BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UG 166/UM 1216/UM 1218

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DISPOSITION: TARIFF REVISIONS EFFECTIVE; WAIVER GRANTED; SERVICE QUALITY MEASURE ADOPTED

On August 15, 2005, Northwest Natural Gas (NW Natural or company) submitted its annual gas cost tracking and technical adjustment filing, commonly known as its Purchased Gas Cost Adjustment (PGA) filing, with the Public Utility Commission of Oregon (Commission). The PGA allows NW Natural to adjust tariffs annually for known and measurable changes in purchased base gas costs and for changes in amortization rates relating to the PGA balancing account and other deferred accounts. This filing included a proposed increase in annual revenues in Advice No. 05-9A, docketed as UG 166, effective October 1, 2005. In a concurrent filing, docketed as UM 1216, NW Natural requested reauthorization of deferrals under the company's PGA mechanism. In a third filing, docketed as UM 1218, NW Natural is petitioning for approval of a Billing Accuracy Service Quality Measure. A description of the filing is found in Staff's Report, attached as Appendix A, and incorporated by reference.

On September 13, 2005, NW Natural filed replacement tariff sheets to correct errors found by Staff, along with a request to waive statutory notice (L.S.N.). NW Natural requested that all proposed tariff sheets become effective October 1, 2005.

At its public meeting on September 22, 2005, the Commission adopted Staff's recommendation to approve the L.S.N. and allow the tariff revisions of Advice No. 05-9A to become effective with service on and after October 1, 2005. In addition, the Commission adopted Staff's recommendation that a waiver of OAR 860-021-0135 be granted for the application to amortize the balance in the deferred account for partial decoupling, including the effects of a correction for weather data used to calculate the Schedule 190 Partial Decoupling Mechanism from November 15, 2003 to June 30, 2004.

Finally, the Commission adopted Staff's recommended reauthorization to use deferred accounting in accordance with the PGA balancing account, and granted the company's petition to establish a Billing Accuracy Service Quality Measure.

ORDER

IT IS ORDERED that:

- 1. Northwest Natural's request for amortization of deferred accounts, base gas cost changes, and rate changes as requested in Docket No. UG 166 is granted.
- 2. Northwest Natural's request for a waiver of the requirements of OAR 860-021-0135 related to the collection of Schedule 190 underbillings is granted.
- 3. Northwest Natural's request for reauthorization of deferred accounting, for the Purchased Gas Balancing Account mechanism, Schedule No. 169, for one year beginning October 1, 2005, is granted.

- 4. Northwest Natural Gas' tariff revisions in Advice No. 05-9A are allowed to go into effect October 1, 2005, and the L.S.N. is approved.
- 5. Northwest Natural Gas' request for adoption of the Billing Accuracy Service Quality Measure in Docket No. UM 1218 is approved.

SEP 2 9 2005

Hee Bever John Savage Chairman Commissioner Rav Baum Commissioner

Made, entered, and effective _____

A party may request rehearing or reconsideration of this order pursuant to ORS 756.561. A request for rehearing or reconsideration must be filed with the Commission within 60 days of the date of service of this order. The request must comply with the requirements in OAR 860-014-0095. A copy of any such request must also be served on each party to the proceeding as provided by OAR 860-013-0070(2). A party may appeal this order to a court pursuant to applicable law.

ITEM NO. 5, 6 & 7

PUBLIC UTILITY COMMISSION OF OREGON STAFF REPORT PUBLIC MEETING DATE: September 22, 2005

REGULAR	X CONSENT EFFECTIVE DATE Octob	oer 1, 2005
DATE:	September 19, 2005	
TO:	Public Utility Commission	
FROM:	Ken Zimmerman, Deboral Carcia and Ed Durrenberger	
IHROUGH:	Lee Sparling, Ed Busch, Bonnie Ratorn and Judy Johnsor	1
SUBJECT:	NORTHWEST NATURAL: (Docket No. UG 166/Advice N Reflects changes in the cost of purchased gas and techni and makes adjustments to base rates for various program (Docket No. UM 1216) Requests reauthorization of the P mechanism. (Docket No. UM 1218) Petition to adopt new	cal adjustments is. GA deferral

Accuracy Service Quality Measure.

STAFF RECOMMENDATION:

We recommend the Commission approve Northwest Natural's (NW Natural, company or NWN) request to waive statutory notice (L.S.N.) and allow the company's proposed tariff sheets in Advice No. 05-9A to become effective with service on and after October 1, 2005. This filing increases the company's annual revenues for its Oregon operations by approximately \$135.6 million, or 16.9%.

We recommend the Commission approve the company's request for reauthorization to use deferred accounting pursuant to its Purchased Gas Adjustment (PGA) balancing account.

We recommend the Commission grant the company a waiver of OAR 860-021-0135 for the application to amortize the balance in the deferred account for partial decoupling, including the effects of a correction for weather data used to calculate the Schedule 190 Partial Decoupling Mechanism from November 15, 2003 to June 30, 2004.

We also recommend the Commission grant the company's petition to establish a Billing Accuracy Service Quality Measure that has been docketed as UM 1218.

