

STATE OF IOWA  
DEPARTMENT OF COMMERCE  
UTILITIES BOARD

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IN RE:  AQUILA, INC., d/b/a AQUILA NETWORKS	DOCKET NOS. RPU-05-2 TF-05-143
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**ORDER APPROVING REVENUE REQUIREMENT SETTLEMENT, REJECTING  
CAPITAL ADDITIONS TRACKER SETTLEMENT,  
AND FINAL DECISION AND ORDER**

(Issued March 1, 2006)

**BACKGROUND**

On May 2, 2005, Aquila, Inc., d/b/a Aquila Networks (Aquila), filed with the Utilities Board (Board) proposed gas tariffs identified as TF-05-143 and TF-05-144. In TF-05-143, Aquila proposed to increase its Iowa gas rates to produce a permanent annual revenue increase of approximately \$4,082,132, or an overall annual revenue increase of 2.6 percent. In TF-05-144, Aquila filed proposed gas tariffs designed to produce additional annual revenue of approximately \$1,656,132, or 1 percent, on a temporary basis. The temporary gas tariffs became effective May 13, 2005, pursuant to Iowa Code § 476.6(10). In addition to the request for an increase in natural gas rates, Aquila proposed a Capital Additions Tracker (CAT) to recover future capital investments and asked that the Board initiate a collaborative process to investigate possible rule changes pertaining to the process used for recovering bad debt expense.

On May 27, 2005, the Board issued an order establishing a procedural schedule and a hearing date. On June 30, 2005, the Board issued an order granting intervention to Cornerstone Energy, Inc. (Cornerstone), Northern Natural Gas Company (Northern), Iowa Joint Utility Management Program, Inc. (IJUMP), and Interstate Power and Light Company (IPL).

On September 9, 2005, Aquila and the Consumer Advocate Division of the Department of Justice (Consumer Advocate) filed a joint motion for approval of a non-unanimous settlement agreement that proposed to resolve the revenue requirement issues in Docket No. RPU-05-2 (Revenue Settlement). The proposed Revenue Settlement provided that two issues were not resolved by the agreement. Those issues were to be litigated at the hearing scheduled for November 7, 2005. The two issues were the establishment of the CAT and rate design.

Aquila gave notice of the proposed Revenue Settlement to other parties and scheduled a settlement conference as required by 199 IAC 7.2(11)"b." On October 26, 2005, Cornerstone filed a pleading indicating it did not object to the proposed Revenue Settlement. The other intervenors did not file comments or objections to the proposed Revenue Settlement.

On November 3, 2005, Aquila and Consumer Advocate filed a proposed settlement approving the CAT (CAT Settlement). With the CAT Settlement, Aquila also filed a request for a waiver of the settlement conference required by 199 IAC 7.2(11)"b" and to permit the intervenors to address the proposed CAT

Settlement at the November 7, 2005, hearing. On November 4, 2005, Cornerstone filed a pleading indicating it had no objection to the CAT Settlement. The hearing was held as scheduled on November 7, 2005. On November 8, 2005, the Board issued an order that granted the waiver, shortened the time for filing comments on the proposed CAT settlement, and modified the briefing schedule. The other intervenors did not file objections to the CAT Settlement.

### **REVENUE SETTLEMENT**

The Revenue Settlement proposes to establish Aquila's natural gas rate base in Iowa at \$69,122,678 and the overall rate of return for Aquila's rate base at 8.879 percent. The agreement would also establish an increase in annual natural gas allowed revenue for Aquila in Iowa of \$2,600,576 and a total Iowa allowed revenue requirement of \$162,171,097. The agreed-to increase would be adjusted for rate case expense that would be amortized over a three-year period. Aquila provides natural gas service to approximately 144,000 Iowa customers in 130 Iowa communities. Board rule 199 IAC 7.18 provides that the Board cannot approve a settlement unless the Board finds that the proposed settlement agreement is reasonable in light of the whole record, consistent with law, and in the public interest.

A comparison of the initial increase proposed by Aquila, the increase supported by Consumer Advocate, the increase implemented in temporary rates, and the increase agreed to in the Revenue Settlement is set out below.

	Aquila	Temporary rate increase	Consumer Advocate	Settlement
Revenue Increase	\$4,082,132	1,656,132	\$158,513	\$2,600,576
Percent Increase	2.6%	1.0%	0.1%	1.66%
Overall Rate of Return	9.5723%	9.5723%	8.108%	8.879%

As shown in the above table, both Aquila and Consumer Advocate made compromises from their original positions to reach a settlement. The Revenue Settlement results in the elimination of many issues and saves time and resources normally associated with litigated rate proceedings. The settlement also results in lower rate case expenses.

