Decoupling: Frequently Asked Questions

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NARUC & Grants & Research

• NARUC represents PUCs in the States
• G&R Dept. addresses research and facilitates dialogue on key questions facing Commissions
• 17 current projects covering infrastructure, environment, regulatory design, finance, security and other issues for the gas, water, electric, telecom sectors
• Demand-side & Clean Energy plays some role in about 1/2 of our projects

Partnerships with FCC, NCS, FERC, private sector, non-governmentals
Why efficiency?

Efficiency and rates

• More efficiency means we can do more with less electricity
• There are reasons utilities like efficiency:
  – Resource adequacy
  – Load management
  – Deferring the need to build new infrastructure
• … Why would a utility want you to use more electricity instead of less?
Because of how they collect revenue

- Mostly they are in the business of selling kilowatt hours / therms, not energy services.
- Current revenue structures give you more money the more you sell
- Who determines how utilities collect revenue?

**PUCs**

- PUCs exist so that public-benefit services (like electricity) can stay in business, without taking consumers to the cleaners to pay for something they need.
- They do this by setting cost-of-service rates

Setting Rates

- Base costs in rates are determined by figuring out the cost of operations using a “model year”, and spreading that cost across classes (commercial, industrial, residential) and across customers within classes

- Revenue Requirement equals:
  - Operating expenses, plus
  - Return on investment, plus
  - Return of investment (Depreciation)

- The basic components of operating expenses are:
  - Base costs (power plants, transmission lines, employees) that stay roughly constant between rate cases
  - Variable costs (fuel, purchased power, storm restoration, etc.) that can change unpredictably between rate cases.

- We set the rates by setting a model price:
  - Allocate revenue requirement to each rate class
  - Allocate class revenue requirement to rate components (customer charge, energy and demand)
  - For each rate component:
    - Revenue Requirement ÷ number of customers = Price
Rate cases and Sales are Divorced

- Rate cases focus on costs to reach revenue requirement, but once the case ends, prices are all that matter.
- Variable components are dealt with in part using fuel adjustments or other surcharges. Base costs (mostly fixed) are largely governed in rate cases.
- Anecdotally, utilities are only motivated to come in for new rates in lean times, and avoid rate cases when profits are good.

What is Decoupling?

- Decoupling is an extension of traditional ratemaking
  - It begins with a traditional rate case
  - Sets a target revenue
  - Then periodically adjusts, so...
  - Revenues for each class remain at the target level
- If a company sells more, customers get a rebate
- If they sell less, the rates will be adjusted upwards
- This decreases “regulatory lag”: rates are adjusted annually (or more often)
Who has tried decoupling?

III. 1: States That Have Considered Electricity or Gas Decoupling

- State has energy efficiency program, decoupling is not used (19 states)
- State has energy efficiency program, decoupling was proposed but not adopted (31 states)
- State has energy efficiency program, currently investigating decoupling (3 states & DC)
- State has energy efficiency program, decoupling has been approved for at least one utility (9 states)
- State has no energy efficiency program, decoupling has been approved for at least one utility (1 state)

Adapted from D. Dismukes, Louisiana State University, 2007

Decoupling: What It Does and Doesn’t Do

What it does:
- Eliminates incentive to increase profits through increased sales
- Eliminates “losses” from reductions in sales
- Captures effects of all efficiency and DSM activities

What it doesn’t do:
- Create a positive incentive for increased efficiency or demand-side resource
- Address “barriers” to efficiency or DSM
- Change the design of rates
What It Does and Doesn’t Do

• Does it make \textit{bills} go up?
  – Not necessarily. People who use less will see savings, people who use more will see higher bills: just like now.
  – Dilution effect on those who use the same, and potential infrastructure and fuel savings may create reductions.
• Does it make \textit{rates} go up when others save?
  – Not necessarily: small incremental increase
  – For electricity, a growing sector means more billing units to divide revenue requirement by
• Doesn’t the current system work well enough?
  – Some argue no: without changing the way utilities make money, the numbers are just too huge to overcome with incentives alone.

Approaches to throughput

• Revenue Decoupling
  – Full
  – Per Customer
  – Normalized
• Lost Revenue Recovery or Conservation Adjustments
• Straight-Fixed Variable Rates
Does decoupling increase efficiency?

- California
- Con Edison
- Idaho
- Versus 3rd party provision

One concern: Risk Transfers

- Between classes
- Business-to-consumer
- Weather
- Fuel-cost

- The Maine Example
Off-ramps and adjustments

- Normalization & “re-coupling”
- Balancing Accounts
- Rate banding
- Shared earnings
- Course corrections

Read The FAQ!
http://www.naruc.org/Publications/NA_RUCDecouplingFAQ9_07.pdf