MASTER SERVICES AGREEMENT

THIS MASTER SERVICES AGREEMENT (the "Agreement"), effective January 1, 2019, is between Northwest Natural Gas Company ("NW Natural"), its parent company, Northwest Natural Holding Company ("NW Natural Holdings"), and its affiliates and subsidiaries (together, the "Affiliates"). NW Natural and its Affiliates are "Affiliated Interests," as defined under ORS 757.015 and RCW 80.16.010.

RECITALS

A. NW Natural is an Oregon corporation that is a natural gas local distribution company that serves customers through separate facilities located in Oregon and southwestern Washington. NW Natural is a wholly owned subsidiary of NW Natural Holdings—a publicly held company traded on the New York Stock Exchange. A list of NW Natural's Affiliates is included in Addendum 1, which may be amended periodically. NW Natural and its Affiliates, as identified in Addendum 1, are referred to herein as "Party" or collectively as "Parties". NW Natural is subject to regulation by the Oregon Public Utility Commission ("OPUC") and Washington Utilities and Transportation Commission ("WUTC"), respectively, for its state-regulated gas distribution activities in such states, and by the OPUC and the Federal Energy Regulatory Commission ("FERC") for its regulated intrastate and interstate gas storage activities. NW Natural is headquartered in Portland, Oregon.

B. Attached as Addendum 1 is a list of NW Natural's Affiliates. Except as otherwise noted on the Addendum, all of these Affiliates are legal entities separate and apart from NW Natural. Nothing in the Agreement is to be interpreted to the contrary.

C. NW Natural employs certain trained personnel capable of performing needed management, analytical, professional, and administrative services (which, together with the more detailed services specified on Addendum 2, are referred to herein as the "Services") in furtherance of the Affiliated Interests' operations.

D. NW Natural desires to make available to NW Natural's Affiliates such personnel and Services as the board of directors, officers or managers of those Parties shall reasonably request in the future, without detriment to NW Natural's utility functions.

E. NW Natural's Affiliates desire to make available to NW Natural such personnel and Services as the board of directors, officers or managers of NW Natural shall reasonably request in the future, without detriment to NW Natural's Affiliates' respective business functions.

THEREFORE, the Parties agree as follows:

1. Services Provided by NW Natural

Upon the request of the board of directors, officers, or managers of NW Natural, NW Natural shall furnish to its Affiliates the Services listed in Addendum 2 as requested, subject to applicable requirements of the cognizant utility commission(s), and given the terms and conditions as follows:

2. <u>Requests for Service</u>

All Services provided shall be mutually agreeable and based upon a written request for Services in a form substantially similar to that attached as Addendum 3 hereto ("Request for Services"), specifying the scope of Services. Changes in the Request for Services shall be agreed to in writing by the Parties.

3. Basis of Charges

3.1 <u>Costs Included in State Utility Revenue Requirements</u>. If the service cost or benefit is intended for inclusion in NW Natural's state operations revenue requirements, then:

a. All billing by NW Natural to an Affiliate shall be at the higher of cost or market, unless otherwise specified by the Parties and approved by the OPUC and/or, as appropriate, the WUTC.

b. All billings by an Affiliate to NW Natural shall be at the lower of cost or market, unless otherwise specified by the Parties and approved by the OPUC and/or the WUTC, or unless provided at an approved rate on file with the OPUC and/or the WUTC or the FERC.

c. All billings for Services rendered to NW Natural by an Affiliate shall meet the following three criteria: (1) they must be just and reasonable regulated utility expenses; (2) they must be for functions that NW Natural would perform as a stand-alone utility; and (3) they must not duplicate, but may augment/supplement, functions already performed by NW Natural.

3.2 <u>Costs Defined</u>. For the purpose of this Agreement, "costs" shall include both of the following:

a. All out-of-pocket expenses of the Party providing the Services incurred in connection with the provision of Services rendered, including salaries, labor costs and benefits and other payroll overhead costs; amounts paid for independent technical and professional Services; amounts paid to third-party contractors; and all administrative overhead expenses, including, but not limited to, space utilization, utilities, IT costs and other administrative costs. Labor costs shall be based on the number of hours worked by the employees multiplied by the average cost rate per hour applicable to those employees. The hourly rate shall be adjusted to

include all appropriate payroll overhead loadings (for vacation, benefits, taxes, etc.). In addition, the applicable Administrative overhead loading rate shall be applied to derive the fully loaded cost of employee time associated with Services provided. Materials, supplies, and non-labor vouchered items shall similarly be charged to the other Party on the basis of the full cost of the items supplied. Supporting documentation on the cost of non-labor items shall be available to the other Party to substantiate the charges billed. Non-labor costs shall not have an A&G loading rate applied.

b. A reasonable return on any investment in assets, equipment, or plant ("Assets") supporting the provision of Services in the following amounts:

(i) For Services provided by NW Natural, the return onAssets employed, if any, shall be no less than the rate case authorized rate of return on itsinvestment serving its ratepayers; and

(ii) For Services provided by an Affiliate to NW Natural, the return on Assets employed, if any, shall be no more than the rate case authorized rate of return on its investment serving its ratepayers, if applicable.

