

## MEMORANDUM

TO: Missouri Public Service Commission Official Case File  
Case No. GR-2003-0369, Aquila Networks – Light and Power

FROM: David M. Sommerer, Manager - Procurement Analysis Department  
Annell G. Bailey, C.P.A., Regulatory Auditor - Procurement Analysis Department  
Philip S. Lock, Regulatory Auditor - Procurement Analysis Department  
Lesa A. Jenkins, P.E., Regulatory Engineer - Procurement Analysis Department  
Kwang Choe, Ph.D., Regulatory Economist – Procurement Analysis Department

/s/ Dave Sommerer 12/27/04	/s/ Thomas R. Schwarz, Jr. 12/27/04
<hr/> Project Coordinator / Date	<hr/> General Counsel's Office / Date

SUBJECT: Staff Recommendation for Aquila Networks – Light and Power 2002-2003 Actual Cost Adjustment Filing

DATE: December 27, 2004

The Procurement Analysis Department (Staff) has reviewed the 2002-2003 Actual Cost Adjustment (ACA) filing of Aquila Networks – Light and Power (ANLP or Company). This filing was made on October 31, 2003, for rates to become effective November 14, 2003. It was docketed as Case No. GR-2003-0369. The filing includes the Company's calculations of the ACA, Refund and Transition Cost recovery balances. The Refund account was inactive with beginning and ending balances of zero.

ANLP was formerly the St. Joseph Light and Power Company before being merged with and into UtiliCorp (now Aquila, Inc.) effective December 31, 2000. ANLP provided natural gas to approximately 6,200 sales customers in 15 communities in the northwest portion of the state in the counties of Atchison, Nodaway and Holt. The ACA ending balance in the Company's 2002-2003 ACA filing is \$636,061 under-recovery.

Staff's review consisted of an audit and evaluation of the billed revenues and actual gas costs for the period of September 1, 2002 to August 31, 2003, included in the Company's computation of the ACA rate. A comparison of billed revenue recovery with actual gas costs will result in an over-recovery or under-recovery of the ACA, Refund and Transition Cost balances. Staff also reviewed ANLP's gas purchasing practices to determine the prudence of the Company's purchasing decisions.

In addition, Staff conducted a reliability analysis for ANLP including a review of estimated peak day requirements and the capacity levels to meet the requirements, peak day reserve margin and the rationale for this reserve margin, comparison of actual to estimated demand, seasonal and

annual estimated demand and supply plans. Staff also conducted a hedging review to determine the reasonableness of the Company's hedging plans for the 2002-2003 ACA period.

### **PRIOR YEAR STAFF ADJUSTMENTS FOR IMBALANCE AND STORAGE COSTS**

Two Staff adjustments from the prior year ACA case, Case No. GR-2002-468, were reversed in the Company's computation of the ACA balance for 2002-2003. Those adjustments decreased 2001-2002 ACA gas costs by \$22,915 to correct the calculation of the monthly imbalances, and by \$1,637 to correct the calculation of the monthly storage injection and withdrawal amounts. Together the adjustments had an effect of decreasing gas costs by a total of \$24,552 for the prior year 2001-2002. In the 2002-2003 ACA computation, the Company added them back, increasing the amount collectible from customers. Because the August 31, 2002, beginning ACA balance already was properly adjusted for these amounts, they should not be included again in the ACA computation for 2002-2003. Therefore, Staff proposes an adjustment to reduce the amount collectible from customers by \$24,552.

### **IMBALANCE COSTS**

During the 2002-2003 ACA period, the Company used the current month commodity cost of gas to price out monthly imbalance volumes. This methodology was used from January 2001 through October 2003. This methodology has created a valuing problem with the pricing of monthly imbalances (negative volumes with positive imbalance costs and vice-versa). Effective November 2003, imbalances are handled through the No Notice service for the ANLP system. ANLP's interstate pipeline, ANR Pipeline Company (ANR), enabled the Company to begin a cash-out method of pricing monthly imbalances, as the pipeline no longer required the local distribution company to carry forward monthly imbalances. To alleviate the valuation problem prior to November 2003, the Company reversed out all cumulative imbalance costs through October 2003. This results in a \$72,322 + (\$8,774) adjustment for the period of January 2001 to May 2003 and a (\$58,408) final adjustment for the period of June 2003 to October 2003. With these adjustments, the imbalance account was ultimately cleared from the Company's books in February 2004.

In summary, Staff does not require an imbalance adjustment as a result of the Company's actions. Staff will review the Company's application of its adjustments in the 2003-2004 ACA. In addition, Staff will review the Company's (cash-out) treatment of its monthly imbalance activity as provided in the Company's tariff Sheet No. 52.

