ONITA R. KING Rates & Regulatory Affairs Tel: 503.721.2452 Fax: 503.721.2516 email: ork@nwnatural.com



September 15, 2016

Re:

NWN OPUC Advice No. 16-18 / UG 324

#### VIA ELECTRONIC FILING

Public Utility Commission of Oregon Attention: Filing Center 201 High Street SE, Suite 100 Post Office Box 1088 Salem, Oregon 97301-1088

> Combined Effects of: UG 306: NWN OPUC Advice No. 16-10A UG 307: NWN OPUC Advice No. 16-11 UG 308: NWN OPUC Advice No. 16-12 UG 309: NWN OPUC Advice No. 16-13A UG 310: NWN OPUC Advice No. 16-14A UG 311: NWN OPUC Advice No. 16-15A UG 312: NWN OPUC Advice No. 16-16A UG 313: NWN OPUC Advice No. 16-17A

Northwest Natural Gas Company, dba NW Natural ("NW Natural" or the "Company"), files herewith revisions to its Tariff, P.U.C. Or. 25<sup>1</sup> ("the Tariff"), stated to become effective with service on and after November 1, 2016, as follows:

First Revision of Sheet i, Tariff Index,

Fourth Revision of Sheet v, Tariff index,

Sixth Revision of Sheet 2-1, Rate Schedule 2, "Residential Sales Service;"

Sixth Revision of Sheet 3-4, Rate Schedule 3, "Basic Firm Sales Service – Non-Residential (continued),"

Fourth Revision of Sheet 27-1, Rate Schedule 27, "Residential Heating Dry-Out Service,"

<sup>&</sup>lt;sup>1</sup> Tariff P.U.C. Or. 25 originated November 1, 2012 with Docket UG 221; OPUC Order No. 12-408 as supplemented by Order No. 12-437, and was filed pursuant to ORS 767.205 and OAR 860-022-0005.

Sixth Revision of Sheet 31-11, Rate Schedule 31, "Non-Residential Firm Sales and Firm Transportation Service (continued)," Fourth Revision of Sheet 31-12. Rate Schedule 31, "Non-Residential Firm Sales and Firm Transportation Service (continued)," Fourth Revision of Sheet 32-12, Rate Schedule 32, "Large Volume Non-Residential Sales and Transportation Service (continued)," Fifth Revision of Sheet 32-13, Rate Schedule 32, "Large Volume Non-Residential Sales and Transportation Service (continued)." Fourth Revision of Sheet 32-14, Rate Schedule 32, "Large Volume Non-Residential Sales and Transportation Service (continued)," Fourth Revision of Sheet 33-8, Rate Schedule 33, "High Volume Non-Residential Firm and Interruptible Transportation Service (continued)," Second Revision of Sheet 100-1, Schedule 100. "Summary of Adjustments," Second Revision of Sheet 100-2, Schedule 100, "Summary of Adjustments (continued)," Second Revision of Sheet 100-3 Schedule 100. "Summary of Adjustments (continued)," Second Revision of Sheet 100-4 Schedule 100, "Summary of Adjustments (continued)," Fifth Revision of Sheet 190-1 Schedule 190, "Partial Decoupling Mechanism," Fourth Revision of Sheet 190-2, Schedule 190, "Partial Decoupling Mechanism (continued)," Fourth Revision of Sheet 195-5 Schedule 195, "Weather Adjusted Rate Mechanism (WARM Program) (continued)".

This filing is made in accordance with OAR 860-022-0025, OAR 860-022-0030, and OAR 860-022-0070.

The first purpose of this filing is to revise the Company's Tariff Rate Schedules to reflect the combined effects of changes to rates proposed under the above-referenced filings.

The second purpose of this filing is to make clarifying tariff revisions that indirectly relate to the above-referenced filings as follows:

- <u>Sheet i.</u> The Company proposes to revise the title page to the Company's Tariff P.U.C. Or. 25 to remove Damascus from the list of incorporated cities; the Company was notified that effective July 18, 2016 the city of Damascus became unincorporated. In addition, clarifying language has been added at the bottom of the page to note that the Company may also serve customers that reside in unincorporated communities.
- <u>Schedule 100</u>. The Company proposes to revise this schedule to reflect only those adjustment schedules that are applicable to rates on the stated effective date. There are currently several adjustment schedules that remain active in the Company's tariff but which have a zero rate effect on current rate schedules.
- <u>Schedule 190</u>. The Company proposes to revise provision 3 of the Partial Decoupling Deferral Account section to clarify the step one process to reflect actual practice consistent with the 2<sup>nd</sup> Partial Stipulation adopted by the Commission in Docket UG 221 (OPUC Order 12-408).

The number of customers affected by the rate changes proposed in this filing is 579,129 residential customers, 60,111 commercial customers, and 935 industrial customers.

The net effect of the changes to rates associated with all of the referenced filings combined is to decrease the Company's annual revenues by \$17,652,100 (including revenue sensitive effects).

The average monthly bill impact of the combined changes to rates is shown in the table below:

Class	Rate Schedule	Average Monthly Bill Change (\$)	Average Monthly Bill Change (%)
Residential	Schedule 2	-\$1.40	-2.6%
Commercial	Schedule 3	-\$3.60	-1.6%
Commercial Firm Sales	Schedule 31	-\$57.88	-2.6%
Industrial Firm Sales	Schedule 32	-\$283.84	-2.8%
Industrial Interruptible Sales	Schedule 32	-\$563.08	-3.0%

The monthly bill effects for all other rate classes can be found in Exhibit A to this filing.

Please note that the monthly bill effects for Rate Schedule 31 and Rate Schedule 32 do not include the effect of changes in the pipeline capacity charge due to the customer option to

Public Utility Commission of Oregon NWN OPUC Advice No. 16-18 September 15, 2016, Page 4

elect either an MDDV-based capacity charge or a volumetric-based capacity charge. If, for instance, a customer served under Rate Schedule 32 Industrial Firm Sales Service elected the volumetric pipeline capacity option, the change in the monthly bill effective November 1, 2016 would be a decrease of \$223.63 or -2.8%

The Company requests that the tariff sheets filed herewith be permitted to become effective with service on and after November 1, 2016.

In accordance with ORS 757.205, Copies of this letter and the filing made herewith are available in the Company's main office in Oregon and on its website at <u>www.nwnatural.com</u>.

Please address correspondence on this matter to me at ork@nwnatural.com, with copies to:

eFiling NW Natural Rates & Regulatory Affairs 220 NW Second Avenue Portland, Oregon 97209 Telecopier: (503) 721-2516 Telephone: (503) 226-4211 x3589 eFiling@nwnatural.com

Sincerely, NW NATURAL

/s/ Onita R. King

Onita R. King Rates & Regulatory Affairs

Attachments: Exhibit A – Supporting Materials

P.U.C. Or. 25

First Revision of Sheet i Cancels Original Sheet i

#### RATES, RULES AND REGULATIONS FOR NATURAL GAS SERVICE IN OREGON

INCLUDING SERVICE TO THE INCORPORATED COMMUNITIES OF:

ADAIR VILLAGE, ALBANY, AMITY, ASTORIA, AUMSVILLE, AURORA; BANKS, BARLOW, BEAVERTON, BROWNSVILLE: CANBY, CANNON BEACH, CLATSKANIE, COBURG, COLUMBIA CITY, COOS BAY, COQUILLE, CORNELIUS, CORVALLIS, COTTAGE GROVE, CRESWELL; (D) DALLAS, DEPOE BAY, DONALD, DUNDEE, DURHAM: EUGENE: FAIRVIEW, FOREST GROVE; GEARHART, GERVAIS, GLADSTONE, GRESHAM; HALSEY, HAPPY VALLEY, HARRISBURG, HILLSBORO, HOOD RIVER, HUBBARD; INDEPENDENCE; JEFFERSON, JOHNSON CITY, JUNCTION CITY; KEIZER, KING CITY; LAFAYETTE, LAKE OSWEGO, LEBANON, LINCOLN CITY, LYONS; MAYWOOD PARK, McMINNVILLE, MILL CITY, MILLERSBURG, MILWAUKIE, MOLALLA, MONMOUTH, MT. ANGEL, MYRTLE POINT; NEWBERG, NEWPORT, NORTH BEND, NORTH PLAINS; OREGON CITY; PHILOMATH, PORTLAND; RAINIER, RIVERGROVE; ST. HELENS, SALEM, SANDY, SCAPPOOSE, SCIO, SEASIDE, SHERIDAN, SHERWOOD, SILVERTON, SODAVILLE, SPRINGFIELD, STAYTON, SUBLIMITY, SWEET HOME: SILETZ. TANGENT, THE DALLES, TIGARD, TOLEDO, TROUTDALE, TUALATIN, TURNER; VERNONIA; WARRENTON, WATERLOO, WEST LINN, WILLAMINA, WILSONVILLE, WOODBURN, WOOD VILLAGE:

AND IN TERRITORY SERVED BY THE COMPANY IN OREGON, ADJACENT TO THE ABOVE COMMUNITIES AND INCLUDING UNINCORPORATED COMMUNITIES WITHIN THE AREAS SHOWN ON THE MAP OF SERVICE AREA BELOW.

