High Voltage DC Systems

Production Description
High Voltage DC (HVDC) Systems are used to simulate High Voltage Direct Current Transmission Systems or other DC Links. The integrated model can be used in different applications, such as load flow analysis, harmonic analysis and transient stability. Multiple control schemes and different types of dynamic modes are available. All the equipment in conversion inversion stations are considered in the model.

Key Features
- Detailed Converter Modeling
- Composite AC/DC Inverter/AC Systems
- Combined Transformer Model
- Automatic harmonic spectrum calculation
- Built in Control Schemes
- Easy-To-Use Dynamic Modes

Capabilities
- Load flow analysis model with all possible control schemes
- Harmonic current injection modeling
- Transient stability modeling
- Shut-off and restart modeling

Features
- Friendly graphical user interface
- Integrated data sheet
- Application oriented properties
- Standard interface design

Standards
- IEEE Std 1378-1997
- IEEE guide for commissioning High-Voltage Direct-Current (HVDC) converter stations and associated transmission systems

Benefits
- Accurate static-steady & dynamic modeling
- Combined AC & DC systems in a study
- Convenient implement of modeling in different applications

DC Link, Modeling, & Simulation

Unlimited Buses* & Elements
No Voltage Limitations
Looped & Radial Systems
Integrated 1-Phase, 3-Phase, & DC Systems
Multiple Generators & Grid Connections
Multiple Isolated Sub-Systems
Customizable Libraries
Graphical Display of Results on One-Line Diagrams
Customizable Font Types, Sizes, Styles, & Colors
Customizable Display of Ratings & Results
Graphical Display of Equipment Impedance & Grounding
Automatic Error Checking
Graphical Display of Overstressed Devices
Graphical Display of Over/Under Voltage Buses
Dynamically Adjust Display of Results

*Maximum number of energized buses during calculations is license dependent.

Operation Technology, Inc. • www.etap.com • 17 Goodyear • Irvine, CA 92618 • 949.462.0100 • Fax 949.462.0200