The Role of Public Utilities

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A symposium on public utility regulation in Maine


The regulation of public utilities in Maine continues to evolve in response to changing economic, political and social forces. Not only has the structure of regulation of the electrical and telecommunications industry seen dramatic changes in the past twenty years, but it also is certain the next decade will see equally fundamental changes. Maine Policy Review invited three key participants in Maine's regulatory arena - Robert Briggs of Bangor Hydro-Electric, Public Advocate Steve Ward, and Thomas McBrierty of New England Telephone - each to interpret the changes of the past two decades and what future changes we can expect. - Editor

The role of public utilities
by Robert S. Briggs, President, Bangor Hydro-Electric Co.

Our charge was to describe the changing role of public utilities over the last twenty years. Fortunately, we were afforded a good deal of discretion, because I prefer instead to begin by setting forth a vision of where we could be headed: In this decade, we could complete the transformation of electric utilities from bureaucratic, construction-oriented, central planning monoliths into lean, competitive, market-sensitive, customer-oriented service businesses.

I see this evolution as the inevitable result of the introduction of more and more competition into the markets and end-use applications that had heretofore been considered the exclusive domain of electric utilities. This competition has taken many forms. At the supply level, the adoption of state and federal laws and regulations in the late 1970s and early 1980s to encourage non-utility power production to replace foreign oil has forever changed the manner in which utilities procure power resources. This regulatory approach was enhanced by the concept of competitive bidding among suppliers (including utilities). The only detail that remains is to ensure free and open access by all suppliers to the electric transmission grid to completely dispel any perception that electricity production is a "cost-plus" business.

Meanwhile, at the demand level, increases in electric rates are causing customers to consider non-electric alternatives. This process has been enhanced, on the one hand, by policies that have actually sanctioned increasing rates for the sake of other goals, and, on the other hand, by developments in efficiency and new technology in the non-electric alternatives. The resulting loss of electric sales means rates to the remaining customers must rise, which starts the cycle all over again for those uses on the competitive margin. Meanwhile, the development of technologies that utilize electricity, both new applications and better ways to accomplish existing functions, continues apace. Reflecting upon the products of our electronic age - computers, fax machines, microprocessors, electric vehicles, electric arc furnaces, electro-thermal storage, and on and on - serves to reinforce the hypothesis that electricity is indeed a premium, preferred energy source that increases society's efficiency and decreases pollution. Strategies for success in this competitive environment do not permit utility managers to continue to think in terms of protected markets and assured returns.
The completion of this transformation will not be painless. Of the four principal "stakeholders" - customers, stockholders, regulators and utility management - the first two can be viewed as driving the process and benefiting from the results. The last two, regulators and utility management, must continually review and adjust the leadership and direction of their respective roles in the process. For them, the achievement of reward and satisfaction depends on the success of that adjustment.

One of the most difficult adjustments - and one that affects the relationship between regulators and utility management - will be to address objectively the scenario, to which I alluded earlier, that acknowledges the value of the expanded use of electricity in meeting society's goals of greater efficiency and a cleaner environment. I believe in that hypothesis, but its promotion seems almost heretical, given the regulatory focus on conservation over these last several years.

There is no lack of material to support my point of view, but that discussion is beyond the scope of this paper. Rather, the question now is, assuming my vision is reasonably accurate: Has our evolution over the last twenty years been consistent with that direction? My answer is "yes, and no." A follow-up question might be: Is further adjustment required in the manner in which industry leaders and regulators approach their respective roles if this vision is to be accommodated? My answer is most assuredly "yes."

Two decades of evolution

Twenty years ago would have been just prior to the Arab oil embargo, the first so-called "energy crisis." At that time, I think it is fair to say that electric utilities were reasonably autonomous in their decisions about providing the facilities they perceived as necessary to accommodate seemingly inexorable growth patterns. The recent history had been characterized by a period of expansion and growth which, accompanied by economies of scale in larger generation facilities, allowed utilities to enjoy reductions in per-unit costs. This, in turn, held electric rate increases to a minimum, and even allowed for a series of electric rate reductions. Indeed, in my company's history, we had no rate increases from 1958 to 1972. In fact, we had $2 million in rate decreases, not an insignificant amount when compared to our 1972 total annual revenues of less than $20 million. In this atmosphere, regulation was generally limited to its original purpose: economic regulation of a permitted monopoly business.

