

**BEFORE THE PUBLIC UTILITY COMMISSION**

**OF OREGON**

UG 177/UM 1339

In the Matters of )  
 )  
 NORTHWEST NATURAL GAS COMPANY, )  
 dba NW NATURAL )  
 )  
 Annual Purchased Gas Cost and Technical )  
 Rate Adjustments. (UG 177) )  
 )  
 Application for Reauthorization to Defer )  
 Certain Expenses or Revenues. (UM 1339) )

ORDER

**DISPOSITION: APPLICATIONS APPROVED**

On August 31, 2007, the Public Utility Commission of Oregon (Commission) received two applications from Northwest Natural Gas Company, dba Northwest Natural. A description of the filings and their procedural history is contained in the Staff Report, attached as Appendix A and incorporated by reference.

Based on a review of the applications and the Commission’s records, the Commission finds that the applications satisfy applicable statutes and administrative rules. At its Public Meeting on October 30, 2007, the Commission adopted Staff’s recommendation to approve the applications.

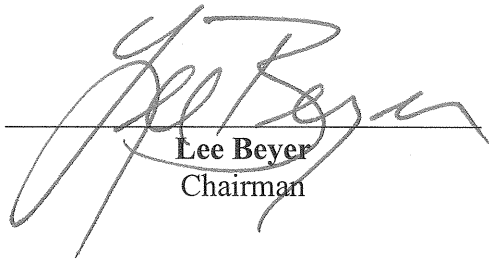
**ORDER**

IT IS ORDERED that:

1. Waiver of statutory notice to allow the associated tariff sheets of Advice Nos. 07-7A, 07-7B, and 07-7C to go into effect November 1, 2007, is approved.
2. The amortization of deferred accounts, base gas cost changes, and other rate changes as requested in docket UG 177 is approved.

3. Reauthorization to use deferred accounting pursuant to Schedule P, as requested in docket UM 1339 for one year beginning November 1, 2007, is approved.

Made, entered, and effective OCT 30 2007.

  
\_\_\_\_\_  
**Lee Beyer**  
Chairman

  
\_\_\_\_\_  
**John Savage**  
Commissioner

  
\_\_\_\_\_  
**Ray Baum**  
Commissioner



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 by filing a petition for review with the Court of Appeals in compliance with ORS 183.480-183.484.

**PUBLIC UTILITY COMMISSION OF OREGON  
STAFF REPORT  
PUBLIC MEETING DATE: October 30, 2007**

REGULAR   X   CONSENT        EFFECTIVE DATE   November 1, 2007  

DATE: October 23, 2007

TO: Public Utility Commission

FROM: Ken Zimmerman, Lynn Kittilsorn and Carla Owings

THROUGH: Lee Sparling, Ed Busch, Bonnie Tatom and Judy Johnson

SUBJECT: NORTHWEST NATURAL: (Docket No. UG 177/Advice No. 07-7)  
Reflects changes in the cost of purchased gas and technical adjustments and makes adjustments to base rates for various programs.

(Docket No. UM 1339) Requests reauthorization of the PGA deferral mechanism.

**STAFF RECOMMENDATION:**

Staff recommends the Commission approve Northwest Natural's (NW Natural, Company or NWN) request to waive statutory notice (L.S.N.) and allow the proposed tariff sheets in Advice Nos. 07-7A, 07-7B and 07-7C to become effective with service on and after November 1, 2007. This filing decreases the Company's annual revenues for its Oregon operations by approximately \$81.9 million, or 9.0%.

Staff further recommends the Commission approve the Company's request to reauthorize the use of deferred accounting pursuant to its Schedule P, Purchased Gas Cost Adjustments.

**DISCUSSION:**

On August 31, 2007, 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 related to the PGA account and other deferred accounts. The filing is docketed UG 177, Advice No. 07-7, with a requested effective date of November 1, 2007. NW Natural proposed a decrease of approximately \$59.1 million, or 6.5% in annual revenues for its Oregon operations for changes in purchased gas costs

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and certain temporary and permanent adjustments. On October 12, 2007, NW Natural replaced its filing in its entirety with a supplemental filing docketed as Advice 07-7A to become effective with service on and after November 1, 2007, along with an L.S.N. application, to make updates to the Company's initial calculations for the effects of changes in purchased gas costs. This filing decreases the Company's annual revenues for its Oregon operations by approximately \$81.9 million, or 9.0%.

On October 16, 2007, NW Natural filed Advice No. 07-7B to ensure that the correct margins for use in the calculation of the WARM Adjustment Factor are correctly reflected in the Company's tariff. This sheet was inadvertently omitted from the Company's previous filings in this docket. On October 22, 2007, NW Natural filed Advice No. 07-7C to ensure that the correct adjustments to rates for storage inventories are correctly reflected in the Company's tariff. This sheet was inadvertently omitted from the Company's previous filings in this docket. Neither of these filings changed other tariff sheets previously filed.

### UG 177

NW Natural requests approval to decrease rates to: (1) track decreases 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 Table 1, below. Details on each line item are included in this Staff Report and in Attachment A.

