ITEM NO. 2 & 3

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: October 19, 2015

REGULAR __X__ **CONSENT** ____ **EFFECTIVE DATE** **November 1, 2015**

DATE: October 5, 2015

TO: Public Utility Commission

FROM: Erik Colville

THROUGH: Jason Eisdorfer and Aster Adams

SUBJECT: NORTHWEST NATURAL: (Docket No. UG 298/Advice No. 15-12A) Reflects changes in the cost of purchased gas, amortization of deferred gas costs, storage recall and the combined changes associated with the annual Purchased Gas Adjustment (PGA) filing.

NORTHWEST NATURAL: (Docket No. UG 304/Advice No. 15-14) Revises tariff rate schedules to reflect the combined effects of changes to rates.

STAFF RECOMMENDATION:

Staff recommends that the Commission approve Northwest Natural's (NWN) proposed tariff sheets in Docket No. UG 298 / Advice No. 15-12A and Docket No. UG 304/Advice No. 15-14, with an effective date of November 1, 2015. In addition, Staff recommends that NWN's recall of 30,000 Dekatherms per day (Dth/day) of Mist storage capacity from the interstate storage account be found prudent.

ISSUE:

NWN's Purchased Gas Adjustment (PGA) allows NWN to annually reset rates based on updated forecasts of gas and gas-related costs and recover or return to customers, a portion of the variance between the gas costs collected in rates over the previous year and the actual costs incurred by the utility. In this report, Staff discusses NWN's forecasted costs and proposed rates for the upcoming "gas year" and NWN's calculation of the true-up amounts for the previous "gas year." Staff also addresses the prudence of NWN's recall of Mist storage to determine whether the costs associated with the recall are appropriately included in rates.

APPLICABLE STATUTES AND RULES:

ORS 757.210 authorizes the Commission to establish the rates charged by public utilities. ORS 757.259(5) authorizes the Commission to allow a utility to amortize costs deferred under an automatic adjustment clause. The amortization is subject to the Commission's determination the costs were prudently incurred. Under ORS 757.259(6), the overall average rate impact of the amortizations authorized under ORS 757.259 in any one year may not exceed three percent of the utility's gross revenues for the preceding calendar year.

To determine prudence the Commission reviews the Company's actions, based on all that the Company knew or should have known at the time, to determine whether the actions were reasonable and prudent in light of the circumstances which then existed.[1]

ANALYSIS:

On August 1, 2015, NWN filed its annual PGA requesting rate changes related to natural gas commodity purchases and the costs to deliver this gas to NWN's system for the upcoming gas year (a "gas year" runs from November 1 to October 31 of the following calendar year). The PGA is filed to adjust rates yearly based upon:

(1) **A Forward Looking Portion**: An estimate of the commodity, pipeline, and storage costs – collectively referred to as the purchased cost of gas – for the upcoming gas year using projections for the price of natural gas and customer usage; and

(2) **A Backward Looking Portion:** A true-up of balances in deferral accounts due to the inevitable imperfect projection of costs and usage in last year's PGA filing that resulted in over/under-collection relative to those projections.

On September 15, 2015, NWN submitted its updated and revised PGA filing. A replacement filing was made September 28, 2015, reflecting the Commission's Order No. 15-297 in Docket No. UM 1717 related to the Jonah Field post-carry wells.

This Staff Report discusses: (1) the forward looking portion; (2) the backward looking portion; and (3) the overall revenue and rate impacts of combining these two segments with non-gas cost components for the 2015-16 gas year.

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[1] *In re PacifiCorp,* Order No. 12-493.

Forward Looking - Projected Purchased Gas Costs 2014-2015 PGA Year

There are two main components that together make up the purchased cost of gas: (a) commodity costs; and (b) demand costs. *Commodity costs* are the cost of the natural gas itself for delivery at specified trading hubs at specific times and *demand costs* are the cost of pipeline capacity and per unit of gas pipeline transport rates that allow NWN to transport its gas purchases to its own system (city-gate) at the time it is needed.

