

DRAFT

INTERCONNECTION AGREEMENT

THIS INTERCONNECTION AGREEMENT (this “Agreement”) is entered into as of [REDACTED] by and between Northwest Natural Gas Company (“NW Natural” or “NWN,”) with offices located at 220 NW Second Avenue, Portland, OR 97209 and (“Producer”) with offices located at [REDACTED], (collectively referred to as “Parties” or individually as “Party”) regarding NW Natural’s design, construction, and maintenance of a receipt point into NW Natural’s distribution facilities as more fully described herein (the “Receipt Point Facilities”) to allow for NW Natural to receive biomethane (“Biomethane”) from Producer’s facilities to be located at [REDACTED] (hereafter, the “Plant”).

WITNESSETH

WHEREAS, Producer intends to design, construct, commission, operate and maintain a plant for the production of Biomethane and desires to inject such Biomethane into NW Natural’s natural gas local distribution system (“LDC System”) for delivery to a Biomethane purchaser(s), and

WHEREAS, Producer has requested that NW Natural design, construct, operate, and maintain Receipt Point Facilities necessary for NW Natural to receive Biomethane from the Plant in quantities up to [REDACTED] Dth/day; and

WHEREAS, NW Natural is willing to design, construct, operate, and maintain the Receipt Point Facilities in accordance with the terms of this Agreement as supplemented by the terms and conditions in NW Natural’s Tariff as approved by the Oregon Public Utility Commission (“OPUC”); and

WHEREAS, Producer agrees to pay NW Natural for all of the costs incurred by NW Natural in designing, constructing, operating, and maintaining the Receipt Point Facilities as further provided for in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, and subject to all of the terms and conditions set forth herein, NW Natural and Producer agree as follows:

ARTICLE 1 **DEFINITIONS**

1. **Producer-Owned Facilities:** any upstream facilities, piping and equipment, necessary to connect the Plant to the Receipt Point Facilities.
2. **Discretionary Testing:** Testing that is completed by either party outside the Pre-Injection Testing or Periodic Testing schedules; the party facilitating the testing will be responsible for the costs.
3. **Types of Constituents for Testing:**
 - a) **Health Protective Constituents:** constituents that may impact human health and include two types, carcinogenic and non-carcinogenic.
 - b) **Pipeline Integrity Protective Constituents:** constituents that may impact the LDC System or end-use Producer equipment.
 - c) **Group 1 Health Constituents:** any Health Protective constituent with a concentration below the Trigger Level during Pre-injection Testing.

reasonable efforts to complete Phase One within the time estimated in item (i) of this Section 2.2. NW Natural will submit to Producer a proposed Phase Two Cost Estimate for Phase Two within 30 days of NW Natural's completion of the design for Phase Two. If Producer accepts the proposed Phase Two Cost Estimate, and upon NW Natural's receipt of both the Notice to Proceed and the Phase Two Prepayment required in Section 3.3, NW Natural will use reasonable efforts to complete Phase Two within the time estimated in item (ii) of this Section 2.2. If Producer does not deliver to NW Natural the Notice to Proceed for Phase Two within 60 days of receipt of NW Natural's proposed Phase Two Cost Estimate, then NW Natural may in its sole discretion terminate this Agreement and the terms of Section 9.3 will apply as if Producer had terminated this Agreement under Section 9.3.

2.3 Easements, Permits and Authorizations. All easements, permits and authorizations associated with the Receipt Point Facilities required hereunder will be obtained by and in the name of NW Natural. Easements will be obtained from property owners and jurisdictions, as applicable. Subject to Article 9, NW Natural will retain the easements and access to maintain and operate the Receipt Point Facilities. NW Natural will be under no obligation to commence Phase Two until such time as all necessary easements, permits and authorizations for Phase Two have been obtained. NW Natural agrees to make reasonable efforts to prepare and submit the necessary applications and filings to obtain such easements, permits and authorizations and will use reasonable efforts to prosecute the same to final disposition. In no event will NW Natural be liable to Producer under this Agreement for failure to obtain, or for delays in obtaining, the necessary easements, permits and authorizations, unless NW Natural has failed to make reasonable efforts to prepare and submit the necessary applications and filings to obtain such easements, permits, and authorizations or has failed to use reasonable efforts to prosecute the same to final disposition. Producer will grant any necessary easement(s) to construct, operate, and maintain the Receipt Point Facilities that may be on Producer's premises and will provide unobstructed access at all times to the personnel of NW Natural and its designees to perform their duties under this Agreement. Nothing in this Section 2.3 is intended to prohibit or interfere with Producer's taking reasonable measures to secure the Plant.

2.4 Required Producer-Owned Facilities. Producer will design, permit, construct, own and operate, at Producer's sole cost and expense, Producer-Owned Facilities. The terminus of Producer-Owned Facilities at the Receipt Point Facilities will be a 4-inch ANSI 300 raised face flange approximately 36" above ground (to centerline), with the exact height and location to be coordinated with NW Natural field engineering personnel, at a pressure to be determined by NW Natural during Phase One. Producer will design and install a pipe and valve assembly, based on industry standards, for collecting Biomethane samples from the flow of gas to the Receipt Point Facilities prior to receipt of Biomethane at the Receipt Point Facilities. Producer will install a minimum of four (4) 1-inch, full bore thread-o-lets, valves, and plugs (exact materials to follow NW Natural specifications and standards and will be approved prior to installation by NW Natural) prior to the terminus of Producer-Owned Facilities at locations mutually agreed upon between Producer and NW Natural, and will allow NW Natural to insert its equipment into the pipeline at these locations. Producer will obtain all necessary permits and authorizations regarding Producer-Owned Facilities and will be solely and fully responsible for compliance with any applicable codes and safety requirements and the inspection, maintenance, and operation of such Producer-Owned Facilities. Additionally, at its sole cost and expense, Producer will design, construct, and maintain at the Plant at all times, the equipment and necessary permits to valve off and immediately flare the Biomethane, or divert flow to other Producer-owned equipment, prior to the terminus flange of Producer-Owned Facilities should NW Natural require Producer to immediately cease all deliveries of Biomethane to the Receipt Point Facilities as described more fully in the Operating Provisions of Article 5 of this Agreement. Producer expressly agrees that Producer is, and NW Natural is not, responsible for the over-pressure protection of Producer-Owned Facilities.

2.5 Producer is required to provide at its sole cost and expense, active and continuous communication and Producer plant control network connections, a dedicated circuit that is backed up by a UPS and standby generator, and instrument air service via tubing to operate the isolation valve to the Receipt Point Facilities, if required, to the location of the Receipt-Point Facilities. Producer will also provide a Plant control system communication link at the Receipt-Point Facilities. In the event Producer does not provide services required under this Section 2.5, NW Natural will design and install the equipment as required and the costs will be

included in the amount paid by Producer as described in Section 3.2. Specific requirements for electric service, communication system, instrument air, and other Receipt Point Facilities systems will be determined during Phase I.

2.6 NW Natural will have the right to review and suggest modifications to the design for Producer-Owned Facilities prior to construction, provided nothing herein will be construed to impose any obligation or duty on NW Natural to assist Producer with the design, selection of materials, construction, or other activities required to provide Biomethane consistent with the Biomethane Quality Specification, nor will NW Natural's review of the design relieve or diminish Producer's obligation to design, permit, construct, maintain, and operate Producer-Owned Facilities as specified per this Agreement. Producer is not required to implement the suggested modifications.

2.7 Service Commencement. Notwithstanding the requested in-service date in Producer's Notice to Proceed, service at the Receipt Point Facilities will become available on or after the date that NW Natural provides Producer with written notice that Pre-injection Testing is complete, as specified in Section 4.5 of this Agreement, and the Receipt Point Facilities have been constructed, tested, and commissioned by NW Natural.