**Table 1: Change in Annual Revenues**

PGA Base Gas Cost Decrease <sup>1</sup>	\$(41,171,233)
Removal of Prior Year Temporary Debit Increment	(3,064,959)
Addition of New Temporary Credit Increment	(35,425,211)
Permanent Base Rate Adjustments	(2,260,115)
Total Proposed Decrease	\$(81,921,518)

With these changes, the monthly bill of a typical residential customer on Schedule No. 2 using 56 therms per month will decrease by \$6.50, or 8.0%, from \$81.07 to \$74.57. In January, a typical residential customer's consumption of 112 therms would result in a billing decrease from \$156.14 to \$143.14.

<sup>1</sup> This amount includes a commodity cost decrease of \$35,208,739 and a demand cost decrease of \$5,962,494.

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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 56 therms plus the monthly customer charge, divided by 56 therms. The graph shows that NW Natural's residential customers have an effective rate of \$1.33163 per therm, while Avista's and Cascade's effective rates are \$1.51843 and \$1.26241 respectively. Table 2 shows the rates the Commission has approved for NW Natural's residential customers on Rate Schedule No. 2 between 2003 and 2006, and the current proposal.

**Table 2: Residential Rates 2003 – 2007 (Proposed)**

Date	Customer Charge	Rate per Therm	Percentage Change <sup>2</sup>
October 2003	\$6.00	\$0.92213	
October 2004	\$6.00	\$1.10784	20.1%
October 2005	\$6.00	\$1.29167	16.6%
November 2006	\$6.00	\$1.34052	3.8%
November 2007 (Proposed)	\$6.00	\$1.22449	-8.7%

NW Natural offers customer assistance programs. NW Natural also offers energy efficiency programs through Energy Trust of Oregon (ETO). 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, as well as on ETO's web site.

### Staff Review of Gas Costs

#### National and Regional Natural Gas Markets

In terms of natural gas prices and natural gas price volatility, 2006 and thus far in 2007 have been quiet.

- The winter of 2006-2007 was generally mild; no great demand was placed on existing natural gas supply;
- The summer of 2007 was mild in terms of the use of natural gas to generate electricity to meet cooling demand;

<sup>2</sup> 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 2007, when the rate per therm is combined with the monthly customer charge of \$6.00, the average customer's bill is decreased 8.0%, as shown on Attachment B.

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- No major supply interruptions have occurred to date; the hurricane season has been mild and uneventful;
- The prices of natural gas and oil have generally de-linked—rising oil prices are not currently carrying natural gas price along;
- Gas storage injections and inventory levels are at historic highs;
- The futures markets, including speculators and hedge funds traders, have generally not been able to promote any sustained increase in natural gas prices; futures prices across the country have consistently and generally declined, with particularly sharp declines in the West (e.g., Rockies);
- Domestic supply has remained steady, with no substantial decline—the number of wells being drilled for domestic natural gas has increased about 300%, helping domestic supply remain steady or even increase slightly;
- Liquefied natural gas (LNG) imports, while not growing, remain poised to increase over the next several years; and
- The development of unconventional natural gas sources (e.g., coalbed methane, tight sands, deep-water) has expanded with significant events on both the technical and financial fronts.

Of course, other potential factors may lead to increases in the price of natural gas. LNG imports into the US, while expanding, are not increasing at the rate expected. Plus, many other countries in the world are bidding for LNG supplies to help kindle their economic growth. Biggest among these are Japan, Korea, and several countries in Europe. Second, imports of natural gas from Russia to Europe, China, etc., are not growing as quickly as expected, and it appears that Russia (the single largest holder of natural gas reserves in the world) is increasingly using natural gas and oil as foreign policy tools to seek control of the actions of other nations. Third, weather can play a large part in increasing natural gas price. For example, an up tick in the severity or length of the US hurricane season or an exceptionally cold winter in either the US or Europe could lead to significant increases in prices. Fourth, any large increase in either industrial production or the use of natural gas for electric generation could potentially lead to increases in the price of the resource. Fifth, any failure in the expected level or growth in the level of domestic natural gas production, either conventional or unconventional, could lead to an increase in price. Sixth, imports of natural gas from Canada have declined since at least 2004 and declined by about two-thirds since 2005. Finally, the futures markets for natural gas, particularly the hedge funds involved in those markets, dominate both that market and the physical natural gas market in terms of money invested. With those futures markets not currently functioning in accordance with even the most expansive understanding of “market theory,” the impacts of these markets on future natural gas prices cannot be understood and thus are difficult to accurately forecast. On this front there is some good news. Both the Federal Energy

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Regulatory Commission (FERC) and the Commodity Futures Trading Commission (CFTC) have recently opened “market manipulation” cases on one of the largest energy hedge funds, Amaranth. There is a jurisdictional dispute the courts will need to settle before either FERC or the CFTC can go forward on these cases. After that, Staff will know more about whether the FERC or CFTC, or the two together, can reign in these massive energy hedge funds.

The US Department of Energy’s (DOE) Energy Information Administration (EIA) weekly natural gas update shows the history of natural gas prices on NYMEX and physically at the Henry Hub, as well as the price of West Texas Intermediate (WTI) crude oil. Figures 1 and 2 are snapshots from those numbers for the period November 2006 to September 2007. The pattern for natural gas prices is steady or declining since early in 2007, both at NYMEX and physically at Henry Hub. Since June, prices have noticeably declined. Also, these prices are overall notably lower than the prices in 2006. Figure 1 demonstrates clearly that oil and natural gas prices have de-linked. In Figure 2 (see top of next page), estimated prices for the Northwest Pacific (NWP) winter and PGA year futures strips are also depicted. Unlike the pattern for prices in the current futures months, both winter and PGA-year strips declined until July, shot up by over a dollar during August, and then declined almost a dollar in September.

