PSS™E
Power System Simulator for Engineering
Since its introduction in 1976, the PSS™E tool has become the most comprehensive, technically advanced, and widely used commercial program of its type. It is widely recognized as the most fully featured, time-tested and best performing commercial transmission planning program available, providing users with power flow, short circuit, dynamic simulation (including long term), and optimal power flow. This is the defacto standard power system analysis tool used in over 120 countries and by 10,000+ users.

PSS™MUST
Power System Simulator for Managing and Utilizing System Transmission
The capability to move power from one part of the transmission grid to another is a key commercial and technical concern in the restructured electric utility environment. Engineers determine transmission transfer capability by simulating network conditions with equipment outages during changing network conditions. Simulation tools calculate the first contingency incremental transfer capability (FCITC). FCITC is adjusted for uncertainties and posted as the ATC and TTC. The purpose of the PSS™MUST software is to efficiently calculate:

- Transaction impacts on transmission areas, interfaces, monitored elements or flowgates.
- Generation redispatch factors for relieving overloads.
- Incremental transmission capability (FCITC). FCITC variations with respect to network changes, transactions, and generation dispatch.

PSS™MUST complements PSS™E data handling and analysis functions with the most advanced linear power flow and user interface available. PSS™MUST speed, ease-of-use, and versatile EXCEL interface simplifies and reduces data setup time, and improves results display and understanding.

PSS™TPLAN
PSS™ TPLAN is an integrated, stand-alone computer software package for transmission reliability assessment. It is comprised of a variety of state-of-the-art analytical formulations – mathematically optimized solutions and simulations of system response – presented in an intuitive interface. The interface lets you build up your analysis – from a basic focus on deterministic reliability, onto probabilistic risk assessment and further on to cost-effectiveness.
**PSS™SINCAL**  
**Power System Simulation for Utility and Industry**  
PSS™SINCAL represents forty years of Siemens experience in electrical networks as well as gas, water and district heating. PSS™SINCAL matches the needs of engineering consulting firms, power stations, industrial plants, and municipal power companies, regional and national utilities.

The analytical capabilities range from basic modules like power flow and short circuit to harmonics, probabilistic reliability, protection and dynamic simulation; covering load forecast and cost calculation. Pipe network modules feature steady state and dynamic analyses.

PSS™SINCAL provides high-performance tools for planning and design of supply networks and offers synergies from uniform user interface, handling and cross-sector processing. For this reason, it is eminently suitable for energy suppliers who cover a number of fields, such as municipal utilities.

PSS™SINCAL comes with:
- Open data base application
- Convenient and uniform GUI
- User macros and management of case scenarios
- Topological, schematic or both graphics displays
- Client-server/internet capability
- SCADA and GIS interfaces including CIM standard

**PSS™ODMS**  
**Power System Simulator for Operations and (CIM) Database Maintenance System**  
PSS™ODMS provides an easy-to-use interface that allows system modelers to exchange bus-breaker models quickly and easily between diverse EMS systems. PSS™ODMS converts operations information into the EPRI Common Information Model (CIM) in an open ODBC environment. The optional Viewer/Editor provides graphical editing of the CIM compliant database. The Viewer/Editor has the capability to dynamically generate fully interactive substation-level and “World View” one-line diagrams from the network topology data alone, providing an instantaneous graphical view of any part of the network. It is also available via EMS suppliers who have OEM agreements with Siemens PTI, such as Advanced Control Systems (ACS) of Atlanta.
MOD®
Model On Demand
MOD® extends the capabilities of Siemens PTI’s Power System Simulator for Operations and (CIM) Database Maintenance System (PSS™ODMS) product line. The user can manage a great number of change cases for PSS™E. MOD® assembles sets of model changes into “queues.” Queues can then be managed and organized in various fashions depending on the needs of the PSS™E user.
Queues are coupled with MOD® seasonal and annual profiles to provide the PSS™E user with a procedure for organizing and reorganizing system investigations. All this without the need for generating a great number of PSS™E base cases, or repeatedly rerunning PSS™E cases when planning sequences change. MOD® eliminates the traditional time-consuming generation interconnection study process where one case depends on solving one or more prior case(s) in sequence. Previous sequential dependency, where the planner is required to rerun a number of cases to establish a new case sequence, is a thing of the past. With MOD®, the planner is freed to study the ever-changing world!

PSS™LMP
Power System Simulator for Location Marginal Pricing
PSS™LMP is a tool to help you understand electricity markets and predict their behavior. PSS™LMP performs a chronological simulation of power markets based on locational marginal pricing (LMP). Given economic and network information, it simulates the operation of a market while respecting critical security constraints, thanks to the power of the built-in security constrained unit commitment (SCUC). Power prices (LMPs) and unit commitment and dispatch levels are among the many outputs. PSS™LMP can be used for strategic planning, price forecasting, asset valuation (physical and financial), and market validation. The graphical user interface (GUI) allows the user to edit data and view results. Model changing is easy because the economic data is kept in a common database format while network data is in the industry-standard PSS™E format. To ease the pain of model development, customizable prebuilt models are available for select regions. For convenience and flexibility, results are stored to a database as well. When technical accuracy and ease of use are important, PSS™LMP is the market simulator to choose.

For more information or to arrange a demonstration, please contact:
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