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TO CLEAR THE AIR: TENNESSEE GAS PIPELINE COMPANY AND EVOLVING NATIONAL ACCEPTANCE OF RSG CERTIFICATION STANDARDS

GRASYN FULLER*

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^{*} Grasyn Fuller is a 2023 J.D. graduate of the University of Oklahoma College of Law. Prior to her legal education, Grasyn received her bachelor's degree in public relations and Spanish and her master's degree in strategic communication from the University of Oklahoma. She is honored to be selected for publication in the *Oil and Gas, Natural Resources, and Energy Journal (ONE J)* and extends her deepest gratitude to her ONE J cohort for their insight and inspiration.

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I. Introduction

A. Responsibly Sourced Gas

When considering the impact of gas production on the environment, natural gas production is considered to be minimal compared to traditional gas production because it produces about half the emissions of coal when burned. However, the extraction and shipment of natural gas causes leakage of methane: a powerful greenhouse gas pollutant. Methane contributes to 20 percent of air emissions, making it the second most common greenhouse gas after carbon dioxide. Additionally, methane is 28 times more potent than carbon dioxide at trapping heat in the atmosphere. The Environmental Defense Fund reported in 2002 that 3.7 percent of natural gas produced in the Permian Basin, one of the world's most abundant oil-producing regions, leaks methane into the atmosphere. The Environmental Protection Agency ("EPA") estimated in 2019 that gas production contributes to 48 percent of all methane emissions from the U.S. oil and gas industry.

Based on concerns for these findings and investor pressures, efforts within the oil and gas industry recently shifted to support decarbonization, emphasize reduction of greenhouse gas emissions, and achieve "net zero" emission goals. Over 70 countries worldwide adopted a "net zero" target for greenhouse gas emissions, which the United Nations defined as a global initiative to cut greenhouse gas emissions to as close to zero as possible. Supporters of these initiatives see potential in the immediate effects of methane emissions reductions; because methane is less persistent in the

^{1.} James Downing, Kinder Morgan asks FERC to move forward on 'responsibly sourced gas' option, CQ Roll Call (2022).

^{2.} *Id*. ¶ 2.

^{3.} Eunji Oh & Eugene Kim, Responsibly sourced gas (RSG): a primer, Wood Mackenzie (2021).

^{4.} *Id.* ¶ 6.

^{5.} Quantifying methane emissions from the largest oil-producing basin in the United States from space, Science Advances, Vol 6, Issue 17 (2020). https://www.science.org/doi/10.1126/sciadv.aaz5120.

^{6.} Kinder Morgan asks FERC to move forward on 'responsibly sourced gas' option. ¶ 2.

^{7.} Responsibly sourced gas (RSG): a primer. \P 5.

^{8.} *Id*. ¶ 1.

^{9.} For a livable climate: Net-zero commitments must be backed by credible action, United Nations (2022). https://www.un.org/en/climatechange/net-zero-coalition.

atmosphere than carbon dioxide, reductions in its emissions would have a significant and rapid effect on reducing atmospheric warming.¹⁰

Recently, natural gas producers responded to methane emissions reports with awareness and action initiatives to voluntarily minimize their climate impact. 11 Notably, many in the industry embraced responsibly sourced gas ("RSG") as a means of achieving these goals. The Tennessee Natural Gas Innovation Act defines RSG as a particular category of conventional natural gas produced by companies whose operating standards are independently verified.¹² RSG-producing companies receive such independent verification from third-party certification providers who ensure that the producers procure RSG product through environmentally "responsible" practices. 13 Environmentally responsible standards and practices are considered in all phases of RSG production during certification, including air emissions, water stewardship, land use and community impacts.¹⁴ These standards are determined by the third-party certification providers and fit into the broader decarbonization effort of the United States in adopting environmental, social, and governance ("ESG") standards. 15 Largely, these standards are focused on air emission reductions in natural gas production. 16 Currently, RSG certifications are exclusively available for upstream assets and there is no universal or industry standard of certification.¹⁷

As a result of industry developments embracing RSG, the use of third-party certification and monitoring programs developed as a method to deliver natural gas specifically to ESG-conscious customers. Such programs assign ratings or grades to natural gas developers based on their conformance with the certifier's predetermined standards and practices, thereby rewarding developers with public designations of conformance with RSG standards. However, because they are largely self-reported and inconsistent across operators, voluntary third-party certification programs raise concerns about RSG standardization, certification methods, and how effective the certifiers' actual measurements of methane emissions are. In contrast, third-party

^{10.} *Id*. ¶ 6

^{11.} Responsibly sourced gas (RSG): a primer. ¶ 4.

^{12.} Tenn. Code Ann. § 65-5-114 (West).

^{13.} Responsibly sourced gas (RSG): a primer. \P 3.

^{14.} *Id.* ¶ 3.

^{15.} *Id.* ¶ 1.

^{16.} Tenn. Code Ann. § 65-5-114 (West).

^{17.} Responsibly sourced gas (RSG): a primer. ¶ 3.

^{18.} *Id.* ¶ 7.

^{19.} *Id*. ¶ 8.

certification providers offer natural gas producers the benefit of explicit and consistent measurement standards, administration and application of these standards by an independent organization (i.e., separate from the producer), and a rating or grade based on empirical data gathered from the producer's performance judged against these standards.²⁰

Among the expected benefits to U.S. energy companies embracing RSG standards includes the de-commoditization of natural gas, thereby recharacterizing the use and value of the resource. Additionally, RSG use allows producers distinguish their product from internationally produced and exported gas. Subsequently, they hope this will result in higher profit margins and meet environmental demands from consumers, importing countries, and ESG investors in the industry who wish to support initiatives that address climate change.

