



505 Nicollet Mall
PO Box 59038
Minneapolis, MN 55459-0038

May 7, 2021

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 Carbon Accounting Framework for Renewable Natural Gas and Threshold Carbon Intensity for Interconnection Producers
Docket No. G-008/M-21- ____

Dear Mr. Seuffert:

CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Minnesota Gas ("CenterPoint Energy" or the "Company") respectfully submits the following petition to the Minnesota Public Utilities Commission ("Commission") for approval of a carbon intensity framework for Renewable Natural Gas ("RNG") and a threshold carbon intensity requirement for RNG interconnection producers as required by the Commission's January 26, 2021 Order ("Order") in Docket No. G-008/M-20-434.

Please contact me at (612) 321-4334 or erica.larson@centerpointenergy.com with any questions.

Sincerely,

/s/ Erica Larson

Erica Larson
Counsel, CenterPoint Energy Minnesota Gas

C: Service List

**STATE OF MINNESOTA
BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION**
121 Seventh Place East, Suite 350
St. Paul, MN 55101-2147

Katie Sieben	Chair
Valerie Means	Commissioner
Matt Schuerger	Commissioner
Joseph Sullivan	Commissioner
John Tuma	Commissioner

In the Matter of a Petition by CenterPoint Energy
To Introduce a Carbon Accounting
Framework for Renewable Natural Gas and a
Threshold Carbon Intensity for
Interconnection Producers

Docket No. G-008/M-21-___

PETITION

I. Introduction

CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Minnesota Gas, (“CenterPoint Energy” or the “Company”) respectfully submits the following Petition to the Minnesota Public Utilities Commission (“Commission”) as required by the Commission’s January 26, 2021 Order (“Order”) in Docket No. G-008/M-20-434.¹ Order Point twelve requires the Company to file a proposal for a carbon intensity accounting framework to evaluate and verify the carbon intensity of different Renewable Natural Gas (“RNG”) sources and propose a threshold carbon intensity requirement for RNG interconnection producers.

The Company hired EcoEngineers to develop a RNG carbon intensity accounting framework for Minnesota. EcoEngineers is a renewable energy consulting firm specializing in low-carbon fuels. EcoEngineers is an approved third-party auditor for the California Low-Carbon Fuel Standard (“LCFS”) program and one of only three third-party auditors approved by the U.S. Environmental Protection Agency (“EPA”) for the Renewable Fuel Standard (“RFS”) program.² Since 2015, EcoEngineers has performed over 200 carbon life-cycle analyses for clean energy projects.

The Company and EcoEngineers developed the proposed carbon accounting framework and threshold carbon intensity requirement based on consultation with Center for Energy and the Environment, Fresh Energy, Minnesota Center for Environmental Advocacy, the Sierra Club,

¹ *In the Matter of the Petition by CenterPoint Energy (CPE) to Introduce a Renewable Natural Gas Interconnection Tariff*, Docket No. G-008/M-20-434, Order Approving Renewable Natural Gas Interconnection Framework and Tariff with Modifications (Jan. 26, 2021).

² *Approved Quality Assurance Plans and Q-RIN Pathways under the Renewable Fuel Standard*, U.S. ENVTL. PROTECTION AGENCY (last accessed April 14, 2021), <https://www.epa.gov/fuels-registration-reporting-quality-and-compliance-help/approved-quality-assurance-plans-and-q-rin-pathways>.

Mr. Will Seuffert
Docket No. G-008/M-21-____
April 26, 2021
Page 2

Xcel Energy, the Minnesota Department of Commerce, the Minnesota Pollution Control Agency, the Renewable Natural Gas Coalition, and the American Biogas Council.

The Company submits the following Exhibits in support of its Petition:

- Exhibit A: Proposed Carbon Accounting Framework;
- Exhibit B: Proposed Simplified Calculator for RNG from Dairy/Swine Manure;
- Exhibit C: Proposed Simplified Calculator for RNG from Food Waste;
- Exhibit D: Proposed Simplified Calculator for RNG from Wastewater Treatment; and
- Exhibit E: Proposed Simplified Calculator for RNG from Landfill.

