

Issues and Options in the Economic Regulation of European Network Security

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Abstract : Incentive regulation needs to adapt to the emerging changes in the operating environment of the electricity networks and take into account the security of these. This paper assesses the current issues and options in economic regulation of network security across the European electricity systems. An output-oriented incentive regulatory approach combines the efficiency promoting mechanisms in a revenue cap framework with output-based incentives such as better provision of network security. Thus, incentive regulation is destined to move from pursuing the optimal to being more practical. The RIIO regulatory framework in the UK and the service quality regulation in Italy provide good examples of application of output-based regulation. We also propose an output-based approach for regulation of network security, which accounts for the risks from natural, accidental and malicious threats. We conclude that regulation for network security may also involve looking beyond economic network regulation and focus on the wider security policy and regulation interface considering the risks facing the electricity networks.

Keywords network security, exceptional events, incentive regulation, output-based

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