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DISCUSSION:

On August 15, 2005, NW Natural submitted its annual gas cost tracking and technical adjustment filing, commonly known as its PGA filing. The PGA allows the company to adjust tariffs annually for known and measurable changes in purchased base gas costs and for changes in amortization rates relating to the PGA balancing account. In Advice No. 05-9 (docketed as UG 166), the company proposed a \$118.1 million, or 16.7% increase in annual revenues effective October 1, 2005. Although the dollar amount of the proposed increase was correct at the time of the filing, the 16.7% increase should have been stated as 14.4%. The proposed increase reflects changes in the cost of purchased gas and demand charges. It also adjusts temporary base rates for recovery of its costs for intervenor funding, Coos County Distribution System (CCDS) revenue deferral, Y2K refund, decoupling amortization, SMPE revenue, Demand Side Management (DSM) and UM 1148 and UM 1124 refunds. A portion of the decoupling balance NWN proposes to amortize will recover an amount that has not been collected due to an underbilling of customers. As part of this proposal, NWN has included a request for a waiver of the Oregon Administrative Rule requirements related to the underbilling of customers. Permanent adjustments to base rates are proposed to be made for the South Mist Pipeline Extension Project (SMPE), the price elasticity effects of the proposed rate increase, the revenue requirement associated with the CCDS construction, removal of Y2K increments placed in rates in 1999, investment in accelerated bare steel replacement, geo-hazard mitigation and the pipeline Integrity Management Program (IMP). In a separate filing docketed as UM 1216, NW Natural requested reauthorization of deferrals under its PGA mechanism for the 12 months beginning October 1, 2005.

In a third filing, docketed as UM 1218, NW Natural is petitioning for approval of a Billing Accuracy Service Quality Measure.

On September 13, 2005, the company made a substitute filing, Advice No. 05-9A, along with an L.S.N., to make corrections to the company's initial calculations for the effects of changes in purchased gas costs and to make adjustments to base rates for adjusted costs for the company's bare steel program. The net effect of the changes increased the overall percentage increase from 14.4% to 16.9%.

<u>UG 166</u>

This application requests authority to increase rates to: (1) track increases in purchased gas costs, (2) adjust permanent base rates for certain approved programs, and (3) make technical adjustments to amortize NWN's deferred revenue and gas cost accounts. The change in annual revenue is summarized in the table below. Details on each line item are included in this Staff Report and in Attachment A.

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PGA Base Gas Cost Increase ¹	\$ 128,060,839
Removal of Prior Year Temporary Debit Increment	\$ (11,427,674)
Addition of New Temporary Debit Increment	\$ 11,832,359
Permanent Base Rate Adjustments	\$ 7,119,625
Total Proposed Increase	\$ 135,585,149

With these changes, the monthly bill of a typical residential customer on Schedule No. 2 using 59 therms per month will increase by \$10.85, or 15.2%, from \$71.36 to \$82.21. In January, a typical residential customer's consumption of 122 therms would result in a billing increase from \$141.16 to \$163.58.

A summary that compares the impact of this year's proposed PGA rate changes, on both an annual and January basis, for NW Natural, Avista and Cascade residential customers is shown in Attachment B. A graph illustrating each of the three local distribution companies' (LDCs') effective residential rates on a comparable basis is found in Attachment C. The effective residential rate is calculated as follows: the proposed residential rate multiplied by 65 therms plus the monthly customer charge, divided by 65 therms. The graph shows that NW Natural's residential customers have an effective rate of \$1.38398 per therm, while Avista's and Cascade's effective rates are \$1.42223 and \$1.16448, respectively. The table below shows the rates the Commission has approved for NW Natural's residential customers on Rate Schedule No. 2 between 2001 and 2004, and the current proposal.

Date	Customer Charge	Rate per Therm	Percentage Change [*]
October 2001	\$5.00	\$0.99654	
October 2002	\$5.00	\$0.87016	-12.7%
September 2003 (UG 152)	\$6.00	\$0.87870	1.0%
October 2003	\$6.00	\$0.92213	4.9%
October 2004	\$6.00	\$1.10784	20.1%
October 2005 (Proposed)	\$6.00	\$1.29167	16.6%

¹ This amount includes a commodity cost increase of \$145,349,098 and a demand cost decrease of \$17,288,259.

^{*} 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. In 2005, when the rate per therm is combined with the monthly customer charge of \$6.00, the average customer's bill is increased 15.2%, as shown on Attachment B.

NW Natural offers customer assistance programs. Specific information on these programs is readily available to customers on their monthly bills, by telephone, in person at the company offices, and on the company's web site.

Staff Review of Gas Costs

National and Regional Natural Gas Markets

An unprecedented crisis² in the natural gas industry has evolved over the last 10 years. The price of natural gas has risen over 300% and, barring a dramatic reduction in demand or huge new supplies, will rise further. Moreover, because North American natural gas production has plateaued,³ reliability of supply is now also an issue. It is clear that the mistakes of the middle to late 1990s in quantifying remaining North American natural gas reserves and the continuing construction of gas-fired generation to meet the US growing demand for electricity are primary causes of the current crisis. The nonsensical coupling of natural gas and oil prices⁴ also contributed to a run-up in natural gas futures price which forced the cash market to follow. Since 1999, over 395 GW of new gas-fired generation has come on line, with more expected to be built. This is to meet electricity demand that is expected to grow at or near 2% a year through at least 2010. By 2015, power generation will likely consume nearly 11 Trillion cubic feet (Tcf) a year more natural gas than it did in 2003. This generation was constructed and continues to be constructed based on erroneous information that North American natural gas supplies would remain plentiful for many decades.⁵ This, combined with the low upfront capital cost and generally low emissions of such generation compared to other options, made gas-fired generation seem a clear winner. This has left the US with a continually expanding demand for natural gas that it cannot supply domestically (or even from North America). In short, the US has now entered a chronic (continuing) undersupply situation⁶, made worse by the over 232 Tcf of estimated US outer continental shelf and Rockies natural gas that remains off limits for production due to

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² American Chemical Council, American Council for an Energy Efficient Economy, Matt Simmons, Joseph Riva, senior geologist Colorado School of Mines, Frank Clemente, Andrew Weissman, National Petroleum Council (which refrains from actually using the word crisis), the International Energy Agency, the US Energy Information Administration, Exxon/Mobile, Royal Dutch Shell, Chevron, Total, and Alan Greenspan.