NWN forecasts a decrease of approximately 23 percent in gas commodity cost compared to that in its 2014 PGA. The decrease is in the gas cost per therm (WACOG or weighted average cost of gas) because the percent calculation uses the 2015 PGA load forecast with the 2014 cost per therm and the 2015 WACOG to derive the change in total purchased gas cost. This calculation shows the forecasted gas rate change when holding the gas cost constant from 2014 to 2015. Based on the 2015 PGA load forecast, this decrease in gas commodity is approximately $66,754,904 at $0.33602 per therm. NWN proposes a decrease in demand cost from that in the 2014 PGA of approximately 2 percent ($1,679,662). The total gas commodity and demand cost change compared to the 2014 PGA is a decrease of approximately 19 percent ($68,434,566 or $0.44566 per therm). These changes are approximate due to the use of forecasted loads and gas costs.

Staff reviewed NWN's forecasted commodity and demand costs to determine whether NWN complied with the Commission's Natural Gas Portfolio Development Guidelines (Portfolio Guidelines).[2]

Accepted "best practices" for purchasing natural gas supply by Local Distribution Companies (LDC) is portfolio construction that balances the objectives of reliability, cost, and price volatility using the tools of diversity, flexibility, and balance. The Portfolio Guidelines implement these "best practices" for Oregon LDCs. The Portfolio Guidelines also require each gas utility to include certain information related to its gas supply portfolio with its annual PGA filing. This information assists the Commission in determining the prudence of the LDC's costs.

NWN's portfolio preparation and planning process meets the standards in Section III of the Portfolio Guidelines related to portfolio planning, as do NWN's physical gas contracts and financial transactions relating to natural gas pricing. NWN has also demonstrated its adherence to the guidelines with regard to natural gas supplies and

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[2] The "Natural Gas Portfolio Development Guidelines" and "PGA Filing Guidelines" were initially acknowledged by the Commission in Order No. 09-248 and initially corrected in Order No. 09-263. The current Guidelines were acknowledged by the Commission in Order No.11-196.

financial hedges. In addition, NWN has provided all the information called for in Section IV (Information and Workpapers), and Section V (Supporting Data and Analysis) of the Portfolio Guidelines. NWN's planned supply portfolio, both physical and financial, is presented in Table 1.

Table 1: NW Natural Gas Supply Portfolio for 2015-2016 PGA Year

Resource	Percentage in Portfolio
Pipeline deliveries of natural gas	78.7%
Storage deliveries of natural gas	21.3%
Encana Gas Reserves	0.0%

NWN's gas purchasing strategy for the 2015-2016 period is to hedge the prices of approximately 75 percent of the expected purchases. The 75 percent hedging target is planned to include 23 percent from storage, nine percent from gas reserves, one percent from native gas production at Mist, and 42 percent from financial hedges. The remaining 25 percent of expected purchases will come from spot market purchases.

Spring Earnings Review

Each year, Oregon LDCs make an annual election for the upcoming PGA Year beginning November 1st whether to choose 90/10[3] sharing or 80/20 sharing with a corresponding earnings review threshold. For the 2015-2016 PGA year, NWN elected an 80/20 sharing on September 11, 2015.[4]

Backward Looking - True Up of Gas Commodity Costs for 2014-2015 PGA Year

Just as natural gas prices and demand are projected for the 2015-16 gas year in this year's PGA to determine rates, they were projected in previous years' PGAs to determine rates in those gas years as well. Due to a number of factors including natural gas price volatility, weather, and the overall economy, these projections did not match exactly actual experience so actual revenues collected did not equal those that were estimated.

NWN proposes to true-up its commodity and non-commodity deferred account amortization in effect since November 1, 2014, and that projected for the 2015-2016 PGA period. The commodity gas cost portion of the true-up is a decrease of $19,463,019 to customers. The removal of the prior year amortization is a decrease to

[3] Sharing of the variance between the LDC's WACOG included in its rates and its actual WACOG. For example, 90/10 designates 90 percent of the variance will be deferred for subsequent charge or credit to customers, and 10 percent is absorbed or retained by the LDC. *See* Order 08-504 at 17.

