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September 15, 2016

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

Re: 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. 25¹ (“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,”

¹ 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:

- Sheet i. 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.
- Schedule 100. 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.
- Schedule 190. 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 2nd 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

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 www.nwnatural.com.

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

NORTHWEST NATURAL GAS COMPANY

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;
DALLAS, DEPOE BAY, DONALD, DUNDEE, DURHAM; (D)
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,
SILETZ, SILVERTON, SODAVILLE, SPRINGFIELD, STAYTON, SUBLIMITY, SWEET HOME;
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 (C)
SHOWN ON THE MAP OF SERVICE AREA BELOW. (C)

(continue to Sheet ii)

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Effective with service on
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NORTHWEST NATURAL GAS COMPANY

P.U.C. Or. 25

Fourth Revision of Sheet v
Cancels Third Revision of Sheet v

TARIFF INDEX

(continued)

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Schedule 162: Temporary (Technical) Adjustments to Rates.....	162-1 to 162-2
Schedule 164: Purchased Gas Cost Adjustments to Rates.....	164-1
Schedule 164A: Special Purchased Gas Adjustment Credit.....	164-A
Schedule 165: Special Adjustment to Rates – Gas Reserves Credit.....	165-1
Schedule 167: General Adjustments to Rates.....	167-1
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Schedule 177: System Integrity Program Rate Adjustment - CANCELLED.....	177-1 to 177-4 (C)
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.....	180-1
Schedule 181: Special Rate Adjustment – Regulatory Fee Increase.....	181-1 to 181-2 (N)
Schedule 182: Rate Adjustment for Environmental Cost Recovery.....	182-1 (N)
Schedule 183: Site Remediation Recovery Mechanism (SRRM).....	183-1 to 183-3
Schedule 184: Special Rate Adjustment Gasco Upland Pumping Stations.....	184-1
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Schedule 188: Industrial Demand Side Management (DSM) Program Cost Recovery.....	188-1
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Schedule 320: Oregon Low-Income Energy Efficiency (OLIEE) Programs.....	320-1 to 320-6
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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

(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 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
Customer Charge:	\$8.00	---	---	---	---	\$8.00
Volumetric Charge (per therm):	\$0.44470	---	\$0.12132	\$0.31517	\$0.02604	\$0.90723

(T)

(R)

(D)

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

(continue to Sheet 2-2)

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NORTHWEST NATURAL GAS COMPANY

P.U.C. Or. 25

Sixth Revision of Sheet 3-4
Cancels Fifth Revision of Sheet 3-4

RATE SCHEDULE 3 BASIC FIRM SALES SERVICE - NON-RESIDENTIAL (continued)

MONTHLY RATE: 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 Special Provision 7 of this Rate Schedule.

FIRM SALES SERVICE CHARGES: (03CSF and 03ISF)						Billing Rates [1]
Customer Charge (per month):						\$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 therm of MHDV) [3]:						\$10.00

(T)

(R)

(R)

(T)

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

(D)

[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.

(T)

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

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NORTHWEST NATURAL GAS COMPANY

P.U.C. Or. 25

Fourth Revision of Sheet 27-1
Cancels Third Revision of Sheet 27-1

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

(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 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
Customer Charge:	\$6.00	---	---	---	---	\$6.00
Volumetric Charge (per therm)						
All therms	\$0.33841	---	\$0.12132	\$0.31517	\$0.01693	\$0.79183

(T)

(R)

(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.

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NORTHWEST NATURAL GAS COMPANY

P.U.C. Or. 25

Sixth Revision of Sheet 31-11
Cancels Fifth Revision of Sheet 31-11

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

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

(continue to Sheet 31-12)

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Effective with service on
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NORTHWEST NATURAL GAS COMPANY

P.U.C. Or. 25

Fourth Revision of Sheet 31-12
Cancels Third Revision of Sheet 31-12

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

MONTHLY RATES FOR INDUSTRIAL 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**.

FIRM SALES SERVICE CHARGES (31 ISF) [1]:					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):					\$0.12132
Firm Pipeline Capacity Charge - Peak Demand option (per therm of MDDV):					\$1.80
FIRM TRANSPORTATION SERVICE CHARGES (31 ITF):					
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

(T)

(R)

(R)

(I)

(I)

(T)

(I)

(I)

[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**.

(D)

[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.

(T)

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

(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.