The basic idea behind economic regulation is to have the regulated entity act as if it had competition in those areas where public policy has determined that, for whatever reason, a monopoly form of business ought to be permitted. Beyond that, regulation would not intrude into utility leadership and direction. To be sure, none of us can recall a time when our utility regulation was as "pure" as that, but twenty years ago it was certainly nearer that end of the spectrum than it is today. Whether one applauds or laments that fact, the evident results were encouraging. Rates were stable or falling, the U.S. had achieved the most dependable electric system in the world, and customers were reasonably content to leave the electric utility business up to utility management.

The Arab oil embargo did little to change the role of utilities or the regulatory relationship, except to begin to sensitize the public in general and customers in particular that energy costs
and availability could no longer be taken for granted. However, public concern about the environment had begun in earnest, and was swiftly being translated into higher costs and large capital investments for government and industry alike, including public utilities. By the end of the 1970s, fuel costs, which had risen by a factor of four or five times between 1970 and 1973, had more than doubled again in the second energy crisis. Moreover, forecasters called for oil prices to continue to skyrocket, to an order of magnitude of one hundred dollars plus per barrel within the relevant planning horizons. Meanwhile, inflation and very high costs of capital had driven up utility costs and rates to customers. Vastly higher projected costs of bringing new supplies on line and increasing controversy about the source of such new generation caused the outlook for future supply to be both uncertain and expensive.

In this context, President Carter's declaration of war on the energy crisis was at worst ineffective and at most anticlimactic.

By a combination of untoward events of the time, utility leaders had already lost the public confidence that seemed so secure at the beginning of the 1970s. Strong leadership did allow the utilities to survive the erstwhile short-term crises, but the ability to shape the destiny of the industry for the long-term future was no longer entrusted exclusively to utility management.

However, to this day the Carter administration's initiatives have not been translated into a credible, comprehensive national energy strategy that would substitute for or supplement traditional utility planning. In retrospect, it may have been naive to expect a long-lived consensus on any such national policy.

The late 1970s and early 1980s, though, did see the development of two important changes in the role of electric utilities: (1) the challenge to the supposition that utilities were presumptively the generators of the electric power needed to meet customer demand, and (2) the notion that utilities should actively seek to have their customers implement conservation measures. Although perhaps no one initiative can claim the exclusive right to the genesis of these concepts, each has legislative roots in the most important initiative of the Carter years, the Public Utility Regulatory Policies Act of 1978 ("PURPA"). Building on that initiative, state legislators and regulators expanded on the concepts, working with utilities to ultimately develop a construct known as "least cost planning" or "integrated resource planning." Maine regulators, it should be noted, have been at the forefront of this effort. The intent of this construct is to select the most cost-effective solutions and to assure that the planning for electric utilities' future needs does not discriminate in favor of supply-side opportunities. Indeed, some have chosen to discriminate in the other direction, in favor of conservation or other demand-side opportunities. I am intentionally oversimplifying a decade of tortuous wrangling and difficult choices to make the point that these decisions by the public and regulatory community have fashioned a remedy to address the perception that energy infrastructure planning could no longer be entrusted exclusively to utility management.

There is no longer any real dispute between utility leaders and the regulatory community about the appropriateness of the least-cost planning process or the nature of the public and regulatory involvement. Utility leaders have adjusted to the idea that they are not the sole masters of this aspect of the business.
Utility transformation

The foregoing describes my view of only a portion of our evolution over the last twenty years, and only most summarily. It is a sufficient background, though, to address my rhetorical questions of a few pages back: Has our evolution been consistent with a hypothesis that electric utilities will complete a transformation into lean, customer-oriented, market-driven businesses in a very competitive energy marketplace - a marketplace that recognizes the value of electricity in enhancing society's efficiency and creating a cleaner environment?

In the "yes" column, I point to the competitive power supply market. PURPA's provisions encouraging renewable resource-based, non-utility development of electric generating projects opened the door to a broader question: If security and reliability concerns are addressed, does it make any difference who produces the electricity that electric utilities need for their customers? Of course, it is not all that simple, but thus posed the answer is so patently obvious that one wonders why we did not unlock this part of the business years ago, and why we are not proceeding more swiftly now to tear down the remaining barriers.

