November 25, 2019

Ms. Amy Hambrick
Sector Policies and Programs Division
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

Dear Ms. Hambrick:

The Edison Electric Institute (EEI) and American Gas Association (AGA) appreciate this opportunity to submit comments on the proposed rule from the Environmental Protection Agency (EPA or Agency) regarding the *Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review* (Proposed Methane Rule). 84 *Fed. Reg.* 50,244 (Sept. 24, 2019).

EEI is the association that represents all U.S. investor-owned electric companies. Our members provide electricity for about 220 million Americans, and operate in all 50 states and the District of Columbia. As a whole, the electric power industry supports more than seven million jobs in communities across the United States. The electric power industry is in the middle of a profound, long-term transformation in how electricity is generated, transmitted, and used. This transformation is being driven by a wide range of factors, including: declining costs for natural gas and renewable energy resources, technological improvements, changing customer expectations, federal and state regulations and policies, and the increasing use of distributed energy resources. As a result, the mix of resources used to generate electricity in the United States has changed dramatically over the last decade and is increasingly clean.

AGA, founded in 1918, represents more than 200 local energy companies that deliver clean natural gas throughout the United States. There are more than 74 million residential, commercial and industrial natural gas customers in the U.S., of which 95 percent—more than 71 million customers—receive their gas from AGA members. AGA is an advocate for natural gas utility companies and their customers and provides a broad range of programs and services for member natural gas pipelines, marketers, gatherers, international natural gas companies and industry associates. Today, natural gas meets more than one-fourth of the United States' energy needs.

Electric companies view the continued use of natural gas generation as necessary to continuing the clean energy transition in a way that is both reliable and affordable. Additionally, electric and gas distribution companies recognize that continued methane emissions reductions attributable from the natural gas supply chain are important to demonstrate the carbon dioxide reductions attributable to coal-to-gas switching and to support company sustainability and greenhouse gas reduction goals.

Accordingly, AGA and EEI created a joint CEO Natural Gas Task Force to develop and deploy the Natural Gas Sustainability Initiative (NGSI), a voluntary, industry-led effort to advance innovative and voluntary sustainability efforts throughout the natural gas supply chain from production through end-use. EEI and AGA members recognize the need to address methane emissions. NGSI, therefore, aims to provide consistency and comparability to these measurements throughout the supply chain and to encourage continuous improvement in methane emissions reductions through company-level disclosure.

NGSI is viewed as an important tool to help standardize and contextualize supply chain emissions, specifically for methane. This initiative is designed to be additive and complementary to other efforts and is intended to work in concert with regulatory standards, which are a critical aspect to providing certainty to both the regulated industry and its customers in the supply chain. Ensuring that methane emissions from the entire natural gas supply chain are minimized is critical to the industry's ability to continue to utilize natural gas.

EEI and AGA appreciate the opportunity to submit these comments for consideration. Please contact Alex Bond (abond@eei.org; 202-508-5523), Eric Holdsworth (eholdsworth@eei.org; 202-508-5103), or Dr. Karen Obenshain (kobenshain@eei.org; 202-508-5223) with any questions regarding EEI. Please contact Lori Traweek (ltraweek@aga.org) or Pamela Lacey (placey@aga.org) with any questions regarding AGA.

Sincerely,

Emily S. Fisher
General Counsel and Corporate Secretary

COMMENTS OF THE EDISON ELECTRIC INSTITUTE AND THE AMERICAN GAS ASSOCIATION ON OIL AND NATURAL GAS SECTOR: EMISSIONS STANDARDS FOR NEW, RECONSTRUCTED, AND MODIFIED SOURCES REVIEW

DOCKET NO. EPA-HQ-OAR-2017-0757

November 25, 2019

The Edison Electric Institute (EEI) and the American Gas Association (AGA) appreciate this opportunity to submit comments on the proposed rule from the Environmental Protection Agency (EPA or Agency) regarding the *Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review* (Proposed Methane Rule). 84 *Fed. Reg.* 50,244 (Sept. 24, 2019). EPA proposes to revise the existing source category to remove the transmission and storage segments and to rescind the New Source Performance Standards (NSPS) applicable to those segments, which were added to the source category via the 2012 and 2016 NSPS. In addition, EPA proposes to rescind the methane NSPS applicable to sources that would remain in the source category—specifically those that relate to production and processing. *Id.*

EEI is the association that represents all U.S. investor-owned electric companies. Our members provide electricity for about 220 million Americans and operate in all 50 states and the District of Columbia. As a whole, the electric power industry supports more than seven million jobs in communities across the United States. EEI's member companies invest more than $110 billion annually to make the energy grid smarter, cleaner, stronger, more dynamic, and more secure in order to provide affordable and reliable electricity to customers in an environmentally

responsible manner.[1] EEI's members own and operate electric power generation, transmission, and distribution facilities and assets in order to deliver increasingly clean energy.