ARTICLE 3

PREPAYMENT OF RECEIPT POINT FACILITY COSTS/MARGIN GUARANTEE

3.1 An estimate of the costs to be incurred by NW Natural to design and permit the Receipt Point Facilities is attached as Exhibit B ("Phase One Cost Estimate"). An estimate of the costs to be incurred by NW Natural to construct, test, and commission the Receipt Point Facilities and other expenses incurred in connection with NW Natural's performance of the Project Work ("Phase Two Cost Estimate") will be incorporated into this Agreement by written amendment after Producer issues a Notice to Proceed for Phase Two pursuant to Section 2.2. The Phase One Cost Estimate and the Phase Two Cost Estimate are collectively referred to herein as the "Receipt Point Facilities Cost Estimate". Producer understands and agrees that the Receipt Point Facilities Cost Estimate (i) is provided by NW Natural solely as a good faith, non-binding estimate and (ii) is not a monetary limit on Producer's obligation to fund the development of the Receipt Point Facilities or on Producer's other obligations under this Agreement, subject to the requirements of Section 3.2.

3.2 Producer will pay NW Natural for all of NW Natural's actual costs to design, permit, construct, commission, and test the Receipt Point Facilities and actual expenses incurred in connection with performance of the Project Work under this Agreement.

3.3 Concurrent with the date that Producer gives NW Natural the Notice to Proceed for Phase One, Producer will prepay NW Natural for Phase One an amount equal to the Phase One Cost Estimate (the "Phase One Prepayment"). Concurrent with the date that Producer gives NW Natural the Notice to Proceed for Phase Two, Producer will prepay NW Natural for Phase Two an amount equal to the Phase Two Cost Estimate less Producer's Schedule X construction allowance of \$ [REDACTED] (the "Phase Two Prepayment"). The amount of the Phase One Prepayment and the Phase Two Prepayment are together the "Project Cost Prepayment". The Phase One Prepayment and the Phase Two Prepayment will each be made in the form of wire transfer or ACH to NW Natural, and NW Natural will provide account information separately to Producer. NW Natural will have no obligation to perform Phase One, and will incur no liability for not performing Phase One, until the Phase One Prepayment is received by NW Natural; and NW Natural will have no obligation to perform Phase Two, and will incur no liability for not performing Phase Two, until the Phase Two Prepayment is received by NW Natural.

3.4 Upon completion of the Project Work, or in the event of termination as set forth in Article 9, NW Natural will, within sixty (60) days of completion or termination, render to Producer a reasonably detailed listing of the actual costs incurred by NW Natural in performing the Project Work and will submit to

Producer an invoice indicating any over or underpayment of the actual costs calculated as the difference between the Project Cost Prepayment and the actual costs incurred by NW Natural.

3.5 If NW Natural's actual costs in performing the Project Work exceed the Project Cost Prepayment, Producer will pay NW Natural the amount that the actual costs exceed the Project Cost Prepayment within thirty (30) days of the date of the invoice. If Producer fails to make such payment within said thirty (30) day period, late charges will accrue on the unpaid portion of the billing(s) determined to be due under this Agreement at the applicable rate set forth in Schedule C of the Tariff. Further, Producer agrees to reimburse NW Natural for any reasonable attorney's fees which may be incurred in collection of any payments due.

3.6 If the Project Cost Prepayment exceeds the amount of NW Natural's actual costs in performing the Project Work, NW Natural will refund to Producer the full amount of the overpayment within thirty (30) days after NW Natural provides Producer with the listing of NW Natural's actual costs. If NW Natural fails to make such payment within said thirty (30) day period, interest will accrue on the unpaid portion by which the Project Cost Prepayment exceeded the amount of NW Natural's actual costs in performing the Project Work, at the statutory rate.

3.7 If Producer: (a) makes an assignment or any general arrangement for the benefit of creditors; (b) files a petition or otherwise commences, authorizes, or acquiesces in the commencement of a proceeding or case under any bankruptcy or similar law for the protection of creditors or have such petition filed or proceeding commenced against it; (c) otherwise becomes bankrupt or insolvent (however evidenced); (d) is unable to pay its debts as they fall due; or (e) has a receiver, provisional liquidator, conservator, custodian, trustee or other similar official appointed with respect to it or substantially all of its assets; then NW Natural will have the right, at its sole election, to immediately suspend performance or to terminate this Agreement, in addition to any and all other remedies available to it. Written notice of this decision will be provided by NW Natural to Producer as soon as reasonably practical after the decision to suspend performance or terminate this Agreement is made.

3.8 Producer guarantees that the Cumulative Delivery Margin will meet or exceed the following amounts:

- (a) \$ [REDACTED] by the end of the first Term Year;
- (b) \$ [REDACTED] by the end of the second Term Year;
- (c) \$ [REDACTED] by the end of the third Term Year;
- (d) \$ [REDACTED] by the end of the fourth Term Year; and
- (e) \$ [REDACTED] by the end of the fifth Term Year

Items (a) through (e) are collectively the "Minimum Delivery Margin Guarantee." A "Term Year" is a period of twelve consecutive billing months, with the first Term Year starting on the first billing month after Producer's first injection of Biomethane into the LDC system. "Delivery Margin" is the billing rate for a given Rate Schedule, less (1) any Commodity Component and (2) any Temporary Adjustment for such Rate Schedule. "Cumulative Delivery Margin" is the cumulative Delivery Margin paid by Producer at a given point, plus any Shortfall Payments made by Producer under this Section 3.8. At the end of each Term Year, NW Natural will (x) review Producer's usage, (y) calculate the Cumulative Delivery Margin for that Term Year, and (z) determine if Producer meets the Minimum Delivery Margin Guarantee for that Term Year. If Producer fails to meet the Minimum Delivery Margin Guarantee for a Term Year, Producer will pay NW Natural the difference between the Minimum Delivery Margin Guarantee and the Cumulative Delivery Margin actually paid by Producer ("Shortfall Payment"). Shortfall Payments made under this Section 3.8 will be invoiced and paid consistent with NW Natural's customary billing cycle. If this Agreement is terminated for any reason, (i) any remaining unpaid portion of the Minimum Delivery Margin Guarantee will be immediately due and payable by Producer to NW

Natural, with any previously uncredited Shortfall Payments made by Producer credited toward this amount; or (ii) any Cumulative Delivery Margin amount at the time of termination in excess of the Minimum Delivery Margin Guarantee will be credited to Producer, but only to the extent of uncredited Shortfall Payments previously paid by Producer.

ARTICLE 4

MEASUREMENT, GAS QUALITY, AND FAILURE TO MEET SPECIFICATIONS

4.1 Biomethane delivered at the Receipt Point Facilities will be measured by NW Natural measurement equipment installed, operated and maintained at or near the Receipt Point Facilities. The unit of volume for the purpose of measurement will be one (1) cubic foot of gas at a base temperature of 60 °F, and at a base pressure of 14.73 psia. Such measured volumes, converted to Mcf, will be multiplied by their gross heating value per cubic foot and divided by 1,000 to determine dekatherms (Dth) received and delivered hereunder. The unit of energy or thermal units for the purpose of balancing total receipts and deliveries of Biomethane hereunder will be one (1) Dth. The volumes of Biomethane measured hereunder will be computed in accordance with determination of thermal units as specified in the Tariff.

4.2 At Producer's sole cost and expense, all Biomethane delivered by Producer to NW Natural owned and operated facilities will conform to the quality specifications set forth in the Biomethane Quality Specification attached hereto in Exhibit D and made a part hereof.

4.3 If there are multiple quality monitoring devices providing information for the same constituents, the one(s) maintained by NW Natural will be the official measurement source.

4.4 NW Natural may request a deviation from the monitoring equipment and interval requirements where additional measures are necessary to provide reliable service in a safe environment.

