

Demand charges and dynamic pricing are complements, not substitutes

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PRESENTED BY

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Electricity has a capacity component and an energy component

When customers connect to the grid, they buy a 24/7 call option on the grid (which consists of power plants, transmission lines, substations, feeders, transformers, meters, and electric wires).

Even if customers consume no energy during the peak period, they should still pay for being connected to the grid.

That is where a connection charge, or a non-coincident demand charge enters into the picture.

Moving forward with tariff reform

There is no easy way to differentiate fixed charges by customer size. Non-coincident demand charges provide a more feasible option.

Energy can be priced dynamically, but grid costs are best recovered through demand charges.

Smart meters have been around for a long time for large customers; their presence does not alter the principles of rate design.

I will share some examples of real-time pricing programs for large customers tomorrow; they include both demand charges and dynamic pricing.

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Ahmad Faruqui's consulting practice is focused on the efficient use of energy. His areas of expertise include rate design, demand response, energy efficiency, distributed energy resources, advanced metering infrastructure, plug-in electric vehicles, energy storage, inter-fuel substitution, combined heat and power, microgrids, and demand forecasting. He has worked for nearly 150 clients on 5 continents. These include electric and gas utilities, state and federal commissions, independent system operators, government agencies, trade associations, research institutes, and manufacturing companies. Ahmad has testified or appeared before commissions in Alberta (Canada), Arizona, Arkansas, California, Colorado, Connecticut, Delaware, the District of Columbia, FERC, Illinois, Indiana, Kansas, Maryland, Minnesota, Nevada, Ohio, Oklahoma, Ontario (Canada), Pennsylvania, ECRA (Saudi Arabia), and Texas. He has presented to governments in Australia, Egypt, Ireland, the Philippines, Thailand and the United Kingdom and given seminars on all 6 continents. His research has been cited in *Business Week*, *The Economist*, *Forbes*, *National Geographic*, *The New York Times*, *San Francisco Chronicle*, *San Jose Mercury News*, *Wall Street Journal* and *USA Today*. He has appeared on Fox Business News, National Public Radio and Voice of America. He is the author, co-author, or editor of 4 books and more than 150 articles, papers, and reports on energy matters. He has published in peer-reviewed journals such as *Energy Economics*, *Energy Journal*, *Energy Efficiency*, *Energy Policy*, *Journal of Regulatory Economics* and *Utilities Policy* and trade journals such as *The Electricity Journal* and the *Public Utilities Fortnightly*. He holds B.A. and M.A. degrees from the University of Karachi, an M.A. in agricultural economics and Ph.D. in economics from the University of California at Davis.

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