Decoupling:
Changing Utility Incentives to Promote Efficient Energy Use

Environment Northeast

Background: Changing an Outmoded Approach

Promoting energy conservation has been bad business for most electric and gas utilities. Utility profits increase with sales, and when customers conserve energy, the utilities lose money. Decoupling is a new way to regulate how utilities get paid. It breaks the link between the utilities' profits and their sales volume, enabling the utilities to become full partners in energy efficiency and clean resource investments without losing money.

Decoupling changes only the way utilities are compensated for their distribution costs. Consumers pay two major fees on their gas and electric bills: one is for the energy they use and another is for the utility's cost of delivering the energy to them. Distribution costs are a component of the delivery charge, and they include fixed costs, such as those for poles, distribution lines, substations, and personnel. Although these costs are fixed, consumers pay for them, in part, through a charge based on the amount of energy they use.

With decoupling, the distribution charges are adjusted annually so that the utility does not collect more or less than it is allowed by the state regulators, regardless of any consumer change in energy consumption.

How Electric and Gas Rates are Currently Set

Electric and gas utilities appear before a state's public utility commission ("PUC") in a rate proceeding to determine the total fixed costs (i.e., lines, buildings, personnel) they are allowed to recover. Under current rules, a portion of the approved costs are then divided by estimated sales to determine the kilowatt-hour (kwh for electric utilities) or therm (for natural gas utilities) distribution charge for each category of customer. Once the rate is set, utilities have a strong incentive to find ways to increase sales in order to maximize their profits. Efficiency and demand side programs, which reduce energy consumption, cut into utility earnings and are not likely to receive adequate support from the utility.

Energy use charges are set by the competitive market in most states in New England, not by the utility or the PUC. They are passed on to consumers by the distribution utilities and therefore are not affected by decoupling.

How Decoupling Would Work

A decoupling mechanism should contain two essential elements. First, as it does now, the PUC would, determine in a rate proceeding how much revenue a utility is allowed to collect for its fixed costs. Second, the actual revenues received by the utility would be "trued up" to the amount agreed upon by the PUC the following year. If utilities received too much money they would be required to return it to consumers as bill credits. If they collected too little, they would be allowed to recoup the under-collection with modest charges. California and Oregon's experiences with decoupling show that these adjustments are imperceptible to most customers but critical for changing utility incentives.

Energy charges for the electricity or natural gas used by the customer do not provide profits for the utility, and would not be affected by decoupling. A customer using less energy would see the energy charge portion of their bill go down. Currently, the distribution charge for a Massachusetts residential electric customer is about 3 cents/kWh and the energy charge is about 11 cents/kWh. For residential gas customers, the distribution charge is about 50 cents/therm and the energy charge is about 100 cents/therm.

Decoupling Benefits Both Customers and Utilities

Today when sales increase above those forecast in a rate proceeding, such as during a prolonged heat wave, customers overpay on the distribution cost portion of their bill, and the utilities pocket the extra earnings. With decoupling, consumers would receive a small rebate for these overpayments. Because in this example the rebate compensates for a time of higher than expected energy usage, it could be particularly helpful to consumers. On the other hand, if sales are less than forecast, (i.e., during an unusual stretch of warm winter weather) the decoupling mechanism would increase the distribution charge to customers in proportion to the reduction in sales. During this period, customers would be using less energy, and thus paying lower overall energy bills. The decoupling adjustment would slightly offset the lower bills.

Could Poor Utility Management Result in a Decoupling Rate Adjustment?

Decoupling adjustments would compensate for all variations in sales, including those caused by weather, increased conservation, or economic conditions — but would not compensate for increased costs brought on by a company's mismanagement or poor decision making. Decoupling would not in any way diminish the utility's responsibility to exercise prudent management of its personnel and assets in order to provide the necessary service to its customers within the costs allowed by the commission. Utilities will still have an incentive to keep their fixed costs down in order to earn a good return for their shareholders.

The Benefits of a Decoupling Mechanism

The potential benefits of adopting this mechanism for consumers and the environment are profound. A detailed study of an Oregon gas utility concluded that decoupling had very positive impacts on the company's activities in promoting the efficient use of natural gas and assisting customers in reducing costs.[1]

Decoupling, which removes utility disincentives to promote efficiency and demand-side investments, can complement, and in fact enhance, performance-based programs which give utilities *incentives* to implement strong efficiency and demand-side programs. These performance-based incentives are also essential to maximizing investment in efficiency and demand-side resources.

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[1] *See* Daniel G. Hansen and Steven D. Braithwait, "A Review of Distribution Margin Normalization as Approved by the Oregon Public Utility Commission for Northwest Natural" March 2005.