4.5 Pre-injection Testing. Prior to the first injection of Biomethane into the LDC System, or other NW Natural owned and operated facilities, Producer will hire an independent certified third party laboratory (Oregon Environmental Laboratory Accreditation Program [ORELAP] certified, or equivalent in another state, where applicable) to perform two pre-injection tests ("Pre-Injection Testing"). Samples for each test will be taken a minimum of fourteen (14) days apart and from the flow of gas to the Receipt Point Facilities prior to receipt of Biomethane at the Receipt Point Facilities. Producer will provide NW Natural with a minimum of two (2) business days' advance notice of the Biomethane sampling and NW Natural will have the option to have a representative present to observe the samples being taken. Samples will be tested for all Constituents specified in Table 1 in Exhibit C according to the feedstock. Test results will be shared with NW Natural within five (5) business days of Producer's receipt of the test results.

- a) Producer is responsible for identifying an independent third-party certified laboratory that is capable of detecting constituents at levels specified in Table 1 – Constituent Concentrations, attached in Exhibit C. NW Natural reserves the right to specify a certified laboratory in the event Producer is unable to do so.
- b) Test results from the second pre-injection test will identify the Group 1 and Group 2 Health Constituents for Periodic Testing.
- c) During Pre-Injection Testing, the Biomethane's collective potential cancer risk and non-cancer risk totals will be calculated for the Group 2 Health Constituents:
 - i. Cancer Risk: the sum of the ratios for each carcinogenic constituent measured over the Trigger Level identified in Table 1 in Exhibit C. The ratio is the measured value divided by the trigger level (See formula in Table 2 in Exhibit C).

- ii. Non-Cancer Risk: the sum of the health indexes of each non-carcinogenic constituent that registers over the Trigger Level identified in Table 1 in Exhibit C. The health index is the measured value divided by the Trigger Level multiplied by 0.1 (See formula in Table 2 in Exhibit C).
- d) If the collective potential cancer risk or non-cancer risk is at or above the Risk Level A values defined in Table 2 - Collective Risk from Carcinogenic and Non-carcinogenic Constituents, attached in Exhibit C, the Biomethane cannot be accepted or transported by the LDC System. Producer will make necessary modifications to lower the collective potential cancer risk or non-cancer risk below the Risk Level A values and restart Pre-Injection Testing after a minimum seven (7) day period from the last testing sampling.
- e) If during Pre-Injection Testing, any Pipeline Integrity Protective Constituent is found to be at or above the Trigger Level identified in Table 1 in Exhibit C, the Biomethane cannot be accepted or transported by the LDC system. Producer will make necessary modifications to lower the concentration value below the Trigger Level and restart Pre-Injection Testing after a minimum seven (7) day period from the last testing sampling.
- f) If all Pipeline Integrity Protective Constituents are found to be below the Trigger Levels identified in Table 1 in Exhibit C, all Health Protective Constituents are measured below the Upper Action Levels identified in Table 1 in Exhibit C, and both the collective potential cancer risk total and the collective non-cancer risk total from the Group 2 Health Protective Constituents are below the Risk Level A values identified in Table 2 in Exhibit C, in each case in two consecutive pre-injection tests, the Biomethane may be injected subject to compliance with the Periodic Testing (as defined below) requirements specified in Section 4.6.
- g) The costs of Pre-Injection Testing, as well as any required subsequent testing, will be borne by Producer.
- h) If the test results from the first pre-injection sample set do not identify any Health Protective Constituents above the Upper Action Levels or Pipeline Integrity Constituents above the Trigger Levels and the Gas Quality Parameters are below the Action Levels, the Biomethane may be injected into the Receipt Point Facilities while the results for the second sample set are evaluated. If the results from the second pre-injection sample set indicate a constituent is outside the acceptable limit as specified in Table 1 in Exhibit C, the Biomethane will be shut-off and Producer will make necessary modifications to lower the concentration value below the Trigger Level and restart Pre-Injection Testing after a minimum seven (7) day period from the last testing sampling.
- i) Pre-injection Testing will not be performed until the Receipt Point Facilities have been constructed, tested, and commissioned by NW Natural.

4.6 Periodic Testing. Producer will conduct periodic testing of the Constituents specified in Table 1 in accordance with the timelines set forth in this Section 4.6 (“Periodic Testing”). For each Periodic Testing event, Producer will collect the Biomethane samples and send them to an independent certified third-party laboratory. Producer will provide at least two (2) business days’ advance notice to NW Natural of Biomethane sampling and NW Natural will have the option to have a representative present to observe the samples being taken. Producer will share the results with NW Natural within five (5) business days of receipt unless immediate action is required as specified in Section 4.11. If the laboratory results from any testing event identify the need for shut-off based on any of the circumstances enumerated in Section 4.11, Producer will immediately notify NW Natural of the results by calling the NW Natural Gas Control phone number set forth in Section 8.1(a), as may be updated from time to time by NW Natural.

- a) Pipeline Integrity Constituents will be tested once every 3-month period in which injection occurs (samples may not be taken less than sixty (60) days and not more than ninety (90) days from the last testing sample) or until such time they are tested eight (8) times without reaching a Trigger Level identified in Table 1 in Exhibit C for any Pipeline Integrity Constituent, at which point the Pipeline Integrity Constituents will be tested once every 12-month period (samples may not be taken less than nine [9] months and not more than fifteen [15] months from the last testing sample).
- b) Group 1 Health Constituents
 - i. Group 1 Health Constituents will be tested once every 3-month period in which injection occurs (samples may not be taken less than sixty (60) days and not more than ninety (90) days from the last testing sample).
 - ii. Any Group 1 Health Constituent with a concentration below the Trigger Level identified in Table 1 for eight (8) consecutive tests will be tested once every 12-month period in which injection occurs (samples may not be taken less than nine (9) months and not more than fifteen (15) months from the last testing sample).
 - iii. A Group 1 Health Constituent will become a Group 2 Health Constituent if any testing result indicates a concentration at or above the Trigger Level identified in Table 1 in Exhibit C.
- c) Group 2 Health Constituents
 - i. Group 2 Health Constituents will be tested once every 3-month period in which injection occurs (samples may not be taken less than sixty (60) days and not more than ninety (90) days from the last testing sample).
 - ii. A Group 2 Health Constituent will become a Group 1 Health Constituent if testing indicates a concentration below the Trigger Level identified in Table 1 in Exhibit C during four (4) consecutive tests.
- d) For each Periodic Testing event, the Biomethane's collective potential cancer and non-cancer risk totals will be calculated for the Group 2 Health Constituents. The collective totals are subject to the actions described in Section 4.11.
- e) NW Natural may, at its discretion, accelerate or modify the Periodic Testing schedule as necessary to ensure the constituent levels are not injurious to pipeline facilities, or present a health and/or safety hazard to employees and/or the general public. NW Natural will provide written notification of modifications of the testing schedule a minimum of thirty (30) days prior to the effective date.
- f) Producer will be responsible for costs associated with Periodic Testing requirements.

4.7 Producer will provide sixty (60) days' notice to NW Natural if there will be (1) a change in the type of "renewable biomass" used at the Plant, as that term is defined in 40 CFR 80.1401, or (2) a change in the gas processing and conditioning system at the Plant.

- a) NW Natural may direct Producer to complete one test as specified in Section 4.6 for the constituents identified in Table 1 in Exhibit C. The test results will identify the Group 1 and Group 2 Health Constituents and reset the testing frequencies for Periodic Testing.

4.8 NW Natural may conduct additional Discretionary Testing and will notify Producer after the samples are collected. Producer will not be responsible for the testing costs.

