

Control Characteristics of Static Synchronous Series Compensator.

Liamov A. S., Smolovik S. V., Tupitsina A. L.

The aim of this work is to study the influence of static synchronous series compensator (SSSC) for the operation of a single transmission for subsequent use of the developed models in real electrical networks. Over the past decade, the new FACTS series devices have emerged, which are more economical and convenient to use than the FACTS series devices of the first generations, such as series capacitive compensation, including that with thyristor control. In most regions, the construction of new overhead transmission lines is becoming increasingly complex, which increases the possibility of using series FACTS devices both to increase the lines transfer capability and improve the quality of power flow control in complex operational conditions.

Keywords: static synchronous series compensator, electric power system, transmission line.