

## The Future of Utilities Utilities of the Future

How technological innovations in distributed energy resources will reshape the electric power sector

Fereidoon P. Sioshansi, Editor



## Future of Utilities - Utilities of the Future

*How technological innovations in distributed generation will reshape the electric power sector*

Edited by: **Fereidoon P. Sioshansi**, President, Menlo Energy Economics, San Francisco, CA, USA



Rapid technological advancements plus falling costs of **distributed energy resources** (DERs) – which includes **energy efficiency** improvements plus **distributed generation** – is turning an increasing number of **consumers** into **prosumers**, eroding utility revenues and threatening the historical business model.

Equally important are rapid advances in **energy storage, electric vehicles, micro-grids, intelligent home energy management, demand aggregation, and demand response**, all pointing to a different future with a different role for the incumbents.

**Future of utilities: Utilities of the future**, which includes contributions from experts with different perspectives from different parts of the globe, examines the implications of these developments on the electric power sector.

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"The future of the utilities is not yet given, or written. Even those utilities having avoided the market revolution of the past decades won't be able to avoid the 3 tsunamis of supply, demand and technology that are about to hit them. You – and they – can imitate the ostrich and stay blind a bit longer or... read the book!"

**Professor Jean-Michel Glachant**, Director Florence School of Regulation, European University Institute

"The electricity service of 2010 would be quite recognizable to a customer from 1910, but this is about to change. This book shows how technological innovation, economic forces and new business models could combine to produce radical changes over the coming decades."

**Professor Richard Green**, Imperial College Business School

"This book brings together the thinking of some of the smartest minds from around the globe to bear on the quintessential question of this age: what will be the future of the electric utility industry?"

**Dr. Ahmad Faruqi**, The Brattle Group

"New technologies, consumers, and policies are challenging the organizational and operational paradigm of the utilities prevailing since the formative years of the sector. We need to better understand this transition. This book written by leading practitioners and scholars offers a valuable guide to the issues and options for creating the utilities of future."

**Professor Tooraj Jamab**, Durham University

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