[4] The election is filed annually in UM 1286 in compliance with Order No. 11-196 and Order No. 08-504.

customers of $16,814,949 and application of the proposed year amortization is a decrease to customers of $2,648,070. The prior year amortization was projected and included in the 2014 PGA. The proposed year amortization is the sum of the actual balances of the gas cost deferral, firm demand deferral, and interruptible demand deferral accounts as of October 31, 2015.

Staff has reviewed NWN's proposed gas cost deferral and determined that the proposed amortization is appropriate. The resulting revised rate increment is incorporated in the energy charge component of NWN's primary rate schedules.

Overall Rate and Revenue Impact

A summary of the proposed tariff changes for NWN's major rate schedules is shown in Attachment A. Table 2 shows the rates the Commission has approved for NWN's residential customers on Rate Schedule 2 between 2008 and 2015, the current proposal.

Table 2: Residential Rates 2008 – 2015 (Proposed)

Date	Customer Charge	Rate Per Therm[5]	Percentage Change[6]
November 2008	$6.00	$1.39742	14.12%
January 2009	$6.00	$1.39384	-0.26%
November 2009	$6.00	$1.14047	-18.18%
November 2010	$6.00	$1.10644	-2.98%
November 2011	$6.00	$1.08786	-1.68%
November 2012	$8.00	$0.97306	-10.55%
November 2013	$8.00	$0.99317	2.07%
November 2014	$8.00	$1.01330	2.03%
November 2015	$8.00	$0.93513	-7.71%

With these changes, the monthly bill of a typical residential customer using 53 therms per month will decrease by $6.79, or 11.0 percent, from $61.70 to $54.91. In January, a typical residential customer's consumption of 96 therms will result in a billing decrease of $7.48, or -7.1 percent, from $105.05 to $97.57.

The change in annual revenues is summarized in Table 3 below:

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[5] This rate does not include pass-through charges included on customer bills that utilities are required to collect and distribute such as franchise fees or the Public Purposes Charge.
[6] The percentage change reflects only the change in the rate per therm, and does not include the effect of the monthly customer charge on the bill.

Table 3: Change in Annual Revenues

PGA Gas Cost Change	-$69,361,272
Gas Cost-related Amortizations	$0
Non Gas Cost-related Amortizations	$30,646,930
Permanent Base Rate Increment	$0
Total Proposed Change[7]	-$38,714,342

Three Percent Test

The gas cost related amortizations in this filing are included in the calculation of the three percent test pursuant to ORS 757.259(6), which restricts the overall annual average rate impact of amortizations authorized under the statute to three percent of the natural gas utility's gross revenues for the preceding calendar year. For the upcoming gas year, NWN is asking to amortize ($2,713,208). During the last calendar year NWN gross revenues were $678,848,000. Therefore, NWN is seeking to amortize amounts equal to (0.4) percent of the previous year's gross revenues, which does not exceed the three percent threshold. See Attachment C for a more detailed accounting of amortizations and the three percent test.

Jonah Field Post-Carry Wells

In accordance with Order No. 15-297, NWN is allowed in the PGA to pass on to customers a cost for all gas produced by the Jonah Field post-carry wells, at $0.4725 per therm. In the 2014-2015 PGA NWN included the post-carry well gas at the "Rockies forward strip" cost, pending issuance of Order No. 15-297. The Rockies forward strip cost was less than the cost allowed in the Order. For this 2015-2016 PGA, the first PGA after issuance of the Order, NWN included a true-up for the difference in cost between the Rockies forward strip and the ordered rate. NWN also included a projected cost for the post-carry well gas during the 2015-2016 gas year. The 2015-2016 cost is projected because the gas flows are projected, while the cost per therm is fixed by the Order.

Mist Storage Recall

Included in this 2015-16 PGA is a proposal by NWN to recall 30,000 Dth/day of Mist reservoir and compression capacity. The effect of this storage recall is to increase NWN's annual revenues by $234,753. The ratepayer effect of applying the adjustment to customer rates is an increase on a percent of margin basis of $0.00045 on residential Schedule 2 customer rates, and an increase on a percent of margin basis of $0.00032

[7] See Attachment B and CA1, CA2, CA3, CA4, CA5, and CA6 for details.

on commercial Schedule 3 rates. The adjustments for all other rate schedules can be found in Exhibit A, Page 12 to this filing.

