

AVAILABILITY: Available to any Customer that produces and delivers renewable natural gas (“RNG”), as defined in the Interconnection Standards, below, to the Company’s natural gas distribution system.

TERMS AND CONDITIONS: The service rendered under this Rate shall be subject to the terms, conditions and regulations of the Interconnection Standards and Agreements as described below.

PRECEDENTIAL REQUIREMENTS: Prior to the commencement of service, the Supplier shall submit a completed RNG Supplier Interconnect (“RSI”) Request Form and execute 1.) an Interconnect Feasibility and Engineering Agreement (“IFEA”) and 2.) a Gas Sales and Interconnect Agreement (“GSIA”) with the Company, as applicable.

PRICING:

Prior to the commencement of service, the price paid per unit of delivered RNG will be negotiated between the Company and the Supplier. This agreed upon price will be listed in the GSIA and filed with the Public Utilities Regulatory Authority (“PURA”) as described in Section 2.2 of the Interconnection Standards.

INTERCONNECTION STANDARDS:

1. GENERAL

1.1 Applicability

This tariff describes the standards and process for interconnection of RNG supplies to the Yankee Gas Service Company, dba Eversource Energy (the “Company”) natural gas distribution system. RNG is a product of anaerobic digestion or gasification of a wide variety of waste products. These include dairy/animal residuals, landfill biomass material, wastewater treatment produced gases, digestion of agricultural wastes and, in advanced systems, co-digestion of mixed biomass substrates. Digestion of biomass material results in “raw” biogas production; gasification of biomass similarly produces a “raw” syngas. These “raw” gases must be processed for delivery in order to comply with the Company’s standards and to be suitable for introduction to, and acceptance into, the Company’s natural gas distribution system.

An application for a prospective Supplier will be required to provide information requested by the Company and execute any agreements necessary to assess project feasibility. If a supply and/or project is selected, the Company and Supplier will execute an agreement for filing with the Public Utilities Regulatory Authority (“PURA”) for approval.

1.2 RNG Supplier Interconnect (“RSI”) Request Form

Prospective Suppliers must request and submit a completed RSI. The RSI is provided on the Company’s website and will include, among other things, the information regarding the project developer, location, feedstock, process type, expected output, delivery pressure and method of injection.

2. AGREEMENTS

2.1 Interconnect Feasibility Analysis and Engineering (“IFAE”) Agreement

The Company and the prospective Supplier would execute an IFAE to conduct a detailed engineering assessment of the feasibility of the project supply interconnection with the Company’s facilities. This agreement will include, but not be limited to, the following: a scope of services, Supplier and Company responsibilities, gas process designs,

measurement methods and equipment, design standards, required permits, payments, warranties and liabilities, notices and other pertinent information.

2.2 Gas Sales and Interconnect Agreement (“GSIA”)

The Company and Supplier will enter into the GSIA which will be filed with PURA for approval prior to construction, commissioning and operation of the supply. This agreement will include, but not be limited to, the following: effective date and term, customer and Company responsibilities, design standards, reliability obligations, regulatory and permitting requirements, price, billing and payments, volumes, pressure and gas quality, measurement methods, warranties and liabilities, operating procedures and protocols, Force Majeure, default provisions and financial obligations

The Supplier shall be responsible for paying all costs incurred related to constructing, operating and maintaining infrastructure arising from the RNG project through a contribution in aid of construction or other provision of the GSIA. The Supplier responsibility for such costs may be partially offset if recovered in a rate tracking mechanism for the recovery of natural gas infrastructure investments.

3. STANDARDS

Interconnecting RNG from biomass sources to the natural gas distribution system must be accomplished by delivering adequate pressure to the system to ensure the safety and reliability of the pipeline and end-use applications. Gas quality, pressure and flow rates must be continuously monitored to ensure the gas is meeting the agreed-upon specifications. Changes to RNG quality must be communicated in advance so that precautionary measures can be taken prior to the introduction of RNG to the gas distribution system. Operational plans must include, among other things, normal facility communication, notification and response action protocols for variances from agreed-upon specifications and emergency and isolation plans for the interconnection to protect the Company’s natural gas distribution system.

3.1 Gas Quality and Pressure

Supplier will be required to meet the gas quality parameter boundary limits provided in Exhibit A for all RNG delivered to the Company. These standards will be included in the GSIA. The standards may be amended at times to ensure consistency with industry standards and ensure pipeline integrity. Suppliers will be required to deliver gas into the distribution system at a pressure acceptable to the Company.

3.2 Gas Quality Measurement Standards

A gas chromatograph, the analytical tool for quantifying the components of the biogas, is necessary to ensure the pipeline quality gas specifications provided in Section 3.1. Each specification will be monitored using a method agreed upon in the GSIA.

3.3 Codes and Standards

The codes and standards required by the Company as described below will be included in the GSIA.

