



National Regulatory
Research Institute

**The Two Sides of Cost Trackers:
Why Regulators Must Consider Both**

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National Regulatory Research Institute

NRRI Teleseminar

October 27, 2009

2:00-3:30 EDT

Thank you for participating in the NRRI teleseminar, “The Two Sides of Cost Trackers: Why Regulators Must Consider Both.” This manual contains important information you will need during the conference.

THIS MANUAL INCLUDES:

- Course materials
- Dial-in instructions for accessing the conference
- Tips for submitting questions to speakers

CONFERENCE DETAILS

Your conference is Tuesday, October 27, 2009 at 2:00 p.m. EDT, 1:00 p.m. CDT, 12:00 p.m. MDT, and 11:00 a.m. PDT. It will last 90 minutes.

If you are using a speakerphone, put the phone on MUTE for the best sound quality.

HOW TO JOIN THE CONFERENCE

- Dial **1-888-450-9920** approximately 5-10 minutes before the start of the conference.
- Enter your unique PIN (sent in your e-mail confirmation).
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If you wish to submit a question to our speakers, you may do so in advance by sending e-mail to questions@nrri.org. This option, plus live Q&A, will be available during the conference.

TIPS FOR ASKING QUESTIONS

You are in "listen only" mode unless you choose to participate in the live Q&A. If you want to ask a live question:

- UNMUTE your phone before you are called on so there is not a pause in the conference and so the moderator does not pass you over for the next question.
- Lift the handset while asking your question.
- Be sure there are no loud background noises in the room while asking your question.

We at NRRI are excited about this live teleseminar that will provide the information you need to help your commission improve its understanding of cost trackers.

Should you have questions or concerns, please call 301-588-5385 ext 303.

Speaker Bios and Contact Information



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Abstract

A cost tracker allows a utility to recover its actual costs from customers for a specified function on a periodical basis outside of a rate case. This presentation discusses the major issues that state public utility regulators face in evaluating the costs and benefits of these devices.

Several regulators (“state public utility commissions”) have approved new cost trackers for a wide array of utility functions in both the electric and natural gas sectors. Regulators have traditionally limited the use of cost trackers, partially because of the perception that they create “bad” incentives and shift risks to a utility’s customers. The recent approvals depart from past regulatory practices that sanction trackers only under highly restricted conditions.

A major contention in this presentation is that regulators have not given adequate attention to the negative features of cost trackers, which are at odds with the public interest. Specifically, cost trackers diminish the positive effects of regulatory lag and retrospective reviews in deterring utility waste and cost inefficiency. Trackers also could reduce regulatory scrutiny in evaluating cost prudence.

This presentation contends that regulators should view cost recovery in a rate case as the “default” practice. A rate case assures scrutiny of a utility’s costs and provides strong motivation for the utility to control those costs between rate cases. The utility therefore bears the burden of showing why a cost tracker is in the public interest. The utility should demonstrate that it would suffer severe financial difficulties under “extraordinary circumstances” without the tracker.

This presentation also recommends that regulators consider the advantages of replacing cost trackers (excluding fuel and purchased gas cost trackers) with a single rate-of-return tracker in the form of an earnings-sharing mechanism. This alternative can overcome some of the problems with cost trackers, namely perverse or weak incentives for cost control, the mismatching of total costs and revenues, and inadequate regulatory oversight of costs. An earnings-sharing mechanism also achieves the major objective of cost trackers, which is to prevent a utility from suffering serious financial problems between rate cases.

The material for this presentation derives from a paper authored by the presenter, titled “How Should Regulators View Cost Trackers?” The paper is available at http://nrri.org/pubs/gas/NRRI_cost_trackers_sept09-13.pdf.

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The Two Sides of Cost Trackers: Why Regulators Must Consider Both

I. Introduction

- A. This presentation discusses the major issues regulators face in evaluating the costs and benefits of cost trackers.
- B. It responds to state public utility regulators' recent actions in approving new cost trackers for a wide array of utility functions in both the electric and natural gas sectors.
- C. Historically, regulators have limited the use of cost trackers, partially because of the perception that they create "bad" incentives and shift risks to a utility's customers.
- D. The recent approvals differ from past regulatory practices that sanctioned trackers only under highly restricted conditions.
- E. The argument presented here is that regulators have not given adequate attention to the negative features of cost trackers. By conflicting with certain regulatory objectives, cost trackers thwart the public interest in the following ways:
 - 1. Cost trackers undercut the positive effects of regulatory lag and retrospective reviews in deterring utility waste and cost inefficiency.
 - 2. They could also lessen regulatory scrutiny in evaluating the prudence of costs.

