Distributed coordination of EV charging with renewable energy in a microgrid of buildings. Y Yang, QS Jia, G Deconinck, X Guan, Z Qiu, Z Hu. IEEE Transactions on Smart Grid 9 (6), 6253-6264, 2017. 169: 2017: Matching EV charging load with uncertain wind: A simulation-based policy improvement approach.

Networked microgrids that integrate the hydrogen fueling stations (HFSs) with the on-site renewable energy sources (RES), power-to-hydrogen (P2H) facilities, and hydrogen storage could help ...

p>Considered as basic structures of next-generation energy system, environment-friendly and flexible microgrid (MG) systems are potential solutions to deal with stochastic renewable energy sources ...

The droop control is commonly used as the control strategy in microgrid. The traditional droop control only considers the relation between the active power and voltage frequency; and the relation ...

Unbalanced power sharing for islanded droop-controlled microgrids. Y Jia, D Li, Z Chen. Journal of Power Electronics 19 (1), 234-243, 2019. 8: 2019: H robust control of wind generation system. J Yaoqin, C Binggang, Y Zhongqing. Acta Energiae Solaris Sinica 25, 85-91, 2004. 7: 2004:

The multi-energy microgrid (MEMG) improves the energy supply economy through a multi-energy coupling operation. However, due to faults or maintenance, outages may occur in the main grid, forcing ...

DOI: 10.1109/PESGM40551.2019.8973991 Corpus ID: 53041322; Distributed Coordination of EV Charging with Renewable Energy in a Microgrid of Buildings @article{Yang2019DistributedCO, title={Distributed Coordination of EV Charging with Renewable Energy in a Microgrid of Buildings}, author={Yu Yang and Qing-Shan Jia and Geert Deconinck and Xiaohong Guan and Zhifeng ...

Furthermore, an electric heater is introduced into the model to improve the economy of the Microgrid operation and enhance the flexibility of the Microgrid by electricity-heat conversion. Particle swarm optimization is employed to solve this model for the operation schedule to minimize the total operational cost of the Microgrid by co-ordinating the CHP, ...

CaoJia is the slash ship between Cao Cao and Guo Jia from the Romance of the Three Kingdoms fandom. Upon returning from a mission, Guo Jia feel ill. This was somewhat expected, as he was not used to the climate he was put into. Cao Cao sent him to Yi Zhou to take care of himself, not thinking that anything would happen. Guo Jia asks one of Cao Cao"s subordinates to lead the ...

Considering that the charging demand of EVs usually doesn"t align with the uncertain wind power, the coordination of EV charging with the locally generated wind power in a microgrid of buildings ...

The numerical results show that coordinating the distributed solar power and battery can reduce the operational cost of the microgrid and be transformed into a stochastic mixed-integer linear programming. Improving building energy efficiency is significant for energy conservation and environmental protection. When there are multiple buildings with solar power ...

Microgrids are self-sufficient energy ecosystems designed to tackle the energy challenges of the 21st century. A microgrid is a controllable local energy grid that serves a discrete geographic footprint such as a college campus, hospital complex, business center, or ...

This paper proposes a retroactive scheduling regime in handling heterogeneous schedulable sources in small-scale microgrids, of which the decision-makings can be robust to future uncertainties and demonstrates the effectiveness of the proposed regime. High renewables embedded microgrid is an emerging paradigm of distributed power systems, which can locally ...

Coordinating the microgrids (MGs) in the distribution network is a critical task for the distribution system operator (DSO), which could be achieved by setting prices as incentive signals. The ...

DOI: 10.2139/ssrn.4071619 Corpus ID: 247911174; Large-Signal Stable Composite Control for the Source Dc-Dc Converter of Onboard Dc Microgrid @article{Chen2022LargeSignalSC, title={Large-Signal Stable Composite Control for the Source Dc-Dc Converter of Onboard Dc Microgrid}, author={Jiawei Chen and Guangyu Jia and Chengfu Xu and Jie Chen}, ...

DOI: 10.1016/j.apenergy.2023.121490 Corpus ID: 259740852; A safe reinforcement learning-based charging strategy for electric vehicles in residential microgrid @article{Zhang2023ASR, title={A safe reinforcement learning-based charging strategy for electric vehicles in residential microgrid}, author={Shulei Zhang and Runda Jia and Hengxin Pan and Yankai Cao}, ...

A novel energy management framework based on tube-based model predictive control for off-grid microgrid clusters, which enables the robustness against system uncertainties in the energy scheduling strategy with less sacrifice in economic performance and computational efficiency is proposed. In view of the ineluctable uncertainties induced by renewables and load ...

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