Staff issued an Information Request (IR 1) for information supporting the prudence of NWN's proposed Mist storage recall. NWN's response included the following representations and statements:

1. NWN conducted a thorough least cost and risk analysis for resource needs that showed a firm resource shortage in 2015. This analysis was documented and included in NWN's 2014 Integrated Resource Plan (2014 IRP), OPUC Docket No. LC 60, page 1.2. Supported by this analysis, the 2014 IRP, on page 1.20, included the following action item 2.1:

    Acquire resources in the near term consistent with meeting the Base Case firm sales load forecast. a. Recall 30,000 Dth/day of Mist storage capacity from the interstate storage account effective May 2015 to serve the core customer needs reflected in the Base Case load forecast.

2. NWN understands IRP acknowledgment is not preapproval and does not make the argument that because recalling 30,000Dth of daily capacity from Mist was acknowledged in the IRP the action to recall the capacity was prudent.

3. Mist Recall is like most any other supply side resource in that the date of the decision to acquire/build the resource comes before the in-service date of that resource (in the case of the recall of 30,000Dth of Mist capacity the decision date was July 22, 2014 and the in-service (action) date of the recalled capacity was May 1, 2015).

4. Each summer NWN uses its resource planning process to evaluate the amount of Mist capacity that needs to be recalled for core customers the following spring. This is required so that current interstate storage customers can be informed they will not have the option to renew their capacity and need to remove all the gas they have in storage during the winter, so that NWN has the opportunity to fill the recalled capacity during the summer for use the following winter.

5. Since 2001, NWN has analyzed the need to recall Mist capacity for core customers each summer and this is the sixth time during this time frame it has made a recall to ensure customers could be served on a peak day. Each time a recall has been made it has been included in the PGA filing for inclusion in rates in the following gas year. The previous recalls have all been rolled into rates through the PGA the year in which they were filed.

6. NWN could have revisited the decision to recall the capacity after the IRP proceedings at a cost in the form of foregone revenues from selling storage service. Practically speaking, however, there are only three assumptions in the analysis used to make the recall decision that could impact the choice of Mist recall as the resource option representing the best combination of cost and risk for customers: (1) a change in the load forecast, (2) a dramatic reduction in the expected seasonal spreads in gas prices in the price forecast over the planning horizon, and (3) a change in resource firm capacity.

Staff evaluated NWN's information provided in support of the prudence of its action in recalling 30,000 Dth/day of Mist storage capacity from the interstate storage account in light of the Commission's standard for determining prudence (as outlined above).

Following Staff's evaluation, and based upon the prudence standard above, Staff recommends NWN's action be found prudent for the following reasons:

1. IRP analysis and Action Item acknowledgement are important factors in determining the prudence of investment actions.

2. While IRP analysis and Action Item acknowledgement are important factors in determining the prudence of investment actions, they are not the only factors.

3. Given the time lapse between NWN's reversible decision to recall Mist storage (July 22, 2014) and NWN's irreversible (practically speaking) action of recalling Mist storage (May 1, 2015) Staff expects that the analysis supporting the decision be revisited to confirm that conditions have not changed thereby altering (up or down) the need for the additional Mist storage. This expectation is in keeping with Staff's expectations of other Oregon utilities (for example, Portland General Electric's actions to acquire the Port Westward II generating facility and the Carty Generating Station).

4. NWN presented a qualitative review of its IRP analysis as follows: practically speaking there are only three assumptions in the analysis used to make the recall decision that could impact the choice of Mist recall as the resource option representing the best combination of cost and risk for customers: (1) a change in the load forecast, (2) a dramatic reduction in the expected seasonal spreads in gas prices in the price forecast over the planning horizon, and (3) a change in resource firm capacity. NWN did not develop a new load forecast between July 2014 and May 2015 and there was not a significant change in the expected seasonal spread of gas prices over the planning horizon between the price

forecast in the 2015 IRP and the most up to date price forecast in February 2015 (from January 2015). Also, NWN did not experience any changes to the 2015-16 gas year firm resource capacity in this timeframe, which could have possibly negated the need for the recall.

