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June 27, 2013

NWN OPUC Advice No. 13-10

***VIA ELECTRONIC FILING***

Public Utility Commission of Oregon  
550 Capitol Street, NE, Suite 215  
Post Office Box 2148  
Salem, Oregon 97308-2148

Attention: Filing Center

Re: Schedule H, High Pressure Gas Service Rider

Northwest Natural Gas Company, dba NW Natural (NW Natural or Company), files the following revisions and additions to its Tariff P.U.C. Or. 25, stated to become effective on and after September 1, 2013:

“Tariff Index,”  
First Revision of Sheet iv; and

Original Sheet H-1 through H-7  
Schedule H,  
“Large Volume High Pressure Gas Service (HPGS) Rider.”

**I. Introduction**

This filing introduces a new optional rider (Schedule H “Large Volume High Pressure Gas Service”) to the Company’s Rate Schedules 3, 31 and 32 non-residential natural gas service schedules. Schedule H provides High Pressure Gas Service (HPGS) through Company-owned and maintained compression equipment sited on customers’ premises for the purpose of allowing such customers to operate vehicle fueling equipment. This service will allow the Company to provide gas service at pressures up to 3,000 to 3,600 pounds per square inch (psi), which produces energy density high enough to fuel vehicles.

The proposed HPGS Rider responds to customer requests for utility services that would provide the infrastructure needed to support the customers’ ability to fuel vehicles using compressed natural gas (CNG). Attachment A includes letters from five NW Natural customers—Daimler Trucks North

America, Metro, Tri Met, West Linn Paper, and the Port of Portland—requesting the utility’s provision of such services. The Company believes that its proposed HPGS tariff is an important utility service that will allow its customers to maximize the value of their natural gas.

## **II. HPGS Service**

Service under Schedule H provides a non-residential customer with a turn-key solution not otherwise available for providing the gas pressure required for vehicle fueling, without a significant upfront capital investment into compression facilities. Schedule H also removes any concerns a customer may have with maintaining high pressure gas equipment, because the Company will monitor and maintain the compression equipment. Under Schedule H, the Company or its contractor will perform scheduled maintenance to ensure the facilities continue to operate at optimal levels. Unscheduled maintenance will also be available to the customer at cost.

The customer application process for HPGS service will be conducted in two phases. During the initial phase the Customer will sign a Feasibility Agreement stating it will work in good faith with the Company, providing NW Natural with the necessary information about its property and high pressure gas needs. During this phase, the Company will provide a preliminary estimate for HPGS service. If the Company determines that the HPGS facilities can be sited on the customer’s property and the customer approves the preliminary cost estimate, the customer and Company will execute a second agreement called the Site Design and Permit Evaluation Agreement. This agreement will provide the terms and conditions for the second phase of the application process, during which the Company will refine its cost estimate and perform the design work for HPGS installation. Upon completion of the design work, a third and final agreement will be executed to govern the terms of service for the primary ten-year period contract period for HPGS under Schedule H.

HPGS Facilities installed as part of service under Schedule H will include a high speed, reciprocating compressor, a CNG storage tank, and a fast-fill refueling dispenser. A customer may choose to customize the facilities sited on its property by adding equipment such as additional fast-fill dispensers, which can refuel a vehicle within minutes, or by adding one or more slow-fill dispensers, which can refuel a vehicle in five to eight hours. Further options include additional CNG storage tanks and a dispenser for the public resale of CNG. In all configurations, the customer will be responsible for operating the dispenser to fuel its vehicles and, if applicable, the customer will be responsible for all activities related to the resale of CNG to the public.

## **III. HPGS Pricing**

The terms of service and pricing for HPGS will vary for each installation and will be laid out in the customer’s HPGS Service Agreement. The customer will be billed a monthly facility charge designed to recover all equipment, permitting and siting costs (“actual project costs”). The monthly facility charge is derived by multiplying the actual project costs by an annual cost recovery factor, divided by 12. The cost recovery factor is designed to recover in each year the depreciation on the HPGS equipment plus the Company’s financing costs, at its authorized return, for the investment made on behalf of the customer. Included as Attachment E are the work papers that show the development of the cost recovery factors.

The customer’s monthly bill will also include a charge for Scheduled Maintenance, and when applicable, charges for any other services such as unscheduled maintenance or back-up gas service that

the Company may provide. The charges under Schedule H will be in addition to the charges for natural gas service billed in accordance with the non-residential rate schedule on which the customer is served.

Because customers served under Schedule H will pay all incremental costs associated with the provision of HPGS, the addition of this service offering should have no negative cost impact on other ratepayers. The program is also designed in such a manner as to mitigate any risks associated with providing a new utility service. For instance, participating customers will be required to meet the credit requirements for service in accordance with General Rule 2 of the Company's Tariff. In addition, if the customer terminates service prior to the end of the ten-year term established in the service agreement, the customer will be required to pay the total amount of monthly facility charges remaining under the HPGS Agreement and the remaining monthly scheduled maintenance charges that NW Natural already incurred or will incur. If service is terminated early, the equipment can be removed and redeployed to another customer site, avoiding the risks of an investment becoming stranded at the customers' site.

#### **IV. HPGS and the Refueling Market**

NW Natural estimates it may have 27 customers taking HPGS within its Oregon service territory over the next five years. The Company expects that these will be companies with approximately forty or more return-to-base fleet vehicles— that is, trucks or cars that return to the same place every night where they can be centrally refueled. Examples of such companies include waste haulers, local delivery services, and public transit agencies. These customers may, at their discretion, provide public access to the refueling stations.

Currently, Oregon has only three public CNG refueling facilities and very limited infrastructure for private fleet vehicle fueling. While NW Natural's HPGS offering is a relatively modest one, the Company hopes it will contribute to the development of a market in Oregon for gas as a transportation fuel.

#### **V. Consistency with State Policy**

In addition to responding to customer requests for LDC provided CNG services, the proposed Schedule H service also is consistent with good public policy, including Governor Kitzhaber's 10-Year Energy Plan, which calls for the acceleration of a more efficient and cleaner transportation system.<sup>1</sup> Specifically, the plan says:

**Accelerate the market transition to a more efficient, cleaner transportation system.**

Transportation is the single largest contributor to Oregon's carbon emissions and a significant source of air toxics. Oregonians consume 1.5 billion gallons of gasoline and drive 39 billion miles every year. According to an analysis conducted by the Oregon Department of Energy from U.S. Census Bureau data, fuel costs average Oregonians nearly seven percent of disposable income; nearly double the cost ten years ago. This plan calls for focusing on achieving a 20 percent conversion of large fleets to alternative fuel vehicles over the next ten years.<sup>2</sup>

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<sup>1</sup> 10-Year Energy Action Plan. Governor Kitzhaber. Page 13: "Over the next ten years, the State will reduce dependence on fossil fuels by assisting in the conversion of 20 percent of large fleets to alternative fuel vehicles, including, but not limited to, electric, compressed natural gas ("CNG"), and liquefied natural gas ("LNG")." [http://www.oregon.gov/energy/Ten\\_Year/Ten\\_Year\\_Energy\\_Action\\_Plan\\_Final.pdf](http://www.oregon.gov/energy/Ten_Year/Ten_Year_Energy_Action_Plan_Final.pdf)

<sup>2</sup> IBID, page 2 of cover letter to Plan (Kitzhaber to Oregon).

Consistent with the Governor's goal to move fleet vehicles to alternative fuels, for both environmental and economic reasons, the Company's HPGS enables customers to utilize a fuel that burns more cleanly than diesel, and is the cleanest of all fossil fuels, with significantly fewer emissions of carbon dioxide and carbon monoxide, and no emissions of nitrogen oxide, sulfur dioxide, particulates or mercury.<sup>3</sup> CNG produces little or no evaporative emissions during fueling and use, as compared to gasoline vehicles where evaporative and fueling emissions are a significant portion of the emissions associated with operation.

#### **VI. Supporting Work Papers**

The Company is excited to bring this service offering forward. It believes the time is right to do so, as this service is being asked for directly by customers and indirectly by our State's leaders.

In support of this filing, the Company includes the following work papers:

- Attachment A contains the five customer letters requesting NW Natural's involvement in the development of CNG Infrastructure.
- Attachment B is the High Pressure Gas Service Feasibility Agreement, which is a prerequisite to service under Schedule H.
- Attachment C is the Site Design and Permit Evaluation Agreement, which initiates design work provided under Schedule H.
- Attachment D is the ten-year Service Agreement necessary to receive service under Schedule H.
- Attachment E contains the cost work papers that demonstrate the development of the capital recovery factors found in Schedule H.
- Attachment F is the long run incremental cost analysis of HPGS.

#### **VII. Application for Accounting Order**

The Company is simultaneously filing an Application for an Accounting Order that, if issued, will allow the Company to depreciate HPGS Facilities over ten years, the term of the primary HPGS Agreement, rather than thirty years which is the expected life of the equipment. Approval of the Company's request for an accounting order is important in order to achieve cost recovery of HPGS in a timely manner, while still facilitating the deployment of necessary infrastructure.

The Company requests that the tariff sheets filed herewith be permitted to become effective with service on and after September 1, 2013.

Copies of this letter and the filing are available in the Company's main office in Portland, Oregon, and in its website at [www.nwnatural.com](http://www.nwnatural.com).

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<sup>3</sup> See <http://www.naturalgas.org/environment/naturalgas.asp#emission>

Please address correspondence on this matter to me with copies to the following:

Kelley Miller  
Rates and Regulatory Affairs  
220 NW Second Avenue  
Portland, Oregon 97209  
Telecopier: (503) 721-2516  
Telephone: (503) 226-4211, ext. 3589  
E-mail: [kelley.miller@nwnatural.com](mailto:kelley.miller@nwnatural.com) and  
[eFiling@nwnatural.com](mailto:eFiling@nwnatural.com)

Jennifer Gross  
Rates & Regulatory Affairs  
220 NW Second Avenue  
Portland, Oregon 97209  
Telecopier: (503) 721-2516  
Telephone: 503.226.4211, extension 3590  
Email: [jgg@nwnatural.com](mailto:jgg@nwnatural.com)

Please contact Jennifer Gross at (503)226-4211, extension 3590, if you have any questions.

Sincerely,

*/s/ Mark R. Thompson*

Mark R. Thompson

# NORTHWEST NATURAL GAS COMPANY

P.U.C. Or. 25

First Revision of Sheet iv  
Cancels Original Sheet iv

## TARIFF INDEX

(continued)

SHEET

### GENERAL SCHEDULES

Schedule A:	Billing for City and County Exactions.....	A-1
Schedule B:	Bills and Bill Payment Options.....	B-1 to B-4
Schedule C:	Miscellaneous Charges and Credits.....	C-1 to C-4
Schedule H:	High Pressure Gas Service (HPGS) Rider.....	H-1 to H-7
Schedule M:	Meter Testing Procedures.....	M-1
Schedule O:	On-The-Bill Repayment Services – Pilot Program.....	O-1 to O-3
Schedule P:	Purchased Gas Cost Adjustments.....	P-1 to P-6
Schedule S:	Service Solutions Dealer Appointment Service Program.....	S-1 to S-3
Schedule T:	Customer-Owned Natural Gas Transportation Service.....	T-1 to T-6
Schedule X:	Distribution Facilities Extensions for Applicant-Requested Services and Mains.....	X-1 to X-8

(N)

### RATE SCHEDULES

Schedule 2:	Residential Sales Service.....	2-1 to 2-2
Schedule 3:	Basic Firm Sales Service – Non-Residential.....	3-1 to 3-4
Schedule 15:	Charges for Special Metering Equipment, Rental Meters, and Metering Services.....	15-1 to 15-4
Schedule 27	Residential Heating Dry-Out Service.....	27-1
Schedule 31	Non-Residential Firm Sales and Firm Transportation Service.....	31-1 to 31-12
Schedule 32	Large Volume Non-Residential Sales and Transportation Service.....	32-1 to 32-14
Schedule 33	High-Volume Non-Residential Firm and Interruptible Transportation Service.....	33-1 to 33-8
Schedule 60A:	Special Contracts Index.....	60A-1
Schedule 60:	Special Contracts.....	60-1 to 60-10
Schedule 80:	Firm Storage Service (Experimental).....	80-1 to 80-16

(continue to Sheet v)

Issued June 27, 2013  
NWN OPUC Advice No. 13-10

Effective with service on  
and after September 1, 2013

**RATE SCHEDULE H  
LARGE VOLUME NON-RESIDENTIAL  
HIGH PRESSURE GAS SERVICE (HPGS) RIDER**

**PURPOSE:**

To provide Company-owned and maintained high pressure gas infrastructure sited on a Customer's Premise where the Company's standard Distribution System operating pressures are insufficient to meet Customer's requirements for fueling motor vehicles.

**SERVICE APPLICABILITY:**

Service under this Rate Schedule Rider is available to a Customer who: (1) has an approved Service Election under Rate Schedule 3, Rate Schedule 31, or Rate Schedule 32 for service to the High Pressure Gas facilities ("HPGS Facilities"); (2) has entered into a High Pressure Gas Service Agreement ("HPGS Agreement") under this Rate Schedule Rider for a minimum initial term of ten years; and (3) has satisfied the prerequisites for service commencement set forth in the Customer's HPGS Agreement.

**SERVICES PROVIDED:**

Service under this Rate Schedule Rider includes High Pressure Gas Service ("HPGS"), Scheduled Maintenance, Unscheduled Maintenance, and Back-Up Service.

HPGS Facilities - The Company will design, plan, engineer, permit, construct, install, inspect, test, and maintain all Standard HPGS Facilities installed in accordance with this rider. NW Natural reserves the right to designate the location of all Distribution Facilities and HPGS Facilities required for such service.

Standard HPGS Facilities – Standard HPGS Facilities include the following:

- Compression system
- Main distribution panel
- Remote feeder panel
- Transformer pad
- Pads
- Trenches
- Compressor skid
- Dryers
- Regeneration pad
- Storage vessels
- Priority panel
- Protective traffic bollards
- One fast fill meter/dispenser (does not include hanging hardware)
- ASME Cascade Buffer – one three pack installed on the roof
- Control System and remote power panel

(continue to Sheet H-2)

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NWN OPUC Advice No. 13-10

Effective with service on  
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**RATE SCHEDULE H  
LARGE VOLUME NON-RESIDENTIAL  
HIGH PRESSURE GAS SERVICE (HPGS) RIDER**

**SERVICES PROVIDED (Continued)**Standard HPGS Facilities (Continued)

Upon Customer request, the Company may assist a Customer in the purchase and installation of additional dispensers, hanging hardware, or other HPGS related equipment beyond the Standard HPGS Facilities. The installed cost for any additional equipment will be borne by the Customer and must be paid at the time the parties enter into the HPGS Agreement.

Scheduled Maintenance - NW Natural shall procure and furnish all materials, utilities, equipment, services, supplies, and labor necessary for the routine operation and maintenance of the HPGS Facilities. Scheduled Maintenance shall include, but shall not be limited to, periodic testing, adjustment, and calibration of the meter, external inspection of above-ground portions of the HPGS Facilities, and maintenance of all valves, piping, meter and instruments. Scheduled Maintenance does not include maintenance of non-standard customer-owned HPGS Facilities.

