

## **SNS COLLEGE OF ENGINEERING**

Kurumbapalayam (Po), Coimbatore – 641 107

#### An Autonomous Institution

Accredited by NAAC – UGC with 'A' Grade Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

## **DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

#### COURSE NAME : 19EE501 TRANSMISSION & DISTRIBUTION

III YEAR /V SEMESTER EEE

Unit 1 – Structure of Power System

### **FACTS DEVICES**



10f







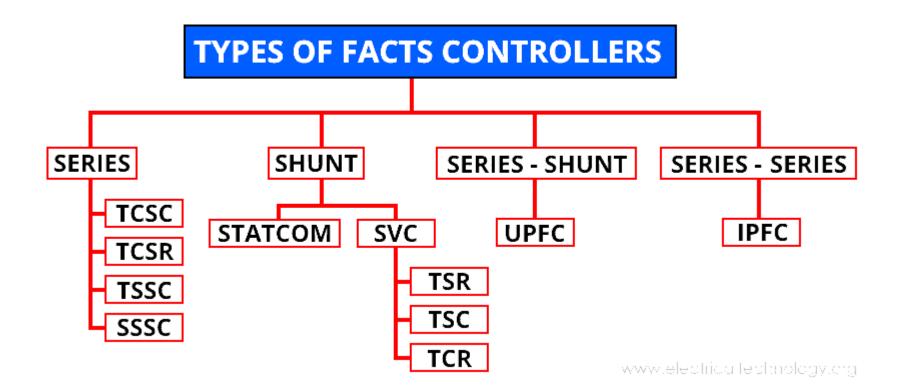


FACTS stands for Flexible Alternating Current Transmission System or simply Flexible AC Transmission System. It is a power electronic based system where static devices are used to enhance and increase the the power transfer capability and controllability.