II. Summary of Filing

A one-page summary is attached to this filing pursuant to Minn. R. 7829.1300, subp. 1.

III. Service on Other Parties

Pursuant to Minn. R. 7829.1300, subp. 2, the Company has served a copy of this filing on the Department of Commerce and the Office of the Attorney General – Residential Utilities Division. A summary of this filing has been served on all parties on the enclosed service lists.

IV. General Filing Information

Pursuant to Minn. R. 7829.1300, subp. 3, the Company provides the following information:

A. Name, Address, and Telephone Number of Utility

CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Minnesota Gas,
a Delaware Corporation
505 Nicollet Mall
PO Box 59038
Minneapolis, Minnesota 55402
(612) 372-4664

B. Name Address, and Telephone Number of Utility Attorney

Erica Larson, Counsel
505 Nicollet Mall
Minneapolis, Minnesota 55402
(612) 321-4334
Erica.Larson@centerpointenergy.com

C. Date of Filing and the Date the Proposed Rate or Service Change Will Take Effect

Date Filed: April 26, 2021
Effective Date: Upon Commission Approval

D. Statute Controlling Schedule for Processing the Filing

CenterPoint Energy is unaware of any statute or rule that controls the timeframe for processing this filing. Under Minn. R. 7829.0100, subp. 11, this petition is a “miscellaneous” filing because not determination of CenterPoint Energy’s revenue requirement is necessary. Comments on a miscellaneous filing are due within 30 days of filing, with replies due 10 days thereafter.³

E. Utility Employee Responsible for Filing

Erica Larson
Counsel, CenterPoint Energy Minnesota Gas
(612) 321-4334
Erica.Larson@centerpointenergy.com

F. Description of the Filing, Its Impact on Rates and Services, Its Impact on Any Affected Person, and the Reasons for the Filing

In this filing, the Company proposes a lifecycle carbon accounting framework for assessing projects that connect to a Minnesota natural gas utility system as required by the Commission’s January 26, 2021 Order (“Order”) in Docket No. G-008/M-20-434. The Company also proposes to set the threshold for carbon intensity for interconnecting renewable natural gas producers equal to the carbon intensity of geologic gas in the system to which the producer is interconnecting.

V. Miscellaneous Information

CenterPoint Energy requests that the following employees be included in the service list for this proceeding.

Amber S. Lee
CenterPoint Energy
505 Nicollet Mall
PO Box 59038
Minneapolis, MN 55459-0038
Amber.lee@centerpointenergy.com

³ Minn. R. 7829.1400, Subp. 1, 4.

Mr. Will Seuffert
Docket No. G-008/M-21-____
April 26, 2021
Page 4

Erica Larson
CenterPoint Energy
505 Nicollet Mall
PO Box 59038
Minneapolis, MN 55459-0038
Erica.larson@centerpointenergy.com

Seth DeMerritt
CenterPoint Energy
505 Nicollet Mall
PO Box 59038
Minneapolis, MN 55459-0038
Seth.demerritt@centerpointenergy.com

VI. Overview of Proposed Carbon Intensity Framework

Renewable Natural Gas (“RNG”) is “pipeline-compatible gaseous fuel that has been derived from the anaerobic biological decomposition of organic materials and has lower lifecycle carbon dioxide equivalent emissions than geological natural gas.”⁴ The lifecycle carbon dioxide equivalent emissions of RNG are lower than fossil natural gas because RNG is produced from organic waste material that contains recently sequestered carbon. When RNG is combusted, this recently sequestered carbon is released back into the atmosphere. In contrast, combustion of geologic natural gas releases carbon that has been sequestered for millions of years.

The extent to which RNG reduces carbon dioxide equivalent emissions depends on the carbon intensity of the feedstock and the production process. Carbon intensity (“CI”) is the total measure of greenhouse gas emissions involved in producing, distributing, and consuming a fuel. CI is measured in terms of greenhouse gases (“GHG”) emitted, calculated in comparison to carbon dioxide emissions per unit of energy produced (measured in grams of carbon dioxide equivalent per megajoule of energy or gCO₂e/MJ).