In considering the proposed Revenue Settlement for Aquila, the Board has reviewed the recent history of Aquila's financial situation and the effect of that situation on the operations of Aquila's natural gas operations in Iowa. Over the past few years, Aquila has faced significant challenges in maintaining its financial integrity and ability to attract capital on reasonable terms because of its non-regulated activities. Aquila indicated in a recent filing with the federal Securities and Exchange Commission (SEC) that one of the ways it intends to meet these challenges is through the cash flow generated by its public utility operations. Revenue from the public utility operations is seen as a significant factor in addressing the financial risks faced by the overall company.

Understanding the need for Aquila to generate additional revenues from its regulated utility operations, the Board must ensure that any increase in revenue from this case is needed to support Iowa operations and not merely to help reduce Aquila's outstanding debt or otherwise address its financial issues from non-regulated activities. The Board also needs to ensure that Iowa customers do not pay increased rates as a result of the sale of Aquila's regulatory assets in other states. In Docket No. WRU-05-18-225, the Board approved safeguards intended to insulate Iowa ratepayers from any adverse effects resulting from the sale of Aquila's assets in other states. The Board has been monitoring the actions taken by Aquila to become a regulated-utility-only company. These safeguards should allow the Board to consider the proposed settlement to determine if the rate increase is reasonable.

Based upon a comparison of the parties' positions as reflected in the prefiled testimony, the compromises the parties have made in their respective positions, and the overall record made in this case, the Board finds that the proposed Revenue Settlement is a reasonable resolution of the overall revenue requirement in this case and should be approved. The Revenue Settlement does not contain an agreement on a return on equity but does provide for an overall rate of return of 8.879 percent. The Revenue Settlement accepts Aquila's proposed capital structure and debt rates with a capital structure that includes 48.61 percent of debt and 51.39 percent equity. The Board finds the Revenue Settlement is reasonable in light of the whole record, is consistent with law, and is in the public interest.

### **BAD DEBT EXPENSE**

As part of the filing in this docket, Aquila requested that the Board initiate a collaborative process to review the current method of collecting bad debt expense through adjustments in a general rate case. Aquila suggests that a mechanism could be included in the purchased gas adjustment (PGA) that would alleviate the lag between when a utility incurs increased bad debt expense as determined in a general rate increase case and when the expense is reflected in the utility's allowed revenue requirement.

Aquila urges the Board to consider a rule change to allow utilities the option of moving bad debts from the rate case process to the PGA. Aquila asserts that in the past three years the Board has implemented several changes to the customer service rules to provide increased protections for low-income customers. Specific changes include 12-month minimum first payment agreements and mandatory second payment agreements for customers that make two consecutive payments on their first agreement. Aquila contends that these changes were worded so broadly that many customers have been able to take inappropriate advantage of these protections. Aquila says these changes have been costly for it and it has experienced recent increases in bad debt expense. Aquila states that it does not propose changes to its tariff, just a change in the mechanism for recovery of bad debt expenses.

Based on the record made in this docket, the Board is not convinced that general changes need to be made to allow bad debt expense to be recovered through the PGA. The PGA is designed to recover the cost of gas so that a utility will not be subject to the risk associated with the dramatic fluctuations that can occur in natural gas prices. The Board does not consider bad debt expense as a cost of gas and it appears that a direct pass-through of that expense is not in the public interest.

### **CAT SETTLEMENT**

Aquila proposed the CAT as a way to recover the carrying costs of what Aquila terms "integrity" projects that meet certain eligibility criteria outside of a general rate increase case. The CAT is designed to recover both a return of and a return on Aquila's investment. "Integrity projects" are defined as capital projects involving natural gas system relocation and replacement, state and federal pipeline safety compliance, and homeland security implementation. The investments would be required to meet the following criteria to qualify: (1) the projects are not growth projects that directly and substantially increase revenues; (2) the items have not been included in rate base in Aquila's most recent rate case; and (3) the projects are to replace, relocate, upgrade, protect, or otherwise extend the useful life of existing infrastructure. Aquila originally proposed that the CAT surcharge would apply to "integrity projects" that would be or were used and useful by each calendar year-end.

Aquila contends the CAT is necessary to mitigate regulatory lag, provide a better opportunity for Aquila to earn its authorized rate of return, and allow a more

complete recovery of its investment. Aquila states that low customer growth and reduced natural gas usage have affected its opportunity to earn its authorized return on equity. Aquila asserts that approval of the CAT would decrease the frequency of rate case filings and thereby reduce overall expenses.

The return on investment and depreciation under the CAT would be recovered through a surcharge applicable to all customers currently paying a customer charge. (Some large volume customers and transportation customers do not pay a customer charge.) In effect, the surcharge would be based on each customer's monthly customer charge, multiplied by the ratio of proposed carrying charges divided by total estimated customer charges collected from all Iowa customers. Aquila estimated that the CAT, as originally proposed, would have generated approximately \$1.2 million in additional revenue if it had been in place during the test year in this case and this could have delayed the need to file this rate increase request for one year.

