



## **MICROGRIDS OPERATION AND CONTROL UNDER EMERGENCY CONDITIONS**

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**ABSTRACT**—Under normal conditions, the MicroGrid operates interconnected with the upstream medium voltage network. However, scheduled or forced isolation can take place. In such conditions, the MicroGrid must have the ability to operate stably and autonomously, requiring the development of suitable control strategies in order to enable MicroGrid islanded operation. The MicroGrid power sources can also be exploited in order to locally promote a service restoration strategy following a general blackout. A sequence of actions for the black start procedure is also identified and it is expected to be an advantage for power system operation in terms of reliability as a result from the presence of very large amounts of dispersed generation in distribution grids.