

Short-term voltage stabilization uninterruptible power supply





Overview

What is power system voltage stability?

Power system voltage stability is mainly divided into steady-state voltage stability, STVS, and mid-term and long-term voltage stability. STVS refers to the ability of power systems to quickly restore their bus voltage to an acceptable level after a large disturbance .

What is short-term voltage stability (STVS)?

The power system is a large-scale and complicated dynamic system within the industrial internet landscape, and short-term voltage stability (STVS) plays a critical role in its safe and reliable operation .

Can voltage stability indicator be used for short-term voltage stability studies?

In this paper, a Voltage Solvability Indicator (VSI) has been proposed for short-term voltage stability studies. The main conclusions are as follows: (1) VSI can be used to characterize the singular surface of power system DAE model, and to accurately describe the Voltage Instability Regions (VIR s).

Can photovoltaic systems improve short-term voltage stability?

IEEE Transactions on Power Systems, 2015, 30(6): 3416-3424. Kawabe K, Ota Y, Yokoyama A, et al. Novel dynamic voltage support capability of photovoltaic systems for improvement of short-term voltage stability in power systems[J]. IEEE Transactions on Power Systems, 2016, 32(3): 1796-1804.



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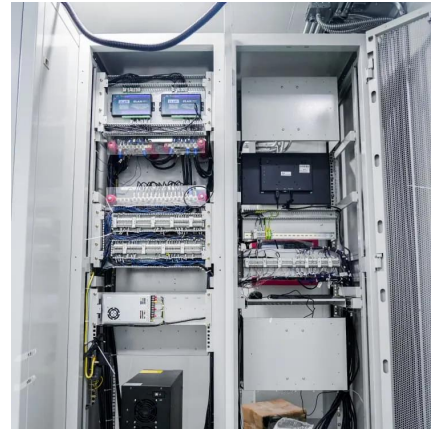
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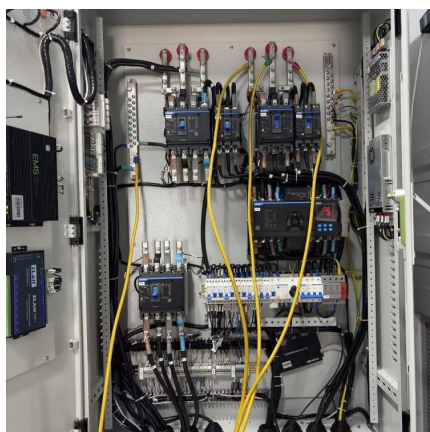


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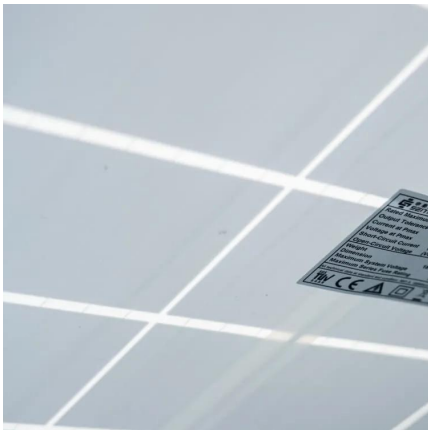
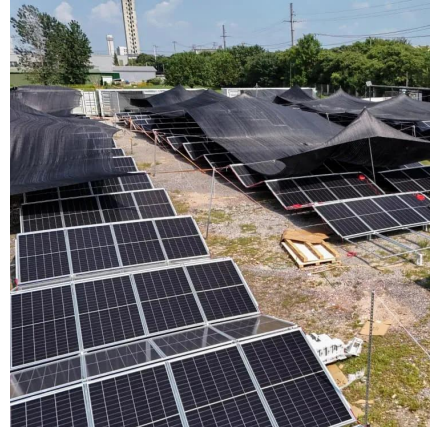
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