³ See Andrew Weissman and the International Energy Agency in particular.

⁴ The two are generally not substitutable except in limited circumstances. Oil and natural gas prices were not historically linked and supply/demand for the two are not generally interconnected. Finally, the physical characteristics of the two are very different, as is their production.

⁵ A few claim large supplies remain untapped due to government restrictions. While it is true that large known supplies are off-limits due to government restrictions, these supplies are not large enough to avert the crisis.

⁶ Undersupply refers both to depletion of supply and the peaking of production capability in North America.

federal restrictions. The push to quickly build more LNG terminals in the US to access world natural gas supply is clear evidence of this US undersupply situation.

Current Cash (Spot) Price of Natural Gas

National prices for natural gas have risen consistently over the last year and are expected to continue to increase through the end of 2005. Many forecasters believe the upward trend will subside in the second or third quarter of 2006. The pattern of volatility in natural gas prices appears unabated during the last year, but did not become more intense. Intra-month volatility has been particularly pronounced over the last 2 years. The Henry Hub spot (cash) natural gas price began the period (October 2004) near \$6.25/MMBtu, remained relatively constant at that level through February 2005, and began to increase noticeably in March 2005. The Henry Hub price is expected to close the period (September 2005) at about \$8.80, a more than 40% increase in price from October 2004.

Northwest natural gas cash prices followed the same general pattern as the Henry Hub, with a basis difference between the Henry Hub and the Northwest averaging about negative \$1.25. Northwest prices began the period at \$5.05 and ended at just over \$7.60, a more than 50% increase in price. Price patterns in the Midwest and Northeast were similar to but not identical to those in the Northwest.

The primary factors that appear to explain these changes in natural gas price are:

- 1. Increased consumer demand (particularly for electric generation), tight supplies, and record crude-oil prices
- 2. No significant change in LNG imports
- 3. Increases in Rockies production are primarily unconventional (more expensive)
- 4. Continuing decline in US production
- 5. Continuing decline in Canadian production
- 6. Continuing growth in the US economy

NYMEX Price

NYMEX natural gas futures prices also increased noticeably over the period, particularly for winter 2005-2006 gas supplies. The table below depicts the changes in the price for each month over the period on the NYMEX exchange as of August 11, 2005. As of September 13, the NYMEX price for most months through September 2006 was up, especially for the winter months which averaged almost \$12. The average increase in the NYMEX price over the period since October 2004 is now 55.62 %. A large share of this increase is the result of the shut-ins caused by Hurricane Katrina, but some is systemic and is likely to remain throughout the coming year.

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NW Natural 2005 PGA Filing (UG 166/UM 1216/UM 1218) September 19, 2005 Page 6

Month	Price – October 2004	Price – August 11, 2005	Change %
October 2005	\$7.00	\$11.00	+57%
November	\$7.00	\$10.90	+56%
December	\$7.50	\$11.70	+56%
January 2006	\$7.60	\$10.90	+43%
February	\$7.60	\$11.90	+57%
March	\$7.40	\$10.60	+43%
April	\$6.25	\$8.50	+36%
May	\$6.20	\$8.20	+32%
June	\$6.10	\$8.50	+39%
July	\$6.00	\$8.60	+43%
August	\$6.10	\$8.65	+42%
September	\$6.05	\$8.60	+42%
AVERAGES	\$6.73	\$9.84	+46%

Over the last year the NYMEX has established a significant premium over current spot (cash) prices, averaging currently over \$2 per MMBtu.

As of September 14, 2005, forecasts of natural gas prices for the upcoming winter and beyond have congealed around several values, including the effects of Hurricane Katrina. First, the price at the Henry Hub is expected to be between \$11.00 and \$11.50 for the final quarter of 2005. This translates to an expected Northwest price of \$9.75 to \$10.25. Prices at the Henry Hub are forecasted to decline slightly in 2006, averaging just below \$8.50, or \$7.25 for the Northwest. First, second, and third quarter prices for the Henry Hub in 2006 are expected to average \$10.02, \$7.53, and \$7.20, respectively, according to the EIA. This translates to approximately \$8.77, \$6.28, and \$5.95, respectively, expected for the Northwest. Changes in weather, demand, or supplies could, of course, lead to changes in these price forecasts or to the actual prices experienced.

In addition to the factors listed above under "Current Cash (Spot) Price of Natural Gas," other factors that appear important in explaining the NYMEX price are:

- 1. The tendency of many NYMEX traders to discount the notion that prices can be controlled through either supply or demand response (e.g., storage, conservation)
- 2. The tendency of NYMEX traders to focus more on bad news than good, and to place more credence in bad news than good
- 3. The role definition of "NYMEX" traders as price makers

- 4. NYMEX traders' generally shallow knowledge of energy engineering and politics, apart from commodity economics⁷
- 5. Treating natural gas as *only* a commodity⁷

Gas Supply and Production

The American Gas Association estimates that 57% (or 1,600 billion cubic feet) of the natural gas flowing to America's homes during the coldest month of the 2005-2006 winter will come from domestic production. This estimated proportion is down by 7% from the 64% from domestic production in 2001-2002. Natural gas from underground storage is expected to supply about 30% of the natural gas used during the 2005-2006 peak winter month, followed by Canadian imports (10.8%), LNG (1.8%) and supplementals, such as propane-air facilities (0.3%). This indicates the increasing importance of storage gas and LNG in meeting US peak winter gas needs. Many factors can influence production. Hurricanes are certainly one of these factors. The effects of hurricane Katrina on natural gas production in the Gulf of Mexico were substantial. As of August 31 at 4 PM (EST), 8.345 billion cubic feet per day of Gulf natural gas production was shut-in, equivalent to 83.46% of daily Gulf natural gas production (which is 10 Bcf per day). Prices reflected this reduced supply. The NYMEX price reached a high of nearly \$11.50/MMBtu at the close of trading on 8/31. The Henry Hub spot price was \$12.69/MMBtu on 8/31, up \$2.84/MMBtu from the price of Friday, 8/26. At market locations across the Gulf region, price increases ranged up to \$4.10/MMBtu with an average of \$0.91/MMBtu. The overall average change in price was \$0.58/MMBtu.