Aquila proposed that the CAT would be subject to an annual reconciliation of costs, an annual true-up from budgeted to actual expenditures, that costs included in the CAT may not exceed 10 percent of base revenue, and Aquila would file semi-annual earnings reports. Aquila stated that the Board's authority to investigate and reduce rates would not be impaired by adoption of the CAT. Aquila proposed to file a detailed listing of construction projects and to calculate a monthly surcharge. The surcharge mechanism would then need to be approved by the Board in each subsequent Aquila rate case following this docket. Any over- or under-recovery

resulting from the CAT surcharge would be used to adjust the level of carrying charges in the next year.

Aquila contended the Board had approved a similar rate mechanism for the Cooper Nuclear Station and the Board can approve an automatic adjustment rate mechanism, such as the CAT, pursuant to Iowa Code § 476.6(11). Aquila suggested that the CAT is similar to the PGA factor and energy adjustment clause (EAC) mechanism, but admitted that those automatic cost adjustment factors do not include a return on the investment. Aquila agreed to the use of the approved cost-of-service study used to allocate charges to customers in this docket as a reference source for the net plant allocation by customer type, as proposed by Consumer Advocate.

On November 3, 2005, Aquila and Consumer Advocate filed a non-unanimous settlement agreement (CAT Settlement) that proposed to resolve all of the issues related to approval of the CAT. The CAT Settlement modifies Aquila's initial proposal as follows:

1. An investment cap is set at \$6.0 million annually.
2. The CAT surcharge will be based on actual amounts invested for plant that is in service and used and useful.
3. The CAT surcharge will recover return on and return of investment and will be allocated to customer classes using net plant allocations. A reconciliation of actual collections to intended collections will occur on an annual basis.

4. When Aquila files a general rate case, the CAT surcharge in effect at that time will be set to zero. The then-undepreciated investment and appropriate reconciliations included in the CAT will be included in Aquila's rates, including temporary rates. In the event Aquila has not filed a general rate case after collection of the CAT surcharge has been in effect for three full years of surcharge recovery, the CAT will no longer be in effect. However, in no event is Aquila precluded from proposing this CAT or any variation thereof in its next general rate proceeding.

5. The CAT will go into effect in 2006. Aquila will be entitled to file for eligible projects placed into service from September through November of 2005, provided such projects have not been included in the current rate proceeding.

6. As applicable, commencing on January 1, 2006, Aquila will file with the Board a capital integrity investment plan and budget or a true-up report and tariff sheet(s) for the coming year and the calculation for the surcharge that will be in place for the year. The surcharge will go into effect no earlier than February 1, 2006.

At the hearing, Aquila witness Joseph M. Bahr presented a hypothetical example of the CAT surcharge under the proposed CAT Settlement. The hypothetical example was calculated using the cap in the CAT Settlement of \$6 million in eligible investment, plus a carrying charge of 15.5 percent, and resulted in

an annual recovery from the surcharge of \$950,000. The \$950,000 is then allocated to customer classes using a net plant allocator, consistent with the cost-of-service study filed in this case, and then divided by each customer class percentage, which would result in an annual recovery from average residential customers of approximately \$7.20.

Mr. Bahr testified that the approximate 15.5 percent carrying charge includes a return on equity of 10.4 percent, a cost of debt of 7.27 percent, a capital structure of about 51 percent equity and 49 percent debt, gross-up of the return on equity for taxes, and use of the depreciation rate from the appropriate account. Mr. Bahr testified that the 10.4 percent to be used to calculate the CAT surcharge is the same return on equity agreed to in the most recent gas rate case involving Interstate Power and Light Company (IPL), Docket No. RPU-05-1.

### **BOARD DECISION ON CAT SETTLEMENT**

The proposal by Aquila to recover certain capital investments through an automatic surcharge placed on customers' bills and calculated on a yearly basis, rather than included in a general rate case proceeding, is a significant departure from traditional ratemaking. Aquila asserts that the traditional regulatory compact between Aquila, the Board, and customers is broken and Aquila must be allowed this extraordinary mechanism to mitigate regulatory lag, provide a reasonable opportunity for Aquila to earn its authorized rate of return, and to allow Aquila a more complete recovery of its investment.

There seems to be no dispute that Aquila's customer growth rate is only 0.5 percent per year. There also seems to be no dispute that the average natural gas usage of Aquila's residential customers has fallen by 1.5 percent for the last five years. Aquila asserts this low growth rate does not offset the cost of capital investment and the lower per customer usage reduces revenues by the same amount and limits the ability of Aquila to earn its authorized rate of return. Aquila suggests that approval of the CAT will decrease the frequency and associated cost of rate cases.