Unscheduled Maintenance – NW Natural will procure and furnish all materials, equipment, supplies, services, and labor necessary to perform non-routine maintenance on the HPGS Facilities as needed to ensure efficient and continued operation. Such Unscheduled Maintenance shall include dispatching Company personnel to investigate any abnormality or emergency situation affecting the HPGS Facilities, including the tripping of an alarm observed by the Company through its monitoring of HPGS Facilities, and the repair or replacement of HPGS Facilities or their components that result from normal wear or facility failure. Unscheduled Maintenance also includes equipment additions, upgrades, or replacements that the Company determines are required to comply with any changes in law, evolving industry and/or NW Natural engineering design, or field operational standards. Unscheduled Maintenance does not include maintenance of non-standard, Customer-owned HPGS Facilities, or of any other equipment that is not associated with or required for the operation of the HPGS Facilities.

(continue to Sheet H-3)

Issued June 17, 2013  
NWN OPUC Advice No. 13-10

Effective with service on  
and after September 1, 2013



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**RATE SCHEDULE H  
LARGE VOLUME NON-RESIDENTIAL  
HIGH PRESSURE GAS SERVICE (HPGS) RIDER**

**SERVICES PROVIDED (Continued)**

Back-Up Service – NW Natural may provide compressed natural gas (“CNG”) as a Back-Up Service when Scheduled Maintenance or Unscheduled Maintenance disrupts the flow of Natural Gas to the HPGS Facilities for an extended period of time. The availability and duration of Back-Up Service is subject to Company discretion and availability. For purposes of this provision, Back-Up Service may be provided via tanker deliveries of CNG to the Customer’s site at NW Natural’s discretion. The Company may limit the number of vehicles that may use NW Natural fueling stations under this Back-Up Service provision. Back-Up Service is not available as a replacement supply source under Curtailment conditions or when Customer-owned gas supplies do not arrive at the Receipt Point. Customer is not relieved of its obligations under this Rider, including the Customer’s obligation to pay any charges set forth in this Rider during the period of any service disruption resulting from Unscheduled Maintenance.

**INSTALLATION COSTS:**

In the event that new Distribution Facilities are required to provide service under this Rate Schedule Rider, such facilities shall be installed in accordance with Schedule X of the Tariff of which this Rate Schedule is a part. For purposes of this Rate Schedule Rider, the Company-owned facilities beyond the meter will not be considered Distribution Facilities as they are defined in NW Natural’s General Rules and Regulations. Any costs for site preparation and Company-owned facilities installed beyond the meter will be included in the Monthly Facility Charge calculation.

**MONTHLY CHARGES:**

All costs and charges are specific to each HPGS Facilities’ installation and shall be set forth in the HPGS Agreement between NW Natural and the Customer. A description of each charge follows:

(continue to Sheet H-4)

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**RATE SCHEDULE H  
LARGE VOLUME NON-RESIDENTIAL  
HIGH PRESSURE GAS SERVICE (HPGS) RIDER**

**Monthly Billing Rate (continued)**

Monthly Facility Charge is the amount a Customer will pay for the installation and use of the HPGS Facilities, calculated as follows:

$$(\text{Actual Project Costs} * \text{Cost Recovery Factor}) / 12$$

Where:

Actual Project Costs equals the cost for all equipment associated with the provision of HPGS, and the costs to design, plan, engineer, permit, construct, install, inspect, and test the HPGS Facilities, adjusted as needed for any subsequent capital additions or improvements that result from Unscheduled Maintenance. Any tax credits, refunds, grants, rebates or other monetary benefits recognized for accounting purposes as a result of the installation of an HPGS Facility at a Customer's Premise will be credited, net of any applicable taxes, to the Actual Project Costs at the time of recognition;

and

Cost Recovery Factor equals the adjustment for incremental capital-related costs of the HPGS Facilities. Incremental capital-related costs include depreciation, interest, property taxes, and any other costs customarily relating to a utility investment. The cost of capital and cost of long-term debt used in the Cost Recovery Factor shall be the amounts authorized by the Commission in the Company's most recent general rate case. The Cost Recovery Factors for each year of the initial ten year term of service, using current incremental capital-related costs are shown in the table below.

(continue to Sheet H-5)

Issued June 17, 2013  
NWN OPUC Advice No. 13-10

Effective with service on  
and after September 1, 2013

**RATE SCHEDULE H  
LARGE VOLUME NON-RESIDENTIAL  
HIGH PRESSURE GAS SERVICE (HPGS) RIDER**

**Monthly Billing Rate (continued)**

<b>Cost Recovery Factors Primary 10 Year Term Effective: September 1, 2013</b>			
<b>Year 1</b>	22.9%	<b>Year 6</b>	15.1%
<b>Year 2</b>	21.1%	<b>Year 7</b>	13.9%
<b>Year 3</b>	19.3%	<b>Year 8</b>	12.7%
<b>Year 4</b>	17.8%	<b>Year 9</b>	11.7%
<b>Year 5</b>	16.4%	<b>Year 10</b>	10.7%

Scheduled Maintenance Charge includes the costs associated with providing Scheduled Maintenance and administrative services for the HPGS Facilities. Scheduled Maintenance costs are initially based on expected labor and material costs known at the time the HPGS Agreement is executed. The Scheduled Maintenance Charge may be adjusted annually on the anniversary date of the execution of the HPGS Agreement to reflect any adjustments for differences between expected costs and actual costs, and to reflect any cost changes expected for the next 12-month period.

In addition to the Monthly Facility Charge and the Scheduled Maintenance Charge, the Company will bill and the Customer will be responsible to pay all actual costs associated with the Company's provision of Unscheduled Maintenance and Back-Up Services.

Unscheduled Maintenance will be billed as costs are incurred at actual costs for labor and materials.

Back-Up Services will be billed as costs are incurred. Sales Service Customers will be billed according to the rate, and terms and conditions of the Rate Schedule on which the Customer receives gas service as part of its service under this Rider. For Transportation Customers, an additional amount will apply for each therm of back-up gas consumed, priced at the monthly incremental cost of gas in accordance with Rate Schedule 150. The charge will also include all mobilization costs and associated time and materials.

Issued June 17, 2013  
NWN OPUC Advice No. 13-10

Effective with service on  
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**RATE SCHEDULE H  
LARGE VOLUME NON-RESIDENTIAL  
HIGH PRESSURE GAS SERVICE (HPGS) RIDER**

**Special Conditions**

1. Service under this Schedule first requires a signed Site Design and Permit Evaluation Agreement, which must be superseded by a signed HPGS Agreement under which Customer elects to take service under this Rider for a primary term of ten years commencing on the first day of the first Billing Month following the date that the HPGS Facilities are installed. The Company and Customer may choose to negotiate a new HPGS Agreement at the end of the primary ten-year term.
2. The Company or Customer may terminate service under this Rate Schedule Rider for the reasons and in the manner set forth in the HPGS Agreement. In the event of termination prior to the end of the ten-year initial term, Customer must pay any amounts due for the early termination of service to the Company in accordance with the terms and conditions of the HPGS Agreement. Upon termination of service, NW Natural will safely cap utilities used at the HPGS Facilities and remove the HPGS Facilities, except for all cement pads.
3. With the sole exception of the use of the fueling apparatus, the Customer may not access or modify, or allow another party to access or modify, the HPGS Facilities without the express written permission of NW Natural.
4. The Customer shall operate the fueling apparatus in accordance with all applicable regulations and laws.
5. The Customer shall maintain the minimum clearances around the HPGS Facilities as directed by NW Natural.
6. The Customer shall not fuel any vessel that is not fit and certified for transporting and, or containing compressed natural gas.
7. The Customer is solely responsible for compliance with laws related to the use of CNG in a vehicle and, if applicable, the operation as a retailer of CNG, including responsibility for payment of any state and federal highway or other taxes associated with or related to the sales and, or use of compressed natural gas under this Rider.

(continue to Sheet H-6)

Issued June 17, 2013  
NWN OPUC Advice No. 13-10

Effective with service on  
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**RATE SCHEDULE H  
LARGE VOLUME NON-RESIDENTIAL  
HIGH PRESSURE GAS SERVICE (HPGS) RIDER**

**Special Conditions (continued):**

8. If requested by Company, the Customer shall provide financial assurance in advance of construction by making a cash payment, or providing an irrevocable letter of credit or other guaranty of Customer's obligations in a form acceptable to NW Natural for an amount equal to part or all of the site design costs as defined in the Site Design and Permit Evaluation Agreement.
9. Customer shall notify NW Natural as soon as reasonably possible of any conditions that may affect operation of HPGS Facilities, including, but not limited to, force majeure, fires, vandalism, accidents, planned construction, or power disruptions at Customer's premises and specifically on or near the Site.
10. NW Natural will attempt to conduct Scheduled Maintenance and Unscheduled Maintenance in a manner that minimizes disruption of the flow of Natural Gas through the HPGS Facilities.
11. The Customer must establish and maintain electricity services necessary for the continual operation of the HPGS Facilities. The Company may assist in the siting of the electric services on the Customer Premise.
12. The Customer must maintain a lockable security fence around the site or around the HPGS Facilities.
13. Unobstructed access to the Company's HPGS Facilities, meters and other property of the Company located on the Customer's Premises must be given to the Company, its employees, its contractors, subcontractors, and agents, at all times for installation, inspection, adjustment, repair, maintenance, removal and other purposes. Failure to permit access is grounds for Disconnection of Service.
14. For the purposes of this Rider, the Custody Transfer Point is the meter located at the point of interconnection between the Company's Distribution Facilities and the Company-owned service line to its HPGS Facilities. All service under this Rider occurs beyond the Custody Transfer Point.

(continue to Sheet H-7)

Issued June 17, 2013  
NWN OPUC Advice No. 13-10

Effective with service on  
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**RATE SCHEDULE H  
LARGE VOLUME NON-RESIDENTIAL  
HIGH PRESSURE GAS SERVICE (HPGS) RIDER**

**GENERAL TERMS:**

Service under this Rider is governed by the terms and condition of the Service Agreement between Customer and NW Natural, by the terms of this Rate Schedule Rider, by the terms of the Rate Schedule from which the Customer is receiving Natural Gas service, by any other Schedules that by their terms or by the terms of this Rate Schedule Rider apply to Service under this Rate Schedule Rider, by the General Rules and Regulations contained in this Tariff, and by all rules and regulations prescribed by regulatory authorities as amended from time to time. In the event of inconsistent terms, the terms of this Rate Schedule Rider and the Customer's Service Agreement shall prevail over the Tariff. In the event of inconsistent terms, the terms in the Customer's Service Agreement shall prevail over this Rate Schedule Rider.

Issued June 17, 2013  
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Effective with service on  
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## **Attachment A**

NWN OPUC Advice No. 13-10



March 21, 2013

Mr. Chris Galati  
Business Development  
NW Natural Gas  
220 NW Second Ave  
Portland, OR 97209

Dear Mr. Galati,

I write to express TriMet's support for NW Natural's application to the Oregon Public Utility Commission to create a utility-supplied High Pressure Service Tariff. TriMet is actively considering natural gas vehicles for use in our fleet to help reduce fuel costs and price volatility, while also reducing emissions and noise from our operations. We believe this program offers great promise for enabling TriMet to make the transition to natural gas sooner than it would otherwise be able, through the cost of service arrangement envisioned under the tariff to provide for the fueling infrastructure.

We have had positive experiences with NW Natural over the years, and have great trust in the utility's ability to deliver this program effectively and efficiently in a way that will benefit the ratepayer. In particular, we believe the utility-supplied High Pressure Service model offers real promise for TriMet since natural gas fueling infrastructure is not a core activity area of ours, such that we lack direct experience on the compression-storage-dispensing and metering side of the business, which the utility can provide. As a regulated service, we are confident that the program will be delivered cost-effectively, and that having the utility as a partner will enable economies of scale to be more quickly achieved for our organization.

We have been studying the experiences of other transit properties that have converted to natural gas, such as Pierce County Transit in Washington, and are excited about the potential benefits that converting to natural gas could offer. We believe that the program NW Natural is proposing represents an attractive model for enabling TriMet to focus on its core competencies (vehicle operations and maintenance), while our utility partner would focus on the fueling infrastructure and operations. The possibility of enabling TriMet to provide retail fuel sales further promises to make the conversion more cost-effective for TriMet, letting us reap the potential cost savings of a conversion to natural gas even sooner. This would allow us to put more of our resources into our core mission of providing transit service.

We look forward to the PUC's approval of the High Pressure Service Tariff so that we can move forward with our discussions about TriMet's potential participation in the program. TriMet encourages and supports NW Natural in filing a tariff that would provide the infrastructure services necessary to help TriMet support the Governor's 10 Year Energy Action Plan call for a comprehensive alternative fuel program that allows utility-ownership of refueling infrastructure.

Sincerely,

A handwritten signature in green ink, appearing to read "Neil McFarlane".

Neil McFarlane  
General Manager





June 14, 2013

Susan Ackerman, Chair  
Public Utilities Commission  
550 Capitol Street NE #215  
P.O. Box 2148  
Salem, Oregon 97308-2148

Dear Chair Ackerman:

I am writing you today on behalf of the Port of Portland in support of the high pressure service tariff request submitted to the Public Utilities Commission by the Northwest Natural Gas Company.

The Port of Portland provides convenient free shuttle bus service to customers in our economy parking lot and to employees that work at the Portland International Airport (PDX) 24 hours a day, 365 days a year. We understand the environmental and economic benefits of using compressed natural gas (CNG) as a transportation fuel.

The Port owns and maintains a private CNG fueling system that cannot be used by the general public. The buses cover over 2,000 miles a day and use over 260,000 Gasoline Gallon Equivalents (GGE) of CNG fuel across the fleet.

Since 1997, the Port has used CNG safely, reliably, and economically while reducing our carbon footprint by over 500 metric tons of CO<sub>2</sub>e per year and operating the fleet at a 30% discount to operating diesel fueled buses.

The Port is currently reviewing the costs and benefits of redeveloping our older fueling infrastructure. We believe Northwest Natural's high pressure service tariff request, if approved, will provide the Port more flexibility in our decision making regarding the needs of our shuttle bus fleet which is an integral part of our operations at the busiest commercial service airport in the state of Oregon.

The Port is pleased to support NW Natural's efforts as we believe this is an important step for our state as we transition to a more reliable availability of lower carbon fuel in the marketplace.

Sincerely,

Bill Wyatt  
Executive Director



April 23<sup>rd</sup>, 2013

Chris Galati  
Business Development  
NW Natural  
220 NW Second Ave  
Portland, Oregon 97209

West Linn Paper Co. is in the process of evaluating Compressed Natural Gas for fleet use. The primary motivation to look at Natural Gas include but are not limited to, environmental benefits (PM, NO<sub>x</sub>, SOX, VOC, CO), compliance with environmental regulations, excessive price and volatility of diesel and the security of fuel supply. CNG is the only alternate fuel that mitigates these problems while providing the customer with a reasonable return on investment for making the switch.

The economics are based on incremental cost of vehicles, cost of training and parts inventory for maintenance and code compliance upgrades for garage bays. The final component is the full capital cost associated with the infrastructure: compressor station, storage and metering of CNG on site.

WLPCO is seeing the conversion to CNG take place across North America. CNG Engines, trucks and truck conversions are now possible. Oregon and the Portland Metropolitan area seems to be isolated and lagging behind in this area. WLPCO along with other industrial customers fears that competitive advantage along with jobs will be lost if this trend continues.

WLPCO recognizes that NWN is a leader and expert in CNG infrastructure. WLPCO projects that NWN can achieve economy of scale for implementation, maintenance and back up of infrastructure.

WLPCO further recognizes that a regulated utility offering is one of the best and most effective ways to catch up with the rest of North America and requests that NWN offer infrastructure services to customers through a utility tariff.

Sincerely

A handwritten signature in blue ink, appearing to read "Steven Doss", is written over a faint background image of a paper mill.