(T)

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Fourth Revision of Sheet 32-12
Cancels Third Revision of Sheet 32-12

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

MONTHLY RATES:

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 [1]:					Billing Rates
Customer Charge (per month, all service types):					\$675.00
	Base Rate	Base Rate Adjustment	Commodity Component [2]	Total Temporary Adjustments [3]	
32 CSF Volumetric Charges (per 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 (per 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 therm of MDDV per month):					\$0.15748
Firm Sales Service Storage Charge (per therm of MDDV per month):					\$0.20415
Pipeline Capacity Charge Options (select one):					
Firm Pipeline Capacity Charge - Volumetric option (per therm):					\$0.12132
Firm Pipeline Capacity Charge - Peak Demand option (per therm of MDDV per month):					\$1.80

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

(continue to Sheet 32-13)

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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

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

(continue to Sheet 32-14)

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 NWN OPUC Advice No. 16-18

Effective with service on
 and after November 1, 2016

NORTHWEST NATURAL GAS COMPANY

P.U.C. Or. 25

Fourth Revision of Sheet 32-14
Cancels Third Revision of Sheet 32-14

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

MONTHLY RATES (continued):

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 TRANSPORTATION SERVICE CHARGES (32 CTF 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 Charge (per therm of MDDV per month):					\$0.15748
INTERRUPTIBLE TRANSPORTATION SERVICE CHARGES (32 CTI or ITI) [3][4]:					
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	\$0.09816	---	\$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	

[1] 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.

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Effective with service on
and after November 1, 2016

NORTHWEST NATURAL GAS COMPANY

P.U.C. Or. 25

Fourth Revision of Sheet 33-8
Cancels Third Revision of Sheet 33-8

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.

FIRM TRANSPORTATION SERVICE CHARGES (33 TF)					
					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 Capacity Charge: Per therm of MDDV per month					\$0.15748
Minimum Monthly Bill: Customer Charge, plus Transportation Charge, plus Firm Service Distribution Capacity Charge, plus any other charges that may apply from Schedule C and Schedule 15.					

(T)

(I)

INTERRUPTIBLE TRANSPORTATION SERVICE CHARGES (33 TI)					
					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
Minimum Monthly Bill: Customer Charge, plus Transportation Charge, plus any other charges that may apply from Schedule C and Schedule 15 .					

(T)

(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)

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NORTHWEST NATURAL GAS COMPANY

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Second Revision of Sheet 100-1
Cancels First Revision Sheet 100-1

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

SCHEDULE	A	160	162	164	167	172
2	ADD	ADD	INC	INC	INC	INC
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	
31 (ISF)	ADD	ADD	INC	INC	INC	INC
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		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)

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Effective with service on
and after November 1, 2016

(N)

(C)

(C)

NORTHWEST NATURAL GAS COMPANY

P.U.C. Or. 25

First Revision of Sheet 100-2
Cancels Original Sheet 100-2

**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											

(C)

(C)

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 100-3)

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

Effective with service on
and after November 1, 2016

NORTHWEST NATURAL GAS COMPANY

P.U.C. Or. 25

Second Revision of Sheet 100-3
Cancels First Revision of Sheet 100-3

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. (C)

Schedule 164 “Purchased Gas Cost Adjustments to Rates.”

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

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. (D)

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. (D)

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. (M)

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. (N)

(continue to Sheet 100-4)

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Effective with service on
and after November 1, 2016

NORTHWEST NATURAL GAS COMPANY

P.U.C. Or. 25

Second Revision of Sheet 100-4
Cancels First Revision of Sheet 100-4

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.

(M)

(N)

(N)

Schedule 183 "Site Remediation Recovery Mechanism"

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

(C)

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.

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NORTHWEST NATURAL GAS COMPANY

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-listed Rate Schedules includes the following adjustment:

Residential Rate Schedules: **\$0.00555**

(C)

Commercial Rate Schedules: **\$0.05944**

(C)

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)

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NORTHWEST NATURAL GAS COMPANY

P.U.C. Or. 25

Fourth Revision of Sheet 190-2
Cancels Third Revision of Sheet 190-2

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**.

Step One. 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.

(T)
(N)
(N)
(N)

Step Two. This step derives the per-therm customer variance by multiplying the heating degree-day difference by the usage coefficient of .16471 for Residential variances, and .85441 for Commercial variances.

Step Three. 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.

(C)

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
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NORTHWEST NATURAL GAS COMPANY

P.U.C. Or. 25

Fourth Revision of Sheet 195-5
Cancels Third Revision of Sheet 195-5

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, and the monthly therm usage is 129 therms:

(C)

HDD Differential:	Normal HDDs:	600 HDDs	
	Actual HDDs:	650 HDDs	
	HDD variance:	$600 - 650 = -50$ HDDs	
Equivalent Therms:	HDD variance:	-50 HDDs	
	Statistical coefficient:	0.16471	
	Equivalent therms:	$-50 \times 0.16471 = -8.2355$ therms	
Total Warm Adjustment:	Equivalent therms:	-8.2355 therms	
	Margin Rate:	\$0.44470	
	Total WARM Adj.:	$-8.2355 \times \$0.44470 = (\$3.66233)$	
Total WARM Adjustment converted to cents per therm:	Total WARM Adj.:	(\$3.66233)	
	Monthly usage:	129 therms	
	Cent/therm Adj.:	$-3.66233 \div 129 = (\$0.02839)$	
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	$(129 \times \$0.87884) + \$8.00 = \$121.37$	(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
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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
Calculation of Proposed Rates - SUMMARY