II. Organization of Presentation

- A. I will first define cost trackers and discuss how they benefit utilities.
- B. I will then provide the rationales for cost trackers and explain how they relate to regulatory principles for cost recovery.
- C. I will also examine two scenarios:
 - 1. In the first, regulators allow comprehensive cost trackers.
 - 2. In the second, they allow no cost trackers.
- D. Finally, I will recommend a regulatory policy and identify questions regulators should ask when investigating cost trackers.

III. The Definition and Mechanics of a Cost Tracker

- A. A cost tracker allows a utility to recover its actual costs from customers for a specified function on a periodical basis outside of a rate case. A tracker, in other words, involves the recovery of a utility's actual costs in the periods between rate cases.
- B. These costs could include those that deviate from some baseline or are zero-based.
 - 1. Baseline costs, for example, could include bad debt costs reflected in present rates as determined in the last rate case.
 - a. A cost tracker could allow adjustments in rates when actual bad-debt costs depart from the baseline level.
 - b. These adjustments would occur periodically as prescribed previously by the regulator.
 - 2. To benefit customers when actual cost falls below the baseline level, a cost tracker must be "symmetrical."
 - a. The unpredictability of a cost item means that test-year cost estimates can overstate or understate the actual costs.
 - b. Virtually all fuel and purchased gas cost trackers are symmetrical, with customers benefiting when commodity-energy costs fall (e.g., since Autumn 2008).
- C. Cost trackers, alternatively, could apply to *all* of the costs associated with a particular business function or task.
 - 1. Under this zero-based approach, for example, the entire cost of a gas utility's new investments in upgrading the safety of its distribution system would be amortized and recovered later from customers in lieu of inclusion in base rates.
 - 2. The same cost-recovery procedure can occur for other utility activities such as energy-efficiency initiatives.
- D. Some cost trackers, such as fuel adjustment clauses (FAC) and purchased gas adjustments (PGAs), adjust rates in response to changes in the price of fuels used by generating facilities and purchased gas for gas utilities.

IV. Principles for Cost Recovery

- A. "Reasonable opportunity" criterion

1. Regulators have applied myriad criteria for utility cost recovery.
2. Regulators are legally bound to allow utilities the *opportunity* to recover prudently incurred costs. Prudent costs reflect utility management that makes rational and well-informed decisions.
3. The word “opportunity” refers here to the utility having a good chance of earning its authorized rate of return and is distinct from an entitlement.
4. “Earning the authorized rate of return” means that the utility recovers its prudent variable costs (e.g., operations and maintenance) and earns a return of and on prudently incurred fixed costs, including its cost of capital as determined in the last rate case.

B. Violations of the “opportunity” condition

1. Regulators traditionally allow cost recovery only after a rate case review. Other alternatives, such as a cost tracker, would require that a utility show violation of the “opportunity” condition for particular cost items.
2. A violation can occur when a certain cost is substantial, unpredictable, and generally beyond a utility’s control.
3. Other than costs relating to fuel and purchased power and gas, few other costs arguably fall within the confines of “special circumstances” that justify recovery outside of a rate case.
4. Parties to regulatory proceedings naturally disagree over when these circumstances exist.
5. To clarify their positions to utilities, intervening groups, and the general public, regulators might want to consider issuing policy statements articulating necessary conditions for the recovery of costs through trackers.

C. Incentive effects of cost trackers

1. Regulators, until recently, have taken a cautious approach to trackers, partially because they weaken the incentive of a utility to control its costs.
2. Controlling utility costs is a primary objective of regulators because it contributes to lower rates and reflects efficient utility management. Cost trackers can, in various ways, result in higher utility costs:
 - a. They undercut the positive effects of regulatory lag on a utility’s costs.