### **STORAGE COSTS**

Staff has reviewed the Company's storage activity for the 2002-2003 ACA. Revisions were made by Staff to reflect the proper valuation of storage injections and withdrawals. Upon review

of Staff's proposed storage schedule, the Company has adopted Staff's revisions to the 2002-2003 ACA that has resulted in a revised cumulative storage balance of \$1,615,451 ( $302,143/\text{Mmbtu} \times \$5.3466 = \$1,615,451$ ) as of August 2003. The cumulative storage balance is the result of all storage activity (net injections and withdrawals) that has occurred prior to August 2003. The Company's cumulative storage balance for the 2002-2003 ACA should therefore be reduced from \$637,076 as filed, to \$618,155. This is a result of all storage activity that occurred during the 12-month period ended August 2003, resulting in a net increase of \$18,921 in storage costs.

### **TRANSITION COST BEGINNING BALANCE**

The Company's computation of the transition cost balance did not include the August 31, 2002, prior year ending balance \$11,715. In error, Aquila filed using the following month's general ledger balance in the transition cost. As a result, the Company's filing showed a \$1,351 ending balance due to customers, when it should have been \$2,431 due from customers. The Company and Staff agree that the correct balance is \$2,431 under-collected. Therefore Staff proposes an adjustment of \$3,782 to the transition cost balance.

### **HEDGING**

ANLP delivered total supplies (storage withdrawals plus flowing supplies of gas) of 595,508 Mmbtu's to customers in the heating season (November through March) 2002-2003. The company's gas portfolio consisted of storage and flowing gas supplies. The flowing gas supplies were based on first-of-month index based contracts with ANR.

ANLP hedged, on average, approximately 63% of the actual deliveries to customers by the use of storage withdrawals for November through March. However, large storage withdrawals occurred before March 2003 leaving relatively little price protection for March 2003. Low storage levels led to large storage injections at the then-prevailing high prices for March 2003. Although the company seems to have a reasonably specific hedging strategy in place at its corporate level, and it also appears that the company monitors the market movement fairly closely by reading industry reports and publications, the lack of variety of hedging tools such as utilizing financial instruments limited the company's ability to deal with a rapidly rising market in late February 2003.

Although the LDC may achieve significant overall winter hedging coverage, it may at the same time leave individual winter months totally exposed to price escalation. For example, assume December through February were 100% hedged, but November and March were at 0%. Overall, the winter hedge could yield a significant coverage of well over 60% and still not address the unprotected winter months. If pricing mechanisms worked in such a way as to be set one time for the entire winter, then a total seasonal approach to hedging might protect the monthly and daily exposures to price increases. However, this is not the price risk that most LDCs are faced

with in terms of hedging. LDCs generally buy and sell gas in the monthly and daily markets. The relevant price risk the Company must hedge is the risk in the monthly and daily gas markets. That is, the Company is exposed to the daily and the monthly market price volatility.

Given the cold weather impact of late February 2003 and the company's limited hedge for March 2003, Staff recommends that the company analyze its hedging risk for each winter month under normal conditions and cold weather conditions, including cold weather that may occur late in the winter season. This analysis should include a review of the volumes hedged and the associated cost.

## **RELIABILITY ANALYSIS**

Staff has the following comments and concerns regarding the Company's reliability analysis:

1. In the 1999-2000 ACA review, Case No. GR-2000-574, and in the 2000-2001 ACA review, Case No. GR-2002-468, Staff requested more complete documentation to support the Company's growth estimates and this issue has not been sufficiently addressed by the Company. The Company uses these growth estimates in the reliability reviews to estimate future usage requirements. The Company's responses to Data Request (DR) No. 80 and 82 for the peak day calculation assume a 2% growth factor. However, Aquila also states that a review of growth based on January customer counts for each year has shown little to no growth, and in some cases a decline. Aquila states it is not adding a growth factor, but will continue to monitor for growth, but then adds the 2% growth factor. Staff recommends that the Company review its estimates for peak day and how growth is considered in these estimates.
2. In the 2001-2002 ACA recommendation, Case No. GR-2002-0468, Staff recommended that Aquila submit a more complete storage plan that considers usage for colder than normal weather, instead of just planning for normal weather. Staff recommended that the Company identify minimum storage inventories that must be in place at the end of each winter month to assure sufficient storage volumes are available in later winter months.

