

The Role of Distribution Network Operators in Promoting Cost-Effective Distributed Generation: Lessons from the United States for Europe

EPRG Working Paper 1422

Cambridge Working Paper in Economics 1448

Karim L. Anaya, and Michael G. Pollitt

Abstract

We explore the different competitive mechanisms applied by electric utilities from the USA in promoting cost-effective Distributed Generation (DG) resources and the challenges that they face due to the increase in DG connections. Case studies from California, Oregon, Colorado and New York are discussed. The case studies refer to two kinds of competitive mechanisms: Request for Proposals (RFP) and auctions (Renewable Auction Mechanism). The study proposes an auction design with a focus on the UK context and examines the role of energy regulators in auction mechanisms. We think that the experience described in the four case studies can be replicated by Distribution System Operators (DSOs) in Europe, however unbundling rules established in the EC third package need to be taken into consideration.

Keywords : electricity auctions, distributed generation, renewable energy, third energy package

JEL Classification: D44, L51, L94, Q28,Q48

Contact k.anaya@jbs.cam.ac.uk
Publication December 2014
Financial Support UK Power Networks via the Low Carbon Networks
Fund's Flexible Plug and Play Project