Orthogonal Array Microgrid

Uncertainty of RG and load is described as an uncertain set produced by interval prediction. Then, the Taguchi"s orthogonal array (OA) testing method is used to provide possible ...

In this study, two cases with typical microgrids are considered to evaluate the effectiveness of the proposed method, and GAMS tool is used for implementation of simulations.

An example is given in this paper to explain the GA-orthogonal array hybrid analyzing method.

This work introduces a preliminary step in which experimental design techniques, namely, an orthogonal array experiment and a factorial-effect chart are used to find an operation method that ...

The invention discloses a method for robustly and optimally operating micro-grids on the basis of orthogonal arrays.

The Taguchi method is based on orthogonal arrays, as that shown in Table 1, which allow identifying the fewest possible experiments to be performed which correspond to a specified ...

Keywords: Orthogonal array, Genetic algorithm, Microgrid, Compound energy system, Operating optimization

The operation plan of each microgrid with an SOFC, PEFC, and G/E generator, each with different output characteristics, was analyzed to examine the analytical accuracy of the orthogonal array-GA ...

This chapter presents a mathematical robust model for a microgrid (MG) to obtain the battery energy storage system (BESS) charge/discharge scheduling and the exchange of power with upstream ...

Web: https://www.capturedmoments.co.za