

Analysis of Vermont Alternative Regulation

Vermont General Assembly
Senate Finance Committee

David E. Dismukes, Ph.D.
Center for Energy Studies
Louisiana State University

January 22, 2015

Disclosure: Financial support for this analysis provided by AARP.

Why Are Utilities Regulated?

Utilities are regulated for two reasons:

1. Utilities are **imbued with the public interest:** utilities provide critical services (electricity, natural gas) that are essential for a modern economy; and
2. Utilities are “**natural monopolies.**” Utilities have (natural) cost characteristics that allow them to drive competitors out of the market and then price their services at rates higher than competitive markets.

These two conditions serve as the basis for utility regulation (traditional and alternative regulation).

How Do We Regulate Utilities Under Traditional Regulation?

Traditional regulation is often called “**cost-of-service**” regulation since **rates (or prices) are set to costs**.

This is just like **competitive markets where prices are set to costs**. Regulation is often thought to be a proxy for competitive markets since **optimal regulation rewards efficient firms and penalizes inefficient firms**.

Rate cases are the administrative process in which **rates are set**. Requires regulators to cull through significant amounts of information to determine an appropriate level of costs (and return on investment) for a utility.

Rates are set once on a “typical year” basis.

“**Regulatory lag**” is the time between rate cases that **disciplines** utility costs.

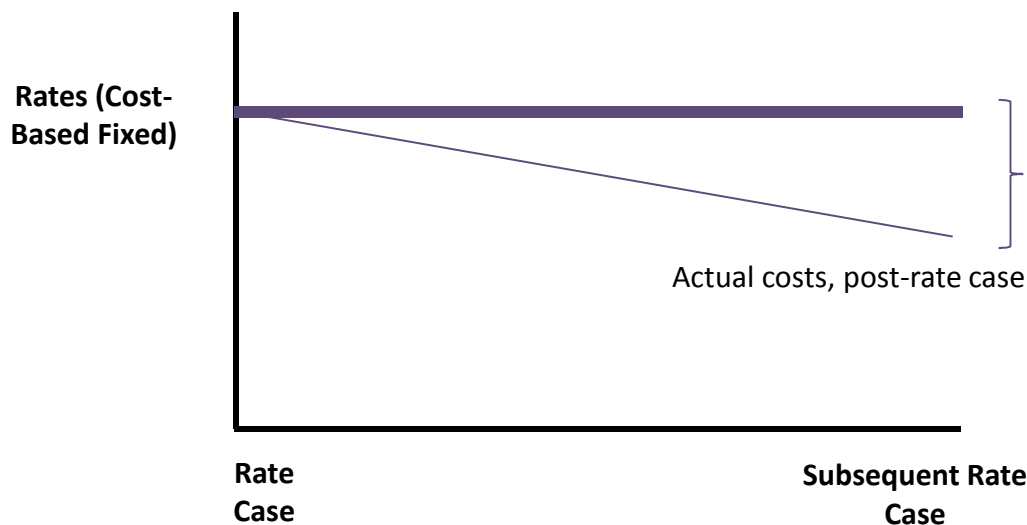
Traditional Regulation: Regulatory Lag

Regulatory lag is the time period between the two rate cases. If a utility can decrease costs relative to the year upon which rates are set, it can achieve the benefits of the efficiency gains (i.e., **increased profitability**).



Rate Case: Rates are based on costs known at that time and are fixed until next rate case.

Subsequent Rate Case: Rates re-set and fixed until next rate case.



Reduction in costs (efficiency improvement) facilitated by regulatory lag.

Note that allowed rate of return does bound how large this profitability can get.

Why Alternative Regulation?

The theory and practice of **alternative regulation** arose primarily in the early 1980s **in reaction to many of the policy/economic challenges of that time period** including:

- Frustration with determining costs in a **high inflationary/high fuel cost** environment.
- Frustration with the **capital inefficiency** and **over-capitalization** that was attributable to traditional regulation (primarily nuclear units).
- The huge over-hang of **excess capacity** that arose during that time period from the massive utility build-out that became unnecessary.

What is Alternative Regulation?

Alternative regulation is a means of regulating utilities that relies **less on a traditional rate case** structure and more on an **annual formulaic-based approach** of setting rates.

Alternative regulation **modifies traditional regulation**: it **does not replace traditional regulation**. Alternative regulation focuses more on **output and performance** rather than inputs (measuring the cost of service in any given year).

Rationales for the use of alternative regulation:

- “Institutionalize” regulatory lag (increase utility profit opportunities by encouraging efficiency).
- Reduce asymmetric information problems (regulated firms having more information about costs than regulators).
- Reduce administrative costs (reduced need for rate cases).

Primary Components of an Alternative Regulation Plan

Alternative regulation plan should be based upon a structure that **balances risk and rewards between ratepayers and utilities**. These plans are typically based upon three primary components

Formula for allowed annual rate change

Earnings sharing mechanism

Program duration

Appropriately designed alternative regulation program needs to **balance risks** across these three program components.

The goal is not to make a utility's job easier – it's actually to make it more challenging by offering the utility greater opportunity for rewards (profits).

