

**Key Lessons from the
2009 PURC/OOCUR Advanced Course: Advanced Methods
in Regulatory Pricing and Industry Analysis**

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Teachers learn from their students, and students learn from each other. As with past programs, the participants in this training course identified the key lessons learned during the week. At the concluding session of the program, they shared their reactions to formal presentations and informal networking. The PURC staff appreciates the dedication and energy exhibited by participants: they brought energy, insight, and understanding to the sessions and shared their ideas with all of us. Course Coordinators Rossana Passaniti, CMP, and Melissa Stevens both commented on the fine spirit shown by participants—their willingness to share ideas and to be fully immersed in the learning experience.

Note that while most of the lessons refer to regulatory agencies and to those developing infrastructure reforms, the principles apply to operators as well. Organizations face the same types of challenges: creating a sustainable infrastructure system where all stakeholders have confidence in the integrity of the process and have a shared vision of improved infrastructure performance. Throughout the program, speakers and participants noted that there is no ideal way to regulate. The legal structure and other aspects of the institutional context limit what a regulator can do in any particular nation. However, taking a week to acquire new skills and review national situations helps leaders shape the institutional constraints in ways that can increase the likelihood that sector performance will improve.

PURC Director Mark Jamison reviewed the Lessons and noted that they tend to be strategic rather than technical in nature—suggesting that many of the important ideas involved how regulators, representatives from government ministries, infrastructure managers, and consumer advocates needed to “get on the balcony.” Intentionally stepping back from the “give and take” of regulation allows leaders to see how various stakeholders limit or promote reform. PURC Director of Energy Studies Ted Kury commented that the strong performance of participants on the two Quizzes reflected well on the efforts of all attendees. We hope that the annotated list of lessons stimulates further discussion among all those involved in these important sectors.

- 1. Resolving questions of fact, interests, values, and authority represent key tasks of regulators.** Research can determine the facts: the trends, relative performance, and best practice. Research and negotiation can assist in determining how benefits and costs can be allocated across stakeholders. Adaptive (or leadership) work helps groups understand the priorities and values of others—so dialogues are essential if

stakeholders are to understand and appreciate the concerns of various groups. Finally, adaptive work is required to determine who has jurisdiction (final say) over particular issues, so that overlaps and gaps do not become sources of conflict in the system; authority conflicts distract agencies and managers from doing their jobs.

- 2. Liberalization does not “replace” regulation.** Opening the market in telecommunications does not mean that regulation is no longer needed: interconnection, number portability, and the potential exercise of market power all require some monitoring. In some cases, electricity generation has been liberalized, but plant siting, the terms and conditions for transmission links, and other issues must still be addressed.
- 3. Rigorous analysis is required for rate-setting.** Estimates of opportunity costs provide information for deriving marginal price signals. In addition, accounting costs may be used to determine the level of “revenue requirements.” Clearly, technical skills are necessary but not sufficient for regulatory effectiveness in the area of prices and service quality. Agencies that operate in silos lose the synergies that could be drawn upon through interdisciplinary task forces that bring engineers, lawyers, and economists together.
- 4. A uniform system of accounts is essential if information is to be comparable across firms.** Regulators and operators must be able to evaluate various financial statements and operating statistics, so access to information is crucial for sound decision-making. Executives can only manage what they measure, so data collection and analysis are central to sound management as well as good regulation.
- 5. Benchmarking techniques provide ways to evaluate the relative performance of operating companies.** Statistical and other quantitative techniques (like Data Envelopment Analysis) can help analysts identify strong and weak performing firms. Of course, infrastructure industries are very complex—with utilities facing different operating conditions and historical experiences. Nevertheless, yardstick comparisons provide a basis for setting targets and developing incentives for improved performance.
- 6. Networking among professionals reveals shared problems and possible strategies for addressing infrastructure issues.** Networking with colleagues from the Caribbean and other regions provides regulators and operators with insights about how to implement “best practice” in home countries. No nation has “all” the answers, but the process of

sharing ideas and experiences lead to ways to promote professionalism, improved regulatory processes, and better decisions.