- (1) “Regulatory lag” refers to the time gap between when a utility undergoes a change in cost or sales levels and when the utility can reflect these changes in new rates.
 - (2) Economic theory predicts that the longer the regulatory lag, the more incentive a utility has to control its costs; when a utility incurs costs, the longer it has to wait to recover those costs, the lower its earnings are in the interim. The utility, consequently, would have an incentive to minimize costs.
 - (3) Regulators rely on regulatory lag as an important tool for motivating utilities to act efficiently.
- b. When mechanisms for cost recovery differ across functional areas, perverse incentives can arise that would make it profitable for the utility not to pursue cost-minimizing activities. The result is higher rates to utility customers.
- (1) A utility with an FAC might postpone maintenance of a power plant even when such maintenance would cost less than the savings in fuel costs (i.e., when beneficial to consumers but not to the utility).
 - (2) The utility could not immediately (or ever) recover additional maintenance costs, while it could pass the higher fuel costs through the FAC.
- c. Cost trackers, in the long run, can bias a utility’s technological and investment decisions.
- (1) A utility recovering fuel costs through an FAC, for example, might want to adopt fuel-intensive generation technologies even if they are more expensive from a lifecycle perspective.
 - (2) The result, again, is higher rates to utility customers.
- d. Cost trackers also could motivate utilities to shift more of their costs to functions subject to trackers.
- (1) They might, for example, want to classify routine maintenance costs as a capital expense that receives “tracker” cost recovery.
 - (2) Such shifts could lead to utilities earning an excessive rate of return.

- (3) Regulators implementing trackers should carefully define applicable costs.
 - (4) Regulators should also examine costs claimed under trackers to ensure that the utility recovers only appropriate costs through the tracker.
 - e. An important incentive for cost control by regulated utilities is the threat of cost disallowance from retrospective review.
 - (1) To the extent that cost trackers dilute the frequency and quality of these reviews, further erosion of incentives for cost control occurs.
 - (2) With less regulatory oversight and auditing, which often accompany rate cases, a utility might have less concern regarding the costs it incurs.
 - (3) Regulators have long recognized the importance of retrospective reviews in motivating a utility to avoid cost disallowances from grossly subpar performance.
- 3. Rational utility management, as a general rule, would exert minimal effort in controlling costs if it has no effect on the utility's profits.
 - a. This condition occurs when a utility is able to pass through (with little or no regulatory scrutiny) higher costs to customers with minimal consequences for sales.
 - b. Cost containment constitutes a real cost to management. Without any expected benefits, management would exert minimum effort on cost containment.
 - c. The difficult problem for the regulator is to detect when management is lax. Regulators should concern themselves with this problem.
 - (1) Lax management translates into a higher cost of service and, if undetected, higher rates to the utility's customers.
 - (2) Regulators should closely monitor and scrutinize costs, subject to cost trackers.
- 4. A contradiction seems to exist between the criterion that trackers should apply only to those costs beyond the control of a utility and the assertion that the modified incentives caused by trackers can lead to higher costs. In reality, a utility has at least some control over most of its costs.

- a. Except for certain taxes and some other cost items, the actions of utility management can affect costs.
 - b. Even for fuel or purchased gas, utility management's actions can affect their total costs. Although for the most part the marketplace determines the price paid for these items, utilities can negotiate prices under long-term contracts and decide on the mix and sources of different fuels and purchased gas.
- D. Regulators also tend to avoid cost recovery that results in radical price volatility to utility customers.
- 1. Such a policy could preclude monthly price adjustments from changes in fuel costs or purchased gas costs.
 - 2. It also might result in a phase-in of the construction costs of a new base-load-generating facility.

V. Utilities' Perspective on Cost Trackers

- A. Under traditional ratemaking, the regulator sets base rates to allow the utility an opportunity to recover all of the rate-case determination of revenue requirements.
- 1. It requires no regulatory activity between rate cases.
 - 2. Traditional ratemaking establishes base rates predicated on the test year.
 - 3. A regulator relies heavily on cost-of-service studies to determine base rates. The costs represent those calculated for a designated test year and exclude those costs recovered in trackers and other mechanisms.
 - 4. Base rates have two characteristics:
 - a. A regulator sets them in a formal rate case, and
 - b. They remain fixed until the utility files a new rate case and the regulator makes a subsequent decision.
 - (1) No matter how much the utility's actual costs and revenues deviate from their test-year levels, rates remain fixed until the regulator approves new ones in a subsequent rate case.
 - (2) The exception is when a regulator allows for interim rate relief under highly abnormal conditions that jeopardize a utility's financial condition.

