

**PUBLIC UTILITY COMMISSION OF OREGON  
STAFF REPORT  
PUBLIC MEETING DATE: September 25, 2001**

REGULAR   X   CONSENT        EFFECTIVE DATE       October 1, 2001      

**DATE:** September 19, 2001

**TO:** Phil Nyegaard through Lee Sparling, Ed Busch and Bonnie Tatom

**FROM:** Ray Nuñez and Judy Johnson

**SUBJECT:** NW Natural's 2001 Gas Cost Tracking and Technical Adjustment Filing (Docket No. **UG 144**, Advice Nos. 01-18 and 01-18A), and Application for Reauthorization to continue deferring certain revenues and expenses (**UM 1033**)

**SUMMARY RECOMMENDATION:**

We recommend the Commission approve NW Natural's (NWN or company) Application to Waive Statutory Notice and allow the proposed tariff sheets in Advice No. 01-18A to become effective with service on and after October 1, 2001. This filing increases the company's annual revenues by \$109.3 million, or 20.7 percent.

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

**DISCUSSION:**

On August 14, 2001, NW Natural submitted its annual gas cost tracking and technical adjustment filing, commonly known as its PGA filing. In Advice No. 01-18 (docketed as UG 144), the company proposed to increase annual rates effective October 1, 2001, to reflect changes in the cost of purchased gas, and technical adjustments in its deferred revenue and gas cost accounts. In a filing docketed as UM 1033, NW Natural requested reauthorization of deferrals under its PGA mechanism. On September 11, 2001, in Advice No. 01-18A, along with an application to waive statutory notice, the company submitted substitute sheets to reflect a pass-through of pipeline refunds to customers. Also, effective with this filing, are two changes that the Commission approved on August 21, 2001. First, the effective date for the PGA has moved forward two months from December 1 to October 1 (the Commission approved this date change for Avista Utilities and Cascade at the June 12, 2001, public meeting). Second, for purposes of PGA accounting, Canadian

pipeline demand charges will be classified as demand charges, rather than commodity costs, for this and subsequent PGA filings.

### **UG 144**

This application requests authority to increase rates to: (1) track increases in purchased gas costs, and (2) make technical adjustments to amortize NWN's deferred revenue and gas cost accounts. The change in annual revenues is summarized below and shown in **Attachment A, page 1 of 2.**

PGA Base Gas Cost Increase	\$ 125,257,532
Removal of Temporary Increment	(19,169,293)
Adding New Temporary Increment	3,162,729
TOTAL Proposed Increase	\$ 109,250,968

### **Summary of Bill Effects**

With these changes, the monthly bill of a typical residential customer on Schedule No. 2 using 54.1 therms per month will increase by \$9.26, or 18.7 percent. A typical customer's bill would increase from \$49.65 to \$58.91. During January, a typical customer's usage would be 118.5 therms and the bill would increase from \$102.80 to \$123.09. A summary of the proposed tariff and revenue changes for NW Natural's major rate schedules is shown in Attachment A, page 2 of 2. A summary of the impact of the rate changes on NW Natural's customers on both an annual and January basis is shown in Attachment B, along with the current rates and rate and bill impacts on Cascade and Avista Utilities customers of their PGA filings (addressed in agenda items 12 and 7).

### **Staff Review of Gas Costs**

#### **National/Regional/Local Trends**

Natural gas prices in the Northwest have become increasingly volatile in the last several years. The trends identified last year regarding the erosion of our regional price advantage, integration of national and regional markets and corresponding price volatility and uncertainty, continue to characterize Northwest regional gas markets.

Last winter wholesale cash market prices for next-day delivery of natural gas to Northwest points went ballistic as demand outpaced supply through the limited delivery points. Spot market prices that had been in the \$2.50 range rocketed to \$49.95 per MMBtu in early December, stayed in the double-digits for the remainder of the month and didn't settle back below \$5.00 per MMBtu until May.

