

Investments Delayed, Service Denied: Regulatory Functions and Sector Performance

By Sanford V. Berg and Lynne Holt
Public Utility Research Center
University of Florida
October 26, 2001--Water21

This article is the second in a series on how the design of new independent regulatory commissions (IRCs) affects the performance of the water sector in a country. The first article outlined how customers and utilities can benefit from sound regulatory processes. Below, we describe nine functions that have implications for the central objectives of effective regulation of water supply and sanitation. Moreover, each function affects one of the major responsibilities of IRCs-- the approval of water utility tariffs.

Effective utility regulation depends to a large degree on the legal authority granted, and resources provided, to regulators of water supply and sanitation services. Even if regulators have adequate authority and resources, they must possess values or principles that reflect a shared vision of priorities for the sector (Berg, 2001). In addition, the regulatory process should avoid micro-management and second-guessing utility decisions. Rather, regulatory rules should provide incentives for cost containment and system expansion and introduce competitive elements where possible.

Each of the nine functions helps ensure that utilities keep costs and prices as low as possible. Efficiently run utilities are, of course, better positioned to attract ongoing capital investments from public or private sources for infrastructure expansion and improvements. One or more stakeholders may have reasons for opposing the inclusion and execution of these functions in the regulatory agency. However, the net impact of denying the agency necessary legal authority or resources will be to significantly weaken sector performance.

The IRC's "best practices" should include:

1. *Licensing, to specify operating and quality standards that have impacts on cost and tariffs.* Often, regulatory commissions have the responsibility for issuing a "certificate of use" to utilities when a capital investment has been completed for a new facility providing additional capacity. Generally, a water utility that is issued a "certificate of use" must adhere to the standards under which the facility is to be designed, constructed, and operated, including environmental standards. These standards are specified in advance of the facility's operation. The IRC must monitor compliance with these standards to ensure that the quality of water supply and treatment and the level of service to customers are not compromised.

While utility managers may view such oversight as intrusive, time-consuming, and expensive, standards can clarify regulators' expectations and promote transparency. Because customers know what is expected of the utility, they are more likely to accept the utility's prices. Of course, there is a delicate, and often debatable, balance between standards that seek to accomplish these objectives and micro-management of utility operations.

2. *Prescription of standards for a utility's investment and performance.* Many utilities have service expansion obligations that are part of their franchise responsibilities. In addition, consumers are willing to pay for a defined standard of service quality; however, investment and performance standards have implications for the cost of service. To protect consumers from excessive prices while ensuring that reliability and other performance standards are adhered to, the IRC will need to prescribe procedures and standards for companies' investment programs, including criteria for least-cost expansion and competitive bidding.

Again, the issue of excessive micro-management might be raised by managers of utility companies and suppliers to those companies. However, customer protection is a core regulatory responsibility. Furthermore, investment mandates will reflect national priorities toward the sector; the regulatory commission should monitor the adherence of utilities to schedules, filed with the commission, that specify scheduled deadlines for adding capacity. If the IRC lacks the authority to penalize utilities for not meeting their obligations, investment mandates will be considered a public relations gimmick instead of a serious national objective.

3. *Collection of data on a utility's costs, revenues and performance, for use in tariff determinations and monitoring sector outcomes.* Utilities should be required to furnish the IRC with any information concerning their facilities and operations which the commission might need to determine utility rates or assess their practices. It is also standard practice for regulated firms to prepare audited financial reports on an annual basis to facilitate regulatory review. Moreover, the commission needs the authority to penalize firms that do not comply with requests for information. Similarly, the IRC should develop procedures for addressing special issues, including non-payment of consumer bills, unsafe service conditions, fraudulent use of service, service reconnection, utilities' refusal to serve customers, accidents, and consumer complaints.

Such a list of tasks opens up the possibility for abuse of government power. Excessive requests for information raise administrative expenses for utilities. Ultimately, these costs will be passed on to customers. Therefore, the IRC must be reasonable in its requests in order to minimize long-term adversarial relationships with regulated companies.

4. *Approval of utility tariffs, to determine revenue sufficiency for operating and capital costs such as returns, assets values, deferred loans, etc.).* The *rate level* is based on revenues required for financial sustainability, including fair returns to invested shareholder capital. *Rate structure* refers to the use and rate designs that promote efficient use of scarce resources and fairness (e.g., seasonal rates, block structures, etc.). Implicit cross-subsidization characterizes most rate designs in emerging markets, so regulators need to consider whether concerns for fairness or access by low-income consumers are really being addressed. In some countries, formal approval by a council of ministers or higher authority is required to change rates. If another

political body can easily overturn IRC decisions, then the IRC is not truly independent and its credibility is called into question. (Smith, 1997).

Some consumers may benefit from existing cross subsidies, and will find rate rebalancing unpalatable. However, if price structures involve untargeted subsidies, the main beneficiaries are likely to be the politically powerful, not the poor and not those who are currently without service. Poorly conceived rate structures with untargeted subsidies often result in insufficient revenues, thus making it problematic for utilities to finance new investments. Educating all stakeholders of the implications of untargeted subsidies becomes a task of both the IRC and political leaders who support improved sector performance.

5. *Adoption of uniform systems of accounting, to provide comparable cost data (production, distribution, treatment) for tariffs.* Around the world, regulators have the function of determining a uniform system of accounts. In the case of water, it is important that the data be assigned to appropriate activities so that the IRC can review the utility's performance at each stage of supply to consumers. Furthermore, disaggregated accounting numbers facilitate benchmarking -- a tool that regulators can use for obtaining specific data about a utility's performance over time in comparison with that of similar utilities within the same industry.