- B. Utilities have argued that a more dynamic market environment, characterized by the increased unpredictability and volatility of certain costs, justifies the recovery of those costs through a tracker rather than in base rates.
- C. Utilities have also asserted that the static nature of the “test year” sometimes denies them a reasonable opportunity to earn their authorized rate of return. They contend that cost trackers advance ratemaking goals by matching revenues to actual costs.
- D. In contrast to base rates, cost trackers offer a utility the advantages of:
 - 1. Shortening the time lag between the incurrence of a cost and its recovery in rates (i.e., curtailing regulatory lag);
 - 2. Increasing cost-recovery certainty;
 - 3. Lessening the regulatory scrutiny of its costs (normally, in a rate case a regulator closely reviews the utility’s costs before approving them for recovery from customers; regulators often less rigorously scrutinize a utility’s costs when recovered through a tracker); and
 - 4. Taking everything into account, lowering a utility’s financial risk by stabilizing its earnings and cash flow.
- E. Utilities increasingly have asked their state public utility regulators to depart from traditional regulation by approving new cost-recovery mechanisms for different business activities.
 - 1. Some gas utilities want to expand the scope of their PGA clauses to include a wider array of costs.
 - 2. Current cost trackers in the natural gas sector, other than those for purchased gas costs, apply to functions including pipeline integrity management, pipeline replacement costs (e.g., accelerated cast-iron main replacement programs), bad debt, energy-efficiency costs, general infrastructure costs, manufactured gas plant remediation, stranded restructuring costs, property taxes, post-retirement employee benefits, and environmental costs.

VI. Regulatory Rationales for Cost Trackers

- A. “Extraordinary circumstances”
 - 1. Regulators have traditionally approved cost trackers only under “extraordinary circumstances.”

- a. Regulators recognize the special treatment given to costs recovered by a tracker.
 - b. They consider cost trackers an exception to the general rule for cost recovery.
 - c. This view places the burden on a utility to demonstrate why certain costs require special treatment.
2. The “extraordinary circumstances” justifying most of the cost trackers that regulators have historically approved apply to costs that are:
 - a. Largely outside the control of a utility,
 - b. Unpredictable and volatile, and
 - c. Substantial and recurring.
3. Historically, regulators required that all three conditions exist if a utility hoped to have costs recovered through a tracker.
4. Fuel costs and purchased gas costs were good candidates because of their vulnerability to influence by factors beyond the control of a utility, their volatility, and their large size.
5. Regulators recently have approved cost trackers when costs do not meet all three conditions, especially the third.
6. The third condition (“substantial and recurring costs”) greatly restricts the costs eligible for cost tracker recovery.
 - a. Differences between test-year and actual cost must have a material effect on a utility’s rate of return.
 - b. Legal precedent dictates that regulators must set reasonable rates that allow a prudent utility to operate successfully, maintain its financial integrity, attract capital, and compensate its investors commensurate with the risks involved.
 - c. A utility should recover revenues in excess of its operating expenses to provide a “fair return” to investors. Businesses including utilities need to earn a profit to compensate investors for business, financial, and other risks.
7. Some regulators have softened or ignored the “substantial and recurring” component of the “extraordinary circumstances” standard.

- a. Bad debt, the subject of recent cost trackers, features financial effects that are typically not substantial.
 - b. Utilities have contended that the unpredictability of this cost makes it difficult to incorporate it accurately into the base rate.
 - c. But even if this assertion is true, it is questionable whether any bad-debt cost unaccounted for in the test year would inflict substantial financial harm on a typical utility.
- B. “Severe financial consequences”
1. Historically, regulators have approved cost trackers to avoid the possibility of a utility suffering a serious financial problem because of cost increases unforeseen at the time of the last rate case.
 - a. Justification for cost trackers is, therefore, greater when a regulator relies on a historical test year that does not recognize the volatility of certain costs or their upward trend over time.
 - b. Let us assume that a certain operating cost has trended upward (e.g., 2 percent per year) over the past several years. Let us also assume that the regulator allows only a historical test year.
 - (1) In this example the utility is likely to under-recover this particular cost—increasingly so as time passes from the last rate case.
 - (2) What effect this outcome would have on the utility’s overall rate of return depends on the magnitude of any cost increase relative to the utility’s earnings and whether other costs fell while rates were in effect.
 2. Regulators do not expect utilities to earn the authorized rate of return during each future period over which new prices are in effect.
 - a. Regulators implicitly impute a risk premium in the authorized rate of return, partially to account for the earnings volatility from fluctuations in costs or revenues from the test year.
 - b. Trackers reduce “business risk.”
 - (1) Business risk refers to the uncertainty linked to the operating cash flows of a business.
 - (2) Business risk is multidimensional, inclusive of sales, cost, and operating risks.

