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Essential to Energy Efficiency, but Easy to Explain: Frequently Asked Questions about Decoupling

Decoupling policies adjust rates between rate cases to ensure a utility collects the amount of revenue its regulator or governing board authorized, no less and no more. As they become increasingly common across the U.S., this article attempts to clear up many commonly asked questions and misconceptions about decoupling using case studies, previous research, regulatory filings, and the authors' experience in utility regulation.

Dylan Sullivan, Devra Wang and Drew Bennett

Energy efficiency is the cheapest and cleanest source of energy in the American economy, with enormous potential to save money (nearly \$700 billion by 2020), create jobs, and reduce pollution (1.1 gigatons of carbon dioxide by 2020), through improvements in buildings, processes, and devices served by America's electric and natural gas utilities.¹ Energy efficiency programs that provide

customers with information, assistance, and incentives for energy efficiency improvements are needed to overcome the persistent market barriers that prevent households, businesses, and industry from taking advantage of this opportunity.²

Utilities, together with their regulators and governing boards, are responsible for providing customers with reasonably priced and reliable energy services.

Whether utilities only distribute energy, have competitively provided generation service but retain responsibility for resource acquisition, or provide fully integrated distribution, transmission, and generation service, they have a critical role in accelerating the deployment of energy efficiency. Utilities have existing relationships with customers as “energy authorities,” will collectively invest more than \$2 trillion in infrastructure between 2010 and 2030,³ and have the ability to reduce transaction costs for third-party providers of efficiency services. But under traditional regulation, utilities are discouraged from investing in the best-performing and cheapest resource – energy efficiency – because it hurts them financially.

Fortunately, there is a simple, effective, and proven way to remove this conflict: break the link between the utility’s revenue and the amount of energy it sells by adjusting rates to ensure that the utility collects its authorized fixed costs, no less and no more. Combined with other key policies to encourage energy efficiency, such “decoupling” mechanisms can free utilities to help customers save energy whenever it is cheaper than producing and delivering it.

I. What Is Decoupling?

A decoupling mechanism adjusts rates between rate cases to

ensure a utility collects its revenue requirement – the amount of revenue the regulator or governing board determined is necessary for the utility to maintain reliability and provide reasonable returns to its investors – no less and no more. Decoupling removes the throughput incentive: the incentive of a utility to increase sales of energy between rate-setting processes, beyond the amount of sales

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assumed when rates were set. Decoupling is suitable for any utility network system (i.e., electricity, natural gas, water). A utility that implements decoupling is free to invest in energy efficiency without endangering recovery of its fixed costs.

II. Decoupling Is Necessary and Effective

A. What is wrong with the throughput incentive?

Under traditional rate design, utilities recover fixed costs

from volumetric charges. When sales fall, utilities may not recover all of their fixed costs. When sales increase, utilities may collect more than their authorized fixed costs and reasonable return. Motivated by this throughput incentive, utilities may work against energy efficiency despite policy direction promoting it.

B. How does the throughput incentive impact energy efficiency?

The throughput incentive most often contributes to utility *inaction* on energy efficiency, even though it is the cheapest way to meet energy needs. In addition, various utilities have actively countered efficiency by:

- opposing (or not supporting) highly cost-effective efficiency codes for new buildings and standards for new appliances and equipment at the local, state, and national level;
- providing incentives for the use of inefficient equipment or practices, such as electric resistance heat;
- supporting rate structures that encourage high consumption, such as declining block rates or flat rates with a low consumption (volumetric) charge;
- failing to include energy efficiency and conservation in their communications with customers;
- not supporting or opposing targets or planning processes that help capture all cost-effective energy efficiency.

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