ABSTRACT

Voltage sags are an important power quality problem. Sags in most case are considered less critical compared to interruption, but they typically occur more frequently. Voltage sags are often accompanied by a phase jump that in some cases more likely to trip critical loads. To mitigate voltage sag accompanied by phase jump a Dynamic Voltage Restorer (DVR) is used.

DVR is known as an effective device to mitigate voltage sags. When sag occurred, DVR injects the system with the compensation voltage compare with missing voltage because sag. If the compensation successfull, sag can be mitigated and voltage waveform is back to the satisfied form.

This final project describes control strategies of dynamic voltage restorer for the compensation of voltage sags with phase jump to achieve good voltage quality.

Keywords: Voltage sags, Phase jump, Dynamic Voltage Restorer