B. Tennessee Gas Pipeline Company, L.L.C.

On March 31, 2022, Tennessee Gas Pipeline Company, L.L.C. ("Tennessee") filed revised tariff records pursuant to section four of the Natural Gas Act ("NGA").²⁴ These revised tariff records proposed to implement a producer certified gas ("PCG") Pooling Service Option on Tennessee's pipeline.²⁵ By filing these records, Tennessee sought approval from the Federal Energy Regulatory Commission ("FERC") to market natural gas that is RSG-certified to produce minimal methane emissions during shipment.²⁶

FERC rejected Tennessee's initial proposal because they believed Tennessee failed to demonstrate that incorporating minimum performance criteria (collectively, "PCG Criteria") into its tariff is "just and reasonable" due to possible barriers restricting future amendments to the criteria.²⁷ Later, FERC approved Tennessee's amended proposal that excluded PCG Criteria from its tariff and instead created a system for amendments of PCG Criteria on its website.²⁸ Thereafter, FERC concluded that this amended proposal was

^{20.} Id.

^{21.} Thomas N. Russo, Responsibly Sourced Gas: Time to Change the Natural Gas Industry's Narrative, Climate and Energy (2021).

^{22.} *Id*. ¶ 6.

^{23.} Id.

^{24.} Tennessee Gas Pipeline Co., L.L.C., 179 FERC ¶ 61,076 (2022).

^{25.} Id. ¶ 6.

^{26.} James Downing, Kinder Morgan asks FERC to move forward on 'responsibly sourced gas' option, CQ Roll Call (2022).

^{27.} Tennessee Gas Pipeline Co. ¶ 17.

^{28.} *Id*. ¶ 18.

just and reasonable.²⁹ Unlike the initial proposal, this website display of PCG Criteria for Tennessee's Pooling Service Option provided a transparent, extended-use solution for establishing certified gas criteria in Tennessee's pipeline.³⁰ Additionally, information contained on the website display extended the use of the PCG Pooling Service Option without limiting or eliminating the service or rights of existing shippers.³¹

Tennessee is the first pipeline to seek and gain FERC approval for shipments of certified RSG.³² Additionally, it is the first pipeline system to implement PCG aggregation into a pooling service.³³ This note explores the regulatory history published by FERC in an Order Rejecting Tariff Records issued on April 29, 2022, and subsequent Order Accepting Tariff Records issued on April 29, 2022, in response to Tennessee's proposals. In examining these FERC opinions, this note examines how effects of FERC's decisions may impact future RSG policy decision making and the introduction of independent certification criteria into the RSG market.

II. Examining FERC's Opinion in Tennessee Gas Pipeline Co., L.L.C.

A. Procedural History.

Tennessee first submitted its PCG Pooling Service Option proposal to FERC on December 15, 2021, "in response to increasing customer interest in responsibly sourced natural gas ("RSG") initiatives due to climate change concerns related to greenhouse gas emissions, particularly methane emissions." Its tariff proposed to enhance the purchase, sale, and use of RSG supply around the country. Tennessee hoped to achieve RSG supply enhancement by opening shipment between producer and user through paper pooling points at liquid trading points on its pipeline.

According to the Interstate Natural Gas Association of America, pooling points are physical or theoretical points at which gas is aggregated from

^{29.} *Id*. ¶ 21.

^{30.} *Id*. ¶ 13.

^{31.} Tennessee Gas Pipeline Co., L.L.C., 179 FERC ¶ 61,233 (2022).

^{32.} Tennessee Gas Pipeline Co., L.L.C., 179 FERC \P 61,076 (2022).

^{33.} Tennessee Gas Pipeline Receives FERC Approval for Producer Certified Gas Pooling Service Proposal, Kinder Morgan (2022). https://ir.kindermorgan.com/news/news-details/2022/Tennessee-Gas-Pipeline-Receives-FERC-Approval-for-Producer-Certified-Gas-Pooling-Service-Proposal/default.aspx.

^{34.} Tennessee Gas Pipeline Co., 179 FERC ¶ 61,076.

^{35.} *Id*. ¶ 2.

^{36.} Id.

different producers before the supply is sent to consumers.³⁷ Pooling the aggregate supply allows the pipeline to serve many consumers without tying a particular producer to a specific consumer contract.³⁸ Paper pooling specifically refers to aggregation as a matter of accounting, as opposed to physical pooling in a supply.³⁹ Put simply, Tennessee wanted to enhance its RSG shipment by providing an RSG-only pooling point that consumers could buy directly from.

Before submitting its first PCG Pooling Service Option proposal to FERC, Tennessee defined its aggregators as any entity that: (1) requested supply aggregation service by Tennessee; (2) met certain conditions within the General Terms and Conditions of Tennessee's FERC Gas Tariff; and (3) executed a supply aggregation service agreement with Tennessee.⁴⁰ Under the PCG Pooling Service Option, aggregators that obtain approved, third-party certification and meet Tennessee's PCG Criteria may designate their certified gas supply as RSG.⁴¹ The PCG Criteria listed on Tennessee's website include (1) a list of qualified third-party certification providers eligible to provide RSG certification to the aggregator; (2) RSG certification metrics; (3) the acceptable certification ratings required of the aggregator to be obtained from the qualified third-party certification providers; and (4) the acceptable methane emissions intensity level threshold.⁴²

In response to comments and discussions by interested parties regarding the initial proposal, Tennessee filed an amendment on March 31, 2022. 43 First, at the request of shippers, Tennessee's amended proposal clarifies the incorporation of the PCG Criteria into its tariff, not just on its website. 44 Incorporation into the tariff restricts Tennessee's ability to change its PCG Criteria without adequate notice to aggregators. 45 Second, the amendment expands the number of pooling points where the PCG Pooling Service Option is available to include all of Tennessee's 20 pooling points. 46 Next, Tennessee agrees to file a RSG market monitoring report with FERC after 12 months of

^{37.} Pooling Point, Interstate Natural Gas Ass'n of America, https://ingaa.org/glossary/?letter=p.

^{38.} *Id*.

^{39.} Id.

^{40.} Tennessee Gas Pipeline Co., 179 FERC ¶ 61,076 (footnote 4).

