



Utility Regulation: The Rate Case

Over the years the procedures for state-level utility rate cases have evolved into a pretty standard set of formulas and estimating methods.

Most states use a future “test year” where the utility estimates its revenue and costs for an upcoming period. Naturally, the utility will low ball the projected revenue to justify asking for a higher level of revenue through rates approved by the regulators. Costs in the model year will be overstated as much as the utility thinks they can get away with.

A much debated part of cost assignment is whether to recover costs in the period under consideration or as “ratebase” where the cost is amortized and earns a return. For example: a utility may project a \$20 million cost for plant repairs or high-overhead efficiency programs. This whole cost can be recovered as part of the revenue award in the current rate case or stretched over an amortization period of ten years by placing it in rate base. If rate base treatment is chosen then \$2 million will be collected in the first year with \$18 million to be deferred while earning the allowed rate of return, say 8%. By the rule of 72, the interest divided into 72 yields the time to double the initial amount ($72/8 = 9$ years). So the \$18 million justifies the collection of \$36 million over time. If the amortization period is 20 years then the deferred amount collected is: $\$19\text{m} \times 20/9 = \42 million.

Often the utility or the regulators will choose putting an expense in ratebase and claim they are doing this to save ratepayers money. Of course, in utility-speak they mean only in the amount in the first year. Obviously recovering an expenditure through ratebase with return over time is much more costly to ratepayers.

After the estimates of revenue and costs the next matter is the amount of the utility’s ratebase. This is total plant first costs minus accumulated depreciation which is net book value of hard assets. Other things going into ratebase are working capital and other “regulatory assets” such as our example above. One interesting ratebase item is storm damage. We are accustomed to seeing news coverage of tearful hurricane victims praising the heroic utility workers who restore their electrical service. Not so heroic is the way the utility accountants are booking that expense in a way that gives huge future streams of profits to the poor storm-victim utility.

The next step in rate making is to calculate the rate of return which is a blend of the interest on debt and the return on stockholders’ equity. The cost of debt is pretty easy. The markets set interest rates. The most amusing part of a rate case is the utility witness who will argue for a high return on equity. Determining the proper return on the equity in a company is a very subjective matter and can only really be set under market conditions. The utilities bring high-paid outside experts with their formulas and reviews of what other utilities, also

under regulation, are making to advise the regulators. We are reminded of the ancient soothsayers who examined the entrails of small animals to make predictions the great leader wanted to hear. This tradition of examining irrelevant data to make dubious recommendations continues in modern day utility regulation.

Administratively determined returns based on such studies are like studying the profits of Wendy's and McDonald's to set the profits for Burger King. Plus all the other utilities are basing their requests for profit levels on the examples of fellow utilities who used the utility under review as an example to set their profit levels. Sort of circular logic.

The whole approach of adding up cost and politically setting a profit level is nonsense. (Utilities call profits the "cost of equity.") This is topsy-turvy from market price and cost determination. In a competitive market prices are set by competition; and firms try to cut and control costs in order to earn a profit. So in the market prices determine costs not the other way around.

The utility revenue amount is the sum of operating expenses at cost, depreciation and amortization, taxes and the return on ratebase. The difference between current revenues and the revenue award is the amount of the rate increase.

Then comes the question of how to collect the revenue in rates. Traditionally the rates collect capacity cost allocated by customer group peak demands on the system, as well as the variable operating cost allocated on a volumetric basis. The main groups are residential and business class customers. This may sound straight forward, but the methods of allocation are arbitrary, and the final cost responsibility is actually set by political clout of the customer groups. The voting residential customers may provide the utility with a 4% return and the business customers a 12% return, so the utility average is the 8% allowed by the regulators. The regulatory agencies are headed by people either elected or appointed by those who are elected. The bias is toward cross-subsidy in favor of the voters. This is no problem for the utilities who just want to be sure they get a high return on ratebase. If pleasing regulators by sticking it to business customers helps assure their good standing with regulators, then that's just tough for business customers.

Jim Clarkson
www.rsmenergy.com