The Board does not agree that the traditional regulatory compact is broken. Traditional regulation is sufficiently flexible to allow for adjustments if circumstances unreasonably limit a utility's opportunity to earn its authorized return. Iowa has recognized concerns like Aquila's and has revised its statutes in response. See Iowa Code § 476.33(5). The Board recognizes that per customer usage of natural gas has declined in recent years for all Iowa natural gas utilities and that Aquila provides natural gas service in areas of low customer growth. Moreover, some of the reduction results from energy efficiency programs required by law.

Since Aquila agreed to settle both its request for a general increase in revenue and the CAT proposal, the Board has not been given the opportunity to address the evidentiary support for the CAT in this order or to look for alternative ways to address the reduced customer usage. The Board is presented with similar arguments concerning the effects of reduced usage, low customer growth, and other factors of

Aquila's opportunity to earn its authorized rate of return in the litigated rate design section of this order. It appears that Aquila's customer usage reductions are not out of the range of what other Iowa natural gas utilities have experienced. In addition, Aquila did not propose a CAT or other extraordinary revenue recovery mechanism in its 2002 rate case even though the same factors existed.

The addition of a surcharge for integrity investments on customer bills as proposed in the CAT would be, in effect, an additional rate increase above the amount in the Revenue Settlement. Rates established in a general rate proceeding are designed to allow Aquila, and any rate-regulated public utility, the opportunity to earn the return on equity found to be reasonable. However, a public utility is not guaranteed recovery of the return on equity and must operate the utility in an efficient and prudent manner to earn the return on equity used to calculate the rates. The CAT would allow Aquila to sidestep this traditional regulatory framework and would virtually guarantee Aquila a return on these investments, as well as a guaranteed depreciation rate, for the duration of the CAT.

Historically, trackers have only been allowed on a very limited basis. Currently, approved tracker mechanisms allow the direct pass-through of the cost of energy estimated on an annual basis without a carrying charge and these tracking mechanisms are limited to costs that are beyond the control of management, are subject to sudden changes in level, and are an important factor in determining the total cost to serve. Two tracking mechanisms are currently approved by the Board,

the EAC for recovery of electric generation fuel costs and the PGA for recovery of purchased gas costs.

In 1997 the Board approved a tracker mechanism for recovery of specific costs associated with the Cooper Nuclear Station (Cooper Tracker). The Cooper Tracker allowed MidAmerican Energy Company (MidAmerican) to recover actual capital expenses through a per/kWh charge annually based upon a formula. The costs incurred by MidAmerican were the result of a contract between MidAmerican and Nebraska Public Power District whereby MidAmerican would receive 50 percent of the electricity generated by the Cooper Nuclear Station; however, MidAmerican was not the Cooper owner and did not have control over capital expenditures. The Board approved the Cooper Tracker because it determined that MidAmerican's capital expenses associated with the Cooper Nuclear Station varied widely and unpredictably, often driven by requirements of the Nuclear Regulatory Commission, and MidAmerican had little or no control over those expenditures.

The circumstances cited by Aquila in support of the CAT are significantly different than those associated with the EAC and PGA and the circumstances faced by MidAmerican at the Cooper Nuclear Station. The investment expenses faced by Aquila are investment costs arising from the day-to-day operation of a public gas utility. Aquila has control over the size and timing of these expenditures and the expenditures can be reasonably calculated so they can be included in rates approved in a general rate case in a timely manner. The other tracker-type mechanisms were

approved for circumstances where the utility had no control over the expenditures and could not reasonably establish what those costs would be from year to year. The tracker mechanism proposed by Aquila in the CAT Settlement does not meet the criteria traditionally required for recovery of additional revenue outside of a general rate case proceeding.

The CAT as originally proposed had several fundamental flaws and would have been contrary to good regulatory policy. The CAT as modified by the settlement has corrected some of those flaws. The modifications made in the CAT Settlement removed some of the more troubling components found in the original proposal. The adoption of a specific investment cap on total annual integrity investment is probably preferable to the 10 percent cap in the original proposal, which would have varied to some degree from year to year. Recovery through the surcharge only of investments that have become used and useful makes the CAT more acceptable. Limiting the CAT to a three-year period is also a reasonable modification.

One remaining component of the CAT that the Board considers problematic is the adoption of a return on equity that does not reflect the reduced risk that would accompany the approval of the CAT. The CAT Settlement does not contain an agreed-upon return on equity; however, at the hearing Aquila's witnesses testified that a return on equity of 10.4 percent would be used in calculation of the surcharge. Aquila indicated this return on equity was adopted since it was the return on equity

agreed to in the settlement of IPL's most recent natural gas rate case, Docket No. RPU-05-1. The 10.4 percent return on equity was part of the overall revenue requirement settlement in Docket No. RPU-05-1 and does not reflect any consideration of what an appropriate return on equity should be for a low-risk revenue recovery mechanism such as the CAT.