The CI of both RNG and geologic natural gas can be calculated using a life-cycle assessment (“LCA”) which measures the overall GHG emissions of a fuel source including emissions from production, transportation of the fuel, and the end use. An LCA for RNG includes emissions related to feedstock production and transportation, feedstock processing, transportation and distribution of the RNG, and the end use of the finished fuel. There are several commercial and open access LCA tools available for life-cycle carbon accounting.

⁴ *In the Matter of the Petition by CenterPoint Energy (CPE) to Introduce a Renewable Natural Gas Interconnection Tariff*, Docket No. G-008/M-20-434, Order Approving Renewable Natural Gas Interconnection Framework and Tariff with Modifications (Jan. 26, 2021) at Order Point 1(C)(1).

The Commission ordered that the Company file a proposal for an accounting framework to evaluate and verify the CI of RNG sources and validate its effectiveness in reducing carbon emissions.⁵ The Company includes its proposed Carbon Accounting Framework in Exhibit A.

The Company’s proposed Carbon Accounting Framework (“MN-GREET”) uses a modified version of the *Greenhouses gases, Regulated Emissions, and Energy use in Technologies Model* (“GREET”) life-cycle assessment model to measure CI for both RNG and geologic natural gas. The GREET model is widely used and is maintained and updated by the Department of Energy’s Argonne National Laboratory. Among other things, GREET is the basis for LCA assessment conducted for the California Low Carbon Fuel Standard and the Oregon Clean Fuels Program.

MN-GREET, like all versions of the GREET model, calculates the CI of RNG using a combination of producer-specific information and assumed multipliers and factors. Some key inputs and assumptions are identified in the table below:

Table 1: Key Inputs and Assumptions MN-GREET Clean Up to End Use Stages⁶

Stage of RNG Lifecycle	Key Inputs	Key Assumptions
RNG Clean Up	Quantity of electricity use per unit of RNG Quantity of geologic natural gas and other fuels used per unit of RNG	CI of electricity ⁷ CI of geologic natural gas or other fuels Methane leakage from clean up equipment
RNG Transportation	Miles transported to end use customer	Leakage rate per mile transported
RNG End Use		Emissions resulting per unit of RNG combusted

As shown in the table above, the basic methods for calculating emissions from the clean-up to end-use stages are similar for all types of RNG.⁸ However, the methods for calculating

⁵ *In the Matter of the Petition by CenterPoint Energy (CPE) to Introduce a Renewable Natural Gas Interconnection Tariff*, Docket No. G-008/M-20-434, Order Approving Renewable Natural Gas Interconnection Framework and Tariff with Modifications (Jan. 26, 2021) at 21.

⁶ This table is a very simplified representation of key inputs and assumptions needed to calculate CI. See Exhibits B-E for more details on how CI is calculated depending on feedstock.

⁷ As discussed further below, producers will be given an option to use a default CI value for electricity or may use a facility specific value. Producers who purchase or generate and use renewable electricity may claim a lower CI for their facility’s electricity use.

⁸ The numerical inputs and assumptions are not the same for each feedstock. However, the methods used to calculate CI are broadly similar.

emissions or avoided emissions from RNG feedstock production and feedstock transportation vary greatly depending on the feedstock for the RNG. There are four main feedstocks for RNG:

- Dairy and swine manure;
- Food scraps, urban landscaping waste, and other organic waste;
- Wastewater treatment plant; and
- Landfill gas.

The table below describes some of the key inputs and assumptions required for each feedstock.

