

Review on the Icing Flashover Characteristics and Measures to Preventing Iced Insulators from Flashover Voltage

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Insulators are widely used in power systems to provide electrical insulation and mechanical support for transmission lines and substations. The insulation performance of insulators will decrease greatly when under the combined severe conditions of ice-covering, snow-covering, pollution and high altitudes. The long time severe freezing rain and suitable ice-covering weather conditions at the beginning of 2008 caused the large area insulator flashovers, trip out and break of equipment of transmission lines and substations in China, and a large amount of economic losses. The typical insulator icing flashover accidents occurred in recent years in China are introduced, then the research status of insulator icing flashovers and the measures to improve the icing flashover voltage are reviewed, and some relevant icing flashovers and external insulation coordination problems that need to be solved are proposed in this paper, and this can be a reference for the transmission and transformation equipment icing flashovers and external insulation coordination research in the heavy pollution and icing regions of China.