Based upon the record before the Board, it appears that as a result of this order there will be a reduced need for the additional revenue stability sought by Aquila through the CAT. The Board in the decision on rate design (see below) has provided for additional stability in cash flow for Aquila by approving recovery of the total revenue increase from the Revenue Settlement to be recovered through the General Service class customer charge. Without further evidentiary support to show that this shift of revenue recovery to the customer charge is inadequate to address Aquila's cash flow concerns, or some recognition of the reduced risk to Aquila from adoption of a CAT-type mechanism, guaranteeing additional cash flow with a CAT is not warranted.

Based upon the discussion above, the Board will reject the CAT Settlement. The CAT, even with the modifications in the settlement, is not reasonable. Board rule 7.18 requires a settlement to be reasonable in light of the whole record, consistent with law, and in the public interest. The Board finds that the CAT Settlement is not reasonable in light of the record in this docket and is not in the public interest.

## **RATE DESIGN**

Allocation of the revenue increase approved in the Revenue Settlement among customer classes is not a contested issue in this case. No objection has been raised to Aquila's class cost-of-service study or its resulting allocation of the entire \$2.6 million Revenue Settlement increase to the General Service class. The contested issue involves Aquila's proposal to change the current two-part rate design of fixed customer charges and a uniform per-therm volumetric (commodity) rate to a three-part design consisting of the same customer charges, an annually fixed demand charge, and a reduced commodity rate. The demand charge would be based on each customer's maximum usage per month over a three-year period. Aquila's proposed rate design would partially shift General Service revenue recovery from volumetric commodity usage to a relatively more fixed rate component.

If the Board does not approve the demand charge rate design, Aquila proposes that the entire revenue increase of \$2.6 million be recovered through the General Service customer charges with no change in the commodity rate.

Consumer Advocate objects to Aquila's proposal for a three-part rate design for the General Service class. Consumer Advocate supports recovery of any remaining revenue increase through a combination of higher customer charges and commodity charges rather than through a demand charge. Consumer Advocate also opposes Aquila's alternative that would recover the entire revenue increase through the General Service customer charges. Instead, Consumer Advocate believes the

Revenue Settlement increase should be more uniformly distributed between the General Service customer charges and commodity charges.

### **Aquila's Position**

Aquila asserts that it has experienced a continuing decline in natural gas usage per customer, similar to national and regional trends. These reductions have been caused by a combination of efficiency gains in space heating and water heating appliances, market share losses in space heating and base use appliances, energy efficiency measures, and demographic changes. Since 1995, Aquila's residential usage per customer has declined 23 percent. Since 2001, General Service usage has declined by 4.6 percent. This consists of a 5.1 percent decline for residential usage and 3.4 percent decline for non-residential usage. Aquila acknowledges that rising gas prices and warmer than normal weather have also played a role in this decline.

Aquila asserts this trend, combined with little or no growth in Aquila's Iowa service territory, warmer than normal weather, and increased customer arrearages, has significantly hindered Aquila's ability to earn its authorized rate of return. Aquila asserts that in the past customer growth and Aquila's non-regulated activities allowed Aquila to absorb reductions in average usage, but this is no longer the case.

Aquila argues that these conditions subject Aquila to unreasonable risk, due to the per-therm volumetric component of its General Service rate design. Aquila asserts that the costs of Aquila's distribution system are mostly fixed and do not vary

with volumetric usage and reductions in customer usage are not matched by reductions in system costs. In addition, Aquila points out that there is a concerted effort by regulators and state governments to reduce natural gas usage. Aquila asserts that this public policy conflicts with Aquila's financial interests. Aquila states that the rate design proposed in this case offers a solution to this conflict.

Aquila's cost-of-service study shows that 69 percent of Aquila's costs are customer-related, 21 percent demand-related, and only 10 percent commodity-related. Under Aquila's current rate structure, 52 percent of revenues are recovered through commodity charges and the proposed three-part rate design would recover approximately 26 percent of revenues through the commodity rate. The demand charge would be set based upon a customer's highest monthly usage over the past 36 months and Aquila proposes to cap any increase or decrease in the customer's highest monthly usage at 10 percent annually. This 10 percent band ensures that the rate design does not result in over-recovery.

