Examples of Good, Bad, and Ugly Decoupling Mechanisms

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Define Decoupling and It's Purpose

- Decoupling is a mechanism to ensure that utilities have a reasonable opportunity to earn the same revenues that they would under conventional regulation, independent of changes in sales volume for which the regulator wants to hold them harmless.

How Does Decoupling Differ from Conventional Regulation

- Conventional Regulation: Set rates based on cost, and let the revenues flow as sales volumes change between rate cases.
- Decoupling: Set revenues based on cost, and let the rates flow as sales volumes change between rate cases.
- Decoupling should NOT be used as an attrition mechanism. If sales volumes and revenues are trending downward, study the causes and follow the trends in setting up a mechanism.

What are the Benefits of Decoupling

- **Remove the throughput incentive**, removing a barrier to utility support of conservation programs, the most cost-effective resource.
- **Reduce utility earnings volatility** due to weather, business cycle, conservation, or other factors that are included within the mechanism. This will reduce the utility's cost of capital and revenue requirement.

Yes
There Are Alternatives to Decoupling

- Straight Fixed Variable Rate Design
- Lost Margin Recovery Mechanism for Conservation Progams
- Incentive Regulation Tied to Conservation Performance that Provides Effective Lost Margin Recovery at Target Levels of Performance.
- Conservco: Remove conservation responsibility from the utility.

A Six-Point Plan for Effective and Fair Decoupling Mechanisms

- The mechanism should provide about the same revenues as conventional regulation, save for the elements you want to decouple.
- Effective conservation programs (Avista)
- Progressive Rate Design (PG&E)
- Cost of Capital Adjustment (WUTC)
- Rate Collar (Most proposals)
- Periodic Rate Proceedings to “re-link” to costs (California)

Five Examples: Awful to Excellent

- Straight Fixed / Variable Rate Design
- "Flawed Mechanisms"
  - Puget Power Electric PRAM (1991 – 1996)
  - Cascade Natural Gas Proposal (2005)
- "Promising Mechanisms"
  - Avista Utilities Gas (2006)
  - NWEC Proposal for Puget Sound Energy Electric System (2006)

Straight Fixed-Variable Rate Design

Traditional Rate Design		
Customer Charge / Month		$5.00
Delivery Margin / Therm		$ 0.30
Annual Margin / Customer @ 800 Therms/year		$ 300.00

Straight Fixed / Variable		
Customer Charge / Month		$24.33
Delivery Margin / Therm		$ 0.01
Annual Margin / Customer @ 800 Therms/year		$ 300.00

Impact On Usage		
Arc Elasticity of Demand		-0.3
Commodity Cost of Gas		$ 0.80
Price under Conventional Rate		$ 1.10
Price under Fixed/Variable Rate		$ 0.81
Change in Price ($/therm)		$ (0.29)
Change in Price (%)		-26%
Change in Usage		**7.9%**