^{41.} *Id*. ¶ 3.

^{42.} Tennessee Gas Pipeline Co., 179 FERC ¶ 61,233 (footnote 2).

^{43.} *Id*. ¶ 2.

^{44.} *Id*. ¶ 3.

^{45.} *Id*. ¶ 5.

^{46.} Tennessee Gas Pipeline Co., 179 FERC ¶ 61,076.

operation under this proposal.⁴⁷ Finally, Tennessee specifies Project Canary, SYSTEMIQ ("MiQ"), and Xpansiv Data Systems' ("Xpansiv") Digital Fuels Program as optional third-party certification vendors that meet the PCG Criteria for its tariff.⁴⁸

Critics of Tennessee's amended proposal includes EQT Energy, LLC ("EOT"). ⁴⁹ EOT filed comments on the amended proposal to demonstrate its support of developing an RSG market that recognizes the need for reduction of methane emissions. 50 However, EQT identifies a fatal flaw in Tennessee's proposal: all-natural gas meeting Tennessee's PCG Criteria is treated as a single form of RSG.⁵¹ The PCG Pooling Service Option Tennessee proposed combines all RSG produced with a methane emissions intensity of 0.20 percent or less in the same pooling point.⁵² EQT affirms that a 0.20 percent methane intensity as an industry goal is effective in reducing emissions because it falls substantially below the industry average methane intensity of 0.437 percent.⁵³ Considering EQT maintains a current methane emissions intensity of 0.054 percent, EQT believes that a tariff provision that treats all natural gas as equal under this 0.20 percent benchmark removes economic incentive to improve or maintain emissions at leading levels.⁵⁴ Furthermore, EQT raises serious concerns as to the impact of Tennessee's proposal on the RSG market. Particularly, they question how incentives, quantifiable measurement systems, and certification programs ultimately integrate into the PCG Pooling Service Option.⁵⁵

Considering the concerns of interested parties to Tennessee's proposal, FERC needed to determine if the proposal was "just and reasonable" in allowing the incorporation of PCG Criteria into its tariff. FERC does not provide criteria on what is "just and reasonable" under these circumstances, apart from the general considerations articulated in its review under the circumstances of this specific proposal. In its holding, FERC rejected Tennessee's proposal and found that Tennessee failed to demonstrate that

^{47.} *Id*. ¶ 6.

^{48.} *Id*. ¶ 7.

^{49.} Tennessee Gas Pipeline Co., 179 FERC \P 61,076.

^{50.} *Id*. ¶ 15.

^{51.} *Id*.

^{52.} Id.

^{53.} *Id*.

^{54.} *Id*.

^{55.} *Id*. ¶ 16.

^{56.} *Id*. ¶ 17.

incorporating the PCG Criteria into its tariff is just and reasonable.⁵⁷ Nevertheless, FERC rejected Tennessee's proposal without prejudice to Tennessee resubmitting the proposal filing without including the PCG Criteria.⁵⁸ FERC articulated several reasons for this decision.

First, because there are neither industry nor government-established standards for an RSG market, FERC had no guidance on how to review the proposal under Tennessee's proposed PCG Criteria. ⁵⁹ Presently, the RSG certification industry includes only a few third-party certification providers, with each provider offering various types of performance ratings, monitoring methods, and emissions-level determinations used. ⁶⁰ Without an established RSG certification industry standard, nor federal regulations for methane emissions in the oil and natural gas sector, FERC recommended Tennessee defer to market-driven initiatives to develop RSG organically instead of setting PCG Criteria with a specific methane emission level. ⁶¹

Additionally, Tennessee's failure to effectively manage its PCG Pooling Service Option could drive shippers from the RSG market and slow the development and acceptance of future RSG standards and third-party certification by driving away customer engagement in the area. Regardless, without adopting and implementing PCG Criteria, an aggregator could not qualify for, nor participate in, the proposed PCG Pooling Service Option. Accordingly, FERC decided that, because of its exclusivity to shippers and aggregators, Tennessee must exclude the PCG Criteria from its proposal. FERC emphasized that its rejection was made without prejudice to Tennessee resubmitting the proposal filing without including the PCG Criteria.

B. Statement of the Case.

In response to FERC's rejection, Tennessee filed a final proposal with the changes FERC requested: a resubmission of the amended proposal without the PCG Criteria. 66 Tennessee argued that it would be arbitrary and capricious to add the PCG Criteria back to its tariff, considering "[R]ejection

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57. Id.
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^{58.} *Id*. ¶ 22.

^{59.} *Id*. ¶ 19.

^{60.} Id.

^{61.} Id.

^{62.} *Id*. ¶ 20.

^{63.} Id. ¶ 21.

^{64.} *Id*.

^{65.} Id. ¶ 22.

^{66.} James Downing, Tennessee Pipeline defends request to sell 'responsible' gas product, CQ Roll Call (2022).

After its initial and amended proposals, Tennessee submitted revised tariff records on May 11, 2022, without the PCG Criteria in its tariff as requested by FERC in its rejection. it proposed the PCG Criteria be posted only on its website. This publication method allows for changes in response to evolving market needs, as emphasized by FERC in its opinion. To address concerns regarding notice of PCG Criteria changes to shippers, any changes to Tennessee's PCG Criteria on the website would take effect (1) no earlier than 30 days from the date of posting on the website, or (2) on the day immediately following the end of the certification period the shipper provided to Tennessee prior to the posting. Flexibility of PCG Criteria, as managed through Tennessee's website, assures market participants that their certified gas will be eligible for the Pooling Service Option.

Nevertheless, Tennessee's final proposal did little to quell the concerns of market participants. First, opponents of the final proposal argued that it violated NGA and FERC regulations. Peculiar Specifically, these regulations require natural gas companies to file "schedules showing all rates and charges for any transportation or sale subject to the jurisdiction of the Commission, and the classifications, practices, and regulations affecting such rates and charges, together with all contracts which in any manner affect or relate to such rates, charges, classifications, and services." Because the PCG Criteria constitute "terms and conditions of a service," opponents argued that the PCG Criteria are required to be included in the tariff and not just posted on the website.