- (3) In the Capital Asset Pricing Model (CAPM), the lower the utility's expected earnings volatility, the lower the measure of the utility's risk relative to the market portfolio (i.e., "beta").
 - (4) Because trackers reduce a utility's business risk, a regulator might want to consider revising downward the risk premium of a utility with additional cost trackers, resulting in a lower return on equity.
3. If a regulator wants to guarantee that the utility will recover its authorized earnings, it would favor a rate design that allows the utility to recover all of its fixed costs in a monthly service charge or a customer charge.
- a. Since regulators generally do not, they implicitly recognize the positive incentive effect from allowing a utility's actual rate of return to deviate from the authorized level.
 - b. Regulators also know that if a utility is continuously earning below its authorized rate of return, the utility has the right to file a general rate increase.

C. An illustration: FACs and PGAs

- 1. The wide popularity of FACs and PGAs among utilities and regulators reflects the perception that these mechanisms are necessary to prevent a utility from earning a rate of return substantially below what was authorized.
- 2. This perception stems from the magnitude of fuel and purchased gas costs relative to a utility's earnings.
- 3. Not surprisingly, virtually all regulators believed that trackers for large items such as fuel costs and purchased gas costs were necessary to prevent inordinate rate-of-return fluctuations.
- 4. Implicit in this belief is the view that the burden on utility shareholders would otherwise be onerous, with long-term negative implications for customers.

VII. Two Extreme States of the World: Several and No Cost Trackers

A. A hodgepodge of cost trackers, or a single rate-of-return tracker

- 1. If a regulator wants a utility always to earn close to its authorized rate of return, it would favor rate adjustments between rate cases for both: (1)

actual costs deviating from test-year costs, and (2) actual revenues deviating from test-year revenues.

- a. This outcome would require cost trackers covering all of the utility's costs in addition to a revenue tracker (i.e., a revenue decoupling mechanism).
 - b. The revenue tracker, for example, would allow the utility to recover all fixed costs that the regulator approved for recovery in the last rate case.
2. Putting the utility's future on "autopilot" seems like a reasonable course of action if financial stability is the only regulatory objective.
 3. Considering incentive problems and excessive risk-shifting to customers, this option comes across as much less appealing.
 4. An earnings-sharing mechanism (ESM), which consolidates different cost and revenue trackers, is one ratemaking procedure for stabilizing a utility's rate of return between rate cases.
 - a. Under this mechanism, the utility adjusts its rates periodically (e.g., annually) when its actual return on equity falls outside some specified band. As an illustration, if the band encompasses a 10 to 14 percent rate of return on equity (with 12 percent as the utility's authorized rate of return established in the last rate case) when the actual return is 9 percent, the utility could adjust its rates upward to increase its return to, or bring it closer to, 10 percent.
 - b. An ESM helps to stabilize a utility's rate of return without a full-scale rate case review. Earnings sharing should reduce the frequency of future rate cases and allow adjusted rates to reflect recent market developments, including those affecting a utility's costs.
 - c. Compared to traditional ratemaking, in which rates remain fixed between rate cases, ESM weakens regulatory lag and thereby reduces the incentive of a utility to control its costs between rate cases. A regulator can lessen this problem by requiring the utility to demonstrate its prudence and offer reasons why specific cost items were higher than their test-year levels.
 - d. In sum, an ESM would trigger a price adjustment between rate cases only when the aggregation of revenue and cost departures from test-year levels causes the utility's rate of return to fall outside a specified "band" region.

- (1) An ESM takes into account the overall profitability of a utility.
 - (2) It assumes the role of a rate-of-return tracker that, in effect, amalgamates different cost trackers into a single cost-recovery mechanism.
5. The ESM differs from cost trackers, which account for specific costs or functions in isolation from the utility's overall financial position.
- a. Trackers' focus on individual cost categories can cause utilities to delay coming in for rate cases, with the utility earning an "excessively" high rate of return in the interim.
 - b. Let us assume that the regulator has approved a tracker for new infrastructure expenditures. The new infrastructure expects to lower the utility's maintenance and other operating costs.
 - (1) If the last rate case did not recognize these lower operating costs, the utility's rate of return would be higher, yet because of the tracker, the utility suffers no interim financial losses from incurring infrastructure expenditures.
 - (2) On net, the utility benefits and its customers immediately pay for the infrastructure costs without benefiting from the lower operating costs (at least until new rates reflect the lower costs).
 - (3) Such an outcome would violate any common meaning of "fairness" and seriously calls into question the merits of using a single-function tracker without readjusting rates for the effect on a utility's other functional areas.
 - (4) This dynamic suggests that regulators implementing trackers should require utilities to file rate cases on predetermined intervals.
- B. No cost trackers
1. Under a strict traditional approach to ratemaking, a utility cannot adjust its rates outside a rate case. No matter what happens to a utility's costs or revenues between rate cases, rates remain fixed.
 2. Let us assume that a utility's costs and revenues are volatile and difficult to predict. The utility's rate of return can then deviate substantially (on the upside or downside) from the authorized level.