What's the Problem? Increased Usage

Adverse impact on low-income users

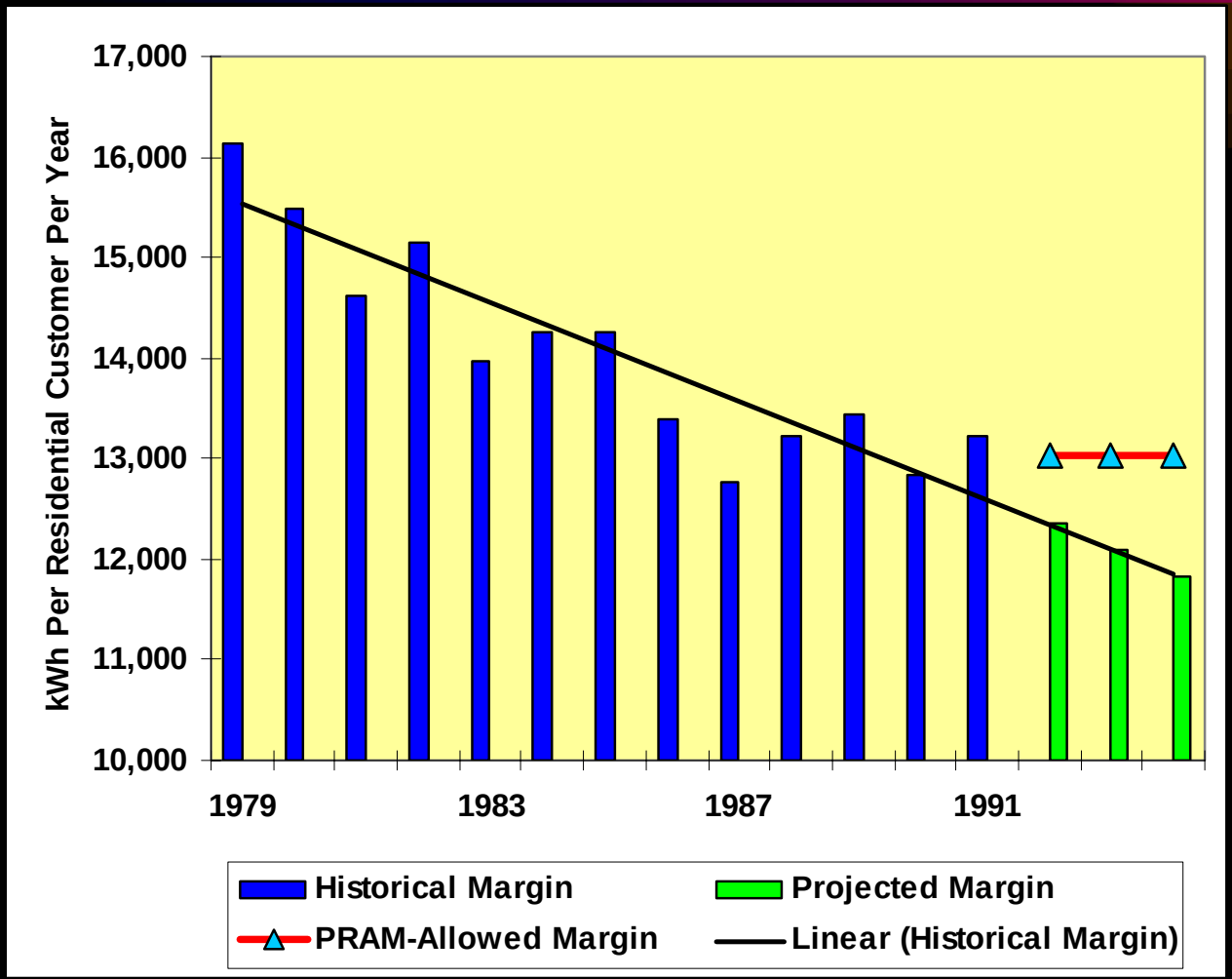
Increased pressure on gas markets

Increased CO_2 Emissions

Puget Sound Energy PRAM 1991 - 1996

- Revenue Per Customer decoupling.
- Most power supply costs handled through a power cost mechanism.
- Company had significant conservation programs
- Failed to consider declining use per customer due to gas availability and building codes.
- No collar on rates. Power cost increases were very large.
- No requirement to re-calibrate to cost at any particular date.

Puget PRAM Failed To Consider Declining Usage Patterns



Margin per customer frozen at a level higher than that which would result from traditional regulation.

As customer count grew, regular rate increases were inevitable.

Terminated when Puget and Washington Natural Gas merged in 1996.

Cascade Natural Gas (2005) Trying to Turn Back the Clock

Proposed Revenue Per Customer Decoupling, based on margin per customer allowed in previous rate case.

Had not had a rate case since 1995.

Did not consider causes of decreased sales per customer.

Company had no history of offering conservation programs

	1995 Actual	Effect of Proposal, Based on 2004 Usage
Use Per Customer	**798**	**711**
Margin Per Customer	**$ 228.91**	**$ 209.19**
Customer Charge	**$ 48.00**	**$ 48.00**
Volumetric Margin Per Customer at Current Rates	**$ 180.91**	**$ 161.19**
Volumetric Margin/therm at current rates	**$ 0.2267**	**$ 0.2267**
Total Margin/therm at decoupling rates	**$ 0.2869**	**$ 0.2942**
Proposed Increase in $/year/Customer		**$ 19.72**
Percent Increase in Margin/Customer		**9.4%**

Mechanism withdrawn; revised and pending in a 2006 general rate case.