**Figure 1: Natural Gas and WTI Prices, Nov 2006 – Sep 2007**

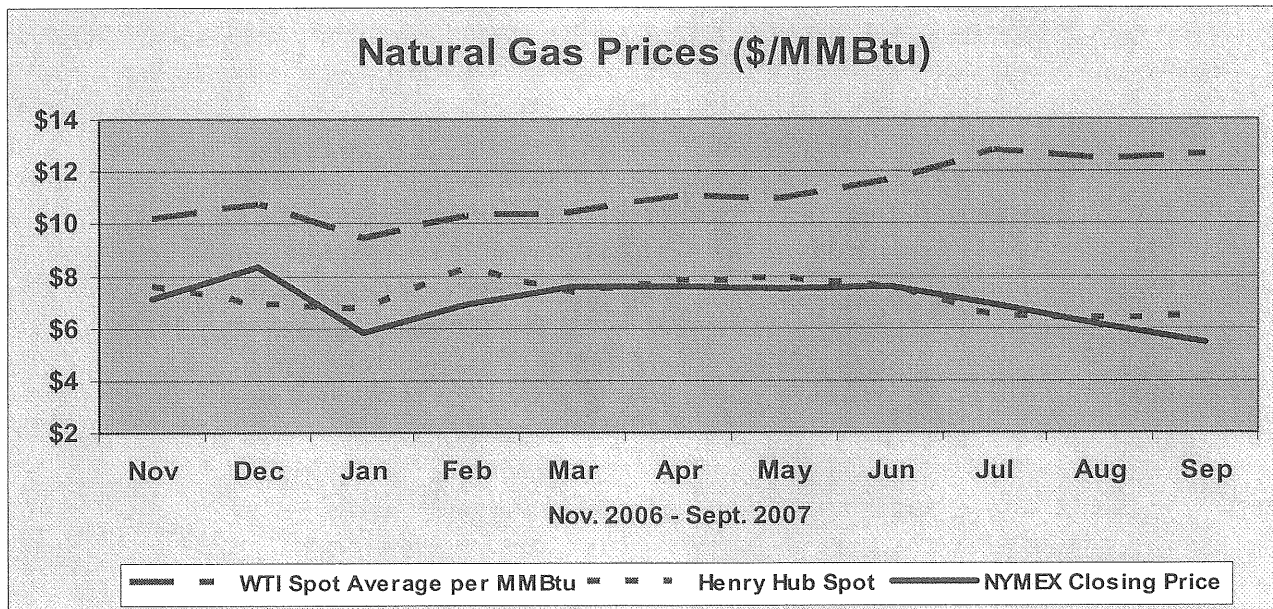
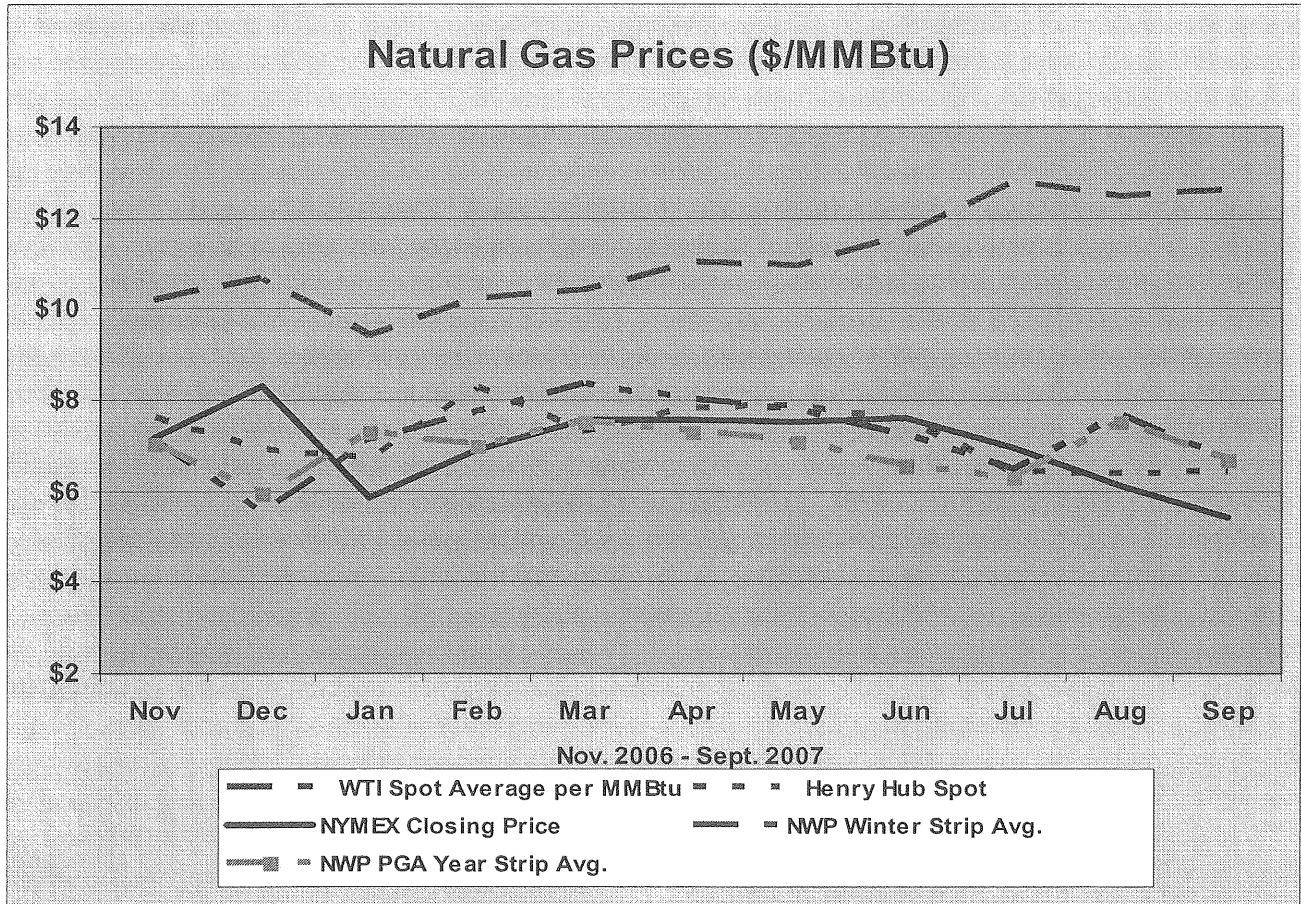




