

A Tale of Two Utilities ... But a Shared Concern

Jon Empson

Senior Vice President, Regulated Operations Aquila, Inc.



\$15.00	
	NYMEX Pricing Settlements
\$14.00	
\$13.00	Jan '96 – July '06
\$12.00	
\$11.00	
\$10.00	
\$9.00	
\$8.00	
\$7.00	
\$6.00	$+ 1 \qquad 1 $
\$5.00	$N = \frac{1}{\sqrt{1}} \sqrt{1} \sqrt{1} \sqrt{1} \sqrt{1} \sqrt{1} \sqrt{1} $
\$4.00	
\$3.00	$\int \nabla \nabla = \int \nabla \nabla \nabla = \int \nabla \nabla \nabla \nabla = \int \nabla \nabla \nabla \nabla $
\$2.00	
\$1.00	
	ul-96 ul-96 ul-97 ul-97 ul-98 ul-99 ul-00 ul-02 ul-03 ul-03 ul-04 ul-05 ul-05 ul-05 ul-05



Weather Normalized Declining UPC



Weather Normalized Use (in Mcf) Per Residential Customer (By region)



Electricity Use in the Typical U.S. Home

Aquila





Customers Continue to Use More





Power Supply Barely Meets Current Peak Demand





Average Annual MPS Residential Bill Analysis







- Provide customers with opportunity to manage their own bills
- Ensure that utilities are "neutral"
- Minimize need for regulatory commission intervention



Nebraska Annual Price Option



- Initially offered as an experiment in Lincoln, NE in response to request from City Council (1998)
- Filed for and received approval from the Nebraska Public Service Commission to implement a statewide pilot program for the first time this year



- Allows customers to lock in the price of gas for November 1, 2006 to October 31, 2007
- Fixed price election replaces PGA; all other rate components stay the same
- Designed similar to the existing Lincoln program
- Has an enrollment cap of 39,000
- Allows customer an option in taking control of utility bill



Annual Price Option IS

 A program for customers who want a stable gas price

- Annual Price Option is <u>NOT</u>
 - A supplier choice program
 - A guarantee of savings



Selected Lincoln Customer/Fixed Bill vs. Utility Rate

Actual Experience	
Annual Bill Differentials	Customers
1999: (\$37.75)*	1,215
2000: (\$1.51)	906
2001: \$125.08	1,979
2002: (\$84.33)	5,418
2003: \$60.33	10,911
2004: (\$7.26)	17,090
2005: \$38.78	24,969

*Bracketed numbers indicate fixed was higher than traditional utility PGA



Missouri Fixed Bill Pilot



Missouri Fixed Bill Pilot

- Customer is offered a fixed price for an entire billing period regardless of underlying costs and usage changes
- Unlike budget bill, there is no reconciliation
- Customer retains benefits of conservation in future billing periods



Program Design

Target Customers

- St. Joe area Residential in the pilot
- Small commercial a future possibility
- At least one year usage history at premise
- Good credit but may be ideal for bad credit







Fixed Bill Operational Issues

Seasonality: "Keep the Faith"

Summer Peaking Utility







Current Status of Fixed Bill Status

- Fixed Bill program year 1 began June 2005
- 16,000 randomly selected eligible customer received Fixed Bill offer
 - 541 accepted Fixed Bill offer 3.38% acceptance rate
- Fixed Bill generated extremely low number of customer service calls -
- Over 93% of Fixed Bill customers chose to renew for year 2
 - Supports customers desire to receive predictability and "no surprise billing."
 - Year 2 offers were on average 2.46% less than their year 1 fixed amount (adjusted for rate increases)
- Fixed Bill offered to additional 15,500 eligible regular tariff residential customers
 - 652 accepted Fixed Bill offer 4.20% acceptance rate
- Total current participation in Fixed Bill program stands at 7% acceptance rate of customers receiving an offer







Revenue Decoupling Gas Utilities



Define Decoupling and It's Purpose

Decoupling is a regulatory mechanism to encourage utilities to promote demand reduction by ensuring that utilities have a reasonable opportunity to earn the same revenues that they would under conventional regulation.



Decoupling – Causes of Changes in Sales Volumes (i.e., Declining Use per Customer)

Long-term trends:

- More efficient appliances
- More efficient construction
- Warming trend in weather

More recently:

• High gas prices by historical standards



What Are the Benefits of Decoupling?

- Remove the throughput incentive, removing a barrier to utility support of energy efficiency programs; break connection between sales and profits
- Not atypical for 50-70% of utility margin (earnings) to be sales dependent
- Reduce utility earnings volatility due to weather, business cycle, conservation, or other factors that are included within the mechanism

Decoupling – Customer Energy Bill

Aquila





What's Influencing Behavior: How Do Utilities Make \$?

Under traditional rate-of-return (ROR) regulation:

Price = Revenue Requirement / Sales

• But,

Actual Revenues = Price * Quantity

• And, therefore:

Utility Profit = <u>Actual</u> Revenues – <u>Actual</u> Costs

 Under traditional regulation a reduction in quantity of energy sold will result in reduced earnings



Decoupling – How it Works

- Create a system that holds the company harmless (i.e., no effect on profits) for reductions in sales due to customer efficiency
- Replaces traditional ratemaking with a formula that determines how *revenues* will change over time
- The company, knowing what revenue levels to expect, is then free to take reasonable actions to help customer reduce demand



Regulatory Solutions

- Rate Design
 - Severs relationship between revenues and sales volume
 - Sets allowed revenue/margin per customer
 - <u>Real time</u> solution
 - Generally not a lot of tracking and administration
- Lost Base Revenue Adjustments (LRAs) / Trackers
 - Replaces revenues lost due to energy efficiency
 - Measures energy savings from energy efficiency used to compute lost revenues
 - <u>Subsequently</u> recovered through adjustment mechanism



Decoupling Examples

- Aquila lowa rate design proposal
- Reduced usage tracker mechanism



Decoupling – Aquila Iowa Rate Design Proposal



- Combined <u>fixed</u> charge component keyed to demand customer places on Aquila's distribution system (i.e., large house pays more than smaller house)
- Combined fixed charge recovers:
 - Operations and maintenance expense
 - Return
 - Taxes
- Customer energy efficiency efforts (shaded area) reduces gas consumption and gas bill, but not utility earnings
- Aquila continues to make a significant investment in energy efficiency in Iowa



Decoupling – Oregon (Cascade NG) Approach



- Shaded area represents energy efficiency impacting utility earnings (margin) <u>and</u> energy usage
- Regulatory mechanism tracks lost margin from energy efficiency (utility earnings) for later recovery
- "Public Purpose Surcharge (.75% of revenues)"; commitment to spend no less than \$500,000 on DSM and lowincome assistance plans
- Since 75% of customer bill is gas cost, customer still benefits from energy efficiency, even with tracker mechanism in place



Questions?