4.9 NW Natural and Producer agree to share information related to any testing of the Biomethane quality with each other no more than five (5) business days from the date of receipt from the independent certified third-party laboratory, including, but not limited to, the constituent(s) measured, the date of the sample, the date of the analysis, the sampling methodology, the sampling equipment, detection limits, and the analysis of the samples.

- a) Any testing results that identify the need for immediate action, as specified in Section 4.11, must be shared immediately upon receipt of results by calling the NW Natural Gas Control phone number set forth in Section 8.1(a), as may be updated from time to time by NW Natural.

4.10 If additional equipment is required to ensure consistent delivery of Biomethane meeting NW Natural's quality specifications as set forth in the Biomethane Quality Specification and this Agreement, Producer will purchase and install the additional equipment at Producer's expense.

4.11 Biomethane injections may be shut-off to NW Natural owned and operated facilities if, in the sole determination of NW Natural, any of the following occur:

- a) The Biomethane does not meet the Biomethane Quality Specification in Exhibit D;
- b) Any on-line gas quality monitoring instrument is known to not be providing current and accurate measurements or power is not available to critical components, unless NW Natural provides written notice in advance of delivery that it will accept delivery;
- c) The Biomethane contains constituents at concentrations which prevent or restrict the normal marketing of Biomethane, are at levels that are injurious to pipeline facilities, or are at levels that present a health or safety hazard to NW Natural employees or the general public; or
- d) There is an imminent safety risk.

4.12 Biomethane injections will be shut-off to NW Natural owned and operated facilities under any of the following circumstances:

- a) The level of an individual health protective constituent is found at or above the Upper Action Level identified in Table 1 in Exhibit C in any testing result;
- b) A Pipeline Integrity Protective Constituent is found at or above the Trigger Level identified in Table 1 in Exhibit C in any testing result; or
- c) The collective potential cancer risk or non-cancer risk is found at or above Risk Level A identified in Table 2 in Exhibit C.

4.13 If Biomethane injections are shut-off, NW Natural may immediately valve off the Receipt Point Facilities and notify Producer that flow at the Receipt Point Facilities was suspended. If additional information is desired by Producer as to why deliveries were terminated, Producer may contact NW Natural's Gas Control at the phone number provided in Section 8.1(a), as may be updated from time to time by NW Natural.

- a) Producer will provide a phone number for use 24 hours a day for notifications.

4.14 Restart Procedure.

- a) In order to restart Biomethane injection following a shut-off resulting from Section 4.12(a),(b), or (c) or Section 4.11 (c) or (d), Producer will complete one test of the Biomethane in accordance with the Pre-Injection Testing requirements specified in Section 4.5. Injection may then resume if the test indicates: (1) the Biomethane complies with the Biomethane Quality Specification in Exhibit D; (2) the Health Protective Constituents are below the Lower Action Levels identified in Table 1 in Exhibit C; (3) the collective potential cancer and non-cancer risk totals are below the Risk Level A values specified in Table 2 in Exhibit C; and (4) the Pipeline Integrity Protective Constituents are below the Trigger Levels specified in Table 1 in Exhibit C. After injection resumes, Periodic Testing pursuant to Section 4.6 will recommence at the most frequent testing intervals specified in Section 4.6 for the applicable constituent until NW Natural reevaluates each constituent and determines that it is eligible for less frequent testing. If testing pursuant to Section 4.5 indicates the Biomethane may not be injected on NW Natural owned and operated facilities based on the requirements of Section 4.5(e), Producer will make necessary modifications to lower the concentration values and restart testing as specified in Section 4.5 after a minimum seven (7) day period from the last test sampling.
- b) In order to restart Biomethane injection following a shut-off resulting from 4.11(a) or (b), Producer may begin injections a minimum of 24 hours after Producer demonstrates that the Biomethane meets the Biomethane Quality Specification. If Producer does not own testing equipment that can test for Biomethane Quality Specification identified in Exhibit D, NW Natural will provide on-site testing after 24 hours, but no later than two business days from the date that Producer requests on-site testing, during normal business hours, Monday through Friday, 8:00 a.m. to 3:00 p.m.
- c) When NW Natural crews are required on-site to restart the Biomethane injection, including but not limited to on-site testing specified in Section 4.14(b), Producer will pay the costs of the labor and materials required for such activities.
- d) Producer and NW Natural may agree to modify the restart procedures identified in this Section on a case-by-case basis, upon written agreement between the Parties.

4.15. NW Natural may make changes to the Biomethane Quality Specification in Exhibit D, or Tables 1 and 2, attached as Exhibit C, in its sole discretion based on: (a) the gas specifications listed in the Northwest Pipeline, LLC Gas Tariff; (b) recommendations by the American Gas Association (AGA) or the Gas Technology Institute (GTI) or other reputable sources; (c) the resulting gas flows on the LDC System not meeting the specified gas quality standard; (d) documented changes to LDC System operating conditions; (e) to meet new or revised generally accepted natural gas utility practices regarding quality or testing; (f) or as ordered by the OPUC, the Washington Utility and Transportation Commission ("WUTC"), the Pipeline and Hazardous Materials Safety Administration ("PHMSA"), or another regulatory body having authority in the matter. NW Natural will provide Producer the reason for these changes and will require Biomethane that meets the modified quality specifications within six (6) months of the date Producer is notified of the modifications, unless an imminent health or safety concern exists, an equipment integrity hazard is detected, or otherwise required by a governing agency. In the event the Biomethane Quality Specification or Tables 1 or 2 are modified by NW

Natural and additional equipment is required to ensure the Biomethane meets the quality specifications, Producer will purchase and install the additional equipment at Producer's expense.

- a) If modifications to Producer-Owned Facilities will take longer than six (6) months to complete due to equipment procurement times or equivalent challenge, NW Natural will determine, in its sole discretion, an alternative effective date to meet the modified quality specifications.

4.16 NW Natural and Producer will maintain records for all periodic tests they commission for five (5) years, minimum, and will include the following information: (a) the dates samples were taken and tests were completed, if different, (b) name of the individual that collected the sample, (c) the name and address for the lab completing the test, (d) the test methods followed, (e) the constituents tested and the resulting level for each, (f) the date results were received by the requesting entity, and (g) any resulting actions or modifications to Producer-Owned Facilities. Each Party will provide copies of any test records, either printed or electronic, to the other Party within two (2) weeks of receiving a request therefore.

ARTICLE 5 **OPERATING PROVISIONS**

5.1 NW Natural will operate and maintain the Receipt Point Facilities in accordance with: (a) the Tariff, as amended from time to time; (b) the terms and conditions of this Agreement; (c) the specifications and procedures defined in the Biomethane Quality Specification; (d) the requirements of all applicable laws and regulations of governmental bodies having jurisdiction; and (e) sound and prudent natural gas industry practices.

5.2 Producer will notify and seek approval from NW Natural prior to increasing/decreasing the daily volume of Biomethane injected in the LDC System, as identified in Section 2.1 and Exhibit A, to ensure the Receipt Point Facilities and operations are adequate. In the event additions or modifications are required to the Receipt Point Facilities or LDC System to serve an increased/decreased volume, Producer should follow the process identified in Article 3 for the prepayment of Receipt Point Facilities, and will coordinate the introduction of Biomethane with NW Natural based on the required modifications and the restart procedure specified in Section 4.14.

5.3 NW Natural will have the right to inspect Producer-Owned Facilities.

5.4 Producer will notify NW Natural immediately if any Producer-Owned Facilities, including conditioning/clean-up equipment, is not operating properly so NW Natural may perform Discretionary Testing if desired.

5.5 If NW Natural determines in its sole discretion that additional telemetry or telecommunication links must be installed to (a) establish or maintain safe, prudent or economic operating conditions, or (b) accurately monitor the flow of Biomethane, NW Natural will coordinate with Producer to purchase and install such facilities at Producer's expense, as specified in Article 3.

