

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. **Requests for Service**

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 Costs Included in State Utility Revenue Requirements. 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 Costs Defined. 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 on Assets employed, if any, shall be no less than the rate case authorized rate of return on its investment 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 **Direct Assignment and Allocation Methods.** 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 **Review of Affiliate Charges to NW Natural.** 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. **Regulatory Jurisdiction**

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

Exhibit A – COST ALLOCATION MANUAL

NORTHWEST NATURAL GAS COMPANY COST ALLOCATION MANUAL

Overview

The purpose of Northwest Natural Gas Company's ("NWN") Cost Allocation Manual is to describe the methodologies for allocating direct, indirect and shared services costs between NWN, and any affiliates of NWN, and its non-regulated or non-utility affiliates and activities.

NWN is a natural gas local distribution company, which operates in Oregon and Washington, and is regulated by the Public Utility Commission of Oregon ("OPUC") and Washington Utilities and Transportation Commission ("WUTC"). NWN is owned by NWN Holdings. NWN Holdings also owns certain other businesses. NWN, NWN Holdings, and the other businesses owned by NWN and NWN Holdings are "affiliated interests" to NWN under ORS 757.015, and RWC 80.16.10. As such, the allocation of costs between these entities is subject to regulation by the OPUC and WUTC, and this manual sets out the methodologies, policies, and procedures for ensuring that the allocation of costs is done appropriately.

This document is intended to provide an overview of the different types of allocations and the processes employed to direct costs to the proper affiliate or activity.

This Cost Allocation Manual ("CAM") has been completed in accordance and conformance with the NARUC *Guidelines for Cost Allocations and Affiliate Transactions* ("*NARUC Guidelines*") as follows:

1. To the maximum extent practicable, in consideration of administrative costs, costs should be collected and classified on a direct basis for each asset, service or product provided.
2. The general method for charging indirect costs should be on a fully allocated cost basis. Under appropriate circumstances, regulatory authorities may consider incremental cost, prevailing market pricing or other methods for allocating costs and pricing transactions among affiliates.
3. To the extent possible, all direct and allocated costs between regulated and non-regulated services and products should be traceable on the books of the applicable regulated utility to the applicable Uniform System of Accounts. Documentation should be made available to the appropriate regulatory authority upon request regarding transactions between the regulated utility and its affiliates.
4. The allocation methods should apply to the regulated entity's affiliates in order to prevent subsidization from, and ensure equitable cost sharing among the regulated entity and its affiliates, and vice versa.
5. All costs should be classified to services or products which, by their very nature, are either regulated, non-regulated, or common to both.
6. The primary cost driver of common costs, or a relevant proxy in the absence of a primary cost driver, should be identified and used to allocate the cost between regulated and non-regulated services or products.
7. The indirect costs of each business unit, including the allocated costs of shared services, should be spread to the services or products to which they relate using relevant cost allocators.

Overall, the approach to allocating costs is to directly assign costs when applicable and to allocate costs based on the primary cost driver of the common cost, or relevant proxy, and to ensure that unauthorized subsidization of unregulated activities by regulated activities, and vice versa, does not occur. Except where otherwise approved, goods or services provided to the utility by an affiliate are provided at the lower of cost or prevailing market price. Goods or services provided by the utility to an affiliate are provided at the higher of cost or market price.

Costs allocated can take the form of: direct labor, direct purchased goods or services, and indirect labor and other indirect common costs. These costs are charged by the providing party to the receiving party at fully loaded costs. For the indirect labor and common costs that cannot be direct charged or allocated based on the primary cost driver of the common cost an indirect general allocator of the Massachusetts Formula will be used as a relevant proxy. The general allocator ("Massachusetts Formula") will be developed using an average of plant, revenues, and employee headcount for the preceding year ended December 31st. Refer to "Indirect Costs - Allocation of Common Costs" below.

