Illinois Climate Change Advisory Group

Subgroup: Power/Energy
Policy Name: Decoupling of utility rates and profits
Policy Type: 
Estimated 2020 Reductions Compared to BAU: uncertain

Affected sectors, subsectors or entities (As the case may be)

Sector: Electric
Subsector: Distribution utilities
Entities: ComEd, Ameren, Mid-American

Description

Background: Utility Ratemaking

Under traditional regulation, a utility’s rates are set based on an estimation of costs of providing service over some time period (including an allowed rate of return, or “profit”), divided by a forecasted amount of unit sales over that period. If actual sales turn out just as forecasted, the utility will recover all of its fixed costs and earn its allowed rate of return. If actual sales exceed the forecast, the utility will earn extra profit. If actual sales fall below the forecast, the utility will earn less profit, and may potentially fail to recover all of its fixed costs. This basic relationship between sales and profits exists whether the utility is a vertically integrated utility or a “distribution only” utility in a restructured state.

Rationale for Decoupling

The public interest issue underlying the concept of utility rate “decoupling” is really fairly simple. Once rates are set, the utility has a disincentive to take actions to encourage their customers to adopt energy efficient practices that may result in lower sales, as this will reduce their net revenues, and thus their amount of profit and their ability to recover their fixed costs. This disincentive affects not only their interest in directly funding and delivering energy efficiency programs to their customers, but also their corporate interest regarding other public policy initiatives promoting energy efficiency, such as improved building codes and new equipment and appliance standards.

As a result of this basic conflict between the utility corporate interest in higher unit sales and the public interest in advancing energy efficiency, a number of states have implemented alternative mechanisms designed to modify the economic effects of energy efficiency on the utility. The concept of “decoupling” sales levels from fixed cost recovery (including rate of return) is one commonly cited mechanism for overcoming that inherent utility opposition to energy efficiency. (Another common method is to provide an economic incentive to utility shareholders for good utility performance in providing
energy efficiency programs…with the implicit assumption that this will help compensate the utility for lost sales revenues.)

What is “Decoupling”?

In the simplest terms, “decoupling” refers to a rate adjustment mechanism that “decouples” the ability of the utility to recover its agreed-upon fixed costs (including allowed earnings) from the actual volume of unit sales that occur. There are a number of slight variations in how the computations can be done (e.g., normalizing for weather, adjusting for the number of customers, etc.), but the basic principle is that a “true-up” mechanism is applied once actual sales levels are known. The true-up mechanism is symmetrical. That is, if sales were lower than forecasted (for whatever reason, including energy efficiency), then a slight upward adjustment in rates is applied to compensate the utility. Conversely, if sales were higher than forecasted, a slight rate decrease is implemented to compensate customers. Under nearly all reasonable circumstances, these “adjustments” should be very small (e.g., between 0% and 3%), but to ensure that is the case, some jurisdictions have applied “caps” on the possible adjustment to limit its magnitude (e.g., limit any adjustment to no more than 2% or 3% of the existing rate).

Decoupling Should be Part of a Package Deal

Despite the fact that decoupling provides symmetrical protections for both the utility and ratepayers, there is some overall beneficial effect to utilities from reducing their risk of cost-recovery. On balance, if decoupling results in significant new energy efficiency programs, then ratepayers (and society) will be better off and the trade-off for decoupling would be worthwhile. For that reason, advocates and regulators have typically required that any adoption of decoupling be part of a “package deal”, with significant new investment in energy efficiency. Indeed, the two leading states in terms of implementing decoupling (i.e., CA and OR) are two of the states with the very highest levels of utility funding for energy efficiency.

One Note of Caution: Raising ‘Monthly Charges’ or ‘Meter Charges’ is NOT Decoupling, and is Not Recommended

Some utilities have attempted to pursue rate redesign that would shift most or all fixed cost recovery out of variable unit rates and into fixed monthly or meter charges, and have attempted to call this “decoupling”. However, virtually all energy efficiency advocates and ratepayer advocates do not support that practice. The concept is generally held in strong disfavor by energy efficiency advocates because it diminishes the energy unit “price” incentive to customers to be more energy efficient (i.e., it decreases the apparent cost of a kWh or therm), and can be misleading because many things considered as short term fixed costs are really long term variable costs that are affected by the amount of energy consumed (e.g., the capital cost of power plants, transmission equipment, etc.) It is also typically opposed by ratepayer advocates as resulting in a very visible increase in base customer utility charges, which would tend to relatively disadvantage low-income and other low-usage customers.
Rough estimate of reductions from BAU in 2020

No direct link to specific reductions, but addressing this issue will likely be vitally important for achieving large amounts of energy efficiency from utility sector programs.

Timetables, duration and stringency

Developing an agreement to allow decoupling (and/or shareholder incentives for energy efficiency performance) should be done as soon as possible (even if the exact details are finalized later) because it will likely significantly affect the positions that utilities will take regarding energy efficiency as climate change policies are developed. (And energy efficiency is the fastest and most cost-effective resource strategy for reducing carbon emissions, so you want to make sure it is fully utilized.)

Barriers to implementation

These mechanisms will require some willingness by regulators to include new regulatory methods. But experience in states that have done this indicates that this is not burdensome. Old-line utility management will have to do some thinking and make some effort to adjust the utility’s “mission” and “business plan” to truly embrace energy efficiency as a resource. But there are some good examples where this is happening.

Interstate Cooperation

Nothing directly, although there is benefit from being able to learn from the experiences in other states.