Figure 2: Natural Gas (National and NWP) and WTI Prices, Nov 2006 – Sep 2007



The EIA forecast of the natural gas price at the Henry Hub has fluctuated since January within a generally narrow range. The next 12-months EIA forecast began the year at \$7.06/MMBtu. In its August 7, 2007 forecast, the EIA projected an average Henry Hub price for 2007 of \$7.45/MMBtu; for the next 12-months beginning August 2007 at the Henry Hub of \$7.66/MMBtu; and projected an average price for the winter season at the Henry Hub of \$8.27/MMBtu. These forecasts and actual prices translate to natural gas prices, for the hubs from which Oregon LDCs purchase, of about \$7.00/MMBtu for the PGA year and about \$7.50/MMBtu for the winter season. Of course, all Oregon LDCs "lock-in" the price of a portion of their natural gas supply portfolio well in advance of the 2007-2008 winter season, including multi-year fixed price financial contracts, and place natural gas into storage during the off-peak season for withdrawal during the winter season. This means the overall pricing for their portfolios cannot, and properly should not, reflect only current natural gas prices and price forecasts.



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Barring disturbing factors (e.g., severe hurricane damaging a large portion of Gulf Coast production, colder than expected winter), the current pattern of falling and low-volatility pricing is likely to continue at least through the winter of 2007-2008.

*Natural Gas Purchasing Strategies*

Staff continues to emphasize that "portfolio purchasing" 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 purchasing approach requires 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. The greater the risks of price change or supply availability, the greater the need to follow the diversity requirements of portfolio theory.

Staff emphasizes the following points about portfolio purchasing that should be applied by all three LDCs. These points have been reviewed in meetings with the LDCs throughout the past three years and were included in last year's PGA Staff Reports.

1. In specific practice, portfolio purchasing means the LDC must purchase a combination of resources, including demand-side options, to meet the needs of its customers that are balanced, diverse, and flexible. Thus it is not just the size of each resource making up the portfolio that must meet these objectives but also such elements of the portfolio as timing, duration of supply contract, location of supply, contracting form/type, pricing, etc.
2. While the current natural gas market arrangements do limit the options of LDCs in controlling the level and volatility of the price paid for natural gas, portfolio purchasing provides an array of tools to retain at least some LDC control over these pricing concerns.
3. Overemphasizing any particular resource option(s) in a portfolio is contrary to the proper application of portfolio purchasing, no matter the precise form of that overemphasis or the resource(s) to which it is applied. In 2005, all the Oregon LDCs entered into financial hedging arrangements for too large a share of their natural gas supply. NW Natural did not make that mistake in its 2006 PGA portfolio and has not made it in the current PGA filing.

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4. Purchasing natural gas via the portfolio approach requires more attention and effort by the LDC to gather, review, interpret, and apply market intelligence in constructing the portfolio; in monitoring the actual functioning of the portfolio constructed; and in modifying the portfolio as market or operational changes require. This is hard work, especially when compared to purchasing natural gas from daily, weekly, or monthly cash markets.
5. There is no "one size fits all" in portfolio construction. Each portfolio must be designed, constructed, applied, and reviewed based on existing and expected market conditions, and on the demand, supply, operational, and general economic circumstances of the LDC for whom the portfolio is being constructed.
6. Each and every portfolio decision and action must be as fully documented as possible. That is, the details behind every decision and action in making a portfolio choice must be available for review and analysis by the LDC and Staff without any extraordinary effort on the part of either the LDC or Staff.