Second, opponents to the final proposal pointed out that FERC rejected previous proposals to allow other pipelines to alter their PCG criteria unilaterally where it would affect shippers' services. 75 Accordingly,

^{67.} *Id*. ¶ 4.

^{68.} Tennessee Gas Pipeline Co., L.L.C., 179 FERC ¶ 61,233 (2022).

^{69.} *Id*. ¶ 5.

^{70.} *Id*.

^{71.} *Id*.

^{72.} *Id.* ¶ 9.

^{73. 15} U.S.C. § 171c(c).

^{74.} Tennessee Gas Pipeline Co., 179 FERC ¶ 61,233.

^{75.} Id. (citing Indicated Shippers v. Truckline Gas Co. LLC, 105 FERC ¶ 61,394 (2003)).

opponents proposed Tennessee should be barred from changing its PCG Criteria without first consulting its customers and shippers. ⁷⁶

Additionally, opponents of the third proposal reemphasized FERC's reasoning for rejecting Tennessee's initial proposal: Tennessee failed to meet its burden of showing that the proposal for a PCG Pooling Service Option is just and reasonable.⁷⁷ They argued that "in the absence of an established regulatory framework for the RSG market, Tennessee's proposal will leave all critical policy decisions regarding third party certifiers and the appropriate methane emission intensity level in the hands of the pipeline."⁷⁸

Finally, opponents voiced concerns that this third proposal may compromise FERC's regulation of price transparency in gas prices. ⁷⁹ Opponents commented that, if Tennessee's PCG sells at a higher premium than "non-certified" natural gas, consumers ultimately pay more without assurance that the product genuinely reduces methane emissions. ⁸⁰

Tennessee contended these opposing arguments. First, it rejected assertions that the proposal allows it to dictate the RSG marketplace. On the contrary, Tennessee stated that it is simply responding to the market demands for RSG by implementing a free, voluntary opportunity for a PCG Pooling Service Option within their pipeline. See Shippers maintain the option to transact bilaterally (i.e., direct to consumer) or seek other alternative shipping methods within Tennessee's pipeline. Also, Tennessee believes that, even if the PCG Criteria constitute "terms and conditions of a service," implementing the PCG Criteria into the tariff is unnecessary because it does not affect transportation rates or services; Tennessee's service is free with or without the PCG Pooling Service Option. Finally, Tennessee contends that environmental attributes of natural gas are outside of FERC jurisdiction. Accordingly, opponents may address concerns regarding compliance with emissions reduction regulation with the appropriate governing authorities.

Considering the concerns of interested parties to Tennessee's final proposal, FERC needed to decide if the amended proposal without the

^{76.} Tennessee Gas Pipeline Co., 179 FERC ¶ 61,233.

^{77.} *Id*. \P 10.

^{78.} *Id*.

^{79.} *Id*. ¶ 11.

^{80.} Id.

^{81.} *Id*. ¶ 12.

^{82.} Id.

^{83.} *Id*.

^{84.} Id. ¶ 13.

^{85.} Id. ¶ 14.

^{86.} *Id*.

incorporation of PCG Criteria into its tariff is just and reasonable.⁸⁷ In its holding, FERC found that, upon examination of the May 11 proposal to the tariff records, the proposal was just and reasonable because implementation of Tennessee's PCG Pooling Service Option provides further transparency and use for certified gas in Tennessee's pipeline without eliminating the service or rights of existing shippers.⁸⁸ Accordingly, FERC accepted Tennessee's proposal effective July 1, 2022, and required Tennessee to file a report summarizing its PCG Pooling Service Option operation by August 1, 2023.⁸⁹

In its reasoning, FERC affirmed that the PCG Pooling Service Option is free, voluntary, available to any customer who wants to use it, and, therefore, shippers are not required to designate their gas traded at Tennessee's pooling point as PCG. Nor does the PCG Pooling Service Option affect Tennessee's transportation service or rates charged for service. Paper Pooling simply indicates to customers that a subset of the pooled gas meets specified environmental criteria as a matter of accounting, as opposed to physical pooling in a supply. Additionally, the tariff does not permit Tennessee to transport gas that meets the PCG Criteria any differently from other gas. Finally, the service is free and does not affect rates. Therefore, this system does not affect transportation or rates because shippers may still use Tennessee's pooling service and are not limited to the PCG Pooling Service Option.

As to pricing, FERC emphasizes that shippers are still able to engage bilaterally (i.e., directly to consumer) in the pooling service without obtaining certification under the PCG Pooling Service Option. ⁹⁶ In doing so, they may agree to any price and any certification they choose. ⁹⁷ Finally, FERC addressed its jurisdiction to make determinations over certified gas standards: it may regulate transportation and sale of natural gas, but not its "production or gathering." Thus, FERC is limited in its jurisdiction to

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87. Id. ¶ 15.
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^{88.} *Id*.

^{89.} *Id.* ¶ 23.

^{90.} *Id.* ¶ 16.

^{91.} *Id*. ¶ 17.

^{92.} Id.

^{93.} *Id*.

^{94.} *Id*.

^{95.} Id. ¶ 16.

^{96.} *Id.* ¶ 20.

^{97.} Id.