Table 2: Key Inputs and Assumptions MN-GREET Feedstock Production/Transport Stage⁹		
Feedstock	Key Inputs	Key Assumptions
Livestock manure	<p>Baseline manure disposal system (e.g. manure lagoon, composting, etc.)¹⁰</p> <p>Number of animals producing manure</p> <p>Distance manure was transported to RNG production facility</p>	<p>Methane emissions per animal in baseline system</p> <p>Weight of manure produced per animal</p> <p>Emissions per pound of manure transported per mile</p>
Organic Waste	<p>Quantity in weight of organic waste and type of waste</p> <p>Distance food waste was transported to processing facility</p>	<p>Methane emissions per ton of organic waste landfilled</p> <p>Emission per pound of food waste transported per mile</p> <p>Percentage of organic waste that would have been landfilled if not for RNG project</p>
Wastewater Treatment		<p>Baseline assumption is anaerobic digestion so no significant emissions or avoided emissions from feedstock production stage</p>
Landfill		<p>Baseline assumption is landfilling so no significant</p>

⁹ This table is a very simplified representation of key inputs and assumptions needed to calculate CI. See Exhibits B-E for more details on how CI is calculated depending on feedstock.

¹⁰ See Section VII for more discussion of the appropriate baseline for manure RNG projects.

		emissions or avoided emissions from feedstock production stage
--	--	--

EcoEngineers has developed simplified calculators for each of the feedstocks identified above and they are attached as Exhibits B through E. If an RNG project will use another feedstock or a combination of feedstocks, the project may use a modified version of a simplified calculator or apply the full MN-GREET model to determine CI.

MN-GREET compares the CI of RNG to the CI of geologic natural gas used for thermal applications to quantify emissions reductions. MN-GREET also allows the CI of RNG to be compared to other products such as petroleum gasoline, diesel, and compressed natural gas used as vehicle fuel. As discussed further below, CenterPoint Energy proposes to calculate emissions reductions in two ways for each project: (1) by assuming that the RNG will be used in Minnesota for thermal application; and (2) using the end use and end-use location of the RNG reported by the RNG producer. Table 3 below illustrates how emissions reductions will be calculated for a theoretical RNG project.

Table 3: Example Calculation of Emissions Reductions¹¹		
Inputs and Assumptions		
1	Quantity of RNG Produced in One Year	100,000 Dth = approximately 100 million MJ
2	CI of RNG when Used in MN for Thermal Application	30 gCO ₂ e/MJ
3	CI of Geologic Gas when Used in MN for Thermal Application	70 gCO ₂ e/MJ
4	Producer reported end use	Vehicle fuel
5	Producer reported end use location	California
6	CI of RNG when Transported to CA and Used in Vehicle	50 gCO ₂ e/MJ
7	CI of Gasoline when Used in Vehicle in CA	100 gCO ₂ e/MJ
Method 1: Compare to MN Thermal		
8	Emissions from RNG Thermal Use in MN (Line 1 x Line 2)	3,000 million gCO ₂ e = 3,000 metric tons CO ₂ e
9	Emissions from Equivalent amount of Natural Gas Thermal Use in MN (Line 1 x Line 3)	7,000 million gCO ₂ e = 7,000 metric tons CO ₂ e
10	Emissions Reduction (Line 9 – Line 8)	4,000 metric tons CO ₂ e
Method 2: Compare to Producer Identified End Use and Location		
11	Emissions from RNG Vehicle Use in CA (Line 1 x Line 6)	5,000 million gCO ₂ e = 5,000 metric tons CO ₂ e
12	Emissions from Equivalent Amount of Gasoline (Line 1 x Line 7)	10,000 million gCO ₂ e = 10,000 metric tons CO ₂ e

¹¹ Values in the table are for illustration only.

13	Emissions Reduction (Line 12 – Line 11)	5,000 metric tons CO2e
----	---	------------------------

VII. Stakeholder Engagement

As required by the Order, the Company and EcoEngineers developed and modified MN-GREET based on consultation with the Center for Energy and the Environment (“CEE”), Fresh Energy, Minnesota Center for Environmental Advocacy (“MCEA”), the Sierra Club and other interested stakeholders.¹² The Company held a series of initial stakeholder meetings in early March. The following stakeholders attended the meetings and provided feedback on the initial framework: CEE, Fresh Energy, MCEA, the Sierra Club, Xcel Energy, the Minnesota Department of Commerce (“Department”), and the Minnesota Pollution Control Agency (“MPCA”). Following these meetings, the Company and EcoEngineers incorporated stakeholder feedback and modified MN-GREET. The revised framework was distributed to stakeholders for review and feedback was subsequently provided to the Company and EcoEngineers at a meeting on April 9, 2021. Additional feedback was provided by email after the April 9, 2021 meeting.