3. It is one thing to prohibit trackers for costs that are substantial, volatile, and unpredictable, and generally beyond the control of a utility; it is another to reject trackers for costs that lack one or more of these features.
4. ***Good regulatory policy rejects cost trackers that are not essential for protecting a utility from a dire financial situation.***
 - a. The utility, in justifying a cost tracker, should present the regulator with credible information showing that a nontrivial probability exists that the cost item under review will rise sufficiently above the test-year level to place the utility in financial jeopardy.
 - b. This showing is more likely when the regulator uses a historical test year and the cost item has recently exhibited an upward trend or substantial volatility.
5. Another conceivable justification for a cost tracker is that it transmits better price signals to a utility's customers.
 - a. Prices would correspond more closely to a utility's actual costs and thus improve economic efficiency.
 - b. For economic efficiency, customers should see costs reflected in their rates, such that they consume less when costs are higher.
 - c. The validity of this argument for a cost tracker depends upon the magnitude and nature of the costs involved. This outcome assumes that a tracker involves a variable cost such as fuel or purchased gas costs.
 - d. When a tracker relates to a fixed cost (e.g., infrastructure costs), the argument turns more to the "fairness" of a cost-recovery mechanism to the utility: Is a tracker justified because test-year cost calculations expose the utility to potentially high financial risk from unanticipated costs falling primarily outside the control of a utility?

VIII. Putting It All Together

- A. The positive side of cost trackers
 1. The primary benefit of cost trackers, in my opinion, is that they reduce the likelihood that a utility will encounter serious financial problems.
 - a. If test-year costs fail to reflect accurate projections of a utility's actual cost for future periods, then the utility's earnings can deviate substantially from what a regulator approved in the last rate case.

- b. Some cost items are difficult to project, as they exhibit high volatility and depend on different variables that by themselves are uncertain.
 - 2. By reducing regulatory lag and the likelihood of prudence reviews, cost trackers can lower a utility's risk and thus increase its access to capital. The utility could then have a higher credit rating that, in turn, could lower the cost of financing capital projects.
 - 3. Cost trackers also coincide with the regulatory objective of setting prices based on the actual cost of service. This condition transmits the right price signal to customers deciding how much of the utility's services to consume.
 - 4. The development of infrastructure such as the smart grid or other new technology costs might warrant that regulators consider cost-recovery mechanisms such as a cost tracker to guarantee minimum cash flow for a utility.
 - a. Investors might otherwise perceive excessive regulatory risks that preclude committing funding to a utility.
 - b. A cost tracker in this instance also might cut down on the frequency of future rate cases.
 - c. Regulators in the future might want to explore non-traditional ways for utilities to recover their costs for new technologies with inherently high operational and financial uncertainties.
 - 5. As a final benefit, cost trackers can reduce regulatory and utility costs by reducing the number of future rate cases.
 - a. Rate cases absorb substantial staff resources and time, diverting those scarce resources from other regulator activities.
 - b. Yet it is doubtful that many of the recently proposed trackers involving non-major cost items would have any effect on the timing of future rate cases.
 - c. Another point is that the costs associated with serious and continuing audits and the monitoring of costs recovered through a tracker could require substantial resources, either in the form of regulatory staff or outside consultants.
- B. The negative side of cost trackers: the case for traditional ratemaking as a default policy or earnings sharing as a preferred alternative
- 1. Cost trackers can reduce utility efficiency.