5. Staff's evaluation of the three assumptions presented in NWN's qualitative review of its analysis regarding load forecast, seasonal spreads in gas prices, and change in firm resource capacity are as follows: (1) NWN's not updating the load forecast is a concern to Staff. In any event, even though the load forecast has not been updated, based on the load forecasts of the other two Oregon gas utilities, Staff doubts NWN's load forecast has decreased enough to alter the recall need. (2) While Staff would argue that a reduction in seasonal spreads in gas prices has indeed occurred, Staff does not believe there was a dramatic change in seasonal gas price spreads in the interval between NWN's analysis and the Mist recall. In addition, the seasonal gas price spread is not the entire justification for Mist – it is a capacity resource for peak periods because it is located "on-system." (3) Staff does not understand with certainty what NWN means by change in firm resource capacity, but speculates that NWN is referring to changes in other capacity resources that might alter the recall need. Staff agrees that it is unlikely there were those sorts of changes in the interval between NWN's analysis and the Mist recall.

Staff does not find to be compelling the following aspects of NWN's representations regarding prudence:

1. That NWN has had five other recalls of Mist included in a PGA, without a targeted prudence review, is not relevant.

2. Given that NWN did not have to build anything, its justification related to the time lag between decision making and recall is lost on Staff. NWN could notify impacted customers of the anticipated recall, and then not execute the recall – at likely a minimal cost (either re-contracting or re-negotiating the storage services not recalled).

While Staff recommends a determination of prudence for NWN's action in recalling 30,000 Dth/day of Mist storage capacity from the interstate storage account, it does so reluctantly. Staff found that NWN's response to Staff's request for information reflected a failure to recognize the importance of the prudence determination process in fulfilling the Commission's mission to "[e]nsure that safe and reliable utility services are provided to consumers at just and reasonable rates while fostering the use of competitive markets to achieve these objectives."[8] In the future, NWN will be well served to provide robust, complete, concise, and clear support for its investment actions if it desires those actions to be found prudent.

Hedging

Staff has issued various IRs regarding NWN's hedging strategy. Particularly, Staff reviewed how NWN complies with its prospective hedging plan.

NWN's hedge targets for each month, as well as an overall target for the PGA year, are laid out in NWN's gas acquisition plans (GAP),[9] the primary objective of which, as stated in page two of confidential attachment three to the NWN response to Staff IR 2 (i.e., page 3 of "NW Natural Gas Acquisition Plan 2015-2016") is to BEGIN CONFIDENTIAL "[redacted]." END CONFIDENTIAL

In NWN's response to sub-part "ii" of part "b" to Staff IR 3, included as Appendix 1, NWN stated:

> *"The 'heating season' months of November through March are typically more vulnerable to price volatility than other months. As a result, the Company plans to hedge approximately 75% to 90% of projected heating season sales volumes based on normal weather conditions... **Hedge targets for summer months are about 60% for May through September** and about 65% for the 'shoulder' months of April and October." (Emphasis added.)*[10]

In order for Staff to conclude that NWN's hedging approach is consistent with its plan, Staff focused on verifying that NWN's hedges are consistent with NWN's target of 60 percent for May through September, specifically focusing on hedges for the month of May (as an example).

Per NWN's statements on pages 40 and 41 in Exhibit C of its PGA supporting documents filed on July 31, 2015,[11] the base load forecast and non-base load forecast

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[8] http://www.puc.state.or.us/Pages/about_us.aspx .
[9] See sub-part "ii" of part "b" of NW Natural's response to Staff IR 3.
[10] See sub-part "ii" of part "b" of NW Natural's response to Staff IR 3.
[11] The values in pages 40 and 41 are expressed in Therms .

for the month of May are 2,299,754 and 1,860,036 Dth, respectively, making a total of 4,159,790 Dth, or 134,186 Dth/day. Multiplying this amount by the hedge target for the summer months of 60 percent results in approximately 80,000 Dth/day.

