raise energy costs on domestic companies threaten our ability to remain competitive.

Additionally, while the EIA does factor the Cross-State Air Pollution Rule ("CSAPR") into its analysis, it does not quantify the impact of other proposed or pending EPA regulations of the utility sector. These regulations, including the Mercury and Air Toxics Standards Rule, or "Utility MACT," greenhouse gas utility regulations, coal combustion residuals, and Clean Water Act section 316(b) cooling water intake structures, will all have an impact on coal-fired utilities, and therefore threaten the availability and reliability of electricity to large industrial customers.

If a CES were to move forward, EPA regulatory policies could act at cross-purposes. Some clean air technologies result in the consumption of additional energy and thus might act contrary to the purposes of a CES. Otherwise, existing electricity-generating infrastructure will face multiple retrofit requirements that are presently scheduled to occur at virtually the same time. For example, the second, more stringent phase of CSAPR is scheduled to be implemented in 2014. This rule affects 28 states overall and the second phase of the rule is targeted on 16 states in the Northeast and Midwest, the industrial heartland of the United States. Beyond that, the Utility MACT rule imposes new controls on existing powerplants in 2015 and 2016. These requirements are mandatory; a facility cannot operate unless it complies. Finally, newly proposed greenhouse gas rules for powerplants would effectively require that natural gas be used for all new generation. This requirement will further shift our nation's generation from coal to natural gas and other power sources.

This situation, at minimum, requires better regulatory coordination and a rationalization of multiple, new requirements. It could also, under certain circumstances, justify preemption for overlapping requirements. While some emission control requirements are complimentary – for example, improved or additional fabric filters can help reduce particulate matter emissions and mercury – this is not always the case. We may therefore need to determine in different situations whether renewable energy policy should take precedence over certain Clean Air Act goals or vice versa.

AISI also believes that the benefits of domestic shale natural gas production should be fully recognized in a CES program. We are encouraged by the discovery and production from shale formations. Affordable natural gas is presenting both integrated and electric arc steelmakers with new options for how to make their products more efficiently. As a significant consumer of natural gas, it is important to have gas supply be both affordable and reliable. And it provides expanded markets for steel pipe and tube products that are essential to the production and transmission of natural gas and oil. The advent of shale gas production in the U.S. has the potential to be a "game changer" for domestic manufacturing, and should not be ignored when creating a low-carbon energy policy.

Finally, we appreciate the recognition of the importance of energy efficiency in the legislation and believe that efficiency measures from manufacturing industry facilities should be fully qualified in a CES program if the bill were to move forward. There is potential for steel production facilities to qualify as energy efficiency producers, either through new CHP capacity, wasted heat and byproduct gas recovery and conversion, or demand response mechanisms, such as reductions in peaking. All of these efficiency opportunities hold great potential for industry, and should be fully included in CES legislation that provides incentives for renewable energy production. However, a CES should recognize the efficiency investments made at industrial facilities in recent years in addition to those improvements made moving forward. As noted above, the steel industry has improved its efficiency by 27% over the last two decades. Legislation that does not provide credit for recent efficiency projects ignores the energy and environmental benefits realized from these investments.

Conclusion

AISI does not support the creation of a federal standard for electricity producers, because of the disruptive economic impact to the energy-intensive, trade-exposed manufacturing sector that will occur to satisfy CES requirements. While the largest cost increases may appear far off in the future under EIA's analysis, steel plants are long-lived capital assets. A steel plant serviced by a utility that is disadvantaged by the bill cannot simply move to an area with an easier compliance burden and lower costs. A new facility built today will still be in service in 2035 and for decades beyond, as will many existing facilities.

It is also essential to recognize that EPA's regulatory agenda for the utility sector, coupled with relatively affordable natural gas supply, is causing numerous utilities to take steps that will ultimately reduce their emissions levels without a CES mandate. In the recently proposed greenhouse gas requirements for new powerplants, EPA bluntly declared that the rule would not impose costs on the utility sector since the agency saw little or no coal generation being built for the next two decades. While this prediction has been strongly criticized as being self-fulfilling, it is clear that EPA anticipates the proposed greenhouse gas rules and other Clean Air Act rules will result in both near-term and longer-term reductions in emissions from the electricity sector. EPA regulations, along with market forces from affordable natural gas, are already causing a shift from coal- to natural gas-based electricity generation. Coal was last above 50% of U.S. electricity generation in 2008. It is now at 45%, and projected to continue to decline to 39% by 2035 even without a CES in place.

AISI does believe that Congress should craft a comprehensive and market-driven energy policy built around promoting greater development of domestic energy sources, incentives for efficiency improvements, and additional support for industry efforts to develop breakthrough technologies. These policy measures will serve to meet shared national clean energy goals, while avoiding the negative impact a CES would have on the industrial sector. In particular, such an agenda should create an abundant and affordable energy supply by developing domestic oil, natural gas, nuclear power, and clean coal resources and fully make all these sources of energy part of the nation's energy independence strategy moving forward.

Thank you very much for your time today, and I stand ready to answer any questions the Committee may have.