Vermont Alternative Regulation: Major Program Deficiencies

Vermont experience, to date, underscores the proverbial “devil in the details” problems with regulatory policy design. The issue with Vermont’s alternative regulation programs rests with **how alternative regulation has been constructed, and modified, since 2006.**

The three primary Vermont alternative regulation design deficiencies include:

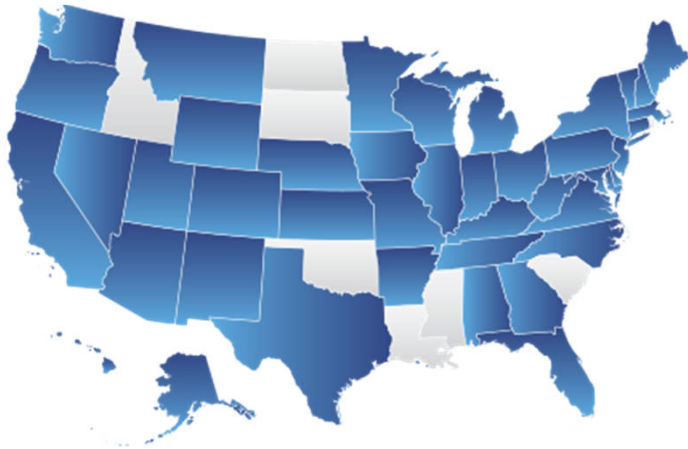
- (1) The trade-offs between annual base rate increases and the ESM is **skewed**, and **primarily benefits shareholders**, not ratepayers.
- (2) Recent modifications to both alternative regulation plans (VGS, GMP) have **shifted a considerable degree of uncompensated risk** away from the utilities and to ratepayers. This is particularly true for VGS.
- (3) The **provisions for “exclusions” included in both alternative regulation plans** are based upon a **questionable premise** (that capital expenditures cannot be accommodated). This combines the worst of “cost-based regulation” and alternative regulation.

Example: Prior Earnings Sharing Experience (Green Mountain Power)

To date, ratepayers have received a total of over **\$800,000** from the sharing portion of the GMP alternative regulation plan. **GMP's** shareholders, however, have received close to **\$7.0 million**.

| Earnings Sharing Experience Green Mountain Power | | | | | | |
|---|----------------------|--|-------------------------|--------------------|--------------------|-----------------------|
| Year | Ratepayer ESM Shares | Contribution to Customer Energy Efficiency Programs (Power Partners) | Ratepayer - Total Share | Deadband Share | Utility ESM Shares | Utility - Total Share |
| 2007 | \$0 | \$2,849 | \$2,849 | \$25,637 | \$0 | \$25,637 |
| 2008 | \$0 | \$31,718 | \$31,718 | \$285,458 | \$0 | \$285,458 |
| 2009 | \$0 | \$120,125 | \$120,125 | \$1,081,129 | \$0 | \$1,081,129 |
| 2010 | \$0 | \$178,792 | \$178,792 | \$1,609,124 | \$0 | \$1,609,124 |
| 2011 | \$0 | \$182,388 | \$182,388 | \$1,641,489 | \$0 | \$1,641,489 |
| 2012 | \$0 | \$0 | \$0 | -\$1,024,350 | \$0 | -\$1,024,350 |
| 2013 | \$0 | \$336,572 | \$336,572 | \$3,029,144 | \$0 | \$3,029,144 |
| | \$0 | \$852,442 | \$852,442 | \$6,647,631 | | \$6,647,631 |

U.S. Offices of Ratepayer Advocacy



- There are currently 40 different legislatively-created ratepayer advocacy offices.
- Ratepayer advocates are usually statutorily-created offices designed to represent and **advocate for ratepayer interests**.
- In some states, this advocacy is defined broadly across all customer classes. In some instances the legislatively-set advocacy mission is limited to just **residential and small commercial customers**.
- A **ratepayer advocate's mission should be as an active and independent advocate and representative for ratepayers** taking positions that directly support economic, safe and reliable service.
- Ratepayer advocacy does not translate into unbridled litigation nor does it suggest consistent opposition to utility and stakeholder positions. **It does mean strong, independent, and transparent representation.**

Conclusions

Regulatory lag is not “bad” and is the primary incentive mechanism included in regulation that should **increase utility efficiency incentives** in a manner **similar to competitive markets** (efficiency leads to increased profitability).

Alternative regulation is a **modification** of, not a **substitute** for, traditional regulation by taking a little of the “old” (cost of service ratemaking and regulatory lag) and combining this with a little of the “new” (formulaic increases in rates and fixed regulatory review periods) to **increase the effectiveness** of the regulatory process for both parties (utilities and ratepayers).

Alternative regulation **changes the regulatory emphasis** from focusing on “**inputs**” (i.e., the cost of service) to one that emphasizes “**outputs**” (i.e., efficiency and profitability): this is why **alternative regulation is often referred to as performance-based regulation**, because its underlying goal is to encourage efficient **performance**.

A good alternative regulation program ensures that the **risks and rewards** between ratepayers and utilities are **balanced**. The current Vermont alternative regulation plans **do not do a good job at balancing risks and rewards** but could be easily changed to ameliorate each of the programs’ shortcomings.

Summary of Recommendations

1. Require the Board to open a proceeding to **reconcile alternative regulation plans** between VGS and GMP with the goal of **creating program consistency that balances the risks** between utilities and ratepayers.
2. Limit **the use of capital expenditure cost recovery mechanisms** within the plans:
 - a) No capex mechanisms allowed until **project-specific and financial need** is proven.
 - b) If major capital program costs are allowed, utilities must be required to provide a **detailed set of minimum filing requirements for annual reconciliations** (similar to the recent GMP settlement agreement).
 - c) If major capital program costs are allowed, utilities must **include performance-based measures with penalties for non-performance**.
 - d) If capital program costs are allowed, they must be **subjected to ratepayer protection mechanisms** that include, but are not limited to, total annual investment caps, rate impact caps, minimum filing requirements, and performance benchmarks with penalties for non-compliance.
3. Consider additional modifications to make the Department more **consumer advocacy-oriented**.