

Shareholder Performance Incentives: Enough Cheese? Right Cheese?

ACEEE Energy Efficiency as a Resource Conference

September 28, 2009

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The Regulatory Assistance Project

Vermont ♦ Maine ♦ New Mexico ♦ California ♦ Illinois



About the Regulatory Assistance Project

- RAP is a non-profit organization providing technical and educational assistance to government officials on energy and environmental issues. RAP Principals all have extensive utility regulatory experience.
 - Richard Sedano was commissioner of the Vermont Department of Public Service from 1991-2001 and is an engineer.
- Funded by foundations and the US Department Of Energy. We have worked in nearly every state and many nations.
- Also provides educational assistance to stakeholders, utilities, advocates.



Regulation...

- ...Inherently offers incentives to utilities...
 - And other stakeholders
- ...Can offer incentives affirmatively designed to promote the public interest (balancing utility and consumer interests)...
 - Or not, and incentives can conflict
 - Status quo can send mixed messages to utilities and customers



Regulation and Energy Efficiency

- Traditional Regulation includes an incentive at most times for the utility to sell more, and a disincentive for it to sell less
 - Utility sees sales necessary to cover fixed costs
 - The throughput incentive does not help utilities love energy efficiency, and should be removed
 - Decoupling
 - Focus of this talk, however, is on performance incentives



Regulation and Energy Efficiency

- Traditional regulation assumes that regulators can direct utility actions in the public interest
- Utilities will comply and receive cost recovery in the appropriate rate case
 - Cost disallowance for various reasons, or penalties can be applied to correct behavior
- Is this system sufficient for imminent, high energy efficiency goals?




Traditional Regulation and Performance Incentives

- Established view: If EE is good for customers, no added incentive for utilities is necessary
- Alternative views:
 - EE can be based on “**compliance**” (good) or on “**innovation**” and “**inspiration**” (better >> best)
 - EE, a priority, competes for utility capital and management attention with investments that earn and benefit from attractive incentive



Proper Basis for Financial Incentives

- Performance
- Not spending, no bonus for just showing up
- Performance for what? For what matters!
 - “Stretch” performance
 - Overall portfolio savings (energy, capacity)
 - Sub-categories too (keyed to public interest)
 - Impact effects by customer class or program
 - Market effects
 - Process achievements, milestones too



Why Financial Incentives for Energy Efficiency?

- To create behavior and performance from the utility beyond what would be expected from pure regulatory compliance
 - How do you measure that?
 - I have no idea, you probably can't, so the reason you do it is out of an interest in aligning or harmonizing regulatory incentives
- Because EE is equivalent or superior to other resources



Energy Efficiency as a Resource Equivalent to Others

- Does that mean EE has to be an investment?
 - Or are the important aspects the **opportunity** to earn, and perhaps the **magnitude** of the bottom line effect?
- G&T investments earn a return
 - Purchased Power earns nothing but thanks and expose the utility to prudence risk
 - Logic is different with munis and coops



Energy Efficiency Superior to Other Resources

- How will utility management be motivated to allocate resources, financial and human, to truly maximize cost effective EE?
 - Emphasis from the CEO (support from CFO)
 - Organize all departments around EE
 - Reward employees for EE success
 - Service, not throughput, is prime directive
- Comprehensive culture shifts (are hard)



Check on Magnitude of Financial Incentive

- Can a third party accomplish sustained equivalent or superior results at less cost?
- State has an option to switch if utility demand for incentive is too big



Financial Incentives for Energy Efficiency: Methods

- Return on Equity Bonus
- Performance Bonus
- Shared Saving
- Shared Avoided Cost



Measuring Implications

- Pressure on EM&V to show performance indicator results
 - Performance thresholds are reached or not
 - Shared savings rewards every unit
- Bottom line cost to ratepayers is a key consideration, so choice among methods should be comparable this way
 - Caps are typical, regardless of method
 - Incentives included in B/C calcs as appropriate



Performance Bonus (MA)

- Performance targets for energy efficiency programs
- Incentive rewards the utility with a percentage of total program costs for meeting targets---essentially a “bonus” on top of cost recovery.
- Targets can focus on overall results and on performance of a sampling of programs with a reward attached to each target, or can be associated with achievements associated with the public interest.