(C) (C)

(continue to Sheet ii)

Issued September 15, 2016 NWN OPUC Advice No. 16-18

P.U.C. Or. 25

Fourth Revision of Sheet v Cancels Third Revision of Sheet v

# TARIFF INDEX

(continued)

ADJUSTMENT	SCHEDULES	<u>SHEET</u>
	Summary of Adjustments	
	Monthly Incremental Cost of Gas	
Schedule 160:	Revision of Charges for Coos County Customers	
Schedule 162:	Temporary (Technical) Adjustments to Rates	162-1 to 162-2
Schedule 164:	Purchased Gas Cost Adjustments to Rates	
Schedule 164A	: Special Purchased Gas Adjustment Credit	164-A
Schedule 165	Special Adjustment to Rates – Gas Reserves Credit	
	General Adjustments to Rates	
Schedule 172:	Special Adjustment to Rates for Intervenor Funding	172-1
Schedule 177:	System Integrity Program Rate Adjustment - CANCELLED	177-1 to 177-4
Schedule 178:	Regulatory Rate Adjustment	178-1 to 178-2
Schedule 179:	Automated Meter Reading (AMR) Rate Adjustment	179-1
Schedule 180:	Special Rate Adjustment for Working Gas Inventory	
Schedule 181:	Special Rate Adjustment – Regulatory Fee Increase	181-1 to 181-2
Schedule 182:	Rate Adjustment for Environmental Cost Recovery	
Schedule 183:	Site Remediation Recovery Mechanism (SRRM)	183-1 to 183-3
Schedule 184:	Special Rate Adjustment Gasco Upland Pumping Stations	
Schedule 185:	Special Annual Interstate and Intrastate Storage and	
	Transportation Credit	185-1 to 185-2
Schedule 186:	Special Annual Core Pipeline Capacity Optimization Credit	
Schedule 187:		
Schedule 188:	Industrial Demand Side Management (DSM) Program Cost Recovery	y 188-1
Schedule 190:	Partial Decoupling Mechanism	
Schedule 195:	Weather Adjusted Rate Mechanism (WARM Program)	195-1 to 195-5

#### **PROMOTIONAL CONCESSIONS**

Schedule 200:	Promotional Concessions Index	
	General Merchandise Sales Program (Appliance Center)	
	Equipment Sales Promotions	
	Cooperative Advertising Program	
	Showcase Developments	
	Natural Gas Vehicle Program	
	Equipment Financing Program	
	Promotions for Company-Offered Products and Services	

#### PUBLIC PURPOSES SCHEDULES

Schedule 301:	Public Purposes Funding Surcharge	301-1 to 301-3
Schedule 310:	Oregon Low-Income Gas Assistance (OLGA)	
Schedule 320:	Oregon Low-Income Energy Efficiency (OLIEE) Programs	
Schedule 350:	Energy Efficiency Services and Programs – Residential	
	and Commercial	
Schedule 360:	Industrial Demand Side Management (DSM) Programs	
	5.110	

#### OTHER PROGRAMS

Schedule 400: Smart Energy Program 400-	1 to 400-2
---	------------

Issued September 15, 2016 NWN OPUC Advice No. 16-18 Effective with service on and after November 1, 2016

(N) (N)

Sixth Revision of Sheet 2-1 Cancels Fifth Revision of Sheet 2-1

# RATE SCHEDULE 2 RESIDENTIAL SALES SERVICE

#### AVAILABLE:

To Residential Class Customers in all territory served by the Company under the Tariff of which this Rate Schedule is a part. Temporary Disconnection of Service is allowed subject to Special Provision 1 of this Rate Schedule. The installation of Distribution Facilities, when required before service can be provided to equipment served under this Rate Schedule, is subject to the provisions of **Schedule X**.

#### SERVICE DESCRIPTION:

Service under this Rate Schedule is Firm Sales Service to gas equipment used for Domestic purposes by qualifying Residential Class Customers.

Service to a Vehicle Fueling Appliance is subject to the conditions set forth in Special Provisions 3 through 6 of this Rate Schedule.

MONTHLY RATE: Effective: November 1, 2016

The rates shown in this Rate Schedule may not always reflect actual billing rates. See **Schedule 100** for a list of applicable adjustments. Rates are subject to changes for purchased gas costs and technical rate adjustments. The rates for Coos County customers are subject to the additional adjustment set forth in **Schedule 160.** The rates for service to a Vehicle Fueling Appliance shall be further adjusted as set forth in Special Provision 6 of this Rate Schedule.

	Base Rate	Base Adjustment	Pipeline Capacity	Commodity	Temporary Adjustment	Total Billing	(T)
Customer Charge:	\$8.00					\$8.00	
Volumetric Charge (per therm):	\$0.44470		\$0.12132	\$0.31517	\$0.02604	\$0.90723	(R)

(D)

Minimum Monthly Bill: Customer Charge plus charges under Schedule C or Schedule 15 (if applicable)

(continue to Sheet 2-2)

Issued September 15, 2016 NWN OPUC Advice No. 16-18

# **RATE SCHEDULE 3 BASIC FIRM SALES SERVICE - NON-RESIDENTIAL**

(continued)

#### **MONTHLY RATE:** Effective: November 1, 2016

The rates shown in this Rate Schedule may not always reflect actual billing rates. See Schedule 100 for a list of applicable adjustments. Rates are subject to changes for purchased gas costs and technical rate adjustments. The rates for Coos County customers are subject to the additional adjustment set forth in Schedule 160. The rates for service to CNG vehicle fueling equipment shall be further adjusted as set forth in Special Provision 7 of this Rate Schedule.

FIRM SALES SERVIC	Billing Rates [1]					
	\$15.00					
Volumetric Charges (per therm):	Base Rate	Base Adjustment	Pipeline Capacity	Commodity Component [2]	Temporary Adjustment	
Commercial	\$0.35442		\$0.12132	\$0.31517	\$0.07356	\$0.86447
Industrial	\$0.34312		\$0.12132	\$0.31517	\$0.04138	\$0.82099
Standby Charge (per	\$10.00					

[1] Schedule C and Schedule 15 Charges shall apply, if applicable.

(D) (T) [2] The Commodity Component shown is the Annual Sales WACOG. The actual Commodity Component billed could be different for certain customers as described in the special provisions of this Rate Schedule (T)

[3] Applies to Standby Sales Service only.

Minimum Monthly Bill. The Minimum Monthly Bill shall be the Customer Charge plus any Schedule C and Schedule 15 Charges.

Issued September 15, 2016 NWN OPUC Advice No. 16-18

# **RATE SCHEDULE 27 RESIDENTIAL HEATING DRY-OUT SERVICE**

#### AVAILABLE:

To Residential home builders, developers, and contractors during the period that a Residential dwelling is under construction, in all territory served by the Company under the Tariff of which this Rate Schedule is a part.

#### SERVICE DESCRIPTION:

Service under this Rate Schedule is restricted to the use of gas in approved permanently-installed gas heating equipment in place during the period the dwelling is under construction. Upon occupancy of the dwelling, service under this Rate Schedule shall terminate automatically. In no event will service under this Rate Schedule continue for a period of time greater than twelve (12) months from the date the gas meter is set at the dwelling. Upon termination of service under this Rate Schedule, gas service shall transfer to Schedule 2.

#### MONTHLY RATE: Effective: November 1, 2016

The rates shown in this Rate Schedule may not always reflect actual billing rates. See **Schedule 100** for a list of applicable adjustments. Rates are subject to charges for purchased gas costs and technical rate adjustments. The rates for Coos County customers are subject to the additional adjustment set forth in Schedule 160.

	Base Rate	Base Adjustment	Pipeline Capacity Rate	Commodity Rate	Temporary Adjustment	Billing Rate	(T)
Customer Charge:	\$6.00					\$6.00	
Volumetric Charge (pe	er therm)						
All therms	\$0.33841		\$0.12132	\$0.31517	\$0.01693	\$0.79183	(R)

(T)

(D)

Minimum Monthly Bill: Customer Charge, plus charges under Schedule C and Schedule 15 (if applicable)

#### **GENERAL TERMS**:

Service under this Rate Schedule is governed by the terms of this Rate Schedule, the General Rules and Regulations contained in this Tariff, any other schedules that by their terms or by the terms of this Rate Schedule apply to service under this Rate Schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

Issued September 15, 2016 NWN OPUC Advice No. 16-18

P.U.C. Or. 25

#### RATE SCHEDULE 31 NON-RESIDENTIAL FIRM SALES AND FIRM TRANSPORTATION SERVICE (continued)

#### MONTHLY RATES FOR COMMERCIAL CUSTOMER CLASS:

#### Effective: November 1, 2016 (T)

The rates shown in this Rate Schedule may not always reflect actual billing rates. **See Schedule 100** for a list of applicable adjustments. Rates are subject to changes for purchased gas costs and technical rate adjustments. The rates for Coos County customers are subject to the additional adjustment set forth in **Schedule 160**. The rates for service to CNG vehicle fueling equipment shall be further adjusted as set forth in Provision No. 2 of the "SPECIAL CONDITIONS FOR COMPRESSED NATURAL GAS ("CNG") SERVICE FOR VEHICULAR USE" of this Rate Schedule.

FIRM SALES SERVICE CHARGES	Billing Rates					
Customer Charge (per month):	\$325.00					
Volumetric Charges (per therm)	Base Rate	Base Rate Adjustment	Commodity Component [2]	Total Temporary Adjustments [3]		
Block 1: 1st 2,000 therms	\$0.21386		\$0.31517	\$0.07048	\$0.59951	
Block 2: All additional therms	\$0.19546		\$0.31517	\$0.06959	\$0.58022	
Pipeline Capacity Charge Options	(select one):					
Firm Pipeline Capacity Charge - Volu	\$0.12132					
Firm Pipeline Capacity Charge - Pea	k Demand option	(per therm of N	DDV):		\$1.80	
FIRM TRANSPORTATION SERVICE	E CHARGES (31	CTF):				
Customer Charge (per month):					\$325.00	
Transportation Charge (per month):					\$250.00	
Volumetric Charges (per therm)	Base Rate	Base Rate Adjustment		Total Temporary Adjustments [4]		
Block 1: 1st 2,000 therms	\$0.18122			\$0.01139	\$0.19261	
Block 2: All additional therms	\$0.16570			\$0.01042	\$0.17612	

[1] The Monthly Bill shall equal the sum of the Customer Charge, plus the Volumetric Charges, plus the Pipeline Capacity Charge selected by the Customer, plus any other charges that may apply from Schedule C or Schedule 15.

Charge selected by the Customer, plus any other charges that may apply from Schedule C or Schedule 15. (D) [2] The stated rate is the Company's Annual Sales WACOG. However, the Commodity Component to be billed will be (T) dependent on Customer's Service Type Selection and may instead be Winter Sales WACOG or Monthly Incremental Cost of Gas.

[3] Where applicable, as set forth in this rate schedule, the Account 191 portion of the Temporary Adjustments as set forth in (T) Schedule 162 may not apply.

[4] Where applicable, as set forth in this rate schedule, the Account 191 portion of the Sales Service Temporary Adjustments (T) as set forth in Schedule 162 may also apply.

(continue to Sheet 31-12)

Issued September 15, 2016 NWN OPUC Advice No. 16-18 Effective with service on and after November 1, 2016

220 N.W. Second Avenue Portland, Oregon 97209-3991

P.U.C. Or. 25

#### **RATE SCHEDULE 31** NON-RESIDENTIAL FIRM SALES AND FIRM TRANSPORTATION SERVICE (continued)

#### MONTHLY RATES FOR INDUSTRIAL CUSTOMER CLASS:

(T)

(D)

(T)

Effective: November 1, 2016 The rates shown in this Rate Schedule may not always reflect actual billing rates. See SCHEDULE 100 for a list of applicable adjustments. Rates are subject to changes for purchased gas costs and technical rate adjustments. The rates for Coos County customers are subject to the additional adjustment set forth in SCHEDULE 160.

