



VORträge zum Operations Research

Kolloquium des Instituts für Operations Research

Zeit: Montag, 18. November 2019, 14:00 Uhr

Ort: Raum 320, Gebäude 09.21

Es spricht: Dr. Mohammad Reza Hesamzadeh, KTH Royal Institute of Technology, Stockholm

Zum Thema: **The Long-Term Impact of Market Power in Generation Sector on Electricity Demand Investment**

Abstract: Conventional economic analysis on effects of market power in electricity sector overlooks the harm it causes to the consumer, by modeling the demand side as passive consumers with a demand curve. However, it seems quite clear that downstream consumers are not necessarily passive at all but, instead, must make a material sunk investment to participate in the market. This paper shows that the material sunk investment made by the consumers shall be affected when the generators are in a position to exercise market power. The potential failure of consumers to make the potential investment, thereby foregoing the full benefits of electricity supply, is a result of harm from market power. The paper proves the harm of market power on demand-side sunk investments, in a two-node and three-node system; and goes on to verify the conclusions in general setting with numerical simulations.

Bio:

Mohammad Reza Hesamzadeh (IEEE-SM'13) received his Docent (Readership) from KTH Royal Institute of Technology, Sweden, and his PhD from Swinburne University of Technology, Australia, in 2013 and 2010, respectively. He was a Post-Doctoral Fellow at KTH in 2010-2011 where he is currently a faculty member. He is also a faculty affiliate at Program on Energy and Sustainable Development (PESD), Stanford University. His special fields of interests include electricity market analysis and design and mathematical modelling and computing. Dr Hesamzadeh is a member of International Association for Energy Economics (IAEE) and a Member of Cigre, Sweden Section. He is currently an editor of IEEE Transactions on Power Systems.

Die Vorträge zum Operations Research wenden sich an alle Interessierten!

Nach dem Vortrag laden wir Sie gerne zu einem Gespräch mit dem Referenten und einer Tasse Kaffee ein.

Bei Rückfragen wenden Sie sich bitte an:

Prof. Dr. Steffen Rebennack, Institut für Operations Research.