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Testimony

of Ross Eisenberg
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before the House Committee on Energy and Commerce
Subcommittee on Environment

on “Legislation Addressing New Source Review Permitting Reform”

May 16, 2018

SUMMARY OF TESTIMONY

The manufacturing sector is cleaner, more efficient and more responsible than it has ever been. This commitment has yielded extremely positive results in terms of emissions. The manufacturing sector has reduced its emissions of nitrogen oxides (NOx) by 53 percent since 1970, carbon monoxide (CO) by 70 percent since 1970, sulfur dioxide (SO2) by 90 percent since 1970, coarse particulate matter (PM10) by 83 percent since 1970, volatile organic compounds (VOC) by 47 percent since 1970, fine particulate matter (PM2.5) by 23 percent since its peak in 1999, and greenhouse gases (GHGs) by 10 percent over the past decade. The industrial sector actually produces *less* GHG emissions than it did in 1990, a considerably different story compared to the broader U.S. economy.

The NAM appreciates the opportunity to testify regarding draft legislation that would clarify the degree of physical or operational change to an emissions source that would constitute a "modification" sufficient to trigger New Source Review (NSR). The NAM supports this bill because it would remove barriers that have prevented manufacturers from investing in efficiency upgrades and installing modern pollution control equipment at their facilities.

The purpose of NSR is to require industrial facilities to install modern pollution control equipment when they are built or when making a change that increases emissions significantly. In practice, however, NSR often stands in the way of efficiency upgrades and environmentally beneficial projects.

Control technologies are perpetually improving. Unfortunately, administration of the NSR program has contributed to a fair amount of inertia. NSR has stood in the way of customer adoption of technologies that would improve the efficiency of gas and steam turbines. It presents a huge impediment to the installation of more efficient technologies that would ultimately combat climate change.

The draft legislation that is the subject of today's hearing would create flexibility in the definition of "modification" so that these heat rate improvements and efficiency upgrades will not be deterred by the threat of NSR. It would eliminate the situation where a piece of modern control technology triggers NSR because it generates collateral emissions of another pollutant. Most importantly, it could unlock a massive market for the installation of efficient technologies that would drive manufacturers' already-impressive emissions reductions down even farther.

TESTIMONY OF ROSS EISENBERG

BEFORE THE HOUSE COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON ENVIRONMENT

Hearing on:
"Legislation Addressing New Source Review Permitting Reform"

MAY 16, 2018

Good morning, Chairman Shimkus, Ranking Member Tonko and members of the Subcommittee on Environment. My name is Ross Eisenberg, and I am the vice president of energy and resources policy at the National Association of Manufacturers (NAM). The NAM is the nation's largest industrial trade association, representing nearly 14,000 small, medium and large manufacturers in every industrial sector and in all 50 states. I am pleased to represent the NAM and its members and provide testimony on manufacturers' continued commitment to reduce air emissions.

Manufacturers have sharply reduced our impact on the environment through a wide range of innovations, such as increasing energy efficiency, saving and recycling water, and implementing successful initiatives to reduce pollution and waste. Through these traditional and innovative measures, manufacturers have helped to usher in a new era of a cleaner and more sustainable environment.

The manufacturing sector is cleaner, more efficient and more responsible than it has ever been. This is not merely lip service: 94 percent of the manufacturers listed on the *Fortune* 500 have a sustainability plan in place for their company.

This commitment has yielded extremely positive results in terms of emissions. For every major air pollutant regulated by the Environmental Protection Agency (EPA), the manufacturing sector has made dramatic reductions for several decades. Today's manufacturing company is a sleek, technology-driven operation that looks nothing like the industrial facilities of the past. With that progress has come a smaller environmental footprint.

Consider the following:

- Manufacturing sector emissions of nitrogen oxides (NOx), a criteria pollutant and the primary precursor of ozone, have dropped by 53 percent since 1970.[1]
- Manufacturing sector carbon monoxide (CO) emissions have dropped 70 percent since 1970.[2]
- Manufacturers have reduced our emissions of coarse particulate matter, or PM10, by 83 percent since 1970.[3]
- The manufacturing sector has reduced emissions of fine particulate matter, or PM2.5, by 23 percent since their peak in 1999.[4]
- Since 1970, the industrial sector has reduced its sulfur dioxide (SO2) emissions by 90 percent.[5]

[1] EPA National Emissions Inventory, *available at* https://www.epa.gov/air-emissions-inventories/national-emissions-inventory-nei.
[2] *Id.*
[3] *Id.*
[4] *Id.*
[5] *Id.*