Steven Doss  
Purchasing Manager  
West Linn Paper Company

# DAIMLER

April 2, 2013

Daimler Trucks North America

Christopher F. Galati, P.E., MBA  
NW Natural Gas  
220 NW Second Ave.  
Portland, OR 97209

Dear Chris;


Daimler Trucks North America has invested significant capital to develop and produce various lines of fleet vehicles that operate on natural gas. Daimler began this effort many years ago when it became apparent that natural gas was the leading alternate fuel to meet our customer's needs. These include but are not limited to customer power and range requirements, EPA compliance, fuel stability and fuel security. In addition, natural gas is the only fuel available that offers the customer an ROI on the investment to switch from business as usual.

As Sales Manager for these vehicles I have spanned North America and given innumerable presentations on the topic of Class 6-8 Natural Gas Vehicles. We have over 2,000 units in operation. The common remaining barrier to market adoption is now the lack of infrastructure for compressed natural gas fueling. Daimler has product but cannot sell into the Oregon market because there is no place to fuel these vehicles. This hurts sales, the environment, employment and Oregon's competitive advantage. The 2,000 units in operation could easily be 10,000 units, if proper infrastructure existed.

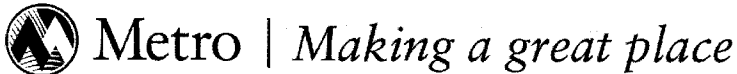
I fully understand the hesitancy of fleet managers to switch to CNG as they are uncomfortable with the cost, insecurity, learning curve and operation of the infrastructure. That is why Daimler Trucks North America fully supports any and all endeavors, by a gas utility to own and operate and maintain CNG infrastructure on behalf of customers who wish to make a switch to this clean and domestically produced fuel.

Infrastructure to date in Oregon has been minimal and reserved to a handful of locations. Daimler Trucks North America had to acquire special permission to fuel our test trucks at the state motor pool in Salem. This generally proves that the private market cannot and will not seed the region with enough infrastructure to produce meaningful market transformation in this region.

Daimler Trucks North America requests that NW Natural seek approval from the OPUC to provide this necessary service in their territory.

Sincerely,  
  
Robert Carrick  
Sales Manager

Daimler Trucks North America  
4435 N. Channel Ave.  
Portland, Oregon 97217  
503-745-2888 Phone  
503-745-3999 Fax  
[robert.carrick@daimler.com](mailto:robert.carrick@daimler.com)



April 8, 2013

Mr. Chris Galati  
Business Development  
NW Natural Gas  
220 NW Second Ave  
Portland, OR 97209

Dear Mr. Galati,

I write to express Metro's support for NW Natural's application to the Oregon Public Utility Commission to create a utility-supplied High Pressure Service Tariff. Metro believes approval of this tariff will foster development of natural gas fueling stations for trucks in the Metro region. Using natural gas as a transportation fuel promotes Metro's goals of clean air and water. Additionally, Metro is also interested in developing a local natural gas fueling infrastructure which will support development of markets for renewable natural gas (RNG) derived from a variety of organic wastes.

In his 10 Year Energy Action Plan, published in December of 2012; Governor Kitzhaber called for a comprehensive alternative fuel program that *"allows utility-ownership of refueling infrastructure and provides incentives, where appropriate, for vehicle conversions."* Metro concurs with this and, based on successful programs elsewhere, believes that NW Natural's participation in developing a regional natural gas infrastructure may act as a catalyst for market transformation and private investment.

Metro's 10-Year Regional Solid Waste Management Plan calls for garbage and recycling trucks to switch from diesel to cleaner fuels. We believe this switch is likely to benefit the hauling companies and their customers (residents and businesses) both economically and environmentally.

As the regional waste shed manager; Metro understands that there is an abundance of organic waste generated in the region. The RSWMP calls for the increased collection, processing and recovery of this material. One option of recovery includes converting organic material to biogas or renewable natural gas. Metro understands that a natural gas fueling infrastructure is a key component needed to further enable the development of a biogas and renewable natural gas market.

Metro has a positive relationship with NW Natural and trusts its ability to deliver this program effectively and efficiently in a way that will benefit the natural gas ratepayer. In particular, Metro believes having the utility as a partner will enable garbage hauling companies' to attain economies of scale for conversion to CNG and deliver associated benefits to customers sooner and with more certainty than without utility initiative.

Sincerely,

Scott Robinson  
Deputy Chief Operating Officer  
Metro

## **Attachment B**

NWN OPUC Advice No. 13-10

## HIGH PRESSURE GAS SERVICE FEASIBILITY AGREEMENT

This High Pressure Gas Service Feasibility Agreement (“Agreement”), dated [DATE] is made by and between Northwest Natural Gas Company dba NW Natural, an Oregon corporation located at 220 NW Second Avenue, Portland, Oregon 97209 (“NW Natural”), and [INSERT CUSTOMER NAME], a(n) [State and business entity type] located at [INSERT CUSTOMER’S STREET ADDRESS], (“Customer”) (collectively, “the Parties”).

### RECITALS

- A. NW Natural provides Large Volume Non-Residential High Pressure Gas Service under its Schedule H, HPGS Rider (“HPGS Rider”);
- B. This Agreement is Phase I of a three-phase process to provide information to the Customer to evaluate and obtain service under the HPGS Rider;
- C. Customer desires to evaluate the feasibility of receiving service under the HPGS Rider; and
- D. NW Natural is willing to evaluate the Customer’s site, fuel needs, facilities, and other factors relevant to Customer receiving service under the HPGS Rider to assist Customer in its evaluation;

NOW THEREFORE, NW Natural and Customer hereby agree as follows:

#### 1. NW Natural Services

(a) NW Natural will evaluate Customer’s site, fuel needs, facilities, and other factors relevant to Customer receiving service under the HPGS Rider and provide Customer with a report summarizing the facility requirements and estimated costs associated with Customer taking service under the HPGS Rider.

(b) Any analyses, reports, or other information provided by NW Natural to Customer under this Agreement are for the limited purpose of assisting Customer in Customer’s own evaluation of receiving service under the HPGS Rider. Customer shall not use the analyses, reports, or other information provided by NW Natural for any other purpose. NW Natural makes no warranties or guarantees, express or implied, related to the suitability or costs of service under the HPGS Rider for Customer or Customer’s needs. The provisions of this Section 1(b) shall survive after termination of this Agreement.

#### 2. Customer Obligations

(a) Customer will work with NW Natural to determine where the NW Natural’s high pressure natural gas facilities could be located on Customer’s premises (“Site”) and the date NW Natural may have access to the Site.

(b) Customer represents that it has the authority to grant leases and easements on the property.

(c) Customer must provide NW Natural all records, information, drawings, and assumptions necessary for NW Natural to complete its analysis, including but not limited to information about Customer’s fueling needs (e.g., current fueling requirements, the amount of fuel needed in the future, and the expected timing of Customer’s fueling requirements, etc.) and Customer’s existing electric and

natural gas facilities. NW Natural will provide Customer written notice of the information Customer must provide pursuant to this Section, which will include daily, weekly, and annual projections that include both fast fill or slow fill needs.

(d) Customer must disclose to NW Natural all hazardous and potentially hazardous conditions, zoning requirements, and permit restrictions that may exist at the Site.

(e) Customer must provide NW Natural access to the Site as necessary for NW Natural to complete its analysis.

(f) Customer agrees to comply with NW Natural's General Rules and Regulations relating to credit and collection policies including, at NW Natural's sole discretion, the requirement for Customer to pay NW Natural, in advance of construction of the HPGS Facilities, a sum that is equal to part or all of the Estimated Project Costs ("Adequate Assurance"). The Adequate Assurance is intended to cover NW Natural's costs in the event that the HPGS Facilities are constructed and Customer fails to make payments under this Agreement. If NW Natural deems an Adequate Assurance to be necessary, then the parties will negotiate the terms of an Adequate Assurance Agreement including the payment to NW Natural and the refund schedule to Customer.

(g) Customer agrees that all claims that it may have arising out of the high pressure gas service facilities and equipment will be limited to the final cost of those facilities and equipment.

3. **Contract Term.** This Agreement shall become effective as of the Effective Date and shall continue until either (a) this Agreement is terminated by either Party pursuant to Section 4; or (b) this Agreement is superseded by an HPGS Rider Service Agreement.

4. **Termination.** Either Party may terminate this Agreement for any or no reason upon written notice to the other Party. The terms in Section 1(b), Section 5, and Section 6 shall survive termination.

5. **Confidentiality Agreement.**

(a) The term "Confidential Information" means any information that a Party has designated in writing as proprietary or confidential, by writing "CONFIDENTIAL" prominently on the material(s).

(b) The Parties acknowledge that as part of performing under this Agreement, the Parties will exchange Confidential Information regarding their facilities and other forms of proprietary information deemed to be confidential. The Parties agree not to disclose Confidential Information during or after the term of this Agreement except to the extent necessary to perform their obligations under this Agreement during the term hereof. Neither Party shall use or duplicate any Confidential Information for any other purpose other than for use under this Agreement. Each Party's standard of care under this Article shall be satisfied if it treats the other Party's Confidential Information as it treats its own information that it does not wish to be publically disclosed, published, or otherwise disseminated.

(c) Each Party's Confidential Information shall be made available to the other party's employees, subcontractors or agents only on a "need to know" basis.

(d) The confidentiality obligations imposed in this Section shall not apply to: (i) information that now or hereafter becomes part of the public domain through lawful means; (ii) information already known to or developed by the receiving party as demonstrated by written materials that predate the

disclosure; (iii) information subsequently and rightfully received from third parties without any obligation of confidentiality; and (iv) information required to be produced by a lawful government, regulatory, or court order, provided that Customer will provide NW Natural with prompt written notice sufficient to allow NW Natural to seek a protective order or other appropriate remedy.

(e) Upon termination of this Agreement, each Party shall immediately cease to use any of the Confidential Information disclosed to it pursuant to this Agreement. Upon such termination or expiration, neither Party may retain any Confidential Information of the other Party and shall immediately return to the other Party all written Confidential Information that has been provided to it as well as any copies of Confidential Information.

(f) Customer agrees that in the event of a breach or threatened breach of this Section, the remedy at law is inadequate and a Party may obtain equitable relief prohibiting the breach, in addition to any other appropriate legal or equitable relief.

(g) The provisions of this Section 5 shall survive after termination of this Agreement.

**6. Indemnification.** Customer, to the fullest extent permitted by applicable law, shall indemnify and hold harmless NW Natural and its directors, officers, shareholders, employees, agents, successors, and assigns from and against any and all loss, cost, expense, damage and liability, and from any and all claims for damages on account of bodily injury, including death, sustained by any person, whether employees of Customer, subcontractors, consultants, licensees, or otherwise, and from any and all costs and expenses, including attorney and expert witness fees, in any suit, action, appeal, or proceeding, whether groundless or not, which may be brought against NW Natural, caused by or arising out of any act or omission of Customer or its agents or employees. Customer shall, at its own expense, defend any such claims, suits, actions, appeals, or proceedings which may be made or commenced against NW Natural by reason thereof or in connection therewith, and shall pay all costs and expenses, including attorney and expert witness fees, incurred by reason thereof, and all judgments, which may be recovered therein. If NW Natural elects to retain independent counsel, Customer agrees to reimburse NW Natural for costs and attorney and expert witness fees reasonably incurred by NW Natural to defend itself through attorneys of its choice. The provisions of this Section 6 shall survive after termination of this Agreement.

## **7. Miscellaneous.**

(a) A waiver by either Party of any breach of this Agreement by the other shall not operate as a waiver of any future breach, whether such breach is of a like or different character.

(b) Should any portion of this Agreement be deemed void or unenforceable, the remainder shall remain in full force and effect and shall be construed in a manner to most closely reflect the intent of the Parties.

(c) Customer shall not assign this Agreement without NW Natural's prior written consent.

(d) This Agreement shall be binding upon and inure to the benefit of the successors and assigns of the Parties.

(e) The sections of this Agreement have been labeled for convenience; section headings shall not be used to construe the meaning of any portion of this Agreement.



(f) This Agreement, including all exhibits and appendices executed pursuant to and in conjunction with this Agreement, constitutes the entire agreement between NW Natural and Customer and supersedes any and all previous oral or written negotiations, correspondence, communications, or representations with respect to any aspect of Customer receiving service under the HPGS Rider. No changes to the Agreement, or any exhibits, or appendices, whether in the form of written negotiations, correspondence, representations, alterations, additions, or changes or otherwise, shall be binding unless specifically agreed to in writing signed by both Parties. Neither the course of conduct between the Parties nor trade usage shall modify the provisions of the Agreement.

(g) This Agreement shall be governed and construed in accordance with the laws of the State of Oregon. Jurisdiction and venue for all disputes shall be Multnomah County, Oregon.

8. **Notice to Proceed.** After NW Natural has provided its report to Customer and before NW Natural is obligated to continue work at the Site, Customer may provide a written notice to NW Natural stating that Customer wishes to proceed with an HPGS Rider Service Agreement (“Notice to Proceed”).

9. **Exclusivity.** Customer agrees not to enter into any contracts for services similar to those being provided by NW Natural under this Agreement for a period of 180 days after the Effective Date of this Agreement.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized officers or representatives.

AGREED TO AND ACCEPTED.

**[INSERT CUSTOMER NAME]**

**NW Natural**

By: \_\_\_\_\_  
(Signature)

By: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print or Type Name)

\_\_\_\_\_  
(Print or Type Name)

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

## **Attachment C**

NWN OPUC Advice No. 13-10

## HIGH PRESSURE GAS SERVICE SITE DESIGN AND PERMIT EVALUATION AGREEMENT

This High Pressure Gas Service Site Design and Permit Evaluation Agreement (“Agreement”), dated \_\_\_\_\_ (“Effective Date”) is made by and between Northwest Natural Gas Company dba NW Natural, an Oregon corporation located at 220 NW Second Avenue, Portland, Oregon 97209 (“NW Natural”), and [INSERT CUSTOMER NAME], a(n) [State and business entity type] located at [INSERT CUSTOMER’S STREET ADDRESS], (“Customer”) (collectively, “the Parties”).

### RECITALS

NW Natural provides Large Volume Non-Residential High Pressure Gas Service under its Schedule H, HPGS Rider (“HPGS Rider”);

This Agreement is Phase 2 of a three-phase process to provide information to the Customer to evaluate and obtain service under the HPGS Rider;

In Phase 1 of this process, the Parties entered into a High-Pressure Natural Gas Feasibility Agreement under which the Company evaluated the Customer’s site, fuel needs, facilities, and other factors relevant to service under the HPGS Rider. The Company provided information to Customer to allow Customer to evaluate and estimate costs associated with service under the HPGS Rider;

Customer requests that NW Natural proceed with designing, planning, engineering, and confirming permit requirements (“Phase 2 Services”) for high pressure gas service facilities (“HPGS Facilities”) in preparation for Phase 3 of the process, in which the parties will enter into a High-Pressure Natural Gas Service Agreement pursuant to which NW Natural will permit, construct, install, inspect, test, and maintain the HPGS Facilities; and

The Parties are entering into this Agreement in order to set forth the terms and conditions under which NW Natural will provide and Customer will pay for Phase 2 Services.

**NOW, THEREFORE**, the Parties agree as follows:

### **ARTICLE 1. NW NATURAL SERVICES**

1.1 Description of Phase 2 Services. NW Natural will design, plan, engineer, and confirm permitting requirements (“Phase 2 Services”) in preparation for NW Natural to permit, construct, install, inspect, test, and maintain HPGS Facilities to provide high-pressure natural gas service at a designated location on the Customer’s premises (“Site”). NW Natural may provide Phase 2 Services through its agents.