CenterPoint Energy thanks the stakeholders for their active participation and valuable feedback. Below, the Company discusses some of the items that were discussed with stakeholders.

A. Interest in Keeping MN-GREET as Simple as Possible

During the stakeholder engagement process, stakeholders expressed an interest in modifying existing LCA models from other jurisdictions and keeping MN-GREET as simple as possible. Based on this interest, EcoEngineers developed MN-GREET based on a simplified *Greenhouse gases, Regulated Emissions, and Energy use in Technologies Model* (“GREET”). GREET is an open access LCA model that is updated annually and supported by the U.S. Department of Energy. EPA uses GREET to monitor clean fuels. California and Oregon also use modified versions of GREET to calculate CI to ensure compliance with state low-carbon fuel standards. To further simplify MN-GREET, EcoEngineers developed four GREET calculators to be used in quantifying CI for RNG produced from landfill gas; wastewater treatment plants; dairy and swine manure; and food scraps, urban landscaping waste, and other organic waste, attached as Exhibits B through E.

B. Methane Leakage Assumptions

One of the stakeholders requested that the Company and EcoEngineers consider studies that estimate higher rates of methane leakage from the geologic gas supply chain, and in particular a specific study by Alvarez et al.,¹³ when setting the baseline for fugitive methane emissions as opposed to using estimates developed by EPA. Methane leakage estimates for the geologic gas

¹² *In the Matter of the Petition by CenterPoint Energy (CPE) to Introduce a Renewable Natural Gas Interconnection Tariff*, Docket No. G-008/M-20-434, Order Approving Renewable Natural Gas Interconnection Framework and Tariff with Modifications (Jan. 26, 2021) at 21.

¹³ Alvarez, R., et al., 2018, Assessment of methane emissions from the U.S. oil and gas supply chain, Science, DOI: 10.1126/science.aar7204.

supply chain can be divided into emissions from the wellhead, emissions from transmission, and emissions from distribution. The Alvarez et al. study concludes that EPA emissions factors may be significantly underestimated, particularly with respect to wellhead emissions.

CenterPoint Energy is proposing to use the EPA emissions factors rather than factors estimated by Alvarez et al. or other studies for two primary reasons. First, to the extent that EPA factors are underestimates of methane leakage from the gas supply chain (i.e., wellhead, transmission, and distribution), that means that using them will result in conservative estimates of the emissions reduction that can be achieved by an RNG project. Increasing our estimate of wellhead emissions would increase the CI for geologic gas but not for RNG. Increasing our estimate of transmission and distribution emissions would increase the CI of both RNG and geologic gas. Overall, using the Alvarez et al. study would improve the CI of RNG relative to geologic gas. Second, the EPA emissions factors are the only estimates available based on a national inventory of emissions. They are reviewed and updated annually. Argonne National Laboratory, which developed and continues to update the GREET model, has considered the implications of the Alvarez et al. study and selected continuing to use EPA values as the GREET default.¹⁴

C. Baseline for Manure RNG

Stakeholders inquired whether MN-GREET's baseline for livestock facilities assumed disposal of animal waste in lagoons or through composting. The baseline assumption for livestock manure disposal affects the CI calculation for RNG produced from animal manure. Many Minnesota farmers use manure lagoons which generally release significant amounts of methane. However, some farmers handle manure in ways that produce fewer GHG emissions (e.g. composting, land applying, etc.). Some stakeholders suggested that the baseline should be whatever process the farm was using immediately prior to beginning RNG production to most accurately reflect GHG emissions reductions from the RNG project. Other stakeholders expressed concern that using farm practices from immediately before the RNG project would have the effect of penalizing farmers who had voluntarily chosen more environmentally friendly practices in the past. One stakeholder noted that Minnesota Rules Chapter 7020 contains some provisions that may limit the use of manure lagoons for new or expanded animal feedlots.

