

# A2

## **Performance of Relaying During Wide-Area Stressed Conditions** IEEE PSRC Working Group C12

Speaker  
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### Abstract

Recent wide-area electrical disturbances have clearly demonstrated the vulnerability of the interconnected power system when operated outside its intended design limits. Recent disturbances have shown that protective relay systems are very often involved in major wide area perturbations, sometimes preventing further propagation and sometimes contributing to the spread of the disturbance.

The presentation is based on an IEEE Power Systems Relaying Committee working group report that describes the performance of protective relays during wide area stressed power systems conditions. The key issues presented will be the behavior of protection functions during dynamic operating conditions, lessons learned from studying recent wide area perturbations, analysis of operational history of protection performance during stressed system conditions and finally, methods available for implementing protective relay functions to prevent further propagation of system-wide disturbances.