1		11/1/2015			Proposed	Net change	Net change	Proposed	
2		Billing	Net change	Net change	Rates	Permanent	Temporary	11/1/2016	
3		Rates	WACOG	Demand [1]	PGA Only [1]	Increases	Increases	Rates [1]	
4					D=A+B+C			I=D+E+F+G+H	
5	Schedule	Block	A	B	C	D	E	F	I
6	2R		\$0.93513	(\$0.02085)	\$0.00283	\$0.91711	\$0.00000	(\$0.00988)	\$0.90723
7	3C Firm Sales		\$0.87993	(\$0.02085)	\$0.00283	\$0.86191	\$0.00000	\$0.00256	\$0.86447
8	3I Firm Sales		\$0.83072	(\$0.02085)	\$0.00283	\$0.81270	\$0.00000	\$0.00829	\$0.82099
9	27 Dry Out		\$0.80313	(\$0.02085)	\$0.00283	\$0.78511	\$0.00000	\$0.00672	\$0.79183
10	31C Firm Sales	Block 1	\$0.61817	(\$0.02085)		\$0.59732	\$0.00000	\$0.00219	\$0.59951
11		Block 2	\$0.59905	(\$0.02085)		\$0.57820	\$0.00000	\$0.00202	\$0.58022
12	31C Firm Trans	Block 1	\$0.19118	\$0.00000		\$0.19118	\$0.00000	\$0.00143	\$0.19261
13		Block 2	\$0.17480	\$0.00000		\$0.17480	\$0.00000	\$0.00132	\$0.17612
14	31I Firm Sales	Block 1	\$0.53466	(\$0.02085)		\$0.51381	\$0.00000	\$0.00761	\$0.52142
15		Block 2	\$0.51781	(\$0.02085)		\$0.49696	\$0.00000	\$0.00747	\$0.50443
16	31I Firm Trans	Block 1	\$0.17031	\$0.00000		\$0.17031	\$0.00000	\$0.00264	\$0.17295
17		Block 2	\$0.15394	\$0.00000		\$0.15394	\$0.00000	\$0.00240	\$0.15634
18	32C Firm Sales	Block 1	\$0.46316	(\$0.02085)		\$0.44231	\$0.00000	\$0.00829	\$0.45060
19		Block 2	\$0.44762	(\$0.02085)		\$0.42677	\$0.00000	\$0.00795	\$0.43472
20		Block 3	\$0.42176	(\$0.02085)		\$0.40091	\$0.00000	\$0.00742	\$0.40833
21		Block 4	\$0.39586	(\$0.02085)		\$0.37501	\$0.00000	\$0.00688	\$0.38189
22		Block 5	\$0.38034	(\$0.02085)		\$0.35949	\$0.00000	\$0.00636	\$0.36585
23		Block 6	\$0.36996	(\$0.02085)		\$0.34911	\$0.00000	\$0.00615	\$0.35526
24	32I Firm Sales	Block 1	\$0.46083	(\$0.02085)		\$0.43998	\$0.00000	\$0.00763	\$0.44761
25		Block 2	\$0.44568	(\$0.02085)		\$0.42483	\$0.00000	\$0.00740	\$0.43223
26		Block 3	\$0.42039	(\$0.02085)		\$0.39954	\$0.00000	\$0.00703	\$0.40657
27		Block 4	\$0.39514	(\$0.02085)		\$0.37429	\$0.00000	\$0.00666	\$0.38095
28		Block 5	\$0.37996	(\$0.02085)		\$0.35911	\$0.00000	\$0.00624	\$0.36535
29		Block 6	\$0.36991	(\$0.02085)		\$0.34906	\$0.00000	\$0.00609	\$0.35515
30	32 Firm Trans	Block 1	\$0.10049	\$0.00000		\$0.10049	\$0.00000	\$0.00108	\$0.10157
31		Block 2	\$0.08542	\$0.00000		\$0.08542	\$0.00000	\$0.00092	\$0.08634
32		Block 3	\$0.06036	\$0.00000		\$0.06036	\$0.00000	\$0.00067	\$0.06103
33		Block 4	\$0.03528	\$0.00000		\$0.03528	\$0.00000	\$0.00039	\$0.03567
34		Block 5	\$0.02021	\$0.00000		\$0.02021	\$0.00000	\$0.00024	\$0.02045
35		Block 6	\$0.01022	\$0.00000		\$0.01022	\$0.00000	\$0.00013	\$0.01035
36	32C Interr Sales	Block 1	\$0.45065	(\$0.02085)		\$0.42980	\$0.00000	\$0.00746	\$0.43726
37		Block 2	\$0.43505	(\$0.02085)		\$0.41420	\$0.00000	\$0.00737	\$0.42157
38		Block 3	\$0.40905	(\$0.02085)		\$0.38820	\$0.00000	\$0.00722	\$0.39542
39		Block 4	\$0.38306	(\$0.02085)		\$0.36221	\$0.00000	\$0.00706	\$0.36927
40		Block 5	\$0.36743	(\$0.02085)		\$0.34658	\$0.00000	\$0.00698	\$0.35356
41		Block 6	\$0.35709	(\$0.02085)		\$0.33624	\$0.00000	\$0.00675	\$0.34299
42	32I Interr Sales	Block 1	\$0.45043	(\$0.02085)		\$0.42958	\$0.00000	\$0.00753	\$0.43711
43		Block 2	\$0.43491	(\$0.02085)		\$0.41406	\$0.00000	\$0.00742	\$0.42148
44		Block 3	\$0.40899	(\$0.02085)		\$0.38814	\$0.00000	\$0.00725	\$0.39539
45		Block 4	\$0.38308	(\$0.02085)		\$0.36223	\$0.00000	\$0.00707	\$0.36930
46		Block 5	\$0.36752	(\$0.02085)		\$0.34667	\$0.00000	\$0.00697	\$0.35364
47		Block 6	\$0.35718	(\$0.02085)		\$0.33633	\$0.00000	\$0.00677	\$0.34310
48	32 Interr Trans	Block 1	\$0.10132	\$0.00000		\$0.10132	\$0.00000	\$0.00068	\$0.10200
49		Block 2	\$0.08615	\$0.00000		\$0.08615	\$0.00000	\$0.00058	\$0.08673
50		Block 3	\$0.06087	\$0.00000		\$0.06087	\$0.00000	\$0.00041	\$0.06128
51		Block 4	\$0.03556	\$0.00000		\$0.03556	\$0.00000	\$0.00026	\$0.03582
52		Block 5	\$0.02041	\$0.00000		\$0.02041	\$0.00000	\$0.00014	\$0.02055
53		Block 6	\$0.01029	\$0.00000		\$0.01029	\$0.00000	\$0.00009	\$0.01038
54	33		\$0.00586	\$0.00000	\$0.00000	\$0.00586	\$0.00000	\$0.00004	\$0.00590