There are good and sufficient reasons for those follow-up questions, to be reserved for discussion at another time. The point for now is that regulators and utilities around the country have used the PURPA initiative to push the concept to its practical limits, with Maine once again in the forefront. To be sure, we got off to a rocky start. Perhaps due to over-zealous encouragement, Maine's utilities and their customers are burdened with "first generation" PURPA power projects that, in retrospect, cost more than they should have. But the process has now evolved such that all new sources are bidding against one another for the business, with the result that the lowest possible cost will be assured. Nor does there appear to be any shortage of bidders. Our company's most recent solicitation for expressions of interest to provide fifty megawatts of power brought initial responses adding up to about 600 megawatts. In sum, while there are some very thorny details to be worked out, our evolution in this aspect of our business decidedly supports my vision about our transformation.

However, at the other end of our business - the demand side, or the whole concept of our relationship with our customers - the evolution has not been as supportive of the transformation I've described. In this area, adjustments are called for.

PURPA's conservation initiatives were embraced in varying degrees by regulators and utilities around the country. Maine has been, once again, a leader in aggressively testing the concepts, and it has become binding policy that conservation of electricity is the preferred choice. To the extent Maine's citizens do not elect to do so on their own, this policy requires Maine's utilities to implement the conservation by, in effect, purchasing it from their customers. The resultant cross-subsidies among customers and upward pressure on rates is deemed worth the price to achieve the conservation, under the theory that the total cost, at least for those who take advantage of the subsidies, will be less. Another important precept to the electric conservation ethic is that pollution will be reduced if less electricity is needed.

Engaging in the details of this debate would extend my paper unacceptably. As many are aware, we at Bangor Hydro have always questioned the appropriateness of the current policy. While we
are obliged to aggressively implement and promote state policy, it is also important from time to
time to challenge conventional wisdom, just as it was on the power supply side of the equation.

In reference again to my hypothesis, it is undoubtedly the case that our society is becoming
more, not less, "electrified." Besides new uses, electrification is substituting for other energy
uses, and this is happening despite a concentrated focus on conservation of electricity. Efficiency
is the driving force, just as it has been since the beginning of our business. Moreover - and this is
a key point - with increases in efficiency come improvements in our environmental quality.

Thus the focus should be on the efficient use of all of our energy resources, and the concurrent
elimination of wasteful practices. My vision rests in the confidence that, when all factors are
considered (or to use current lexicon, when the externalities associated with all competing energy
resources are considered), electricity is a clear winner in terms of societal efficiency and
environmental impact.

If there is any merit to my hypothesis, then the time has come to critically appraise existing
policies that discourage the increased use of our service. One of those is the conservation policy
outlined above, but there are others. The temptation has been very great, and occasionally
irresistible, to advance other social goals via the convenience of electric utility regulation. For
example, no one disputes that low income people have a difficult time making ends meet. But
rather than face up to the problem with realistic tax policies, we find it easier to meet a portion of
that need by increasing electric rates to subsidize those who cannot pay.

The inevitable result of these policies is to increase the per unit cost of our service and to impair
the competitiveness of electricity vis-à-vis other energy alternatives. The wisdom of this is
especially questionable in the current environment. At present, our embedded costs, and
therefore our rates, are high. On the other hand, additional electric resource costs, both short-
term and long-term, are low, and resources are evidently plentiful. Indeed, the current recession
has created in our region an overabundant power supply that will carry us into the next century.
All of this reinforces the thought that electricity ought to be allowed - indeed, encouraged - to
compete with all forms of energy for whatever share of the energy service market it can capture.

This, then, is the area greatest in need of adjustment on the part of utility and regulatory leaders.
We need to work together to explore whether or not the hypothesis I've postulated is accurate,
and then to break down any barriers to the achievement of the right goals. Success in this
endeavor will result in efficiency gains, environmental improvement and lower energy costs.

Beyond that, utility leaders will have to finish the process of weaning our companies of
bureaucratic attitudes and risk-averse management, and generally must pursue those qualities
that enhance competitiveness and market sensitivity. Speaking as a utility manager, I take
comfort in the observation that we are not plowing new ground. In reading Jack Fassett's
excellent history of the United Illuminating Company in southern Connecticut, from which he
retired as chief executive, I am reminded that our companies began as lean, competitive service
businesses. So we are, in a sense, just returning to a familiar heritage.
References:


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