Decoupling: The Essential Mechanics

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Revenue-Profit Decoupling: What is it?

- Breaks the mathematical link between sales volumes and profits
- Objective is to make profit levels immune to changes in sales volumes
  - This is a <u>revenue</u> issue
  - This is <u>not a pricing</u> issue
  - Volumetric pricing and other rate design (e.g. TOU) may be “tweaked” in presence of decoupling, but pricing structures need not be changed
- Not intended to decouple customers’ bills from consumption

Revenue Decoupling: The Basic Concept

- Basic Revenue-Profit Decoupling has two primary components:
  - Determine a "target revenue" to be collected in a given period
    - In the simplest form of revenue decoupling (sometimes called "revenue cap" regulation), Target Revenues are always equal to Test Year Revenue Requirements
    - Other approaches have formulas to adjust Target Revenue over time
  - Set a price which will collect that target revenue
- This is the same as the last step in a traditional rate case – i.e. Price = Revenues ÷ Units

How Decoupling Is Administered

- Some (e.g. California) use an annual accrual of the revenue over- and under-recoveries and then collect or refund that amount over an ensuing 12 mo. Period
  - CA also uses future test years and annual proceedings to approve decoupling adjustments
- Annual proceedings are potential opportunity for litigation and challenge

How Decoupling Is Administered

- Others use a “current” system which makes the decoupling adjustment directly on customers’ bills for that month (or, sometimes, with a 30-60 day lag)
  - Decoupling does not necessarily require any “lag” as is customary for fuel clauses
- When all inputs are derived directly from billing information, then process becomes ministerial and not subject to much litigation or challenge

The Decoupling Calculation

- Utility Target Revenue Requirement determined with traditional rate case
  - By class & by month (or other period coinciding with how often decoupling adjustment is made)
- Each future period *will have* different *actual* unit sales than Test Year
- The difference (positive or negative) is flowed through to customers by adjusting Price for that period (see Post Rate Case Calculation)

Periodic Decoupling Calculation	
From the Rate Case	
Target Revenues	$10,000,000
Test Year Unit Sales	100,000,000
Price	$0.10/Unit
Post Rate Case Calculation	
Actual Unit Sales	99,000,000
Target Revenues (from above)	$10,000,000
Required Total Price	$0.10101/Unit
Decoupling Price "Adjustment"	$0.00101/Unit

Approaches Where Target Revenues Are Not Held Constant

- California
  - Embeds decoupling in broader PBR context
  - Allows Target Revenues to change – e.g. for inflation & productivity
- Many now use Revenue Per Customer model, where Target Revenues are recomputed to account for customer growth

RPC Decoupling

- Recognizes that, between rate cases, a utility's costs change mostly as a function of the number of customers served
- For each volumetric price, a "revenue per customer" average can be calculated from the rate case test year data used to set prices

How RPC Decoupling Changes Allowed Revenues

- In any future period, the Target Revenue for any given volumetric price (i.e. demand charge or energy rate) is derived by multiplying the RPC value from the rate case by the then-current number of customers

Periodic Decoupling Calculation	
From the Rate Case	
Target Revenues	$10,000,000
Test Year Unit Sales	100,000,000
Price	$0.10/Unit
Number of Customers	200,000
Revenue Per Customer (RPC)	$50.00
Post Rate Case Calculation	
Number of Customers	200,500
Target Revenues ($50 X 200,500)	10,025,000
Actual Unit Sales	99,000,000
Required Total Price	$0.101768/Unit
Decoupling Price “Adjustment”	$0.001768/Unit

Changes To The RPC To Reflect Utility-Specific Conditions

- Inflation and Productivity Adjustment
  - Allowed RPC changes over time to reflect inflation (increase) and productivity (decreases)
- Separate RPC for Existing and New Customers
  - If new customers have higher or lower usage than existing customers, the RPC can be separately calculated for each cohort

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