For facilities with practices that exceed the minimum legal standard, CenterPoint Energy is proposing to consider waste disposal practices for animal manure facilities on a facility-by-facility basis with a lookback period to align with Minnesota's greenhouse gas emissions-reduction goal

Commented [ERL1]: EcoEngineers is looking into the legal limitations in Minnesota and we will add some additional detail.

¹⁴ A. Burnham, Updated Natural Gas Pathways in GREET1_2019 Model, Argonne National Laboratory, October 2019, available at https://greet.es.anl.gov/publication-update_ng_2020 ("In 2018 we added the option to use emissions data from Alvarez et al. (2018) for GREET... However we continue to use the latest EPA GHGI to update default CH4 emissions data in GREET. We find the EPA GHGI to be the best data source that provides detailed process-level emissions needed to update GREET. As the EPA updates its GHGI annually, we will continue to evaluate the latest data in this area and update GREET accordingly.").

based on 2005 emissions.¹⁵ Under this standard, a farm that had a manure lagoon in 2005 but later voluntarily began composting could claim emissions reductions in relation to a manure lagoon baseline. However, a farm that began composting prior to 2005 would have to use composting as the baseline. If a farm began composting as a condition of a Minnesota Pollution Control Agency permit or other legal/regulatory requirement it would have to use composting as the baseline regardless of when that requirement came into effect for the facility. The Company believes that a lookback period in line with the timing of Minnesota GHG reduction goals will allow stakeholders and the Commission to assess whether the RNG project could help the state achieve its GHG reduction goals while not penalizing farmers that have been early adopters of more environmentally-friendly practices voluntarily.

D. Baseline for Organics Recycling

CenterPoint Energy is proposing landfilling as a baseline for RNG from organics recycling facilities. It is assumed that 75% of methane produced by landfills is flared, but that landfills fail to capture 25% of the methane produced. Accordingly, renewable natural gas produced from organics is assumed to avoid methane that would be leaked from landfills.

One stakeholder questioned whether it was appropriate to use landfilling as the baseline given Minnesota statutory recycling goals. Minnesota Statutes 115A.551 sets goals for counties outside of the metro area to recycle 35 percent of their waste by 2030 and counties inside the metro area to recycle 75 percent of their waste by 2030. CenterPoint Energy notes that the statutory recycling goal is not targeted specifically at organics recycling, but includes recycling of materials such as paper, plastic, and metal. The Company is not aware of any state statute or regulation mandating the recycling of organics, in particular.

The Partnership on Waste and Energy has noted the organics recycling will be necessary for the metro area counties to meet their 75 percent recycling goal.¹⁶ However, the same is likely not true for counties outside of the metro area to reach their 35 percent goal. State law provides counties with discretion regarding whether and to what extent they utilize organics recycling or other forms of recycling to achieve their goal. Accordingly, the Company believes it is still appropriate to utilize a landfilling baseline for organics recycling projects. It is still likely that but for the renewable natural gas project, the organic waste would have been landfilled and not recycled.

E. Assumptions for Electricity

The CI of electricity used in biogas clean up processes is one input into determining the CI of RNG. MN-GREET generally follows California's GREET by assuming a regional electricity CI score as a default value. However, in response to a request to allow RNG producers to claim a lower CI when they purchase or generate low- or no-carbon electricity, MN-GREET will allow

¹⁵ See Minn. Stat. § 216H.02, subd. 1.

¹⁶ Petition by CenterPoint Energy to Introduce a Renewable Natural Gas Interconnection Service, Docket No. G-008/M-20-424, Partnership on Waste and Energy Comments (June 25, 2020).

the input of alternative emissions factors for projects that use electricity generated from low- or no-carbon resources.

F. Comparison with Minnesota Thermal Application or Expected Near-Term RNG Use

Stakeholders discussed whether the CI calculation for RNG and calculation of emissions reductions attributable to the RNG project should assume thermal use in Minnesota or use the actual near-term use of the RNG as reported to the Company by the interconnecting producer. On the one hand, comparing with the actual near-term use reported by the producer (e.g. vehicle fuel use in California) will result in the most accurate near-term CI and emissions reduction figures. On the other hand, the near-term use of the RNG may be only a short-term decision unlike the investments made to interconnect an RNG producer. Many stakeholders, including the Company, are interested in using Minnesota produced RNG in state for thermal applications so not considering the potential of interconnecting RNG projects to eventually contribute to reducing Minnesota emissions from natural gas use seems short-sighted.

