

October 29, 2021

Via email: GHGInventory@epa.gov

U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460

Re: EPA Request for Stakeholder Feedback on Updates Under Consideration for Natural Gas Systems in the 2022 Annual GHG Inventory

Dear EPA GHG Inventory Staff:

In September 2021, the Environmental Protection Agency ("EPA") released several documents presenting updates under consideration for petroleum and natural gas systems for the 2022 annual report, "Inventory of U.S. Greenhouse Gas Emissions and Sinks" ("2022 GHGi"). In the EPA documents and a related webinar on September 15, 2021, EPA requested stakeholder feedback on the updates under consideration.

The Interstate Natural Gas Association of America ("INGAA"), a trade association of the interstate natural gas pipeline industry, respectfully submits these comments in response to EPA's request. We understand that EPA preferred to receive written comments earlier this month, yet INGAA appreciates EPA's consideration of these comments, which provide feedback on EPA's memo¹ on potential changes to activity data used for calculation of methane emissions.

INGAA member companies transport more than 95 percent of the nation's natural gas, through approximately 200,000 miles of interstate natural gas pipelines. In 46 of the 48 contiguous United States, INGAA member companies operate over 5,400 natural gas compressors at over 1,300 compressor stations and storage facilities along the pipelines to transport natural gas to local gas distribution companies, industrials, gas marketers, and gas-fired electric generators. This includes over 3,500 stationary natural gas-fired reciprocating engines, 1,500 combustion turbines, and 300 electric motors that drive the compressors. INGAA's comments focus on the transmission and storage ("T&S") segment inventory, particularly EPA's request for feedback on potential changes to activity data for T&S sources. INGAA members have reported data under EPA's Greenhouse Gas Reporting Rule ("GHGRP") since 2011, and INGAA's comments below recommend additional use of GHGRP data to improve methane emission estimates.

¹ EPA Memo, "Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2020: Updates Under Consideration for Activity Data," (September 2021). Referred to herein as "EPA Activity Data Memo," see: https://www.epa.gov/system/files/documents/2021-09/2022-ghgi-update-activity-data_sept-2021.pdf

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1. INGAA supports relying on PHMSA data for storage well activity data.

EPA seeks feedback on updating underground storage well activity data (i.e., well counts) using well count data from the Department of Transportation Pipeline and Hazardous Materials Safety Administration ("PHMSA"). PHMSA data, which is more recent, provides actual storage well data and is available for 2017 and subsequent years, should supplant a methodology that relies on 1992 data and annual scaling based on residential gas use. INGAA supports the proposed change and encourages EPA to update the activity data in the 2022 GHGi.

In March 2021 comments² to EPA on the 2021 Annual GHG Inventory Report, INGAA identified this data source, noting that PHMSA data are available since 2017. INGAA recommended that EPA update storage well activity data using the available PHSMA data and update the time series by interpolating from 2017 to the 1992 estimate. EPA's potential changes to underground storage well activity data, identified in the EPA Activity Data Memo, are consistent with INGAA's recommendation. INGAA appreciates EPA's consideration of our previous comments and strongly supports this update for the 2022 GHGi.

2. INGAA does not support relying on Enverus' proprietary information for updating T&S activity data for transmission compressor station counts and pipeline miles.

The EPA Activity Data Memo presents alternative activity data for transmission compressor station counts and transmission pipeline miles based on information available from Enverus and acknowledges that the Enverus database/information resource is proprietary. EPA seeks feedback on using Enverus information to update activity data. INGAA does *not* support use of proprietary information for GHGi activity data. This is especially a concern when publicly available data are available as an alternative.

Pipeline miles GHGi activity data is currently based on PHMSA data, which is available to the public. The Enverus pipeline mileage is only about 5% higher (2019 comparison) and may use PHMSA data, but the background and basis for the mileage difference are indeterminate due to the proprietary nature of Enverus information. INGAA supports retaining the federal PHMSA data to maintain transparency.

For compressor station counts, the difference when comparing 2019 GHGi to Enverus data is smaller than 5%. However, there is no guarantee that more disparate or questionable activity data may arise in future years from the proprietary resource. In INGAA's March 2021 letter to EPA (discussed above), INGAA discussed alternatives to the current GHGi approach for annual scaling of compressor station activity data and questioned EPA's use of an annual scaling factor based on the count of transmission facilities that report to EPA under the GHG Reporting Program.³ INGAA refers EPA to Comment 4 in the March 2021 letter for additional details and recommends EPA use public data from federal agencies. While GHGi compressor station counts may warrant additional consideration, INGAA does not support relying on Enverus for T&S activity data.

² INGAA March 15, 2021 Comments to EPA, "Docket ID No. EPA-HQ-OAR-2021-0008 – Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2019, 86 Fed. Reg. 28"

³ 40 C.F.R. Part 98. <u>https://www.ingaa.org/File.aspx?id=38626</u>

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3. EPA should consider additional improvements to T&S methodology in the GHGi, including (1) activity data for exhaust methane emission estimates and (2) methane emission factors for T&S compressor leaks.

INGAA offers comments on two additional T&S GHGi methodologies that EPA should consider updating in the 2022 GHGi or integrate into the next annual GHGi.

Exhaust methane: The EPA relies on a methodology for annual activity data estimates based on data that is nearly three decades old to estimate exhaust methane emissions. Activity data for estimating compressor driver exhaust methane emissions from reciprocating engines and turbines (i.e., annual horsepower-hours ("hp-hrs") per year) is based on 1992 baseline data from GRI/EPA reports. The annual GHGi update scales that value based on annual residential natural gas use. Using changes in gas consumption as a proxy for equipment operation is flawed for this emissions category because gas transmission compressor station assets have changed significantly since 1992. Currently, there are fewer reciprocating engines and more combustion turbines compared to 1992, and recently installed turbines are more likely to operate than reciprocating engines when pipeline demand is lower. Thus, total annual hp-hrs and relative values for engines versus turbines is different for current operations than it was in 1992. INGAA has not reviewed the issue enough to provide an alternative but welcomes additional discussion with EPA on developing updated activity data for compressor exhaust methane estimates.

<u>Compressor leak emissions factors</u>: In a November 2019 meeting with EPA staff, INGAA shared reports and a white paper available from the Pipeline Research Counsel International (PRCI) that compiled and analyzed over ten thousand measurements of T&S compressor leaks conducted to address GHGRP Subpart W requirements. The Subpart W data were used to develop a detailed analysis that updated emission factors ("EFs") for T&S reciprocating compressors and centrifugal compressors. Utilizing Subpart W data to better understand T&S emissions is a GHGRP objective and PRCI's analysis of six years of measurement and leak survey data, that includes nearly 15,000 measurements, provides EFs based on a very large dataset. INGAA recommends replacing the current EFs for T&S compressor leaks, as well as the related station-level leak EFs, with EFs from the PRCI reports. This is consistent with the objective of ensuring that, when available, GHGRP data are used to inform GHG emission estimates. INGAA welcomes any questions EPA may have about using the PRCI EFs.

INGAA appreciates your consideration of these comments. Please contact me if you have any questions. Thank you.

Regards,

/s/ Joan Dreskin

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