4. Method of Charging for Services

4.1 <u>Direct Assignment and Allocation Methods.</u> Direct assignment of costs shall be the primary method for charging for Services according to the accounting procedures in NW Natural's Cost Allocation Manual, attached as Exhibit A. Exhibit A contains rules for determining and allocating any remaining costs associated with those Services that cannot be directly assigned to a user of a Service. The allocation methods set forth in Exhibit A shall be applied to allocate those costs that cannot be directly assigned.

4.2 <u>Review of Affiliate Charges to NW Natural</u>. At least annually, NW Natural shall review the Services supplied by the Affiliates under each of the Addenda executed. The

review shall include a determination that billing is consistent with the accounting and cost assignment procedures in Section 3 and Exhibit A.

5. Invoicing

a. As soon as practicable after the last day of each month, the provider of Services shall invoice the recipient of Services for expenses for the month concluded, computed pursuant to Sections 3 and 4 above.

b. All invoice charges shall be supported by documentation satisfactory to the recipient. Charges for Services shall be entered into the accounting records in the month following the period in which Services were rendered. However, if the invoice charges are less than \$50,000 per Party, then invoice may be delayed until either (1) total charges are more than \$50,000 per Party, or (2) quarterly, whichever comes first.

6. Monitoring and Control

The Inter-Company Services Coordinator ("Coordinator") is responsible for reviewing, monitoring and maintaining Services Requests that are active. The Coordinator ensures authorization of new Services Requests and that allocation factors are proper and accurate. Additionally, the Coordinator is responsible for coordinating the monthly billing process as described in Section 5 above.

7. Billing Disputes

Disputes on billings for Services shall be resolved through negotiations between the authorized representative(s) of the Affiliate, the Controller of NW Natural, and the Vice President(s) of the department at NW Natural responsible for providing or receiving Services, or their respective designee(s).

8. **Books and Records**

a. All transactions made under this Agreement shall be recorded by NW Natural in accordance with the Uniform System of Accounts prescribed by the regulatory authorities having jurisdiction over NW Natural.

b. Each Party shall have the right at all reasonable times to examine the books and records of the other for the purpose of verifying the cost, or the market value determination if applicable, of the Services performed by the other Party.

9. Limitations on Service

a. NW Natural shall diligently and competently render all Services reasonably requested by the Affiliates to the extent NW Natural can make available its resources without detriment to its utility functions.

b. The Affiliates shall diligently and competently render all Services reasonably requested by NW Natural to the extent those entities can make available their resources without detriment to their business functions, and to the extent that such Services to NW Natural are specified in the attached Addendum 2 to this Agreement.

c. NW Natural and its Affiliates shall coordinate and administer all Services being rendered under this Agreement in order that such Services shall be furnished as efficiently and economically as possible.

d. Except as provided in subsections 9.a. and b. above, neither NW Natural nor its Affiliates shall have priority over the other in obtaining Services under this Agreement.

10. Limitation of Authority

The Parties agree that no Party shall assume nor create any obligation on behalf of any other Party other than as specifically provided for in this Agreement. Each Party reserves to itself

the right to make commitments for loans, financing, mortgages, and other commitments necessary and proper for its corporate purposes.

11. Inspection and Reporting

a. All books, records, and other data in possession of the Parties relating to the provision of Services pursuant to this Agreement shall at all times, during normal business hours, be made available to or copies provided to any regulatory agency having jurisdiction when engaged in the performance of its lawful functions, except to the extent that such information is reasonably determined by any Party to be confidential in nature in which case any such information shall be submitted to any such regulatory agency under confidential treatment in accordance with the applicable laws and regulations governing such confidential treatment request.

b. Each Party shall timely furnish to each other Party such information with regard to its operations as shall be reasonably required.

12. <u>Regulatory Jurisdiction</u>

The Parties acknowledge that NW Natural is a public utility company subject to regulation and control by various state and federal governmental regulatory agencies. The provisions of this Agreement shall be construed in aid of and not in derogation of the lawful control and regulatory power of any such agency.