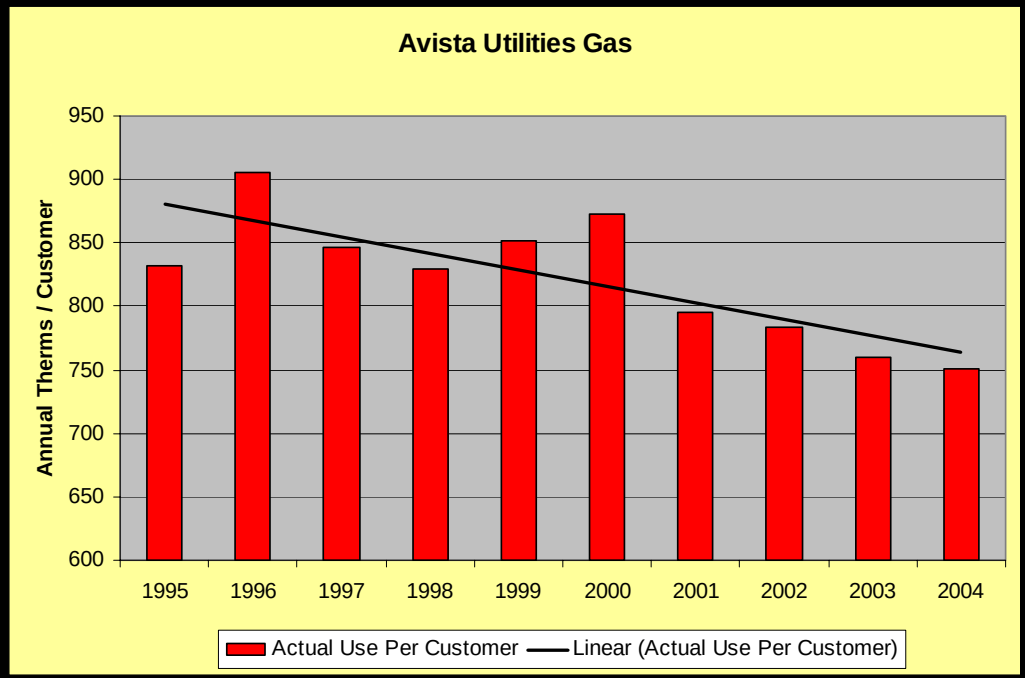
Avista Utilities (2006) Proposal "Decoupling Light" To Allay Fears

Weather-normalized (Company continues to absorb weather risk);

Only applies to customers included in the historic test year used to set the rates. New customers are removed from both numerator and denominator;