The price at Northwest trading hubs also increased. The price at AECO went up to \$8.75, while Sumas and Rocky Mountain gas increased to near \$9.00. As of September 13, 2005, the price effects of Katrina on NYMEX, the Henry Hub, and other trading hubs across the country had dissipated to a large extent. However, as of this date, an increase of about \$0.50/dekatherm over the pre-Katrina price was visible at most Northwest hubs, while an \$0.80/dekatherm increase was visible at the Henry Hub and about a \$1.00/dekatherm increase was visible on NYMEX. It is unlikely that all of this price increase is due directly to Katrina, since prices were rising at all hubs and on NYMEX prior to Katrina. Katrina apparently has had little impact on receipts of shipments at the LNG terminal at Lake Charles, Louisiana. While no major shortages of natural gas have resulted thus far from Katrina, it now seems possible that shortages could be experienced this winter as a result of Katrina, depending on the severity of the

⁷ An indication of both this ignorance and the treatment of natural gas as only a commodity is a quote in the text, *Trading Natural Gas: A Nontechnical Guide* at page 11, "The supply of natural gas is essentially dependent on only one factor: price." This is nonsense since the major factors determining supply are physical (e.g., geology, physics and chemistry), both in terms of total supply and production.



winter. The Mineral Management Service reported on September 13, 2005 that 3.720 Bcf/d, or 37.20% of daily gas production offshore remained shut-in as a result of Katrina. There are also concerns that it may be as long as four months before full natural gas production from the Gulf is restored.

NW Natural's Natural Gas Purchasing Strategy

Portfolio theory has been accepted for the last two decades as the best means to deal with the risks involved in the purchasing of natural gas by LDCs. This theory is based upon a mathematics of diversification. The theory proposes that LDCs focus on selecting portfolios of gas supplies based on their overall risk-reward characteristics instead of merely compiling portfolios of purchases that each individually has attractive risk-reward characteristics. In a nutshell, LDCs in purchasing natural gas should select portfolios not individual supply options. Such a portfolio should display the three characteristics of balance, flexibility, and diversity, and should be based on the particular circumstances in which the purchases are made. And the greater the risks of price change or supply availability the greater the need to follow the diversity requirements of portfolio theory.

The general elements of an effective LDC gas supply portfolio are laid out in the table below. All portfolios should include each of these options, if available, to the extent possible based on the set of physical, operational, and economic circumstances of the particular LDC.

No.	Portfolio Components
1	Base gas contracts
2	Seasonal contracts
3	Pricing in contracts – mix of fixed prices and index prices
4	Contract take provisions – flexible to allow daily nominations of less than 100% of MDQ without penalty
5	Storage
6	Multiple suppliers for all contract types (more than six for each type if possible)
7	No single supplier with sufficient share to dominate gas supply
8	All gas contracts staggered in term
9	Load management, e.g., interruptible sales contracts, real time pricing sales contracts
10	Buy back contracts
11	Energy conservation, e.g., weatherization
12	Financial hedges, e.g., options, swaps, staggered in timing

The current and likely to continue crisis in natural gas price and supply means that it is even more important that LDCs learn, understand, and apply portfolio practices in their gas purchasing. And because of the ongoing crisis LDCs will need to work to expand



these practices not only to include additional portfolio components but also to include more sophisticated means to evaluate portfolios.

NW Natural's natural gas purchasing process clearly takes into the account the need to purchase a portfolio, not individual contracts for gas. In its natural gas purchasing, NW Natural clearly pursues the objectives of balance, flexibility, and diversity of both gas supply and transportation for that supply. NW Natural's portfolio includes most of the necessary components of a gas supply portfolio. For baseload requirements, NW Natural's portfolio includes take-or-pay firm contracts. Winter (swing) gas is purchased partly through firm take-or-pay contracts and partly through contracts that require nominations. About 10% of NW Natural's portfolio is "spot" purchases made throughout the year.

According to NW Natural's responses to Staff's data requests, upstream gas supply contracts have been negotiated with the following objectives in mind:

"(1) Use a diverse group of reliable suppliers as established by their asset positions, past performance and other factors; (2) Try to match our year-round customer requirements to baseload (take-or-pay) annual or multi-year supply contracts to obtain the most favorable pricing; (3) Use winter only (Nov-Mar) term contracts to match our rise in requirements during the heating season; (4) Leave very little to be purchased on the spot market during the winter due to the likely correlation of high requirements with high spot prices; (5) Use a variety of multi-year contract durations to avoid having to recontract all supplies every year; (6) Use index-related pricing formulas in term contracts to enable easy evaluation of competitive offers and avoid the need for further price negotiation over the term of the contract; (7) Structure the portfolio to provide some opportunity to take advantage when spot prices are favorable; and (8) Avoid over-contracting gas on a take-or-pay basis, which could result in excess gas supplies that must be sold at a loss if requirements fail to materialize, such as during a warm winter."