The American Gas Association, founded in 1918, represents more than 200 local energy companies that deliver clean natural gas throughout the United States. There are more than 74 million residential, commercial, and industrial natural gas customers in the U.S., of which 95 percent—more than 71 million customers—receive their gas from AGA members. AGA is an advocate for natural gas utility companies and their customers and provides a broad range of programs and services for member natural gas pipelines, marketers, gatherers, international natural gas companies, and industry associates. Today, natural gas meets more than one-fourth of the United States' energy needs.

Today, EEI and AGA members are leading a clean energy transformation. As member company greenhouse gas (GHG) emissions have decreased, the amount of electricity that is generated from natural gas has increased, such that electricity generators are now the largest users of natural gas in the country. AGA's member gas companies deliver natural gas to more than 71 million customers across the country and thus have a significant interest in the sustainability of the product they deliver. They already have reduced gas distribution emissions by 73 percent since 1990. Many EEI and AGA members have committed to reduce their own GHG emissions further. Accordingly, EEI and AGA members have a significant interest in the methane emissions related to all parts of the natural gas supply chain.

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[1] *See* EEI, Industry Data, Statistical Highlights: Capacity and Generation (2018), http://www.eei.org/resourcesandmedia/industrydataanalysis/industrydata/Pages/default.aspx.

I. Natural Gas and Electric Companies Continue To Lead the Clean Energy Transition, and Natural Gas Plays A Significant Role In That Transition.

The clean energy transformation for electricity is being driven by a wide range of factors impacting generation, including declining costs for natural gas and renewable energy resources, technological improvements, changing customer expectations, federal and state regulations and policies, and the increasing use of distributed energy resources. As a result, the mix of resources used to generate electricity in the United States has changed dramatically over the last decade and is increasingly clean. Natural gas surpassed coal as the main source of electricity generation in the United States for the third year in a row in 2018, with natural gas-based generation powering 34.9 percent of the country's electricity, compared to coal-based generation at 27.2 percent.[2] This trend is projected to continue in 2019 and beyond.[3]

As natural gas use has increased, so has reliance on renewable generation. Since 2014, more than half of the industry's investments in new electricity generation have been in wind and solar generation resources,[4] and more than one-third of America's electricity now comes from carbon-

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[2] *See* Department of Energy, Energy Information Administration (EIA), *Electricity Explained: Electricity in the U.S.* (Apr. 2019), https://www.eia.gov/energyexplained/index.php?page=electricity_in_the_united_states. In April 2019, U.S. monthly electricity generation from renewable sources exceeded coal-based generation for the first time based on data in EIA's *Electric Power Monthly*. Renewable sources provided 23 percent of total electricity generation to coal's 20 percent. According to EIA, this outcome reflects both seasonal factors as well as long-term increases in renewable generation and decreases in coal generation. EIA, *U.S. Electricity Generation from Renewables Surpassed Coal in April* (June 26, 2019), https://www.eia.gov/todayinenergy/detail.php?id=39992.

[3] *See* EIA, *Natural Gas and Wind Forecasted to Be Faster Growing Sources of U.S. Electricity Generation* (Sept. 17, 2019)(noting that the most recent Short-Term Energy Outlook projects that natural gas-based electricity (and wind energy) will increase in 2019 and 2020).

[4] *See* EIA, *Nearly Half of Utility-Scale Capacity Installed in 2017 Came from Renewables* (Jan. 10, 2018), https://www.eia.gov/todayinenergy/detail.php?id=34472. *See* also EEI, Industry Data,

free resources, including nuclear energy, hydropower, solar, and wind.[5] The trend of increasing renewable energy deployments also will continue. EIA projects that the U.S. will add 72 gigawatts (GW) of new wind and solar capacity between 2018 and 2021 alone and that, long-term, demand for new electric generating capacity will be met by renewables and efficient natural gas as older coal-based and less-efficient natural gas-based generating units retire.[6]

These changes have helped the sector further reduce its environmental impacts. As of the end of 2018, the electric power sector had reduced its carbon dioxide (CO_2) emissions by 27 percent compared with near peak levels in 2005—nearly the lowest level in 30 years. EEI's member companies have reduced their CO_2 emissions even more dramatically to approximately 37 percent below 2005 levels.[7] These reductions will continue: EEI's member companies are on a path to reduce CO_2 emissions 50 percent by 2030, and 80 percent by 2050, compared to 2005 levels while keeping electricity affordable and reliable.[8]

Statistical Highlights: Capacity and Generation (2018), http://www.eei.org/resourcesandmedia/industrydataanalysis/industrydata/Pages/default.aspx.

