

A REVIEW STUDY ON HVDC CIRCUIT BREAKERS

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ABSTRACT

The need for electric control and financial access to distant sustainable power source sources, such as seaward wind control or sunlight-based warm age in deserts, has reignited interest in multi-terminal high voltage direct current (HVDC) frameworks (systems). There was a lot of study done around there, especially in the 1980s, but just two three-terminal frameworks were discovered. Since then, HVDC technology has advanced significantly, and despite a number of technical challenges, the acceptance of large-scale HVDC systems is now widely discussed and debated. The accessibility of HVDC circuit breakers (CBs) will be critical for the recognition and dependability of these systems, making them one of the main enabling advancements. Various ideas for HVDC breaker designs have been disseminated and licensed, but no acceptable solution to intrude on HVDC cutoff has been discovered. This article aims to condense the literature on innovation areas relevant to HVDC breakers, especially in the last two decades. Existing discrepancies are shown by comparing the mainly 20+ year old, cutting edge HVDC CBs with the new HVDC innovation.

KEYWORDS: *Circuit Breaker, Distribution, Electric Power, HVDC, Technology.*

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