Competition "vs." Regulation:
Have We Achieved Conversational Clarity? (Part II)

Scott Hempling
May 2008

Words strain,
Crack and sometimes, break, under the burden,
Under the tension, slip, slide, perish,
Decay with imprecision, will not stay in place,
Will not stay still.

— T.S. Eliot, "Burnt Norton," Four Quartets (London, 1943), quoted in Edward Tufte, Beautiful Evidence at 139 (2006).

The immediately preceding essay addressed ambiguities and imprecisions in our conversations about "competition" and "regulation." Some commenters said the essay aimed arrows disproportionately at competition-speak. I acknowledge the imbalance but intended no bias. To compensate, this next essay addresses regulation-speak. These two essays intend no critique of "competition" or "regulation." The essays address conversation, not merits.

In regulation, three of the most commonly used phrases are "revenue requirement," "cost-based pricing," and "subsidy." Let's consider their multiple meanings.

"Revenue Requirement"

This phrase dominates ratemaking. It forces attention to the utility's need for revenues sufficient to cover the expenses and capital costs (including reasonable profit) associated with serving the public.

Ambiguity arises because the term "requirement" carries two distinct meanings. First is the ***utility's*** requirement: the dollars the utility needs to cover its costs including building, operating, maintaining, and replacing the infrastructure; paying its taxes; compensating its employees and vendors; paying interest on its debt; and paying shareholders sufficient returns to attract and retain their dollars.

Second is the ***legal*** requirement. Regulatory law, in the form of statutes and the Constitution's Takings Clause, nowhere ***guarantees*** revenues sufficient to meet the utility's needs. The law requires only a "fair opportunity" to earn a reasonable return. Legally required revenues (what the utility is entitled to receive) thus can differ from utility-required revenues (what the utility needs to receive) for at least two reasons: First, imprudent costs are not legally recoverable, even if the nonrecovery drives a utility's actual return on equity below the level normally "required" to attract capital. Second, if actual cost levels and sales levels fall below the

estimates used to compute the revenue requirement, there is no retroactive "true up" (except in special situations like fuel adjustment clauses or extraordinary storm costs).

So the phrase "revenue requirement" carries a linguistic signal, implying a regulator's obligation to ensure cost recovery; whereas the law leaves the regulator with plenty of running room.

"Cost-Based Pricing"

Experienced utterers of this phrase usually mean "a price set by regulators rather than the market." But what type of "cost" do we mean? Embedded cost, marginal cost, variable cost? If marginal cost, long-term or short-term? If variable cost, average variable cost or variable cost at the margin? Future cost, historic cost, or original cost? Replacement cost or reproduction cost? Practitioners have seen "cost-based" prices based on each of these factors. And since when are "market-based prices" not "cost-based"? Economists tell us that if the market is effectively competitive, price will tend toward a cost basis—specifically, marginal cost.

Further, in the phrase "cost-based pricing," what does "based" mean? Is "cost" a starting point or an ending point? For example, commenters usually distinguish "performance-based ratemaking" (PBR) from "cost-based ratemaking." But PBR designers typically start with a baseline of historic cost, then inject "X" factors for productivity gains or losses, passthroughs for various unavoidable costs, and "sharing mechanisms" that allocate excess returns between shareholders and ratepayers. At bottom, there is a cost basis.

While more clarity would assist policymaking, there is a deeper problem here. The linguistic sturdiness of the phrases "revenue requirement" and "cost-based pricing" gives them iconic status, but distracts from a disturbing fact: They produce prices remote from economic efficiency. Economic efficiency is not regulation's only goal, but it's a good starting point, since the inefficiency means we can make someone better off without making anyone worse off. Who's against that?

There is legitimate debate over what price-types produce economic efficiency, but embedded cost pricing is not in the running. Embedded cost pricing persists because our focus is on "revenue requirement." Embedded cost pricing is the way we allocate the revenue requirement among all customers, so as to make full cost recovery likely. Embedded cost pricing does have some elements that aim at economic efficiency, such as allocating some portion of load related costs in proportion to load, and striving to place some fixed costs in fixed charges. But the central purpose of embedded cost pricing is recovery of the revenue requirement, not economic efficiency. For a century, our profession has placed two compatible goals (compensation sufficiency and economic efficiency) in conflict. Had we relabeled "cost-based rates" as "rates that deprive society of savings," we might have fixed them faster.

"Subsidy"

There is no denying this word's political content. Russell Long, the iconic Chairman of the U.S. Senate's Finance Committee, used to say, "A tax loophole is something that benefits the other guy. If it benefits you, it is tax reform." And, on one's responsibility for government's costs: "Don't tax you, don't tax me, tax that fellow behind the tree." It's the same with "subsidy." If the allocation benefits you, it's a "subsidy"; if it benefits me, it's "investment" or "economic development."

Even at the technical, nonpolitical level, there are multiple definitions of "subsidy." I learned as an infant that a subsidy occurs when the regulator sets a customer's price below incremental cost, because then the customer's act of consumption causes costs that others (either shareholders or other customers) must bear. Under this definition, the subsidisee's action makes the subsidizer worse off than if the subsidisee had not acted.

There are multiple other definitions, less technical but more frequently used. Most commonly, practitioners use "subsidy" to describe any situation in which one person bears costs properly attributable to someone else. (This definition differs from my prior one, because in the former case the subsidy occurs only when subsidisee causes ***new*** costs, whereas in the generic definition the subsidisee avoids an appropriate share of ***existing or*** new costs.) The generic concept itself has multiple, overlapping applications, including: (a) the customer's contribution to fixed costs deviates from his contribution to the utility's load; (b) different customer classes pay rates that produce different returns on utility investment incurred for those classes; (c) an allocation of costs between fixed and variable charges such that some high-consumption consumers pay, through their consumption, for fixed costs incurred initially to serve low-consumption consumers; and (d) average cost pricing, when there is variation in the cost to serve different locations as, for example, when urban customers complain that they "subsidize" rural customers because the urban service costs are below average while rural service costs are above average.

A common, clearer definition of the term would decrease its political content and increase its usefulness.

Recommendations for Regulators

When terms carry political or propagandist content they make dialogue and decisionmaking difficult. My recommendation is simple: When we speak, take care to define; when we listen, ask for the definitions. The clearer the conversation, the better the decisions. See especially Georgetown linguistics Professor Deborah Tannen's The Argument Culture: Stopping America's War of Words *(1998).*