NW Natural's Natural Gas Purchasing Strategies

In its 2006 PGA portfolio, NW Natural had financially fixed the price for about 47% of its projected annual sales and expected to provide from storage about 14% of the volumes its customers required. That picture has not changed this year, as shown in Table 3 below.

**Table 3: NW Natural Gas Supply Portfolio**

Resource	Percentage in Portfolio
Pipeline deliveries of natural gas	85.41%
Storage deliveries of natural gas	14.59%
Percentage of firm natural gas deliveries fixed via financial hedges	49.95%

NW Natural plans to financially fix the price of additional volumes subsequent to the PGA filing, but its target for financial hedging is approximately 65% of expected annual sales. Staff remains convinced that the target for fixed-price financial hedging by NW Natural should not exceed 60% of expected annual sales volumes. Staff would be comfortable with a final level of fixed-price financial hedging toward the lower end of the range 50%-60%, however. If NW Natural ends its financial hedging at 50% of expected annual volume, this would have the Company hedging about 65% of these volumes when storage is included. At a 60% financial hedging level, the total hedged volumes would be about 75% of expected annual sales. This would still be a reasonable and

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prudent portfolio for an LDC of NW Natural's size, operational characteristics, and market options.

With regard to storage, last year Staff raised concerns about NW Natural's recovery of 100% of its commodity storage costs. Staff was not certain NW Natural was operating its storage in the most effective ways to secure both reliable service and reasonable price arbitrage between off-peak and on-peak natural gas prices. Staff suggested and NW Natural agreed to have an independent, outside qualified party perform a study to answer these questions. That study was performed by Altos Management Partners, Inc. (Altos), an experienced and knowledgeable analyst of natural gas questions and issues. Altos' report on its analysis of NW Natural's storage operations concluded that:

- NW Natural's supply and storage portfolio is adequate to ensure reliability. It was fully adequate to meet actual firm load during the past several years. Furthermore, it would have been adequate to handle any load distribution that could reasonably be expected.
- The existing physical setup is adequate to serve firm load requirements. NW Natural's ability to accept deliveries at gates located at multiple sites and adjust nominations to suit load requirements reduces NW Natural's pipeline infrastructure requirements.
- In order to better capitalize on price arbitrage opportunities and better meet durational issues, an expansion of Mist storage capacity would be desirable. It will also mitigate the impact of storage withdrawal ratchets by prolonging the duration of maximum or near maximum withdrawal rates. However, a cost/benefit analysis needs to be conducted before a decision is made.
- Finally, NW Natural's storage operations during the past few years realized through price arbitrage a net savings of over \$40 million. Storage was efficiently dispatched to capitalize on price arbitrage opportunities, as well as meet load. NW Natural's strategy to capitalize on arbitrage opportunities, provided that there are adequate storage inventories, has paid off for its ratepayers. The amount saved represents almost half of the theoretical maximum savings with perfect foreknowledge of future prices and loads which we find is truly impressive. (pages 4-5)

Altos' report answers the operational questions about storage Staff raised during its review of the Company's 2006 PGA portfolio. Altos' proposal that NW Natural expand Mist storage capacity will be addressed separately.

NW Natural's current portfolio for 2007-2008 is consistent with the Company's long-term financial hedging history. The table on the next page is taken from the "*Public Utility Commission of Oregon Natural Gas Procurement Study*," published in 2005. During the

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period between 1999 and 2003, NW Natural generally hedged financially about 40%-50% of its supply requirement, with 2000-2001 being the exception at 66%. In 2003-2004 the percentage of natural gas supply financially hedged jumped to about 82% and remained near this level for 2005-2006. With its current and last year's PGA filings, NW Natural has returned to the pre-2003 hedging pattern. At the same time, the Company appears to have reduced its use of fixed-price contracts and substantially increased the level of natural gas it plans to purchase at index (unhedged short-term supply or firm supply at index prices) prices. These are appropriate developments for an LDC the size of NW Natural, operating in the context of the current Northwest and US natural gas markets. Between financial hedging and storage, NW Natural has fixed the price of about 65% of its gas supply in its current PGA portfolio.

**Table E.3. NW Natural Natural Gas Purchases, PGA Years 1999/2000 through 2003/2004 (percent of total).**

Strategy	99/00	00/01	01/02	02/03	03/04
Without Hedge	7.0	9.3	7.2	4.5	1.7
With Hedge <sup>3</sup>	41.9	66.1	49.5	54.7	82.2
Fixed Price <sup>4</sup>	31.1	8.2	30.2	27.0	3.3
Storage	20.0	16.4	13.1	13.9	12.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

NW Natural's current hedging program appears reasonable. NW Natural's overall hedge price is approximately \$7.36/Dth, just below the range of futures pricing Staff can support as reasonable (see Table 4).

**Table 4: Staff's Hedging Price Range for 2007 PGAs<sup>5</sup>**

High	Low
\$7.80	\$7.38

However, Staff is concerned that NW Natural's forecast of spot or short-term index prices for the coming PGA year is based solely on a 60-day futures strip, with no consideration of forecasts based on analysis of fundamental market variables. NW Natural has access to at least two such "fundamentals" forecasts but has given neither

<sup>3</sup> Price with a supplier is tied to an index, but a financial transaction (swap or option) with a separate counterparty fixes the price.

