

# Grid operators under pressure. Coping strategies of incumbent energy companies

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**Arne Maibaum, Marcel Kiehl, Johannes Weyer**  
(TU Dortmund University)

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Recent developments in energy policy have put pressure especially on grid operators. The unbundling of the energy system means in effect that they can neither profit any more from energy production nor from energy trade. They are now liable for their own accounting, depending only on transmission fees, which are derived of the cost of the lowest contender. Nevertheless, they are responsible for the stability of the grid. The operators of the high-voltage transmission nets suffer mostly from an unstable power feed-in by large-scale solar and wind energy parks. In contrast, the operators of medium-voltage distribution nets are confronted with many small, decentralized and unregulated energy producers.

In order to evaluate the coping strategies of grid operators, we conducted 20 qualitative interviews with employees and managers of two big German energy companies and of two large public utility companies. Using qualitative analysis and observation practices we examined how those operators maintain the stability of a complex system and try to become resilient in spite of growing external pressure.

Our main findings are: Since a proper control technology is missing, the grid management of incumbent companies is only partly prepared to cope with recent developments in the energy system. With new structures still missing, repair work has to be done in the control room. Grid operation changes remarkably: formerly low maintenance night watches become active management shifts, and tasks as weather prognosis or the calculation of power consumption have become a constant challenge for operators.

Marcel Kiehl  
mail: marcel.kiehl@tu-dortmund.de  
phone: (+49)231 755-7026

Arne Maibaum  
mail: arne.maibaum@tu-dortmund.de  
phone: (+49)231 755-7446

Address:  
TU Dortmund University  
Faculty of Business, Economics and Social Sciences  
Technology Studies Group  
D-44221 Dortmund