NW Natural "swaps" monthly index prices for fixed prices either directly with the physical supplier or, more typically, through the use of financial instruments, in order to increase price stability across the year. All take-or-pay volumes are fixed in price. NW Natural also will enter into several "call options" to help limit price exposure on supplies purchased on either a swing or spot basis during the winter months. Overall, NW Natural will hedge the price of approximately 90% of its expected annual purchase volumes for the upcoming 12-month period commencing in November, the traditional start month for its supply contracts. NW Natural also engages in 2-year and 3-year price swaps for a portion of its future requirements to help stabilize prices by dampening year-to-year volatility.

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While NW Natural's overall purchasing process generally follows a portfolio approach, a fuller and more robust application of portfolio methods will be required to effectively address the trends in current natural gas markets toward higher and more volatile prices, and fewer options for LDCs to mitigate these trends. NW Natural and Staff need to work constructively together over the next few months to ensure this objective is achieved in time for the purchasing season, beginning in April of 2006. NW Natural, like many LDCs, feels overwhelmed by the current natural gas supply market, largely seeing itself "at the mercy" of this market. While it is true that LDCs have fewer options for controlling gas price than they had in the past and that natural gas is in crisis, it is false that LDCs are wholly at the mercy of the gas market. But taking advantage of these options will require more than just learning and applying portfolio methods and their associated mathematics. It will require that NW Natural more directly and actively "manage" its gas supply cost on a monthly and sometimes even daily basis, especially during the peak winter period. It also means it will no longer be feasible for NW Natural to financially hedge almost all volumes purchased unless the hedging strategy is in line with the general requirements of portfolio methods and the specific portfolio practices designed for the NW Natural system and circumstances.

Staff's analysis does not indicate that NW Natural's current purchasing strategy is imprudent. However, Staff recommends NW Natural incorporate the following suggestions for future natural gas purchases:

- 1. NW Natural's use of pricing formulae in supply contracts is limited. If possible, NW Natural should look to add more and more flexible pricing options to its supply contracts (e.g., index changes, flexible MDQ, flexible nominations, weather derivatives).
- 2. Expand bidding (e.g., combination supply/transport, bid for hedges, direct comparison of bidding options).
- 3. Look into purchase partnerships with other LDCs or industrial customers.
- 4. NW Natural should analyze the following possible additional gas supply portfolio components:
 - a. More volumes purchased through contracts of 5 years or longer (a workable option for an LDC the size of NW Natural)
 - b. Direct LNG contracting
 - c. Physical fixed price contracting
 - d. Direct contracting for unconventional gas supplies
- 5. Improve coordination of energy efficiency programs, demand-response, buy-back contracts, and gas purchasing, to fine tune how the options might work together and get the maximum benefit in terms of customer cost.

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Staff also recommends that NW Natural more rigorously apply portfolio methods through mathematical testing (statistical) of varied portfolios.

NW Natural's Natural Gas Costs

For the time during which NW Natural purchased gas for the period October 2005 through September 2006, the average cash (spot) price in the Northwest was approximately \$6.00/MMBtu, with prices noticeably higher during the last two months of the period (July and August 2005). The NYMEX price closed the period (September 2006) at over \$9.00 (\$7.75)/MMBtu,⁸ with prices between \$11 (\$9.75) and \$12 (\$10.75) per MMBtu for the winter months of 2005-2006. However, the NYMEX price for September 2006 ranged from \$6.75 (\$5.50) to near \$7.25 (\$6.00) during April and May of 2005, began to rise noticeably in early June, ending finally just over \$9.00 (\$7.75), at the end of August. After a spike during March and early April over \$8.50 (\$7.25), the NYMEX price for the winter months declined below \$8.00 (\$6.75) in April before beginning a climb in May which, thus far, has produced a high near \$12.00 (\$10.75).

For the current PGA, NW Natural proposes to pass through to its sales customers an average delivered natural gas cost of \$0.71073/therm (\$7.11/dekatherm (MMBtu)). This delivered cost of gas is adjusted for normalized sales volumes and line losses, and an adjustment is made for revenue sensitivity. The result is the sales WACOG proposed by NW Natural of \$0.73491. This pass through proposal is reasonable.

Noting once again that future natural gas prices are very likely to be even higher and perhaps more volatile, the changes proposed for NW Natural's purchasing process should help control its future cost of gas, thus limiting future increases and rate shock. NW Natural clearly understands the details of portfolio methods as applied to natural gas portfolio construction. NW Natural should perform more work on mathematical analysis of future portfolio, particularly in assessing the risk-cost trade-offs. As the largest of the LDCs, NW Natural should both lead in analysis and set an example for others to follow (within the limits of their particular load and circumstances).

Technical Adjustments - Deferred Accounts

NW Natural's application proposes to make technical adjustments in amortizing credit and debit balances in its deferred accounts. This activity consists of the following components:

Removal of temporary debit increments currently in place, decreasing revenues by \$11,427,674.

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⁸ Prices in parentheses are estimated Northwest prices based on an average basis difference from national price of (\$1.25).

Addition of new temporary increments to the company's deferred revenue and gas cost accounts as detailed below. The Commission previously authorized all of the deferred amounts subject to amortization.

Temporary Debit (Credit) Increments	Amount
Commodity and demand costs	\$3,440,578
Schedule 190 Partial Decoupling Mechanism	*\$6,220,353
Demand Side Management & Weatherization	\$1,492,000
UM 1148 Parking, Fish Block Refund	(\$3,395)
Y2K Refund	(\$517,859)
UM 1124 West Linn Refund	(\$51,348)
Coos County Revenue Deferral	\$1,100,857
Amortization of Small Remaining Account Balances	\$12,955
Intervenor Funding	\$55,012
SMPE in place revenues	\$83,205
Total	\$11,832,359

*See the next section for a discussion related to this balance

Staff has reviewed the company's technical adjustments and determined that the proposed amortizations are appropriate. The revised amortization increments are incorporated in the energy charge component of the company's primary rate schedules. The net revenue effect of adding the new temporary increments and removing the current increments is an increase of \$404,684 on an annual basis.