<sup>4</sup> Price was fixed with a supplier for some period of time.

<sup>5</sup> This range is based on a weighted average made up of high and low prices for the winter and PGA year Northwest Pacific winter strips combined with the averages for these strips over the period November 2006 to September 2007.

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any weight in arriving at the Company's forecast of future spot (cash) prices for natural gas. In Replacement Exhibit A attached to its October 12, 2007, revised PGA filing, NW Natural explains its position on this topic:

NW Natural completed a number of analyses based on the data it had available at the time this PGA was initially filed, and then repeated its analyses with updated data for this later re-filing. NW Natural created a number of scenarios, giving various weights to the two fundamentals forecasts and NYMEX data. Based on these analyses, NW Natural determined that a forecast that exclusively utilized NYMEX data, and a forecast that used a blend of NYMEX and EIA data, resulted in an identical price outcome. A forecast that blended all three data sources, and a forecast that used NYMEX and Wood-Mackenzie data, were also identical, but slightly (\$.001) higher.

Based on these results, and our belief that NYMEX data is the most appropriate for development of our forecast, NW Natural did not use the Wood Mackenzie or EIA forecast in its development of its WACOG. (p. 8)

Staff does not wish to belabor this point, but wants to make its position clear on the use of blended forecasts of future spot (cash) prices by LDCs.

1. This is primarily a matter of risk mitigation. One of the proper methodologies to mitigate spot price forecasting risk (and certainly the easiest to apply in the PGA portfolio) is to blend market intelligence (e.g., NYMEX futures strips averages) with the prices in fundamentals forecasts. NW Natural's failure to take this action in its estimates of future index (short-term) natural gas prices decreases NW Natural's ability to protect itself and its customers from the consequences of gas price changes.
2. NW Natural's conclusion that blended forecasts and use of a NYMEX futures average "...resulted in an identical price outcome" is only accurate for the weightings for the "blends" the Company chose. The simplest and most straightforward blend of NYMEX prices and fundamentals price forecasts is a one-third weight for each. When the results of this blend are compared to the NYMEX prices alone, the results are certainly not identical. The NYMEX averages used by NW Natural are lower than this blend by an average of 2.87% (\$0.18/Dth) during the winter and higher than the blend by 3.57% (\$0.24/Dth) during the non-winter months.

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3. Finally, NW Natural's statement that "...NYMEX data is the most appropriate for development of our forecast" is troubling. NW Natural provides no documentation or rationale for this "belief." And since the belief violates basic tenets of even short-term forecasting methodology, it has no place in the preparation of the PGA portfolio.

NW Natural's forecast of future spot (cash) index prices could be applied to as much as 35% of NW Natural's total gas requirements. Staff continues to propose to NW Natural that it amend this forecast to include at least the two "fundamentals" forecasts to which the Company has current access. Staff will continue to address this topic in the context of UM 1286 and in the quarterly meetings with the Company.

In our 2005 PGA Staff Report we noted that,

.... 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 is doing well in achieving this objective. Also, NW Natural seems to be making reasonable progress in implementing many of the other recommendations made in previous Staff memos regarding purchasing optionality; portfolio diversification, flexibility, and balance; competitive bidding; mathematical testing of supply portfolios; and better coordination of supply-side and demand-side resources for meeting demand. Staff expects this progress to continue and considers the regular quarterly meetings with NW Natural a critical element in this continued progress.

#### NW Natural's Natural Gas Costs

For the time during which NW Natural purchased gas for the period November 2007 through October 2008, the average cash (spot) price in the Northwest was approximately \$6.00/MMBtu, with prices relatively stable until the most recent three months, June, July, and August, when prices declined noticeably. The NYMEX price over the period November 2006 to August 2007 averaged about \$8.25/MMBtu for the PGA year and about \$8.60/MMBtu for the winter period, with a similar price pattern. Over that same period the average forward prices for the hubs at which the Oregon LDCs purchase were about \$6.95/MMBtu for the PGA year and about \$7.30/MMBtu for the winter period, also with a similar price pattern.

At the end of June 2006, both interstate pipelines NW Natural transports on filed general rate cases at FERC. Northwest Pipeline (NWPL) requested a rate increase of

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about \$119 million, mostly related to rate base additions and an increase in its rate of return. Gas Transmission Northwest's (GTN) filing requested nearly double its current rate for firm transportation. The LDCs and Staff agreed to place the full rate increase requested by both pipelines into the filed 2006 PGAs, subject to refund based on the actual rates finally approved by the FERC. A settlement was reached in the NWPL case in February 2007 and in the GTN case in September 2007. Both settlements set rates lower than those requested by the pipelines, which had been put into place in January 2007 subject to refund. NW Natural has incorporated into its PGA filing the rates agreed to in the settlements. Any difference between these settlement rates and final rates will be addressed through the deferral accounts. NW Natural has included Oregon's share of the NWPL refund in the deferred accounts of this filing. When received, the GTN refund will be passed-through in the same manner.

The commodity price and transportation demand charge NW Natural proposes to pass through to its sales customers are shown in Table 5, along with the range of prices for commodity Staff recommends as reasonable. Staff accepts the demand charge proposed by NW Natural as it is established via FERC tariff. However, as explained below, Staff has made certain that the actual demand charges in effect for the upcoming year are being proposed for pass-through by NW Natural.

