



July 10, 2020

Mr. Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 East Seventh Place, Suite 350
St. Paul, MN 55101-2147

RE: Petition by CenterPoint Energy to Introduce a Renewable Natural Gas Interconnection Tariff

To Whom It May Concern:

The Coalition for Renewable Natural Gas (RNG Coalition) appreciates the Minnesota Public Utilities Commission's (Commission) approval of CenterPoint Energy's (CenterPoint) request to extend the comment period for Docket G-008/M-20-434, and for providing us with the opportunity to submit the following comments in reply to issues raised by other parties. As discussed in our previous comments,¹ RNG Coalition continues to believe that CenterPoint's Petition is a significant and necessary step forward in the development of Minnesota's renewable natural gas (RNG) resource and in achieving the State's greenhouse gas (GHG) reduction goals.

First and foremost, we applaud the significant support for RNG found in many parties' comments and the fact that even parties that currently hold some reservations about CenterPoint's Petition acknowledge that biogas and RNG will play important roles in decarbonizing Minnesota's economy.² For decarbonization efforts to be successful, we must expand, rather than limit, the set of technologies available.³

RNG Coalition's mission is to advocate for sustainable development, deployment and utilization of renewable natural gas so that present and future generations will have access to domestic, renewable, clean fuel and energy, in Minnesota and across North America. We appreciate the importance of strong dialogue around the environmental benefits of RNG. Accordingly, our comments below primarily

¹ RNG Coalition's initial comments are here:

<https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=showPoup&documentId={A072EC72-0000-C311-A381-434EA1A19F0A}&documentTitle=20206-164257-01>

² See page 2 of the comments submitted by Fresh Energy, MCEA, and Sierra Club (hereafter *Joint Environmental Parties' Comments*):

<https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=showPoup&documentId={E06CED72-0000-C61B-93FA-34A6717F16F8}&documentTitle=20206-164280-01>

³ We emphasize that our goal is not to oppose other alternatives that may help to accomplish the changes needed to meet the Minnesota's climate goals, including electrification where appropriate. RNG is a viable technology that is available today to help achieve near-term GHG goals and is part of the long-term solution to decarbonization. RNG is also a strong GHG reduction strategy for the sectors where emissions were found to be increasing in the most recent Minnesota Pollution Control Agency GHG report:

<https://www.pca.state.mn.us/sites/default/files/Iraq-2sy19.pdf>

provide our perspective on the issues related to environmental topics raised by Fresh Energy, Sierra Club, and the Minnesota Center for Environmental Advocacy (Joint Environmental Parties).

We Support Lifecycle Greenhouse Gas Accounting but Recommend that such Accounting be Included in Policies that Create Demand for RNG, not in Utility Interconnection Requirements

The Joint Environmental Parties highlight the importance of evaluating RNG projects to ensure that they achieve “sustainable carbon emissions benefits.”⁴ We agree that greenhouse gas accounting using lifecycle accounting (LCA)—sometimes called carbon intensity (CI) when expressed on an emissions per unit energy basis—is a key tool to ensure the development of sustainable RNG. However, we do not support CI analysis as a base requirement for pipeline interconnection or for inclusion in CenterPoint’s proposed tariff. Instead, we believe the proper place to conduct such accounting is in the public policies that create additional demand for RNG, because the full lifecycle of how the RNG is produced, moved to end market, and used should be considered when assessing the net GHG benefits of RNG use.

Full LCA has already been successfully included in multiple demand-side policies. For example, the California Low Carbon Fuel Standard and Oregon Clean Fuels Standard are largely⁵ responsible for the current incentive structure governing project development and subsequent RNG utilization in the U.S. Under these programs, projects with the lowest CI scores receive the greatest incentive.⁶ In the absence of a Minnesota-specific demand-side pull from a new policy, these programs in other states will set the framework for which Minnesota RNG projects get built.

Project-specific CI scores under the aforementioned policies are calculated via LCA accounting, which factors in GHG emissions and reductions from every step of the fuel production and utilization process.⁷ Each project-specific LCA is modelled using a version⁸ of the GREET model⁹ created by Argonne National Lab, which is widely accepted among regulatory agencies and the scientific community. Given the comprehensive and established nature of these tools, RNG Coalition strongly supports using LCA accounting and the GREET model in assessment of RNG projects. Should Minnesota (or an individual utility) develop programs that support the use of RNG, we recommend they build upon this framework.¹⁰

⁴ *Joint Environmental Parties’ Comments*, page 3

⁵ As layered atop the Federal Renewable Fuels Standard.

