Public Utility Economics: International Infrastructure

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In Public Utility Economics: International Infrastructure, Spring Semester 2007, undergraduate student teams examined issues in infrastructure industries, such as the political economy of regulation, market structure and competition, performance benchmarking, service to the poor, cost analysis, and environmental impacts. Dr. Sanford Berg developed this new course with support from the University of Florida’s Public Utility Research Center, and the Center for International Business Education and Research. Students used the Body of Knowledge on Utility Regulation, developed by PURC, as a major learning resource.

Dr. Berg also incorporated the PURC/World Bank International Training Program on Utility Regulation and Strategy into the class, giving students unique opportunities to interact directly with international regulatory professionals and study current global infrastructure policy. Below are photographs of the student consultant teams along with comments.

In January 2007, Training Program participants identified issues they wanted to see researched. Students then met with these regulatory professionals to learn more about the issues. In May, the “consulting teams” sent reports to agencies in Algeria, Barbados, Costa Rica, West Africa, Serbia, South Africa, Tanzania, and Trinidad & Tobago. One team developed a database on Regulatory Decisions. The web links and cases will be incorporated into the PURC web pages and used as resources for sector regulators and infrastructure managers.

Regulatory Decisions Database
Sean Wiborg & Joseph Childs
This team studied alternative approaches to liberalizing Algeria’s energy sector and provided possible models for restructuring the industry to improve sector performance. The project also examined private participation in electric utility infrastructure. The team developed lessons from the California experience, to be applied to developing countries. The regulatory commission responsible for implementing the country’s reforms is engaged in significant capacity-building, involving training for professional staff. The report is to be used to stimulate critical thinking within the commission regarding sector objectives and regulatory strategies.

David Ince, from the Barbados Fair Trade Commission, wrote the following: “Let me congratulate you on your efforts; the research conducted was extensive and is a useful resource for any organization wishing to compare and contrast different approaches to wind development.” The agency sought background information on citizen participation in siting a NIMBY (Not In My Backyard) and on the economics of wind power. Besides providing information on how to engage different stakeholders in the evaluation process, the student team provided two and one-half pages of references for the Barbados FTC.

The student team provided an overview of liberalization initiatives in Latin America for Costa Rica’s multi-sector regulator, ARESEP (Autoridad Reguladora de los Servicios Publicos). A state-owned monopoly now provides telecommunications services: the report identified the strengths and limitations of different market structures in this high technology sector (where the radio spectrum and digital services offer new opportunities for improved sector performance).
Students provided several reports on telecommunications liberalization in Europe. The material addressed issues of market power, competitive entry, network interconnection, and service quality. As James Kibler noted, “Serbia’s telecommunications sector has witnessed significant growth of desired private competition in key segments of telecommunications; however, the benefits of increasing competition and market “privatization” have greater potential with proper strategy and careful policy implementation.” Reports focused on policy issues facing Serbian regulators at RATEL (Republic Telecommunication Agency).

The development of the West African power pool raises issues: energy policy, infrastructure management, technical standards, national markets, planning, licensing, rates, and dispute resolution. Mahama Kappiah (Head of the Energy Division of the ECOWAS Secretariat) wrote: “There are very good references and web links in the document which provide very useful information. We are really impressed with the depth of review and research. We find this report very useful and will circulate it among stakeholders, including some national regulators, as an independent review of previous consultants’ work.”

The Barbados Fair Trading Commission sought information on reform processes for the heavily-subsidized Barbados Water Authority. The team recommended a comprehensive benchmarking program so leaders could evaluate utility performance. The report covered rate levels and rate structures, regulatory and political constraints, and policy options. The team viewed stakeholder education as a high priority task for those seeking reform. Dr. Marsha Atherley-Ikechi, Utility Analyst for the Barbados FTC, reviewed the report and wrote: “I applaud your students for the time and effort that went into this document and encourage you to continue this student consulting program.”
Students explored technical issues as they provided research reports for regulators: “In our interactions so far with Susan Harrysingh, Telecommunications Authority of Trinidad and Tobago, we learned that her country is expanding its telecommunications industry, and is interested in comparable examples of other countries or territories in telecommunications. She is particularly interested in how other countries have dealt with issues of benchmarking. She discussed areas that could be benchmarked, including, but not limited to: dropped calls, access for citizens, and noise on the lines.” (Adam Heinemann)

Transportation: Tanzania
David Green, Tory Leggio, Roberto Garcia, Tangeia Lang & Jonathan Myers (not shown)

“This team researched the Liquid Petroleum Gas market in South Africa with special respect to the role of market regulation, the focus of government subsidies, and the promotion of LPG as an energy source for all socioeconomic classes of consumers. “The LPG report is of an excellent quality and we would like to congratulate the research team for a task well-done. We are surprised by the high standard of work presented by undergraduate students. It should be viewed as an exercise for their possible future careers in academia or government.” - Adrian Cogills, South African Department of Minerals & Energy

LPG: South Africa
Flynn Vickers, Matthew Jones & Rhett Dougherty

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Telecommunications: Trinidad & Tobago
Adam Heineman, Wen Cromer & Christine Gleason