FIRM SALES SERVICE CHARGES		Billing Rates				
Customer Charge (per month):					\$325.00	
Volumetric Charges (per therm)	Base Rate	Base Rate Adjustment	Commodity Component [2]	Total Temporary Adjustments [3]		
Block 1: 1st 2,000 therms	\$0.16888		\$0.31517	\$0.03737	\$0.52142	
Block 2: All additional therms	\$0.15261		\$0.31517	\$0.03665	\$0.50443	
Pipeline Capacity Charge Options	(select one):					
Firm Pipeline Capacity Charge - Volumetric option (per therm):						
Firm Pipeline Capacity Charge - Peal	Demand option (	per therm of MD	DDV):		\$1.80	
FIRM TRANSPORTATION SERVICE	CHARGES (31 I	TF):				
Customer Charge (per month):					\$325.00	
Transportation Charge (per month):					\$250.00	
Volumetric Charges (per therm)	Base Rate	Base Rate Adjustment		Total Temporary Adjustments [4]		
Block 1: 1st 2,000 therms	\$0.16403			\$0.00892	\$0.17295	
Block 2: All additional therms	\$0,14825			\$0.00809	\$0.15634	

[1] The Monthly Bill shall equal the sum of the Customer Charge, plus the Volumetric Charges, plus the Pipeline Capacity Charge selected by the Customer, plus any other charges that may apply from SCHEDULE C and SCHEDULE 15.

[2] The stated rate is the Company's Annual Sales WACOG. However, the Commodity Component to be billed will be dependent on Customer's Service Type Selection and may instead be Winter Sales WACOG, or Monthly Incremental Cost of Gas.

[3] Where applicable, as set forth in this rate schedule, the Account 191 portion of the Temporary Adjustments as set forth in (T) SCHEDULE 162 may not apply.

[4] Where applicable, as set forth in this rate schedule, the Account 191 portion of the Sales Service Temporary Adjustments (T) as set forth in SCHEDULE 162 may also apply.

Issued September 15, 2016 NWN OPUC Advice No. 16-18

P.U.C. Or. 25

#### **RATE SCHEDULE 32** LARGE VOLUME NON-RESIDENTIAL SALES AND TRANSPORTATION SERVICE (continued)

#### **MONTHLY RATES:**

Effective: November 1, 2016 (T)

The rates shown in this Rate Schedule may not always reflect actual billing rates. See SCHEDULE 100 for a list of applicable adjustments. Rates are subject to changes for purchased gas costs and technical rate adjustments. The rates for Coos County customers are subject to the additional adjustment set forth in SCHEDULE 160.

FIRM SALES SERVICE CHARGE	S [1]:				Billing Rates
Customer Charge (per month, all s	ervice types):				\$675.00
	Base Rate	Base Rate Adjustment	Commodity Component [2]	Total Temporary Adjustments [3]	
32 CSF Volumetric Charges (p	er therm):				
Block 1: 1st 10,000 therms	\$0.09877		\$0.31517	\$0.03666	\$0.45060
Block 2: Next 20,000 therms	\$0.08394		\$0.31517	\$0.03561	\$0.43472
Block 3: Next 20,000 therms	\$0.05928		\$0.31517	\$0.03388	\$0.40833
Block 4: Next 100,000 therms	\$0.03458		\$0.31517	\$0.03214	\$0.38189
Block 5: Next 600,000 therms	\$0.01978		\$0.31517	\$0.03090	\$0.36585
Block 6: All additional therms	\$0.00988		\$0.31517	\$0.03021	\$0.35526
32 ISF Volumetric Charges (pe	r therm):				
Block 1: 1st 10,000 therms	\$0.09753		\$0.31517	\$0.03491	\$0.44761
Block 2: Next 20,000 therms	\$0.08291		\$0.31517	\$0.03415	\$0.43223
Block 3: Next 20,000 therms	\$0.05851		\$0.31517	\$0.03289	\$0.40657
Block 4: Next 100,000 therms	\$0.03415		\$0.31517	\$0.03163	\$0.38095
Block 5: Next 600,000 therms	\$0.01950		\$0.31517	\$0.03068	\$0.36535
Block 6: All additional therms	\$0.00980		\$0.31517	\$0.03018	\$0.35515
Firm Service Distribution Capacity	Charge (per the	rm of MDDV per i	month):		\$0.15748
Firm Sales Service Storage Charge (per therm of MDDV per month):					
Pipeline Capacity Charge Option	s (select one):				
Firm Pipeline Capacity Charge - Vo	lumetric option	(per therm):			\$0.12132
Firm Pipeline Capacity Charge - Pe	eak Demand opt	ion (per therm of	MDDV per month	n):	\$1.80

(D)

(T)

The Monthly Bill shall equal the sum of the Customer Charge, plus the Volumetric Charges, plus the Pipeline Capacity Charge selected by [1] the Customer, plus any other charges that may apply from Schedule C or Schedule 15.

The stated rate is the Company's Annual Sales WACOG. However, the Commodity Component to be billed will be dependent on [2] Customer's Service Type Selection and may instead be Winter Sales WACOG or Monthly Incremental Cost of Gas.

[3] Where applicable, as set forth in this rate schedule, the Account 191 portion of the Temporary Adjustments as set forth in Schedule 162 (T) may not apply.

(continue to Sheet 32-13)

Issued September 15, 2016 NWN OPUC Advice No. 16-18

P.U.C. Or. 25

Fifth Revision of Sheet 32-13 Cancels Fourth Revision of Sheet 32-13

# RATE SCHEDULE 32 LARGE VOLUME NON-RESIDENTIAL SALES AND TRANSPORTATION SERVICE

(continued)

#### **MONTHLY RATES (continued):**

Effective: November 1, 2016 (T)

The rates shown in this Rate Schedule may not always reflect actual billing rates. See **SCHEDULE 100** for a list of applicable adjustments. Rates are subject to changes for purchased gas costs and technical rate adjustments. The rates for Coos County customers are subject to the additional adjustment set forth in **SCHEDULE 160** 

INTERRUPTIBLE SALES SERVICE CHARGES [1][4]:						
Customer Charge (per month):					\$675.00	
	Base Rate	Base Rate Adjustment	Commodity Component [2]	Total Temporary Adjustments [3]		
32 CSI Volumetric Charges (per therm):			•	•	-	
Block 1: 1st 10,000 therms	\$0.10055		\$0.31517	\$0.02154	\$0.43726	
Block 2: Next 20,000 therms	\$0.08547		\$0.31517	\$0.02093	\$0.42157	
Block 3: Next 20,000 therms	\$0.06033		\$0.31517	\$0.01992	\$0.39542	
Block 4: Next 100,000 therms	\$0.03520		\$0.31517	\$0.01890	\$0.36927	
Block 5: Next 600,000 therms	\$0.02010		\$0.31517	\$0.01829	\$0.35356	
Block 6: All additional therms	\$0.01009		\$0.31517	\$0.01773	\$0.34299	
Interruptible Pipeline Capacity Charge (	per therm):				\$0.01443	
32 ISI Volumetric Charges (per therm):						
Block 1: 1st 10,000 therms	\$0.10033		\$0.31517	\$0.02161	\$0.43711	
Block 2: Next 20,000 therms	\$0.08530		\$0.31517	\$0.02101	\$0.42148	
Block 3: Next 20,000 therms	\$0.06021		\$0.31517	\$0.02001	\$0.39539	
Block 4: Next 100,000 therms	\$0.03512		\$0.31517	\$0.01901	\$0.36930	
Block 5: Next 600,000 therms	\$0.02006		\$0.31517	\$0.01841	\$0.35364	
Block 6: All additional therms	\$0.01005		\$0.31517	\$0.01788	\$0.34310	
Interruptible Pipeline Capacity Charge (	per therm):	•	•	•	\$0.01443	

[1] The Monthly Bill shall equal the sum of the Customer Charge, plus the Volumetric Charges, plus the Pipeline Capacity Charge selected by the Customer, plus any other charges that may apply from Schedule C or Schedule 15.

[2] The stated rate is the Company's Annual Sales WACOG. However, the Commodity Component to be billed will be dependent on Customer's Service Type Selection and may instead be Winter Sales WACOG or Monthly Incremental Cost of Gas.

[3] Where applicable, as set forth in this rate schedule, the Account 191 portion of the Temporary Adjustments as set forth in Schedule 162 (T) may not apply.
 [4] Where applicable, as set forth in this rate schedule, the Account 191 portion of the Sales Service Temporary Adjustments as set forth in (T)

[4] Where applicable, as set forth in this rate schedule, the Account 191 portion of the Sales Service Temporary Adjustments as set forth in Schedule 162 may also apply.

(continue to Sheet 32-14)

Issued September 15, 2016 NWN OPUC Advice No. 16-18 Effective with service on and after November 1, 2016

(D)

(T)

220 N.W. Second Avenue Portland, Oregon 97209-3991

P.U.C. Or. 25

# RATE SCHEDULE 32

LARGE VOLUME NON-RESIDENTIAL SALES AND TRANSPORTATION SERVICE

(continued)

#### MONTHLY RATES (continued):

Effective: November 1, 2016

(T)

(D)

(T)

(T)

(T)

The rates shown in this Rate Schedule may not always reflect actual billing rates. See **SCHEDULE 100** for a list of applicable adjustments. Rates are subject to changes for purchased gas costs and technical rate adjustments. The rates for Coos County customers are subject to the additional adjustment set forth in Schedule 160.

