
Planning and Implementing FACTS Controllers for Improving Power System Dynamic Performance

HVDC and FACTS Subcommittee Meeting
IEEE PES General Meeting

July 23, 2008

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Recent Power Electronics/FACTS Applications to Improve Power System Dynamic Performance

Recent Power Electronics / FACTS Installations from 2005/06 (T&D) Panel Session

◆ Dynamic Reactive Compensation

1. Potrero Substation, Newark Substation 230 kV SVCs, PG&E/ABB (California)
2. Ninemile Substation, Porter Substation, 230 kV SVCs, Entergy/Siemens (Louisiana)
3. Laurens County/Dublin Substation, 115 kV SVC, Georgia Power/Mitsubishi Electric (Georgia)
4. Holly Substation, STATCOM, Austin Energy/ABB (Texas)
5. Mexico City Dynamic Var Compensator, Mexico City Metropolitan Area (Planning Study)
6. Wind Farm Interconnection DVAR Applications (American Superconductor) (Applications Paper)

◆ HVDC / BtB

1. Langlois VFT Hydro Quebec/GE (Quebec)

Recent Power Electronics / FACTS Installations from 2006 (PSCE) Panel Session

◆ Dynamic Reactive Compensation

1. Potrero Substation, Newark Substation 230 kV SVCs, PG&E/ABB (California) [Operational Experience]
2. Devers Substation, 525 kV SVC, Southern California Edison/Siemens (California)
3. St. George Substation, 138 kV SVC, PacifiCorp/Mitsubishi Electric (Utah)
4. Hryggstekkur Substation, 132 kV DVAR, Landset Iceland/American Superconductor (Iceland)
5. McCamey area, Wind Generation Hub DRCS (SVCs), AEP/S&C Electric (Texas)

◆ HVDC / BtB

1. Rapid City HVDC BtB, Basin Electric Coop/ABB (South Dakota)

Recent Power Electronics / FACTS Installations from 2008 (T&D) Panel Session

◆ Dynamic Reactive Compensation

1. “How the Lake Bonney Wind Farm Met ESCOSA’s, NEMMCO’s, and ElectraNet’s Rigorous Interconnecting Requirements” - American Superconductor
2. “De-icer Installation at Lévis substation on Hydro Québec’s High Voltage System” - Hydro Quebec/Areva (Quebec)
3. “Dynamic Voltage Support with the Rector SVC in California’s San Joaquin Valley” - Southern California Edison/Mitsubishi Electric, California
4. “Application of SVCs by CenterPoint Energy to Address Voltage Stability Issues: Planning and Design Considerations” - CenterPoint/Siemens (Texas)

Recent Power Electronics / FACTS Installations from 2008 (T&D) Panel Session

◆ Dynamic Reactive Compensation

5. “A Feasibility Study for an HVDC Submarine Cable to Interconnect the Baja California Sur Grid to the Mexican Electrical System” - Feasibility Study (Mexico)
6. “Application of Inverter-Based Systems for Peak Shaving and Reactive Power Management” - Public Service of New Mexico and AEP/S&C Electric (New Mexico and Ohio)
7. “Dynamic Control Modes of Unified Power Flow Controllers for Transmission Reinforcement” - NYPA/Siemens (New York)

◆ HVDC / BtB

1. Improving Power System Dynamic Performance in Laredo, TX” - AEP/GE (Texas)
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**Past Panel Sessions on FACTS and
Power Electronic Application
1999-2008
-See PDF File**

**Call for Panel Session Paper
Abstracts for Review for PSCE 2009
Show, March 15-18, 2009
- See Handout -**

Questions and Comments:

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