^{98. 15} U.S.C. § 171(b).

regulate "gas production or the price of natural gas in bilateral transactions, including the maximum amount of methane that may be released during the production of natural gas." FERC is therefore careful to disclaim any determinations as to the quality of any natural gas in their approval of Tennessee's proposal. ¹⁰⁰

FERC Commissioner, James P. Danly, took issue with the exclusion of Tennessee's proposed PCG Pooling Service Option as a "classification, practice, and regulation" affecting jurisdictional rates, charges, and services included in the NGA. ¹⁰¹ According to the dissenting opinion issued by Danly, the argument that the tariff has no effect on jurisdictional rates and service is inaccurate because the PCG Pooling *Service* Option is plainly a jurisdictional *service*. ¹⁰² Therefore, any purported effect it may have on transportation is not dispositive. ¹⁰³ Accordingly, Danly believes Tennessee's proposal is still not "just and reasonable" under these circumstances. ¹⁰⁴

III. Analysis and Evolution in National Acceptance of RSG Certification Standards

FERC stated in its first opinion that it may, in other circumstances, determine it is just and reasonable to allow specific RSG criteria to be included in a tariff. ¹⁰⁵ The Commission also provided an example that, in the case that industry standards for RSG were developed, and the pipeline were merely acknowledging its adoption of those industry standards in a service, it would be a permissible request under the just and reasonable standard of the Commission. ¹⁰⁶ Nevertheless, FERC allowed Tennessee to maintain the PCG Criteria for its Pooling Service Option outside of its tariff, notwithstanding protests and concerns of market participants.

An issue presented by this result is the lack of a national or global RSG certification standard upon which the PCG Pooling Service Option can be modeled. Legislative recognition or standardization of RSG certification standards may provide a cognizable framework for industry standards and regulation in future implementation of similar PCG criteria. However, as these descriptions demonstrate, there is no clear standard developed to define

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99. Tennessee Gas Pipeline Co., L.L.C., 179 FERC ¶ 61,233 (2022).
100. Id. ¶ 22.
101. Id. (Danly, dissenting).
102. Id. ¶ 4.
103. Id.
104. Id. ¶ 6.
105. Tennessee Gas Pipeline Co., L.L.C., 179 FERC ¶ 61,076 (2022).
106. Id.
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RSG. Therefore, there exists no defined industry standard. As Ryan Lance states, "In the absence of a clear regulatory standard, gas suppliers are chasing a set of moving goal posts [and] until there is a way to fill in the diligence spreadsheet that will pass muster with the lawyers and accountants, the full benefit that may attend this opportunity will likely continue to elude us." ¹⁰⁷

Opponents of Tennessee's final proposed tariff revisions criticized the PCG Pooling Service Option, arguing that "in the absence of an established regulatory framework for the RSG market, Tennessee's proposal will leave all critical policy decisions regarding third party certifiers and the appropriate methane emission intensity level in the hands of the pipeline." However, with the federal adoption or synthetization of third-party certification standards, a standard could be reached to the environmental and economic benefit of many natural gas producers and consumers looking to enter into the RSG marketplace.

Because FERC is limited in its jurisdiction to regulate "gas production or the price of natural gas in bilateral transactions, including the maximum amount of methane that may be released during the production of natural gas," ¹⁰⁹ regulations as to the quality of any natural gas in proposed legislation may come from another governmental entity, such as the EPA.

IV. RSG Certification Providers

Services offered by RSG certification providers differ from independent emission reduction initiatives or commitments by independent energy companies, as they require the companies to rely on third-party relationships with providers to evaluate their companies based on predetermined achievement standards and practices. ¹¹⁰ Each certification provider has a unique approach to administering and monitoring these standards and practices, as there is no current industry or federal standard in place for RSG certification. ¹¹¹ In its amended proposal, Tennessee identifies Project Canary, SYSTEMIQ ("MiQ"), and Xpansiv Data Systems' ("Xpansiv") Digital Fuels Program as optional third-party certification vendors its customers may

^{107.} Ryan M. Lance, Sustainability 101, Wyo. Law. (2022), at 36.

^{108.} Tennessee Gas Pipeline Co., L.L.C., 179 FERC ¶ 61,233 (2022).

^{109.} *Id*. ¶ 22.

^{110.} Eunji Oh, Responsibly sourced gas: cleaner, greener and here to stay (Extract), Wood Mackenzie (2021).

^{111.} Tennessee Gas Pipeline Co., 179 FERC ¶ 61,076.

engage for an evaluation to meet the PCG Criteria for its tariff. ¹¹² The following section provides a comparative overview of Tennessee's selected models for PCG Criteria based on the following third-party RSG certification providers.

A. Project Canary

Project Canary defines RSG as "natural gas that has undergone independent 3rd party assessment that molecules were produced under specified environmental best practices." According to Project Canary, embracing RSG provides market differentiation for natural gas producers, facilitates sustainability and energy transitions, implements an immediate and significant decarbonization solution, and empowers buyers with natural gas options that meet their environmental standards and expectations. 114

On August 5, 2020, Project Canary joined with *Independent Energy Standards* ("IES"), the developer of the TrustWell certification, to form *International Environmental Standards*.¹¹⁵ This new company combines Project Canary's continuous emissions monitoring technology and IES's TrustWell certification process.¹¹⁶ Together, they produce data-driven reports on oil and gas companies' ESG performance.¹¹⁷ According to Project Canary C.E.O, Chris Romer, the partnership accomplishes providing "a market-based opportunity to differentiate their commodity in a meaningful way, receive a premium price and preserve the role of natural gas as a bridge fuel to a carbon-neutral economy."¹¹⁸

1. "TrustWell" Certification

Project Canary endeavors to provide certification assessments which differentiate companies and their operations based on responsibility and environmental stewardship.¹¹⁹ To achieve this endeavor, Project Canary develops and utilizes the TrustWell Ratings system to rate, certify, and

^{112.} Tennessee Gas Pipeline Co., L.L.C., 179 FERC ¶ 61,233 (2022).

^{113.} Responsibly Sourced Gas, Project Canary (2023). https://www.projectcanary.com/next-gen-energy/responsibly-sourced-gas/.

^{114.} Id. ¶ 2.

^{115.} Project Canary Merges with Independent Energy Standards. https://www.projectcanary.com/media/project-canary-merges-with-independent-energy-standards/.

^{116.} *Id*. ¶ 3.

^{117.} Id. ¶ 4.