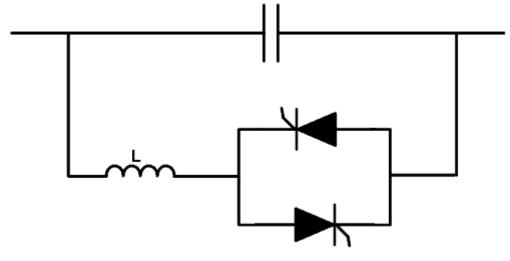
# **Types of FACTS Controllers**







## **Thyristor Controlled Series Capacitor (TCSC)**





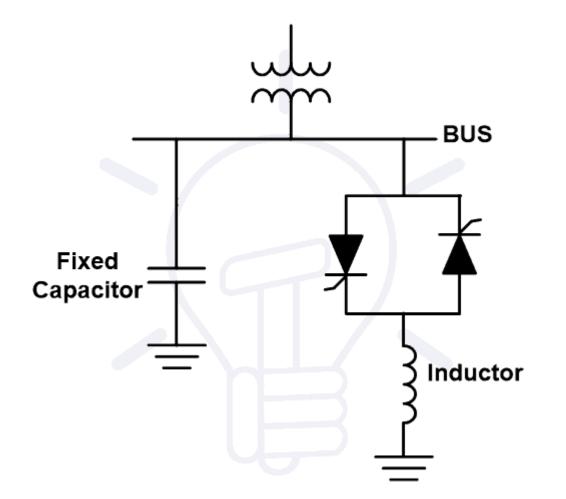
4/10



7/31/2024

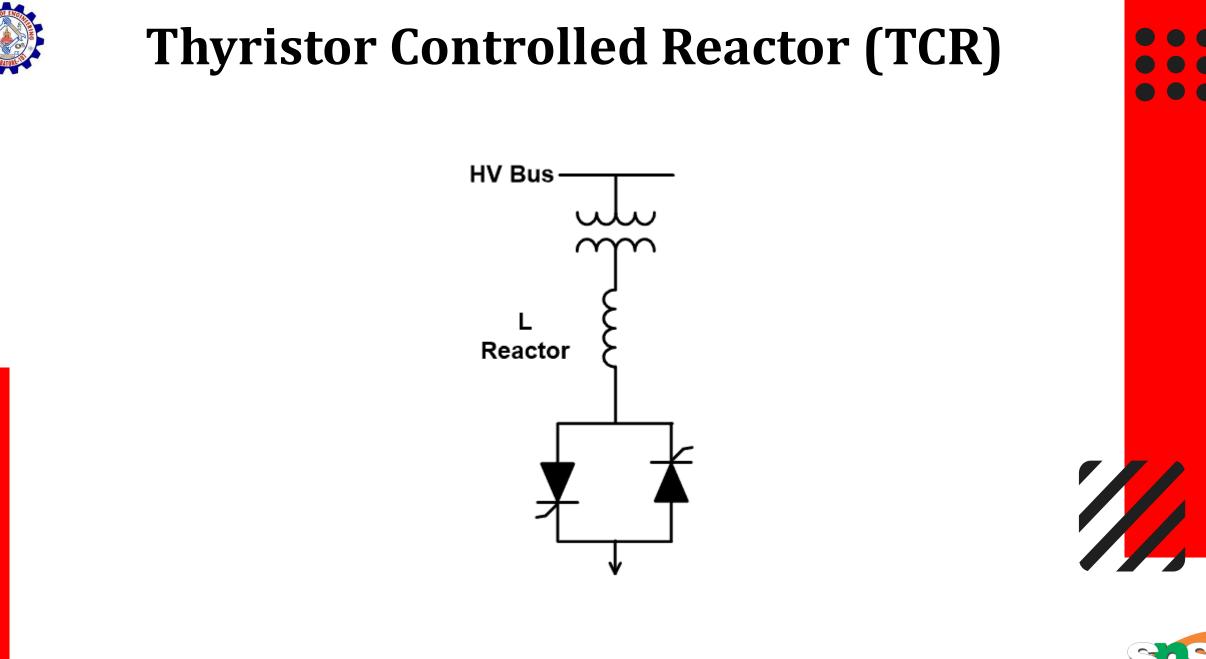


# Static VAR Compensation (SVC)

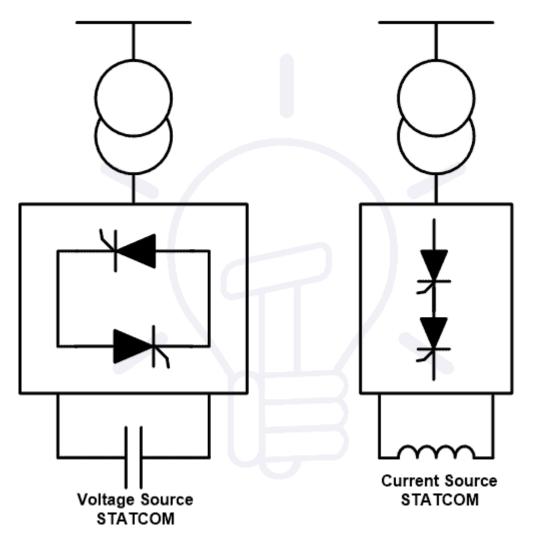




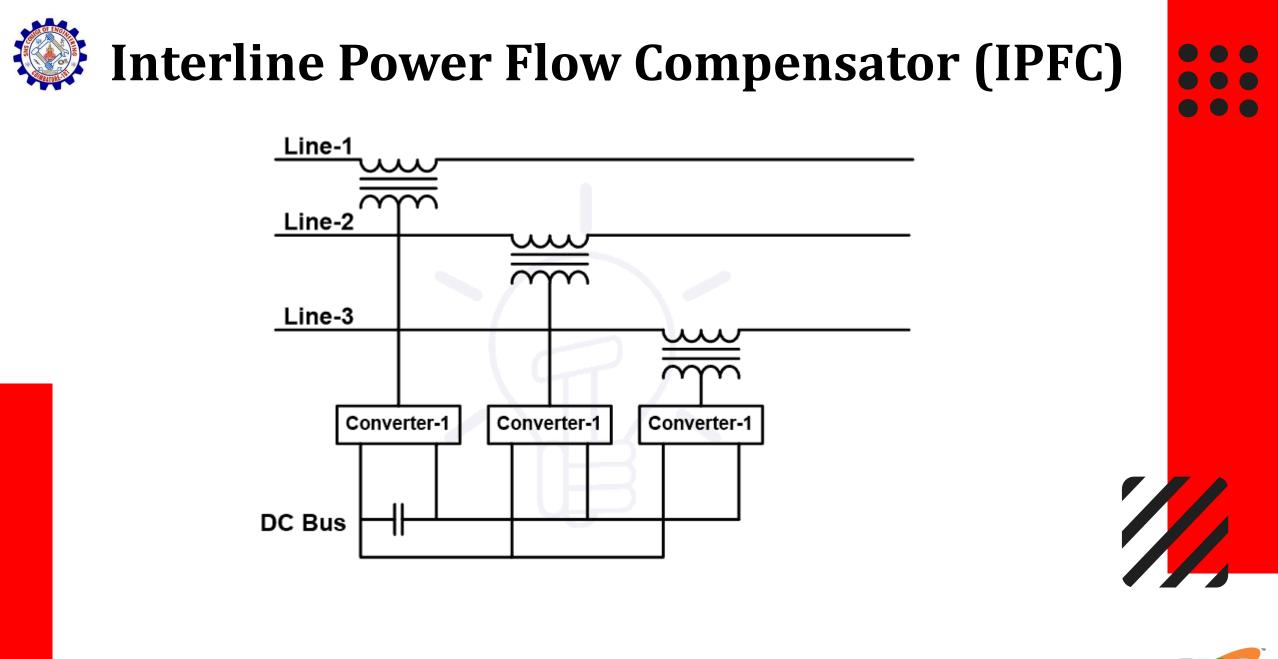




# Static Synchronous Compensator (STATCOM)

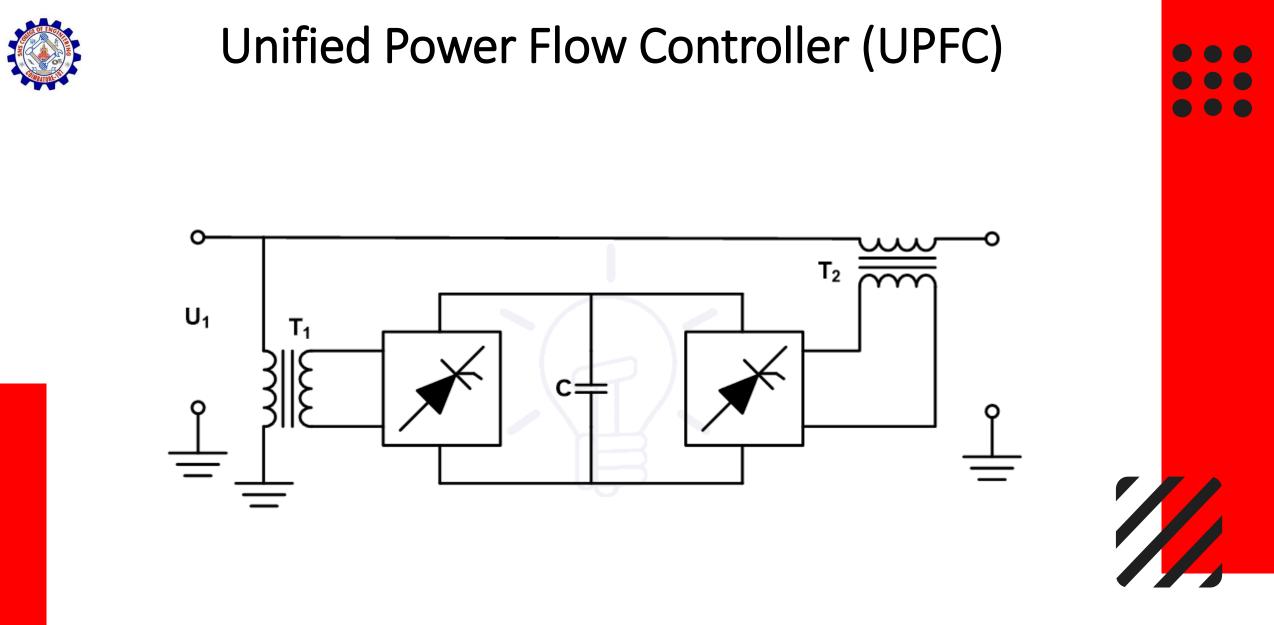








7/31/2024







## REFERENCES



- Wadhwa, C.L., "Electrical Power Systems", New Age International Publishers Ltd., New Delhi, 7<sup>th</sup> Edition, 2017.
- Kothari D. P., Nagrath I. J., "Modern Power System Analysis", McGraw Hill India Limited, New Delhi, 4<sup>th</sup> Edition 2011.
- Mehta, V.K., Rohit Mehta, "Principles of Power Systems", S.Chand& Company Private Limited, New Delhi, 4<sup>th</sup>Revised Edition, 2011.
- Singh S.N, "Electric Power Generation, Transmission and Distribution", PHI Learning Private Limited, New Delhi, 2<sup>nd</sup>Edition, 2009.
- Uppal, S.L., Rao, S., "Electrical Power", Khanna Publishers Limited, New Delbi, 15<sup>th</sup>Edition, 2014.



## **THANK YOU**

