

Techniques to Remove Disincentives to Reduce Annual Sales¹

Title of Mechanism	Description	Examples Where Used ²
Decoupling	Regular adjustments in retail rates to eliminate any differences between authorized and actual recoveries of utilities' allowed costs as a result of fluctuations in retail energy consumption (total or per customer). Assures recovery of a pre-defined or formulaic distribution revenue requirement (which has been approved by the regulatory agency in a rate case or other proceeding for that purpose). Jurisdictions vary on what costs are included within decoupling mechanisms.	18 states (with another 5 pending) now have decoupling for 1 or more natural gas utilities and 9 states (with another 11 pending) have adopted it for one or more electric utilities. These include: California (both), Utah (gas), Oregon (both), Washington (gas currently and previously electric); Idaho (electric), Nevada (gas), Wyoming (gas), Colorado (gas), Wisconsin (electric), Arkansas (gas), Illinois (gas), Indiana (gas), Ohio (gas), North Carolina (gas), Virginia (gas), Maryland (both), New York (both), New Jersey (gas), Massachusetts (both), Vermont (electric), Rhode Island (gas), and D.C. (electric). Some of these mechanisms fully decouple, some partially decouple, and some are pilot programs.
Lost margin recovery	Assured recovery of the lost revenues net of avoided short-run variable cost due to specific programmatic energy conservation actions by the utility.	Hawaii, 1993 – 2005 Oregon (Gas, Avista & Cascade); Energy Trust Legislation Per National Action Plan for Energy Efficiency (11-07): Connecticut, Indiana, Kentucky, Massachusetts, Ohio (electric), Vermont
Straight fixed-variable rate design	A rate design that recovers all costs that do not vary with sales volume in a fixed charge.	Ohio (gas)

¹ Some of the techniques listed may be more advantageous than others at removing disincentives to reduce annual sales. Not every mechanism described here accounts for all unrecovered fixed costs due to conservation.

² The list of examples is not intended to be exhaustive.

Title of Mechanism	Description	Examples Where Used
Third-party administration	Creating a separate governmental or regulated entity that receives funds from rates or from government, and invests directly in energy efficiency.	Vermont (has adopted electric decoupling) Oregon (has both electric and gas decoupling) Wisconsin United Kingdom
Frequent rate cases	Annual rate cases, so that rates are regularly adjusted to reflect current or predicted sales volumes.	Washington (1979-86)
Future test period	Set rates in a rate case based on “next year” costs rather than on a historical test year basis.	Oregon, California
Weather-only revenue normalization	Lost margins due to weather variations are recovered by adjusting distribution costs per unit.	Many states (gas)
Real-time pricing	Prices for electricity are adjusted hourly to reflect real-time market conditions. Typically applied only to large-volume customers.	Georgia Power Washington (Puget Industrial 1996-2001)
Elimination of purchased gas adjustments (PGAs) and power cost adjustments (PCAs)	Eliminate automatic adjustment of rates to reflect changes in power supply or gas supply costs (applies to utilities where short-run marginal power costs are equal to or greater than retail rates).	Washington (Pacific Power)
Time of use pricing	Prices for usage differ by time of day, but are set in advance and do not fluctuate during the rate period.	Washington (Puget Sound Energy pilot, 2001-2002)
Energy efficiency portfolio standard	Utilities required to achieve a defined level of energy efficiency.	Washington (I-937), Minnesota
Align return on equity (a.k.a., the Averch-Johnson, or A.J., Effect)	If an IOU is allowed a too-high rate of return (profit), the market price of its stock becomes higher than its cost of capital. Then existing shareholders will receive a windfall when the utility adds ratebase investments. In theory, this may provide an incentive to grow loads and setting the allowed return on equity for utilities at the estimated incremental cost of equity capital for those utilities in order to achieve a market to book ratio close to 1.00 removes this incentive.	Many utility commissions believe that conventional ratemaking should seek to achieve this goal and nearly every commission asserts it sets rate of return at the cost of capital. However, this is the most subjective part of ratemaking and commissions have allowed market-to-book ratio greater than 1.0.

Techniques to Align Utility Net Income with Energy Efficiency Performance³

Title of Mechanism	Description	Examples Where Used ⁴
Rate of return incentives	Utility receives a higher allowed return on equity for investment in energy efficiency.	Washington, 1980 – 1990 Nevada, 2006 – present
Shared-savings incentives	Utility receives a share of the net savings from energy efficiency achievement, or achievement above a threshold.	Washington, Puget, 1991-92 and 2007-09 Hawaii, 1993 – 2005 California investor owned utilities Duke Save-A-Watt (Indiana)
Power plant pricing for energy efficiency	Utility receives a payment for energy efficiency that is based on (less than 100%) what power from a new power plant would cost.	Duke Save-A-Watt (NC)
Linking other cost recovery to energy efficiency performance	Utility is allowed to recover some specified costs only if they achieve defined energy efficiency performance targets.	Washington, 2007 – present (Avista)
Linking allowed employee compensation to energy efficiency performance	Utility is allowed to recover executive salaries and bonuses only if energy efficiency performance meets goals.	Several utilities provide bonuses to efficiency sector employees and managers based on energy efficiency performance.
Tax credits to the Utility for Energy Efficiency Achievement	Utility receives a reduction in applicable taxes due to the state if it invests in energy efficiency.	Washington, 1980 - 1990
Penalties for Non-achievement of Energy Efficiency Requirements	Utility is financially penalized if they fall short of a defined required level of energy efficiency achievement.	I-937 (Washington) PSE (Washington, 2002-2009)

³ Some of the techniques listed may be more advantageous than others at aligning utility net income with energy efficiency performance.

⁴ The list of examples is not intended to be exhaustive.