

<b>Thesis Title</b>	12-Pulse Converters For The Application in HVDC Transmission System
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## **ABSTRACT**

This thesis is concerned with the power transfer system simulator between two AC sources with remote location via high voltage direct current (HVDC). The system consists of two 12-pulse converters using thyristors as switching devices, and power circuit approach is monopolar. Bi-directional power flow can be controlled through a Personal Computer. A converter acting as a sender is controlled in a rectifying mode in order to transfer power from an AC system to high voltage DC system. An another converter is controlled in an inverting mode based on line commutation in order to convert DC power to AC power for supplying loads and another AC source. The tests have been performed under various conditions of voltage and frequency between the sending and receiving system. Furthermore, discussion of variation of active power controls and reactive power is given. This will be useful for effective power system design .