Schedule 190 Partial Decoupling Mechanism Error & related requests to waive OAR 860-021-0135 & adopt a Billing Accuracy Service Quality Measure

The current filing includes NWN's application for amortization of the balance in the deferral account for the partial decoupling mechanism set forth in Schedule 190. Schedule 190 uses the principles of deferred accounting to track differences between actual gas usage and the base gas usage that was established in the company's last approved general rate case for all residential and commercial customers. Coincident with the company's annual Purchased Gas Cost and Technical Rate Adjustment filing ("PGA"), customer rates are adjusted for the effect of the amortization of the balance in the Schedule 190 deferral account based on the most recent 12 months ended June. Along with the account balance accrued during the past 12 months, NWN has also proposed to include an amount to collect for an underbilling that took place during the period of October 1, 2004 through September 30, 2005 (billing period).

In May 2005, NWN became aware that weather data for the company's Albany service territory that was provided by a third party vendor were incorrect. An investigation



revealed that the error began approximately October 2003. This means that NWN was not aware of the data error before the Schedule 190 rate adjustments were developed for the 2004 PGA filing, for the 12 months ended June 2004. As the error caused the rate adjustments to be understated, customer rates for October 2004 through September 2005 were lower than they should have been.

Oregon Administrative Rule 860-021-0135 (OAR) provides that a utility will adjust customer bills when an underbilling or overbilling occurs, and if it can be shown that the error was due to some cause and the date can be fixed, the overcharge or undercharge will be computed back to such date, but no more than three years.

In June 2005, when NWN brought the error to Staff's attention, recovery of the underbilling was also discussed. Staff's attorney advised that, as written, Schedule 190 did not appear to have enough information regarding the data sources used to calculate the adjustment to support rebilling customers under the above OAR. However, Staff's counsel suggested that NWN should be able to recover the underbilled amount, if it were able to provide documentation to sufficiently amplify the tariff calculations and thereby support its claim that customers were underbilled.

Subsequently, NWN did provide to Staff sufficient information to warrant a recalculation of the adjustment for the above period and also agreed to modify the tariff to include the missing information. Staff's initial position was that the underbilling clearly falls under the provisions of the OAR and any recovery of under billed amounts would require collection as a line item on customer bills, and NWN would have to meet the notice requirements in the OAR.

NWN suggested that the error be collected through an adjustment of the Schedule 190 deferral account at the time of the 2005 PGA process, arguing that it would be confusing to customers if the provisions of the OAR were applied to the Schedule 190 underbilling. If the per therm rate adjustment that applied only to the effect of the data error correction was listed as a separate line item on all customer bills, along with a written explanation of the correction, it would be confusing because the Schedule 190 rate effect does not normally display on a customer bill, and the average customer has no knowledge of how the Schedule 190 or any other deferral account affects their bill.

From a technical perspective, NWN also argued that if the provisions of the OAR applied to this error, the company would be required to isolate the amounts associated with the October 2003 through June 2004 time period from the current balance in the Schedule 190 deferral account in order to determine the appropriate rate adjustment to be applied as a line item adjustment to customer bills. The remaining balance in the Schedule 190 deferral account would be amortized into rates through the normal process. The result will

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be two separate rate adjustments applied to billing rates for the amortization of Schedule 190 amounts. Because the rate adjustment would be applied on a volumetric basis over the next 12-month period, there are many variables (e.g. weather, customer turnover, etc.) that could cause an under or over amortization of the amounts in both cases. In the case of the normal Schedule 190 amortization, the variance would be captured in the next amortization phase. It is unclear how the company would handle the variance for the isolated amounts associated with the data error correction. In any event, NWN maintained that it seems unnecessary to bifurcate the amounts associated with the correction were to be reflected through the normal Schedule 190 amortization process. NWN further pointed out that customers call whenever something new shows up on their bill. As such, a line item on every customer bill would generate an enormous increase in customer calls to the company as well as to the Commission's Consumer Services Division.

Staff considered and agreed with NWN's arguments regarding the level of customer confusion a line item collection would generate and the logic of having only one rate adjustment for one adjustment schedule. Staff also acknowledged that the average total adjustment to each customer's bill would be a relatively small amount (approximately \$1.74) to warrant such confusion. However, Staff was concerned about the number of billing errors NVVN has made in a relatively short time frame, so after a thorough analysis of the issues, Staff proposed the following compromise: Staff would support NVVN's request to waive the requirements of the OAR, and collect the underbilling through a Schedule 190 deferral adjustment, if NVVN would agree to enter into a Billing Accuracy Service Quality Measure (B-1 SQM), the terms of which were agreeable to NWN, Staff, and CUB. The final contingency was that NWN would petition the Commission to adopt a completed B-1 SQM during the 2005 PGA process.

Generally, Staff does not support a request from a utility to waive a requirement of the Oregon Administrative Rules (OARs). From Staff's perspective, the OARs usually provide the right balance between customer rights and responsibilities and utility rights and responsibilities. However, in this instance Staff recommends that the Commission grant NWN's request for a waiver. In Order No. 02-135⁹, the Commission agreed that waiver of a rule is sometimes in the public interest. The implementation of a B-1 SQM that, from January 2006 though September 2012, reduces NWN's revenue requirement if it does not meet specific billing accuracy standards, is far more valuable to customers and serves a greater good than requiring NWN to collect the Schedule 190 underbilling as a line item.