[5] *See* EIA, *Electricity Explained: Electricity in the United States* (Apr. 2018), https://www.eia.gov/energyexplained/index.php?page=electricity_in_the_united_states.

[6] *See* EIA, *Annual Energy Outlook 2019: With Projections to 2050* (Jan. 24, 2019) at 94, 96, https://www.eia.gov/outlooks/aeo/pdf/aeo2019.pdf. While EIA notes in the *Annual Energy Outlook* (AEO) that the amount of renewable and natural gas-based generation deployed are dependent on the price of natural gas, this does not impact the expected closure of coal-based and other less efficient generation.

[7] Based on an EEI analysis of CO_2 emissions data from ABB Velocity Suite.

[8] Many EEI member companies have announced significant voluntary commitments to further reduce CO_2 emissions by 2030 and 2050, many of which aim to reduce emissions 80 percent below 2005 levels by 2050. These commitments are attached here as Appendix C. Further, EIA's AEO 2019 base case projects that electric sector emissions will level off from 2020 to 2050, despite a projected 30-percent increase in generation over this period, as a result of decreases in

Natural gas-based generation has played an important role in this transition because these units have significant operational flexibility and can serve as quick start resources that help to integrate variable renewable resources into the grid reliably. "Fast ramping" resources, like natural gas-based generating units, are essential in the effort to increase the amount of electricity generated from renewable resources.[9] Natural gas-based generation also displaces older, higher-emitting electric generating units, including both coal-based generation and older, less efficient natural gas generation.[10] Importantly, natural gas generation is cost-effective. Increased use of natural gas to generate electricity benefits customers through lower prices, contributes to reducing emissions from higher-emitting resources, and helps support increased renewables deployment.

AGA's member natural gas companies are leaders in reducing methane and providing cleaner, affordable energy to homes and businesses across the United States. AGA's member gas companies have identified, refined, and implemented best practices for detecting and reducing

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the use of coal as a generating fuel. *See* EIA, n.18, *supra*, at 114. EIA's base case only considers existing policies that are current laws and does not address the potential for future reductions as a result of new laws or industry commitments.

[9] North American Electric Reliability Corporation and California Independent System Operator, *Special Assessment: Maintaining Bulk Power System Reliability While Integrating Variable Renewable Resources – a CAISO Approach* (Nov. 2013), https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC-CAISO_VG_Assessment_Final.pdf. Other efforts also contribute to integrating renewable generation reliably, including advanced inverter technologies, better market signals, and enhanced weather forecasting abilities.

[10] *See* International Energy Agency, *Global Energy & CO_2 Status Report 2018* (March 2019), CO_2 Emissions ("Driven by economics and policies, coal-to-gas switching avoided almost 60 Mt of coal demand, with the transition to less carbon-intensive natural gas helping avert 95 Mt of CO_2 emissions. Without this coal-to-gas switch, the increase in emissions would have been more than 15% greater. This switch, most significant in China and the United States, reduced emissions by 45 Mt and 40 Mt, respectively."), https://www.iea.org/geco/emissions/.

methane emissions from natural gas local distribution systems, working through voluntary programs such as U.S. EPA's Natural Gas STAR and Methane Challenge Program. These best practices include accelerating the replacement of cast iron and unprotected steel pipe with modern materials, modernizing metering and regulating stations, and reducing blowdown emissions from pipe repairs. Many of these practices also help ensure the safe delivery of natural gas.

Natural gas utilities spend $26 billion annually on safety. As a result of this investment, annual methane emissions from the natural gas distribution sector declined by 73 percent between 1990 and 2017—to less than 0.01 percent of annual natural gas production,[11] even as natural gas utility companies added more than 760,000 miles of pipeline to serve 20 million more customers. AGA and its members are not resting on that accomplishment.

In an effort to improve and demonstrate the sustainability of the natural gas delivered to homes and business customers, AGA and its members have supported top tier peer-reviewed scientific methane studies to improve the accuracy of methane measurement and estimation and to better understand where there are opportunities to achieve reductions across the natural gas supply chain. Continued investment in innovative technologies is helping to further reduce methane emissions in the delivery of natural gas and is resulting in even more efficient and cleaner burning appliances in homes as well as applications for industrial and commercial businesses.