^{118.} *Id*. ¶ 6.

^{119.} *TrustWell Assessment Overview*, Project Canary (2023). https://go.projectcanary.com/l/971793/2023-06-20/45x2v/971793/1687885936RddQsKnr/TrustWell_Assessment_Overview .pdf.

inspect RSG-producing facilities based on a developer's maintenance of Control Measures (internal processes) and Local Factors (the inherent risk profile of an operation) and their indication of potential threats at the wellsite. ¹²⁰ Local Factors are the unique set of risks and circumstances within the evaluated company's operation that are evaluated based on probability and consequence within its upstream operations, production, environmental, and community. ¹²¹ Control Measures evaluate the operator's response to local factors based on engineering and operational practices that the operator utilizes to mitigate inherent risks associated with Local Factors. ¹²² Control Measures are evaluated in consideration of well integrity, safety, environmental performance, and community categories. ¹²³ Finally, within these two evaluative categories are subcategories, against which the operator's practices evaluated against at least one of the four primary categories: air, water, land, and community. ¹²⁴

There are three primary phases across which operators are evaluated in the TrustWell assessment: Policy, Plan, and Execution. Policy reviews the standardized documentation and practices within the operation, Plan scrutinizes operations at pad-level and how such operations incorporate Policy standards, and Execution validates that policies and plans are being followed. The TrustWell standard is "robust, comprehensive, and rigorous" in its evaluation of these objectives, which it achieves through documentation review, subject matter expert interviews, and site inspections of wells, and continuous engagement with the companies it evaluates. 127

Based on TrustWell evaluations, operators may be granted a Silver, Gold, or Platinum TrustWell Rating. Patings are comprehensive at each level, and advancement requires heightened monitoring and documentation of efforts implemented in environmental programs, waste management, emergency response, spill prevention, and well integrity. Page 129

^{120.} Environmental Assessments (Trustwell 2.0), Project Canary (2023). https://www.projectcanary.com/solutions/trustwell/.

^{121.} TrustWell Assessment Overview. at 12.

^{122.} Id. at 19.

^{123.} Id.

^{124.} Id. at 2.

^{125.} Id. at 6.

^{126.} Id.

^{127.} Id.

^{128.} Id. at 70.

^{129.} Id. at 70-72.

2. Low Methane Rating

As for emissions tracking specifically, Project Canary requires operators to develop environmental programs and protocols to reduce emissions in times of normal and crisis conditions. Wey features of an environmental program to reduce emissions includes (1) sensor-based, continuous monitoring of facility events, equipment, and activities, (2) unintentional emissions surveys and prompt repair through cameras, drone detection, and leak response timelines, (3) mitigation of emissions under normal operating conditions through routine flaring and planned maintenance, and (4) technology and equipment implementation, such as continuous emissions monitors and controllers. 131

From this emissions data, Project Canary may grant qualifying developers a Low Methane Rating ("LMR"). The LMR system endeavors toward emissions certification transparency by implementing its measuring, reporting, and evaluating systems for onshore operation methane emissions and providing quantifiable evaluations of methane emission performances. Its key evaluative factors are methane intensity, carbon intensity, emissions best practices, monitoring technology and deployment and target setting. Notably, methane intensity must be calculated on an energy basis, comprised of emissions from *all* gas production and including sources outside of state and federal reporting obligations. Iss

The Minimum Qualification Requirements for a LMR include (1) basin-level methane intensity no higher than 0.20 percent, (2) pad-level methane intensity no higher than 0.20 percent, (3) carbon intensity calculations reported and reviewed, (4) implementation of baseline emissions reduction best practices at each emission source category, (5) publicly released corporate emissions targets and tracking criteria, (6) quarterly monitoring of source-level emissions and semi-annual flyover evaluations that include the site undergoing evaluation, and (7) semi-annual site-level monitoring or continuous site-level advanced monitoring on the site undergoing evaluation. Operators may a higher LMR A, AA, or AAA rating by meeting these Minimum Qualification Requirements, implementing further differentiated practices, and decreasing site-level emissions intensities to

^{130.} Id. at 23.

^{131.} Id. at 24.

^{132.} Id. at 25.

^{133.} Id.

^{134.} Id.

^{135.} Id. (emphasis added).

^{136.} Id.

0.10 percent (for an LMR AA rating) or 0.05 percent (for an LMR AAA rating. 137

B. Xpansiv Data Systems' (Xpansiv) Digital Fuels Program

The Xpansiv program cultivates a rule-based market through its Digital Fuels Program, intended for customers to achieve product differentiation based on their ESG performance. ¹³⁸ Its framework combines established energy market principles, sustainability standards, and emissions accounting through digital data recordings of fuel use which Xpansiv claims to be registered and broadly applicable throughout the industry. ¹³⁹

The primary areas of measurement for the Digital Fuels Program are, "1) a rigorous, minimum threshold for ESG-asset integrity, enabling emerging markets to move forward quickly and collectively to integrate and value ESG performance within the global commodity complex; and 2) Proof of StateTM, whereby production data and related activities are encrypted and subject to independent validation." According to Xpansiv stakeholders, "[T[his evidence-based proof of provenance enables participants to make informed decisions on the clear path to net-zero." Furthermore, the Xpansiv program requires the highest possible standards for methane emission controls in the natural gas industry at a threshold methane emissions intensity of 0.1 percent. 142

Within its Digital Fuels Program, Xpansiv provides standardized digital assets, that valuate low-emissions natural gas producers. ¹⁴³ One of these digital assets include Methane Performance Certificates ("MPCs"), which register the operator's intensity of methane emissions based on independently validated data from direct and continuous measurement of well pads and production facilities. ¹⁴⁴ The MPCs' empirical data and traceable sources of measurement allow Xpansiv customers to demonstrate

^{137.} Low Methane Rating (LMR) Evaluation Protocol Onshore Production, Project Canary (2023). https://go.projectcanary.com/l/971793/2023-04-28/3w3fm/971793/16881392 39C110ZN2P/Low_Methane_Rating__LMR__Protocol_V1.2.pdf.

