Clean Solutions: What's In It For Utilities?

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Incentive Regulation

> All regulation is incentive regulation

- Consider: Energy Star products save energy at a cost of about 1 cent/kWh, a small fraction of the cost of power supply.
- Do you know what incentives utilities have to promote Energy Star?
- > Do you really know how utilities make money?



> Every kWh sold adds to profits

- Every kWh lost to efficiency or customer side distributed resources cuts profits
- >AND the numbers are overwhelming
- If this continues there is little chance of any significant utility investment in these resources

How the System Works

- > Regulation and utility profits do not work as you might expect!
- > Once case ends prices are all that matter
- Profits = revenue costs
- > Revenue = price * volume
- Costs are mostly unrelated to volume *in the short run* (that is, from rate case to rate case)
- Thus: if efficiency causes volume to decrease, utility profits drop

The Numbers: Typical Vertically Integrated Utility

≻1% sales loss yields 5% cut in profits!

Good News

>It wasn't always this way

Utility costs have been shifted to consumers or deferred for later recovery

>Fuel and purchased power

>AFDC

Good news: it was not intentional and it can be fixed

>1989 NARUC Resolution: Reform regulation so that successful implementation of a utility's leastcost plan is its most profitable course of action

Better Pricing Is Not The Solution

- > Better prices to consumers, revealing the full marginal cost, is a good idea and should be done
- BUT better prices including TOU prices, inverted block rates, critical on-peak prices, and others do not solve the utility's financial problem and, even worse, create a new set of perverse incentives
- Example: TOU prices move most utility profits to on-peak sales

Restructuring Does Not Help

Same company divested of generation 1% sales loss 11% loss of profits

Some states' treatment of stranded costs (e.g., Maine's) actually double the disincentive for energy efficiency

Solutions?



- > Prices?
 - Some utilities have proposed to move all or most revenue to fixed monthly charges
 - > This would be a mistake for several reasons
- > Revenues caps
 - Revenue or revenue per customer caps are a proven methods for restructured and non-restructured states
 - Increasingly used for regulating transmission companies and gas companies in the US and abroad





Profits & Progress Through Least-Cost Planning

http://www.raponline.org/showpdf.asp?PDF_URL='Pubs/General/P%26plcp%2Epdf'

Profits and Progress Through Distributed Resources

http://www.raponline.org/showpdf.asp?PDF_URL=Pubs/General/ProfitsandProgressdr.pdf

Performance-Based Regulation For Distribution Utilities

<u>http://www.raponline.org/showpdf.asp?PDF_URL=%22Pubs/General/DiscoPBR.pdf%22</u>

Performance-Based Regulation in a Restructured Electricity Industry

http://www.synapse-energy.com/Downloads/pbr-naruc.doc