⁹ Order 02-135, page 4, says in part, The Commission generally does not favor exempting an entity from compliance with any administrative rule. Nonetheless, entities are currently allowed to seek a waiver from the application of certain rules, and we have, on occasion, found it to be in the public interest to grant such a request.



The B-1 SQM provides a good incentive to NWN to significantly reduce the number of billing errors imposed on customers.

NWN advised Staff that it questioned whether the error did constitute an underbilling subject to the OAR but agreed to Staff's proposal. NWN subsequently filed a petition to adopt a B-1 SQM which has been docketed as UM 1218. The final B-1 SQM attached to NWN's petition is the result of many hours of collaboration by Staff (both Utility Program and Consumer Services), CUB, and NWN, represents a good compromise of the positions advocated by each group, and should serve customers well.

The proposed B1 SQM accomplishes the following: (1) provides assurance that NWN shall achieve a billing accuracy target greater than or equal to 99.4%; (2) provides a remedy to customers for large-impact, systematic billing errors by reducing the company's revenue requirement if the level of accuracy for billing falls below the 99.4% target; (3) provides standards for Commission notification of billing errors, and for monitoring and reporting on billing accuracy; and (4) does not change the function and application of the existing C1 Service Quality Measure for at-fault customer complaints.

NWN appears to have met the necessary requirements which entitle it to collect the Schedule 190-related underbilling. For reasons previously stated, Staff recommends the Commission waive the notice requirements of OAR 860-021-0135 and allow NWN to collect the Schedule 190 underbilling through an increase to the 2005 Schedule 190 deferral account, and grant NWN's petition to adopt, effective January 1, 2006, the B-1 SQM docketed as UM 1218.

Other Base Rate Adjustments

Bare Steel Replacement Program: Commencing in 2002 and continuing until 2021, NW Natural is removing bare steel pipe from its distribution system on an accelerated schedule. Bare steel pipe is leaky and requires higher levels of cathodic protection. The company has authorization to invest an incremental \$3 million in accelerated bare steel replacement above a base level of investment of \$3 million under this program. At the time of the annual PGA, the company is allowed to include in rates the cost of service associated with accelerated bare steel replacement for the preceding 12 months. This rate treatment for accelerated bare steel replacement costs is subject to an annual limit of \$6 million beyond which the company must gain approval for treatment under the program. The company initially reported spending \$6.55 million for the 12 months starting October 1, 2004. Staff, NWIGU and CUB discussed the unexpectedly large program costs with NW Natural. The company agreed to reduce the amount requested for recovery under the accelerated bare steel program to the maximum annual limit of \$6 million with the balance, \$550,000, subject to audit, counting against the budget for the succeeding year. Staff



audited NW Natural's costs for this program in July 2005. Some program costs were disallowed and the company made the appropriate corrections to its accounts. The rate impact of the revenue requirement for this program is an increase of \$848,000 over the \$1,338,000 currently in rates. For the period October 1, 2005 to September 30, 2006, a total of \$2,186,000 will be collected.

<u>Geo-hazard Repair and Risk Mitigation</u>: Commencing in 2002 and continuing until 2006, NW Natural is repairing and mitigating landslide hot spots, erosion and other geo-hazards. Staff audited NW Natural's costs for this program through February 2005, and verified that the company made the appropriate corrections based on Staff's review. The rate impact of the revenue requirement for this program is an increase of \$19,000 over the \$341,000 currently in rates. For the period October 1, 2005 to September 30, 2006, a total of \$360,000 will be collected.

Integrity Management Program: This new base rate increment applies adjustments to permanent rates related to investments in inspection and subsequent repair to transmission pipelines within the company's system as prescribed by the Office of Pipeline Safety in their "IMP Rule" and in Commission Order 04-390. Program costs were audited in February 2005; adjustments were recommended by Staff and verified to have been made by the company. For the period from October 1, 2005, to September 30, 2006, \$535,000 will be collected.

<u>South Mist Pipeline Extension</u>: This base rate increment applies the permanent effects of SMPE pursuant to Commission Order No. 03-507 in Docket UG 152. The SMPE connects NW Natural's Mist storage fields to Williams' Northwest Pipeline at Molalla and provides additional capacity to expand the use of the Mist storage facility, while at the same time reinforcing pressure and volume deliverability to the southern portions of the company's distribution system. NW Natural's 2000 Integrated Resource Plan, acknowledged by the Commission in Order No. 00-782, identified Mist area storage to be a lower cost option for meeting future natural gas load requirements than reserving natural gas transmission capacity on pipelines from the major production areas. The SMPE provides the necessary inflow and takeaway capacities to fully utilize Mist storage capabilities.

On September 22, 2004, the SMPE project was put in service. On December 13, 2004, the Molalla Gate Station was completed, increasing the injection capacity at Mist through the SMPE and completing this project. Staff audited the final program costs through the end of December 2004. The last permanent increment to base rates for the completion of the project is the addition of the Molalla Gate Station and the SMPE true up. This results in a net increase of \$130,627 to be collected from October 1, 2005 through September 30, 2006.

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<u>Coos County Distribution System:</u> The Coos County Distribution system was placed in service at the end of October 2004. This project brought one of the nation's largest remaining population centers not previously served with natural gas into the NW Natural gas distribution system. The CCDS costs were deferred from October 29, 2004 through September 30, 2005; the related revenue requirement of \$1,100,857 is now proposed to be added to temporary base rates as shown on the table on page 12. In addition, permanent base rates are proposed to be adjusted to collect the ongoing revenue requirement associated with the construction of the distribution system, \$1,297,000, less an offsetting Coos County Contribution of \$113,757 funded by the company as authorized in Order 04-702 which has the net effect of collecting \$1,183,243 from October 1, 2005 through September 30, 2006.