13. Damages

In no event shall a Party be liable to another Party for any lost or prospective profits or any other special, punitive, exemplary, consequential, incidental or indirect losses or damages (in tort, contract or otherwise) under or in respect of this Agreement or for any failure of performance however caused, whether or not arising from the Party's sole, joint, or concurrent negligence. To the extent any payment required to be made under this Agreement is agreed by the Parties to

constitute liquidated damages, the Parties acknowledge that actual damages in such circumstances are difficult or impossible to determine and that such payment of liquidated damages constitutes a reasonable approximation of such damages, and not a penalty.

14. Governing Law

This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of Oregon.

15. Waiver

Any of the terms and conditions of this Agreement may be waived at any time and from time to time by the Party entitled to the benefit of such term or condition, but a waiver in one instance shall not be construed as a waiver in any other instance. A failure to enforce any provision of this Agreement shall not operate as a waiver of such provision or of any other provision. A waiver by any Party in favor of another Party shall not bind any regulatory agency with jurisdiction over such matter if the agency determines that such waiver would violate its regulations, orders, or applicable statutes.

16. Assignment

This Agreement shall be binding upon the Parties and their representatives and may not be assigned.

17. Termination

NW Natural reserves the right at any time upon thirty (30) days notice to its Affiliates to terminate this Agreement in whole or part. NW Natural shall promptly notify the OPUC and/or WUTC, if applicable, of such termination. NW Natural, or any Affiliate, reserves the right at any time upon notice to the other to terminate any or all of NW Natural or any Affiliate's Services Request(s) under this Agreement.

18. Integrated Agreement

This Agreement embodies the entire agreement and understanding between the Parties and does not supersede any prior agreement between such Parties, but governs all agreements entered into after the Effective Date. This Agreement may be executed by the Parties in separate counterparts, each of which when executed and delivered shall be an original, but which together shall constitute but one and the same agreement.

19. Adoption of Agreement by Affiliates

At such time that a NW Natural Affiliate requests or provides Services from/to any Party to this Agreement, the Affiliate shall sign Addendum 3 which adopts this Agreement.

Date as of _____ December 21, 2018

NORTHWEST NATURAL GAS COMPANY

By: _____

Name: Brody J. Wilson

Title: Vice President, Controller, Treasurer & Chief Accounting Officer

Addendum 1: Affiliates of NW Natural

The Appliance Center** Northwest Energy Corporation NWN Gas Reserves, LLC Northwest Biogas, LLC NNG Financial Corporation KB Pipeline Company Gill Ranch Storage, LLC NW Natural Energy, LLC NW Natural Gas Storage, LLC Trail West Holdings, LLC Trail West Pipeline, LLC BL Credit Holdings, LLC NW Natural Water Company, LLC NW Natural Water of Oregon, LLC NW Natural Water of Washington, LLC NW Natural Water of Idaho, LLC Salmon Valley Water Company Falls Water Company Cascadia Water, LLC Gem State Water Company

Please note this is the affiliate list included in the MSA filed on December 28, 2018 in docket UM 1804 in compliance with Order No. 17-526.

For the most recent list of affiliates, please refer to the Company's most recent annual Affiliated Interest Report filed with the Public Utility Commission of Oregon.

*Each of these businesses with the exception of the Appliance Center is a legal entity separate and apart from NW Natural. Nothing in this Agreement is intended to be interpreted to the contrary.

**The Appliance Center is a nonregulated business segment of NW Natural.

Addendum 2:

List of Services

This Addendum provides a description of the Services that **may be** performed by the Parties, which may be modified from time to time. This list is exemplary only, and nothing in this addendum suggests that such services have or shall actually be performed by or for any Party. The specific Services to be provided to a particular Party are set forth in Addendum 3.

All Services provided by the Parties shall be based on a mutually agreeable work scope, specifying the scope of Services, personnel, and budget for Services. Changes in the scope of work shall be agreed to by the Parties involved.

Internal Auditing	Reviews internal controls and procedures to ensure assets are safeguarded and transactions are properly authorized and recorded. Periodically audits accounting and other records and coordinates their examination, where applicable, with that of independent public accountants.
Legal	Provide legal advice and assistance with respect to labor and employment law, litigation, contracts, rates and regulation, environmental matters, and real estate legal issues, as well as, authorizations and compliance with matters under federal and state laws.
Corporate and Strategic Planning and Business Analysis and Development	Facilitates preparation of strategic plans, monitors trends and evaluates business opportunities, including acquisitions and dispositions. Facilitates process improvements by investigating and conducting research into issues relating to production, utilization, testing, manufacture, transmission, storage and distribution of energy. Keeps current on all research developments and programs of significance affecting company and the energy industry. Conducts research and development in promising areas and advises and assists in the solution of technical problems.