Cost Capitalization (NV)

- Utility “capitalizes” energy efficiency program costs—similar to investments in supply-side assets
 - The energy efficiency investment may be amortized over the average lifetime of the energy efficiency measures
 - Or over a shorter period to balance other financial concerns
- Utility earns a return on the un-depreciated energy efficiency regulatory asset, a modest incentive
- A bonus to its authorized return on equity can create a more substantial incentive comparable with other methods



Shared Savings (CA)

- Utility retains a percentage of the “Net Resource Benefits” achieved by the total energy efficiency portfolio
- Incentive levels tied to achievement of energy savings goals or specified level of net benefits.
- Net Resource Benefits are typically defined as avoided costs of energy, capacity, transmission & distribution and environmental benefits where allowed.



Avoided Cost

- Energy efficiency savings valued at a set percentage of avoided generation costs
- This approach covers program costs, any net lost revenue, and traditional incentive payment.
- See John Wilson's thorough explanation in a later presentation on this panel of Duke's proposal along this line



Synthesis

- An objective of any state government is to offer consistent policy to the public.
- Finding the right balance of these regulatory reforms will promote strategies consistent with the overall objective of supporting energy efficiency.

Kansas CC

Docket GIMX-441-GIV pg 29

“The Commission has stated it views energy efficiency as an energy resource. The Commission has an obligation to steer utilities toward resources, whether demand side or supply side, in a manner that results in just and reasonable prices. And because the Commission is in the energy regulation business, the Commission views energy efficiency as a means to an end — energy at a low cost to consumers within the context of a balanced energy resource portfolio -- not an end in itself that must be rewarded.”



Oregon PUC Order 09-020

pg 27

“... PGE does have the ability to influence individual customers through direct contacts and referrals to the ETO. PGE is also able to affect usage in other ways, including how aggressively it pursues distributed generation and on-site solar installations; whether it supports improvements to building codes; or whether it provides timely, useful information to customers on energy efficiency programs. We expect energy efficiency and on-site power generation will have an increasing role in meeting energy needs, underscoring the need for appropriate incentives for PGE.”



Leadership

- Many imminent changes to power sector
- Energy efficiency will be more valuable than ever
- Yet supply-orientation remains powerful in utility and government cultures
- Leadership will be needed to nurture changes



Energy Efficiency Power Plant

- An abstract idea comparing energy efficiency as a resource with supply
- A tangible financeable bundle of energy efficiency programs with an expected resource shape
 - Tailored to system needs in size and time
 - Performance at least as reliable as generator



Performance Incentives in the States

- Arizona (SS)
- California (SS)
- Colorado (?)
- Connecticut (PB)
- Hawaii (SS)
- Idaho (?)
- Illinois (penalty)
- Indiana (?)
- Kansas (SS)
- Kentucky (?)
- Massachusetts (PB)
- Minnesota (SS)
- Montana (ROE)
- Nevada (ROE)
- New Hampshire
- New Jersey (SS)
- New Mexico (?)
- Ohio (case by case, AC)
- Rhode Island (PB)
- Texas (?)
- Vermont (PB)
- Virginia (?)



