## World Academy of Science, Engineering and Technology International Journal of Mathematical and Computational Sciences Vol:14, No:12, 2020

## The Response of LCC to DC System Faults and HVDC Re-Establishment

Authors: Mesbah Tarek, Kelaiaia Samia, Chiheb Sofien, Kelaiaia Mounia Samira, Labar Hocine

**Abstract**: As every power systems short circuit failure can occur for HVDC at the DC link. So, the power devices should be protected against over heath produced by this over-current. This can be achieved through the power switchers or fast breaker. After short circuit the system is unable to restart, only after a time delay, because of the potential distribution along the DC link line. An appropriate fast and safety control is proposed and tested successfully. The detailed development and discussion of these faults is presented in this paper.

Keywords: HVDC, DC link, switchers, short circuit, faults

Conference Title: ICSRD 2020: International Conference on Scientific Research and Development

**Conference Location :** Chicago, United States **Conference Dates :** December 12-13, 2020