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| Autore | Ding Yi (Electrical engineering teacher) |
| Titolo | Integration of Air Conditioning and Heating into Modern Power Systems : Enabling Demand Response and Energy Efficiency / / by Yi Ding, Yonghua Song, Hongxun Hui, Changzheng Shao |
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| ISBN | 981-13-6420-6 |
| Descrizione fisica | 1 online resource (191 pages) |
| Disciplina | 697.93 |
| Soggetti | Production of electric energy or<br>Energy security<br>Power Electronics, Electrical Machines and Networks<br>Energy Security<br>Control and Systems Theory<br>Building Physics, HVAC |
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| Nota di contenuto | Air Conditioning and Heating as Demand Response in Modern Power Systems -- Aggregated Air Conditioners for Providing Operating Reserve -- Heterogeneous Air Conditioner Aggregation for Providing Operating Reserve considering Price Signals -- Air Conditioner Aggregation for Providing Operating Reserve considering Lead-Lag Rebound Effect -- Inverter Air Conditioner Aggregation for Providing Frequency Regulation Service -- Integration of Flexible Heating Demand into the Integrated Energy System -- Incorporating Demand Response of Heat and Electricity in the Integrated Energy System -- Economical Evaluation of the Flexible Resources for Providing the Operational Flexibility in the Power System. |
| Sommario/riassunto | This book focuses on the integration of air conditioning and heating as a form of demand response into modern power system operation and planning. It presents an in-depth study on air conditioner aggregation, and examines various models of air conditioner aggregation and corresponding control methods in detail. Moreover, the book offers a comprehensive and systematic treatment of incorporating flexible |

heating demand into integrated energy systems, making it particularly well suited for readers who are interested in learning about methods and solutions for demand response in smart grids. It offers a valuable resource for researchers, engineers, and graduate students in the fields of electrical and electronic engineering, control engineering, and computer engineering.