The spot market alone does not tell the whole story. Spot market prices are for gas bought for delivery the next day. To buy gas for delivery next winter, utilities must purchase futures contracts or enter into contracts with gas marketers for future delivery. On May 1, 2001, NYMEX contracts for natural gas to be delivered in December 2001 were selling for \$5.179 per MMBtu and contracts for delivery in January of 2002 were selling for \$5.241 per MMBtu. A futures contract purchased on May 1<sup>st</sup> to buy the next 12 months (12-month strip) through April 2002 was selling for \$4.893 per MMBtu.

During this same period, the U.S. Department of Energy/Energy Information Administration, together with the major trading houses, were predicting that the average price for natural gas in 2001 would not fall below \$5. ("average" meaning that \$3 gas prices in the summer, when Northwest gas demand is low, could be offset by \$7+ gas in the winter, when Northwest gas demand is high.)

A primary component in the equation for predicting natural gas prices was that the new gas-fired electric generators proliferating up and down the West Coast (and the Nation) would be in direct competition with natural gas storage operators for finite gas supplies during the summer months, keeping prices uncharacteristically high. Two unforeseen factors occurred this past year to disrupt that prediction:

- A combination of high gas prices and a lagging national economy reduced industrial and feedstock demand for natural gas, loosening demands on the supply.
- The summer weather across the country has been moderate. Together with price elasticity associated with higher electric costs the result has been lower air conditioning demand.

Consequently, natural gas has been injected into storage at a record pace, resulting in an improved supply picture and lower market prices for natural gas.

The question remains whether the current summer price levels are sustainable. The present balance that is allowing large storage injections is both precarious and fragile. A recent error in the weekly American Gas Association (AGA) storage report set off an upsurge in futures prices that saw a 10% increase in natural gas futures prices occur in less than an hour.

The two wild cards remaining in the supply/demand deck are industrial load and gas-fired electric generation. Separately or together these two have the potential to shift the balance. Compounding this demand volatility is the limitation that virtually all natural gas deliveries to the Northwest must come from one of three receipt points: Sumas, Kingsgate or the Rockies. However, given the declining forward price outlook, increasing storage

levels, growing gas production, high drilling rig counts, FERC price caps and the public pressure for a national energy policy, natural gas prices could stabilize over the next twelve months.

To mitigate this demonstrated volatility of Northwest natural gas markets, NW Natural has employed economic tools to hedge its purchases and has expanded the use of its storage facilities, notably the Mist storage complex.

#### NW Natural's Gas Cost Situation

NW Natural obtains approximately 79% of its gas supply from Canada, 19% from Rocky Mountain regions and 2% from local production in the Mist field. About 70% of the firm off-system contracts are purchased on a fixed price basis, of which half is fixed through financial instruments such as swaps. The other 30% of the firm off-system contracts float with well-known indices found in publications such as the *Inside F.E.R.C.'s Gas Market Report* and the *Canadian Gas Price Reporter* for locations at the Canadian border, in the Rocky Mountains, and within the province of Alberta. All of NW Natural's annual gas supply volumes change price at least once a year. As a result, these annual renegotiations again took place in the continuing high-price natural gas market. Counterbalancing these index-based supply contracts is NW Natural's Mist storage resource and the use of financial derivatives for minimizing gas costs and price volatility. Overall, NW Natural's purchasing strategy has been to minimize, to the extent possible, the impact of rising prices, while creating flexibility to balance the need for gas reliability.

NW Natural relies on storage to meet about 20 percent of its annual sales requirement and about 50 percent of its design peak day firm demand. Most of this storage is owned and operated by NW Natural within its service territory. Storage facilities include the Mist field and two liquefied natural gas plants in Portland and Newport, Oregon. With the additional flexibility provided by the Mist III expansion, and for this year, another compressor and storage reservoir, NW Natural has decreased the role of premium-priced swing supplies and year round upstream pipeline capacity in its portfolio.