- (a) Interstate state pipeline gate station design for custody transfer from transmission pipelines to local distribution operators is provided under Title 49 CFR, Section 192 TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE: MINIMUM FEDERAL SAFETY STANDARDS

- (b) Other Regulatory Compliance and Codes may include, but are not limited to:
- 49 CFR 192 – Transportation of Natural Gas by Pipeline: Minimum Federal Safety Standards
 - ANSI/ASME B31.8 – Gas Transmission and Distribution Piping
 - BOCA 96 – The National Building Code
 - 220 CMR – Commonwealth of Massachusetts Gas Pipeline Safety Standards (Injection systems into the MA gas distribution system)
 - ANSI B16.5 – Steel Pipe Fittings
 - ANSI B16.11 – Forged Steel Fittings, Socket Welding & Threaded Fittings
 - ANSI Z223.1 – National Fuel Gas Code
 - ASME B31.8 – Gas Transmission & Distribution Piping Systems
 - API 1104 – Welding of Pipelines and Related Facilities
 - ASME Section VII – Boiler and Pressure Vessel Code
 - NFPA 70 – National Electric Code
 - API RP 500C – Recommended Practices for Electrical Installations at Pipeline Facilities
 - AGA XL1001 – Classification of Locations for Electrical Installations in Gas Utility Areas
 - API 5L – Specification for Line Pipe
 - ASTM A106 – Specification for Seamless Pressure Pipe
 - API 6D – Specifications for Pipeline Valves
 - AGA 7 – Turbine Meter Measurement Calculations
 - AGA 8 – Electronic Flow Computers and Transducers
 - AGA 9 – Measurement of Gas by Multipath Ultrasonic Meters
- (c) Applicable Local Community Standards – The design must meet local standards for all weather conditions. It must also meet community and customer standards for noise, aesthetics, building codes and gas characteristics.
- (d) Permitting Requirements – Typically, permits involve environmental construction standards, OSHA requirements, emission and noise requirements.
- (e) Electrical Design – Electrical design entails meeting area classification requirements and standards for Gate Stations.
- (f) Odorant Design – An odorant tank and delivery control system with remote monitoring capabilities is needed to monitor system performance for code compliance and ensure safety to the public in the event of gas leaks.
- (g) Controls Design – To control, monitor and alarm on pressure, temperature, flow rate, odorant, moisture and gas quality conditions.

3.4 Mechanical Systems

The Supplier, at its sole expense, will be required to install all the necessary mechanical systems to ensure all of the design and operational standards will be met and maintained throughout the term of the supply.

(a) Metering

The measurement system will consist of Meter Set Assembly (“MSA”) components used to measure gas usage to support billing. The MSA includes associated regulators, over protection devices, shut off valves, piping, fittings, meter protection and any automated meter reading, volume correctors and telemetering as required.

(b) Gas Preheating System

The pressure reduction of the natural gas stream will cause the gas temperature to drop. A gas preheating system may be required before pressure reduction to raise

the temperature of the gas enough so that, after pressure cuts, the gas reaches the optimal required temperature. The preheating system would have control signals to a remote terminal unit to alarm in the event of a heater failure.

- (c) Emergency shutdown valves will provide remote operation to ensure that the facilities can be isolated.
- (d) Pressure Control and Overpressure Protection consisting of emergency shutdown valves and other valves, strainer, regulators, sensing lines, overpressure protection devices, gauges, pressure and temperature measurement, and miscellaneous components to allow for operation testing and maintenance.
- (e) Telemetry installation at the metering site to have communication with Gas Control / Supervisory Control and Data Acquisition ("SCADA") system.
- (f) Installation of sniff location to be monitored for odorant levels.
- (g) Compressors as needed, depending on the interconnection point into the system or if converted to compressed natural gas ("CNG").
- (h) Gas dryer as needed.
- (i) Other equipment – any other equipment as needed determined by the Company to ensure safety and reliability.

EXHIBIT A:

<u>Renewable Natural Gas Quality Standards</u>				
	<u>Natural Gas Property Specification</u>	<u>Unit</u>	<u>Range</u>	<u>Guidance</u>
1	Gross Heating Value	Btu/scf	(Min. – Max.)	970 – 1110
2	Wobbe Number		(Min. – Max.)	1270 – 1400
3	Carbon Dioxide	% by Volume	Not To Exceed	2.0%
4	Oxygen	% by Volume	Not To Exceed	0.2%
5	Combined Oxygen and Nitrogen	% by Volume	Not To Exceed	4.0%
6	Total Inerts (Diluents)	% by Volume	Not To Exceed	4.0%
7	Non-Methane C ₂ + Hydrocarbons	% by Volume	Not To Exceed	12.0%
8	Heavier Hydrocarbons C ₄ + Hydrocarbons	% by Volume	Not To Exceed	1.5%
9	Hydrocarbon Dewpoint	°F	Less Than	15
10	H ₂ S	grain/100 scf	Not To Exceed	0.25
11	Total Sulfur	grain/100 scf	Not To Exceed	1
12	Water Vapor	Lbs./Mcf	Not To Exceed	7
13	Siloxanes, Si	ppm (v)	Not To Exceed	1

The Renewable Natural Gas Quality Standards represent guidance for Suppliers. The Company will determine the specific gas quality for each project based on its respective configuration and interconnection to the distribution system. The gas quality standard parameters will be determined during the IFAE process and included in the GSIA.

Notes:

* “Standard Cubic Foot” or “SCF” means a volume of Gas that occupies one (1) cubic foot of volume at a temperature of 60 degrees Fahrenheit and an absolute pressure of 14.73 pounds per square inch.

** Flowing temperature should be adequate to prevent interference with the proper operation of lines, regulators, meters and other equipment of the Company. The Company may impose restrictions on the temperature of the flowing gas that it receives when, in the Company’s reasonable judgement, these restrictions are necessary to ensure the proper operation of the Company’s facilities.

*** Commercially free of all objectional matter: Biologicals, objectional odors, dust or other solid or liquid matters.