5.6 NW Natural will provide the following services through its own employees, agents or consultants and personnel providing services pursuant to contracts entered into by NW Natural:

- a) Routine Service. NW Natural will procure and furnish all materials, equipment, services, supplies, spare parts and labor necessary for the routine operation and maintenance of the Receipt Point Facilities ("Routine Services"). Routine Services will include, but will not be limited to, the following: (i) making available communications, surveillance, monitoring, data acquisition and measurement; and (ii) providing periodic testing, adjustment, and calibration of the meter, inspection of the Receipt Point Facilities, (iii) maintaining the odorant supply, as required, and (iv) maintaining valves, piping, and instruments. Routine

Services does not include the replacement of major components, including but not limited to meters, valves, regulators, odorizers, and analyzers.

- b) Repairs. NW Natural will procure and furnish all materials, equipment, supplies, services, and labor necessary for making Repairs to the Receipt Point Facilities. "Repairs" will mean and include the replacement of major components as the result of normal wear or facility failure associated with the Receipt Point Facilities or any part thereof required to keep the Receipt Point Facilities operating efficiently at the design capacity and in accordance with general industry practices and standards, including but not limited to equipment additions or upgrades that are required as the result of evolving industry or NW Natural engineering design or field operational standards. NW Natural will attempt to make Repairs in a manner that minimizes disruption of Biomethane flows onto the LDC System. If Repairs need to be performed during Producer's Biomethane deliveries to the Receipt Point Facilities, and the metering facilities need to be bypassed, NW Natural will follow standard policy and, if possible, time the meter before taking the meter out of service so that reasonable estimates may be made for the actual delivery volumes during the meter outage. NW Natural will provide at least thirty (30) days' notice to Producer before making any Repairs, as defined herein, to the Receipt Point Facilities, provided that Producer recognizes that such notice may impact the length of time that the Receipt Point Facilities are out of service due to the Repairs.
- c) Emergency Services. In the case of an explosion, fire, storm, or other emergency situation or Force Majeure which might threaten life or property or render the Receipt Point Facilities incapable of continued operation, NW Natural will take such steps and incur such expenses as in its sole opinion are required to deal with such emergency ("Emergency Services"). NW Natural may be required to valve off the Receipt Point Facilities, and NW Natural will, as promptly as practical, report such emergency to Producer. Emergency Services do not include Repairs covered under Section 5.6(b).

5.7 If NW Natural determines that any necessary Routine Service or Repairs of NW Natural facilities or the Receipt Point Facilities, other than Emergency Services, will prevent the flow of Biomethane through the Receipt Point Facilities, NW Natural will notify Producer a minimum ten (10) days prior to such activities. Whenever possible, NW Natural will coordinate any interruption of service for planned Routine Service or Repairs with Producer for planned maintenance on Producer-Owned Facilities and will make reasonable commercial efforts to minimize the service interruption.

5.8 Interruption Restart Procedure. If NW Natural interrupts the flow of Biomethane to carry out Routine Service, Repairs, or another non-quality related operation, and Producer does not complete maintenance on any Producer-Owned Facilities and continues producing and flowing Biomethane by flaring or serving other equipment, NW Natural and Producer will coordinate reinstatement of injection of Biomethane to the Receipt Point based on the restart procedure identified in Section 4.14(b).

5.9 Notwithstanding Section 5.2, Producer may interrupt the Biomethane flow for any reason, in its sole discretion. Producer will provide NW Natural a minimum ten (10) days' notice prior to planned interruptions, and will notify NW Natural immediately when Emergency Services are required. NW Natural and Producer will coordinate reinstatement of injection of Biomethane to the Receipt Point based on the restart procedure identified in Section 4.14(a).

5.10 Access. Both NW Natural and Producer will provide reasonable access to the Receipt Point Facilities and Producer-Owned Facilities, respectively, for the purposes of operation, maintenance, repairs, and inspections as specified in this Agreement.

5.11 Measurement. The measurement of Biomethane by NW Natural or check measurement by Producer at the Receipt Point Facilities will be in accordance with the Tariff.

5.12 Receipt of Biomethane. NW Natural will not be obligated or required to install or pay for compression to effect deliveries of Biomethane. If the pressure of the Biomethane is outside the specified range, NW Natural may, without any prior notification to Producer, refuse to receive the Biomethane at the Receipt Point Facilities and/or prevent the Biomethane from entering the LDC System.

5.13 Insurance. NW Natural will carry and maintain in force insurance of the type and in the amounts sufficient in its sole opinion for its operation of the LDC System and the Receipt Point Facilities. Producer will carry and maintain in force insurance of the type and in the amounts specified in, and in accordance with all the requirements of, Exhibit E.

5.14 Compensation for Routine Services, Repairs, and Emergency Services. NW Natural will not seek compensation from Producer, under this Agreement, for Routine Services and Emergency Services. NW Natural will invoice Producer for (i) the actual costs of Repairs pursuant to Section 5.6(b) and (ii) the actual costs for any Repairs required to NW Natural facilities at the Receipt Point Facilities or on the NW Natural system directly due to the operations of Producer, the acts or omissions of its personnel, or the Biomethane; and Producer will reimburse NW Natural for such costs according to the invoice and payment provisions herein. Producer's obligation to pay for Repairs under this Section 5.14 does not apply to Repairs due to normal wear and tear of the LDC System.

5.15 Force Majeure. Neither Party will be liable to the other for a failure to perform its obligations under this Agreement, to the extent that such failure is a result of Force Majeure. "Force Majeure" is defined in the Tariff. Each Party will provide notice to the other of a Force Majeure adversely impacting the Party's performance as soon as reasonably practical after the occurrence of the event or the impacted Party's knowledge thereof. Initial notice may be given orally; however, written notice with reasonably full particulars of the event or occurrence is required as soon as reasonably practical. Failure to give notice will not be deemed a waiver of such Force Majeure. Each Party will make reasonable efforts to avoid the adverse impacts of a Force Majeure and to the extent possible, will work to resolve the cause, event, act, or omission in order to resume performance adversely impacted by the Force Majeure.

ARTICLE 6 **PRODUCER SALES OF BIOMETHANE AND ACKNOWLEDGMENTS**

6.1 The Receipt Point Facilities will be the Custody Transfer Point, as defined in the Tariff.

6.2 This Agreement does not obligate NW Natural to purchase Biomethane from Producer, nor does it limit Producer's ability to consume the Biomethane at the Plant. If NW Natural purchases Biomethane produced at the Plant, a separate gas purchase agreement will be entered into between NW Natural and the seller of the Biomethane.

6.3 If Producer sells Biomethane to third parties, those sales will require that such third party have with NW Natural a Transportation Service Agreement under Schedule T of the Tariff or other applicable agreement pursuant to the Tariff, except in cases when NW Natural has an agreement to purchase the Biomethane from the third party at the Receipt Point Facilities.

6.4 Producer agrees to comply with any applicable rules set forth in the nomination, balancing and other operating procedures applicable to the transportation of customer-owned gas on the LDC System, as modified from time to time, which are set forth in Schedule T and in NW Natural's currently effective statement of Gas Transportation Operating Procedures.

6.5 Producer acknowledges that Producer is not allowed to transport the Biomethane, or cause the Biomethane to be transported, on NW Natural's LDC System past the Receipt Point Facilities without NW Natural's prior approval of such transportation service.

