

عنوان مقاله:

A Hybrid Islanding Detection Technique Using Rate of Voltage and Frequency Change and Reactive Power Compensation

محل انتشار:

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خلاصه مقاله:

The penetration of distributed generation units into power systems, due to their advantages, is rapidly increasing, which in addition to their advantages, they also have some defects. One of their major defects concerns Islanding that, because of its dangerous, it should be immediately detected, and the distributed generation unit should be etached from the main grid. In this paper, a new hybrid method, in order to do detection in a quick and precise manner, has been presented, and that, by Rate of Voltage and Frequency Change (passive method) and the active method based on the reactive power compensation as backup, islanding is detected. This proposed method, in comparison with other presented methods, has minimal negative impact on system performance, and is able to easily detect Islanding from Non-Islanding phenomena. The results obtained from the conducted simulations on the software .MATLAB/SIMULINK shows the efficiency of this proposed method

کلمات کلیدی:

Islanding detection, reactive power compensation, DG , ROCOV, ROCOF

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