

MANAGEMENT OF MICROGRIDS IN MARKET ENVIRONMENT

A.G. Tsikalakis, A.Dimeas, N. D. Hatziaargyriou, J.A. Pecas Lopes, G.Kariniotakis, J.Oyarzabal

*School of Electrical & Computer Engineering
National Technical University of Athens
9 Iroon Polytechniou Str., 15773 Zografou, Athens, Greece
Phone (30) 2107723696, Fax: (30) 2107723968
E-Mail: atsikal@power.ece.ntua.gr*

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ABSTRACT

Restructuring of power markets has helped in the penetration of Distributed Generation (DG) in the electricity networks. Microgrids are Low Voltage distribution networks comprising various distributed generators (DG), storage devices and controllable loads that can operate interconnected or isolated from the main distribution grid, as a controlled entity. This paper describes the main functions of the Microgrid Central Controller required for the optimization of Microgrid operation during interconnected operation. This is achieved by maximizing its value, i.e. optimizing production of the local DGs and the exchange of power with the main distribution grid.