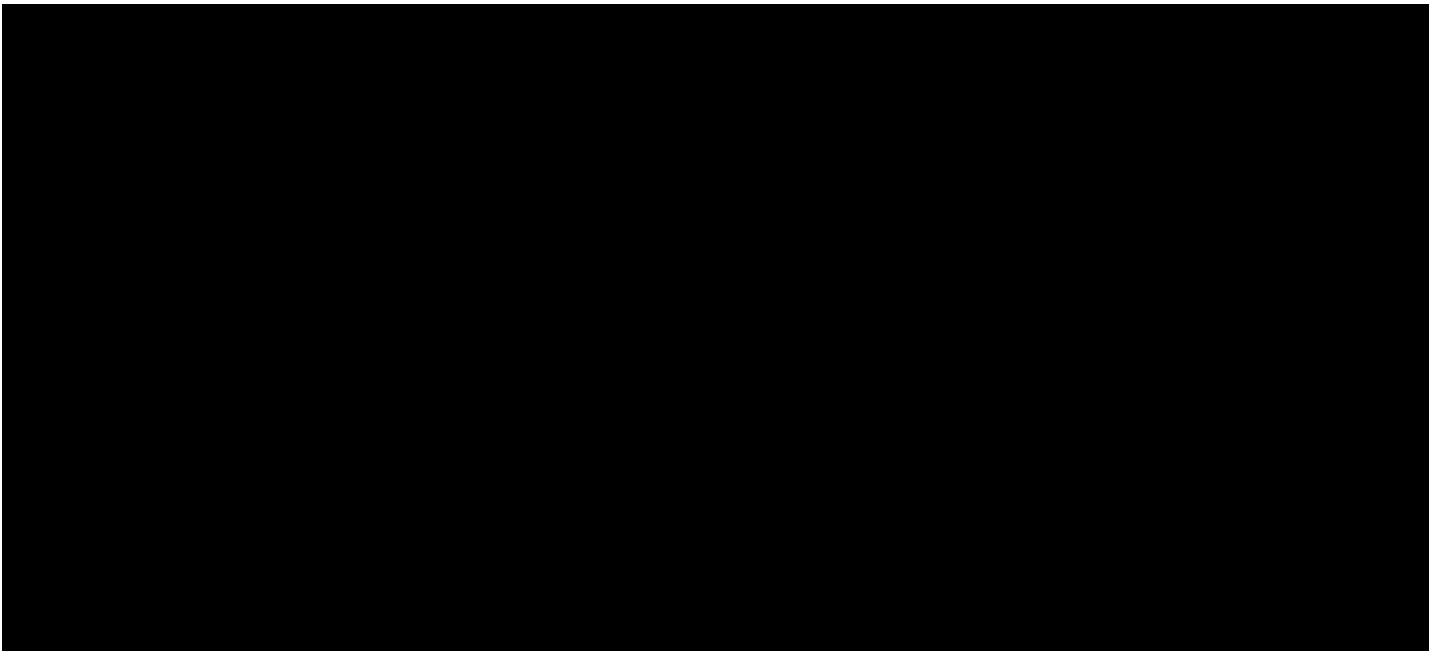
Affiliates & Non-Regulated Activities

Refer to the subsequent organizational chart for the list of all affiliates and subsidiaries of NWN that currently meet the requirements of ORS 757.015 and RCW 80.16.010, respectively.^{1 2}

The following is a list of NWN's non-regulated activities with additional cost allocation considerations:

1. Appliance Center/Miscellaneous Merchandising
2. Interstate Storage

NW Natural Organizational Chart – as of November 1, 2018



¹ BlackRock, Inc. and The Vanguard Group hold more than five percent of the voting securities of NWN, however they are not allocated any direct, indirect and shared services costs by NWN. The ownership of voting securities held by these entities are reported pursuant to ORS 757.511 and OAR 860-027-0175.

² On October 1, 2018, NWN consummated a holding company reorganization, whereby Northwest Natural Holding Company became the sole shareholder of all of the outstanding shares of NWN, and NWN transferred to Northwest Natural Holding Company all outstanding interests of each of its subsidiaries other than Northwest Energy Corporation and its subsidiary, NWN Gas Reserves LLC.

Labor Allocation Methods

Management oversight and other labor performed by NWN employees for the benefit of affiliates or non-public utility activities are recorded in accordance with the labor allocation methods described below.

Direct Labor - Shared Services

NWN has several departments that may provide services to affiliates that specifically benefit another entity. These departments direct-charge time incurred in aggregate of 30 minutes per day directly to the respective affiliate, or non-utility activity in which the time relates to in the SAP time reporting system to the extent possible. The costs are assigned directly to the entity for which the service is being provided through intercompany accounts. NWN charges labor rates for these shared services at cost per the payroll systems, grossed up for payroll overheads. Refer to 'Payroll Loadings and Overheads' below.

The departments that direct charge time incurred include:

- Accounting, including Shared Services Management
- Accounts Payable
- Clerical Administrative Services
- Corporate Communications
- Engineering and Operations
- Environmental
- Executives – Management Oversight
- Facilities and Security
- Gas Accounting
- HR and Payroll
- Information Technology & Services
- Legal
- Marketing
- Public Policy and Government Affairs
- Purchasing and Stores
- Rates and Regulatory
- Risk and Land
- Safety
- Strategic planning, business development
- Tax
- Treasury

Indirect Labor - General and Administrative Services

NWN has several departments that perform administrative and general functions for the benefit of NWN, NW Natural Holdings and its affiliates as well as public company related activities in service of NWN and other affiliates. These departments' labor costs are indirectly charged via a corporate allocation to the affiliates that benefit from their services. See 'Indirect Costs - Allocations of Common Costs' below. The below departments are determined to be indirect labor costs as they cannot be identified with a particular service or product to be charged and the labor benefits all affiliates. As such, the labor costs of these departments are allocated using

allocation factors designed to equitably allocate costs between NWN and its affiliates. These allocation factors are designed with an emphasis on recognizing cost drivers, or a relevant proxy in the absence of a primary cost driver.

