

Special Session 20**Key Technologies for Optimal Operation and Control
of Clean Energy Integration Systems via DC-Friendly Sending Systems****Introduction and Topics**

The massive integration of clean energy poses severe challenges to grid stability. Traditional AC transmission often struggles with large-scale, long-distance energy evacuation. To address this, DC-friendly sending systems have emerged as a critical paradigm, leveraging advanced power electronics to ensure clean energy actively supports the DC network. This issue focuses on the Key Technologies for Optimal Operation and Control of Clean Energy Integration via DC-Friendly Sending Systems. By optimizing source-grid coordination and power control, this project aims to maximize clean energy utilization while ensuring the stability and efficiency of the DC transmission corridor.

Topic 1: Frequency Response and Control for Clean Energy through DC-Friendly Integration Systems

Topic 2: Optimal Operation for Clean Energy Integration Systems via DC-Friendly Sending Systems

Topic 3: Coordinated Source-Grid-DC Stability Control for AC/DC Systems

Topic 4: Frequency and Voltage Stability Analysis of DC-Friendly Transmission Systems

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// Paper Publication //

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