

SESSION 9C

SHAREHOLDER INCENTIVE MECHANISMS: THEIR IMPACT ON EVALUATION PRACTICE AND PROGRAM ADMINISTRATORS

Moderator: Michael Messenger, Itron

PAPERS:

Empirical Assessment of Shareholder Incentive Mechanisms Designs under Aggressive Savings Goals: Case Study of a Kansas “Super-Utility”

Peter Cappers, Lawrence Berkeley National Laboratory

Charles Goldman, Lawrence Berkeley National Laboratory

Evaluation and Performance Incentives:

Seeking Paths to (Relatively) Peaceful Coexistence

Michael W. Rufo, Itron Inc.

An Assessment of California’s Energy Efficiency Incentive Mechanism

Tim Drew, Energy Division, California Public Utility Commission

SESSION SUMMARY:

The papers in this session analyze the range of direct and indirect effects that shareholder incentive mechanisms have had on regulatory policy, the science or art of program evaluation, and the financial returns of regulated public utilities. These papers will be useful for those analysts interested in understanding the tradeoffs in the design of performance mechanisms that seek to achieve multiple policy goals and the support of many different stakeholder interests.

The first paper, from Cappers and Goldman, conducts a financial analysis to assess the financial impacts that a range of different kinds of shareholder mechanism would likely have on a super utility over a range of expected energy efficiency program performance. Using a conglomerate of the three largest utilities in Kansas, the authors quantitatively illustrate the tradeoff between ratepayer and shareholder interests when a 1% reduction in incremental electricity sales is achieved through energy efficiency under different incentive mechanisms.

The analysis looks at the differential financial impacts on the super utility of revenue de-coupling per customer, performance targets, cost capitalization, shared net benefits and the Save A Watt mechanisms proposed by Duke in North Carolina and Ohio. The analysis also looks the impacts of these mechanisms with and without the impact of future carbon regulation. The analysis assesses if the utility can be compensated in a manner that produces a sufficient business case or profit to equitably split the positive financial impacts between shareholders and ratepayers at a cost that is not overly burdensome.

The second paper, from Mr. Rufo, explores the issues and tensions associated with implementing financial incentive or payment for performance shareholder mechanisms for program administration performance and executing unbiased and objective load impact evaluations to improve the accuracy of program savings estimates (for the same)energy efficiency programs. The author first identifies the issues and problems that arise when financial rewards or penalties are tied to achievement of point estimates of program or portfolio energy savings without consideration for uncertainty in many of these parameters. The author selects several key energy efficiency impact estimation parameters and examines how they are measured or estimated and to what extent these parameter estimates are within the control the program administrator can be realistically measured and can be considered fair to all parties. The

analysis suggests that despite its many other attributes, energy efficiency is a resource with inherently difficult measurement and estimation challenges. The author concludes that there is a significant risk that evaluation study results will be politicized, marginalized, or simply discarded when results lead to negative financial impacts for powerful stakeholders. To reduce the probability of this negative outcome, the author provides several recommendations on how to design performance incentive mechanisms so that they can co-exist with the goal of providing unbiased accounts of program savings, complete with all the uncertainties that exist in this enterprise.

The third paper, from Mr. Drew, introduces a framework for considering modifications to the complex set of rules that govern the energy efficiency risk-reward incentive mechanism (RRIM) and the evaluation, measurement, and verification (EM&V) activities that are currently being pursued by Investor owned utilities in California. Results from both processes (RRIM & EM&V) are being used to measure performance and determine incentive awards or penalties for the investor owned utilities (IOUs or utilities). In this paper, the author explores simpler shareholder incentive mechanisms that could achieve the same policy objectives but with substantially less time devoted to the review of detailed estimates of net program savings and or net energy benefits produced by utility programs.

The author discusses a simplified and streamlined earnings process whereby the utility may qualify for regularly scheduled minimum earnings as an incentive for meeting adequate performance standards, and potential bonuses for achieving superior performance. The author proposes this streamlined approach rather than the current system linking performance incentive earnings to minutely detailed calculation and verification of net energy savings thresholds, estimates of incremental measure cost and the useful life of efficiency measures, and a theoretical sharing of net benefits between shareholders and ratepayers. Instead a simple shareholder incentive mechanism with base and bonus performance incentives for administrators linked to high level program outcomes, market outcomes, or progress indicators is proposed.