These departments include:

- Corporate Governance and Compliance
- Corporate Secretary
- Financial Planning & Budgeting
- Financial Reporting
- Internal Audit
- Investor Relations
- Shareholder Services

Payroll Loadings and Overheads

NWN Employee payroll overhead (POH) is comprised of Vacation and Holiday Overhead Load and Benefits Overhead Load. The Company's payroll overheads loading rate is reviewed and updated annually by HR, Accounting, and Finance. Quarterly, any over or under allocation of costs recorded to the payroll overhead clearing accounts is reviewed and allocated to corporate expense and non-utility activities consistent with the underlying payroll charged.

Vacation and Holiday Overhead Load

A vacation and holiday overhead load is included in the payroll overheads which includes the estimated cost of all vacation, sick and company designated holiday days earned by an employee so that these costs appropriately follow where an employee charges their time.

Benefits Overhead Load

The benefit overhead load includes the cost of health care, pension, post-retirement medical, workers' compensation, 401K plans, payroll taxes, and annual incentive plan and key goal bonuses. If exception time is reported (see "Labor Allocation Methods"), the benefits overhead load follows the payroll dollars. The benefits overhead load is set at a rate adequate to fully allocate by year-end all actual benefit costs. The rate is determined at the beginning of the year based on estimated costs. Because benefit cost rates may differ depending on employee grade, employees are categorized into two classes, with different benefits overhead load rates for each class. The employee classes are: (1) Executives, and (2) Non-executives.

In 2017, the following costs were allocated as payroll overhead loadings (company averages):

Executives	
Vacation & Holiday Overhead Load	15.57% of payroll
Benefits Overhead Load	91.09% of payroll
Total Executive Payroll Overhead ³	106.66% of payroll
Non-Executives	
Vacation & Holiday Overhead Load	15.57% of payroll
Benefits Overhead Load	79.89% of payroll
Total Non-Executives Payroll Overhead	95.46% of payroll
Overtime and Doubletime Overhead ⁴	15.80% of payroll

Service Provider and Administrative Allocations

For affiliate labor charges, both direct and indirect charged, an additional administrative overhead load of 27.5% of the labor cost is added to cover the cost of rented space, office supplies, IT costs, utilities, furniture and equipment and other administrative costs.⁵ In like manner, an appropriate administrative overhead load is also charged from an affiliate to NWN when an affiliate provides services to NWN. The Company's administrative overhead is reviewed annually by Accounting.

Other Goods or Services

Direct Costs

Affiliates or non-regulated utility activities are charged directly for materials, supplies and services (e.g., consulting services, accounting software, office supplies, Kelso-Beaver Pipeline demand charge⁶) purchased by NWN on behalf of the affiliate on the basis of the full cost of the items supplied.

Indirect Costs - Allocation of Common Costs Incurred

Common costs incurred by NWN that may benefit other affiliates that are not able to be directly assigned will be allocated to the affiliates using the general corporate allocation methodology.

³ The executive payroll overhead rates do not include expenses for various elements of our executive compensation program such as stock option expense, restricted stock unit expense or long-term incentive plan expenses, because these expenses are excluded from rate base and are therefore, not necessary to allocate out.

⁴ The overtime overhead rates do not include a vacation and holiday component, and only include those benefit costs that are incurred when additional salary is incurred including payroll taxes and 401k match.

⁵ The administrative overhead load will not be charged if the employee providing the Services is located on affiliate premises for which all facilities related costs are borne by the Affiliate receiving the Services.

⁶ Under the Gas Transportation Agreement between Kelso-Beaver Pipeline Company ("KBPC") and NWN dated September 26, 1991, NWN pays KBPC a monthly demand charge which is charged directly. Additionally, if KBPC actually transports gas for NWN, there is an additional volumetric/commodity charge payable by NWN to KBPC for gas transported. The rates charged by KBPC to NWN for gas transportation services on the Kelso-Beaver Pipeline were approved by FERC in KBPC's 1991 certificate order.

These common costs include the indirect labor of the General and Administrative departments listed above as well as indirect department costs. See summary below.