1.2 HPGS Facilities Design Volume and Pressure. The HPGS Facilities will have a designed daily volume of \_\_\_ Dth/d and a peak hourly flow of \_\_\_ Dth/hr. The design pressure of the HPGS Facilities will be between \_\_\_ psig and \_\_\_ psig, although actual operating pressure during service may be outside this range.

1.3 Deliverables from NW Natural.

- (a) NW Natural will develop the following as part of its Phase 2 services:
- Initial Estimated Project Cost (the estimated cost to design, plan, engineer, permit, construct, install, inspect, and test the HPGS Facilities)
  - Permit-Ready Site Design

- Permit-Ready Construction Drawings and Specifications
- Completed Oregon Business Energy Tax Credit Application
- Completed Permit Application(s)
- High Pressure Gas Service Agreement (prepared for signature)

(b) All drawings, specifications, and other design materials developed and produced by NW Natural or its agents under this Agreement shall remain the property of NW Natural. Such material may not be reproduced without express written permission of NW Natural.

1.4 Services Provided in Accordance with Law and Standard Industry Practice. NW Natural will perform the Phase 2 Services in accordance with applicable state and federal specifications and standard natural gas industry practice.

1.5 Commencement of Phase 2 Services. NW Natural shall have no obligation to commence Phase 2 Services until Customer provides:

- (a) Written confirmation of the Site and the date NW Natural may have access to the Site;
- (b) The Exhibits described in Section 2.1; and
- (c) The financial assurance required by Article 4.

## **ARTICLE 2. CUSTOMER OBLIGATIONS**

2.1 The following Exhibits will provide the information necessary for NW Natural to proceed with the Phase 2 Services described in Section 1.1. Customer must provide the below information prior to commencement of the work under this agreement. Customer will update and supplement this information as needed and provide any additional information requested by NW Natural.

- (a) Exhibit A: Site Description.
- (b) Exhibit B: Access Authorization and Restrictions.
- (c) Exhibit C: Site Information including any specifically requested materials, methods or procedures affecting design or construction.
- (d) Exhibit D: Service Information (Vehicles, consumption, etc.)
- (e) Exhibit E: Notice of Conditions

2.2 Notice of Conditions. Customer shall disclose to NW Natural all hazardous and potentially hazardous conditions, zoning requirements, permit restrictions, the presence of hazardous wastes, substances, or contaminants, as defined under state or federal law (“Hazardous Substances”), and any other conditions differing materially from those ordinarily encountered and generally recognized as inherent to the work provided under this Agreement that may exist at the Site.

- (a) This notice obligation continues for the term of this Agreement.
- (b) NW Natural may require Customer to remediate hazardous materials or conditions at the Site before NW Natural continues or begins work under this Agreement.

2.3 Compensation to NW Natural. Customer agrees to pay NW Natural the Site Design Costs of \$\_\_\_\_\_ to cover all costs, fees, and expenses associated with the designing, planning, engineering and confirming permit requirements. This amount will be recovered as follows:

(a) If Customer enters into a High Pressure Gas Service Agreement with NW Natural for service under the HPGS Rider within sixty (60) days of NW Natural providing Customer notice that it has completed the Phase 2 Services, the Site Design Costs will be recovered as part of the High Pressure Gas Service Agreement.

(b) If Customer does not enter into High Pressure Gas Service Agreement with NW Natural for service under the HPGS Rider within sixty (60) days of NW Natural completing the Phase 2 Services, NW Natural shall give to Customer an invoice reflecting the Site Design Costs. Customer shall pay or cause to be paid the full amount of such invoice within thirty (30) days of the date of the invoice. If Customer fails to make payment of such invoice within said thirty (30) day period, interest shall accrue on the unpaid portion of the billing(s) determined to be due under this Agreement, at the applicable interest rate set forth in NW Natural's Tariff. Further, Customer shall reimburse NW Natural for any reasonable attorney's fees that may be incurred in connection with any activities concerning collection of any payments due.

### **ARTICLE 3. LEASE AND ACCESS**

3.1 Lease. Customer shall lease to NW Natural the Site consisting of approximately \_\_\_\_\_ square feet on the Customer's property for NW Natural to provide the HPGS. The Site is more specifically described in Exhibit A attached hereto. The lease shall additionally include a reasonable right of ingress and egress to and across Customer's property to allow NW Natural to access the Site and a utility easement sufficient to allow access to the HPGS Facilities on the Site. Such lease shall commence on the Effective Date and shall terminate 60 days after the date this Agreement is terminated. No rental shall be payable by NW Natural to Customer for such lease and Customer acknowledges that the consideration for such lease is the Customer's and NW Natural's rights and obligations under this Agreement. Customer shall at its sole cost pay all real property taxes and assessments levied against the Site.

3.2 Site Access. Customer shall provide reasonable access to the Site at all times to NW Natural personnel and NW Natural's agents performing their duties.

### **ARTICLE 4. FINANCIAL ASSURANCE**

4.1 Customer agrees to comply with NW Natural's General Rules and Regulations relating to credit and collection policies including, at NW Natural's sole discretion, the requirement for Customer to provide either a payment to NW Natural or a letter of credit, in advance of construction, that is equal to part or all of the Site Design Costs ("Adequate Assurance"). The Adequate Assurance is intended to cover NW Natural's costs in the event that the HPGS Facilities are constructed and Customer fails to make payments under this Agreement. If NW Natural deems an Adequate Assurance to be necessary, then the parties will negotiate the terms of an Adequate Assurance Agreement including the payment to NW Natural and the refund schedule to Customer.

### **ARTICLE 5. INSURANCE**

5.1 NW Natural shall carry and maintain insurance of the type and in the amounts sufficient in its sole opinion to cover its services under this Agreement and any exposure in providing services under this Agreement. Customer shall carry and maintain Commercial General Liability Insurance in the

amount of \$1 million per occurrence and \$2 million in the aggregate. NW Natural shall be named as an additional insured on Customer's Commercial General Liability Insurance and the policy shall contain a cross liability endorsement and contractual liability coverage for obligations assumed by Customer under the indemnity provisions of this Agreement.

#### **ARTICLE 6. FORCE MAJEURE**

6.1 NW Natural shall not be liable to Customer for the failure to perform any of its obligations under this Agreement, to the extent that such failure is a result of Force Majeure. The term "Force Majeure" as employed herein means any cause, event, act or omission whether of the kind enumerated herein or otherwise that is not reasonably within its control.

(a) Force Majeure shall include, but shall not be limited to, the following: (i) physical events such as acts of God, landslides, earthquakes, fires, other natural catastrophes, epidemics, explosions, and breakage or accident or necessity of repairs to machinery, equipment, lines of pipe or any component part of the HPGS Facilities; (ii) weather-related events, such as low temperatures which cause freezing or failure of the HPGS Facilities or lines of pipe, storms, floods, and lightning; (iii) acts of others such as the need to obtain third party easements and/or rights-of-way, strikes, lockouts or other industrial disturbances, riots, sabotage, insurrections or wars; and (iv) governmental actions or litigation, such as necessity for compliance with any court order, law, statute, ordinance, regulation, or policy having the effect of law promulgated by a governmental authority having jurisdiction, including the need to obtain pipe line construction or other permits. Nothing contained herein shall be construed to require the settlement of a strike or labor dispute.

(b) NW Natural will provide notice of Force Majeure to Customer as soon as reasonably practical after the occurrence of the event, cause or upon receipt of 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 shall not be deemed a waiver of such Force Majeure. NW Natural shall 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 under the Agreement.

#### **ARTICLE 7. LIABILITY AND INDEMNIFICATION**

7.1 Customer shall protect, defend, indemnify and hold NW Natural, its directors, officers, employees, attorneys-in-fact, agents and affiliated companies, free and harmless from and against any and all losses, claims, liens, demands, and causes of action of every kind and character, arising out of, in connection with, or incident to this Agreement or any activities contemplated hereunder, including, but not limited to, the amounts of judgments, penalties, interest, court costs, investigation expenses and costs and legal fees (whether incurred at trial, on appeal, in bankruptcy or otherwise), for claims, liens, debts, personal injuries, death or damages to property, and all other claims or demands of every character occurring or incident to, in connection with or arising out of Customer's or its contractors' or subcontractors' performance of Customer's obligations under this Agreement. This indemnity provision may be limited as necessary by applicable law.

**7.2 IN NO EVENT WILL EITHER PARTY NOR 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, INCLUDING, BUT NOT LIMITED TO, LOSS, DAMAGE, OR EXPENSE TO PERSONS OR PROPERTY, DIRECTLY OR**

**INDIRECTLY, ARISING OUT OF ITS ACTIONS THAT ARE IN ACCORDANCE WITH THE TERMS AND CONDITIONS SET FORTH IN THIS AGREEMENT OR NW NATURAL'S TARIFF, UNLESS SUCH DAMAGES ARE THE RESULT OF A PARTY'S WILLFUL MISCONDUCT.**

**ARTICLE 8. EFFECTIVE DATE/TERM/TERMINATION**

8.1 This Agreement shall be effective as of the Effective Date and will continue until NW Natural completes the Phase 2 Services, or the Agreement is terminated as provided in this Article.

8.2 Termination by Customer. Customer may terminate this Agreement at any time by giving NW Natural written notice and paying any amounts required by Section 8.4. NW Natural shall have no further obligation to continue Phase 2 Services and shall incur no liability for discontinuing such work.

8.3 Termination by NW Natural.

(a) At any time during the term of this Agreement, in the event that Customer shall: (i) make an assignment or any general arrangement for the benefit of creditors; (ii) file a petition or otherwise commence, authorize, or acquiesce 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; (iii) otherwise become bankrupt or insolvent (however evidenced); (iv) be unable to pay its debts as they fall due; or (v) have a receiver, provisional liquidator, conservator, custodian, trustee or other similar official appointed with respect to it or substantially all of its assets; NW Natural shall have the right, at its sole election, to immediately withhold and/or suspend performance and/or to terminate this Agreement and/or request additional financial assurance, in addition to any and all other remedies available to it. Written notice of this decision will be provided by NW Natural to Customer as soon as reasonably practical after the decision to withhold or suspend performance, or terminate this Agreement is made.

(b) At any time during the term of this Agreement, in the event NW Natural determines that (i) Customer has failed to comply with any material term of this Agreement; (ii) a condition at the Site poses a risk to health or safety that Customer has not mitigated within a reasonable period of time; or (iii) NW Natural must discontinue its work due to a Force Majeure, NW Natural shall have the right, at its sole election, to immediately withhold and/or suspend performance and/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 Customer as soon as reasonably practical after the decision to withhold or suspend performance, or terminate this Agreement is made.

8.4 Effect of Termination. Upon termination of this Agreement for any reason by either Party, NW Natural shall render to Customer an invoice reflecting the Site Design Costs set forth in Section 2.3. Customer shall pay or cause to be paid the full amount of such invoice within thirty (30) days of the date of the invoice. If Customer fails to make payment of such invoice within said thirty (30) day period, interest shall accrue on the unpaid portion of the billing(s) determined to be due under this Agreement, at the applicable interest rate set forth in NW Natural's Tariff. Further, Customer shall reimburse NW Natural for any reasonable attorney's fees that may be incurred in connection with any activities concerning collection of any payments due.

## **ARTICLE 9. DISPUTE RESOLUTION**

9.1 If a dispute arises out of or relates to this Agreement, or the breach thereof, the Parties agree to settle the dispute by the process described in this Section.

(a) Either Party may give the other Party written notice of any dispute that is not resolved in the ordinary course of business. The Party receiving the notice of dispute may respond in writing. The written notice and response, if any, shall be first submitted to a higher level of management than the persons with direct responsibility for administration of this Agreement. If the Parties' higher level management are unable to resolve the dispute within ten (10) days after delivery of the written notice of the dispute, and a statement indicating that higher level management was unable to resolve the dispute, shall be submitted to executives of both Parties having the authority to finally resolve the dispute. Within thirty (30) days of delivery of the notice to the Parties' executives, the designated executives shall meet at a time, place and in a manner that is mutually agreeable, and shall resolve the controversy. All reasonable requests for information made by one Party to the other shall be honored in a timely fashion.

(b) If executives of both Parties are unable to resolve the dispute within sixty (60) days after receipt of the notice to the executives, or if the executives fail to meet within thirty (30) days of delivery of the notice, either Party may give written notice to the other Party of its intention to arbitrate the dispute. The Parties must, however, first attempt in good faith to settle the dispute by mediation. If the dispute is not settled by mediation with forty-five (45) days after delivery of written notice of intention to arbitrate, or longer, if mutually agreeable, the mediation shall terminate, and the dispute shall be settled by arbitration. The American Arbitration Association ("AAA") Commercial Arbitration Rules shall govern these proceedings, unless other rules are mutually agreed upon by the Parties in writing. The decision of the arbitrator(s) shall be binding, and judgment on the arbitrator(s) award may be entered in the state or federal courts of Multnomah County, Oregon.

9.2 Nothing in this Agreement shall prohibit or limit a Party's right to initiate litigation to enforce the arbitrator's award, or to obtain injunctive or equitable relief permitted by the terms of this Agreement, or to preserve a superior position with respect to other creditors.

9.3 All submissions and negotiations between the Parties conducted pursuant to or in contemplation of this dispute resolution process shall be kept confidential by both Parties and treated by the Parties as compromise and settlement negotiations for purposes of applicable court rules of evidence.

## **ARTICLE 10. MODIFICATION AND ASSIGNMENT**

10.1 This Agreement may not be modified or amended in any respect except by a written instrument executed by the Parties. No waiver or modification of any provision of this Agreement shall occur as a result of any course of performance or course of dealing between NW Natural and Customer, or from any usage of trade. No Party may assign this Agreement without the prior written consent of the other Party, which consent shall 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 10.1 for a modification or assignment shall be borne by Customer. NW Natural shall provide its response within five (5) business days of any request for assignment received from Customer. Any attempted assignment made without such prior written consent shall be void and of no legal effect. This Agreement shall 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 shall not relieve either Party of any obligations to the other Party incurred prior to such assignment.

#### **ARTICLE 11. CONFIDENTIALITY AGREEMENT**

11.1 The term “Confidential Information” means any information that a Party has in writing as proprietary or confidential, by writing “CONFIDENTIAL” prominently on the material.

11.2 The Parties acknowledge that as part of performing under this Agreement, the Parties will exchange Confidential Information regarding their facilities and other forms of proprietary information deemed to be confidential. The Parties agree not to disclose Confidential Information during or after the term of this Agreement except to the extent necessary to perform their obligations under this Agreement during the term hereof. Neither Party shall use or duplicate any such information for any other purpose other than for use under this Agreement. Each Party’s standard of care under this Article shall be satisfied if it treats the other Party’s Confidential Information as it treats its own information that it does not wish to be publically disclosed, published, or otherwise disseminated.

11.3 Each Party’s Confidential Information shall be made available to the other party’s employees, subcontractors or agents only on a “need to know” basis.

11.4 The confidentiality obligations imposed in this Section shall not apply to: (1) information that now or hereafter becomes part of the public domain through lawful means; (2) information already known to or developed by the receiving party as demonstrated by written materials that predate the disclosure; (3) information subsequently and rightfully received from third parties without any obligation of confidentiality; and (4) information required to be produced by a lawful government, regulatory, or court order, provided that Customer will provide NW Natural with prompt written notice sufficient to allow NW Natural to seek a protective order or other appropriate remedy.