Aquila asserts that this rate design will provide Aquila more stable revenues by reducing reliance on the General Service commodity rate for a significant share of fixed cost recovery. Aquila asserts that the proposed rate design will reduce seasonal billing variability, which benefits low-income customers, and is equitable since it is tailored to each customer's usage. Aquila asserts the proposed rate design properly encourages energy efficiency by giving customers more accurate price signals about the fixed nature of gas delivery costs.

Aquila suggests that the proposed rate design should not noticeably affect customers' energy efficiency incentives. For example, a medium-sized residential customer who reduces heat-sensitive usage by 20 percent would see a 12 percent total bill reduction under Aquila's proposed rate design, compared to 13 percent under the current rate design. This is because, as Consumer Advocate points out, 85 percent of the customer's bill will continue to reflect the cost of gas passed through in the PGA. Also, within 36 months a reduction in heating usage would be reflected in the customer's reduced maximum daily quantity (MDQ) and demand charge. This should remove some of the concern expressed by Consumer Advocate that 74 percent of the non-gas portion of customer bills would be fixed and not influenced by greater efficiency.

Aquila indicated that it chose the demand rate approach, rather than other mechanisms, in order to more closely match an individual customer's rates with the cost of serving that customer. Aquila decided that other methods were not sufficiently customer specific and Aquila seeks approval of the demand charge rate design regardless of whether the Board opens a general inquiry into "decoupling" of rates from usage.

If the Board chooses not to adopt Aquila's demand rate design, Aquila proposes an alternative method for recovering the increase agreed to in the Revenue Settlement. Under this alternative, Aquila's entire \$2.6 million increase would be collected by increasing General Service customer charges. Aquila points out that the

customer charge increases would be consistent with Aquila's uncontested class cost-of-service study and a little less than the customer charge increases initially proposed by Aquila. The customer charge increases would also be similar to Aquila customer charge increases recently approved in Kansas.

### **Consumer Advocate's Position**

Consumer Advocate opposes the new rate design proposed by Aquila for the General Service class. Consumer Advocate argues that Aquila has used its current General Service rate design for decades and the General Service class consists of smaller customers whose gas usage is measured through simple metering that records only volumetric commodity usage. Consumer Advocate points out that Aquila's proposal would recover 74 percent of its General Service non-gas revenues through fixed charges if the demand charge is approved. This shift in revenue recovery would reduce the potential for usage-based billing savings for customers and could adversely affect the significant energy efficiency investments made by Aquila's customers over the past 15 years.

Consumer Advocate points out that customers have benefited through lower gas bills from the investment in energy efficiency and contends Aquila's proposal erodes the price signal by sending the message to customers that 74 percent of their non-gas monthly bills will be fixed for at least 12 months. Consumer Advocate argues that customers are not likely to see much relationship between energy

efficiency investments and savings in the non-gas portion of their bills if the proposed rate design is approved.

Consumer Advocate argues that, contrary to Aquila's position, the natural gas distribution system is built to provide gas throughout the year, not just on the peak day. Consumer Advocate suggests that the primary cost of distribution mains is the labor involved in installation, not the incremental size of pipe needed for meeting peak day requirements.

Consumer Advocate states that Aquila needs no additional incentive to promote energy efficiency since it is mandated by statute. Consumer Advocate points out that Aquila has admitted that it takes all reasonable actions to cost-effectively maximize customer participation in its Iowa energy efficiency programs. Approval of the demand charge should not be seen as another incentive for Aquila to support energy efficiency programs.

Consumer Advocate argues that Aquila's demand rate proposal is inappropriate for smaller, less sophisticated customers. Smaller customers have traditionally been billed according to a customer charge and a volumetric commodity rate, since meters that measure maximum demand are expensive. Introducing a new fixed charge based on maximum customer demand will create significant customer confusion. Even large, knowledgeable customers can be confused by the concept of maximum demand. This confusion will be much greater for small General Service customers who are entirely different from large demand-metered customers. Large

customers who are billed under a demand charge use more than 2,000 therms per month, on average, whereas the average General Service customer uses about 95 therms per month. General Service customers have always been billed according to monthly commodity usage and have never seen a demand rate. The demand concept is made even more complex by basing it on an estimate rather than a direct reading of metered data. Using an estimate also makes it inherently less accurate. Consumer Advocate asserts it is unfair and unreasonable to merely estimate an MDQ for non-demand metered customers rather than measuring it directly.

Consumer Advocate states that most General Service customers are not aware that the demand charge is being proposed by Aquila and so complaints about the charge will not be received until after approval. Consumer Advocate disagrees with Aquila that there is a benefit from the demand charge by giving customers greater stability and predictability in their monthly billings. Consumer Advocate suggests that stability and predictability can already be achieved by use of Aquila's level payment plan. Consumer Advocate contends that Aquila is seeking this change primarily to make its own revenue stream more stable and predictable to generate enough cash flow to satisfy unregulated obligations. Aquila admitted this connection between the revenue streams from its regulated operations and its unregulated debt and interest payments in a filing with the federal SEC. Accordingly, Aquila states that it must increase its utility revenue and earnings by obtaining additional utility rate

increases, while increasing operational efficiencies with respect to these utility operations.