NW Natural's 2001-2002 gas costs reflect changes in the mix of purchase volumes. First, baseload supply resources, as captured by the annual supply contracts, show gas volumes increased 20% over the last PGA period. Overall, the annual contract volumes follow established trends, yet there was an effort to reduce volumes on annual contracts that have increased prices. Next, storage usage patterns show storage withdrawals decreased 20%. Storage usage patterns are similar to last year except for increased volumes for the Portland and Newport liquefied natural gas (LNG) facilities. Overall, purchase volumes show a 1.4 million or 18.8% increase. This PGA filing shows a change

not only in the mix of purchase volume patterns, but also an increase in quantity of total purchase volumes taken from NW Natural's available supply portfolio.

Staff's Review of NW Natural's Gas Costs

NW Natural, together with the other two regulated gas utilities, is required to file for rate changes related to purchased gas costs each year. In work papers submitted to Staff, NW Natural shows a gas cost total of \$377,860,311, which represents a 49% increase over last year. The annual cost of gas includes both natural gas commodity and transportation costs.

Staff reviewed the PGA filing to determine the merits and basis for the proposed gas cost increase. Staff examined the gas supply contracts, the prices paid for the gas, and volumes of gas delivered and used for customers. Staff also duplicated the calculations, audited billing records and examined supporting documents and cost data used in the spreadsheet models for the gas cost exhibits. In addition, Staff analyzed the company's purchasing operations and submitted data requests to NW Natural. Quarterly and monthly operational reports were also examined. Finally, reviews of the gas cost spreadsheet model occurred throughout the year.

Last year, NW Natural had purchased actual volumes totaling 750,118,260 therms and a weighted average cost of gas of \$0.34767. The weighted average cost of gas, or WACOG, is the annual commodity cost per therm. This year, the company has contracted with suppliers for volumes totaling 751,528,817 therms at a weighted average cost of gas of \$0.52391. The number of therms actually increased a minute 0.18%, while the WACOG increased 51%. Overall, NW Natural's annual commodity cost increased by \$124,038,969. NW Natural's WACOG reflects increases in the costs of purchased gas during the PGA period. First, baseload supply resources, as captured by the annual contracts, show an increase of 92% over the last PGA period. Pricing of these contracts is tied to gas price indices, which have risen as discussed above. Second, winter base costs increased 30% while winter swing contract costs show a decrease of 28%, for a net 2% increase. The cost of spot gas resources declined by 20%. Demand charges remained similar to last year; however, this year demand charges increased to \$13 million reflecting the Commission-approved PGA accounting treatment that now classifies Canadian pipeline demand charges with other demand charges rather than as commodity costs.

Following (on Page 6) is a table of NW Natural's Weighted Average Cost of Gas since 1991. These numbers are unadjusted for the effects of inflation. Staff concludes that NW Natural's proposed WACOG of \$0.52391 is an accurate reflection of the company's annual commodity cost. In addition, this filing shows demand charge increases of \$14,281,847 and adjustments for uncollectibles, city franchise fees, and gross revenue

