Decoupling Discussion

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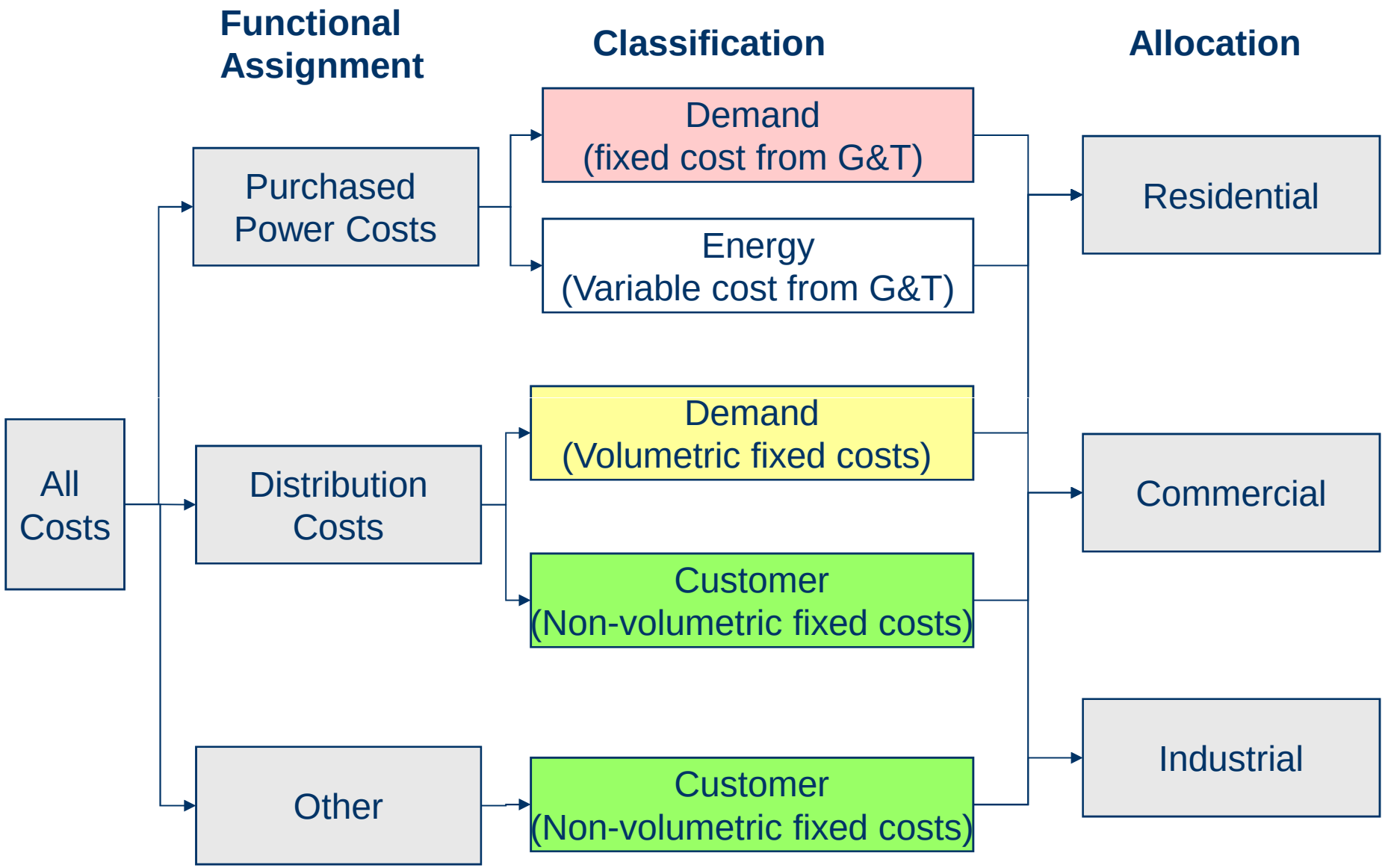
What is Decoupling?

- Shorthand notation for “decoupling fixed cost recovery from energy sales”
- If a utility recovers a portion of its fixed costs through energy sales, it has an incentive to increase sales once its rates have been set (called the throughput incentive)
- Decoupling eliminates this incentive by breaking the link between fixed cost recovery and usage level

