



November 2, 2020

Missouri Public Service Commission  
200 Madison Street, PO Box 360  
Jefferson City, MO 65102-0360

**RE: Docket number AW-2021-0064, Proposed Amendments to 20 CSR 4240-10.030 Establishing Biomethane-Specific Safety and Gas Quality Standards**

To Whom It May Concern,

The Coalition for Renewable Natural Gas (RNG Coalition)<sup>1</sup> offers this letter in response to the Missouri Public Service Commission's (PSC) proposed amendments to CSR 4240-10.030, establishing safety and gas quality standards specific to renewable natural gas (RNG) in Docket AW-2021-0064.

We appreciate the Commission's recognition of the need for RNG-specific standards as the RNG industry continues to grow within Missouri and throughout the U.S. Our comments below briefly discuss the potential for RNG production and associated benefits in Missouri before addressing the standards proposed by PSC.

**About RNG Coalition and the RNG Industry**

RNG Coalition is the trade association for the RNG industry in the United States and Canada. Our diverse membership is comprised of leading companies across the RNG supply chain including RNG producers, energy marketers, waste management and recycling companies, labor, utilities, and academic institutions, among others. Together we advocate for the sustainable development, deployment and utilization of RNG, so that present and future generations have access to domestic, renewable, clean fuel and energy in Missouri and across North America.

The RNG industry is nascent relative to other renewables industries but has shown extraordinary growth recently, driven primarily by policies designed to promote environmental and economic goals—including but not limited to clean air, improved waste management, increased job development, energy independence, and resource diversity.

Processing waste biogas into RNG is a crucial component of a circular economy, creating a versatile resource which can be used in any application that currently uses conventional natural gas. RNG is a well-proven technology available at commercial scale today,<sup>2</sup> with the potential to unlock a number of

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<sup>1</sup> For more information see: <http://www.rngcoalition.com/>

<sup>2</sup> The vast majority of RNG available commercially today is created by capturing and processing raw biogas generated as waste decomposes at sites with aggregated organic matter—such as landfills, wastewater treatment plants, and agricultural operations—and then upgrading this gas to meet pipeline quality standards. In the absence of the RNG project this biogas is often flared, or worse, is uncollected and escapes fugitively into the atmosphere as a short-lived climate pollutant (methane).

cross-sector benefits for Missouri in the near-term. As such, we support PSC's efforts to provide the Missouri RNG industry with authority and policy support to promote RNG growth in the state.

### **Environmental and Economic Benefits of RNG Development and Utilization**

All commercially available methods of producing RNG demonstrate excellent greenhouse gas (GHG) performance. To date, reducing GHG emissions has been a primary driver of growth and adoption. The transportation fuel programs promoting RNG use have proven that production and use of RNG achieves GHG emissions reductions on the order of 40%, or more, compared to conventional natural gas derived from geologic sources. RNG projects capture fugitive methane and achieve dramatic greenhouse gas reductions throughout the fuel lifecycle. Many RNG projects can be "carbon-negative" (i.e., better than "carbon neutral").

In addition to the potential for reduction of GHG emissions through waste emission capture, the implementation of RNG projects provide other important environmental and economic benefits—including millions of dollars in capital investment per project and the creation of thousands of clean energy sector jobs.<sup>3</sup> RNG development also supports the protection and improved monitoring of natural and working lands while serving as a component of Missouri's natural resource economy. In the agricultural sector, RNG provides a source of revenue to farmers and ranchers that they can use to pay for land improvements or simply to support their families and way of life. For local governments that oversee wastewater plants or landfills, RNG provides a revenue stream that helps support essential services like firemen and police, while keeping taxes low.

In all cases, RNG helps to facilitate improvements in air and water quality through better waste management practices. RNG production and utilization creates a more circular economy, increasing the sustainability of organic waste processing systems and turning a burden into an asset.