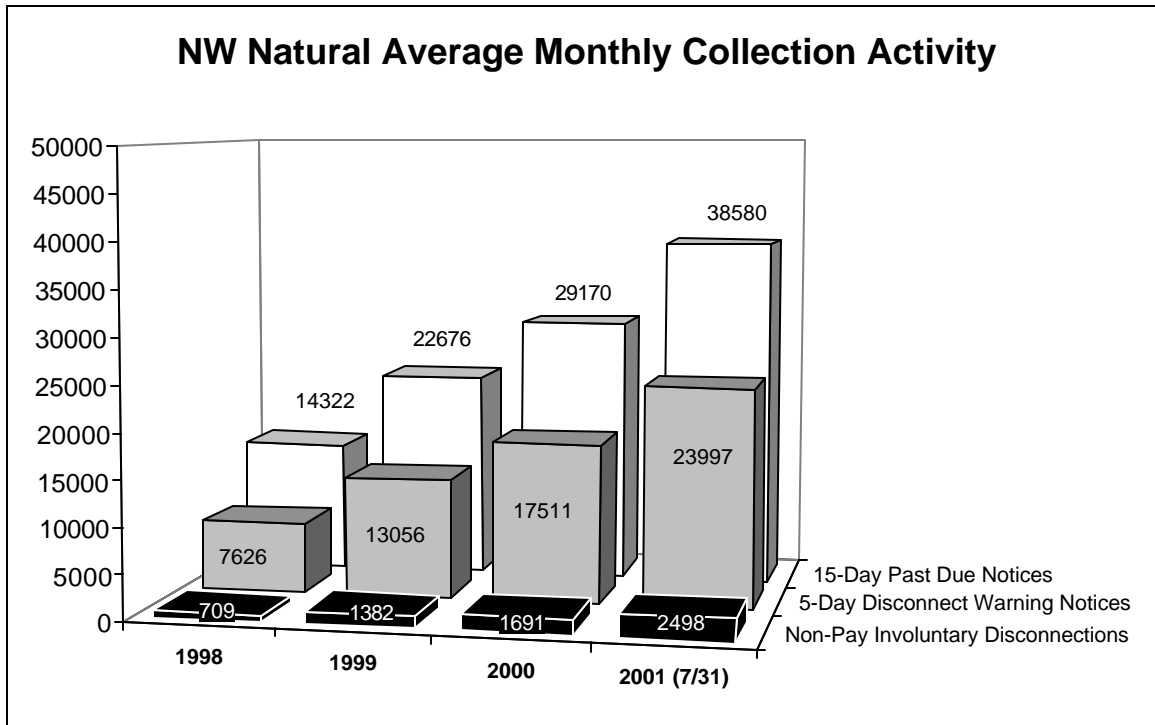
fees of \$4,429,697. Adding these costs to the commodity cost increase of \$106,545,988 results in the change in base gas cost of \$125,257,532 which is shown in Attachment A. Staff has inspected NW Natural's proposed tariff sheets and verified their accuracy.

Year	WACOG	% Change
1991	.15479	
1992	.16699	8%
1993	.17654	6%
1994	.15241	-14%
1995	.11635	-24%
1996	.11051	-5%
1997	.16344	48%
1998	.17906	10%
1999	.22314	25%
2000	.34767	56%
2001	.52391	51%

How does NW Natural expect to work with its customers in the next year?

- The company will continue mandated energy audits under its Residential Energy Conservation and Commercial Energy Conservation Services Programs. Performance and customer participation in this program actually declined last year, after peaking in 1999. The volume of requests for new energy audits and actual work completed is projected to increase this year. NW Natural should re-evaluate the cost-effectiveness of weatherization measures to reflect rate changes that may be approved in this PGA.
- The company will continue to promote its *Gas Assistance Program (GAP)*, a below-the-line program that helps low-income customers pay their winter gas bills. In this program, customers can contribute to this fund, which the company matches with shareholder dollars. For 2001, the company contribution beyond the matching funds will be \$75,000, bringing the total funds available in this program to \$ 208,908. This is a 58% increase in funding over 2000 levels.
- The company will continue to offer its customers the required *Level Payment Plan* designed to average the monthly payments for gas service of any residential customer. By the end of July, participation in the company's Level Payment Plan was over 97% of the total participation in 2000.
- NW Natural will also provide customers the required 12-month payment arrangements on arrearages. As of July 31, 2001 customer participation in arrearage Time Payment Agreements was at 117% of 2000 levels. NW Natural has also identified substantial

increases in the average monthly volumes of disconnect warning notices issued and in disconnections of service for non-payment. As with Avista and Cascade, the increased collection activity at NW Natural may be attributed to a combination of higher gas costs and the general economic decline (see bar graph below).



