



GCC Electrical
Testing Laboratory

المفتبر الفليبي لفمص المعداد الكهريالية

FACTS Technology and Application

"The FACTS technology is a collection of controllers, which can be applied individually or in coordination with others to control one or more of the interrelated system parameters, such as series impedance, shunt impedance, current, voltage and damping of oscillations. The course addressing the conceptual design of the FACTS system".



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Education
Course Code: E07



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FACTS Technology and Application



MARCH
25 - 29
2018



GCC Electrical Testing Laboratory

المفتبر الفليبي لفمص المعدات الكهربائية

Objectives

The course provides an outline of FACTS technology, with the reason for its application. It deals with the main technical issues associated to this technology and it is addressed mainly to the conceptual design of such systems.

Addressed to:

The Course program contains the following

Duration:

4 Full Days

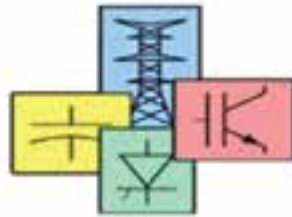
Location/Venue:

GCCIA HQ, Dammam

Course Fees:



Flexible AC Transmission System (FACTS) Devices



PROGRAM

FACTS Technology and Application

The Course program contains the following training outline:

DAY 1

DAY 1: AC Systems and Selection Strategies for FACTS Devices

- Basic FACTS definition
- Power Systems
- Transmission Systems
- Economic Considerations
- AC OHTL's: Series Compensation and high Surge Impedance Loading (SIL)
- DC Transmission
- Fix and controlled reactive power compensation
- Typical Reactive Power Compensation (RPC) application field
- Practical Examples

DAY 2

DAY 2: FACTS Classification: Schemes and Technology

- Generalities
- Static Var Compensator (SVC)
- Thyristor Controlled Series Compensator (TCSC)
- Static Synchronous Compensator (STATCOM)
- Static Synchronous Series Compensator (SSSC)
- Unified Power Flow Controller (UPFC)
- Phase Shifting Transformer (PST, TCPST)

DAY 3

DAY 3: FACTS Specifications

- Main characteristic and performance requirements
- Guidelines examples for a Specification
- Standards and other reference documents

DAY 4

DAY 4: FACTS Modeling and Studying

- Modeling principle
- Load flow and Dynamic Study
- Practical Examples