

## Review on Application of DVR in Compensation of Voltage Harmonics in Power Systems

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**Abstract :** Energy distribution networks are the main link between the energy industry and consumers and are subject to the most scrutiny and testing of any category. As a result, it is important to monitor energy levels during the distribution phase. Power distribution networks, on the other hand, remain subject to common problems, including voltage breakdown, power outages, harmonics, and capacitor switching, all of which disrupt sinusoidal waveforms and reduce the quality and power of the network. Using power appliances in the form of custom power appliances is one way to deal with energy quality issues. Dynamic Voltage Restorer (DVR), integrated with network and distribution networks, is one of these devices. At the same time, by injecting voltage into the system, it can adjust the voltage amplitude and phase in the network. In the form of injections and three-phase syncing, it is used to compensate for the difficulty of energy quality. This article examines the recent use of DVR for power compensation and provides data on the control of each DVR in distribution networks.

**Keywords :** dynamic voltage restorer (DVR), power quality, distribution networks, control systems(PWM)

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