

THE USE OF SYNCHRONOUS CLOSING BREAKER METHOD TO REDUCE CAPACITOR BANK SWITCHING TRANSIENT EFFECT IN PT. ASAHIMAS FLAT GLASS TBK.

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ABSTRACT

The using of capacitor bank to improve power factor in power quality, has few problem to attention. During energization in capacitor bank switching, will generate surge transient related with voltage and current transient. This final project considering about simulation and analyze transient overvoltage due to capacitor bank switching that happened at PT. Asahimas Flat Glass Tbk. Unit A1 & A2 using MATLAB Simulink 7.8.

The transient state impact while switching capacitor occur can damage to instrument and overall system. The using synchronous closing breaker as one solution overcome this problem. By using synchronous Closing Breaker can reduce transient overvoltage. From the result of the simulation shows transient overvoltage on load bus generated 2.83 pu and synchronous closing breaker method can reduce voltage until 1.52pu and also can reduce transient current and transient oscillation generated.

Keyword : capacitor bank switching, synchronous closing breaker, transien overvoltage