Additionally, common costs incurred by NWN Holdings that benefit NWN and other affiliates will be allocated using the general corporate allocation methodology and NWN will be charged its portion intercompany. NWN Holdings' structure as a publicly traded holding company provides substantial benefits to its regulated utilities and other affiliates. Indeed, the NWN Holdings' without any operations of its own, exists for the purpose of, and in service to, its subsidiaries. For these costs that benefit various functional areas and affiliates, it is not practical to charge the costs directly. Costs incurred by NWN Holdings directly related to the publicly traded company structure will be allocated to the affiliates using the general corporate allocator.

The following table shows the formulas that shall be used to allocate the cost of services and costs incurred which are not directly charged. These allocators shall be updated annually based on the preceding year ended December 31st data. However, if a significant or material event occurs during the year the Company will update the allocators to reflect such an event on a pro-rata basis. The following table includes functions and costs that do not have a direct cost causation. The general corporate allocator ("Massachusetts Formula") will be developed using an average of plant, operating revenues, and payroll expense for the preceding year ended December 31st.

NWN Indirect Costs Incurred⁷	Basis of Allocation
Corporate Governance and Compliance Department	General corporate allocation: 33.3% plant, 33.3% operating revenues, 33.3% payroll expense
Corporate Secretary Department	General corporate allocation: 33.3% plant, 33.3% operating revenues, 33.3% payroll expense
Financial Planning and Budgeting Department	General corporate allocation: 33.3% plant, 33.3% operating revenues, 33.3% payroll expense
Financial Reporting Department	General corporate allocation: 33.3% plant, 33.3% operating revenues, 33.3% payroll expense
Internal Audit Department	General corporate allocation: 33.3% plant, 33.3% operating revenues, 33.3% payroll expense
Investor Relations Department	General corporate allocation: 33.3% plant, 33.3% operating revenues, 33.3% payroll expense

⁷ The departments include the departmental payroll and non-payroll costs incurred and additional administrative overhead charge on payroll costs.

Shareholder Services Department	General corporate allocation: 33.3% plant, 33.3% operating revenues, 33.3% payroll expense
Insurance Premiums	Allocation to affiliates and non-regulated activities covered by the group insurance based on the underwriting principles for each type of policy.
Property Taxes	Allocation to affiliates and non-regulated activities based on the value of the property owned that the taxes relate to.

NW Natural Holdings Common Costs Incurred	Basis of Allocation
Costs related to publicly traded company structure	General corporate allocation: 33.3% plant, 33.3% operating revenues, 33.3% payroll expense
Income tax Expense or Benefit	Allocated based on the adjusted pre-tax income or loss of the affiliate or activity

Other Goods and Services related to Individual NWN Non-Regulated Activities

Appliance Center

NWN's Appliance Center is a retail store that demonstrates and sells natural gas appliances to the general public. In addition to the allocations described within, an additional charge for management oversight of 1.5% of NWN's selling expenses is charged to the Appliance Center business. Certain NWN employees work exclusively on matters related to the operation of the Appliance Center. The cost of the employees and all related payroll overheads are charged to directly to the appliance center. In addition, all expenses incurred in the operation of the Appliance Center are charged to directly.

Interstate Storage

NWN owns and operates the Mist underground natural gas storage facility in Columbia County near Mist, Oregon. In addition to the allocations described within NWN provides the interstate storage service under a limited jurisdiction blanket certificate issued to it by FERC under Section 284.224 of FERC's regulations. See, Northwest Natural Gas Company, 95 FERC ¶ 61,242 (2001). Under that certificate, NWN is authorized to provide FERC-jurisdictional bundled firm and interruptible storage and related transportation services to and from its Mist storage field in interstate commerce. In addition, NWN provides an intrastate firm storage service for eligible intrastate customers and sites in Oregon under Tariff Schedule 80 (experimental). The terms of Rate Schedule 80 mirror NWN's FERC-authorized interstate service. Since the provision of the storage services is accomplished by the use of some shared storage and transportation assets that are included in the core rate base, NWN has sharing agreements in place with its Oregon and Washington regulators. In Oregon, the sharing arrangement for both storage services and asset optimization assistance is set forth in NWN's Tariff Schedules 185 and 186. These sharing agreements are in lieu of specific allocations of costs.

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

*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.

<p>Accounting/ Payable/Finance/Budgeting/Treasury</p> <p>Accounts</p>	<p>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.</p>
<p>Tax</p>	<p>Advise and assist in the preparation of federal, state and other tax returns, and respective tax accounting entries and generally advise company as to any issues involving taxes.</p>
<p>Risk Management</p>	<p>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.</p>
<p>Land and Environmental</p>	<p>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.</p>
<p>Corporate Communications</p>	<p>Prepares and disseminates information to employees, customers, government agencies, communities and the media.</p>
<p>Public Policy and Governmental Affairs</p>	<p>Provide services in support of corporate strategies for managing relationships with federal, state and local governments, agencies</p>

		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 Services	Administrative	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]

By: _____

Print Name: _____

Title: _____

Date: _____