- Since 1970, manufacturers have reduced our emissions of volatile organic compounds (VOC), which mix with NOx to form ground-level ozone, by 47 percent.[6]
- Just over the past decade, manufacturers have reduced our greenhouse gas (GHG) emissions by 10 percent while increasing our value to the economy by 19 percent. The industrial sector actually produces *less* (GHG) emissions than it did in 1990, a considerably different story compared to the broader U.S. economy.[7]

Manufacturers are committed to sustainability and have taken strong, meaningful steps to address our past, present and future environmental challenges. Last month, the NAM and the U.S. Department of Energy (DOE) announced the *Sustainability in Manufacturing Partnership*.[8] This partnership will provide a national platform to highlight manufacturers' environmental stewardship and encourage the adoption of energy-efficient and sustainable practices. This partnership means better access for manufacturers to DOE's Advanced Manufacturing Office (AMO) and the expertise and programs they provide to manufacturers seeking to improve their energy efficiency and sustainable practices. We intend for this to be a long-term partnership between DOE and the

[6] *Id.*
[7] Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2015, *available at* https://www.epa.gov/sites/production/files/2017-02/documents/2017_complete_report.pdf.
[8] https://www.energy.gov/articles/us-department-energy-and-national-association-manufacturers-announce-sustainability.

NAM to communicate what manufacturers are doing to protect the environment and work together to solve our emerging energy and environmental challenges.

Comments on Draft New Source Review (NSR) Legislation

The NAM appreciates the opportunity to testify regarding draft legislation that would clarify the degree of physical or operational change to an emissions source that would constitute a "modification" sufficient to trigger New Source Review (NSR). The NAM supports this bill because it would remove barriers that have prevented manufacturers from investing in efficiency upgrades and installing modern pollution control equipment at their facilities.

The NSR program is a federal air permitting program under the Clean Air Act that applies to new facilities or major modifications to facilities. The purpose of NSR, according to the EPA, is to require industrial facilities "to install modern pollution control equipment when they are built or when making a change that increases emissions significantly."[9] In practice, however, NSR often stands in the way of efficiency upgrades and the installation of modern pollution control equipment.

A significant portion of the existing gas turbine and steam turbine fleet could benefit from equipment upgrades to improve their efficiency and operational flexibility, particularly given that many are now being used differently (e.g., as load-following) in conjunction with growing renewable generation. These upgrades for gas and steam turbines will ensure higher grid efficiency and lower

[9] https://www.epa.gov/sites/production/files/2015-12/documents/nsrbasicsfactsheet103106.pdf.

emissions in supporting renewable energy use. However, NSR has stood in the way of customer adoption of these technologies.

For example, a NAM member company manufactures gas turbine upgrade technology that could improve the vast majority of in-service gas turbines by 2.6 percent and reduce their total carbon dioxide (CO_2) emissions per megawatt-hour (MWh) by 6.5 percent. This company reports that its customers are choosing not to install this equipment simply because it triggers NSR. The company is facing the same impediments for large and small fossil steam turbines, such as steam path redesign technologies, rotor replacement, and steam turbine warming systems.

NSR also presents a huge impediment to the installation of more efficient technologies that would ultimately combat climate change. An inability to define what is "routine maintenance" has resulted in NSR Notices of Violation being issued for environmentally beneficial projects like economizer replacement, steam turbine upgrades, feed water heater replacements, and similar activities. In comments to the EPA's draft Clean Power Plan, the Utility Air Regulatory Group (UARG) cited *more than 400 instances* in which a regulated entity took on a project to improve the energy efficiency of a power generation unit, only to be targeted by the EPA or citizen suits alleging that it had violated NSR.[10]

Control technologies are perpetually improving. Unfortunately, administration of the NSR program has contributed to a fair amount of inertia.

[10] Comments of the Utility Air Regulatory Group on Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, Docket ID EPA-HQ-OAR-2013-0602-22768, Attachment A (Dec. 1, 2014).

NSR should not operate as an incentive for manufacturers to operate their plants exactly as they were built, and only to replace parts with the exact same part that existed when the plant was built.

The draft legislation that is the subject of today's hearing would create flexibility in the definition of "modification" so that these heat rate improvements and efficiency upgrades will not be deterred by the threat of NSR. It would eliminate the situation where a piece of modern control technology triggers NSR because it generates collateral emissions of another pollutant (e.g., technologies that reduce NOx but increase CO). Most importantly, it could unlock a massive market for the installation of efficient technologies that would drive manufacturers' already-impressive emissions reductions down even farther.

Conclusion

Manufacturers have established a strong record of environmental protection and strive to reduce the environmental footprint of our operations and to become more sustainable. The results are already impressive, and they get better with each passing year. The NAM supports legislation to remove barriers to the installation of energy efficient and environmentally beneficial technologies, key steps toward addressing the environmental challenges of current and future generations.