FIRM TRANSPORTATION SERVICE	CHARGES (32 C	TF or 32 ITF) [1]:			Billing Rates				
Customer Charge (per month):					\$675.00				
Transportation Charge (per month):					\$250.00				
Volumetric Charges (per therm)	Base Rate	Base Rate Adjustment		Total Temporary Adjustments [2]					
Block 1: 1st 10,000 therms	\$0.09698			\$0.00459	\$0.10157				
Block 2: Next 20,000 therms	\$0.08241			\$0.00393	\$0.08634				
Block 3: Next 20,000 therms	\$0.05820			\$0.00283	\$0.06103				
Block 4: Next 100,000 therms	\$0.03395			\$0.00172	\$0.03567				
Block 5: Next 600,000 therms	\$0.01939			\$0.00106	\$0.02045				
Block 6: All additional therms	\$0.00973			\$0.00062	\$0.01035				
Firm Service Distribution Capacity Cha	rge (per therm of	MDDV per month):			\$0.15748				
INTERRUPTIBLE TRANSPORTATION SERVICE CHARGES (32 CTI or ITI) [3][4]: Customer Charge (per month):									
Transportation Charge (per month):									
Volumetric Charges (per therm)	Base Rate	Base Rate Adjustment		Total Temporary Adjustments [2]					
Block 1: 1st 10,000 therms	\$0.09816			\$0.00384	\$0.10200				
Block 2: Next 20,000 therms	\$0.08344			\$0.00329	\$0.08673				
Block 3: Next 20,000 therms	\$0.05891			\$0.00237	\$0.06128				
Block 4: Next 100,000 therms	\$0.03436			\$0.00146	\$0.03582				
Block 5: Next 600,000 therms	\$0.01965			\$0.00090	\$0.02055				
Block 6: All additional therms	\$0.00984			\$0.00054	\$0.01038				

 For Firm Transportation Service, the Monthly Bill shall equal the sum of the Customer Charge, plus Transportation Charge, plus the Volumetric Charges, plus the Distribution Capacity Charge, plus any other charges that may apply from Schedule C or Schedule 15.

[2] Where applicable, the Account 191 Adjustments shall apply.

[3] For Interruptible Transportation Service, the Monthly Bill shall equal the sum of the Customer Charge, plus Transportation Charge, plus the Volumetric Charges, plus any other charges that may apply from Schedule C or Schedule 15.

[4] Where applicable, as set forth in this rate schedule, the Account 191 portion of the Sales Service Temporary Adjustments as set forth in Schedule 162 may also apply.

Issued September 15, 2016 NWN OPUC Advice No. 16-18

### RATE SCHEDULE 33 HIGH VOLUME NON-RESIDENTIAL FIRM AND INTERRUPTIBLE TRANSPORTATION SERVICE

(continued)

#### MONTHLY RATE:

Effective: November 1, 2016 (T)

The rates shown below may not always reflect actual billing rates. See **Schedule 100** for a list of applicable adjustments. Rates are subject to changes for purchased gas costs and technical rate adjustments.

				Billing Rates
Customer Charge:				\$38,000.00
Transportation Charge:				\$250.00
Volumetric Charge:	Base Rate	Base Rate Adjustments	Total Temporary Adjustment [1]	
Per therm, all therms:	\$0.00566		\$0.00024	\$0.00590
Firm Service Distribution Capa	acity Charge: Per th	erm of MDDV per	month	\$0.15748

**INTERRUPTIBLE TRANSPORTATION SERVICE CHARGES (33 TI) Billing Rates** Customer Charge: \$38,000.00 Transportation Charge: \$250.00 Base Rate Total Temporary Volumetric Charge: Base Rate Adjustments Adjustment [1] Per therm, all therms: \$0.00566 \$0.00024 \$0.00590 ---Minimum Monthly Bill: Customer Charge, plus Transportation Charge, plus any other charges that may apply from Schedule C and Schedule 15.

(T)

(T)

(I)

(I)

[1] Where applicable, as set forth in this Rate Schedule, the Account 191 portion of the Temporary Adjustments as set forth in **Schedule 162** shall apply.

(D)

Issued September 15, 2016 NWN OPUC Advice No. 16-18

(N)

(C)

(Ċ)

## SCHEDULE 100 SUMMARY OF ADJUSTMENTS

#### PURPOSE:

The purpose of this Schedule is to list and summarize the adjustment Schedules applicable to each of the Company's Rate Schedules effective: November 1, 2016

		400	400	404	407	470
SCHEDULE	Α	160	162	164	167	172
	ADD	ADD	INC	INC	INC	INC
2	ADD	ADD	INC	INC	INC	INC
A (005)	4.00	4.00	1110		1110	
3 (CSF)	ADD	ADD	INC	INC	INC	
3 (ISF)	ADD	ADD	INC	INC	INC	INC
15	ADD				INC	
27	ADD	ADD	INC	INC	INC	
31 (CSF)	ADD	ADD	INC	INC	INC	
31 (CTF)	ADD		INC		INC	
	ADD	ADD	INIC	INC	INC	INC
31 (ISF)	ADD	ADD	INC	INC	INC	INC
	100			_		
31 (ITF)	ADD		INC		INC	INC
32 (CSF/ISF)	ADD	ADD	INC	INC	INC	INC
32 (CSI/ISI)	ADD	ADD	INC	INC	INC	INC
32 (CTF/ITF)	ADD	TID D	INC		INC	INC
32 (CTI/ITI)	ADD		INC		INC	INC
33 (CTI/ITI)	ADD		INC		INC	
33 (CTF/ITF)	ADD		INC		INC	
60	ADD					

Table Code Key:

**ADD** This adjustment is added to the billing rates at the time the bill is issued.

**INC** This adjustment is included in the billing rates shown on the Rate Schedule.

(continue to Sheet 100-2)

Issued September 15, 2016 NWN OPUC Advice No. 16-18

P.U.C. Or. 25

(C)

(Ċ)

#### SCHEDULE 100 SUMMARY OF ADJUSTMENTS (continued)

#### PURPOSE (continued):

SCHEDULE	178	180	183	184	185	186	187	188	190	195	301
2	INC	INC	INC	INC	ADD	ADD	INC		INC	ADD	ADD
3 (CSF)	INC	INC	INC	INC	ADD	ADD	INC		INC	ADD	ADD
3 (ISF)	INC	INC	INC	INC	ADD	ADD	INC	INC			
15											
27	INC	INC	INC	INC			INC				ADD
31 (CSF)	INC	INC	INC	INC	ADD	ADD	INC		INC		ADD
31 (CTF)	INC		INC	INC					INC		
31 (ISF)	INC	INC	INC	INC	ADD	ADD	INC	INC			
31 (ITF)	INC		INC	INC							
32 (CSF/ISF)	INC	INC	INC	INC	ADD	ADD	INC	INC			
32 (CSI/ISI)	INC	INC	INC	INC		ADD	INC	INC			
32 (CTF/ITF)	INC		INC	INC							
32 (CTI/ITI)	INC		INC	INC							
33 (CTI/ITI)	INC		INC	INC							
33 (CTF/ITF)	INC		INC	INC							
60											

ADD This adjustment is added to the billing rates at the time the bill is issued.

**INC** This adjustment is included in the billing rates shown on the Rate Schedule.

(continue to Sheet 100-3)

Issued September 15, 2016 NWN OPUC Advice No. 16-17A

Table Code Key:

P.U.C. Or. 25

(C)

(D)

(D)

(D)

(M)

(M)

(N)

(N)

# SCHEDULE 100 SUMMARY OF ADJUSTMENTS

(continued)

The following is a brief description of the applicable Schedules:

#### Schedule A "Billing for City and County Exactions."

This is an adjustment to customer bills for the pass through collection of city and county exactions.

#### Schedule 160 "Revision of Charges for Coos County Customers."

This is an ongoing volumetric adjustment (per therm) that is applied to Coos County Customer bills.

#### Schedule 162 "Temporary (Technical) Adjustments to Rates."

These are Temporary Adjustments to volumetric rates (per therm) for the amortization of gas costs (Account 191) deferral amounts.

#### Schedule 164 "Purchased Gas Cost Adjustments to Rates."

This schedule reflects the Pipeline Capacity and Commodity charges applicable to current billing rates.

#### Schedule 167 "General Adjustments to Rates."

These are additions to Base Rates (per therm) and to Customer Charges that apply the effect of general rate adjustments approved in a general rate case docket.

#### Schedule 172 "Special Adjustment to Rates for Intervenor Funding."

These are Temporary Adjustments to volumetric rates (per therm) for the recovery of costs associated with payments made to Citizens Utility Board and Northwest Industrial Gas Users for their participation in various Commission activities.

#### Schedule 178 "Regulatory Adjustment Rate."

These are Temporary Adjustments to volumetric rates (per therm) associated with the amortization of one-time deferral or residual amounts from deferral accounts that have ended.

#### Schedule 180 "Special Rate Adjustment for Working Gas Inventory"

These are: (1) Temporary Adjustments to volumetric rates (per therm) for the amortization of amounts relating to carrying costs on working gas inventory deferred between November 1, 2012 and October 31, 2013; and (2) additions to Base Rates (per therm) for the recovery of carrying costs on working gas inventory made in accordance with the Stipulation in Docket UM 1651.

# Schedule 181 "Special Rate Adjustment – Regulatory Fee Increase"

These are Temporary Adjustments to volumetric rates (per therm) for the rate effects of the regulatory fee increase established by Commission Order 16-067 in Docket UM 1766.

(continue to Sheet 100-4)

Issued September 15, 2016 NWN OPUC Advice No. 16-18

P.U.C. Or. 25

(M)

(Ņ)

(N)

(C)

# SCHEDULE 100 SUMMARY OF ADJUSTMENTS

(continued)

#### Schedule 182 "Rate Adjustment for Environmental Cost Recovery"

These are Base Rate Adjustments for the collection of \$5.0 million per year for the recovery of costs related to environmental remediation expenses, in accordance with Order No.15-049 in Docket UM 1635 and UM 1706.

#### Schedule 183 "Site Remediation Recovery Mechanism"

These are Temporary Adjustments to volumetric rates (per therm) for the recovery of environmental remediation costs.

#### Schedule 184 "Special Rate Adjustment Gasco Upland Pumping Station"

These are additions to Base Rates (per therm) for the recovery of costs associated with the pumping station installed at the Gasco Upland Site located in Linnton, Oregon.

#### Schedule 185 "Special Annual Interstate Storage and Transportation Credit."

This applies an annual lump sum adjustment to June bills for the sharing of revenues from non-utility storage and transportation activities that do not affect Rate Schedule billing rates.

#### Schedule 186 "Special Annual Core Pipeline Capacity Optimization Credit."

This applies an annual lump sum adjustment to June bills for the sharing of revenues from pipeline capacity optimization activities that do not affect Rate Schedule billing rates.

#### Schedule 187 "Special Adjustment for Storage Recall."

These are additions to Base Rates (per therm) for the recovery of Mist storage facilities recalled from Interstate Storage activities to serve core utility customers.

#### Schedule 188 "Industrial Demand Side Management (DSM) Program Cost Recovery."

These are Temporary Adjustments to volumetric rates (per therm) for the recovery of costs associated with demand side management programs available to Industrial Customers.