11.5 Upon termination of this Agreement, each Party shall immediately cease to use any of the Confidential Information disclosed to it pursuant to this Agreement. Upon such termination or expiration, neither Party may retain any Confidential Information of the other Party and shall immediately return to the other Party all written Confidential Information that has been provided to it as well as any copies of Confidential Information.

11.6 Customer agrees that in the event of a breach or threatened breach of this Section, the remedy at law is inadequate and NW Natural may obtain equitable relief prohibiting the breach, in addition to any other appropriate legal or equitable relief.

#### **ARTICLE 12. SURVIVING TERMS**

12.1 The following provisions of this Agreement shall survive termination as specified in such Section or Article, as follows: Article 7 and Article 11.

#### **ARTICLE 13. OTHER GENERAL PROVISIONS**

13.1 Complete Agreement. This Agreement sets forth the entire integrated agreement of the Parties with respect to the subject matter herein.

13.2 Supersedes Other Agreements. This Agreement supersedes all other agreements relating to the subject matter herein that the Parties may have previously entered.

13.3 Not Construed Against Either Party. This Agreement has been drafted with the joint participation of each Party, and shall be construed to be neither against nor in favor of any Party, rather this Agreement shall be construed in accordance with the fair meaning of its stated terms.

13.4 Headings. The headings set forth in this Agreement shall not affect the interpretation of this Agreement.

13.5 Severability. Any provision of this Agreement held to be unenforceable in any jurisdiction shall be, as to that jurisdiction only, ineffective only to the extent of such unenforceability, without affecting any other provision of this Agreement.

13.6 Interpretation and Construction. Any term used in the plural shall refer to all members of the relevant class, and any term used in the singular shall refer to any one or more of the members of the relevant class. Any masculine term shall also refer to the feminine. References in this Agreement to sections are to sections to this Agreement. "Including" shall 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" shall not be exclusive.

13.7 Signatures May Be in Counterparts; Facsimile or E-Mail Signature Has Legal Effect. This Agreement may be signed in counterparts. A facsimile version or an e-mailed pdf of the signature page shall have the same legal effect as an original.

13.8 Waiver. No waiver by a Party of any provision of this Agreement shall be deemed to be a waiver of any preceding, concurrent, or succeeding breach of the same or any other provision.

13.9 Rights and Remedies Cumulative. Subject to the terms herein, all rights and remedies granted or referred to in this Agreement are cumulative and resort to one shall not preclude resort to any other available right or remedy.

13.10 Signatories Have Authority. The signatories to this Agreement certify that they have the authority to bind the Party they represent.

13.11 Conflict Between NW Natural's Tariff and this Agreement. To the extent there is a conflict between NW Natural's Tariff and this Agreement, this Agreement governs.

#### **ARTICLE 14. NOTICES AND COMMUNICATIONS**

14.1 Any notice or communication permitted or required by this Agreement shall be made in writing; and shall 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:

For contract-related issues:

To: NORTHWEST NATURAL GAS COMPANY  
Attn: Bruce Gieseeman  
220 NW Second Avenue  
Portland, OR 97209

To: Customer  
Attn:

E-mail: bruce.gieseeman@nwnatural.com  
Phone: 503-226-4211 x5846  
Fax:

E-Mail:  
Phone:  
Fax:

For operational issues during business hours:

For after-hours calls:

14.2 Either Party may change its address for receipt of notices and communications under this Agreement upon the provision of appropriate written notification to the other Party.

**IN WITNESS WHEREOF**, the Parties hereto have executed this Agreement as of the Effective Date .

**NORTHWEST NATURAL GAS COMPANY**

**[CUSTOMER]**

By: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date of Signature: \_\_\_\_\_

By: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date of Signature: \_\_\_\_\_

HIGH-PRESSURE GAS SERVICE SITE DESIGN AND PERMIT EVALUATION AGREEMENT  
DATED \_\_\_\_\_, 2013  
BETWEEN NORTHWEST NATURAL GAS COMPANY  
AND [CUSTOMER]

EXHIBIT A: DESCRIPTION OF LEASED SITE

[Include description of site and map.]

Date: \_\_\_\_\_

HIGH-PRESSURE GAS SERVICE SITE DESIGN AND PERMIT EVALUATION AGREEMENT  
DATED \_\_\_\_\_, 2013  
BETWEEN NORTHWEST NATURAL GAS COMPANY  
AND [CUSTOMER]

EXHIBIT B: ACCESS AUTHORIZATION AND RESTRICTIONS

[Customer shall provide reasonable access at all times to NW Natural personnel or its agent to perform their duties. Please list any restrictions to such access below including physical restrictions and day of week or time of day restrictions.]

Date: \_\_\_\_\_

HIGH-PRESSURE GAS SERVICE SITE DESIGN AND PERMIT EVALUATION AGREEMENT  
DATED \_\_\_\_\_, 2013  
BETWEEN NORTHWEST NATURAL GAS COMPANY  
AND [CUSTOMER]

EXHIBIT C: REQUESTED SPECIFICATIONS

[Please provide a written description of all requested materials, methods, and procedures for installing pavement, cutting, and trenching within the Site. NW Natural will use best efforts to meet Customer's written specifications.]

Date: \_\_\_\_\_

HIGH-PRESSURE GAS SERVICE SITE DESIGN AND PERMIT EVALUATION AGREEMENT  
DATED \_\_\_\_\_, 2013  
BETWEEN NORTHWEST NATURAL GAS COMPANY  
AND [CUSTOMER]

EXHIBIT D: NOTICE OF CONDITIONS

Customer shall disclose to NW Natural all hazardous and potentially hazardous conditions, zoning requirements, permit restrictions, the presence of hazardous wastes, substances, or contaminants, as defined under state or federal law ("Hazardous Substances"), and any other conditions differing materially from those ordinarily encountered and generally recognized as inherent to the work provided under this Agreement that may exist at the Site.

Date: \_\_\_\_\_

HIGH-PRESSURE GAS SERVICE SITE DESIGN AND PERMIT EVALUATION AGREEMENT  
DATED \_\_\_\_\_, 2013  
BETWEEN NORTHWEST NATURAL GAS COMPANY  
AND [CUSTOMER]

EXHIBIT E: SITE SECURITY PLAN

Date: \_\_\_\_\_



## **Attachment D**

NWN OPUC Advice No. 13-10

## HIGH PRESSURE GAS SERVICE AGREEMENT

This High Pressure Gas Service Agreement (“Agreement”), dated \_\_\_\_\_ (“Effective Date”) is made by and between Northwest Natural Gas Company dba NW Natural, an Oregon corporation located at 220 NW Second Avenue, Portland, Oregon 97209 (“NW Natural”), and [INSERT CUSTOMER NAME], a(n) [State and business entity type] located at [INSERT CUSTOMER’S STREET ADDRESS], (“Customer”) (collectively, “the Parties”).

### RECITALS

NW Natural provides Large Volume Non-Residential High Pressure Gas Service under its Schedule H, HPGS Rider (“HPGS Rider”);

This Agreement is Phase 3 of a three-phase process to provide information to the Customer to evaluate and obtain service under the HPGS Rider;

In Phase 1 of this process, the Parties entered into a High-Pressure Natural Gas Feasibility Agreement under which the Company evaluated the Customer’s site, fuel needs, facilities, and other factors relevant to service under the HPGS Rider. The Company provided information to Customer to allow Customer to evaluate and estimate costs associated with service under the HPGS Rider;

In Phase 2 of this process, the Parties entered into a High-Pressure Natural Gas Service Site Design and Permit Evaluation Agreement under which NW Natural designed, planned, engineered, and confirmed permit requirements (“Phase 2 Services”) for high pressure gas service facilities (“HPGS Facilities”);

Customer has provided written notice to NW Natural that it wishes to proceed with Phase 3 of this process and to receive service under the HPGS Rider for a primary term of 10 years and desires NW Natural to proceed with designing, planning, engineering, permitting, constructing, installing, inspecting, testing, and maintaining the HPGS Facilities; and

The Parties are entering into this Agreement in order to set forth the terms and conditions under which NW Natural will provide service to Customer under the HPGS Rider and Customer will pay for service under the HPGS Rider.

**NOW, THEREFORE**, the Parties agree as follows:

### **Article 1. SCOPE OF SERVICE BEFORE IN SERVICE DATE**

1.1 Description of High Pressure Natural Gas Services. NW Natural shall permit, construct, install, inspect, test, and maintain HPGS Facilities as necessary to allow Customer to take service under the HPGS Rider at the designated location on the Customer’s premises designated in the High-Pressure Natural Gas Service Site Design and Permit Evaluation Agreement (“Site”) and in accordance with applicable state and federal specifications and standard natural gas industry practice. NW Natural may provide these services through its agents.

#### 1.2 Permitting, Constructing, Installing, and Testing

(a) NW Natural shall permit, construct, install, and test the HPGS Facilities at the Site in accordance with drawings and specifications contained in Exhibit A.

- (i) HPGS Facilities include only those facilities installed beyond the Custody Transfer Point, as defined in the Company's General Rules and Regulations contained in NW Natural's currently-effective filed Tariff. The HPGS Facilities are described in Exhibit B.
  - (ii) The HPGS Facilities do not include the optional, non-standard equipment described in Exhibit C ("Optional Equipment"). However, NW Natural shall supply and install the Optional Equipment described in and under the terms described in Exhibit C.
- (b) NW Natural shall make best efforts to limit disruptions to Customer's operations during construction during normal business hours.
- (c) NW Natural shall provide Customer the training described in Section 5.1(e).

### 1.3 Maintaining the HPGS Facilities

- (a) NW Natural shall provide Scheduled Maintenance, Unscheduled Maintenance, Back-Up Services, and Removal of HPGS Facilities in accordance with:
- (i) The General Rules and Regulations contained in NW Natural's currently-effective filed Tariff;
  - (ii) The terms and conditions set forth in the HPGS Rider;
  - (iii) All rules and regulations prescribed by regulatory authorities;
  - (iv) This Agreement and any amendment thereto; and
  - (v) Prudent natural gas industry practices.
- (b) Scheduled Maintenance. NW Natural shall procure and furnish all materials, utilities, equipment, services, supplies, and labor necessary for the routine operation and maintenance of the HPGS Facilities ("Scheduled Maintenance"). Scheduled Maintenance shall but shall not be limited to, providing periodic testing, adjustment, and calibration of the meter, external inspection of above-ground portions of the HPGS Facilities, and maintenance of all valves, piping, meter and instruments. Scheduled Maintenance does not include maintenance of Optional Equipment.
- (c) Unscheduled Maintenance. NW Natural shall procure and furnish all materials, equipment, supplies, services, and labor necessary for performing non-routine maintenance to the HPGS Facilities ("Unscheduled Maintenance"). Such Unscheduled Maintenance shall include the repair and replacement of HPGS Facilities or their components as the result of normal wear or facility failure associated with the HPGS Facilities or any part thereof required to keep the HPGS Facilities operating efficiently at the design pressures and in accordance with general industry practices and standards. Unscheduled Maintenance includes equipment additions, upgrades, or replacements that are required as the result of changes in law, evolving industry and/or NW Natural engineering design, or field operational standards. Unscheduled Maintenance includes dispatching NW Natural personnel to investigate any abnormality or emergency situation affecting the HPGS Facilities, including the tripping of an alarm observed by NW Natural through its monitoring of HPGS Facilities. Unscheduled Maintenance does not include maintenance of Optional Equipment.

- (d) Back-Up Service. If Unscheduled Maintenance disrupts the flow of natural gas through the HPGS Facilities for an extended period of time, NW Natural will make Back-Up Service available to Customer, subject to availability (“Back-Up Service”).
- (i) NW Natural may provide Back-Up Service at designated NW Natural fueling stations or via deliveries of compressed natural gas (CNG) to the Site at NW Natural’s discretion. If Back-Up Service is unavailable, Customer is not relieved of its obligations under this Agreement, including Customer’s obligation to pay any charges set forth in this Agreement.
  - (ii) If Customer receives Back-Up Service under this Agreement, Customer will be charged for the natural gas commodity at the rate set forth in the Rate Schedule under which Customer takes commodity service, and charged for time and materials at the applicable labor rate.
- (e) Removal of HPGS Facilities. Upon termination of this Agreement, NW Natural will safely cap utilities used at the HPGS Facilities and remove the HPGS Facilities, except for all cement pads, underground conduits, trenches, bollards, underground piping, underground electrical feeds, and signal cables.
- (f) Attempts to Minimize Disruption to Customer. NW Natural will attempt to conduct Scheduled Maintenance and Unscheduled Maintenance that is not due to an emergency condition in a manner that minimizes disruption of the flow of natural gas through the HPGS Facilities.
- (g) Notice of Disruption of Flow of Natural Gas through HPGS Facilities. As circumstances permit, when NW Natural determines that any necessary Scheduled Maintenance or Unscheduled Maintenance will prevent the flow of natural gas through the HPGS Facilities, NW Natural will give reasonable notice to Customer prior to making such maintenance, repair, or replacement.

## **Article 2. CUSTOMER OBLIGATIONS**

2.1 Update Notice of Conditions. Pursuant to the High-Pressure Natural Gas Service Site Design and Permit Evaluation Agreement, Customer provided NW Natural notice of all hazardous and potentially hazardous conditions, zoning requirements, permit restrictions, the presence of hazardous wastes, substances, or contaminants, as defined under state or federal law (“Hazardous Substances”), and any other conditions differing materially from those ordinarily encountered and generally recognized as inherent to the work provided under this Agreement that may exist at the Site. Customer shall update such notice as necessary. This notice obligation continues for the term of this Agreement.

2.2 Site Access to NW Natural. Customer shall provide NW Natural access to the Site as described in Article 6.

2.3 Site Security.

- (a) Customer shall maintain a lockable security fence around the Site or the HPGS Facilities and a secure staging facility for use during construction and while providing services under this Agreement.
- (b) Customer shall provide NW Natural with a site security plan.

(c) With the sole exception of the use of the fueling apparatus, Customer may not access or modify, or allow another party to access or modify, the HPGS Facilities without the express written permission of NW Natural.

(d) Notwithstanding the requirement to secure the HPGS Facilities, Customer shall provide reasonable access at all times to NW Natural personnel performing their duties.

2.4 Operation of Fueling Apparatus and Conducting Activities Near HPGS Facilities.

(a) Customer shall ensure that the fueling apparatus is operated and activities near the HPGS Facilities are conducted in a safe manner and in compliance with applicable laws.

(b) Customer shall maintain the minimum clearances around the HPGS Facilities as directed by NW Natural or any authority having jurisdiction over the HPGS Facilities.

(c) Customer shall not fuel any vessel that is not fit and certified for transporting and/or containing CNG.

(d) Customer shall notify NW Natural as soon as reasonably possible of any conditions that may affect operation of HPGS Facilities, including, but not limited to, fires, vandalism, accidents, planned construction, or power disruptions at Customer's premises and specifically on or near the Site.

2.5 Emergency Shut-Off. Customer shall comply with NW Natural's emergency shut-off procedures.

2.6 Electric Service. Customer shall maintain electric service to the HPGS Facilities through the term of this Agreement.

2.7 Financial Assurance. Customer shall provide the financial assurance required by Article 8.

2.8 Payment for Services. Customer shall make all payments required under Article 4.

2.9 Payment of State and Federal Highway or Other Taxes. Customer is solely responsible for payment of any state and federal highway or other taxes associated with or related to the use or sale of CNG.