- 7. Marginal cost analysis requires a detailed understanding of the different stages of production.** Avoidable costs determine forward-looking (opportunity) costs. The steps for estimating marginal cost require a number of skills. The results of marginal cost studies are useful for developing improved price signals for consumers.
- 8. Market and merger analysis in telecommunications can yield a “reasonable approximation” of market power measures.** Excessive precision in telecommunications is not helpful, given convergence and other technological developments. The economist’s toolkit provides a useful conceptual framework for sorting out the extent to which economies of scale and scope yield efficiencies.
- 9. Capacity building in regulation improves the climate for reform.** The development of professional staff members requires opportunities for updating their skills. In addition, leaders should seek ways to become less isolated. Mechanisms for listening to one another should be identified and utilized. When bureaucracies become comfortable, leaders can become insulated from the real issues. Finally, other stakeholders (the press, judiciary, government ministries) can also benefit from workshops that increase awareness regarding the responsibilities of regulators and of operators).
- 10. Regulatory effectiveness can be enhanced through prudency tests of costs.** While second-guessing and micro-managing executives are not productive, regulators need to review major outlays, taking into account only the information available at the time. These prudency reviews should be transparent. An agency needs to be consistent in both its process and in the substance of its decisions. Transparency implies clear rules and functions that give operators confidence in the professionalism of those providing oversight. It is said that “the fewer the facts, the stronger the opinion.” One way to reduce the divisive role of rhetoric is to introduce information about the costs and benefits of different policy options. If the regulatory process is transparent, stakeholders (including political leaders) will understand the decisions of infrastructure agencies.
- 11. Regulators have a number of roles, including that of detectives and educators.** Gathering evidence from many sources provides a strong foundation for regulatory decisions. Such decisions always are made in a particular context, where the political, economic, and social environment sets the stage for moving forward. Sometimes, goals

or targets are not feasible if political constraints on price are rigid. It is better to be clear about what is possible—communicating these constraints to affected parties.

- 12. Selection of regulatory commissioners (and key staff) should be (relatively) non-political.** Staggered terms promote continuity in the regulatory leadership. A strong and technically solid regulator promotes confidence in the regulatory system. Communication with stakeholders is important—but distance must be preserved. A government ministry sets policy; the regulatory agency implements policy. If staff at a regulatory commission only communicate directly with the operator, and that operator is politically powerful, there will be a public perception that regulatory decisions are unduly influenced by these contacts. Similarly, a commission could be captured by powerful consuming groups, leading to excessively low prices that are not sustainable. Working for the long-term financial sustainability of the sector requires balancing the interests of many stakeholders.
- 13. Financial analysis is an important skill for regulatory commissions.** Concepts related to discounted cash flows, cost of capital, and financial integrity are central to evaluating operator business plans and revenue requirements. Thus, capacity building never ends. Organizational recruitment and retention depend on creating a culture of continuous improvement. The Body of Knowledge on Infrastructure Regulation, online at www.regulationbodyofknowledge.org, provides one set of resources for internal training programs and for addressing frequently asked questions.
- 14. Cross-country comparisons help regulators and operators better understand their own situations.** In addition, experiences in other jurisdictions provide insights regarding how alternative approaches might strengthen sector performance. Best practice regulatory institutions take an active role in learning lessons from agencies in other countries. Staff exchanges represent one way to share experience and expertise across jurisdictions.
- 15. There is a science and art of rate design.** Quantitative techniques provide bounds on forward-looking prices. However, citizen acceptance of rate decisions is also necessary if the system is to be sustainable. Stakeholders can appeal decisions in most jurisdictions, so it is important to (a) follow the law, (b) base decisions on facts and appropriate methodologies, and (c) communicate the decision in a way that makes the logic and impact clear to all affected parties.

- 16. Prepare for and use consultants effectively.** Consultants, local university scholars, and colleagues in other nations can all provide valuable perspectives. No agency has the resources to address all issues with internal expertise. It is important, however, to know what questions to ask these outside experts.
- 17. Identify and engage all stakeholders.** Operators and regulators need not be adversaries. Regulation is not a zero-sum game where consumers lose or operators win. Workshops can resolve some technical (factual) issues. It is still important to eliminate any perception of regulatory capture, since citizen confidence in the regulatory system is central to long-term infrastructure development.
- 18. Develop programs for “Consumers at Risk.”** Some countries have been particularly skillful at addressing the special needs of those who have low incomes and are vulnerable to rate increases. Cultivate opportunities for engaging the public in discussions about strategies for expanding networks to those who currently are not receiving service. Hearings provide one format for obtaining opinions—though the weight given to some concerns will depend on the financial sustainability of current prices and the willingness of the government to support well-targeted subsidies for access to the system.
- 19. Design workshops for judges and other elements of civil society.** Communications to groups external to the organization are important in that they represent a key way the public becomes informed about the regulatory process and about agency decisions. Workshops represent one forum for educating opinion leaders and other branches of government about the role and responsibilities of regulatory agencies. Press releases should avoid jargon and provide the following: an honest and direct answer, a message that explains the role or goal of your organization, specific proofs of your point, links to listeners, and a clincher that reinforces your message.
- 20. Quality of service needs to be measured and evaluated in terms of customer willingness to pay.** Related tasks include developing appropriate incentives for improving service quality and setting targets. Since customers generally lack choice of infrastructure supplier (except, for example, in telecommunications), significant attention should be given to monitoring performance in this area.

Thank you to all who shared lessons at the training program. We hope you will utilize the PURC Web site, www.purc.ufl.edu, as a resource in your future work.