#### Schedule 190 "Partial Decoupling Mechanism."

These are Temporary Adjustments to volumetric rates (per therm) to apply the effects of usage variances calculated in accordance with this Schedule.

#### Schedule 195 "Weather Adjusted Rate Mechanism (WARM)."

These are winter heating season adjustments to volumetric rates (per therm) applied to Residential and Commercial customer bills for the effect of any deviation from normal weather within a billing month.

#### Schedule 301 "Public Purposes Funding Surcharge."

These are monthly adjustments applied as a percentage of the total billed amount that does not affect Rate Schedule billing rates.

Issued September 15, 2016 NWN OPUC Advice No. 16-18 Effective with service on and after November 1, 2016

Issued by: NORTHWEST NATURAL GAS COMPANY d.b.a. NW Natural 220 N.W. Second Avenue Portland, Oregon 97209-3991

P.U.C. Or. 25

Fifth Revision of Sheet 190-1 Cancels Fourth Revision of Sheet 190-1

# SCHEDULE 190 PARTIAL DECOUPLING MECHANISM

#### PURPOSE:

To (a) describe the partial decoupling mechanism established in accordance with Commission Order in Docket UG -221; and (b) identify the adjustment applicable to rates under the Rate Schedules listed below.

#### APPLICABLE:

To Residential and Commercial Customers served on the following Rate Schedules of this Tariff:

Residential	Commercial
Rate Schedule 2	Rate Schedule 3 CSF
	Rate Schedule 31 CSF

ADJUSTMENT TO RATE SCHEDULES:Effective:November 1, 2016(T)The Temporary Adjustments for Residential and Commercial Customers taking service on the above-<br/>listed Rate Schedules includes the following adjustment:(T)

Residential Rate Schedules:	\$0.00555
Commercial Rate Schedules:	\$0.05944

#### PARTIAL DECOUPLING DEFERRAL ACCOUNT:

1. Each month, the Company will calculate the difference between weather-normalized usage and the calculated baseline usage for each Residential and Commercial Customer group. The resulting usage differential shall be multiplied by the per therm distribution margin for the applicable customer group.

The Company shall defer and amortize, with interest, 100% of the distribution margin differential in a sub-account of Account 186. The deferral will be a credit (accruing a refund to customers) if the differential is positive, or a debit (accruing a recovery by the company) if the differential is negative.

(continue to Sheet 190-2)

Issued September 15, 2016 NWN OPUC Advice No. 16-18 Effective with service on and after November 1, 2016

(C) (C)

220 N.W. Second Avenue Portland, Oregon 97209-3991

# SCHEDULE 190 PARTIAL DECOUPLING MECHANISM

(continued)

#### PARTIAL DECOUPLING DEFERRAL ACCOUNT (continued):

2. The baseline use-per-customer is:

Residential: 636 Commercial: 3,845

3. Weather-normalized usage is calculated using the approach to weather normalization adopted in the Company's last general rate case, Docket UG 221. The weather data is taken from the stations identified in **Rule 24**.

<u>Step One</u>. For the heating season months of December through April, usage is normalized by taking the difference between normal and actual heating degree days for each district using a base of 59 degrees for Residential and 58 degrees for Commercial. Usage for the heating season months of November and May will be normalized by the actual WARM effect attributable to the month that is included in customer bills.

<u>Step Two</u>. This step derives the per-therm customer variance by multiplying the heating degreeday difference by the usage coefficient of .16471 for Residential variances, and .85441 for Commercial variances.

<u>Step Three</u>. The per-therm customer variance is multiplied by the appropriate customer count, by district, with the sum of the district results representing the normalized therm amount.

- 4. Baseline usage will be adjusted to reflect actual customers billed each month.
- 5. The per therm distribution margins to be used in the deferral calculation effective November 1, 2016 is \$0.44470 per therm for Residential customers and \$0.33079 per therm for Commercial customers.
- 6. Coincident with the Company's annual Purchased Gas Cost and Technical Rate Adjustment filing, the Company shall apply an adjustment to Residential and Commercial rates to amortize over the following 12 months, the balance in the balancing account as of June 30.
- 7. This Schedule is an "automatic adjustment clause" as defined in ORS 757.210, and is subject to review by the Commission at least once every two (2) years.

#### **GENERAL TERMS**:

This Schedule is governed by the terms of this Schedule, the General Rules and Regulations contained in this Tariff, any other schedules that by their terms or by the terms of this Schedule apply to service under this Schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

Issued September 15, 2016 NWN OPUC Advice No. 16-18 Effective with service on and after November 1, 2016

(C)

(T)

(N)

(N) (N)

P.U.C. Or. 25

#### SCHEDULE 195 WEATHER ADJUSTED RATE MECHANISM (WARM Program) (continued)

#### WARM BILL EFFECTS (continued):

#### **Example Bill Calculation:**

Here is the how the WARM adjustment is calculated for a residential **Rate Schedule 2** customer where the billing rate is \$0.90723 cents per therm, the HDD variance is 50 HDDs colder than normal, (C) and the monthly therm usage is 129 therms:

HDD Differential:	Normal HDDs: Actual HDDs:	600 HDDs 650 HDDs	
	HDD variance:	600 - 650 = -50 HDDs	
Equivalent Therms:	HDD variance:	-50 HDDs	
	Statistical coefficient:	0.16471	
	Equivalent therms:	-50 x 0.16471 = -8.2355 therms	
Total Warm Adjustment:	Equivalent therms:	-8.2355 therms	
	Margin Rate:	\$0.44470	
	Total WARM Adj.:	-8.2355 x \$0.44470 = (\$3.66233)	
Total WARM Adjustment			
converted to cents per therm:	Total WARM Adj.:	(\$3.66233)	
	Monthly usage:	129 therms	
	Cent/therm Adj.:	-3.66233 ÷ 129 = (\$0.02839)	
Billing Rate per therm:	Current Rate/therm:	\$0.90723	(R)
	WARM cent/therm Adj.:	(\$0.02839)	
	WARM Billing Rate:	\$0.90723 + -\$0.02839 = \$0.87884	(R)
Total WARM Bill:	Customer Charge:	\$8.00	
	Usage Charge:	\$0.87884	(R)
	Total	(129 x \$0.87884) + \$8.00 =\$121.37	(R)

#### **GENERAL TERMS:**

This Schedule is governed by the terms of this Schedule, the General Rules and Regulations contained in this Tariff, any other Schedules that by their terms or by the terms of this Schedule apply to service under this Schedule, and by all rules and regulations prescribed by regulatory authorities, as amended from time to time.

Issued September 15, 2016 NWN OPUC Advice No. 16-18

# EXHIBIT A

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

# NW NATURAL SUPPORTING MATERIALS

**Combined Effects Replacement Filing** 

NWN OPUC Advice No. 16-18 / UG 324 September 15, 2016

# **NW NATURAL**

# EXHIBIT A

# Supporting Material

# **Combined Effects**

# NWN OPUC ADVICE NO. 16-18/ UG 324

Description	Page
Change in Average Bill by Rate Schedule	1
Calculation of Proposed Rates - Summary	2
Calculation of Proposed Rates - Detail	3
Combined Effects on Revenue	4
Estimated Revenue Effects (3% Test)	5
Workpaper for Warm Table in Rate Schedule 195	6

# NW Natural Rates & Regulatory Affairs 2016-17 PGA - Oregon: September Filing Effects on Average Bill by Rate Schedule ALL VOLUMES IN THERMS

AL	L VOLUMES IN THE	RIMS									
1			Oregon PGA		Normal		44 14 10045	44/0045	Proposed	Proposed	Proposed
2			Normalized	The sum of in	Therms		11/1/2015	11/1/2015	11/1/2016	11/1/2016	11/1/2016
3 4			Volumes page, Column D	Therms in Block	Monthly	Monthly Charge	Billing Rates	Current	Combined Rates	Combined Average Bill	Combined % Bill Change
5		•	Columnitie	DIOCK	Average use	charge	Rates	Average Bill F=D+(C * E)	Rates	Z = D + (C * Y)	AA = (Z-F)/F
6	Schedule	Block	А	В	с	D	Е	F	Y	Z = D+(C T) Z	AA = (2-1)/1 AA
7	2R	DIOCK	350,075,126	N/A	50	\$8.00	\$0.93513	\$54.76	\$0.90723	\$53.36	-2.6%
8	3C Firm Sales		159,370,240	N/A	233	\$15.00	\$0.87993	\$220.02	\$0.86447	\$216.42	-1.6%
9	31 Firm Sales		4,175,625	N/A	1,006	\$15.00	\$0.83072	\$850.70	\$0.82099	\$840.92	-1.1%
10	27 Dry Out		776,455	N/A	36	\$6.00	\$0.80313	\$34.91	\$0.79183	\$34.51	-1.1%
11	31C Firm Sales	Block 1	17,477,992	2,000	3,092	\$325.00	\$0.61817	\$2,215.50	\$0.59951	\$2,157.62	-2.6%
12		Block 2	12,723,016	all additional	.,.		\$0.59905	.,	\$0.58022	.,	
13	31C Firm Trans	Block 1	1,364,169	2,000	1,601	\$575.00	\$0.19118	\$881.08	\$0.19261	\$883.37	0.3%
14		Block 2	1,632,747	all additional			\$0.17480		\$0.17612		
15	311 Firm Sales	Block 1	4,251,890	2,000	5,375	\$325.00	\$0.53466	\$3,141.93	\$0.52142	\$3,070.29	-2.3%
16		Block 2	9,164,274	all additional			\$0.51781		\$0.50443		
17	311 Firm Trans	Block 1	175,539	2,000	5,773	\$575.00	\$0.17031	\$1,496.44	\$0.17295	\$1,510.77	1.0%
18		Block 2	517,230	all additional			\$0.15394		\$0.15634	•	
19	32C Firm Sales	Block 1	27,042,245	10,000	7,918	\$675.00	\$0.46316	\$4,342.30	\$0.45060	\$4,242.85	-2.3%
20		Block 2	8,064,435	20,000			\$0.44762		\$0.43472	•	
21		Block 3	797,112	20,000			\$0.42176		\$0.40833		
22		Block 4	11,666	100,000			\$0.39586		\$0.38189		
23		Block 5	0	600,000			\$0.38034		\$0.36585		
24		Block 6	0	all additional			\$0.36996		\$0.35526		
25	321 Firm Sales	Block 1	4,884,363	10,000	21,274	\$675.00		\$10,307.90	\$0.44761	\$10,024.06	-2.8%
26		Block 2	5,102,563	20,000	,		\$0.44568		\$0.43223		
27		Block 3	1,942,948	20,000			\$0.42039		\$0.40657		
28		Block 4	579,399	100,000			\$0.39514		\$0.38095		
29		Block 5	0	600,000			\$0.37996		\$0.36535		
30		Block 6	0	all additional			\$0.36991		\$0.35515		
31	32 Firm Trans	Block 1	14,611,752	10,000	41,387	\$925.00	\$0.10049	\$4,325.62	\$0.10157	\$4,362.45	0.9%
32		Block 2	17,230,536	20,000			\$0.08542		\$0.08634	•	
33		Block 3	9,911,484	20,000			\$0.06036		\$0.06103		
34		Block 4	17,461,606	100,000			\$0.03528		\$0.03567		
35		Block 5	21,764,847	600,000			\$0.02021		\$0.02045		
36		Block 6	2,455,153	all additional			\$0.01022		\$0.01035		
37	32C Interr Sales		6,252,115	10,000	35,083	\$675.00		\$15,961.70	\$0.43726	\$15,488.92	-3.0%
38		Block 2	8,553,424	20,000			\$0.43505		\$0.42157	•	
39		Block 3	4,339,671	20,000			\$0.40905		\$0.39542		
40		Block 4	5,183,222	100,000			\$0.38306		\$0.36927		
41		Block 5	89,527	600,000			\$0.36743		\$0.35356		
42		Block 6	0	all additional			\$0.35709		\$0.34299		
43	321 Interr Sales	Block 1	7,427,326	10,000	41,859	\$675.00	\$0.45043	\$18,727.71	\$0.43711	\$18,164.63	-3.0%
44		Block 2	8,841,797	20,000			\$0.43491		\$0.42148		
45		Block 3	4,869,921	20,000			\$0.40899		\$0.39539		
46		Block 4	9,961,830	100,000			\$0.38308		\$0.36930		
47		Block 5	2,051,108	600,000			\$0.36752		\$0.35364		
48		Block 6	0	all additional			\$0.35718		\$0.34310		
49	32 Interr Trans	Block 1	8,822,944	10,000	195,043	\$925.00	\$0.10132	\$9,353.93	\$0.10200	\$9,412.83	0.6%
50		Block 2	16,011,309	20,000			\$0.08615		\$0.08673		
51		Block 3	11,561,774	20,000			\$0.06087		\$0.06128		
52		Block 4	29,665,818	100,000			\$0.03556		\$0.03582		
53		Block 5	56,877,518	600,000			\$0.02041		\$0.02055		
54		Block 6	83,025,918	all additional			\$0.01029		\$0.01038		
55	33		0	N/A	0	\$38,000	\$0.00586	\$38,000.00	\$0.00590	\$38,000.00	0.0%
56											