⁶ Voluntary programs for RNG—and the tools built to support such markets—are considering adopting the same general CI approach. See: <https://www.green-e.org/renewable-fuels> and <https://www.mrets.org/m-rets-renewable-thermal-tracking-system/>

⁷ CI inputs include but are not limited to feedstock production, fuel production (upgrading and processing), fuel transport, and fuel combustion.

⁸ The CA GREET (used by California LCFS) and OR GREET (used by Oregon CFS) are versions of Argonne National Lab’s GREET model which have been modified to include parameters specific to each jurisdiction.

⁹ More information about Argonne National Lab’s GREET model can be found [here](#).

¹⁰ While existing state-level low carbon fuel standard policies target the vehicle sector, this LCA framework can easily be adapted to other end uses (e.g., the building sector).

However, it is not helpful to require additional LCA in a supply-side interconnection framework because it will likely create conflicting (or at best duplicative) incentives with those set by demand-side programs. The work associated with LCA within the various demand-side programs is nontrivial but it of high importance to RNG development (because the LCA is tied to the financial value associated with such programs). We fail to see what benefit an additional supply-side requirement would create beyond reducing interest in projects within CenterPoint's service territory.

Methane Leakage Should Be Accounted for in Greenhouse Gas Accounting, but the Fact that RNG can be Delivered via the Existing Gas Systems is an Advantage not a Challenge

The Joint Environmental Parties correctly point out that encouraging the use of RNG close to where it is created (in order to minimize methane leakage) is one strategy—but certainly not the only strategy—to help minimize lifecycle emission from RNG. Luckily, the location of organic waste streams suitable for RNG production are often closer to demand centers than sources of conventional gas. Unluckily, not all states promote the use of RNG equally and sources of supply of RNG will not always perfectly match local demand.

Therefore, promoting trade in RNG between jurisdictions through a robust market with harmonized rules will ensure that the RNG is produced at the lowest cost for customers. RNG Coalition supports addressing the issue of methane leakage quantitatively in LCA analysis. For example, the LCA in the California LCFS accounts for leakage both at the project itself and during transmission and distribution of the RNG to California (which helps incent projects closer to California, all else equal). We note that, when this methane leakage is accounted for in the current tools, CI scores for RNG range from low-carbon to substantially carbon-negative even when RNG is moved significant distances to reach California.¹¹

Pipeline leakage from the existing gas transmission and distribution system is independent of RNG production and utilization and should also be properly accounted for in the counterfactual when determining the emissions benefits of RNG use (i.e., when making GHG comparisons to continued use of conventional gas or diesel fuel).¹² RNG is largely able to use existing gas infrastructure—usually less than a few miles of additional gas pipelines are required to interconnect an RNG project to the existing gas system. Therefore, RNG is a true “drop-in” substitute for conventional natural gas—unlike most other low-carbon energy carriers. Investments to improve the performance of the existing gas system implicitly help the CI of RNG projects, and large-scale use of RNG in the current system can create substantial climate benefits in the near-term, even as other longer-term strategies are undertaken to change the gas system over time.

¹¹ See the list of pathway certified carbon intensities under CA LCFS [here](#).

¹² Making comparisons of RNG's LCA performance relative to a hypothetical system with zero GHG emissions—as is done in the *Grubert 2020* study cited by Joint Environmental Parties—may be helpful from an academic perspective but is an unfair near-term point of comparison for RNG because no fully decarbonized alternatives exist today at scale. Methane leakage performance of RNG systems can be improved over time, just as the emissions from electric-sector-driven solutions can be reduced in the future as the power supplied to Minnesota's grid gets cleaner.

Deviations from Standards on a Case-by-Case Basis are Appropriate and Will Not Disrupt Air Pollution and Safety Requirements

The Joint Environmental Parties' Comments contain significant discussion of the local air pollution impacts of RNG and express concerns for allowing any deviation from interconnection specifications based on these concerns. We believe this discussion of air pollution impacts of RNG does not properly capture the literature on this issue and in some cases is fairly misleading.