**Table 5: NW Natural Commodity and Demand Costs for 2007 PGA<sup>6</sup>**

Charge (\$/therm)	NW Natural	Staff's Range
Commodity	\$0.68828	\$0.70000 - \$0.80000
Commodity (revenue sensitized)	\$0.70805	\$0.72011 - \$0.82298
Demand	\$0.11795	\$0.11795
Demand (revenue sensitized)	\$0.12134	\$0.12134
Total	\$0.80623	\$0.81795 - \$0.91795
Total (revenue sensitized)	\$0.82939	\$0.84145 - \$0.94432

<sup>6</sup> The low value in Staff's range is a 60%/20%/20% weighted average of the median values for the NWP futures strips for the winter and PGA year over the period November 2006 to September 2007 in combination with the average of six selected fundamentals forecasts. The high value in Staff's range is a 60%/20%/20% weighted average of the highest values for the NWP futures strips for the winter and PGA year over the period November 2006 to September 2007 in combination with the average of six selected fundamentals forecasts. Both values are rounded to the nearest whole dollar.



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Obviously, NW Natural's proposed gas costs are below the lower end of Staff's range of charges. In addition, the gas costs are reductions from those currently in place for the Company. The proposed commodity weighted average cost of gas (WACOG) is a 6.53% percent reduction. The total gas cost (with transportation charges) is a 6.65% reduction. The transportation demand charge will decline by 7.39%. This reduction in demand charge is primarily the result of the lower rates established in the just settled NWPL and GTN general rate cases. NW Natural, along with the other LDCs, agreed to compute its 2007 PGA demand costs and re-file its PGA to capture these lower rates. These gas costs are reasonable.

Staff continues to be concerned that NW Natural continues to place additional risks on its customers by the way it chooses to forecast future gas spot (cash) prices and is disappointed that the Company has not yet committed itself to applying "best practices" portfolio purchasing in constructing its annual gas supply portfolio. These are items that will be more fully addressed in UM 1286. Despite these concerns, Staff believes the PGA gas costs proposed by NW Natural are reasonable and should be allowed to go into effect on November 1, 2007. The overall decrease in revenues proposed by NW Natural is \$41,171,233.

#### 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 \$3,064,959.
- Addition of new temporary increments to the Company's deferred accounts as detailed below. The Commission previously authorized all of the deferred amounts subject to amortization.

<u>Temporary Debit (Credit) Increments</u>	<u>Amount</u>
Commodity and demand costs	\$(33,989,497)
Residential and Commercial Decoupling	865,647
Demand Side Management & Weatherization	(55,002)
Intervenor Funding	79,849
Pipeline Integrity Refund	(1,048,852)
Oregon Tax Kicker Refund	(1,244,386)
Coos County Deferral Refund	<u>(32,970)</u>
Total	\$(35,425,211)

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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 a decrease of \$38,490,170 on an annual basis.

### **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. Staff last audited this program in April 2007. For the year beginning November 1, 2007, \$1,958,000 is proposed to be collected in rates for the accelerated Bare Steel Replacement project. This amount represents an increase from last year of \$14,000.

Geo-hazard Repair and Risk Mitigation: Commencing in 2002 and originally scheduled to end in 2006, NW Natural is repairing and mitigating landslide hot spots, erosion and other geo-hazards. Staff last audited this program in April 2007. The costs in this filing are consistent with the findings of the audit. The rate impact of the revenue requirement for this program is a decrease of \$19,000 from the amount currently collected in rates. From November 1, 2007 to October 31, 2008, a total of \$767,000 will be collected. The Company requested another extension of this program from September 30, 2007 to December 31, 2007 in order to complete a specific project, the Salmon River geo-hazard project. The Commission approved a stipulation between the Parties to extend the program in Order No. 07-444, entered October 16, 2007.

Integrity Management Program: This 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 April 2007; adjustments were recommended by Staff and verified to have been made by the Company. For the period from November 1, 2007 to October 31, 2008, \$2,101,000 will be collected in rates, an increase of \$240,000 from the amount currently collected from customers.

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Coos County Distribution System: The Coos County Distribution system was placed in service in 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. This filing includes the removal of last year's credit increment of \$123,563 and the addition of a new credit increment of \$134,214 funded by the Company as authorized in Order 04-702.

Price Elasticity Adjustment: 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 reduced \$2,484,464 from November 1, 2007 through October 31, 2008 to account for price elasticity.

### **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 is 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 preceding calendar year, unless the Commission finds that allowing a higher amortization rate is reasonable under the circumstances. NW Natural's proposed amortizations are approximately (\$35.4) million, which represents approximately 3.5% of the utility's gross revenues. Staff recommends the Commission grant a waiver to the 3% threshold for purposes of this filing.

### **UM 1339**

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.

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**PROPOSED COMMISSION MOTION:**

NW Natural's requests for: (1) a waiver of statutory notice to allow the associated tariff sheets of Advice Nos. 07-7A, 07-7B, and 07-7C to go into effect November 1, 2007; (2) amortization of deferred accounts, base gas cost changes, and other rate changes as requested in Docket UG 177; and (3) reauthorization to use deferred accounting pursuant to Schedule P, as requested in UM 1339 for one year beginning November 1, 2007, are approved.