56 57 Totals

957,099,637

#### NW Natural Rates & Regulatory Affairs 2016-17 PGA - Oregon: September Filing Calculation of Proposed Rates - SUMMARY

Schedule 2R 3C Firm Sales 3I Firm Sales 27 Dry Out 31C Firm Sales 311 Firm Trans 311 Firm Trans 32C Firm Sales 321 Firm Sales 321 Firm Sales 322 Firm Trans 322 Firm Trans 322 Interr Sales 321 Interr Sales			11/1/2015 Billing	Net change	Net change	Proposed Rates	Net change Permanent	Net change Temporary	Proposed 11/1/2016
2R 3C Firm Sales 31 Firm Sales 27 Dry Out 31C Firm Sales 311 Firm Trans 311 Firm Trans 32C Firm Sales 321 Firm Sales 321 Firm Sales 322 Interr Sales 321 Interr Sales			Rates	WACOG	Demand [1]	PGA Only [1]	Increments	Increments	Rates [1]
2R 3C Firm Sales 31 Firm Sales 27 Dry Out 31C Firm Sales 311 Firm Trans 311 Firm Trans 32C Firm Sales 321 Firm Sales 321 Firm Sales 322 Interr Sales 321 Interr Sales						D=A+B+C			I=D+E+F+G+I
3C Firm Sales         31 Firm Sales         27 Dry Out         31C Firm Sales         31C Firm Trans         311 Firm Sales         312 Firm Sales         321 Firm Sales         321 Firm Sales         322 Firm Trans         322 Interr Sales         321 Interr Sales	Schedule	Block	Α	В	С	D	Е	F	I
31 Firm Sales         27 Dry Out         31C Firm Sales         31C Firm Trans         311 Firm Sales         311 Firm Sales         311 Firm Trans         32C Firm Sales         321 Firm Sales         321 Firm Sales         322 Firm Trans         322 Interr Sales         321 Interr Sales	2R	-	\$0.93513	(\$0.02085)	\$0.00283	\$0.91711	\$0.00000	(\$0.00988)	\$0.90723
27 Dry Out 31C Firm Sales 31C Firm Trans 311 Firm Sales 311 Firm Trans 32C Firm Sales 321 Firm Sales 322 Firm Trans 322 Interr Sales 321 Interr Sales	3C Firm Sales		\$0.87993	(\$0.02085)	\$0.00283	\$0.86191	\$0.00000	\$0.00256	\$0.86447
31C Firm Sales 31C Firm Trans 31I Firm Sales 31I Firm Trans 32C Firm Sales 32I Firm Sales 32 Firm Trans 32C Interr Sales 321 Interr Sales	31 Firm Sales		\$0.83072	(\$0.02085)	\$0.00283	\$0.81270	\$0.00000	\$0.00829	\$0.82099
31C Firm Trans 31I Firm Sales 31I Firm Trans 32C Firm Sales 321 Firm Sales 322 Firm Trans 322 C Interr Sales 321 Interr Sales	27 Dry Out		\$0.80313	(\$0.02085)	\$0.00283	\$0.78511	\$0.00000	\$0.00672	\$0.79183
311 Firm Sales 311 Firm Trans 32C Firm Sales 321 Firm Sales 322 Firm Trans 322 C Interr Sales 321 Interr Sales	31C Firm Sales	Block 1	\$0.61817	(\$0.02085)		\$0.59732	\$0.00000	\$0.00219	\$0.59951
311 Firm Sales 311 Firm Trans 32C Firm Sales 321 Firm Sales 322 Firm Trans 322 C Interr Sales 321 Interr Sales		Block 2	\$0.59905	(\$0.02085)		\$0.57820	\$0.00000	\$0.00202	\$0.58022
311 Firm Trans 32C Firm Sales 321 Firm Sales 322 Firm Trans 322 C Interr Sales 321 Interr Sales	31C Firm Trans	Block 1	\$0.19118	\$0.00000		\$0.19118	\$0.00000	\$0.00143	\$0.19261
311 Firm Trans 32C Firm Sales 321 Firm Sales 322 Firm Trans 322 C Interr Sales 321 Interr Sales		Block 2	\$0.17480	\$0.00000		\$0.17480	\$0.00000	\$0.00132	\$0.17612
32C Firm Sales 321 Firm Sales 32 Firm Trans 32C Interr Sales 321 Interr Sales	311 Firm Sales	Block 1	\$0.53466	(\$0.02085)		\$0.51381	\$0.00000	\$0.00761	\$0.52142
32C Firm Sales 321 Firm Sales 32 Firm Trans 32C Interr Sales 321 Interr Sales		Block 2	\$0.51781	(\$0.02085)		\$0.49696	\$0.00000	\$0.00747	\$0.50443
321 Firm Sales 32 Firm Trans 32C Interr Sales 321 Interr Sales	311 Firm Trans	Block 1	\$0.17031	\$0.00000		\$0.17031	\$0.00000	\$0.00264	\$0.17295
321 Firm Sales 32 Firm Trans 32C Interr Sales 321 Interr Sales		Block 2	\$0.15394	\$0.00000		\$0.15394	\$0.00000	\$0.00240	\$0.15634
32 Firm Trans 32C Interr Sales 321 Interr Sales	32C Firm Sales	Block 1	\$0.46316	(\$0.02085)		\$0.44231	\$0.00000	\$0.00829	\$0.45060
32 Firm Trans 32C Interr Sales 321 Interr Sales		Block 2	\$0.44762	(\$0.02085)		\$0.42677	\$0.00000	\$0.00795	\$0.43472
32 Firm Trans 32C Interr Sales 321 Interr Sales		Block 3	\$0.42176	(\$0.02085)		\$0.40091	\$0.00000	\$0.00742	\$0.40833
32 Firm Trans 32C Interr Sales 321 Interr Sales		Block 4	\$0.39586	(\$0.02085)		\$0.37501	\$0.00000	\$0.00688	\$0.38189
32 Firm Trans 32C Interr Sales 321 Interr Sales		Block 5	\$0.38034	(\$0.02085)		\$0.35949	\$0.00000	\$0.00636	\$0.36585
32 Firm Trans 32C Interr Sales 321 Interr Sales		Block 6	\$0.36996	(\$0.02085)		\$0.34911	\$0.00000	\$0.00615	\$0.35526
32 Firm Trans 32C Interr Sales 321 Interr Sales	321 Firm Sales	Block 1	\$0.46083	(\$0.02085)		\$0.43998	\$0.00000	\$0.00763	\$0.44761
32C Interr Sales		Block 2	\$0.44568	(\$0.02085)		\$0.42483	\$0.00000	\$0.00740	\$0.43223
32C Interr Sales		Block 3	\$0.42039	(\$0.02085)		\$0.39954	\$0.00000	\$0.00703	\$0.40657
32C Interr Sales		Block 4	\$0.39514	(\$0.02085)		\$0.37429	\$0.00000	\$0.00666	\$0.38095
32C Interr Sales		Block 5	\$0.37996	(\$0.02085)		\$0.35911	\$0.00000	\$0.00624	\$0.36535
32C Interr Sales		Block 6	\$0.36991	(\$0.02085)		\$0.34906	\$0.00000	\$0.00609	\$0.35515
32C Interr Sales	32 Firm Trans	Block 1	\$0.10049	\$0.00000		\$0.10049	\$0.00000	\$0.00108	\$0.10157
321 Interr Sales	52 11111 114115	Block 2	\$0.08542	\$0.00000		\$0.08542	\$0.00000	\$0.00092	\$0.08634
321 Interr Sales		Block 3	\$0.06036	\$0.00000		\$0.06036	\$0.00000	\$0.00067	\$0.06103
321 Interr Sales		Block 4	\$0.00030 \$0.03528	\$0.00000		\$0.03528	\$0.00000	\$0.00039	\$0.03567
321 Interr Sales		Block 5	\$0.03320	\$0.00000		\$0.03320	\$0.00000	\$0.00037	\$0.03307
321 Interr Sales		Block 5 Block 6	\$0.02021	\$0.00000		\$0.02021	\$0.00000	\$0.00024	\$0.02043
321 Interr Sales	220 Interr Sales	Block 0 Block 1	\$0.45065	(\$0.02085)		\$0.42980	\$0.00000	\$0.00013	\$0.01035
	JZC IIIICH Jaies	Block 1 Block 2	\$0.43005 \$0.43505	(\$0.02085)		\$0.42980	\$0.00000	\$0.00740	\$0.43720
		Block 2 Block 3	\$0.43505 \$0.40905	(\$0.02085)		\$0.41420	\$0.00000	\$0.00737	\$0.42137
		Block 3 Block 4	\$0.40905 \$0.38306	(\$0.02085)		\$0.36620 \$0.36221	\$0.00000	\$0.00722	\$0.39342
		Block 5	\$0.36743	(\$0.02085)		\$0.34658	\$0.00000	\$0.00698	\$0.35356
	221 Interr Sales	Block 6	\$0.35709 \$0.45043	(\$0.02085)		\$0.33624	\$0.00000	\$0.00675	\$0.34299
32 Interr Trans	SZI IIILEIT SAIES	Block 1		(\$0.02085)		\$0.42958	\$0.00000	\$0.00753	\$0.43711
32 Interr Trans		Block 2	\$0.43491	(\$0.02085)		\$0.41406	\$0.00000	\$0.00742	\$0.42148
32 Interr Trans		Block 3	\$0.40899	(\$0.02085)		\$0.38814	\$0.00000	\$0.00725	\$0.39539
32 Interr Trans		Block 4	\$0.38308	(\$0.02085)		\$0.36223	\$0.00000	\$0.00707	\$0.36930
32 Interr Trans		Block 5	\$0.36752	(\$0.02085)		\$0.34667	\$0.00000	\$0.00697	\$0.35364
32 Interr Trans		Block 6	\$0.35718	(\$0.02085)		\$0.33633	\$0.00000	\$0.00677	\$0.34310
	32 Interr Trans	Block 1	\$0.10132	\$0.00000		\$0.10132	\$0.00000	\$0.00068	\$0.10200
		Block 2	\$0.08615	\$0.00000		\$0.08615	\$0.00000	\$0.00058	\$0.08673
		Block 3	\$0.06087	\$0.00000		\$0.06087	\$0.00000	\$0.00041	\$0.06128
		Block 4	\$0.03556	\$0.00000		\$0.03556	\$0.00000	\$0.00026	\$0.03582
		Block 5	\$0.02041	\$0.00000		\$0.02041	\$0.00000	\$0.00014	\$0.02055
		Block 6	\$0.01029	\$0.00000		\$0.01029	\$0.00000	\$0.00009	\$0.01038
33	33		\$0.00586	\$0.00000	\$0.00000	\$0.00586	\$0.00000	\$0.00004	\$0.00590
urces:	<u>urces:</u>			Col F - Col B	Col G+H-C-D		Col K - Col J	Col M - Col L	