Consumer Advocate states that regulated utility operations should compensate the utility for its costs of providing service and give the utility an opportunity to earn a fair rate of return on its investment. Utility operations should not be used to cover Aquila's unregulated obligations and related debt interest expense. Similarly, these other concerns should not be allowed to conflict with important public policy goals such as energy efficiency.

Consumer Advocate suggests that only a small amount of reduced natural gas usage is due to energy efficiency improvements, such as higher efficiency furnaces. Consumer Advocate suggests that Aquila has not analyzed the influence of natural gas prices, which increased 80 percent during the 1999-2000 to 2004-2005 heating seasons, and warmer weather during most of the 1995-2004 period. During the ten years between Aquila's last two rate cases, 1992 to 2002, customer usage has declined, but two other changes have occurred. First, the American Gas Association now projects that the rate of decline in customer usage will drop by half, from an earlier annual decline of 1.0 percent over the previous 20 years, to an annual decline of 0.5 percent over the next 15 years. Second, Aquila is in financial difficulty and has indicated to the SEC that it will seek increased revenues from its regulated operations to meet those difficulties.

Consumer Advocate also opposes Aquila's alternative proposal to recover its entire \$2.6 million increase through General Service customer charge increases. The Board has never allowed a utility to recover its entire rate increase through one rate component, in one customer class. In Aquila's last rate case, the rate changes were spread among rate components proportionately. The inflated customer charges proposed by Aquila would similarly increase the fixed charge component of customer bills and send customers the wrong price signal with regard to energy efficiency. Consumer Advocate points out that Aquila's attempts to support these increased customer charge levels by comparing them with the Aquila customer charges approved in Kansas is not persuasive since costs and rates in one jurisdiction are not necessarily related to costs and rates in another jurisdiction.

### **BOARD DECISION ON RATE DESIGN ISSUE**

Aquila's proposed rate design changes are intended to increase the fixed charge portion of customer bills, thus reducing the reliance of Aquila's earnings on volumetric commodity usage rates. This is intended to give Aquila greater revenue stability in the face of weather variations and customer usage reductions. Although there is evidence of reductions in Aquila's General Service customer usage, the declining small customer usage does not seem extraordinary compared to other low rate regulated utilities. IPL's decline in usage per residential customer is similar to Aquila's and IPL did not seek a change in its rate design in its recent gas rate case, Docket No. RPU-05-1.

Aquila was experiencing similar reductions in usage when it filed its 2002 rate case but did not seek an alternative rate design in that case. In fact, it supported the same rate design now supported by Consumer Advocate. The Board understands the need for natural gas utilities to respond to reduced customer usage. However, it appears that Aquila's demand charge rate design proposal is more likely a response to Aquila's financial difficulties, which renders it more sensitive to revenue erosion compared to its position in 2002 and to other natural gas utilities.

Aquila's demand charge proposal is the first time an Iowa utility has proposed a permanent rate element for small volume customers based on some measurement or estimate of the customer's peak or maximum rate of usage. Traditionally, demand rates have not been used for small customers because a) it was too expensive to meter or record monthly peak demand for large numbers of small customers and b) the concept of peak demand was regarded as too abstract for small customers to effectively link to their usage behavior. In Docket No. INU-83-8, the problem of the lack of understanding of the small customer was demonstrated in a Board pilot project that investigated the use of demand rates for residential electric customers.

The effectiveness of any price signal is questionable if customers do not understand or cannot effectively respond to the signal. Furthermore, the potential for misunderstanding might be compounded if the price signal is not properly identified. Aquila's proposal would be a levelized estimate based on the customer's highest month's usage, rather than the customer's actual maximum daily usage. In this way,

Aquila's demand charge would avoid the metering expense problem normally associated with establishing a demand rate by estimating customer demand based on the customer's highest month's usage over the past 36 months. However, it is not clear that Aquila has fully considered the potential problem of customer understanding. As Consumer Advocate points out, Aquila's rate notification letter did not even mention the proposed rate design change.

There is also the potential regulatory problem of monitoring the application of Aquila's demand rate design. General Service rates recover over 95 percent of Aquila's non-gas revenues (and will recover even more after the settlement rate increase). Currently, General Service billing determinants can be easily tied to customer and throughput volume data reported in Aquila's IG-1 annual reports. This would not be the case under Aquila's demand rate proposal. Demand charges would be estimated for each customer individually, based on each customer's highest usage month over the past 3 years, which would likely differ from customer to customer.