Staff reviewed the hedges presented by NWN in the highly confidential pages 31 and 32 of its July 31, 2015, filing and identified only BEGIN HIGHLY CONFIDENTIAL [redacted] END HIGHLY CONFIDENTIAL Dth/day, leaving approximately BEGIN HIGHLY CONFIDENTIAL [redacted] END HIGHLY CONFIDENTIAL Dth/day unexplained. Staff issued Staff IR 6 for NWN to explain the aforementioned gap. NWN's confidential response to that request is included as Confidential Appendix 2. NWN's response provided a thorough explanation of how it intends to reach this gap demonstrating consistency in NWN's implementation of its hedging plan.

Staff concludes that NWN's hedging plan is consistent with its implementation thereof.

PROPOSED COMMISSION MOTION:

Northwest Natural's request for base gas cost changes for commodity and transportation, as proposed in Docket No. UG 298/Advice No. 15-12A, be allowed to go into effect on and after November 1, 2015, along with the associated tariff sheets relating in Docket No. UG 304/Advice No. 15-14. In addition, Northwest Natural's recall of 30,000 Dth/day of Mist storage capacity from the interstate storage account was prudent.

NW Natural
Rates & Regulatory Affairs
2015-16 PGA - Oregon: September Filing
Attachment A: Incremental Revenue Change by Rate Schedule

Rate Schedule	Description	Total Revenue at Current (1)	Total Revenue at Proposed	Total Change in Revenue	% Change by Rate Schedule	% Contribution to Total Change
2	Residential Sales	$ 213,940,298	$ 185,027,966	$ (28,912,332)	-13.5%	49.76%
3C	Small Commercial Firm Sales	$ 97,607,829	$ 85,512,742	$ (12,095,087)	-12.4%	20.82%
3I	Small Industrial Firm Sales	$ 2,273,586	$ 1,886,580	$ (387,005)	-17.0%	0.67%
27	Residential Heating Dry Out	$ 409,500	$ 334,513	$ (74,987)	-18.3%	0.13%
31CFS	Mid-size Commercial Firm Sales	$ 22,108,253	$ 19,171,180	$ (2,937,073)	-13.3%	5.05%
31CFT	Commercial Firm Transportation	$ 8,381	$ 45,878	$ 37,498	447.4%	-0.06%
31IFS	Mid-size Industrial Firm Sales	$ 8,175,459	$ 6,696,082	$ (1,479,377)	-18.1%	2.55%
31IFT	Industrial Firm Transportation	$ 492	$ 8,714	$ 8,222	1671.5%	-0.01%
32CFS	Large Commercial Firm Sales	$ 20,987,037	$ 17,103,742	$ (3,883,295)	-18.5%	6.68%
32IFS	Large Industrial Firm Sales	$ 7,300,189	$ 5,925,055	$ (1,375,134)	-18.8%	2.37%
32FT	Large Comm/Indus Firm Transportation	$ 19,878	$ 253,201	$ 233,323	1173.8%	-0.40%
32CIS	Commercial Interruptible Sales	$ 10,721,088	$ 7,915,199	$ (2,805,890)	-26.2%	4.83%
32IIS	Industrial Interruptible Sales	$ 17,971,672	$ 13,237,920	$ (4,733,752)	-26.3%	8.15%
32IT	Interruptible Transportation	$ 35,104	$ 335,147	$ 300,043	854.7%	-0.52%
33	High Volume Non-Residential	$ -	$ -	$ -	0.0%	0.00%
		$ 401,558,766	$ 343,453,919	$ (58,104,846)	-14.47%	100.00%

Note:

[1] Revenue at "Current" does not reflect current revenues, but rather what the revenues would be if existing rates continued to be in effect during the upcoming year (i.e. current rates times forecasted therms). There are small differences with the Advice filings.