^{138.} Xpansiv Publishes Digital Fuels Program to Accelerate ESG Transition in Fuels Sector, Xpansiv (May 13, 2021). https://xpansiv.com/xpansiv-publishes-digital-fuels-program-to-accelerate-esg-transition-in-fuels-sector/.

^{139.} *Id*. ¶ 3.

^{140.} *Id*. ¶ 4.

^{141.} Id. ¶ 6.

¹⁴² *Id*

^{143.} Digital Fuels Program Launch, Xpansiv (2022). https://xpansiv.com/digital-fuels-program-launch/.

^{144.} *Id.* \P 2.

their support of RSG, and to display their progress and commitment to methane emission reduction. 145

The Xpansiv Digital Fuels Program implements a "Quantification Framework" to calculate MPCs. 146 Through continuous monitoring, this method compares methane emission rates for individual natural gas production units against the average baseline of emission rates from the most current U.S. Greenhouse Gas Inventory. 147 The process begins with a Xpansiv customer engaging an Xpansive partner, such as Project Canary's TrustWell, Equitable Origin's EO100, Validere, or Clearstone Engineering's ClearTracker, to produce independent certification standards and methane emissions quantifications for the producer. 148 Next, the customer's empirical data gathered by the partners is converted to Digital Natural Gas ("DNG"), which Xpansiv collects and records to verify the customer's ESG attributes. 149 Finally, if the customer's threshold methane-emissions intensity does not exceed 0.1, that customer is eligible for an MPC. 150 Based on additional empirical data, Xpansiv offers additional certificates, including a "Guarantee of Origin" certificate, "Equitable Origin Certified DNG" certificate, and "Canary/TrustWell Responsibly Sourced Gas" certificate. 151

C. SysteMiQ "MiQ" Certification

The MiQ Standard provides an independent framework that evaluates producers' methane emissions in natural gas production and the company policies and practices of those natural gas producers. The framework serves as a "rulebook" to assess producing facilities' methane emissions management based on its operations. MiQ deploys independent, qualified, third-party auditors to apply the MiQ Standard to the facility seeking certification. Facilities are then graded on an A to F scale and issued a

^{145.} *Id*. ¶ 5.

^{146.} *Id.* ¶ 6.

^{147.} Id.

^{148.} DNG: MPC Data Flow/Asset Registration, Xpansiv (2022). https://xpansiv.com/digital-fuels-program-launch/.

^{149.} *Id*.

^{150.} Id.

^{151.} *Id*.

^{152.} The MiQ Standard, MiQ (2023). https://miq.org/the-technical-standard/.

^{153.} *Id.* ¶ 2.

^{154.} *Id.* ¶ 3.

certificate. ¹⁵⁵ Certificates are issued monthly and published on the public MiQ registry. ¹⁵⁶

The MiQ Standard has three units of measurement for evaluation. First, facilities are evaluated on their calculated intensity of methane emissions. ¹⁵⁷ This is formulated by dividing the methane emitted by the natural gas produced. ¹⁵⁸ According to the MiQ standard annual methane projections should include data comprised of "historical emission calculations, measurements, as well as detected leaks or abnormal process conditions from Facility Scale and Source Level methane monitoring surveys." ¹⁵⁹

Second, facilities are evaluated based on the frequency and manner in which they are monitored. In evaluating the facilities' monitoring practices, MiQ provides consideration to the implementation of reliable monitoring technology deployment at facility and source levels, such as through satellite, regional towers, airborne carriers, vehicles, perimeter sensor, and handheld devices. It is the producers' responsibility to deploy this monitoring technology to detect methane emissions frequently and thoroughly. The intent of this technology deployment is to detect repairs or replacements to systems, when necessary, which is vital to ensure effective emissions management.

The MiQ Standard requires two levels of monitoring technology deployment: (1) source-level and (2) facility-level. ¹⁶³ These varying levels of inspection ensure detection of smaller, component level leaks and abnormally high (super-emitter) emissions, to prevent overrepresentation of a majority of emissions (50 percent) deriving from a small number of sources (5 percent) typically found in the super-emitter category. ¹⁶⁴ Evaluation of these monitoring practices is based on frequency, spatial coverage, and minimum detection limits gathered at both source and facility levels. ¹⁶⁵

^{155.} *Id*. ¶ 4.

^{156.} Id.

^{157.} Subsidiary Document 1: Methane Intensity – Onshore Production, MiQ Standard for Methane Emissions Performance. https://miq.org/document/miq-standard-onshore/.

^{158.} Id. at 5.

^{159.} Id. at 4.

^{160.} Subsidiary Document 3: Monitoring Technology Deployment – Onshore Production, MiQ Standard for Methane Emissions Performance. https://miq.org/document/miq-standard-onshore/.

^{161.} Id. at 3-4.

^{162.} Id. at 10.

^{163.} Id. at 9-11.

^{164.} Id. at 5.

^{165.} Id. at 7.

Finally, facilities are evaluated on the company practices, policies, and procedures maintained for methane emissions management. He MiQ Standard provides mandatory general company practices and practices for managing and reducing intended and unintended methane emissions that are required for a facility to receive an MiQ Certification, including employee training and awareness, reporting methane emissions observations and incidents, estimating and measuring methane emissions, and continual improvement practices. He also provides optional policies and procedures that are necessary for achieving higher MiQ Certification grades, such as installing monitoring technologies, directing inspection and maintenance, and determining root cause analyses of unintended emission events. He burden rests on the producer to demonstrate these practices are documented, understood, and implemented throughout their facility, thereby making the application of this standard completely voluntary to producers.

