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# Electricity market reform: Why it has not turned out as expected

Submitted by

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#### Abstract

Electricity market reform started in 1987 in Chile, followed in 1989 in Britain, and has since spread to many parts of the world. The motivations to change the regulatory regime and the organization of the industry prior to reform vary from one place to another, as do the expectations for the outcome of reforms. Yet the overwhelming reasons are to increase the sector's efficiency by introducing competition in segments where it makes sense to do so. A secondary motivation in many cases has been the belief that traditional regulation has not been effective and market discipline would be a better substitute. In developing countries, of course, the dominant motivating factor is to attract foreign investment to the capital-intensive power sector.

Despite considerable experience gained during the intervening two decades, a number of contentious market design and implementation issues remain. Moreover, while market reform has addressed many of the shortcomings of the regulated or centrally planned era, in nearly all cases, initial market reform has led to unintended consequences or has introduced new concerns, addressed in subsequent "reform of the reforms."

More worrisome, however, is that in some cases, for example in the US, policymakers and consumers are not pleased with the outcome, believing that market reform did not deliver in key areas including lower retail prices. Many markets, and not just in the US, are stuck in a hybrid mode, partly competitive and partly regulated – not something that as originally intended. In a few cases, such as in Maryland, Illinois and Michigan, there is talk of returning to rate of return regulation – something that has de facto already happened in Virginia.

This paper provides an overview of the market reform experience, describes some of the challenging issues facing regulators and policy makers, and provides insights based on research contained in a forthcoming book titled Competitive Electricity Markets: Design, implementation, performance, to be published in 2007.

### Biographical sketch of Dr. Sioshansi

**Fereidoon (Perry) Sioshansi** is President of **Menlo Energy Economics**, a consulting firm based in San Francisco, California, serving the energy sector, primarily the electric power industry. Dr. Sioshansi's professional experience includes working at **Southern California Edison Company** (SCE), the **Electric Power Research Institute** (EPRI), **National Economic Research Associates** (NERA), and most recently, **Global Energy Decisions** (GED).

Dr Sioshansi provides consulting services to the industry, policy makers and regulators on a wide range of topics including:

- Electric power restructuring, privatization & market liberalization;
- Global climate change & environmental sustainability;
- Demand & price forecasting & integrated resource planning;
- Energy efficiency, conservation & demand-side management;
- Renewable energy technologies;
- Corporate strategy formulation & implementation;
- Scenario analysis & dealing with uncertainty;
- Asset & contract valuation in the context of competitive markets;
- Regulatory policy, market design & market power issues.

Dr. Sioshansi has authored numerous reports, books, book chapters & articles. His most recent book, co-edited with Professor Wolfgang Pfaffenberger, titled *Electricity Market Reform: An International Perspective*, was published by Elsevier in 2006. A sequel book, titled *Competitive Electricity Markets: Design, Implementation, Performance* is forthcoming in 2007.

He is the editor and publisher of **EEnergy Informer**, a monthly newsletter with wide international circulation. He is on the Editorial Advisory Board of *The Electricity Journal* where he is regularly featured in *Electricity Currents* section. A frequent contributor to *Energy Policy* and *The Electricity Journal*, he serves on the editorial board of *Utilities Policy*. He has degrees in Engineering and Economics, including an MS and Ph.D. in Economics from **Purdue University**.