NW Natural
Rates & Regulatory Affairs
2015-16 PGA - Oregon: September Filing
Attachment B: Incremental Revenue Change by Adjustment Schedule

	Tariff	Revenue at Current (1)	Revenue at Proposed	Change in Revenue	% Contribution to Total Incremental Change	Advice Filing
1						
2	Schedule P - PGA Forecast	$ 374,156,817	$ 304,795,545	$ (69,361,272)	179.16%	15-12
2	Schedule 172 - Intervenor Funding	$ 114,640	$ 175,613	$ 60,973	-0.16%	15-06
3	Schedule 177 - System Integrity Program	$ 2,437,611	$ 3,120,659	$ 683,048	-1.76%	15-10
4	Schedule 178 - Regulatory Rate Adjustment	$ -	$ (64,674)	$ (64,674)	0.17%	15-08
3	Schedule 182 - Enviornmental Tariff Rider	$ -	$ 5,301,087	$ 5,301,087	-13.69%	15-11
4	Schedule 183 - SRRM Adjustment	$ -	$ 8,587,932	$ 8,587,932	-22.18%	15-11
5	Schedule 188 - Industrial DSM	$ 1,837,261	$ 3,241,647	$ 1,404,386	-3.63%	15-07
4	Schedule 190 - Decoupling	$ 5,881,001	$ 20,555,180	$ 14,674,179	-37.90%	15-09
5	Total	$ 384,427,330	$ 345,712,988	$ (38,714,342)	100.00%	

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5 **Note:**
6 [1] Revenue at "Current" does not reflect current revenues, but rather what the revenues would be
7 if existing rates continued to be in effect during the upcoming year (i.e. current rates times forecasted
6 therms). There are small differences with the Advice filings.

NW Natural
Rates and Regulatory Affairs
2015-16 PGA - Oregon: September Filing
Attachment C: 3% Test

	Surcharge	Credit	
2014-2015 PGA Gas Cost True-Up	(2,648,070)		
Non-Gas Cost Amortizations			
Residual Deferral		(65,138)	
Intervenor Funding	178,504		
Industrial DSM	3,242,119		
Decoupling	20,555,284		
SIP	3,121,739		
Subtotal	27,097,646	(65,138)	
Total	24,449,576	(65,138)	
Total Proposed Amortization			24,384,438
Less: (1)			
Intervenor Funding (1)			(178,504)
Industrial DSM (1)			(3,242,119)
Decoupling (1)			(20,555,284)
SIP (2)			(3,121,739)
Net Proposed Amortizations (subject to the 3% test)			(2,713,208)
Utility Gross Revenues (2014)			678,848,000
3% of Utility Gross Revenues			20,365,440
Allowed Amortization			(2,713,208)
Allowed Amortization as % of Gross Revenues			-0.4%

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) Amortizations not subject to the 3% test as they are not deferrals, but rather capital projects to be included in rate base.

NWN's response to Staff IR 3

NW Natural

Rates & Regulatory Affairs

UG 298
Annual Purchased Gas Cost Technical Rate Adjustments

Data Request Response

Request No. UG 298-OPUC-IR 3:
Regarding page 17 of 114 of Exhibit C to NW Natural's Purchased Gas Adjustment (PGA) filing, filed on July 31, 2015 in Docket No. UG298, where the Company provided a list of the Firm Off-System Gas Supply Contracts (Contracts) for the 2015-2016 gas year, please:

a. Provide a comprehensive explanation (including workpapers) of how such Contracts (collectively) and how each of such Contracts contemplate, comply with, and are related to the 2015-2016 GAP;

b. For each of the Contracts provided in part "a" of this data request, please indicate whether or not the Company has engaged in any derivative contract to fix the price of each of such Contracts. For each Contract:

i. If the answer is "yes," please provide copies of the derivative contract associated for such Contract and provide a brief description of the type of contract and pricing of the contract;

ii. If the answer is "no," please explain the rationale by which the Company did not engage in any derivative contract to fixed the price of such Contract;

c. If the response to part "b" of this data request presents a combination of Contracts that do have derivative contracts associated with it and Contracts that do not have derivative contracts associated with it, please provide a comprehensive explanation of the rational by which the Company choses to hedge or not hedge contracts. Please cite the sections (and page numbers) of any document (i.e., Gas Supply Risk Management Policy, GASP Committee meetings' minutes, etc.) that supports the Company's rationale.