<u>Y2K Increment Removal:</u> In addition to a temporary increment to refund an overcollection of the Y2K amortization as shown in page 12, permanent rates are proposed to be adjusted to remove the Y2K increment put in rates in 1999. This is a permanent adjustment to rates in the amount of \$1,267,708.

<u>Price Elasticity Adjustment:</u> This adjustment, included at the time of price changes in the company's PGA filings each year since 2002, accounts for the effect that rate changes have on customer usage. Permanent rates will be adjusted to collect \$5,671,463 from October 1, 2005 through September 30, 2006.

Earnings Review and 3% Test

Until 1999, as a matter of policy, the Commission conducted earnings reviews for both prospective purchased gas costs changes and PGA-related deferrals. The Commission then adopted OAR 860-022-0070, which requires an annual spring earnings review in lieu of an earnings review related to prospective purchased gas cost changes. In addition, Section (8) of the rule states that an earnings review is not applicable to amortization of deferred gas costs if the LDC assumes at least 33% of the responsibility for commodity cost differences in the risk sharing mechanism. NW Natural's mechanism includes a 33% sharing level, so amortization of deferred gas costs in this PGA filing are exempt from an earnings review.

ORS 757.259(6) and (7) states that the overall annual average rate impact of the amortizations authorized under the statute may not exceed 3% of the natural gas utility's gross revenues for the proceeding calendar year, unless the Commission finds that allowing a higher amortization rate is reasonable under the circumstances. NW Natural's proposed amortizations are below the 3% cap and may be implemented as proposed.

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<u>UM 1216</u>

In this filing, NW Natural requests reauthorization of deferrals pursuant to its automatic adjustment clause, the Purchased Gas Adjustment (PGA) mechanism. The information contained in the application is consistent with the requirements of ORS 757.259, 757.210 and OAR 860-027-0300. The application states that continued deferral of these cost and revenue differences minimizes the frequency of rate changes and appropriately matches costs borne and benefits received by ratepayers, consistent with ORS 757.259(2)(e). The reasons cited for reauthorization are still valid. Staff recommends the Commission approve the request for reauthorizing the PGA deferral mechanism, effective October 1, 2005.

PROPOSED COMMISSION MOTION:

NW Natural's request for: 1) amortization of deferred accounts, base gas cost changes, and other rate changes as requested in Docket UG 166; 2) a waiver of the requirements of OAR 860-021-0135 related to the collection of Schedule 190 underbillings; 3) reauthorization of deferred accounting for NW Natural's Purchased Gas Balancing Account mechanism, Schedule No. 169, as requested in UM 1216 for one year beginning October 1, 2005; 4) waiver of statutory notice to allow the associated tariff sheets of Advice No. 05-9A to go into effect October 1, 2005; and 5) adoption of the Billing Accuracy Service Quality Measure in Docket UM 1218, be approved.

Attachments

NW Natural 2005 PGA

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NW Natural

PGA Effects

Gas Cost Changes

Commodity Change	\$145,349,098
Demand Change	(\$17,288,259)
Total Gas Cost Change	\$128,060,839
Permanent Rate Changes	
Addition of Proposed Bare Steel	\$2,186,000
Removal of Current Bare Steel	(\$1,338,000)
Addition of Proposed Geohazard	\$360,000
Removal of current Geohazard	(\$341,000)
Addition of Proposed Pipeline Integrity	\$535,000
Removal of Y2K	(\$1,267,708)
Addition of SMPE gate station	\$404,359
SMPE True Up	(\$273,732)
Addition of Coos Bay Revenue Requirement	\$1,297,000
Company Coos Bay Contribution	(\$113,757)
Application of Elasticity Adjustment	\$5,671,463
Total Permanent Adjustments	\$7,119,625
Temporary Increments	
Amortization of 191 Account Gas Costs (Demand, Commodity and Coos Bay Demand)	\$3,440,578
Ammortization of 186 for DSM	\$1,492,000
Ammortization of Remaing Balances, Fish/Garden, Etc	\$12,955
Ammortization Of UM1148 StipulationParking	(\$3,395)
Amortization of in place SMPE revenues	\$83,205
Amortization of intervenor Funding	\$55,012
Amortization of Decoupling	\$6,220,353
(Residential and Commercial) Coos Bay Revenue Deferral	\$1,100,857
UM1124 West Linn Refund	(\$51,348)
Y2K Refund	(\$517,859)
Total Proposed Temporary Increments	\$11,832,359
Removal of Current Temporary Increments	(\$11,427,674)
Total Net Temporary Increments	\$404,684
Total Change	\$135,585,149

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Comparison of Proposed Rate and Bill Increases for Oregon Local Distribution Companies by Class of Service (October 2005 PGAs)

					RATE IMPACTS	PACTS					-		BILL IMPACTS	ACTS					
Rate Description Descripion Description Descripion <th></th> <th></th> <th></th> <th>Current</th> <th>Proposed</th> <th>Change</th> <th>%-Change</th> <th></th> <th></th> <th>Current</th> <th></th> <th></th> <th>0%_Change</th> <th>Annul</th> <th></th> <th></th> <th>-</th> <th></th> <th></th>				Current	Proposed	Change	%-Change			Current			0%_Change	Annul			-		
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Attachment B

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Attachment C

ORDER NO. 05-1055

APPENDIX A PAGE<u>21</u> OF <u>21</u>