Dear organizers,

Please accept the following talk for the upcoming conference in Teheran:

I would like to be put in concurrent session C2 or E2.

Coauthor: Erkka, Näsäkkälä, Helsinki University of Technology

Title:

Gas Fired Power Plants: Investment Timing for Mutually Exclusive Technologies

Abstract:

This is a real options approach to investment in gas fired power plants. We consider two types of power plants, one base load, the other also base load but with an opportunity to upgrade to peak load. The investor can choose only one of the two types. We use stochastic models for energy prices, with parameters estimated from observable forward prices of electricity and natural gas. We derive optimal decision rules for investment timing and potential upgrading of the plant. We find that it is suboptimal to select the technology having the lowest threshold level for energy prices. Further, an increase in short term volatility hastens the upgrade decision, while an increase in long term volatility delays upgrading.

Best regards,