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Florida Roadshow

University of Florida – Public Utility Research Center

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BY RYAN MATTHEWS
METERING EVENTS DIRECTOR

The charming college town of Gainesville is home to the University of Florida's Public Utility Research Center. Founded in 1972, the center prepares research and provides training in utility regulation and strategy, as well as the development of leadership skills for infrastructure policy. Dr Sanford Berg, Director of Water Studies, was available to meet over a cup of coffee.

Please give a brief history of your career

Being at a university is a privilege. To be able to set the intellectual agenda for students and be able to tackle research issues on your agenda is extremely good fortune. Of course there is the responsibility that comes with that as well. Over my career, I looked at joint ventures and technological change for about six years. Then I moved into energy for about twelve years. After that I did telecommunications for eight years, and out of that came the Cambridge academic book on Natural monopoly regulation. Then I turned my attention to international infrastructure.

Tell us a bit more about PURC

In the mid-1990s, we obtained seed money to start a training course of international regulation. And that's what got me into the international area; more than two thousand infrastructure regulators and managers from 135 countries have come here for two weeks. Eighty participants at a time from around thirty countries will go through two weeks, attending 65 different sessions; bringing in the top utility personnel from Mozambique, Peru, Thailand, and Albania amongst others. It has been a tremendous privilege being able to work with these professionals. And that's what got me involved in the water sector because the challenges for water/wastewater are so difficult, especially in developing countries. We share lessons from the developed world so problems can be avoided in the developing world. My own work now, in the past six or seven years, has focused on water, but I also cover infrastructure in general.

What are some of the issues that you address in your training courses?

Many of the issues are fundamentally around management. So the question is, how to promote good capacity building at these utilities and get accountability and citizen acceptance of prices that cover costs. Also, how do we create good regulatory regimes, that are somewhat insulated from the political process: how to think politically without being political.. I'm working at a different end of the spectrum. We're trying to promote financial sustainability, and water resource sustainability.

From the standpoint of energy, how are we going to deal with dispersed generation and integrate that into the grid? The metering opportunities that are there are just fantastic, but it's a chicken and egg problem. You really have to have a regulatory system that is predictable that rewards incentives for cost-effectiveness. Without regulatory credibility, infrastructure will be unattractive for investors—which delays the achievement of the Millennium Development Goals.

Do you find there is a growing interest in the utility business from a student level?

Since the research center was formed in 1972, we have been doing work across the USA, as well as having focus in Florida. This has mainly been around energy and telecommunications, but not too much on water.

There are several former PhD students who did their dissertations on infrastructure who graduated and did consulting or teaching in energy, water, or telecommunications. So at that level we have had some great success. I've got students who are publishing papers that I never could write, they are so good. It's not that its high theory, but they're got a good grasp of empirical methods and digging into data sets, and doing some really interesting work trying to relate policy to performance. For example, we have over ten studies of water utility benchmarking.

At the undergraduate level, this university has grown dramatically. But the number of professors, teaching certain electives, has shrunk significantly. In this particular state, legislators have kept the price of tuition so low that the funds coming make it that we're not really state supported, but more so state assisted, which really makes it tough. You will hear this from many other universities; it's an international problem where higher education is just a low priority. We also have got to think of ways of making universities more responsive and more accountable, with some emphasis on interdisciplinary work: universities have departments and the world has problems. Engineering students need to understand incentives and managerial issues, and business students need to appreciate the underlying production technologies in different industries.

How do you then manage the activities of the Center?

I turned over the Directorship to a colleague in 2004 so I could spend more time on research. PURC survives on soft money. When we do a training program that is not subsidized, we've got to charge for it and deliver value. So in that sense we act like a standalone operation. And we've been pretty successful at that. Recently, the university has started two initiatives, one being the Water Institute, and that's trying to conduct research and deliver outreach programs, recognizing the importance of interdisciplinary approaches to managing water sector problems. The other initiative is a Florida Institute for Sustainable Energy which is addressing new technologies—where metering issues for dispersed systems play a significant role.

With our outstanding undergraduates, this university has the second largest number of National Merit finalists. And yet in our case, because of the funding situation, introductory economics is a course with 2 000 students: done via the internet. We do the best we can with our resources. And I guess it's a national challenge of how do you inform students about what is a meaningful profession. You don't have to be a lawyer or a doctor to have a big impact. It's about getting graduates into internships to see the scope of the industry. We alert students to the many opportunities in the energy and water sectors.



Dr. Berg's research has focused on infrastructure industries: the role of research and development in determining the basic industry conditions and the role of public policy in determining sector performance. Regulatory incentives shape managerial decisions regarding prices, facilities, contracts, service quality, and network expansion. Because of its work with regulatory commissions and utilities around the world, the Public Utility Research Center (PURC) has created a library of material on infrastructure policy and regulatory governance. Berg has examined the role of network industries in economic growth and the promotion of innovative approaches to improving water sector performance.

Dr. Berg is the co-author of *Natural Monopoly Regulation: Principles and Practice* (Cambridge University Press). He has published more than eighty articles on infrastructure issues, joint venture activity, and innovation in the *Journal of Regulatory Economics*, *Utilities Policy*, and *Water Policy*. His eight articles in *Water21* examine investment, pricing, and incentive issues facing regulators and water systems managers. Traveling widely, he has given presentations on infrastructure issues in Argentina, Australia, Bolivia, Bulgaria, Brazil, China, Jamaica, Japan, Mexico, Peru, Portugal, Russia, Saudi Arabia, Spain, Uganda, and the United Kingdom.

His public service includes membership on the Florida Governor's Energy2020 Study Commission, 2000-2001 and organization of the PURC/Askew Conference "How Should Florida's Water Supply Be Managed in Response to Growth?" He is co-coordinator of the PURC/World Bank International Training Program since 1996. Over 2000 regulators and managers from 135 nations have participated in the two week program at UF. He has served as a consultant to the World Bank, New York Public Service Commission, Southern Company, and other organizations. He has been honored with a number of awards, including University Teacher/Scholar of the Year, 1998-1999.

Dr Berg can be contacted at: sberg@ufl.edu