6.6 Producer acknowledges that, due to the provisions in Articles 4 and 5 herein regarding quality specifications and the ability of NW Natural to valve off the Receipt Point Facilities, as determined by NW Natural, any Biomethane sales agreement between Producer and a third-party purchaser will take such circumstances into consideration and Producer will be fully responsible and liable to such third parties for such circumstances and will protect, indemnify and hold NW Natural harmless as to any third-party claims for lost profits or other damages regarding any service interruption at the Receipt Point Facilities, including but not limited to claims from a third-party purchaser for lost profits or other damages arising from the following: (a) the failure of Producer-Owned Facilities; (b) a shutdown (or valving off) of the Receipt Point Facilities by NW Natural due to inadequate quality, an imminent safety risk, Routine Service, Repairs, Emergency Service, Force Majeure, or other basis under this Agreement; and (c) Producer's failure to abide by NW Natural's nomination, balancing and other operating procedures applicable to natural gas transportation services.

6.7 Producer acknowledges that Producer may not sell any of the Biomethane to third parties if the Biomethane must move off of the LDC System to reach such third party, including on-system third parties that would require a pathway on the interstate pipeline to reach the third party.

ARTICLE 7
LIABILITY AND INDEMNIFICATION

7.1 To the fullest extent allowed by law, Producer will indemnify, defend (with counsel approved by NW Natural), hold harmless and reimburse NW Natural and its executives, affiliates, subsidiaries, officers, shareholders, directors, agents and employees, successors and assigns from, for and against claims, suits, costs, damages, losses, penalties, expenses, and liabilities of any kind (collectively, "Damages"), including but not limited to attorneys' and expert witnesses' fees and related costs and disbursements, arising out of, in connection with, or incident to this Agreement, whether or not such Damages are attributable to bodily injury, sickness, disease, death, or injury to or destruction of tangible property, but only to the extent caused by the negligence, breach of contract or other wrongful acts or omissions of Producer or those persons or entities for whom Producer is liable. Producer's obligations under this Section (i) will not be construed to negate, abridge or reduce other rights or obligations of indemnity that would otherwise exist as to a person or entity referenced in this Section and (ii) will not be limited to Damages arising from third party claims.

7.2 EXCEPT AS INDICATED IN SECTION 6.6, IN NO EVENT WILL EITHER PARTY OR ITS SHAREHOLDERS, DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS BE LIABLE FOR ANY PUNITIVE, SPECIAL, EXEMPLARY, INDIRECT, INCIDENTAL, CONSEQUENTIAL, LOST PROFITS, OR OTHER SIMILAR DAMAGES TO PERSONS OR PROPERTY, WHETHER SUCH DAMAGES ARE CLAIMED UNDER ANY LEGAL OR EQUITABLE THEORY, UNLESS SUCH DAMAGES ARE THE RESULT OF A PARTY'S WILLFUL MISCONDUCT.

7.3 The provisions in this Article 7 will survive the termination of this Agreement.

ARTICLE 8
NOTICES AND COMMUNICATIONS; PAYMENTS

8.1 Any notice or communication permitted or required by this Agreement will be made in writing; and will be deemed duly delivered if personally delivered or sent to the other Party by registered, certified, or regular mail, postage prepaid, at the appropriate address set forth below:

To: **NORTHWEST NATURAL GAS COMPANY**
Attn: MardiLyn Saathoff
Senior Vice President & General Counsel

To: _____
Attn: _____

- a) Any communication relating to operations identified in Article 4 will be made by calling Gas Control at 503-226-4211 x4613.

8.2 Either Party may change its address for receipt of notices, communications, or payments under this Agreement upon the provision of appropriate written notification to the other Party.

ARTICLE 9
TERM AND EFFECTIVE DATE; REGULATORY APPROVAL OR MODIFICATION

9.1 This Agreement will be effective as of the date first written above; however, if it is determined that the subject matter of this Agreement requires NW Natural to seek specific regulatory approval by OPUC, Federal Energy Regulatory Commission or other regulatory body having authority, this Agreement will not become effective unless and until such approval is obtained by NW Natural. If such approval is not obtained by NW Natural, this Agreement will be null and void and of no further legal effect and NW Natural will have no responsibility or liability to Producer under any of the provisions of this Agreement.

9.2 If, during the performance of this Agreement, a state or federal regulatory commission having jurisdiction (a "Governmental Authority") takes action affecting the rights, obligations, or economic interests of the Parties to this Agreement, then this Agreement may be terminated by either NW Natural or Producer if such Party's rights, obligations, or economic interests are adversely and materially affected by such regulatory action. This right of termination under Section 9.2 will be exercised by giving the other Party sixty (60) days' notice of the exercise of this right and of the specific circumstances giving rise to this right. Such termination will be effective sixty (60) days after such notice unless, prior to the expiration of the notice period, NW Natural and Producer agree to amend this Agreement to reflect the action of such Governmental Authority. Any amendment of this Agreement will be effective immediately following such Governmental Authority's approval, if necessary, of such amendment.

9.3 Upon termination under Section 9.2 or 9.3, (i) NW Natural will be responsible for reimbursing payments received from Producer associated with Project Work covered under the Receipt Point Facilities Cost Estimate that has not yet been performed or cannot be canceled without additional cost, (ii) NW Natural will have no further obligation to perform the Project Work, and will incur no liability for terminating the Project Work, and (iii) Producer will incur all costs to disconnect the Receipt Point Facilities from the LDC System.

ARTICLE 10
GOVERNING LAW

10.1 This Agreement will be governed by and construed in accordance with the laws of the State of Oregon, without regard to principles of conflicts of law. This Agreement will at all times be subject to all legislation and to present and future orders, rules and regulations of any duly constituted authorities now or hereafter having jurisdiction over Producer, NW Natural, this Agreement, or the Receipt Point Facilities.

ARTICLE 11
MODIFICATION AND ASSIGNMENT

11.1 This Agreement may not be modified or amended in any respect except by a written instrument executed by the Parties hereto which expressly refers to this Agreement. No waiver or modification of any provision of this Agreement will occur as a result of any course of performance or course of dealing between NW Natural and Producer, or from any usage of trade. No Party may assign this Agreement without the

prior written consent of the other Party, which consent will not be unreasonably withheld; provided, however, any reasonable and documented out-of-pocket costs or expenses NW Natural incurs as a result of NW Natural's provision of consent under this Section 11.1 will be borne by Producer. Any attempted assignment made without such prior written consent will be void and of no legal effect. This Agreement will be binding upon and inure to the benefit of any valid successors or assigns to the original Parties to this Agreement, but any assignment of this Agreement will not relieve either Party of any obligations to the other Party incurred prior to such assignment.

ARTICLE 12 **CONFIDENTIALITY**

12.1 This Agreement and the terms set forth herein are confidential and the Parties agree not to disclose such terms other than as set forth in this Agreement and as required by applicable law, regulatory authorities having jurisdiction over a Party, or any securities exchange; but each Party may disclose the terms of this Agreement to the following: (i) each of their and their respective affiliates' officers, employees, agents, lenders and other advisors that have a bona fide need to know such information and that have agreed to use this information only for the purposes intended herein and agreed to keep such information confidential; (ii) NW Natural may disclose the terms hereof to the OPUC or other regulatory authority having jurisdiction; and (iii) disclosure is allowed to any lender, underwriter or investor, their advisors and counsel, in connection with the solicitation and consummation of the financing of the Plant, subject to each such entity's undertaking in writing to keep such information confidential. The provisions of this Section 12.1 will survive for a period of one (1) year after the termination of this Agreement.

ARTICLE 13 **SURVIVING TERMS**

13.1 All obligations created by this Agreement survive termination of this Agreement except the obligation to continue performing the Project Work and any obligation to pay for those portions of the Project Work not performed due to termination. Provisions that expressly survive termination include, but are not limited to, Articles 7 and 12.

