

JOSEPHINE UKPOJO ABAH A thesis submitted in partial fulfilment for the requirements

Not all the complex characteristics of the hybrid microgrids can be studied in a single research project; hence this master thesis focuses only on a specific target case study: sizing, modeling, and ...

Through this research, the methodology of dealing with systems consisting of subsystems with bigger capacity and smaller capacity of output. In a microgrid, the capital cost of per kW output power of internal ...

By testing these configurations, this thesis demonstrates the practicality and feasibility of our microgrid operations under steady-state conditions, while providing insights into the role of PV power factors in ...

In this thesis, research is carried out to examine the sustainability of rural microgrids and then develop metrics to enhance how sustainability can be measured for these types of projects.

The potential of microgrids in this space is examined, and development of a system intended for this context is detailed. The Microgrid Energy Manager (MEM) system is proposed as a low-cost, ...

In the present work the performance of hybrid AC/DC microgrid system is analyzed in the grid tied mode. Here photovoltaic system, wind turbine generator and battery are used for the development of ...

The thesis focuses on integrated energy management strategies for microgrid systems, and constructs an off-grid energy system that includes photovoltaic, wind, heat pump, boiler and energy storage.

The art of the optimisation methods in sizing and EMSs for microgrids. The work in this thesis is divided into three parts; the first part deals with sizing grid-connected PV-Battery Energy Storage System

This thesis discussed microgrids at a general level, covering their main advantages such as increased energy efficiency, reduced grid losses and the possibility of integrating renewable energies, and ...



Graduation Thesis on Microgrid Technology

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