Performance indicators used in benchmarking will vary across jurisdictions. For example, the U.K.'s regulatory body, the Office of Water Services (Ofwat), has assessed water company performance using, among others, the following indicators: properties at risk of low pressure; properties subject to unplanned supply interruptions of 12 hours or more; population subject to hosepipe bans; billing contacts not responded to (within 5 working days); and bills not based on meter readings. A utility's performance is measured for each indicator against predetermined levels. If that performance falls below a specified acceptable level, the utility may be required to propose a course of corrective action to improve its quality of service. Moreover, the IRC may use the information derived from benchmarking to reward or penalize a utility in terms of prices the utility may charge consumers. Utility management also may use this information for management review, strategic planning, outsourcing, reports to investors and/or multilateral funding agencies, and plant acquisition analyses (Blankenship *et al.*, 1998). Nonetheless, utilities may disagree with regulators on the applicability of certain performance measures for their specific circumstances.

6. *Adoption of procedures to resolve disputes between utilities and consumers.* Disputes may arise in a number of areas, including those concerning price re-balancing, quality of service, and network expansion. The IRC needs the authority to rule on matters within its jurisdiction. In addition, both utilities and their customers need to view the IRC as a being fair and even-handed in the way it addresses issues.

Dispute resolution can be very resource and time-intensive. Disputes may be based on perceived failures to deliver on promises or they may be used as a strategy for delaying implementation of a measure ordered by the IRC. Thus, one way to reduce the hostilities that result from disagreements is to provide very clear procedures for

reviewing complaints and reconciling diverse positions. Sometimes workshops can resolve technical issues where the IRC and the utility disagree on the interpretation of rules or the implications of particular developments. In the area of consumer disagreements, setting up citizen advisory boards represents a way for IRCs to provide a forum for stakeholders to gain an improved understanding of how the sector operates and to afford them an opportunity to provide input.

- 7 *Use of management audits to promote cost-effective utility performance.* Typically, the IRC reviews the organizational affairs of water utilities on a regular basis to ensure cost effectiveness and a continuous and efficient supply of service. On an agreed schedule, the IRC also reviews companies' performance effectiveness (achieved through incentive plans and management contracts) in reaching acceptable efficiency benchmarks. The IRC may need authorization to require utilities to take corrective action for unacceptable performance and, if necessary, to set targets for improved performance.

The credibility of regulation depends on how investors and consumers perceive management audits. On the one hand, politically motivated sham studies that lead to arbitrary cost disallowances will result in unreasonably low returns. Such audits damage the investment climate. On the other hand, independent studies sometimes can identify genuine opportunities for cost containment and strengthen management performance. In such cases, utility governance can be improved by information developed in the regulatory process. Outside investors (for investor owned utilities) and citizen leaders (for government owned utilities) are both at an information disadvantage relative to utility managers. Thus, the IRC can strengthen incentives for good performance through regular (and fair) management audits.

8. *Development of human resource policies and procedures.* Recruitment and staff training warrant particular attention as part of regular managerial responsibilities, since the implementation of good regulatory policies depends on the quality of the people conducting regulatory analyses. In addition, compensation policy needs to be flexible enough to recruit able staff and retain the expertise that is developed. In many countries, government salary structures are not competitive with those available in private industry. Since key staff evaluate companies as public policy is implemented, it is essential that their incomes be comparable to those in the private sector.

The provision of water and sanitation services requires a combination of information systems, engineering capabilities, financial analyses, managerial skills, and motivated labor. Utilities need to have procedures for creating the professional and skilled staff required for operating modern equipment and selecting appropriate technologies for meeting service quality standards. Similarly, IRCs need to offer continuing education programs to ensure that professionals have the skills required for successful performance of the nine functions identified here. Costs associated with competitive salaries and continuing education for commission employees are often reflected in utility rates (where a fee mechanism is used to fund the IRC). However, benefits derived from competent staff analysis and evaluations at the IRC should exceed such costs.

9. *Submittal of reports on utility costs and tariffs, to emphasize current and future performance and efficiency, both for individual companies and for the water sector as a whole.* An IRC may submit reports regarding sector activities to a higher authority. Given the expertise assembled at an IRC, it is appropriate for it to provide information and advice to appropriate government departments and ministries. Almost all IRCs prepare and distribute to the general public an annual report on regulatory activities and sector performance, which promotes transparency. In addition, IRCs frequently publish regulatory reports and orders on tariff-related issues on the Internet.

Accountability requires that all stakeholders be kept informed of developments in the sector: Are goals being met? What issues need to be addressed by policy-makers? How does current performance compare with that in comparable nations? On the one hand, forthcoming reports can be an excuse for delaying decisions until studies are completed: “paralysis by analysis” is a strategy that groups use to prolong the status quo. On the other hand, reports and studies can provide a foundation for policy initiatives or for informing stakeholders of current activities. In addition, a carefully prepared historical record of regulatory decisions provides background information to stakeholders and promotes the predictability of regulation—by establishing the basis for decisions. While reports represent one aspect of regulation, they should be viewed as “inputs” that ultimately will promote improved sector performance.

These nine functions are handled differently in every nation. However, it is in the interests of all stakeholders that the IRC has the legal authority, financial and professional resources, and shared values that promote accountability, credibility, and legitimacy.

References:

Berg, Sanford (2001). “Sustainable Regulatory Systems: Laws, Resources, and Values.” *Utilities Policy*, forthcoming.

Blankenship, Linda, Myron Olstein, and Barry Liner (1998). "Metric Benchmarking." *Journal of the American Water Works Association* 90 (6), pp. 57-62.

Smith, Warrick (1997). "Utility Regulators -- Roles and Responsibilities." *Public Policy for the Private Sector*. The World Bank Group.