### **Article 3. PROJECT COSTS**

3.1 Estimated Project Costs. Estimated Project Costs are shown in Exhibit D. Estimated Project Costs reflect (1) the Site Design Costs agreed to by the Parties in the High-Pressure Natural Gas Service Site Design and Permit Evaluation Agreement; and (2) the Initial Estimated Project Costs provided to Customer pursuant to the High-Pressure Natural Gas Service Site Design and Permit Evaluation Agreement, which includes a contingency amount of 10 percent of the Initial Estimated Project Costs. The Estimated Project Costs, amended as set forth below, will be used to calculate the Monthly Facility Charge under this Agreement as described in Article 4.

3.2 Updates to Project Costs.

(a) Prior to the Commencement of Service Date defined in Article 5, NW Natural shall update the Estimated Project Costs and amend Exhibit D to reflect:

- (i) The difference between the actual cost to NW Natural to purchase the HPGS Facilities and to design, plan, engineer, permit, construct, install, inspect, and test the HPGS Facilities (“Actual Project Costs”) and the Estimated Project Costs, if the Actual Project Costs are lower than the Estimated Project Costs;
  - (ii) Customer-initiated Change Orders for any reason; and
  - (iii) NW Natural-initiated Change Orders for Material Events. NW Natural shall initiate a Change Order upon the occurrence of a Material Event that is not attributable to the negligence of NW Natural or its agents or NW Natural’s breach of this Agreement, and provided that NW Natural has taken all reasonable action to minimize the impact of such Material Event.
- (b) Prior to the Commencement of Service Date defined in Article 5, NW Natural shall provide Customer with an updated Exhibit D that reflects the Estimated Project Costs and all amendments to date, which will be the “Final Project Costs.”
- (c) After the Commencement of Service Date defined in Article 5, NW Natural shall amend Exhibit D to reflect changes to the Final Project Costs for:
- (i) Capital Additions and Improvements. The cost of capital additions or improvements to the HPGS Facilities that result from Unscheduled Maintenance (“Capital Additions and Improvements”) shall be added to the Final Project Costs and amortized over the remaining contract term.
  - (ii) Other Funding Sources. If tax credits, refunds, grants, rebates, or other monetary benefits are recognized for accounting purposes as a result of the installation of an HPGS Facility at a Customer’s premise, NW Natural will credit such amount, net of any applicable taxes, to the Final Project Costs at the time of recognition (“Other Funding Sources”).

### 3.3 Material Events.

- (a) For purposes of this Agreement, a “Material Event” shall mean:
- (i) Delays or interference affecting NW Natural’s services resulting from the acts or omissions of Customer or its agents;
  - (ii) The occurrence of a Force Majeure event;
  - (iii) The discovery of Hazardous Substances not brought on the Site by NW Natural or its agents;
  - (iv) The occurrence of a material change in any laws, statutes, acts, ordinances, regulations, codes, rules, orders, decrees, permits or rulings after the Effective Date of this Agreement that directly affects the services to be performed under this Agreement; and
  - (v) The discovery of unforeseen site conditions, including but not limited to geotechnical conditions that affect structural support for HPGS Facilities and the presence of archeological resources.

(b) NW Natural will notify customer in writing of any change orders to include the particulars of the Material Event and estimating the event's expected duration; and the impact on Project Costs.

(c) The occurrence of a Material Event does not excuse any liability of Customer that arose before the occurrence of the Material Event.

#### **Article 4. PRICE AND PAYMENT TERMS**

4.1 Monthly Charges. Customer shall pay the following four separate monthly charges for services provided under this Agreement, calculated as provided in this Article: (1) Facility Charge; (2) Scheduled Maintenance Charge; (3) Unscheduled Maintenance Charge; and (4) Backup Service Charge.

(a) Monthly Facility Charge. The Monthly Facility Charge is calculated by multiplying the Final Project Costs contained in Exhibit D by the Capital Recovery Factor set forth in the HPGS Rider and dividing by 12. The Estimated Facility Charge (based on the Estimated Project Costs) is \$ \_\_\_\_\_ per month. The Estimated Facility Charge will be adjusted to reflect:

- (i) Changes to Project Costs. Any changes to Estimated and Final Project Costs resulting from the events described in Section 3.2.
- (ii) Changes to Capital Recovery Factors. If the Public Utility Commission of Oregon approves changes to the Capital Recovery Factors in the HPGS Rider, the Monthly Facility Charge will be revised to reflect the changes.

(b) NW Natural will provide Customer with a Final Monthly Facility Charge upon commencement of service, and a revised Monthly Facility Charge calculation whenever the Monthly Facility Charge changes.

(c) Scheduled Maintenance Charge. Customer shall pay a monthly charge for the costs associated with providing Scheduled Maintenance and administrative services. The Monthly Scheduled Maintenance Charge will be calculated as set forth in Exhibit E. Customer's charge for Scheduled Maintenance shall be \$ \_\_\_ per month at the outset of the Agreement. NW Natural will adjust the charge for Scheduled Maintenance on an annual basis to reflect NW Natural's expected actual cost of providing Scheduled Maintenance and administrative services. NW Natural will provide Customer with the updated Scheduled Maintenance Charge on an annual basis.

(d) Unscheduled Maintenance Charge. Customer shall pay a monthly charge for the costs associated with providing Unscheduled Maintenance in the prior month, if any. However, as explained in Section 3.2, Capital Additions or Improvements that result from Unscheduled Maintenance shall be added to the Project Costs and amortized over the remaining contract term.

(e) Back-up Service Charges. Customer shall pay the costs associated with providing Back-Up Service. The Back-Up Service Charge will be calculated as set forth in Exhibit F.

4.2 Payment. By [DATE] of each month, NW Natural shall give to Customer an invoice reflecting the Monthly Facility Charge, the Monthly Scheduled Maintenance Charge, and, if applicable, the Unscheduled Maintenance Charge and the Back-Up Service Charge. Customer shall pay or cause to be paid the full amount of such invoice within thirty (30) days of the date of the invoice. If Customer fails to make payment of such invoice within said thirty (30) day period, interest shall accrue on the unpaid

portion of the billing(s) determined to be due under this Agreement, at the applicable interest rate set forth in NW Natural's Tariff. Further, Customer shall reimburse NW Natural for any reasonable attorney's fees that may be incurred in connection with any activities concerning collection of any payments due.

4.3 Compensation for Optional Equipment. Customer shall pay the actual cost of Optional Equipment as set forth in C upon execution of this Agreement.

4.4 Taxes and Fees. As set forth in NW Natural's Tariff, Customer shall pay all business or occupation taxes, license, franchise or operating permit fees, or similar exactions imposed upon NW Natural by any city or county for engaging in business therein or for use and occupancy of streets and public ways.

4.5 Compensation During Service Outages Required. Customer is required to pay the Monthly Facility Charge and the Monthly Maintenance Charge for the period during which Customer does not receive service. If Customer receives Back-Up Service, Customer will be required to pay the Back-Up Service Charge calculated as set forth in Exhibit F.

4.6 Disconnection of Service. If Customer fails to pay any amount required under this Agreement, NW Natural may disconnect utility service to Customer pursuant to Oregon Administrative Rule 860-021-0305.

#### **Article 5. COMMENCEMENT OF SERVICE**

5.1 Service Commencement. Operation at the HPGS Facilities shall become available on or after the date that:

- (a) NW Natural provides Customer with written notice that the HPGS Facilities have been installed, tested, and placed in-service;
- (b) NW Natural provides Customer with the Monthly Facility Charge and the Monthly Maintenance Charge;
- (c) Customer has paid the actual cost of Optional Equipment upon execution of this Agreement;
- (d) Customer has provided any financial assurance required by Article 8; and
- (e) NW Natural provides customer with the training on the HPGS Facilities, including safety requirements, emergency shut-off procedures, and how to dispense CNG from the HPGS facilities.

5.2 Notice of Service Commencement Date. NW Natural will notify Customer of the date upon which these conditions have been satisfied. This date will be the "Service Commencement Date."

#### **Article 6. LEASE, ACCESS, AND OWNERSHIP**

6.1 Lease. Customer shall lease to NW Natural the Site consisting of approximately \_\_\_\_\_ square feet on the Customer's property for NW Natural to provide the HPGS. The Site is more specifically described in Exhibit G. The lease shall additionally include a reasonable right of ingress and egress to and across Customer's property to allow NW Natural to access the Site and a utility easement sufficient to allow access to the HPGS Facilities on the Site. Such lease shall commence on the Effective Date and



shall terminate 60 days after the date this Agreement is terminated. No rental shall be payable by NW Natural to Customer for such lease and Customer acknowledges that the consideration for such lease is the Customer's and NW Natural's rights and obligations under this Agreement. Customer shall at its sole cost pay all real property taxes and assessments levied against the Site.

6.2 NW Natural Site Access. Customer shall provide reasonable access to the Site at all times to NW Natural personnel and NW Natural's agents performing their duties. Customer shall provide Site Authorization as described in Exhibit H.

6.3 Ownership of HPGS Facilities. NW Natural retains ownership of the HPGS Facilities through the term of this Agreement and after termination of this Agreement.

6.4 Encumbrances.

(a) For each party (an "Encumbering Party") with a trust deed, lien, or other encumbrance (an "Encumbrance") on the Site, Customer will obtain the Encumbering Party's written agreement with the following: (1) NW Natural owns the HPGS Facilities; (2) the Encumbering Party has no interest in the HPGS Facilities; (3) the HPGS Facilities are not subject to any Encumbrance in which the Encumbering Party has an interest; and (4) NW Natural has the right, at any time, to remove the HPGS Facilities from the Property.

(b) NW Natural may, at its discretion, file a Uniform Commercial Code ("UCC") Financing Statement on the Site's title identifying NWN as the owner of the HPGS Facilities. Customer will fully cooperate with the UCC filing if pursued by NWN.

#### **Article 7. HAZARDOUS SUBSTANCES**

7.1 Notice of Remediation of Hazardous Substances or Conditions. NW Natural may require Customer to remediate Hazardous Substances or conditions at the Site before NW Natural continues or begins work under this Agreement, or NW Natural may terminate this Agreement pursuant to Section 12.4(b) if the condition or restriction materially affects NW Natural's ability to safely provide the HPGS.

7.2 Hazardous Substances. Customer shall bear all costs and expenses and shall be solely liable for any response, removal, investigation, cleanup, or other remedial action required by applicable environmental laws related to any Hazardous Substance that is not brought on the Site by NW Natural or its agents. NW Natural shall not be responsible for any costs or expenses related to the introduction of Hazardous Substance to the Site by any party other than NW Natural or its agents

#### **Article 8. FINANCIAL ASSURANCE**

8.1 Customer agrees to comply with NW Natural's General Rules and Regulations relating to credit and collection policies including, at NW Natural's sole discretion, the requirement for Customer to provide either a payment to NW Natural or a letter of credit, in advance of construction, that is equal to part or all of the Estimated Project Costs ("Adequate Assurance"). The Adequate Assurance is intended to cover NW Natural's costs in the event that the HPGS Facilities are constructed and Customer fails to make payments under this Agreement. If NW Natural deems an Adequate Assurance to be necessary, then the parties will negotiate the terms of an Adequate Assurance Agreement including the payment to NW Natural and the refund schedule to Customer.

## **Article 9. INSURANCE**

9.1 NW Natural shall carry and maintain insurance of the type and in the amounts sufficient in its sole opinion to cover its services under this Agreement and any exposure in providing services under this Agreement.

9.2 Customer shall carry and maintain Commercial General Liability Insurance in the amount of \$1 million per occurrence and \$2 million in the aggregate. NW Natural shall be named as an additional insured on Customer's Commercial General Liability Insurance and the policy shall contain a cross liability endorsement and contractual liability coverage for obligations assumed by Customer under the indemnity provisions of this Agreement.

## **Article 10. FORCE MAJEURE**

10.1 NW Natural shall not be liable to Customer for the failure to perform any of its obligations under this Agreement, to the extent that such failure is a result of Force Majeure. The term "Force Majeure" as employed herein means any cause, event, act or omission whether of the kind enumerated herein or otherwise that is not reasonably within its control.

10.2 Force Majeure shall include, , but shall not be limited to, the following: (i) physical events such as acts of God, landslides, earthquakes, fires, other natural catastrophes, epidemics, explosions, and breakage or accident or necessity of repairs to machinery, equipment, lines of pipe or any component part of the HPGS Facilities; (ii) weather-related events, such as low temperatures which cause freezing or failure of the HPGS Facilities or lines of pipe, storms, floods, and lightning; (iii) acts of others such as the need to obtain third party easements and/or rights-of-way, strikes, lockouts or other industrial disturbances, riots, sabotage, insurrections or wars; and (iv) governmental actions or litigation, such as necessity for compliance with any court order, law, statute, ordinance, regulation, or policy having the effect of law promulgated by a governmental authority having jurisdiction, including the need to obtain pipe line construction or other permits. Nothing contained herein shall be construed to require the settlement of a strike or labor dispute.

10.3 NW Natural will provide notice of Force Majeure impacting the HPGS Facilities to Customer as soon as reasonably practical after the occurrence of the event, cause or upon receipt of 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 shall not be deemed a waiver of such Force Majeure. NW Natural shall 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 under the Agreement.

## **Article 11. CUSTOMER SALES OF CNG AND ACKNOWLEDGMENTS**

11.1 Sales of CNG. Customer may make CNG sales to the extent such sales are consistent with NW Natural's Tariff and this Agreement.

(a) Customer shall be fully responsible and liable to such third parties and shall hold NW Natural harmless as to any third party claims for damages or lost profits associated with any sales to third parties as a result of any service interruptions at the HPGS Facilities.

(b) Customer is solely responsible for compliance with laws related to operation as a retailer of CNG, including responsibility for payment of any state and federal highway or other taxes associated with or related to the sales of CNG. NW Natural transfers customer of the natural gas at its Custody Transfer Point. NW Natural is not responsible for vehicle fueling.

- (c) Customer Use of CNG. Customer is solely responsible for compliance with laws related to the use of CNG and operation of a CNG fueling station.

## **Article 12. LIABILITY AND INDEMNIFICATION**

12.1 Customer shall protect, defend, indemnify and hold NW Natural, its directors, officers, employees, attorneys-in-fact, agents and affiliated companies, free and harmless from and against any and all losses, claims, liens, demands, and causes of action of every kind and character, arising out of, in connection with, or incident to this Agreement or any activities contemplated hereunder, including, but not limited to, the amounts of judgments, penalties, interest, court costs, investigation expenses and costs and legal fees (whether incurred at trial, on appeal, in bankruptcy or otherwise), for claims, liens, debts, personal injuries, death or damages to property, and all other claims or demands of every character occurring or incident to, in connection with or arising out of Customer's or its contractors' or subcontractors' performance of Customer's obligations under this Agreement. This indemnity provision may be limited as necessary by applicable law.

12.2 IN NO EVENT WILL EITHER PARTY NOR 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, INCLUDING, BUT NOT LIMITED TO, LOSS, DAMAGE, OR EXPENSE TO PERSONS OR PROPERTY, DIRECTLY OR INDIRECTLY, ARISING OUT OF ITS ACTIONS THAT ARE IN ACCORDANCE WITH THE TERMS AND CONDITIONS SET FORTH IN THIS AGREEMENT OR NW NATURAL'S TARIFF, UNLESS SUCH DAMAGES ARE THE RESULT OF A PARTY'S WILLFUL MISCONDUCT.

12.3 Customer agrees that all claims that it may have arising out of the high pressure gas service facilities and equipment will be limited to the final cost of those facilities and equipment.

## **Article 13. EFFECTIVE DATE/TERM/TERMINATION**

13.1 This Agreement shall be effective as of the Effective Date and will continue through 120 months after the Service Commencement Date defined in Article 5. NW Natural and Customer may agree to extend the term of this Agreement. If the term of this Agreement is extended beyond 120 months, the Parties will revise the Monthly Facility Charge and the Scheduled Maintenance Charge consistent with the HPGS Rider.

