

*A Workshop on  
Mechanism Design and Computational Modeling of Social Systems  
November 19 and 20, 2014, School of Mathematics, IPM, Tehran*

## **An Empirical Analysis of Suppliers Bidding Strategy: A Case Study of Iran Wholesale Electricity Market**

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Following the restructuring and establishment of the wholesale electricity market in the most of countries, finding optimal bidding strategy deriving in these markets has been one of the main challenge of electricity suppliers to maximize their expected profit.

At the same time, investigating the suppliers' bidding strategy for electricity market regulatory bodies, in order to identify the market power and the palyers' response to external shocks is important.

This talk evaluates suppliers bidding strategy performance by ex-post approaches in pay as bid auction in the Iran wholsale electricity market using two methods, intersection point analysis of firm actual bid and realized residual demand and the best-response strategies to realized residual demand.

The performance evaluation between firms shows, that the medium-size firms' performance is better than their large counterparts and large firms better than their small-size rivals. also, firms performance under Tavanir management is better than private firms and private firms better than firms with government ownership. furthermore, firms performance, in the peak demand hours is strongly closer to ex-post optimal behavior than medium demand hour and in the medium demand hours better than low demand hours. This results, strongly confirmed with panel fixed-effect regression model.

This talk is based on a joint work with Hassan Mardani, and Mohammad Sadegh Ghazizadeh.

**Keywords:** Iran wholsale electricity market, Actual bid, Ex-post optimal bid, Pay-as-bid auction