



Special Issue Reprint

# Integration of High Voltage AC/DC Grids into Modern Power Systems

www.mdpi.com/books/reprint/2562

Edited by Fazel Mohammadi

ISBN 978-3-03936-525-8 (Hardback) ISBN 978-3-03936-526-5 (PDF)



Electric power transmission relies on AC and DC grids. The extensive integration of conventional and nonconventional energy sources and power converters into power grids has resulted in a demand for high voltage (HV), extra-high voltage (EHV), and ultra-high voltage (UHV) AC/DC transmission grids in modern power systems. To ensure the security, adequacy, and reliable operation of power systems, the practical aspects of interconnecting HV, EHV, and UHV AC/DC grids into the electric power systems, along with their economic and environmental impacts, should be considered. The stability analysis for the planning and operation of HV, EHV, and UHV AC/DC grids in power systems is regarded as another key issue in modern power systems. Moreover, interactions between power converters and other power electronics devices (e.g., FACTS devices) installed on the network are other aspects of power systems that must be addressed. This Special Issue aims to investigate the integration of HV, EHV, and UHV AC/DC grids into modern power systems by analyzing their control, operation, protection, dynamics, planning, reliability, and security, along with considering power quality improvement, market operations, power conversion, cybersecurity, supervisory and monitoring, diagnostics, and prognostics systems.



Order Your Print Copy You can order print copies at www.mdpi.com/books/reprint/2562

# **MDPIN**Books Publishing Open Access Books & Series

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access - high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



# **Open Access**

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License



#### **Author Focus**

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



#### **High Quality & Rapid Publication**

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



# **High Visibility**

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



# **Print on Demand and Multiple Formats**

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG St. Alban-Anlage 66 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