58 59

[1] For convenience of presentation, demand charges for Rate Schedules 31 and 32 are omitted

2 11/1/20		11/1/2015	REMOVE	REMOVE Current	REMOVE Current		ADD	ADD Proposed	ADD Proposed		Current	Proposed	Current	Proposed		11/01/16 Proposed	11/01/16 Proposed
		Billing Rates	Current WACOG	FIRM Demand	_	Subtotal [1]	Proposed WACOG	FIRM Demand	INTERR	Subtotal [1]	Permanent Items	Permanent Items	Temporary Items	Temporary Items	Subtotal [1]	Illustrative Rates [1]	Tariff Rates [1]
	1		\$0.33602	\$0.11849		E=A-B-C-D	\$0.31517	\$0.12132	\$0.01443	D=E+F+G+H		:	.	:	N = I - J + K - L + M  O = I + J + K + L + M	=I+J+K+L+M	excl RS 31& 32 demand
5chedule 2R	Block	A \$0 93513	80 33602	50 11849	<b>0</b> 0000	E \$0.48062	<b>F</b> \$0.31517	G \$0 12132	80 0000	\$0 91711	00000 U\$	\$0.0000	L \$0.03592	\$0 02604	\$0 90723	0 \$0 90723	\$0 90725
3C Firm Sales		\$0.87993	\$0.33602	\$0.11849	\$0.00000	\$0.42542	\$0.31517	\$0.12132	\$0.00000	\$0.86191	\$0.00000	\$0.00000	\$0.07100	\$0.07356	\$0.86447	\$0.86447	\$0.86447
31 Firm Sales		\$0.83072	\$0.33602	\$0.11849	\$0.00000	\$0.37621	\$0.31517	\$0.12132	\$0.00000	\$0.81270	\$0.00000	\$0.00000	\$0.03309	\$0.04138	\$0.82099	\$0.82099	\$0.82099
27 Dry Out		\$0.80313	\$0.33602	\$0.11849	\$0.00000	\$0.34862	\$0.31517	\$0.12132	\$0.00000	\$0.78511	\$0.00000	\$0.00000	\$0.01021	\$0.01693	\$0.79183	\$0.79183	\$0.79183
31C Firm Sales	Block 1	\$0.61817	\$0.33602			\$0.28215	\$0.31517	\$0.12132	\$0.00000	\$0.71864	\$0.00000	\$0.00000	\$0.06829	\$0.07048	\$0.72083	\$0.72083	\$0.59951
	Block 2	\$0.59905	\$0.33602			\$0.26303	\$0.31517	\$0.12132	\$0.00000	\$0.69952	\$0.00000	\$0.00000	\$0.06757	\$0.06959	\$0.70154	\$0.70154	\$0.58022
31C Firm Trans	Block 1	\$0.19118	\$0.00000			\$0.19118	\$0.00000	\$0.00000	\$0.00000	\$0.19118	\$0.00000	\$0.0000	\$0.00996	\$0.01139	\$0.19261	\$0.19261	\$0.19261
	Block 2	\$0.17480	\$0.00000			\$0.17480	\$0.00000	\$0.00000	\$0.00000	\$0.17480	\$0.00000	\$0.00000	\$0.00910	\$0.01042	\$0.17612	\$0.17612	\$0.17612
311 Firm Sales	Block 1	\$0.53466	\$0.33602			\$0.19864	\$0.31517	\$0.12132	\$0.00000	\$0.63513	\$0.00000	\$0.00000	\$0.02976	\$0.03737	\$0.64274	\$0.64274	\$0.52142
1 1	Block 2	\$0.51781	\$0.33602			\$0.18179	\$0.31517	\$0.12132	\$0.00000	\$0.61828	\$0.00000	\$0.00000	\$0.02918	\$0.03665	\$0.62575	\$0.62575	\$0.50443
311 Firm Trans	Block 1	\$0.17031	\$0.00000			\$0.17031	\$0.00000	\$0.00000	\$0.00000	\$0.17031	\$0.00000	\$0.00000	\$0.00628	\$0.00892	\$0.17295	\$0.17295	\$0.17295 \$0.17295
	Block 2	\$0.15394	\$0.00000			\$0.15394	\$0.00000	\$0.00000	\$0.00000	\$0.15394	\$0.00000	\$0.0000	\$0.00569	\$0.00809	\$0.15634	\$0.15634	\$0.15634
32C FIRM SAIES	Block 1 Block 2	\$0.46316 \$0.44762	\$0.33602 \$0.33602			\$0.12714 \$0.11160	\$0.3151/ \$0.31517	\$0.12132 \$0.12132	\$0.00000	\$0.56363 \$0.54800	\$0.00000	\$0.00000	\$0.02837 \$0.02766	\$0.03666 \$0.03561	\$0.57192 \$0.55604	\$0.57192 \$0.55604	\$0.45060 \$0 43473
	Block 3	\$0.42176	\$0.33602			\$0.08574	\$0.31517	\$0.12132	\$0.00000	\$0.5223	\$0.00000	\$0.0000	\$0.02646	\$0.03388	\$0.52965	\$0.52965	\$0.40833
	Block 4	\$0.39586	\$0.33602			\$0.05984	\$0.31517	\$0.12132	\$0.00000	\$0.49633	\$0.00000	\$0.00000	\$0.02526	\$0.03214	\$0.50321	\$0.50321	\$0.38189
	Block 5	\$0.38034	\$0.33602			\$0.04432	\$0.31517	\$0.12132	\$0.00000	\$0.48081	\$0.00000	\$0.0000	\$0.02454	\$0.03090	\$0.48717	\$0.48717	\$0.36585
	Block 6	\$0.36996	\$0.33602			\$0.03394	\$0.31517	\$0.12132	\$0.00000	\$0.47043	\$0.00000	\$0.00000	\$0.02406	\$0.03021	\$0.47658	\$0.47658	\$0.35526
321 Firm Sales	Block 1	\$0.46083	\$0.33602			\$0.12481	\$0.31517	\$0.12132	\$0.00000	\$0.56130	\$0.00000	\$0.0000	\$0.02728	\$0.03491	\$0.56893	\$0.56893	\$0.44761
	Block 2	\$0.44568	\$0.33602			\$0.10966	\$0.31517	\$0.12132	\$0.00000	\$0.54615	\$0.00000	\$0.00000	\$0.02675	\$0.03415	\$0.55355	\$0.55355	\$0.43223
	Block 3	\$0.42039 \$0.30514	\$0.33602 \$0.32602			\$0.08437 \$0.055012	\$0.31517	\$0.12132 \$0.12132	\$0.0000	\$0.52086 \$0.40E44	\$0.00000 \$0.00000	\$0.00000	\$0.02586	\$0.03289	\$0.52/89 \$0.52733	\$0.52789 \$0.52789	\$0.4065/ \$0.3800F
	BLOCK 4	\$0.37006	\$0.33602 \$0.33603			21 600.0¢	\$0.31517 \$0.31517	\$0.12132 \$0.12132	\$0 00000	\$0.49301 \$0.48043			\$0.02447	\$0.03 103 \$0.03068	12200.00¢	7300.0¢	\$0.36073 \$0.36535
	Block 6	\$0.36991	\$0.33602			\$0.03389	\$0.31517	\$0.12132 \$0.12132	\$0.00000	\$0.47038	\$0.00000 \$0.000000	\$0.00000	\$0.02409	\$0.03018	\$0.47647	\$0.47647	\$0.35515
32 Firm Trans	Block 1	\$0.10049	\$0.00000			\$0.10049	\$0.00000	\$0.00000	\$0.00000	\$0.10049	\$0.00000	\$0.00000	\$0.00351	\$0.00459	\$0.10157	\$0.10157	\$0.10157
	Block 2	\$0.08542	\$0.00000			\$0.08542	\$0.00000	\$0.00000	\$0.00000	\$0.08542	\$0.00000	\$0.00000	\$0.00301	\$0.00393	\$0.08634	\$0.08634	\$0.08634
	Block 3	\$0.06036	\$0.00000			\$0.06036	\$0.00000	\$0.00000	\$0.00000	\$0.06036	\$0.00000	\$0.00000	\$0.00216	\$0.00283	\$0.06103	\$0.06103	\$0.06103
	Block 4	\$0.03528	\$0.00000			\$0.03528	\$0.00000	\$0.00000	\$0.00000	\$0.03528	\$0.00000	\$0.00000	\$0.00133 \$0.00003	\$0.00172	\$0.03567 \$0.0304F	\$0.03567	\$0.03567
	Block 5	\$0.02021 \$0.01022	\$0.00000			\$0.02021 \$0.01022	\$0.00000		\$0,00000	\$0.02021	00000.0\$	00000.0\$	\$0.00082	\$0.00.0¢	\$0.02045 \$0.01035	\$0.02045 \$0.01035	30.02045 35010035
32C Interr Sales	Block 1	\$0.45065	\$0.33602			\$0.11463	\$0.31517	\$0.00000	\$0.01443	\$0.44423	\$0.00000	\$0.00000	\$0.01408	\$0.02154	\$0.45169	\$0.45169	\$0.43726
	Block 2	\$0.43505	\$0.33602			\$0.09903	\$0.31517	\$0.00000	\$0.01443	\$0.42863	\$0.00000	\$0.0000	\$0.01356	\$0.02093	\$0.43600	\$0.43600	\$0.42157
	Block 3	\$0.40905	\$0.33602			\$0.07303	\$0.31517	\$0.00000	\$0.01443	\$0.40263	\$0.00000	\$0.00000	\$0.01270	\$0.01992	\$0.40985	\$0.40985	\$0.39542
	Block 4	\$0.38306	\$0.33602			\$0.04704	\$0.31517	\$0.00000	\$0.01443	\$0.37664	\$0.00000	\$0.00000	\$0.01184	\$0.01890	\$0.38370	\$0.38370	\$0.36927
	Block 5	\$0.36743	\$0.33602			\$0.03141	\$0.31517	\$0.00000	\$0.01443	\$0.36101	\$0.00000	\$0.00000	\$0.01131	\$0.01829	\$0.36799	\$0.36799	\$0.35356
201 Interr Calee	Block b	\$0.35709 \$0.46043	\$0.336UZ			\$0.12107 \$0.11441	\$0.31517 \$0.21517	\$0,00000	\$0.01443 \$0.01443	10005.06	\$0,00000	0000000\$	\$0.01408	\$0.011//3	\$0.35/42 \$0.45164	\$0.35742 \$0.46164	\$0.34299 \$0.4271
	Block 2	\$0.43043	\$0 33602			\$0.09889	\$0.31517 \$0.31517	\$0,0000	\$0.01443	\$0.42849	\$0,00000	\$0 00000	\$0.01359	\$0.02101	\$0.43F91 \$0.43591	\$0.43591	\$0.42148
	Block 3	\$0 40899	\$0.33602			\$0.07297	\$0.31517	\$0 00000	\$0.01443	\$0.40257		\$0 00000	\$0.01276	\$0.02001	\$0.40982	\$0.40982	\$0.39539
	Block 4	\$0.38308	\$0.33602			\$0.04706	\$0.31517	\$0.00000	\$0.01443	\$0.37666	\$0.00000	\$0.00000	\$0.01194	\$0.01901	\$0.38373	\$0.38373	\$0.36930
	Block 5	\$0.36752	\$0.33602			\$0.03150	\$0.31517	\$0.00000	\$0.01443	\$0.36110	\$0.00000	\$0.00000	\$0.01144	\$0.01841	\$0.36807	\$0.36807	\$0.35364
	Block 6	\$0.35718	\$0.33602			\$0.02116	\$0.31517	\$0.00000	\$0.01443	\$0.35076	\$0.00000	\$0.00000	\$0.01111	\$0.01788	\$0.35753	\$0.35753	\$0.34310
32 Interr Trans	Block 1	\$0.10132	\$0.0000			\$0.10132	\$0.00000	\$0.00000	\$0.00000	\$0.10132	\$0.00000	\$0.00000	\$0.00316	\$0.00384	\$0.10200	\$0.10200	\$0.10200
	Block 2	\$0.08615	\$0.00000			\$0.08615	\$0.00000	\$0.00000	\$0.00000	\$0.08615	\$0.00000	\$0.00000	\$0.00271	\$0.00329	\$0.08673	\$0.08673	\$0.08673
	Block 3	\$0.06087	\$0.00000			\$0.06087	\$0.00000	\$0.00000	\$0.00000	\$0.06087	\$0.00000	\$0.00000	\$0.00196	\$0.00237	\$0.06128	\$0.06128	\$0.06128
	Block 4	\$0.03556	\$0.00000			\$0.03556	\$0.00000	\$0.00000	\$0.00000	\$0.03556	\$0.00000	\$0.00000	\$0.00120	\$0.00146	\$0.03582	\$0.03582	\$0.03582
	Block 5	\$0.02041	\$0.00000			\$0.02041	\$0.00000	\$0.00000	\$0.00000	\$0.02041	\$0.00000	\$0.00000	\$0.00076	\$0.00090	\$0.02055	\$0.02055	\$0.02055
	BIOCK 6	\$0.01029	\$0.0000			\$7010.0¢	\$U.UUUUU	\$0.0000	\$U.UUUUU	\$0.01029	\$0.0000	\$0.0000	c4000.0¢	\$0.0004	\$0.01038	\$0.01038	\$0.01038
		The second s					000000	00000 00	0000000		000000	000000	00000	10000	00100	00100	00100 04