- a. “Just and reasonable” rates require that customers do not pay for costs the utility could have avoided with efficient or prudent management.
 - b. Regulation attempts to protect customers from excessive utility costs by: (1) scrutinizing a utility’s costs in a rate case, (2) conducting a retrospective review of costs, (3) applying performance-based incentives, and (4) instituting regulatory lag.
 - c. Cost trackers diminish one or more of these regulatory activities. In some instances, they diminish all of them.
 - d. The consequence is the increased likelihood that customers will pay for excessive utility costs.
2. I recommend that regulators approve cost trackers only in special situations where the utility would have to show that alternate cost-recovery mechanisms could cause extreme financial problems.
- a. This showing requires utilities to provide a distribution of possible cost futures and an assessment of their likelihood.
 - b. If a certain cost item has high volatility and unpredictability, represents a large component of the utility’s revenue requirement and is recurring, and is generally beyond a utility’s costs, it becomes a candidate for “tracker” recovery.
 - c. Even then, the regulator should consider the adverse incentive effects and how he or she can compensate for this problem.
 - (1) Regulators should condition any approval of a cost tracker on the utility’s filing information on its performance for those functional areas directly or indirectly affected by the tracker.
 - (2) Has the FAC, for example, caused a utility to spend less money on plant maintenance costs, jeopardizing reliability and inflating total utility costs because of higher avoidable fuel costs? These conditions can ultimately harm the utility’s customers.
3. This limited application of cost trackers provides the benefits of:
- a. Using the same cost-recovery mechanisms for all utility functions to prevent perverse incentives (i.e., incentives leading to a higher cost of service and utility rates);
 - b. Balancing a utility’s total costs and total revenues;

- (1) Without this balancing, it is conceivable that the utility could recover one cost item through a tracker and over-recover other costs set in the last rate case to result in the utility earning above its authorized rate of return
 - (2) A rate case has the attractive feature of matching revenue with costs on an aggregate basis
- c. Retaining sufficient regulatory lag to provide the utility with stronger motivation to control costs (regulatory lag is an important feature of traditional ratemaking in forcing the utility to shoulder the risk of higher costs between rate cases); and
 - d. Scrutinizing a utility's costs and performance in different areas of operation (regulators review costs more rigorously in a rate case setting, decreasing the likelihood that customers will recover a utility's imprudent costs).
4. My earlier discussion points to the advantages of replacing cost trackers (excluding fuel and purchased-gas cost trackers) with a single rate-of-return tracker in the form of an earnings-sharing mechanism or a rate-of-return tracker:
- a. This alternative overcomes some of the problems with cost trackers, namely perverse incentives and weak incentives for cost control, the mismatching of a utility's *total* costs and revenues, and inadequate regulatory oversight of costs.
 - b. An earnings-sharing mechanism is also able to achieve the major objective of cost trackers, namely preventing utilities from suffering serious financial problems between rate cases.
 - c. It can also address the "fairness" issue of why a utility should not recover from customers a cost increase (e.g., property taxes) between rate cases that is completely beyond its control.
 - (1) This mechanism would, in effect, allow the utility to recover the increased costs, but only if it was already earning a "low" rate of return (i.e., a return below the "band" region discussed above).
 - (2) One major problem with cost trackers: they allow a utility to increase its prices even if the utility is already earning a higher-than-authorized rate of return (or one beyond the "zone of reasonableness" set in the last rate case).
 - (3) A regulator would not allow this outcome under traditional regulation.

Appendix: Questions Regulators Should Ask about Cost Trackers

1. Does a cost-tracker proposal meet the regulatory test of acceptability? What minimum threshold should a regulator set for consideration of a cost tracker?
2. What special circumstances exist to warrant cost recovery outside of a rate case?
3. What evidence does a utility present showing that the absence of a tracker for a particular cost could place it in financial jeopardy?
4. In addition to cost trackers, what other cost-recovery mechanisms can regulators rely on to allow a utility to recover substantial unexpected costs between rate cases? What are the public-interest effects of these mechanisms relative to cost trackers?
5. What advantages does a cost tracker offer? What are its disadvantages?
6. How should regulators weigh the downsides of cost trackers relative to the upsides? How important are adverse incentive effects relative to the value of stabilizing a utility's rate of return?
7. How should a regulator account for the net-cost effects of a new investment (e.g., capital costs less savings in operating costs) for which the utility wants cost recovery through a tracker?
8. How would the accumulation of cost trackers for a utility motivate the utility to take risks and improve its overall cost performance?
9. If a cost tracker is justified, how can regulators structure it to mitigate potential problems such as weakened incentives for cost control?
10. What conditions should a regulator attach to the approval of a cost tracker?
 - a. Should it require the utility to report on its cost performance in functional areas directly and indirectly affected by the tracker?
 - b. Should the regulator also require that all costs recovered through trackers be subject to a thorough prudence review?
 - c. Should the regulator reduce the utility's return on equity to account for the lower risk resulting from the tracker?

