

## Republic of Tunisia Ministry of Higher Education and Scientific Research University of Tunis El Manar National Engineering School of Tunis Doctoral School: Engineering Sciences and Techniques



## **DOCTORAL THESIS**

Presentedby

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Prepared in the Laboratory of Electrical Systems

In partial fulfillment of the requirements of

## **NATIONAL DOCTORAL DIPLOMA**

Contribution to the study and implementation of standalone residential DC microgrid in remote area

Defended on February 05th, 2020, in front of the committee composed of:

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