If the information requested in the above question was derived or obtained from other sources (e.g., GASP Committee meetings' minutes or other document that memorialize such meetings, GAPs, etc.) please identify each such specific source and provide a copy of each such specific source document in portable document format (PDF) file(s), MS Word file(s), Excel workbook (with cell references and formulae intact) file(s), or any other common document format indicating the specific page, section, etc. of the relevant source document.

Response:

a. For the 2015-2016 GAP, please see the Company's response to OPUC IR 2 Attachment-3_CONFIDENTIAL. Section 5 ("Physical Contracts") of that document, which begins on page 26, describes the strategies that led to the collective amounts purchased under year-round and winter-only term contracts. For example, on page 28:

"Long-term baseload (with contracts of one year or more) has declined to reflect summer minimum loads. Winter term volumes satisfy daily requirements below minimum expectations with the remainder of demand satisfied by daily spot gas."

Certain sections of the 2015-2016 GAP have been condensed for inclusion in the Exhibit C, of the Company's filing in docket UG 298, and regarding the supply contract purchasing process, see page 30 of 114.

The forecasted monthly loads are shown in Exhibit C, pages 40 and 41 of 114. The "base load" on page 40 during the summer months has a minimum of approximately 23.1 million therms in August. Dividing this monthly amount by 31 days, and further dividing by 10 to convert therms to dekatherms (Dth), yields an approximate daily requirement of 74,000 Dth/day. To allow for spot gas buying, forecasting uncertainties, and to otherwise reflect past experience, this was reduced and rounded to the 65,000 Dth/day that is shown on page 17 of 114 as the "April-October" total baseload contract quantity.

For the winter months, page 41 in Exhibit C shows the additional non-base load requirement to have a minimum of 59.9 million therms in March. Converting this in the same manner as above results in an average daily non-base load requirement of 193,000 Dth/day. Adding in the base load yields a total requirement of 267,000 Dth/day. Again, allowing for spot gas buying, forecasting uncertainties, past experience, as well as allowing for the use of storage withdrawals, it was determined that a total baseload contract quantity during the winter months of 185,000 Dth/day was appropriate, on shown on page 17 of 114 in the "November-March" row.

The selection process for particular contracts is a competitive bidding process governed by the Company's Gas Supply Risk Management Policies (GSRMP), as provided in Exhibit C starting at page 49 of 114. More specifically, page 66 of 114 describes authorized trading locations, while pages 77 through 79 of 114 contain the list of authorized counterparties for physical gas purchases as well as volume limits on purchase transactions with each party to avoid undue concentration of risk.

b. i. See Exhibit C, pages 31 and 32, for the tables that list and briefly describe all the financial derivative hedges applicable to the gas being purchased for the 2015-16 PGA year. For example, the fourth column in those tables is labeled "Associated Supply", which identifies the physical contract on page 17 associated with the particular financial hedge. Note that many physical supply contracts were still pending at the time of the initial UG 298 filing, so the Associated Supply frequently references a forecasted transaction. The derivative contracts themselves are attached as OPUC IR 3 Attachment-1_HIGHLY CONFIDENTIAL.

ii. The Company has hedging targets for each month as well as an overall target for the PGA year. As stated on page 42 of the OPUC IR 2 Attachment-3 (2015-2016 GAP):

"The "heating season" months of November through March are typically more vulnerable to price volatility than other months. As a result, the Company plans to hedge approximately 75% to 90% of projected heating season sales volumes based on normal weather conditions. Hedges include storage withdrawals, gas reserves, and Mist production. Hedge targets for summer months are about 60% for May through September and about 65% for the "shoulder" months of April and October."

The development of the monthly physical baseload contract quantities described in item a above is done independently of these monthly hedging targets. Accordingly, there can be instances where some or all of a physical baseload contract is not hedged in order to avoid exceeding a particular month's hedging target.

c. See response to item b(ii) above.

NWN's CONFIDENTIAL response to Staff IR 6