The Two Sides of Cost Trackers: Why Regulators Must Consider Both

Joseph W. Rogers

Introduction.

- Reconciliation Adjustment Mechanisms/Cost Trackers Are The Latest Trend.
- How And/Or Why Should We Implement Them.

Potential Cost Trackers.

- Revenue Decoupling
- Basic Service Administrative Cost Adjustment
- Cumulative Capital Tracker
- Forward Capital Tracker
- Inflation Adjustment
- Pension and Post-Retirement Benefits Other Than Pensions (“PBOPs”)
- Bad Debt For Distribution Revenues
- Bad Debt For Basic Service Costs
- Attorney General Rate Case Consultant Cost
- System Inspection Costs
- Storm Fund Reconciliation
- Plant Reclassification Adjustment Mechanism
- Net Metering Charge
- Solar Investment Charge
- Smart Grid Charge

How Should A Tracker Be Adopted

- Should Be Adopted In A Base Rate Case.
 - *Attorney General vs. Department of Public Utilities*, 453 Mass. 191 (2009).
- Review The Design Of The Mechanism.
 - Should Be Symmetrical.
 - Set the Baseline To Be Used To Reconcile Against.
- An Adjustment To The ROE Maybe Required.
 - If A Company Is Able To Recover Costs Dollar-for-Dollar, It Will Face Lower Business Risk, And Require A Lower Rate Of Return To Attract Capital.

What Is The New “Fair Return”?

- *Duquesne Light Company v. Barasch*, 109 S.Ct. 609 (1989).
 - Whether a particular rate is “unjust” or “unreasonable” will depend to some extent on what is a fair rate of return given the risks under a particular rate-setting system, and on the amount of capital upon which the investors are entitled to earn that return.
 - The risks a utility faces are in large part defined by the rate methodology because utilities are virtually always public monopolies dealing in an essential service, and so relatively immune to the usual market risks.

Measuring The Risk.

- Stephen G. Hill, *The Impact of Decoupling On Electric Utility Operating Risk*, NARUC Fourth National Conference On Integrated Resource Planning, Burlington, Vermont (September 14, 1992).
- *Connecticut Natural Gas Corporation*, Dkt. No. 08-12-06, Connecticut Department Of Public Utility Control (June 30, 2009)
 - The Department Concluded That The Requisite Reduction In ROE Needed As Compensation Would Prove Too Draconian And Actually Impede The Company's Ability To Attract Capital.
 - It Will Require A 100 Basis Point Reduction In ROE To Provide Customers With Weather-Only Compensation, Without Anything Additional.

How Much Of An ROE Reduction?

- Review Total Revenues Flowing Through Trackers.
 - Trackers From Slide 3 - Of \$112 Million Rate Increase, \$96 Million Recovered Through Trackers, \$16 Million In Base Rates .
- *Green Mountain Power Corporation*, DKT. Nos. 7175; Vermont Public Service Board (December 22, 2006).
 - Adoption of a Fuel Adjustment Clause.
 - Settlement Results In 50 Basis Point Reduction.
- David E. Dismukes, Ph.D., Testimony On Behalf Of The Massachusetts Office Of The Attorney General, DKT. 09-39
 - Survey of Commission Adjustments To ROE In Recognition Of The Fact That Revenue Neutrality Programs Change The Risk Profiles Of Regulated Utilities.
 - 6.5 to 50 Basis Points.

Where Is The Work Load Reduction For Regulators?

- Mini-Annual Rates Cases.
 - Has The Utility Complied Methodology?
 - Are The Costs Prudent and Used And Useful?
- Under What Regulatory Theory Are Costs Recovered Through A Cost Tracker Subject To A Lower Standard of Review.
 - Where Is The Time Savings For Commission and Staff?
 - How Does Cost Tracker Reconciliation Fit Into The Commission's Schedule?

What In This For Customers?

- What Is The Quid Pro Quo For A Tracker?
 - Set Performance Standards.
 - Kaizen - Continuous Improvement.
- Capital Trackers
 - Reduced Leak Rate.
 - SADI and SAFI Improvements.
- Decoupling
 - Obtaining Forecasted Energy Reductions.

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