Supervisory Control of Dynamic Voltage Restores

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Abstract

The impact of system issues on the performance and power rating of dynamics voltage restorers is examined. Algorithms to restore a network voltage sag or swell to given set points have been the subject of significant research in the past. The supervisory control scheme is examined to determine these set points. The control scheme's effect on device power rating (cost) and its interaction with active loads are investigated using analytical methods, simulation and experimental tests. The influence of the choice of the supervisory control algorithm on the selection of protection scheme and the interaction between the protection scheme and the device power rating are also examined.