Accounting/	Accounts	Provide advice and assistance to Company in
Accounting/ Payable/Finance/Budgeting/Treasury		Provide advice and assistance to Company in finance, treasury and accounting matters, including the development of accounting practices, procedures and controls, the maintenance of the general ledger and related subsidiary financial systems, the preparation and analysis of financial reports, treasury management and credit. Provide services related to managing all administrative activities associated with financing, including management of capital structure; cash, credit and risk management activities; investment and commercial banking relationships; oversight of retirement trust funds and general financing activities. Advise and assist company and Affiliates in studying and planning in connection with infrastructure, budgets, economic forecasts, benchmarking, capital expenditures and special projects. Provide centralized accounts payable processing. Provide shared services management and respective intercompany accounting and settlement processes. Advise and assist in the preparation of federal,
		state and other tax returns, and respective tax accounting entries and generally advise
Risk Management		company as to any issues involving taxes. Advise and assist company in its risk and control framework. Manage the purchase and administration of all property and casualty insurance including the settlement of insured claims and in providing risk prevention advice.
Land and Environmental		Provide right of way services, including encroachments. Establishes policies and procedures for compliance with environmental laws and regulations. Researches emerging environmental issues and monitors compliance with environmental requirements. Provides oversight for environmental remediation services.
Corporate Communications		Prepares and disseminates information to employees, customers, government agencies, communities and the media.
Public Policy and Governmental Affa	uirs	Provide services in support of corporate strategies for managing relationships with federal, state and local governments, agencies

	and legislative bodies. Monitor, review, research, and advocate legislative issues. Formulate and assist with public relations and communications programs and administration of corporate contribution and community affairs programs.
Human Resources/Employee Benefits/Payroll/Safety	Advise and assist company in the formulation and administration of human resources and employee relations' policies and programs relating to personnel administration, training, wage and salary administration and safety programs. Provide central accounting for employee benefits and payroll. Direct and administer all medical and health activities for company. Advise and assist company in the administration of such plans and prepare and maintain records of employee and company accounts under the said plans, together with such statistical data and reports as are pertinent to the plans. Provide centralized payroll system.
Information Technology and Services	Provide the resources for the operation of an information technology function, including the development, implementation, and operation of a centralized data processing facility and the management of a telecommunications network. This function includes the central processing of computerized applications, support of individual applications and the development, implementation and processing of those computerized applications that can be best accomplished on a centralized basis. This function provides centralized help desk.
Facilities Management	Manage headquarters facilities, service centers, and district offices. Administers contracts for real estate leases, security, housekeeping, and maintenance of facilities. Maintain database of real estate contracts, managing lease/rental properties, handling purchases and sales of real property.
Office Services/Clerical Administrative Services	Provide centralized mail, imaging, record management services, and other general administrative support services.
Purchasing and Stores	Procure materials, supplies and services necessary for all operations, with the exception of wholesale gas purchases. Manage materials and supplies inventories. Work closely with

	business unit teams, seeking the best value for company through refined sourcing strategies, contracts and supplier agreements.
Marketing	Provide initial contact service related to new customer additions. Plan, formulate and implement marketing programs, as well as provide associated marketing services to improving customer satisfaction, load retention and shaping, growth of energy sales and deliveries, etc. Assist in carrying out policies and programs for the development of plant location and of industrial, commercial and wholesale markets. Provide customer support for industrial and commercial customers. Assist large customers in meeting business requirements related to gas quality, conservation, etc. Seek to maintain positive working relationships with major customers.
Engineering and Operations	Provide advice and assistance to Company in engineering and operations matters.
Rates and Regulatory	Provide advice and assistance to Company in rates and regulatory matters. Provide centralized rates and regulatory services and regulatory compliance.

Addendum 3:

Sample Services Request Form

Services Requested

The undersigned requests that **[Party Providing Services]** provide Services listed in Addendum 2 to the Master Services Agreement.

The undersigned agrees to the terms and conditions contained in the Master Services Agreement, and further agrees that all requests for Services from **[name of Party]** to NW Natural will be governed by the Master Services Agreement.

Services are requested beginning [Dates Services Requested].

[Party Requesting Services]

Ву:_____

Print Name:

Title:

Date:

Exhibit A – COST ALLOCATION MANUAL

For the most current Cost Allocation Manual, please refer to the Company's most recent annual Affiliated Interest Report filed with the Washington Utilities and Transportation Commission.