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American Physical Society

November 11, 2019

The Honorable Andrew Wheeler
Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460

Dear Administrator Wheeler:

The American Physical Society (APS) – the largest physics membership organization in the United States, representing more than 55,000 members – appreciates the opportunity to provide public comments for proposed rule EPA-HQ-OAR-2017-0757, titled “Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review.” This proposed rule includes reconsideration amendments to the new source performance standards (NSPS), which regulate greenhouse gases (GHGs) and volatile organic compound (VOC) emissions from specific sources within the oil and natural gas industry.

APS is concerned with the proposed amendments regarding methane emissions – a concern that is heightened given that recent scientific results indicate that the negative environmental impact of methane is significantly higher than previously estimated.

Briefly summarizing the latest scientific findings: until recently, widely used calculations of methane’s radiative forcing (RF) had excluded any short wavelength effects. This omission has led to a systematic underestimation of methane’s RF by approximately 15 percent.¹ Additionally, the inclusion of short wavelength effects impacts methane’s 100-year global warming potential (GWP), increasing it by 14 percent above the value currently provided by the Intergovernmental Panel on Climate Change.²

With the risks of methane emissions now determined to be higher than previously estimated, this is not the time to be relaxing regulations. Thus, APS opposes any rescission of methane-specific requirements of the NSPS at this time. Instead, the Society recommends a rigorous assessment of methane emissions, via continuous monitoring, from the oil and natural gas industry.

Given the increasing risks, before considering the easing or elimination of any methane regulations, there needs to be a thorough assessment and review of current methane emissions.

Thank you for your consideration.

Sincerely,

The American Physical Society

¹W. D. Collins, D. R. Feldman, C. Kuo and N. H. Nguyen, Large regional shortwave forcing by anthropogenic methane informed by Jovian observations. *Science Advances* **58**, eaas9593 (2018)

²M. Etminan, G. Myhre, E. J. Highwood and K.P. Shine, Radiative forcing of carbon dioxide, methane, and nitrous oxide: A significant revision of the methane radiative forcing. *Geophysical Research Letters* **43**, 12614-12623 (2016)