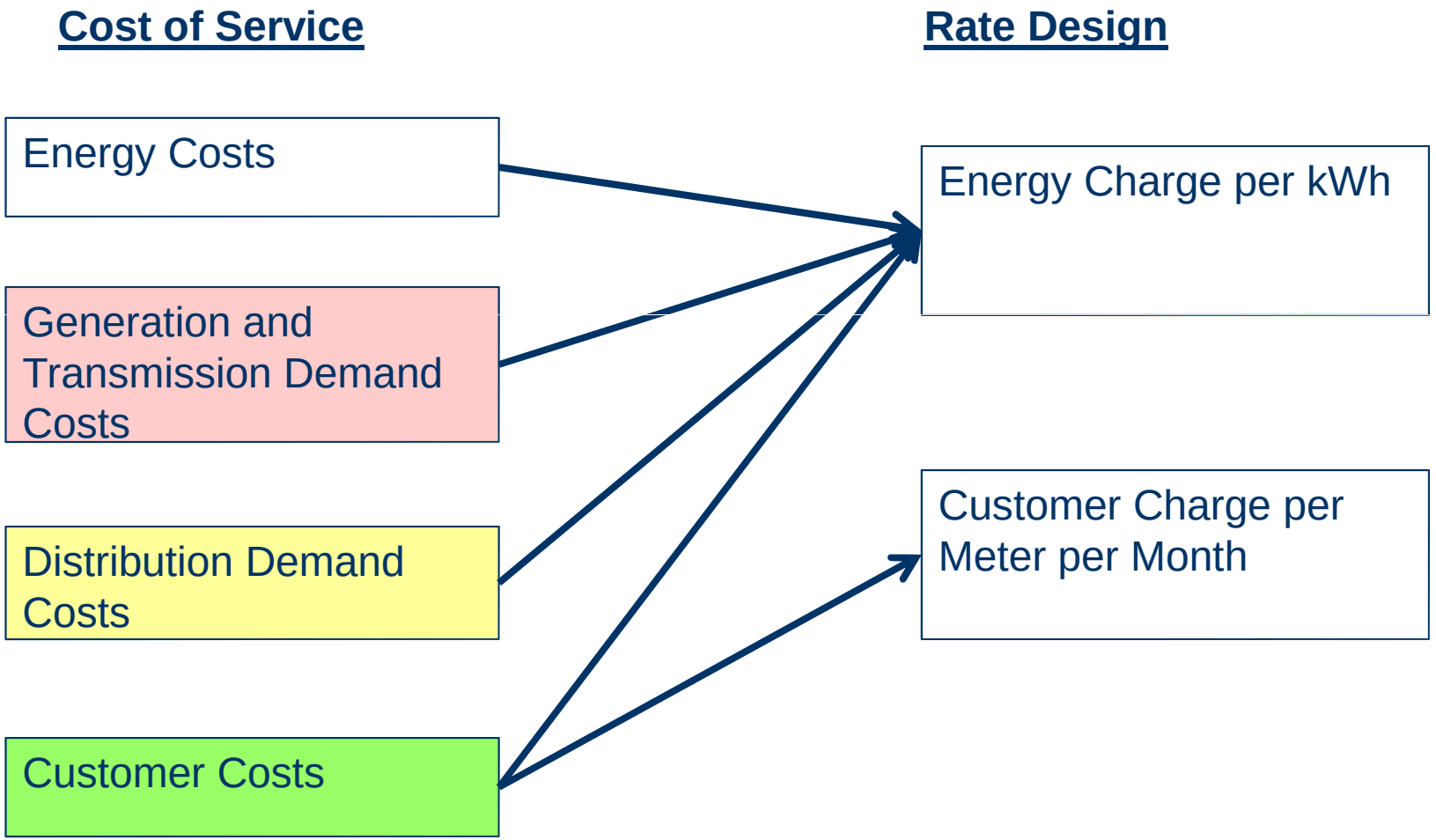
Why Is Decoupling Necessary?

- The problem results from “variablizing” fixed costs so that fixed costs are recovered through sales
  - Production fixed costs from G&T
  - Volumetric fixed distribution costs
  - Non-volumetric fixed distribution costs
- If fixed costs were not recovered through energy sales, “decoupling” would not be necessary