ARTICLE 14 **OTHER GENERAL PROVISIONS**

14.1 This Agreement sets forth the entire integrated agreement of the Parties with respect to the subject matter herein. This Agreement supersedes all other agreements relating to the subject matter herein that the Parties may have previously entered. This Agreement has been drafted with the joint participation of each Party, and will be construed to be neither against nor in favor of any Party, rather this Agreement will be construed in accordance with the fair meaning of its stated terms. The headings set forth in this Agreement will not affect the interpretation of this Agreement. Any provision of this Agreement held to be unenforceable in any jurisdiction will be, as to that jurisdiction only, ineffective only to the extent of such unenforceability, without affecting any other provision of this Agreement. Any term used in the plural will refer to all members of the relevant class, and any term used in the singular will refer to any one or more of the members of the relevant class. Any masculine term will also refer to the feminine. References in this Agreement to sections are to sections to this Agreement. "Including" will mean "including, but not limited to." "Herein," "hereof," "hereto," and other similar terms, refer to this Agreement as a whole and not merely to the specific section or clause where such terms may appear. "Or" will not be exclusive. Time will be of the essence. This Agreement may be signed in counterparts. A facsimile version or an e-mailed pdf of the signature page will have the same legal effect as an original. No waiver by a Party of any provision of this Agreement will be deemed to be a waiver of any preceding, concurrent, or succeeding breach of the same or any other provision. Subject to the terms herein, all rights and remedies granted or referred to in this Agreement are cumulative and resort to one will not preclude resort to any other available right or remedy. The signatories to this Agreement certify that they have the authority to bind the Party they represent.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement effective as of the date first written above subject to the provisions in Section 9.1.

NORTHWEST NATURAL GAS COMPANY

By: _____
Printed Name: _____
Title: _____
Date of Signature: _____

_____ **SIGNATURES:**

By: _____ Date: _____

By: _____ Date: _____

By: _____ Date: _____

Approved:

By: _____ Date: _____

EXHIBIT A

RECEIPT POINT FACILITIES

The Receipt Point Facilities will be located at [REDACTED].

The Receipt Point Facilities will have a designed daily volume of [REDACTED] Dth/d and a peak hourly flow of [REDACTED] Dth/hr at a design pressure of no less than [REDACTED] psig and no greater than [REDACTED] psig¹.

The major items included in this estimate are:

Design and installation of 4-inch wrapped steel pipe connecting Producer's outlet flange to NWN's class D distribution system, metering, pressure control equipment, quality monitoring equipment, odorization facilities, valving, automation control, communication equipment, and associated appurtenances and site work.

¹Pressure design assumptions set forth in this Agreement are not to be construed as implying a guaranty of any particular level of pressure during service.

EXHIBIT B

PHASE ONE COST ESTIMATE

[To be inserted.]

Assumptions for Phase One Cost Estimate:

[To be inserted.]

Allowances for Phase One Cost Estimate:

[To be inserted.]

**Exclusions
from Phase
One Cost
Estimate:**

[To be inserted.]

EXHIBIT C

Table 1 - Constituent Concentrations

Constituent	Trigger Level mg/m³ (ppm_v)^a	Lower Action Level mg/m³ (ppm_v)	Upper Action Level mg/m³ (ppm_v)	Landfill	Dairies	POTW_b
Biomethane Quality Specification^c				X	X	X
Health Protective Constituents – Carcinogenic						
Arsenic	0.019 (0.006)	0.19 (0.06)	0.48 (0.15)	X		
P-Dichlorobenzene	5.7 (0.95)	57 (9.5)	140 (24)	X		X
Ethylbenzene	26 (6.0)	260 (60)	650 (150)	X	X	X
n-Nitroso-di-n-propylamine	0.033 (0.006)	0.33 (0.06)	0.81 (0.15)	X	X	
Vinyl Chloride	0.84 (0.33)	8.4 (3.3)	21 (8.3)	X		X
Health Protective Constituents – Non-Carcinogenic						
Antimony	0.60 (0.12)	6.0 (1.2)	30 (6.1)	X		
Copper	0.060 (0.02)	0.60 (0.23)	3.0 (1.2)	X		
Lead	0.075 (0.009)	0.75 (0.09)	3.8 (0.44)	X		
Methacrolein	1.1 (0.37)	11 (3.7)	53 (18)	X		
Mercaptans (Alkyl Thiols)	N/A (12)	N/A (120)	N/A (610)	X	X	X
Toluene	904 (240)	9,000 (2,400)	45,000 (12,000)	X	X	X
Pipeline Integrity Protective Constituents^{d,e}						
Ammonia	5 grains/CCF	-	-	X	X	X
Biologicals	4x10 ⁴ / SCF ^f	-	-	X	X	X
Hydrogen	0.10%	-	-	X	X	X
Mercury	0.08 mg/m ³	-	-	X	X	X
Siloxanes	0.1 mg Si/m ³	-	-	X	X	X
Notes:						
a. The first number is in milligrams per cubic meter of air (mg/m ³), while the second number in parenthesis is in parts per million volume (ppm _v), unless otherwise specified						

- b. Publicly Owned Treatment Works
- c. Biomethane Quality Specification is reviewed and approved by Engineering and available upon request.
- d. The Pipeline Integrity Protective Constituent Lower and Upper Action Levels will be updated at a future time
- e. Testing requirements will be the lower of stated biomethane values or other tariff requirements
- f. qPCR per Acid-producing Bacteria (APB), Sulfate-reducing Bacteria (SRB), Iron-oxidizing Bacteria (IOB), group and commercially free of bacteria > 0.2 microns

Table 2 - Collective Risk from Carcinogenic and Non-carcinogenic Constituents

Risk Management Levels^a	Risk from Carcinogenic Constituents Risk = $\sum(\text{Group 2 measured value} - \text{Trigger Level})$	Hazard Index from Non-carcinogenic Constituents Hazard Index = $\sum[(\text{Group 2 measured value} - \text{Trigger Level}) * 0.1]$
Risk Level A	≥ 10.0	≥ 1.0
Notes: a. For the collective potential cancer or non-cancer risk		

EXHIBIT D

1. Biomethane Quality Specification

- a. Gas monitoring and enforcement hardware and software including, but not limited to, a gas chromatograph and all related equipment, and applicable communications facilities and software will be installed by Producer at the Receipt Point to monitor the constituents in the gas delivered, and deny access to gas that does not comply with the quality specifications identified in Table 1. For each parameter listed in Table 1, the actual value will be measured, calculated, evaluated, and enforced either on a continuous basis, or at a frequency based on the normal cycling time of the applicable instrument(s), but not less frequent than once every eight (8) minutes.

Table 1 - Gas Quality Specifications

Parameter	RIAL ^a	Value		Action Level
		Min	Max	
Methane (%)	≤ 97.8	97.3		< 97.3
Heating Value (BTU ^b /SCF ^c)	≤ 990 or ≥ 1150	985	1155	< 985 or > 1155
Wobbe Number (BTU/SCF)	N/A	1290	1400	N/A
Temperature (°F)	≥ 115	35	120	> 120
Carbon Dioxide (%)	≥ 1.8		2.0	> 2.0
Nitrogen (%)	≥ 1.8		2.0	> 2.0
Total Inerts ^d + Oxygen (%)	≥ 2.7		3.0	> 3.0
Oxygen (%)	≥ 0.18		0.20 ^g	> 0.20
Hydrogen Sulfide (grain/CCF ^e)	≥ 0.20		0.25	> 0.25
Total Sulfur (grain/CCF)	≥ 4.0		5.0	> 5.0
Moisture (lb/MMSCF ^f)	≥ 4		7	> 7
Hydrocarbon Dew Point (°F)	≥ 10		15	> 15
Notes: a. RIAL – Recommended Initial Alert Level b. BTU – British Thermal Units c. SCF – Standard Cubic Feet d. Inerts – nonhydrocarbon gases including, but not limited to, carbon dioxide, nitrogen, and oxygen e. CCF – 100 Standard Cubic Feet f. MMSCF – One Million Standard Cubic Feet g. All parties agree to exercise every reasonable effort to keep the gas completely free of oxygen				

- i. If any parameter measures are at, above, or below the RIAL, as applicable, NW Natural may notify Producer, as a courtesy, so Producer may make any necessary modifications to ensure the values do not exceed the Action Level.
 - 1. The RIAL for a parameter may be adjusted, as appropriate, based on Producer's operating range.
- ii. If any parameter measures are at, above, or below the Action Level, as applicable, NW Natural may immediately valve off the Receipt Point Facilities and notify Producer that flow at the Receipt Point Facilities was suspended.
- iii. Producer may begin injections after 24 hours from the shut-off, after Producer demonstrates the values for all parameters are within the specified range or above/below the RIAL, as applicable.
- b. Any discrepancies between the values from two or more monitoring devices will be addressed on a case-by-case basis.
- c. NWN may request a deviation from the monitoring equipment and interval requirements established in this standard where additional measures are necessary to provide reliable service in a safe environment.