This information would also be subject to adjustment by a plus-or-minus 10 percent limit on how much the demand charge can change in any given year. Given this level of complexity and the lack of a direct link to annual customer data, the only way the Board could ensure proper implementation of Aquila's estimation method would be to audit the General Service class (over 140,000 customers). If audits were required, the Board would need to shift resources from other areas or

request additional resources to complete the audits and the expense of the audits could be significant.

The Board is not convinced that the benefits asserted by Aquila from adopting the demand charge would outweigh these potential problems. If it is necessary to reduce the reliance of revenue recovery on volumetric rates, there are approaches other than the one proposed by Aquila. Some of these involve some form of periodic revenue true-up or reconciliation to correct for deviations from normalized baseline assumptions. Others involve the use of fixed charges for recovery of non-gas costs, and one includes allowing customers to choose between high and low customer charge options (with correspondingly lower and higher commodity rates) or a Temperature Adjustment Clause that adjusts for weather variation. These are only examples.

The Board finds that the justification presented by Aquila in this case is not sufficient to adopt the three-part rate design, including a demand charge, for General Service customers. Aquila's customer usage reductions do not seem extraordinary compared to what other Iowa natural gas utilities have experienced. Losses from its non-regulated business activities may be a more significant factor behind its proposal. Even if Aquila's usage reductions were extraordinary, it is not clear that its proposed solution is appropriate, given the drawbacks described previously. Other approaches might accomplish the same result without the problems created by the proposed demand rate.

The continuing decline in customer natural gas usage is an issue facing many natural gas utilities throughout the nation. Consideration of this situation should be on a broader scale where the Board can hear from all affected persons. These issues may better be addressed in a separate docket where the problem can be properly isolated and quantified and a fuller range of potential solutions can be considered, such as Docket No. NOI-06-1, "Inquiry Into The Effect Of Reduced Usage On Rate-Regulated Natural Gas Utilities."

Even though the evidence does not support the adoption of the demand charge proposal presented by Aquila, the Board recognizes that Aquila's cost-of-service study supports a general shift in costs from the energy charge to the customer charge. Aquila proposes this shift as an alternative to its demand rate proposal. Under this alternative, the entire \$2.6 million settlement increase approved in the Revenue Settlement would be recovered through General Service customer charges. This would result in customer charges of \$10.44 for residential and \$14.97 for non-residential General Service customers, which is similar to the \$10.50 residential and \$15 non-residential charges proposed in Aquila's initial filing.

The customer charges that would result from recovery of the entire \$2.6 million from General Service customer charges seem well within Aquila's customer costs as shown in the class cost-of-service study. Aquila's uncontested class cost-of-service study, based on its original \$4.1 million increase, showed General Service monthly customer costs equivalent to about \$16 for residential customers and \$25 for non-

residential General Service customers. The Board finds that allocating the entire \$2.6 million in revenue increase approved in the Revenue Settlement to General Service customer charges is reasonable and supported by the record. The Board will approve this alternative proposal.

### **ORDERING CLAUSES**

#### **IT IS THEREFORE ORDERED:**

1. The proposed tariff filed by Aquila, Inc., d/b/a Aquila Networks, on May 2, 2005, identified as Docket No. TF-05-143, and made subject to investigation as part of this proceeding, is rejected as unjust, unreasonable, and unlawful.
2. The non-unanimous "Joint Motion and Settlement Agreement on Revenue Requirement" filed by Aquila, Inc., d/b/a Aquila Networks, and the Consumer Advocate Division of the Department of Justice on September 9, 2005, is granted and approved.
3. On or before 20 days from the date of this order, Aquila, Inc., d/b/a Aquila Networks, shall file revised tariff sheets that produce total revenue, including a permanent rate increase of \$2,600,576, not to exceed \$162,171,097. The revenue increase of \$2,600,576 shall be allocated to General Service customer charges as described in this order.
4. On or before 20 days from the date of this order, Aquila, Inc., d/b/a Aquila Networks, shall file a revised tariff sheet No. GT-12 as described in this order.

5. The "Joint Motion and Settlement Agreement on Capital Additions Tracker" filed by Aquila, Inc., d/b/a Aquila Networks, and the Consumer Advocate Division of the Department of Justice on November 3, 2005, is denied and rejected.

6. All motions or objections not specifically ruled on by the Utilities Board in this order or a previous order are overruled and denied.

7. This order constitutes the final decision of the Utilities Board in Docket No. RPU-05-2.

**UTILITIES BOARD**

/s/ John R. Norris

/s/ Diane Munns

ATTEST:

/s/ Judi K. Cooper  
Executive Secretary

/s/ Curtis W. Stamp

Dated at Des Moines, Iowa, this 1<sup>st</sup> day of March, 2006.