**Attachments**

NW Natural 2007 PGA

NW Natural  
 Rates & Regulatory Affairs  
 2007-2008 PGA Filing - Oregon: October REFILING  
 PGA Effects on Revenue - Staff's Format: Detail for Memo Attachment

	<u>Amount</u>
1	
2 <b><u>Purchased Gas Cost Adjustment (PGA)</u></b>	
3	
4 Commodity Cost Change	(\$35,208,739)
5	
6 Demand Capacity Cost Change	<u>(5,962,494)</u>
7	
8 <b>Total Gas Cost Change</b>	<u>(41,171,233)</u>
9	
10 <b><u>Temporary Increments</u></b>	
11	
12 Amortization of 191.xxx Account Gas Costs	(33,989,497)
13 (Demand, Coos Bay Demand, Commodity & Storage Inventory)	
14	
15 Amortization DSM and Weatherization	(55,002)
16	
17 Amortization of Intervenor Funding - CUB & NWIGU	79,849
18	
19 Amortization of Decoupling (Residential & Commercial)	865,647
20	
21 Amortization of Pipeline Integrity Refund	(1,048,852)
22	
23 Amortization of Oregon Tax Kicker Refund	(1,244,386)
24	
25 Amortization of remaining balance Coos Bay deferral	<u>(32,970)</u>
26	
27 Total Proposed Temporary Increments	(35,425,211)
28	
29 Removal of Current Temporary Increments	<u>3,064,959</u>
30	
31 <b>Total Net Temporary Rate Adjustment</b>	<u>(38,490,170)</u>
32	
33 <b><u>Permanent Rate Adjustments</u></b>	
34	
35 Addition of Proposed Bare Steel Program Costs	1,958,000
36	
37 Removal of Current Bare Steel Program Costs	(1,944,000)
38	
39 Addition of Proposed Geo-Hazard Program Costs	767,000
40	
41 Removal of Current Geo-Hazard Program Costs	(786,000)
42	
43 Addition of Proposed Integrity Management Program Costs	2,101,000
44	
45 Removal of Current Integrity Management Program Costs	(1,861,000)
46	
47 Addition of Proposed Company Coos Bay Contribution	(134,214)
48	
49 Removal of Current Company Coos Bay Contribution	123,563
50	
51 Price Elasticity Adjustment	<u>(2,484,464)</u>
52	
53 <b>Total Net Base Rate Adjustment</b>	<u>(2,260,115)</u>
54	
55	
56 <b>TOTAL OF ALL COMPONENTS OF ALL RATE CHANGES</b>	<u><u>(\$81,921,518)</u></u>
57	
58	
59	
60	

Comparison of Proposed Rate and Bill Increases for Oregon Local Distribution Companies by Class of Service  
(November 2007 PGAs)

Class of Service	Rate Schedule	RATE IMPACTS				BILL IMPACTS											
		Current Rate per Therm	Proposed Rate per Therm	Change Rate per Therm	%-Change Rate	Average January Therms	Customer Charge	Current January Bill	Proposed January Bill	Change January Bill	%-Change January Bill	Annual Therms/ Month	Customer Charge	Current Monthly Bill	Proposed Monthly Bill	Change Monthly Bill	%-Change Monthly Bill
<b>Residential</b>																	
Avista	410*	\$1.44931	\$1.42914	-0.02017	-1.4%	98	\$5.00	\$147.03	\$145.06	-\$1.97	-1.3%	51	\$5.00	\$78.91	\$77.89	-\$1.02	-1.3%
Cascade	101	\$1.19900	\$1.20884	0.00984	0.8%	113	\$3.00	\$138.49	\$139.60	\$1.11	0.8%	60	\$3.00	\$74.94	\$75.53	\$0.59	0.8%
NW Natural	2	\$1.34052	\$1.22449	-0.11603	-8.7%	112	\$6.00	\$156.14	\$143.14	-\$13.00	-8.3%	56	\$6.00	\$81.07	\$74.57	-\$6.50	-8.0%
<b>Commercial</b>																	
Avista	420*	\$1.36555	\$1.34538	-0.02017	-1.5%												
Cascade	104	\$1.10317	\$1.10819	0.00502	0.5%												
NW Natural	3	\$1.24436	\$1.12149	-0.12287	-9.9%												
<b>Industrial</b>																	
Avista	424	\$1.30913	\$1.25402	-0.05511	-4.2%												
Cascade	105	\$1.06455	\$1.04579	-0.01876	-1.8%												
NW Natural	31	\$0.92406	\$0.81672	-0.10734	-11.6%												
<b>Interruptible</b>																	
Avista	440	\$1.02031	\$0.94898	-0.07133	-7.0%												
Cascade	170	\$1.00732	\$0.99242	-0.01490	-1.5%												
NW Natural	32	\$0.84826	\$0.74241	-0.10585	-12.5%												

\* Rate Schedules 410 and 420 include the Margin Reduction Surcharge (in Rate Schedule 496) allowed under the approved Stipulation in Order No. 03-570. In addition, all sales service customers' schedules include a new Glendale Surcharge (Rate Schedule 495).

### 2007 PGA - Residential Rates