The Company proposes to collect and report CI and emissions reductions based on both the actual near-term use of the RNG, as reported by the producer, and as if the RNG were being used for thermal applications in Minnesota. However, for determining whether a proposed RNG project satisfies the Company's proposed CI threshold for interconnection, the Company proposes to assume thermal use in Minnesota.

VIII. RNG Interconnection Threshold

The Commission ordered that the Company file a proposal for a CI threshold required for RNG interconnection. The Company proposes to set its CI threshold equal to 71.73 gCO_{2e}/MJ, which is the approximate CI of geologic natural gas in Minnesota distribution systems. The Company does not anticipate that any RNG project will have difficulty satisfying this threshold.

IX. Implementation and Reporting

In accordance with the Commission's January 26, 2021 Order in Docket No. G-008/M-20-434, the Company will file a compliance filing within 30 days of accepting a producer's RNG into its system. As required by Order point 10, this filing will include information about the producer's feedstock or feedstocks; the total amount of RNG expected to be provided by the producer; the mix of end-uses of the digestate; the state(s) in which the entity or entities purchasing RNG are located and the end-use of the purchased RNG; methane leakage control and mitigation measures employed; estimated methane leakage for the producer and the methodology used to develop the estimate; and analysis of the lifecycle GHG emissions.

Beginning in 2022, the Company will file an annual compliance filing by February 1, including the following information from the previous year:

- Total number of interconnected RNG producers supplying RNG;
- Amount of RNG volumes taken onto the system in total and from each producer

- Mix of feedstock used by these producers;
- Volumes of RNG provided to the system broken out by primary feedstock;
- Mix of end-uses of the digestate for each interconnected producer;
- Estimated RNG methane emissions in total and broken out by primary feedstock and a description of the methodology used to estimate emissions;
- Estimated lifecycle GHG emissions in total and broken out by primary feedstock compared to lifecycle GHG emissions of geologic natural gas on the Company's system and a description of the methodology used; and
- Updated information for each interconnected RNG producer in compliance with Order point 10.

The Company will use the carbon accounting framework described in this filing to calculate estimated lifecycle GHG emissions reductions for each RNG project in its RNG-related compliance filings.

X. Conclusion

In accordance with the Commission's Order, the Company proposes to utilize MN-GREET to determine the CI of different RNG sources and to validate the effectiveness of RNG in reducing carbon emissions. This Framework was developed based on extensive consultation with CEE, Fresh Energy, MCEA, the Sierra Club, and other interested stakeholders. Additionally, the Company proposes a CI threshold of 71.73 gCO_{2e}/MJ for RNG interconnection producers based on the CI of geologic natural gas in Minnesota distribution systems.

STATE OF MINNESOTA
BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION
121 Seventh Place East, Suite 350
St. Paul, MN 55101-2147

Katie Sieben
Valerie Means
Matt Schuerger
Joseph Sullivan
John Tuma

Chair
Commissioner
Commissioner
Commissioner
Commissioner

In the Matter of a Petition by CenterPoint Energy
To Introduce a Carbon Accounting
Framework for Renewable Natural Gas and a
Threshold Carbon Intensity for
Interconnection Producers

Docket No. G-008/M-21-____

PETITION

Summary of Filing

CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Minnesota Gas, ("CenterPoint Energy") submits a Petition to establish a carbon accounting framework to evaluate the carbon intensity of renewable natural gas ("RNG") projects interconnecting into the system of a Minnesota local distribution company and to set a threshold carbon intensity to limit interconnection of highly carbon intensive projects.

CERTIFICATE OF SERVICE

Erica Larson served the above Petition of CenterPoint Energy to all persons at the addresses indicated on the attached list by having the document delivered by electronic filing.

/s/ _____

Erica Larson
Counsel
CenterPoint Energy

DRAFT