2. Biomethane Quality

- a. The Biomethane will also have the following qualitative measures:
 - i. The Biomethane will be commercially free from foreign odors, solid matter, dust, gums, and gum forming constituents, or any other substance which interferes with the intended merchantability of the Biomethane or NWN's ability to properly odorize, or causes interference with the proper and safe operation of the lines, meters, regulators, or other appliances through which it may flow.
 - ii. Toxic or Hazardous Substance: The Biomethane will not contain any toxic or hazardous substance in concentrations which, in the normal use of the Biomethane, may be hazardous to health, injurious to pipeline facilities, limit merchantability, or be contrary to applicable government standards.
 - iii. Bacteria: The Biomethane, including any associated liquids, will not contain microbiological organisms, active bacteria or bacterial agents at levels that are higher than the natural gas in the LDC System and that are capable of causing or contributing to injury to NWN's pipelines, meters, regulators, or other facilities and appliances through which such Biomethane flows, or interference with the proper operation of NWN's facilities.

EXHIBIT E

INSURANCE REQUIREMENTS

Producer will at all times provide and maintain the following coverages and the following minimum limits of insurance written on an occurrence basis by a company or companies rated A/IX or better in the most recent edition of "Best's Insurance Guide" (or such lesser rating as may be approved by NW Natural in writing) and authorized to do business in Oregon.

A. Workers' Compensation and Employer's Liability:

- (i) State: Statutory
- (ii) Employers Liability:
 - \$1,000,000 Each Accident
 - \$1,000,000 each Disease.

B. Commercial General Liability (Occurrence Form):

- (i) Combined Bodily Injury and Property Damage:
 - \$2,000,000 Each Occurrence
 - \$5,000,000 General Aggregate
 - \$2,000,000 Products and Completed Operations
- (ii) The following coverages must be included:
 - (1) Premises Operations.
 - (2) Contractual Obligations (including the contract obligations specified in the indemnification paragraph(s) of this Contract).
 - (3) The policy will be endorsed to be primary and non-contributory with any insurance maintained by NW Natural and its subsidiaries, affiliates, officers, directors, employees, agents and shareholders, and their respective successors and assigns.
 - (4) Products and Completed Operations Insurance consistent with the requirements of this Paragraph B and Subparagraphs (i) and (ii) will be maintained by Contractor and the Subcontractors for the duration of the applicable statute of repose.
 - (5) There can be no exclusions for subsidence, collapse, explosion or underground property damage.
 - (6) There can be no exclusion for mold, fungus, water intrusion or water damage.
 - (7) There can be no Montrose language, anti-pyramiding exclusion, or exclusion limiting coverage to damages which first begin to occur within the policy period.
 - (8) Cross-liability coverage as would be achieved under the standard Insurance Services Office (ISO) separation of insureds clause, without any exclusions for cross-liability.
 - (9) The limits will not be eroded or wasted by defense fees or costs.

C. Business Auto:

- (i) Combined Bodily Injury and Property Damage
 - \$1,000,000 Each Accident
- (ii) The following coverages must be included:
 - (1) Owned Automobiles
 - (2) Non-Owned and Hired Automobiles

D. Pollution Liability Insurance:

- (i) \$3,000,000 per claim
- (ii) Pollution liability insurance will include, without limitation, coverage for (a) transporting of hazardous waste and materials and (b) non-owned disposal sites (NODS).
- (iii) Pollution liability insurance described in this Section C will be maintained by Producer for the duration of the applicable statute of repose.

E. Excess/Umbrella Liability Coverage:

- (i) \$10,000,000 Each Occurrence
- (ii) \$10,000,000 General Aggregate
- (iii) Coverage will be excess to and at least as broad as all insurance required above, including employer's liability, commercial general liability, and business auto.
- (iv) Excess/umbrella liability insurance will be maintained by Producer for the duration of the applicable statute of repose.

E. Certificates and Certified Copies of Policies. Certificates of insurance for Producer's insurance will be filed with NW Natural and be acceptable to NW Natural. Upon NW Natural's request at any time, Producer will immediately provide an actual certified copy of its insurance policies.

F. Notice of Cancellation, Reduction or Expiration. Insurance policies required by this Agreement will contain a provision that coverages or limits afforded under the policies will not be canceled, reduced or allowed to expire until at least 10 days' prior written notice has been given to NW Natural.

G. NW Natural's Remedies. Failure of Producer to secure and maintain insurance with the coverages and limits required by this Agreement will be a material breach of this Agreement entitling NW Natural, in its discretion and without waiving any other remedies, to purchase replacement insurance at the expense of the Producer. Producer consents to NW Natural procuring replacement insurance in Producer's name and Producer will cooperate in all respects with NW Natural's efforts in this regard. Alternatively, at NW Natural's discretion, NW Natural may purchase an NW Natural's protective policy or other similar policy that affords to NW Natural coverages and limits providing reasonably equivalent protections as NW Natural would have received if Producer maintained the insurance required by this Agreement. NW Natural's costs incurred in finding replacement insurance or an NW Natural's protective policy will either be reimbursed directly by Producer or may be offset against amounts owed by NW Natural to Producer on this Project or other projects.

H. Insurance In Excess of Requirements. If Producer purchases insurance in excess of the coverages or limits required under this Agreement, such excess coverages or limits will apply to the Project and inure to the benefit of NW Natural and will include a waiver of subrogation against NW Natural and its affiliates, employees, officers, directors, and agents.

I. No Waiver by NW Natural. The insurance requirements under this Agreement can only be waived or modified by NW Natural by an express written instrument signed by NW Natural acknowledging the reduced coverages or limits. No other act or omission by NW Natural or its agents, including but not limited to (i) implicit or verbal acceptance or approval of reduced coverages or limits or (ii) failure to require proof of compliant insurance, will amount to NW Natural's waiver of the insurance requirements of this Agreement.

- K. Waiver of Subrogation.** Producer warrants that all of Producer's liability insurance policies, including worker's compensation, will contain a waiver of subrogation against NW Natural, its affiliates, subsidiaries, directors, officers, employees and agents.
- L. Additional Insureds.** Producer warrants that all of Producer's liability insurance policies will contain an endorsement expressly naming NW Natural, its affiliates, subsidiaries, directors, officers, employees and agents as Additional Insureds. The coverage under the additional insured endorsement will (i) be primary and noncontributory with respect to any insurance maintained by the additional insureds, (ii) provide the same coverages and limits to the additional insured as are afforded to the primary insured as required by this Agreement, (iii) will provide coverage to the additional insureds for both ongoing operations and the products-completed operations hazard, (iv) these requirements are to be complied with for the same durations as the coverages afforded to the primary insured as required by this Agreement, and (v) waive all rights of subrogation against the Additional Insureds.