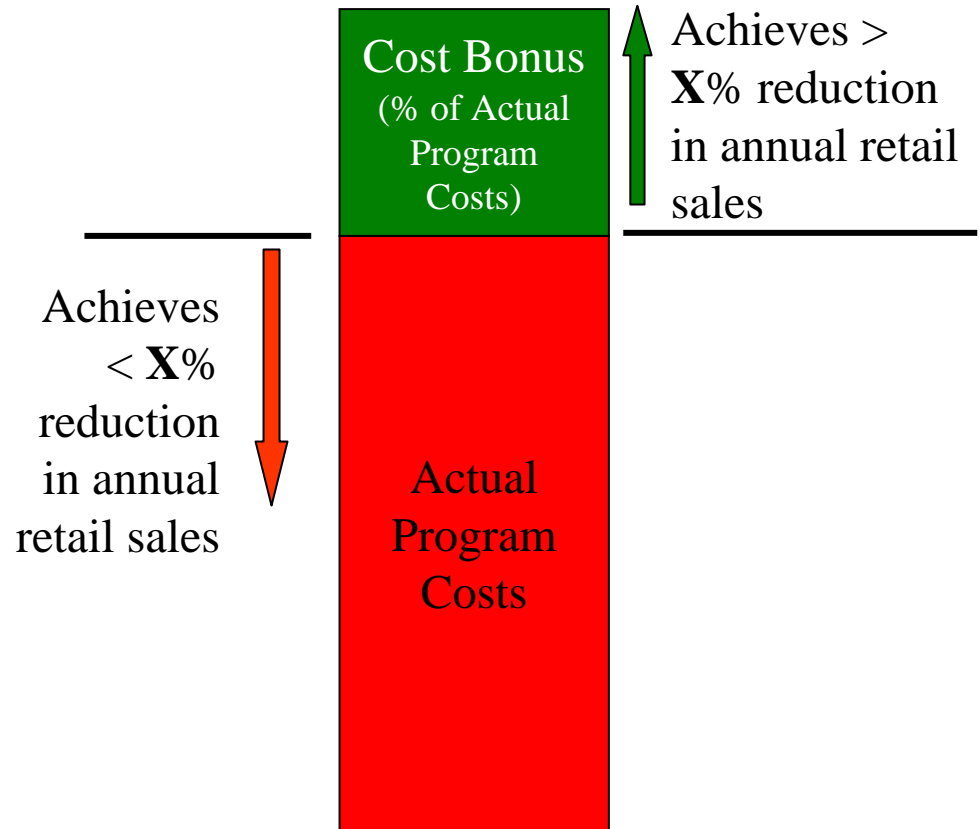
Thanks for your attention

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- RAP Mission: *RAP is committed to fostering regulatory policies for the electric industry that encourage economic efficiency, protect environmental quality, assure system reliability, and allocate system benefits fairly to all customers.*

Performance incentives: Examples

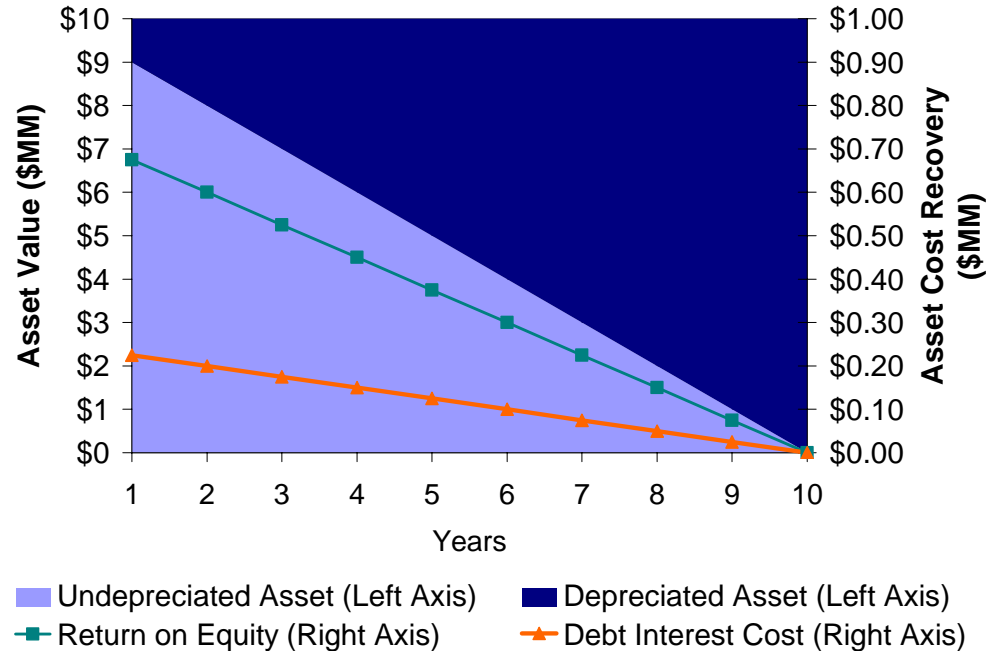
➤ Massachusetts: Companies can earn ~5% of program costs if savings goals are met.

➤ Connecticut: Companies can earn from 1-8% of program costs based on percentage of savings targets achieved (1% for 70% of goals; 5% for 100% and 8 % for 130%)



Cost Capitalization: example

➤ Nevada: 5% additional return on equity (i.e. 500 basis points) for energy efficiency investments compared to supply-side investments.



Shared Savings Incentives: Examples

➤ California: Companies can earn 9% of net benefits for meeting 85-99% of savings goals; 12% if they meet or exceed savings goals, subject to an earnings cap

➤ Minnesota: Companies can earn an incentive based on % of net benefits—a sliding scale calibrated so that up to 30% of program budget as incentive at 150% of savings goal.