### **RNG Potential in Missouri**

The consulting firm ICF estimates that Missouri's potential to produce RNG from anaerobic digestion sources (landfills, animal manure, wastewater treatment, and food waste) is between 17.678-31.935 tBtu/year. With the addition of feedstocks that require gasification the potential supply is increased to 32.16-149.296 tBtu/year.<sup>4</sup> This supply potential could satisfy more than 47% of Missouri's total current natural gas demand,<sup>5</sup> and pipeline-connected RNG projects can be shifted between demand categories over time as needed.

This data reinforces the fact that Missouri can deploy a significant volume of RNG, if appropriate policy support is adopted. Supporting the growth of RNG as part of the state's broader energy strategy will

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<sup>3</sup> ICF, *Economic Impacts of Deploying Low NOx Trucks fueled by Renewable Natural Gas*, 2017  
[https://static1.squarespace.com/static/53a09c47e4b050b5ad5bf4f5/t/59077544ebbd1ad192d13ff6/1493660998766/ICF\\_RNG+Jobs+Study\\_FINAL+with+infographic.pdf](https://static1.squarespace.com/static/53a09c47e4b050b5ad5bf4f5/t/59077544ebbd1ad192d13ff6/1493660998766/ICF_RNG+Jobs+Study_FINAL+with+infographic.pdf)

<sup>4</sup> American Gas Foundation, *Renewable Sources of Natural Gas: Supply and Emissions Reduction Assessment*, 2019  
<https://gasfoundation.org/wp-content/uploads/2019/12/AGF-2019-RNG-Study-Full-Report-FINAL-12-18-19.pdf>

<sup>5</sup> EIA estimates Missouri's 2019 total natural gas consumption (volumes delivered to customers) here:  
[https://www.eia.gov/dnav/ng/ng\\_cons\\_sum\\_dcu\\_SMO\\_a.htm](https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SMO_a.htm)

help to position Missouri as a leader in advanced biofuels and the next generation of natural gas resources.

### Comments on Proposed Missouri Alternative Gas Quality Standards

The RNG Coalition advocates for gas quality standards that are scientifically based and incorporate a thorough understanding of variations in RNG feedstock, production processes, and end-product constituents. If not properly designed, gas quality standards can be a hinderance to RNG project development. For example, gas quality standards for RNG should never be set more stringently than those in place for conventional natural gas.<sup>6</sup>

The RNG Coalition understands PSC's desire to align RNG standards directly with gas quality standards already in place for nearby Federal Energy Regulatory Commission (FERC)-regulated interstate pipelines. Unfortunately, those quality standards can differ significantly across pipelines and, therefore, relying on the nearest pipeline may not meet the needs of the utility accepting the gas (because the utility's system may have different constraints than the nearby pipelines) or provide the desired clarity to the project developer (if they need to meet additional contractual constraints imposed by the utility on top of the FERC-regulated pipeline spec). Therefore, ***we support development of a uniform minimum heating value spec and Wobbe number in this proceeding and recommend leaving other constituents of concerns to bilateral negotiations between utilities and project developers.***

In the current draft of the proposed amendments, we are concerned that the "alignment with FERC-regulated pipeline" requirement in the definitions provided for "Alternative Gas" and "Pipeline Quality" in Section 1 creates either a redundancy, or a potential conflict, with the parameters set forth in Section 2, Parts B-D. FERC-approved pipeline specifications usually have requirements for heating value (and, less frequently, Wobbe number). The RNG Coalition maintains a database of gas quality requirements extracted directly from major transmissions gas pipeline tariffs.<sup>7</sup> In the Table below we extract the relevant minimum heating values and Wobbe Index requirements for example interstate transmission pipelines in Missouri.<sup>8</sup>

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<sup>6</sup> We have seen this issue arise in other jurisdictions, and we've recently had to take strong stands against such inequitable treatment (including in front of FERC) and have received favorable decisions. For example, see FERC Docket No. PR20-32. Gas Quality Tariff for NiSource's Columbia Gas of Ohio. Approved July 20, 2020.