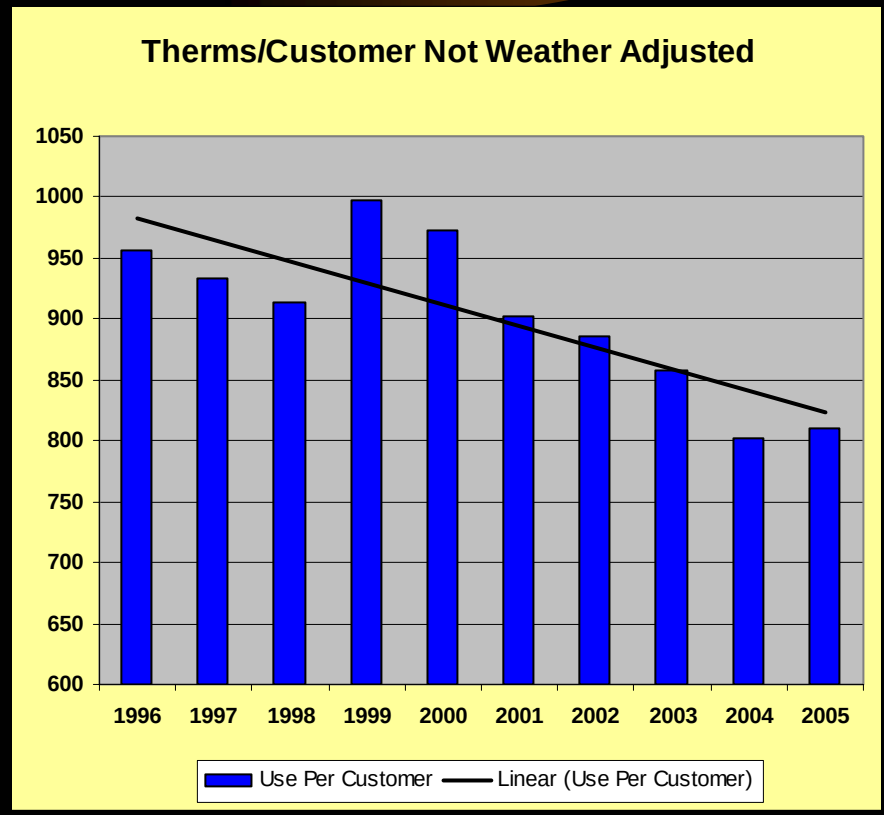
2% Annual Collar on Rate Impacts

Makes the Company whole for load reductions due to Company-funded conservation, customer-funded conservation, and price elasticity, but NOT because new homes are more energy-efficient. The line extension payment should cover this if revenues do not cover costs.



Northwest Energy Coalition Proposal for Puget Sound Energy Gas (2006)

- Puget filed a decoupling mechanism that froze revenue/customer at 834 therms/year level.
- Usage has been declining at 12 therms/year.
- Biggest driver is lower use of new customers: about 700 therms/year, vs. 800+ average.
- New customers are cheaper to serve and the line extension policy makes the Company whole if costs exceed revenues.



Elements of the NWEC Proposal

- Allows current revenue/customer for existing customers. Lower level for new customers.
- If rebates are due, they flow immediately.
- Surcharges are only partially recovered unless utility excels at conservation.
- Penalty for poor conservation performance.
- Explicit recognition of cost of capital impacts benefits associated with weather decoupling.
- 3-Year Pilot Program with formal evaluation.

Cost of Capital Impacts

Rating Agencies value earnings stability. Utility has lower earnings volatility, and needs less equity.

NWNG achieved a 1-step benefit in S&P Business Risk Profile due to weather decoupling.

1-step benefit means utility can achieve same bond rating with 3% less equity.

NWEC Proposed Recognizing the Cost of Capital Impacts, With Implementation In Next Rate Case

Without Decoupling	Ratio	Cost	Net of Tax Cost
Equity	43%	10.3%	4.43%
Preferred	7%	8.0%	0.56%
Debt	50%	7.0%	2.28%
Weighted Cost			7.26%
Net to Gross Factor			0.62
Revenue Requirement: $1 Billion Rate Base			$ 117,161,290

With Decoupling	Ratio	Cost	Net of Tax Cost
Equity	40%	10.3%	4.12%
Preferred	7%	8.0%	0.56%
Debt	53%	7.0%	2.41%
Weighted Cost			7.09%
Net to Gross Factor			0.62
Revenue Requirement: $1 Billion Rate Base			$ 114,379,032

Savings Due to Decoupling Cost of Capital Benefit:	$ 2,782,258

Critical Features and Pitfalls

- A decoupling mechanism is not an attrition adjustment. If the proposed mechanism is more likely to produce more rate increases than decreases independent of conservation program success, something is wrong.
- Follow the trend of revenue;
- If new customers are “different” recognize it.
- Get the cost of capital connection.

Double Agents and True Believers

- There are parties advocating “decoupling” that may have agendas other than objectivity.
  - Several gas utilities (Cascade, Puget, Questar) have packaged what are really gas utility attrition adjustments as “decoupling.” They fail to recognize the “K” factor.
  - At least one environmental group has supported decoupling mechanisms that were favorable to shareholders to gain Company support for the concept, almost regardless of consumer impacts. Seems to assume that things can be “fixed” later.

Web References

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