### 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, as shown on Attachment A, page 1 of 2:

- Removal of temporary increments currently in place, decreasing revenues by approximately \$19.2 million.
- Collection of \$3.2 million of debit balances in the company's deferred revenue and gas cost accounts. The Commission previously authorized all of the deferred amounts subject to amortization.

Staff has reviewed the company's technical adjustments and determined that the proposed amortizations are appropriate. Staff and the company are reviewing the appropriateness of some charges to Account 186.305, Deferral of Office of Pipeline Safety Operator Qualification Program Compliance Costs. The disputed charges do not

materially change the rates and any disallowance will be reflected in the deferred account balance. 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 \$16.0 million on an annual basis. The net technical adjustment change for the residential customer class is a rate decrease of 2.547 cents per therm.

### Rate History

Natural gas rates paid by NW Natural's customers have increased at a slower pace than the commodity cost of purchased gas. The table below shows the rates the Commission has approved for the company's residential customers on Schedule 2 between 1994 and 2000.

Date	Customer Charge	Rate	+/-%
December 1, 1994	\$4.00	\$0.58869	
December 1, 1995	\$4.00	\$0.55247	-6.2%
July 1, 1996	\$4.00	\$0.54479	-1.4%
December 1, 1996	\$4.00	\$0.52604	-3.4%
December 1, 1997	\$4.00	\$0.58110	10.5%
April 1, 1998	\$4.00	\$0.61586	6.0%
December 1, 1998	\$4.00	\$0.63539	3.2%
December 1, 1999	\$5.00	\$0.68134	7.2%
October 1, 2000	\$5.00	\$0.82692	21.4%
December 1, 2000	\$5.00	\$0.82589	-0.1%
June 1, 2001	\$5.00	\$0.82529	-0.1%
October 1, 2001 (Proposed)	\$5.00	\$0.99654	20.8%

### Earnings Review and Three Percent Test

As a matter of policy, in past years the Commission conducted earnings reviews for both prospective purchased gas costs changes and PGA-related deferrals. In 1999, the Commission concluded its PGA Investigation in dockets UM 903 and AR 357. Order No. 99-284 issued in Docket No. AR 357 adopted a new rule, OAR 860-022-0070, Procedures and Standards for Reviewing Gas Utility Rates in the Context of the Purchased Gas Adjustment Mechanism. This rule enacted an annual spring earnings review to replace the earnings review related to prospective purchased gas cost changes. In addition, Section (8) of this rule states: "An earnings review will not be applicable to amortization of deferred gas costs if the LDC assumes at least 33 percent of the responsibility for commodity cost differences in the risk sharing mechanism." NW Natural has adopted a 33

percent sharing level and thus is exempt from an earnings review associated with this PGA filing.

ORS 757.259 (5) and (6) (as amended by House Bill 2630) states that the overall annual average rate impact of the amortizations authorized under the statute may not exceed three percent of the 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 percent cap and may be implemented as proposed.

### **UM 1033**

In this filing, NW Natural requests reauthorization of deferrals pursuant to its automatic adjustment clause, the Purchased Gas Adjustment (PGA) mechanism. 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.

The information contained in the application is consistent with the requirements of ORS 757.259, 757.210 and OAR 860-027-300. 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, effective October 1, 2001.

### **STAFF RECOMMENDATIONS:**

We recommend the Commission take the following action regarding the NW Natural filing:

1. Approve amortization of deferred accounts, base gas cost changes, and rate changes as requested in Docket No. UG 144. Approve NW Natural's request for waiver of the 30-day notice requirement and allow the associated tariff sheets of Advice No. 01-18A to go into effect October 1, 2001.
2. Reauthorize deferred accounting for NW Natural's Purchased Gas Balancing Account mechanism, Schedule No. 169, for one year beginning October 1, 2001.

Attachments

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cc: Ed Busch  
Bonnie Tatom