

THE IERE CENTRAL AMERICA FORUM "TRANSNATIONAL ELECTRICAL INTERCONNECTIONS AND SUSTAINABILITY IN CENTRAL AMERICA"



DEVELOPMENT OF FACTS FOR TRANSMISSION SYSTEMS

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Abstract

The performance of power systems decreases with the size, the loading and the complexity of the networks. This is related to problems with load flow, power oscillations and voltage quality. Such problems are even deepened by the changing situations resulting from deregulation of the electrical power markets, where contractual power flows do no more follow the initial design criteria of the existing network configuration.

Additional problems can arise in case of large system interconnections, especially when the connecting AC links are weak. FACTS devices, however, provide the necessary features to avoid technical problems in the power systems and they increase the transmission efficiency.

Keywords:

Development of Power Systems - FACTS Technology - System Stability - Transmission Efficiency