Sources:

Rates in detail	Col F - Col B	Col G+H-C-D	Col K - Col J	Col M - Col L
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[1] For convenience of presentation, demand charges for Rate Schedules 31 and 32 are omitted

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

	Including Revenue Sensitive Amount*
1	
2	
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Purchased Gas Cost Adjustment (PGA)

Gas Cost Change	(\$14,157,675)
Capacity Cost Change	<u>(689,523)</u>
Total PGA Change	<u>(14,847,198)</u>

Temporary Rate Adjustments

Proposed Temporary Increments	27,046,184
Removal of Other Current Temporary Increments	<u>(29,851,086)</u>
Total Net Temporary Rate Adjustment	<u>(2,804,902)</u>

Base Rate Adjustments

Proposed Base Rate Adjustments	N/A
Removal of Current Base Rate Adjustments	N/A
Total Net Base Rate Adjustment	<u>0</u>

TOTAL OF ALL COMPONENTS OF ALL RATE CHANGES **(\$17,652,100)**

2015 Oregon Earnings Test Normalized Total Revenues \$713,671,000

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	<u>Surcharge</u>	<u>Credit</u>
2		
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32		

Notes:

¹ Amortizations of the deferral are not subject to the 3% test pursuant to ORS 757.259 as they are automatic adjustment clauses.

² 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

	\$0.44470	Residential	\$WARM Adj	Therms	Commercial	\$WARM Adj
1	0.1647	\$0.07	0.8544	\$0.30		
5	0.8236	\$0.37	4.2721	\$1.51		
10	1.6471	\$0.73	8.5441	\$3.03		
15	2.4707	\$1.10	12.8162	\$4.54		
20	3.2942	\$1.46	17.0882	\$6.06		
25	4.1178	\$1.83	21.3603	\$7.57		
30	4.9413	\$2.20	25.6323	\$9.08		
35	5.7649	\$2.56	29.9044	\$10.60		
40	6.5884	\$2.93	34.1764	\$12.11		
45	7.4120	\$3.30	38.4485	\$13.63		
50	8.2355	\$3.66	42.7205	\$15.14		

Billing rate less temps, WACOG & Demand

Sheet 195-5 Calculations - Residential Schedule 2

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