[11] Based on data reported in EPA's most recent annual *Inventory of Greenhouse Gas Emissions and Sinks in the United States (GHG Inventory)*, published in April 2019.

In addition, AGA and member gas companies are spearheading efforts to capture and purify methane from manure, landfills, and wastewater treatment plants for use in pipelines as low to net-negative carbon renewable natural gas (RNG). AGA member gas companies also are piloting "renewable power-to-gas" projects that use wind and solar generation—when it is in excess to grid needs and otherwise would go to waste—to extract hydrogen from wastewater and combine it with captured carbon to create RNG. Coupled with a cleaner energy grid, responsibly produced and transported natural gas, RNG, hydrogen, and power-to-gas will be the foundation for achieving an affordable low to net-zero carbon energy future. These are only a few examples of the innovation underway to build on the progress made to date to reduce GHG emissions.

II. Supply Chain Emissions Are An Important Part of Electric and Natural Gas Company Sustainability Considerations, and Members of EEI and AGA Are Actively Addressing These Concerns.

Electric companies view the continued use of natural gas generation as necessary to continuing the clean energy transition in a way that is both reliable and affordable. Additionally, electric and natural gas distribution companies recognize that continued methane emissions reductions attributable to the natural gas supply chain are important to demonstrate the CO_2 reductions attributable to coal-to-gas switching and to support company sustainability and GHG reduction goals.

Sustainability is a key focus for electric and natural gas companies, particularly to respond to evolving customer expectations and in continuing to deliver reliable, affordable, and increasingly clean energy to their customers. A significant part of the sustainability discussion has focused on updating relevant Environment, Social, and Governance (ESG) metrics to quantify and measure the progress of electric companies. Industry's focus on sustainability is related to its ongoing

clean energy transition and holistic approach to the entirety of the supply chain that feeds that transition, and, in particular, accounting for methane emissions given that the electric industry is the largest domestic user of natural gas.[12]

Accordingly, AGA and EEI created a joint CEO Natural Gas Task Force to develop and deploy the Natural Gas Sustainability Initiative (NGSI), a voluntary, industry-led effort to advance innovative and voluntary sustainability efforts throughout the natural gas supply chain from production through end-use.

Currently, there is no consistency or clarity in how methane emissions intensity is measured or disclosed. The voluntary NGSI framework will be focused initially on developing a consensus methane emissions measurement protocol for each segment of the supply chain and disclosure of that measurement at the company-level. While the NGSI framework will incorporate additional ESG metrics over time, the immediate focus of the NGSI will be on the complete natural gas supply chain—and the need to utilize natural gas in a sustainable, environmentally sound, safe, and secure manner.

Broadly, NGSI will be focused on supporting companies through common tools and metrics to meet environmental and social objectives and to promote continuous improvement, which then can be used at the discretion of individual companies to make supplier-related decisions to reduce supply-chain methane emissions.

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[12] U.S. Energy Information Administration, *Natural Gas Explained: Use of Natural Gas* (July 10, 2019), https://www.eia.gov/energyexplained/natural-gas/use-of-natural-gas.php.

The NGSI was highlighted at EEI's Financial Conference in early November. A final draft[13] of the methane emissions intensity measurement protocol will be circulated to interested participants for comment in late 2019 with a Version 1.0 planned for release in the first quarter of 2020. Version 1.0 of the protocol will be used by participants to measure and disclose methane emissions intensity as part of their financial/sustainability reporting mid-year 2020. The protocol will be reviewed and updated once a year to accommodate new data availability.

EEI and AGA members recognize the need to address methane emissions. NGSI, therefore, aims to provide consistency and comparability to these measurements throughout the supply chain and to encourage continuous improvement in methane emissions reductions through company-level disclosure. NGSI is viewed as an important tool to help standardize and contextualize supply chain emissions, specifically for methane. This initiative is designed to be additive and complementary to other efforts and is intended to work in concert with regulatory standards, which are a critical aspect to providing certainty to both the regulated industry and its customers in the supply chain. Ensuring that methane emissions from the entire natural gas supply chain are minimized is critical to the industry's ability to continue to utilize natural gas.

III. Conclusion

EEI and AGA appreciate the opportunity to submit these comments for consideration. Please contact Alex Bond (abond@eei.org; 202-508-5523), Eric Holdsworth (eholdsworth@eei.org; 202-508-5103), or Dr. Karen Obenshain (kobenshain@eei.org; 202-508-5223) with any

[13] The final draft will incorporate comments received on a July 2019 draft protocol.

questions regarding EEI. Please contact Lori Traweek (ltraweek@aga.org) or Pamela Lacey (placey@aga.org) with any questions regarding AGA.