For example, the Joint Environmental Parties highlight a 2020 study by the California Energy Commission (CEC), which examined exposure to combustion exhaust from RNG-fueled appliances with respect to toxic air contaminants. The Joint Environmental Parties use this study to claim that there is a need for future studies to determine safe standards for biogas and RNG. In fact, the overall conclusions of that CEC study were that "the combustion exhaust from biomethane exhibited *low levels of toxicity* similar to natural gas" and that "biogas and biomethane combustion exhaust is similar to natural gas combustion exhaust, meaning that the *renewable fuels can be safely used in California*."¹³

We certainly do not want to downplay the importance of properly conditioning RNG to ensure safety and system compatibility. Our members pride ourselves on being able to deliver RNG that is safe. However, allowing the utility and project developer some flexibility for deviation from gas quality standards on a case-by-case basis can allow for adaptable solutions to local challenges presented for each project.¹⁴

The Best Long-term End Use of RNG is Unknown at this Time

The Joint Environmental Parties' comments urge the Commission to consider what is the best long-run use of the biogas/RNG resources.¹⁵ Our perspective is that best long-term end use is unknowable at this time, given the dramatic shifts that must occur across all other aspects of the economy to achieve deep decarbonization. We recognize that RNG is viewed by many in the environmental community as a complementary technology in the decarbonization effort and will therefore not necessarily determine in which sectors gas demand is still present over the long-term. Therefore, RNG Coalition advocates for utilization of RNG in *all sustainable* end-use applications today.

There is currently very little incentive to use RNG in the end uses recommended by the Joint Environmental Parties in Minnesota. Until such a time where that changes, RNG interconnection should not be delayed or influenced by speculative assertions about where demand might be in the future. Demand exists today due to incentives for RNG set by other states (and the federal government) and there should be no unnecessary barriers imposed that would prevent projects in CenterPoint's service

¹³ Emphasis added. *Air Quality Implications of Using Biogas to Replace Natural Gas in California*. California Energy Commission. 2020. (See pages iii and 3.) <https://ww2.energy.ca.gov/2020publications/CEC-500-2020-034/CEC-500-2020-034.pdf>

¹⁴ For example, in our opening comments we point to such a proposal from the California gas utilities to allow for deviations in heating value requirements. See the proposed Joint Utility Renewable Gas Interconnection Rule proposed by the California gas utilities: <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M319/K526/319526436.PDF>

¹⁵ *Joint Environmental Parties' Comments*, page 1.

territory serving that demand and capturing the local economic benefits for Minnesota associated with such activity.

We are not opposed to the Commission (or other Minnesota policymakers) evaluating the best long-run end-uses of RNG and developing targeted incentive programs,¹⁶ but such evaluation should not delay a framework for interconnection of shovel-ready RNG in CenterPoint's service territory today. In states that have done quantitative analysis of high building electrification scenarios, projected total demand for gas (which could be served by RNG) still remains significant relative to current demand for RNG very far into the future.¹⁷ This general result can likely be extrapolated for Minnesota as well.

Given this reality, we recommend recognizing the optionality created by pipeline-injected projects. Allowing RNG into the pipeline creates the ability to move that RNG over time to the sector that needs it the most. Steps should be taken to assure market access for all viable pipeline-interconnected sources of RNG, and support should also be given for the use of pipeline alternatives such as virtual pipelines (trucking of RNG) if necessary.¹⁸

Conclusion

RNG Coalition appreciates the opportunity to submit reply comments to the Commission on this matter. The implementation of CenterPoint's petition would represent a significant milestone for decarbonization of Minnesota's gas sector.

Continued efforts of this sort will be essential in achieving Minnesota's ambitious climate change goals and taking smart action on RNG will demonstrate Minnesota's leadership in this area. As such, RNG Coalition respectfully urges the Commission to approve CenterPoint's petition with the modifications suggested in our prior comments.

Sincerely,



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¹⁶ CenterPoint's previously proposed RNG pilot program would serve as a significant starting point for such an effort.

¹⁷ For example, see pg. 35 of the California Energy Commission report entitled *The Challenge of Retail Gas in California's Low Carbon Future*, which finds that natural gas in California's residential, commercial, and industrial sectors is still ~1,000 tBtu in 2050 in the high-building-electrification case:
<https://ww2.energy.ca.gov/2019publications/CEC-500-2019-055/CEC-500-2019-055-F.pdf>

¹⁸ It is important to note here that transportation based GHG emissions from the movement of RNG can be properly captured in well-designed LCA GHG accounting frameworks.