<sup>7</sup> Our gas quality spec database is available here: [https://docs.google.com/spreadsheets/d/1OaErwH5-8BXehuc0b\\_MK9B3ABhmQDOzpHeNvNVazLp8/edit?ts=5c6712a9#gid=0](https://docs.google.com/spreadsheets/d/1OaErwH5-8BXehuc0b_MK9B3ABhmQDOzpHeNvNVazLp8/edit?ts=5c6712a9#gid=0)

<sup>8</sup> <https://psc.mo.gov/CMSInternetData/Gas/Missouri%20Natural%20Gas%20Pipeline%20Map%207-12-2018.pdf>

Example Interstate Transmission Pipeline	Min Heating Value Specification (Btu)	Min Wobbe Number Specification
ANR Pipeline Company	967	N/A
Enable Gas Transmission	975	N/A
Natural Gas Pipeline Company of America	950	1274
Panhandle Eastern Pipeline Company	950	N/A
Rockies Express Pipeline	950	N/A
Southern Star Central Gas Pipeline	950	N/A
Texas Eastern Transmission	967	1314

The current PSC proposed amendments select a minimum heating value of 980 BTU/scf and a minimum Wobbe index of 1290. This min heating value proposal is higher than the FERC approved specifications in the table above. It is also higher than the constraints imposed in most other jurisdictions with state-level specs for RNG.

For example, the California Council on Science and Technology (CCST) found that a minimum heating value of 970 BTU/scf should be acceptable (when the Wobbe minimum is ~1270) from both safety and equipment durability perspectives.<sup>9</sup> Using the input from CCST, the California Public Utilities Commission required Southern California Gas Company and San Diego Gas and Electric to institute minimum values of 970 and 1279, respectively, in California.<sup>10</sup> The Gas Technology Institute also recommended similar values (970 and 1270, respectively) in their 2019 report for the Northeast Gas Association focused on developing RNG specifications.<sup>11</sup>

We are unaware of any reason why higher values for these factors would be necessitated in Missouri and adopting the currently proposed higher values would unnecessarily increase RNG project costs. Given that fact, ***RNG Coalition would support removing the requirement to align with the nearest FERC-regulated pipeline and amending Section 2, Parts B-C to lower minimum heating value to 970 BTU/scf and Wobbe Index to 1270.***

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<sup>9</sup> *Biomethane in California Common Carrier Pipelines: Assessing Heating Value and Maximum Siloxane Specifications*, California Council on Science and Technology (CCST Study), June 2018. See page 40. Available from: <https://ccst.us/reports/biomethane-in-california-common-carrier-pipelines-assessing-heating-value-and-maximum-siloxane-specifications/>

<sup>10</sup> See CPUC Decision 19-05-018. Available from: <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M292/K947/292947504.PDF>

<sup>11</sup> The RNG Coalition participated in, and contributed to, the Gas Technology Institute's Final Report for the Northeast Gas Association dated August 2019, entitled *Interconnecting Guide for Renewable Natural Gas in New York* (GTI/NGA Report). The GTI/NGA Report was intended as an educational guidance—a tool to bring utilities and developers together, to discuss the specific needs of their pipeline and project based on the capacity and point of interconnect. The GTI/NGA Report is a helpful reference for any jurisdiction beginning to consider RNG-specific gas quality standards—it should not, however, be confused for a universal or endorsed standard for direct implementation by a utility, pipeline company, or regulatory body. The GTI/NGA report is available here: [https://www.northeastgas.org/pdf/nga\\_gti\\_interconnect\\_0919.pdf](https://www.northeastgas.org/pdf/nga_gti_interconnect_0919.pdf)

## Conclusion

RNG Coalition appreciates the opportunity to participate and provide comment in this process. Production and utilization of RNG has the potential to create a variety of benefits for Missouri including creating jobs and economic opportunity, reducing emissions, and increasing the resiliency of a variety of energy and waste disposal systems.

Through creation of a successful framework for RNG development and use, Missouri has the ability to become a leader for continued growth in this rapidly emerging green technology. Accordingly, our members look forward to investing in and constructing new methane-capturing and RNG production facilities that create clean energy sector jobs in Missouri. We thank PSC for their leadership on this issue because such dialogue benefits the environment and the economy, energy consumers, and policymakers interested in RNG issues in Missouri and across North America.

Sincerely,

/s/

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