In its response to the Staff Recommendation, Aquila provided storage guidelines for normal weather and weather that is 10% warmer and colder than normal. Warmer than normal weather would be covered by flowing supply and a lesser than planned storage withdrawal. Colder than normal weather would be covered by flowing supply and more storage withdrawals, but attempting to stay within the storage guidelines, which show the storage balance at 55%, 30%, 5%, and 0% at the end of December, January, February, and March, respectively (DR No. 92, DR No. 99). A review of the past 31-years of weather data (1971-1972 to 2001-2002) for this area shows that four of the winters were warmer and four of the winters were colder than normal plus or minus 10%. Thus, 26% of the winters were outside the limits considered by the Company. Additionally, the Aquila plan considers pulling more storage in the earlier winter months for cold weather,

and this would leave only 5% in storage for the month of March. For the L&P system this means that storage would only be available to meet 24% of normal March requirements. Staff recommends that the Company re-evaluate its parameters for cold and warm weather, and the supply plan to meet those requirements, including consideration of late winter cold weather in addition to early winter cold weather.

## **SUMMARY**

The Staff has addressed the following concerns regarding Case No. GR-2003-0369 for Aquila Networks – Light and Power, and proposes the following:

1. That ANLP should reduce the amount collectible from customers by \$24,552 to exclude prior year adjustments from the 2002-2003 ACA balance computation.
2. That ANLP should increase its Purchased Gas Costs by \$18,921 to reflect an increase in storage costs.
3. The Staff proposes no adjustment to the imbalance costs but will review the Company's application of its adjustments to close out the imbalance account in the 2003-2004 ACA. Staff will also review the Company's (cash-out) treatment of its monthly imbalance activity.
4. That ANLP should decrease the transition cost balance by \$3,782 to bring the August 31, 2003, closing balance to \$2,431 under-collected from customers.
5. That the Company analyze its hedging risk for each winter month under normal conditions and cold weather conditions, including cold weather that may occur late in the winter season. This analysis should include a review of the volumes hedged and the associated cost.
6. Although there is no adjustment related to the ANLP reliability analyses, Staff has concerns that are documented in the Reliability Analysis section of this recommendation.

## **RECOMMENDATIONS**

The Staff recommends that the Commission issue an order requiring Aquila Networks – Light and Power to:

1. Adjust the ACA account balances in its next ACA filing to reflect the following Staff adjustments and to reflect the (over)/under-recovered ACA and Transition Cost balances in the far-right column of the following tables:

<b>ACA Description</b>	<b>ACA Balance Due From or (To) Customers Per Filing</b>	<b>Staff Adjustments</b>	<b>Staff Recommended ACA Balance Due From Or (To) Customers</b>
<b>Beginning ACA Balance 8/31/02</b>	\$ (140,812)		\$ (140,812)
<b>Prior Year Adjustments</b>	\$ 24,552	\$ (24,552)	\$ 0
<b>Purchased Gas Cost</b>	\$ 4,936,978		\$ 4,936,978
<b>Storage Cost</b>	\$ (637,075)	\$ 18,921	\$ (618,154)
<b>Recovery from Customers</b>	\$ (3,551,802)		\$ (3,551,802)
<b>Miscellaneous Adjustments</b>	\$ (63)		\$ (63)
<b>Net ACA Balance Before DCCB</b>	\$ 631,778	\$ (5,631)	\$ 626,147
<b>DCCB Interest for 9/02 – 8/03</b>	\$ 4,283		\$ 4,283
<b>ACA Balance 8/31/03</b>	\$ 636,061	\$ (5,631)	\$ 630,430

<b>Transition Cost Description</b>	<b>Transition Cost Due From or (To) Customers Per Filing</b>	<b>Staff Adjustments</b>	<b>Staff Recommended Transition Cost Balance Due From Or (To) Customers</b>
<b>Transition Cost Balance 8/31/02</b>	\$ 7,932	\$ 3,782	\$ 11,714
<b>Recovery from Customers 9/02 – 8/03</b>	\$ (40,941)		\$ (40,941)
<b>Cost Invoiced by Pipeline 9/02 – 8/03</b>	\$ 31,658		\$ 31,658
<b>Transition Cost Balance 8/31/03</b>	\$ (1,351)	\$ 3,782	\$ 2,431

2. Submit information by March 19, 2005, to address Staff's comments and concerns listed in the Reliability Analysis section of this document.

3. Analyze its hedging risk for each winter month under normal conditions and cold weather conditions, including cold weather that may occur late in the winter season. This analysis should include a review of the volumes hedged and the associated cost. Submit this information by March 19, 2005.
4. File a written response to the above recommendations by January 31, 2005.