After the producer's (1) methane intensity is calculated, (2) monitoring technology is deployed at facility and source levels, and (3) company policies and procedures for methane emissions management are established, an accredited third-party Certifying Body audits and verifies producer performance based on these categories and a grade based on the A to F scale is determined by MiQ.¹⁷⁰ The outcomes of which are evaluated and scored as follows:¹⁷¹

Calculated Intensity	Monitoring Technology Deployment	Company Practices	Grade
≤ 0.05%	Quarterly	Stringent	A
≤ 0.10%	Semi-Annually	High	В
≤ 0.20%	Semi-Annually	Medium	С
≤ 0.50%	Annually*	Mandatory Minimum	D
≤ 1.00%	Annually*	Mandatory Minimum	Е
≤ 2.00%	Annually*	Mandatory Minimum	F

^{*}Source-level only

^{166.} Subsidiary Document 2: Company Practices – Onshore Production. MiQ Standard for Methane Emissions Performance. https://miq.org/document/miq-standard-onshore/.

^{167.} Id. at 6-9.

^{168.} Id. at 9-10.

^{169.} *Main Document – Onshore Production*. MiQ Standard for Methane Emissions Performance. https://miq.org/document/miq-standard-onshore/.

^{170.} The MiQ Standard, MiQ (2023). https://miq.org/the-technical-standard/.

^{171.} *Id.* ¶ 3.

The goal of the MiQ grading scale is to consider and include various maintenance of methane emissions at facilities worldwide, which helps their system expand to the global market and include both young and established producers. 172 MiQ believes this market-inclusive approach will encourage progress toward emissions abatement and producer improvement. 173

V. RSG Certification Standards in Legislation

As FERC stated in its Tennessee opinion, "[c]urrently, there is no federal regulation for methane emissions in the oil and natural gas sector."174 Demand for independent certification of RSG is driven by investor expectations, product market differentiations for consumers, and potential for premiums on RSG products. 175 Accordingly, there is an increase in proposed state legislation regarding independently certified RSG. 176

Virginia introduced bipartisan Senate Bill 565 / House Bill 558, ¹⁷⁷ which permits natural gas utilities to include in their fuel portfolios substitute gas sources that meet certain reduced emission standards. 178 One such source includes "low-emission natural gas" defined as: "natural gas produced from a geologic source that has a methane intensity of 0.20 or less (i) as reported under a protocol approved by the federal Environmental Protection Agency's Gas STAR Methane Challenge, (ii) as certified by the United Nations Environment Programmer's Oil and Gas Methane Partnership 2.0, or (iii) as validated under a Qualified Attribute Commodities Platform." ¹⁷⁹

New Mexico also introduced the Hydrogen Hub Development Act ("HB4"), 180, which requires blue hydrogen production using exclusively RSG to qualify for incentives. ¹⁸¹ Incentives may include infrastructure funds and tax credits. In this context, RSG is a gas producing hydrogen defined as follows:

"meets the standard for methane gas allowed to be used in hydrogen hub projects as promulgated by the federal government

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172. Id.
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^{174.} Tennessee Gas Pipeline Co., L.L.C., 179 FERC ¶ 61,076 (2022).

^{175.} Independently Certified Gas in Legislation, Equitable Origin (Feb. 7, 2022). https://energystandards.org/certifiedgaslegislation/.

^{176.} *Id.* ¶ 2.

^{177. 2022} VA S.B. 565 (NS).

^{178.} Id.

^{179.} VA LEGIS 728 (2022), 2022 Virginia Laws Ch. 728 (S.B. 565).

^{180. 2022} NM H.B. 4 (NS).

^{181.} Independently Certified Gas in Legislation. ¶ 5.

pursuant to Title 8 of the federal Energy Policy Act of 2005; or (2) in the absence of a federal standard, is certified as responsibly sourced gas by an independent organization with the nationally recognized expertise to provide such certification as such independent organization and certification are approved by the department of environment."¹⁸²

Tennessee's *Tennessee Natural Gas Innovation Act* exemplifies legislation that recognizes RSG and incentivizes natural gas utility. ¹⁸³ The statute provides, "[A] public utility may request, and the commission may authorize, a mechanism to recover the costs related to the use or development of infrastructure to facilitate use of innovative natural gas resources for natural gas utility customers, if the commission finds that the costs are in the public interest." ¹⁸⁴ Evident by these legislative definitions, independent certifiers of RSG are increasingly recognizable components of the natural gas market.

VI. Conclusion

In its decision in *Tennessee Gas Pipeline Co., L.L.C.*, FERC ruled that without federal regulation for methane emissions in the oil and natural gas sector, Tennessee should defer to market-driven initiatives to develop RSG organically instead of setting PCG Criteria with a specific methane emission level. Nevertheless, FERC allowed Tennessee to maintain the PCG Criteria for its Pooling Service Option outside of its tariff, notwithstanding dissent and concerns of market participants and regulators alike. 186

The lack of a national RSG certification standard upon which the PCG Pooling Service Options can be implemented and facilitated poses an issue to which legislative standardization of RSG certification programs may be the solution. *Tennessee Gas Pipeline Co., L.L.C.* serves as an example of how, without industry or government-established standards for an RSG market, regulatory agencies have little guidance or national standard to review RSG program implementation proposals such as those integrated into Tennessee's proposed PCG Criteria. Variations across third-party certification providers' type of performance ratings, monitoring methods,

^{182. 2022} New Mexico House Bill No. 4, New Mexico Fifty-Fifth Legislative Session - Second Session 2022.

^{183.} Tenn. Code Ann. § 65-5-114 (West).

^{184.} Id. § 65-5-114(c).

^{185.} Tennessee Gas Pipeline Co., L.L.C., 179 FERC ¶ 61,076 (2022).

^{186.} Tennessee Gas Pipeline Co., L.L.C., 179 FERC ¶ 61,233 (2022).

and emissions-level determinations used promotes deference to marketdriven initiatives. However, without a standardization of criteria, there is considerable boundary dividing streamlined access to the environmental and economic benefits of a comprehensive, nationwide RSG marketplace.