13.2 Termination by Customer.

(a) At any time prior to the Commencement of Service pursuant to Article 5, Customer may terminate this Agreement by giving NW Natural written notice and paying any amounts required by Section 13.4. NW Natural shall have no further obligation to continue work on the HPGS Facilities and shall incur no liability for discontinuing such work.

(b) At any time after the Commencement of Service pursuant to Article 5, Customer may terminate this Agreement by giving NW Natural 30 days' written notice and paying any amounts required by Section 13.4.

13.3 Termination by NW Natural.

(a) At any time during the term of this Agreement, in the event that Customer shall: (i) make an assignment or any general arrangement for the benefit of creditors; (ii) file a petition or otherwise commence, authorize, or acquiesce 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; (iii) otherwise become bankrupt or insolvent (however evidenced); (iv) be unable to pay its debts as they fall due; or (v) have a receiver, provisional liquidator, conservator, custodian, trustee or other similar official appointed with respect to it or substantially all of its assets; NW Natural shall have the right, at its sole election, to immediately withhold and/or suspend performance and/or to terminate this Agreement and/or request additional financial assurance, in addition to any and all other remedies available to it. Written notice of this decision will be provided by NW Natural to Customer as soon as reasonably practical after the decision to withhold or suspend performance, or terminate this Agreement is made.

(b) At any time during the term of this Agreement, in the event NW Natural determines that (i) Customer has failed to comply with any material term of this Agreement, including but not limited to making payments to NW Natural as required by this Agreement; (ii) Customer no longer qualifies for service under Rate Schedule 3, Rate Schedule 31, or Rate Schedule 32; (iii) Customer has tampered with or otherwise affected the operation of the HPGS Facilities; (iv) a condition at the Site poses a risk to health or safety that Customer has not mitigated within a reasonable period of time; or (v) NW Natural must discontinue its work due to a Force Majeure, NW Natural shall have the right, at its sole election, to immediately withhold and/or suspend performance and/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 Customer as soon as reasonably practical after the decision to withhold or suspend performance, or terminate this Agreement is made.

#### 13.4 Effect of Termination.

(a) Upon termination of this Agreement for any reason by either Party, Customer is required to pay NW Natural as follows:

- (i) If termination occurs prior to the Commencement of Service pursuant to Article 5, NW Natural shall render to Customer a reasonably detailed listing of the actual costs, including any applicable contract cancellation fees, incurred by NW Natural and shall include an invoice. Cancellation fees shall include, but are not limited to, the Production Unit Cancellation fees set forth in Exhibit D.
- (ii) If termination occurs after the Commencement of Service pursuant to Article 5, Customer shall pay or cause to be paid (1) the total amount of Monthly Facility Charges remaining under this Agreement and (2) and the remaining Monthly Scheduled Maintenance Charges that NW Natural has already incurred, or is contractually obligated to incur.

(b) In the event of termination, NW Natural shall render to Customer an invoice reflecting the total amount of such charges. Customer shall pay or cause to be paid the full amount of such invoice within thirty (30) days of the date of the invoice. If Customer fails to make payment of such invoice within said thirty (30) day period, interest shall accrue on the unpaid portion of the billing(s) determined to be due under this Agreement, at the applicable interest rate set forth in NW Natural's Tariff. Further, Customer shall reimburse NW Natural for any reasonable attorney's fees that may be incurred in connection with any activities concerning collection of any payments due.

(c) Upon termination of this Agreement, Customer shall continue to provide access to the Site as set forth in Article 6 to allow for removal of the HPGS Facilities.

#### **Article 14. DISPUTE RESOLUTION**

14.1 If a dispute arises out of or relates to this Agreement, or the breach thereof, the Parties agree to settle the dispute by the process described in this Section.

(a) Either Party may give the other Party written notice of any dispute that is not resolved in the ordinary course of business. The Party receiving the notice of dispute may respond in writing. The written notice and response, if any, shall be first submitted to a higher level of management than the persons with direct responsibility for administration of this Agreement. If the Parties' higher level management are unable to resolve the dispute within ten (10) days after delivery of the written notice of the dispute, and a statement indicating that higher level management was unable to resolve the dispute, shall be submitted to executives of both Parties having the authority to finally resolve the dispute. Within thirty (30) days of delivery of the notice to the Parties' executives, the designated executives shall meet at a time, place and in a manner that is mutually agreeable, and shall resolve the controversy. All reasonable requests for information made by one Party to the other shall be honored in a timely fashion.

(b) If executives of both Parties are unable to resolve the dispute within sixty (60) days after receipt of the notice to the executives, or if the executives fail to meet within thirty (30) days of delivery of the notice, either Party may give written notice to the other Party of its intention to arbitrate the dispute. The Parties must, however, first attempt in good faith to settle the dispute by mediation. If the dispute is not settled by mediation with forty-five (45) days after delivery of written notice of intention to arbitrate, or longer, if mutually agreeable, the mediation shall terminate, and the dispute shall be settled by arbitration. The American Arbitration Association ("AAA") Commercial Arbitration Rules shall govern these proceedings, unless other rules are mutually agreed upon by the Parties in writing. The decision of the arbitrator(s) shall be binding, and judgment on the arbitrator(s) award may be entered in the state or federal courts of Multnomah County, Oregon.

14.2 Nothing in this Agreement shall prohibit or limit a Party's right to initiate litigation to enforce the arbitrator's award, or to obtain injunctive or equitable relief permitted by the terms of this Agreement, or to preserve a superior position with respect to other creditors.

14.3 All submissions and negotiations between the Parties conducted pursuant to or in contemplation of this dispute resolution process shall be kept confidential by both Parties and treated by the Parties as compromise and settlement negotiations for purposes of applicable court rules of evidence.

#### **Article 15. MODIFICATION AND ASSIGNMENT**

15.1 This Agreement may not be modified or amended in any respect except by a written instrument executed by the Parties. No waiver or modification of any provision of this Agreement shall occur as a result of any course of performance or course of dealing between NW Natural and Customer, or from any usage of trade. No Party may assign this Agreement without the prior written consent of the other Party, which consent shall 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 15.1 for a modification or assignment shall be borne by Customer. NW Natural shall provide its response within five (5) business days of any request for assignment received

from Customer. Any attempted assignment made without such prior written consent shall be void and of no legal effect. This Agreement shall 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 shall not relieve either Party of any obligations to the other Party incurred prior to such assignment.

#### **Article 16. CONFIDENTIALITY AGREEMENT**

16.1 The term “Confidential Information” means any information that a Party has in writing as proprietary or confidential, by writing “CONFIDENTIAL” prominently on the material.

16.2 The Parties acknowledge that as part of performing under this Agreement, the Parties will exchange Confidential Information regarding their facilities and other forms of proprietary information deemed to be confidential. The Parties agree not to disclose Confidential Information during or after the term of this Agreement except to the extent necessary to perform their obligations under this Agreement during the term hereof. Neither Party shall use or duplicate any such information for any other purpose other than for use under this Agreement. Each Party’s standard of care under this Article shall be satisfied if it treats the other Party’s Confidential Information as it treats its own information that it does not wish to be publically disclosed, published, or otherwise disseminated.

16.3 Each Party’s Confidential Information shall be made available to the other party’s employees, subcontractors or agents only on a “need to know” basis.

16.4 The confidentiality obligations imposed in this Section shall not apply to: (1) information that now or hereafter becomes part of the public domain through lawful means; (2) information already known to or developed by the receiving party as demonstrated by written materials that predate the disclosure; (3) information subsequently and rightfully received from third parties without any obligation of confidentiality; and (4) information required to be produced by a lawful government, regulatory, or court order, provided that Customer will provide NW Natural with prompt written notice sufficient to allow NW Natural to seek a protective order or other appropriate remedy.

16.5 Upon termination of this Agreement, each Party shall immediately cease to use any of the Confidential Information disclosed to it pursuant to this Agreement. Upon such termination or expiration, neither Party may retain any Confidential Information of the other Party and shall immediately return to the other Party all written Confidential Information that has been provided to it as well as any copies of Confidential Information.

16.6 Customer agrees that in the event of a breach or threatened breach of this Section, the remedy at law is inadequate and NW Natural may obtain equitable relief prohibiting the breach, in addition to any other appropriate legal or equitable relief.

#### **ARTICLE 2. SURVIVING TERMS**

16.7 The following provisions of this Agreement shall survive termination as specified in such Section or Article, as follows: Article 12, Liability and Indemnification, and Article 16, Confidentiality Agreement.

#### **Article 17. OTHER GENERAL PROVISIONS**

17.1 Complete Agreement. This Agreement sets forth the entire integrated agreement of the Parties with respect to the subject matter herein.

17.2 Supersedes Other Agreements. This Agreement supersedes all other agreements relating to the subject matter herein that the Parties may have previously entered.

17.3 Not Construed Against Either Party. This Agreement has been drafted with the joint participation of each Party, and shall be construed to be neither against nor in favor of any Party, rather this Agreement shall be construed in accordance with the fair meaning of its stated terms.

17.4 Headings. The headings set forth in this Agreement shall not affect the interpretation of this Agreement.

17.5 Severability. Any provision of this Agreement held to be unenforceable in any jurisdiction shall be, as to that jurisdiction only, ineffective only to the extent of such unenforceability, without affecting any other provision of this Agreement.

17.6 Interpretation and Construction. Any term used in the plural shall refer to all members of the relevant class, and any term used in the singular shall refer to any one or more of the members of the relevant class. Any masculine term shall also refer to the feminine. References in this Agreement to sections are to sections to this Agreement. "Including" shall 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" shall not be exclusive.

17.7 Signatures May Be in Counterparts; Facsimile or E-Mail Signature Has Legal Effect. This Agreement may be signed in counterparts. A facsimile version or an e-mailed pdf of the signature page shall have the same legal effect as an original.

17.8 Waiver. No waiver by a Party of any provision of this Agreement shall be deemed to be a waiver of any preceding, concurrent, or succeeding breach of the same or any other provision.

17.9 Rights and Remedies Cumulative. Subject to the terms herein, all rights and remedies granted or referred to in this Agreement are cumulative and resort to one shall not preclude resort to any other available right or remedy.

17.10 Signatories Have Authority. The signatories to this Agreement certify that they have the authority to bind the Party they represent.

17.11 Conflict Between NW Natural's Tariff and this Agreement. To the extent there is a conflict between NW Natural's Tariff and this Agreement, this Agreement governs.

#### **Article 18. NOTICES AND COMMUNICATIONS**

18.1 Any notice or communication permitted or required by this Agreement shall be made in writing; and shall 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:

For contract-related issues:

To: NORTHWEST NATURAL GAS COMPANY  
Attn: Bruce Gieseeman  
220 NW Second Avenue

To: Customer  
Attn:

Portland, OR 97209

E-mail: bruce.gieseeman@nwnatural.com

E-Mail:

Phone: 503-226-4211 x5846

Phone:

Fax:

Fax:

For operational issues during business hours:

For after-hours calls:

18.2 Either Party may change its address for receipt of notices and communications under this Agreement upon the provision of appropriate written notification to the other Party.

**IN WITNESS WHEREOF**, the Parties hereto have executed this Agreement as of the Effective Date .

**NORTHWEST NATURAL GAS COMPANY**

**[CUSTOMER]**

By: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date of Signature: \_\_\_\_\_

By: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date of Signature: \_\_\_\_\_



HIGH-PRESSURE NATURAL GAS SERVICE AGREEMENT  
DATED \_\_\_\_\_, 2013  
BETWEEN NORTHWEST NATURAL GAS COMPANY  
AND [CUSTOMER]

Exhibit A: CONSTRUCTION DRAWINGS AND SPECIFICATIONS

HIGH-PRESSURE GAS SERVICE AGREEMENT  
DATED \_\_\_\_\_, 2013  
BETWEEN NORTHWEST NATURAL GAS COMPANY  
AND [CUSTOMER]

Exhibit B: HIGH-PRESSURE NATURAL GAS FACILITIES

The High-Pressure Natural Gas Facilities will be located at Customer premises at \_\_\_\_\_, Oregon.

The HPGS Facilities will have a designed daily volume of \_\_\_\_\_ Dth/d and a peak hourly flow of \_\_\_\_\_ Dth/hr at a design pressure of not less than \_\_\_ psig nor greater than \_\_\_ psig.<sup>1</sup> HPGS Facilities are installed beyond the Custody Transfer Point, as defined in NW Natural's General Rules and Regulations contained in NW Natural's currently-effective filed Tariff.

The major items comprising the HPGS Facilities are:

- Compression system
- Main distribution panel
- Remote feeder panel
- Transformer pad
- Pads
- Trenches
- Compressor skid
- Dryers
- Regeneration pad
- Storage vessels
- Priority panel
- One fast fill meter/dispenser(s) (does not include hanging hardware)
- Protective traffic bollards
- ASME Cascade Buffer – one three pack installed on the roof
- Control System and remote power panel
- Any modifications or additions to the above major components

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

HIGH-PRESSURE GAS SERVICE AGREEMENT  
DATED \_\_\_\_\_, 2013  
BETWEEN NORTHWEST NATURAL GAS COMPANY  
AND [CUSTOMER]

Exhibit C: OPTIONAL EQUIPMENT ORDER

Customer has elected for NW Natural to install the following Optional Equipment:

[Optional Equipment]

As set forth in the Agreement, payment for Optional Equipment is due upon execution of this Agreement.

**NORTHWEST NATURAL GAS COMPANY**

**[CUSTOMER]**

By: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date of Signature: \_\_\_\_\_

By: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date of Signature: \_\_\_\_\_

HIGH-PRESSURE GAS SERVICE AGREEMENT  
DATED \_\_\_\_\_, 2013  
BETWEEN NORTHWEST NATURAL GAS COMPANY  
AND [CUSTOMER]

Exhibit D: ESTIMATED PROJECT COSTS

[Specifically identify CNG in a Box costs to which Production Unit Cancellation Fee will be applied.]

HIGH-PRESSUR GAS SERVICE AGREEMENT  
DATED \_\_\_\_\_, 2013  
BETWEEN NORTHWEST NATURAL GAS COMPANY  
AND [CUSTOMER]

Exhibit E: SCHEDULED MAINTENANCE CALCULATION

HIGH-PRESSURE GAS SERVICE AGREEMENT  
DATED \_\_\_\_\_, 2013  
BETWEEN NORTHWEST NATURAL GAS COMPANY  
AND [CUSTOMER]

Exhibit F: BACK-UP SERVICE CHARGE CALCULATION

HIGH-PRESSURE GAS SERVICE AGREEMENT  
DATED \_\_\_\_\_, 2013  
BETWEEN NORTHWEST NATURAL GAS COMPANY  
AND [CUSTOMER]

Exhibit G: DESCRIPTION OF LEASED SITE

[Include description of site and map.]

HIGH-PRESSURE GAS SERVICE AGREEMENT  
DATED \_\_\_\_\_, 2013  
BETWEEN NORTHWEST NATURAL GAS COMPANY  
AND [CUSTOMER]

Exhibit H: ACCESS AUTHORIZATION AND RESTRICTIONS

[Customer shall provide reasonable access at all times to NW Natural personnel or its agent to perform their duties. Please list any restrictions to such access below including physical restrictions and day of week or time of day restrictions.]