NW Natural Rates & Regulatory Affairs 2016-17 PGA - Oregon: September Filing calculation of Proposed Rates - DETAIL

## NW Natural Rates & Regulatory Affairs 2016-2017 PGA Filing - Oregon: September Filing PGA Effects on Revenue - COMBINED EFFECTS

1		Including Revenue Sensitve <u>Amount*</u>
2	Purchased Gas Cost Adjustment (PGA)	
3 4 5	Gas Cost Change	(\$14,157,675)
6 7	Capacity Cost Change	(689,523)
, 8 9	Total PGA Change	(14,847,198)
10 11	Temporary Rate Adjustments	
12 13	Proposed Temporary Increments	27,046,184
14 15	Removal of Other Current Temporary Increments	(29,851,086)
16 17	Total Net Temporary Rate Adjustment	(2,804,902)
18 19	Base Rate Adjustments	
20 21	Proposed Base Rate Adjustments	N/A
22 23	Removal of Current Base Rate Adjustments	N/A
24 25 26	Total Net Base Rate Adjustment	0
27 28 29 30	TOTAL OF ALL COMPONENTS OF ALL RATE CHANGES	(\$17,652,100)
31 32	2015 Oregon Earnings Test Normalized Total Revenues	\$713,671,000
33	Effect of this filing, as a percentage change (line 31÷ line 37)	-2.47%

NW Natural Rates & Regulatory Affairs 2016-17 PGA - Oregon: September Filing Attachment C: 3% Test

1		Surcharge	Credit	
	2015-2016 PGA Gas Cost True-			
2	Up		(408,763)	
3				
4	Non-Gas Cost Amortizations	001.010		
5	Intervenor Funding	201,819		
6	Oregon Regulatory Fee	178,043		
7	Industrial DSM	3,592,066		
8	Decoupling	13,209,442		
9	Subtotal	17,181,370	(408,763)	
10				
11	Total	16,772,607		
12				
13	Total Proposed Amortization			16,772,607
14	Less:			
15	Intervenor Funding <sup>1</sup>			(201,819)
16	Industrial DSM <sup>1</sup>			(3,592,066)
17	Decoupling <sup>1</sup>			(13,209,442)
18	Decoupling			(13,207,442)
19	Net Proposed Amortizations (subje	ct to the 3% test)		(230,720)
20	Net Proposed Amontizations (subje			(230,720)
	$  tility Cross Boyonuss (201E) ^2$			(52.242.000
21	Utility Gross Revenues (2015) <sup>2</sup>			653,343,000
22				40 (00 000
23	3% of Utility Gross Revenues			19,600,290
24				<i></i>
25	Allowed Amortization			(230,720)
26				
27	Allowed Amortization as % of Gros	s Revenues		0.0%
28				
29	Notes:			
30	<sup>1</sup> Amortizations of the deferral are not s	ubject to the 3% test purs	suant to ORS 757.259 as t	hey are
31	automatic adjustment clauses.			
30	<sup>2</sup> Unadjusted general revenues as showi	n in the most recent POO		

<sup>2</sup> Unadjusted general revenues as shown in the most recent ROO.

NW Natural 2016-17 PGA Filing: Oregon SEPTEMBER FILING Workpaper for WARM table in RS 195

	ercial	\$WARM Adj	\$0.30	\$1.51	\$3.03	\$4.54	\$6.06	\$7.57	\$9.08	\$10.60	\$12.11	\$13.63	\$15.14
\$0.35442	Commercial	Therms	0.8544	4.2721	8.5441	12.8162	17.0882	21.3603	25.6323	29.9044	34.1764	38.4485	42.7205
	ntial	\$WARM Adj	\$0.07	\$0.37	\$0.73	\$1.10	\$1.46	\$1.83	\$2.20	\$2.56	\$2.93	\$3.30	\$3.66
\$0.44470	Residential	Therms	0.1647	0.8236	1.6471	2.4707	3.2942	4.1178	4.9413	5.7649	6.5884	7.4120	8.2355
			-	Ð	10	15	20	25	30	35	40	45	50

Billing rate less temps, WACOG & Demand

# Sheet 195-5 Calculations - Residential Schedule 2

\$121.37 WARM Adj. Rate WARM bill \$ \$0.87884 \$1 Current Rate \$0.90723 Usage (therms) WARM Adj. ( 3 129 -\$0.02839 Margin calc. -\$3.66233 -8.2355 HDDs variance Stat. coefficient Therms -50 0.16471