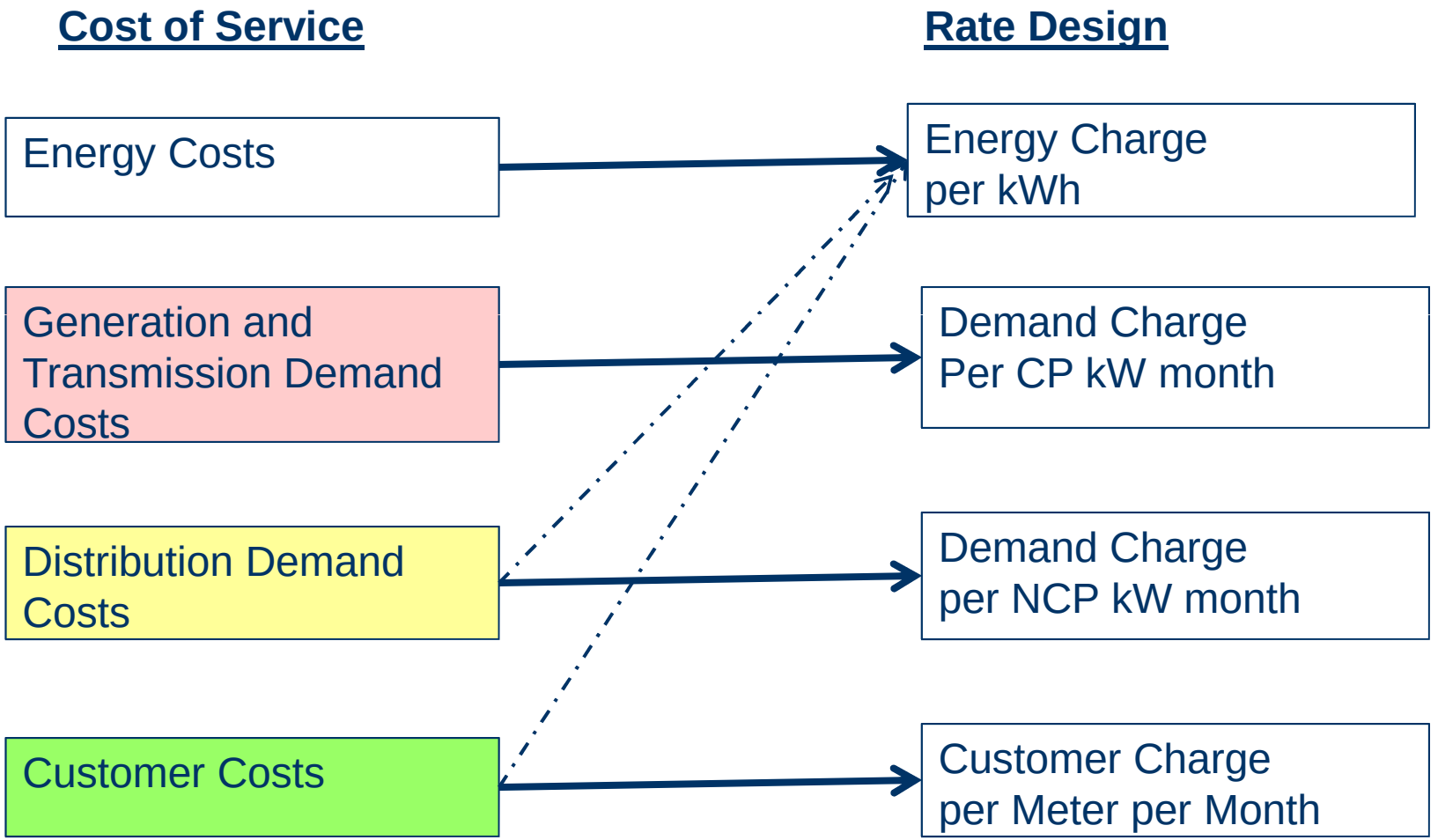
Cost of Service Study



Two Part Rate Design



Three Part Rate Design



The Need for Decoupling

- Fixed cost recovery declines when sales are below the historic levels that were used for calculating a cooperative's base rates
- The more fixed costs that are recovered through kWh sales, the bigger the problem
- Because DSM, energy efficiency and conservation reduce sales, it is necessary to "decouple" fixed cost recovery from sales when pursuing these programs

A Key Issue

- How to recover the cooperative’s fixed costs while preserving as much rate fairness as possible

Decoupling Mechanisms

- Method 1: Recover fixed costs through fixed charges and variable costs through variable charge via rate design
- Method 2: Define an allowed revenue target with a true-up (tracker)
- Method 3: Define the fixed cost component per customer and adjust based on number of customers
- Method 4: Lost Revenue Adjustment Mechanism (LRAM)

Method 1: Fixed Costs Recovered through Fixed Charges

- Three part rate - Rates are restated to place customer related costs in customer charge, demand related costs in the demand charges and energy related costs in energy charge

Method 1: Fixed Costs Recovered through Fixed Charges

- Two part rate
  - Straight fixed variable rate design - all distribution fixed costs in the customer charge
  - Maintaining the distribution demand/customer split
    - All customer related distribution fixed costs recovered through a customer charge
    - Distribution demand related fixed costs are recovered through energy charge
    - Decoupling mechanism for unrecovered distribution demand related fixed costs
    - Mitigates the problem, but does not completely solve it

Method 2: The Revenue Tracker

- An automatic “true-up” mechanism that adjusts revenues based upon the over- or under-recovery of target revenues
  - Target stated as a revenue requirement
  - Target stated as a TIER
  - Target stated as a rate of return
- True up is usually assessed as a kWH charge

Method 3: Fixed Cost per Customer

- Define the utility's fixed cost per customer and adjust revenue based on the number of customers
- For example, if the fixed cost per customer were calculated as $300 annually, the utility's revenue would be adjusted up or down $300 per customer based on the change in number of customers on which current rates are set
- Usually collected through kWh charge

Method 4: Lost Revenue Adjustment Mechanism (LRAM)

- An LRAM allows a utility to recover the “lost” profits and contributions to fixed costs associated with not selling additional units of energy because of the success of demand side management, energy efficiency or conservation programs in reducing electricity consumption
- Usually collected through kWh charge

Method 4: Lost Revenue Adjustment Mechanism (LRAM)

- The amount of lost profit can be estimated by multiplying the fixed portion of the utility's prices by the energy savings from demand side management, energy efficiency or conservation programs
  - Based on projected savings from engineering estimates
  - Based on ex post impact evaluation studies