## **Attachment E**

NWN OPUC Advice No. 13-10





Present Value Estimate	50,000
Inflation Factor	2.1%
Year 1	50,000
Year 2	51,050
Year 3	52,122
Year 4	53,217
Year 5	54,334
Year 6	55,475
Year 7	56,640
Year 8	57,830
Year 9	59,044
Year 10	60,284
Year 11	61,550

## **Attachment F**

NWN OPUC Advice No. 13-10

## **NW Natural High Pressure Gas Service (HPGS)**

NW Natural performed analysis to determine whether the proposed High Pressure Gas Service (HPGS) might impose costs on customer taking service under other rate schedules. This analysis used the following high-level assumptions:

Inflation Rate	2.1%	as used in the UG 221 LRIC Study
HPGS Investment per Site	\$1 million	
Book/Regulatory Depreciable Life	10 years	for all investment
Tax Depreciable Life	7 years	for all investment
Gross Salvage Value	\$0	
Cost of Removal per Site	\$50 thousand	
Direct Cost of Maintenance	\$80 thousand per year	

### **Pricing Approach**

NW Natural will minimize the risk associated with providing a HPGS to both customers and the Company by pricing the service at annual cost of service levels based on the actual investment level on an individual site basis. The Company developed annual cost of service values based on a \$1 million investment per site, a \$50 thousand cost of removal, no gross salvage value, and an \$80 thousand per year, per site maintenance expense with maintenance performed by a third party under contract. NW Natural used a cost of service (cost of service = revenue requirement) model to determine the cost of service on a year-by-year basis. Dividing each annual cost of service by the estimated \$1 million investment provides annual capital recovery factors, which may be used to price HPGS on an individual site basis in order to adjust pricing for those sites having an actual investment level, which differs from the estimated \$1.0 million. HPGS is priced on a stand-alone basis. Costs associated with natural gas delivery are covered by the rates of the underlying rate schedule, such as 31 Commercial Firm Sales.

### **Long-run Incremental Cost Analysis**

NW Natural compared the long-run incremental cost (LRIC) of HPGS with its revenue requirement by first deriving a levelized annual revenue requirement equivalent by present valuing the 10-year revenue requirement stream (PVRR) and annuitizing the result over the same 10-year period. This results in an equivalent revenue stream of \$251,368 annually for 10 years.

NW Natural used the LRIC Study (LRIC model) filed as Exhibit NWN/1101 in the Company's most recent Oregon rate case docketed as UG 221 as the basis for determining whether HPGS would be subsidized

by other rate schedules. ( See Exhibit NWN/1100 in Docket No. UG 221 for a detailed description of the LRIC Study.)

NW Natural updated the LRIC model for the following changes resulting from the Docket No. UG 221 rate case:

ROE	9.5%
Cost of Long-term Debt	6.056%
Revenue Requirement Increase	\$8.7 million per the PUC’s website at <a href="http://www.oregon.gov/puc/Pages/news/2012/2012012.aspx">http://www.oregon.gov/puc/Pages/news/2012/2012012.aspx</a>

NW Natural based the HPGS’s LRIC on one site for one customer to facilitate the interpretation of values. This is likely a conservative approach, as NW Natural may realize scale economies with respect to the cost of contracted maintenance with more sites with the savings to be passed through to customers on a dollar-for-dollar basis.

NW Natural used the same percent of net plant used in the LRIC Study for Mains for expenses associated with Operations Supervision and Engineering and Maintenance Supervision and Engineering. These are the only expense types included in the LRIC Study’s Operations and Maintenance (O&M) loading for Mains that are not specifically identified as maintenance expense for Mains or operating expense for Mains. When added to the direct annual maintenance cost of \$80 thousand per site under a contemplated GE maintenance contract for less than six sites, the annual O&M expense per site is \$81,825.

NW Natural used the same annual “Accounting” cost of \$50.20 used in the LRIC Study for each Commercial customer. This amount represents the annual cost per Commercial customer for Meter Reading, Billing and Collections, Uncollectible Accounts, Customer Service, Customer Assistance, and certain types of Advertising and Sales expenses.

Total Oregon jurisdiction values for revenue and long-run incremental costs included those associated with HPGS, which is presented in the analysis as a stand-alone schedule.

As above, NW Natural did not incorporate in the analysis any impacts associated with rate schedules providing the underlying service for gas delivery; e.g., 31C FS, or 32C IT. If such a schedule is a “subsidizing” rate schedule, the total dollar amount of subsidy from such underlying rate schedules to those rate schedules being subsidized will likely increase if total throughput per customer with the HPGS exceeds the average per customer in the LRIC study. Similarly, any applicable costs for main extensions resulting from specific deployments of the HPGS are assumed to be covered in accordance with the terms and condition established in Schedule X.

Following the migration of Schedule 1R and 1C customers to Schedules 2R and 3C, respectively, as an outcome of the rate case, the only apparent rate schedule paying less than its LRIC is Schedule 2R. All likely rate schedules for the underlying gas delivery service are subsidizing rate schedules.

### **Analytical Results**

Please see the report titled “NW Natural Long-run Incremental Cost including HPGS Based on UG 221 LRIC Study.” Line 25 of the report has the total dollar LRIC value for each rate schedule; Line 28 is the sum of the revenue requirement resulting from the rate case plus revenue from the HPGS, with the total allocated *pro rata* to each rate schedule by its respective LRIC; Line 30 has the Test Year revenues prior to any change resulting from the rate case plus revenue from the HPGS; Line 31 is Line 30 divided by Line 28; and Line 32 “unitizes” Line 31 by dividing each value in Line 31 by the Line 31 company total of 0.97. Each of these lines includes the respective value associated with one deployed HPGS Facility. The criterion for determining whether a rate schedule, prior to the change in revenue requirement resulting from the rate case, subsidizes or is subsidized by other rate schedules on a collective basis is the rate schedule’s Line 32 value: if this value is less than 1.00, the rate schedule is being subsidized collectively by the other rate schedules; if the value is greater than 1.00, the rate schedule is subsidizing other rate schedules collectively.

The value of 1.18 in Column S (“HPGS”) of Line 32 indicates the HPGS, at the levelized annual revenue amount based on the indicated cost of service (revenue requirement) amounts, subsidizes other rate schedules and is not being subsidized. As a result, implementing HPGS appears to provide what some have termed a “system benefit.”

It is highly unlikely that the interaction between the increase in revenue requirement and the rate spread resulting from the rate case materially changed any rate schedule’s status of subsidizing versus being subsidized. This assessment is based on the relatively low value of the former in percentage terms and the moderation employed in establishing the latter. See pages 8 and 23 of Appendix B in Order No. 12-408 regarding rate spread.

This analysis does not include any impact resulting from decoupling as a result of customers currently in a decoupled rate schedule moving to a rate schedule that is not decoupled as a result of higher volumes following implementation of HPGS.

Based on the estimated deployment schedule, the HPGS provides a PVRR system benefit valued at \$5.1 million over 10 years and \$4.5 million over 20 years.



NW Natural  
Long-run Incremental Cost including HPGS  
Based on UG 221 LRIC Study

	Units	Total (A)	IR (B)	IC (C)	2R (D)	3C Firm Sales (E)	3I Firm Sales (F)	31C Firm Sales (G)	31C Firm Trans (H)	31C Inter- Sales (I)
1	Number Customers	601,299	3,764	169	538,601	56,653	285	1,198	6	12
2	MDDV Volumes									
3	Winter-4 Storage Volumes-Sales & Transport	207,362,282	194,861	38,670	132,481,223	49,281,181	569,537	16,449,324	8,064	
4	Winter-4 Storage Volumes-Sales	203,768,706	194,861	38,670	132,481,223	49,281,181	569,537	16,449,324		
5	Firm DesignDay	849,990	830	131	554,495	191,840	1,516	70,302	175	
6	DesignDay-Sales	838,638	830	131	554,495	191,840	1,516	70,302		
7	C&I Incremental Firm DesignDay	17,459	14	3	9,496	4,531	115	1,660	4	0
8	Revenues	287,656,310	577,125	62,009	188,891,594	57,697,369	1,362,237	15,322,004	81,269	285,292
9										
10	Total UG 221 Revenue Requirement plus CNG Service	296,356,310								
11										
12	<b>Incremental Storage Costs</b>									
13	Storage Revenue Requirement - Daily Deliverability	44,295,486	43,865	6,912	29,287,506	10,132,688	80,078	3,713,222	0	0
14	Storage Revenue Requirement - Capacity	7,820,714	7,479	1,484	5,084,675	1,891,429	21,859	631,331	0	0
15										
16	<b>Incremental Transmission Costs</b>									
17	Incremental Transmission Costs per Dth/Design Day	1,640,711	94	94	892,391	425,787	94	94	94	0
18	Incremental Transmission Revenue Requirement		1,337	290			10,760	156,034	388	0
19										
20	<b>Incremental Distribution Costs</b>									
21	Incremental Distribution Costs per Customer		344	388	385	685	3,061	1,972	2,864	2,633
22	Incremental Distribution Costs per Dth/Design Day		0	13	0	13	13	13	13	0
23	Incremental Distribution Revenue Requirement	259,235,337	1,294,281	67,313	207,571,881	41,262,170	891,951	3,270,083	19,439	31,593
24										
25	<b>Total Long-run Incremental Revenue Requirement</b>	312,992,248	1,346,962	76,000	242,836,454	53,712,074	1,004,649	7,770,670	19,827	31,593
26										
27	Ratio of Incremental Rev Req to UG 221 Rev Req	105.6%								
28	<b>Total Revenue Requirement - Allocated based on LRIC</b>	296,356,310	1,275,369	71,960	229,929,386	50,857,209	951,250	7,357,649	18,773	29,914
29										
30	<b>Test Year Revenues with HPGS</b>	287,656,310	577,125	62,009	188,891,594	57,697,369	1,362,237	15,322,004	81,269	285,292
31	Revenue to Cost Ratio	0.97	0.45	0.86	0.82	1.13	1.43	2.08	4.33	9.54
32	Unitized Revenue to Cost Ratio	1.00	0.47	0.89	0.85	1.17	1.48	2.15	4.46	9.83

NW Natural  
Long-run Incremental Cost including HPGS  
Based on UG 221 LRIC Study

	Units	31I Firm Sales (J)	31I Firm Trans (K)	31I Interr Sales (L)	32C Firm Sales (M)	32I Firm Sales (N)	32 Firm Trans (O)	32C Interr Sales (P)	32I Interr Sales (Q)	32 Interr Trans (R)	HPGS (S)
1	Number Customers	225	8	7	53	45	65	52	66	89	1
2	MDDV Volumes										0
3	Winter-4 Storage Volumes-Sales & Transport	1,876,983	157,702		1,708,764	1,888,634	3,150,048				0
4	Winter-4 Storage Volumes-Sales	1,876,983			2,351,912	525,017	3,427,811				0
5	Firm DesignDay	4,331	353		2,351,912	525,017	10,825				0
6	DesignDay-Sales	4,331			13,157	2,036					0
7	C&I Incremental Firm DesignDay	327	27	0	13,157	2,036	818	0	0	0	0
8	Revenues	3,561,584	182,560	75,970	2,060,560	2,056,408	3,945,752	1,749,021	2,647,371	6,846,817	251,368
9											
10	Total UG 221 Revenue Requirement plus CNG Service										
11											
12	<b>Incremental Storage Costs</b>										
13	Storage Revenue Requirement - Daily Deliverability	\$ 228,768	0	0	694,926	107,520	0	0	0	0	0
14	Storage Revenue Requirement - Capacity	\$ 72,039	0	0	90,267	20,150	0	0	0	0	0
15											
16	<b>Incremental Transmission Costs</b>										
17	Incremental Transmission Costs per Dth/Design Day	\$ 94	94	0	94	94	94	0	0	0	0
18	Incremental Transmission Revenue Requirement	\$ 30,740	2,504	0	29,202	14,448	76,829	0	0	0	0
19											
20	<b>Incremental Distribution Costs</b>										
21	Incremental Distribution Costs per Customer	\$ 4,284	4,284	4,290	3,544	5,188	6,948	5,296	6,952	17,562	232,039
22	Incremental Distribution Costs per Dth/Design Day	\$ 13	13	0	13	13	13	0	0	0	0
23	Incremental Distribution Revenue Requirement	\$ 1,019,771	38,824	30,032	357,637	259,726	591,341	275,396	458,816	1,563,042	232,039
24											
25	<b>Total Long-run Incremental Revenue Requirement</b>	\$ 1,351,319	41,328	30,032	1,172,032	401,844	668,171	275,396	458,816	1,563,042	232,039
26											
27	Ratio of Incremental Rev Req to UG 221 Rev Req										
28	<b>Total Revenue Requirement - Allocated based on LRIC</b>	\$ 1,279,495	39,131	28,435	1,109,737	380,486	632,657	260,758	434,429	1,479,964	219,706
29											
30	<b>Test Year Revenues with HPGS</b>	\$ 3,561,584	182,560	75,970	2,060,560	2,056,408	3,945,752	1,749,021	2,647,371	6,846,817	251,368
31	Revenue to Cost Ratio	2.78	4.67	2.67	1.86	5.40	6.24	6.71	6.09	4.63	1.14
32	Unitized Revenue to Cost Ratio	2.87	4.81	2.75	1.91	5.57	6.43	6.91	6.28	4.77	1.18

NW Natural  
HPGS  
Sites and Revenue

Year Index	1	2	3	4	5	6	7	8	9	10	Total
Capital Recovery Factors from COS Study (per Site)	31.0%	29.3%	27.4%	25.9%	24.6%	23.3%	22.0%	20.8%	19.9%	18.9%	243.1%
Direct Investment per Site	1,000,000										
Annual Revenue Requirement per Unit	310,000	293,000	274,000	259,000	246,000	233,000	220,000	208,000	199,000	189,000	
PV of Revenue Requirement	1,703,721										
10-year Annuity Equivalent	251,368										
Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Site Additions	1	3	6	7	10	-	-	-	-	-	-
Site Removals											1
No. of Sites EOY	1	4	10	17	27	27	27	27	27	27	26
HPGS Revenue	310,000	293,000	274,000	259,000	246,000	233,000	220,000	208,000	199,000	189,000	-
	1	3	6	7	10	738,000	699,000	660,000	624,000	597,000	567,000
	3	879,000	1,860,000	1,758,000	1,644,000	1,554,000	1,476,000	1,398,000	1,320,000	1,248,000	1,194,000
	6	2,170,000	2,051,000	1,918,000	1,813,000	1,722,000	1,631,000	1,540,000	1,456,000	1,371,000	1,287,000
	7	3,100,000	2,930,000	2,740,000	2,590,000	2,460,000	2,330,000	2,200,000	2,080,000	1,960,000	1,840,000
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Total	310,000	1,223,000	3,013,000	5,009,000	7,818,000	7,373,000	6,948,000	6,578,000	6,234,000	5,904,000	5,417,000
Adjusted LRIC*	219,706	878,823	2,197,056	3,734,996	5,932,052	5,932,052	5,932,052	5,932,052	5,932,052	5,932,052	5,712,346
HPGS Contribution to System	90,294	344,177	815,944	1,274,004	1,885,948	1,440,948	1,015,948	645,948	301,948	(28,052)	(295,346)
Mid-year Convention	45,147	217,236	580,061	1,044,974	1,579,976	1,663,448	1,228,448	830,948	473,948	136,948	(161,699)
PV of 10-year HPGS Contribution	7.78%	5,104,210									
PV of 20-year HPGS System Contribution	7.78%	4,540,747									

Note: the Adjusted LRIC of \$219,706 results from allocating the revenue requirement resulting from UG 221 plus the HPGS's revenue requirement for one site on the basis of each rate schedule's LRIC.

