



PSS[®]E

Service Offerings

Unleash the power of our high-performance transmission planning software

SIEMENS

PSS®E Service Offerings

The investment in a Grid Software product is a significant one, and it is imperative that a utility gains maximum return on it as quickly as possible. This can be achieved by effective adoption of the Siemens solution, which leads to empowered and trained users, along with the meeting of the business objectives that prompted the investment in the first place.

New and experienced PSS®E users are aiming to quickly become productive with the software while at the same time continuing to meet existing workflow and job demands of their department.

Our team of grid planning experts offers a variety of services for PSS®E customers, ranging from network model maintenance and data quality reviews to customized workshops and training sessions on every aspect of the program and the solutions it offers.

The Siemens Grid Software Professional Services team stands ready to support our customers in ensuring effective adoption of our products. This team of subject matter experts (SMEs) in Power Systems studies, planning, protection, metering, software development, customer support and training has multiple decades of experience in helping customers realize value from our solutions and technologies.

PSS®E Network Modeling Services

Would you like to source out the modelling of your network system?

Do you need help getting started with building the model?

Would you like your network system to be modelled in one of the common programs, such as PSS®E, by an expert?

At Siemens, we deeply understand the physics, function, and features of power system equipment. This allows us to develop detailed, accurate mathematical equipment models, study the interconnected behavior and dynamics between different types of equipment, and understand the underlying data and their tolerances that serve as an input to those models. We are software and technology agnostic, and we work with you to meet your power system modeling needs.

Grid simulation model creation - Gain accurate, validated equipment and power system models.

Siemens develops widely-used industry standard power system analysis software, such as PSS®E.

Consulting is an extensive user of these and many other regional industry software applications that our customers use to develop the digital twins of their equipment and power systems for use in a wide range of studies and analyses.

Our grid simulation model development services include

- Equipment-level to grid-level modeling
- Modeling of state-of-the-art power electronics, rotating machines, and controllers, e.g. for DER, microgrid, and renewables integration
- Modeling of industrial load, drives, and network, with their control and protection features and accounting for the industrial process characteristic
- Review and validation of models and parameters based on field measurements
- Recommendation of processes and practices for maintaining models and integrating them into enterprise data structures

Benefits

- Save time and resources for network modelling
- Receive validated and high-quality network models
- Accelerate your digitalization process
- The network replication is done by a grid expert
- If requested, you will get further support by our experts for detailed work with the simulation program (protection, power, quality, etc.)

Data Transfer Check

PSS®E Tool change - Load Flow & Dynamic Model

Migrating your simulation software to a Siemens Grid Software product (e.g. PSS®E) can be time consuming and the necessary resources cannot be estimated exactly in advance.

Our grid-planning experts have extensive experience in converting network models. Network model conversions often follow the 80/20 rule. 80 per cent of the conversion is done automatically and correctly, 20 per cent requires manual attention. The data transfer check by our experts quantifies the quality of the automatically transferred network model based on the evaluation of load flow comparisons and error messages. The result of the data transfer check can provide decision support for the software change, or it can be used for workforce planning.

Dynamic data in particular is largely created and maintained in proprietary data formats of the respective simulation software. The data transfer check for dynamic data provides feedback on what percentage of the dynamic data can be transferred directly from the new software. Here, the standard models are checked using a comparison of step responses and a suggestion is made for converting user-defined models. The result of the data transfer check can provide decision support for a fundamental software change, or it can be used for workforce planning.

Benefits

- Identify data problems and receive suggestions for improvement
- Save time and resources
- Receive a qualified assessment of the data transfer process

PSS®E Model Check and Cleanup

Your load flow model can show problems in convergence, rendering the calculated results result incomprehensible and different from reality. Data quality can suffer from this along with the execution of a smooth data update process.

Siemens grid-planning experts can help mitigate this problem by becoming familiar with your network system and performing a plausibility check. The plausibility check usually uncovers input errors and reveals structural errors. Our experts validate the results and develop suggestions for improvement. These will be sent to you with a graphical list of the errors found.

Benefits

- Save time when troubleshooting
- Discuss errors in network modelling with the Siemens expert
- Receive correction suggestions for random and systematic errors in the network model
- Gain transparency on level of data quality
- Data quality check according to standards, manufacturing limits, experience and individual rule set

PSS®E Staff Augmentation

Are you struggling to get the full value out of PSS®E? Do you lack the resources to unleash the full potential of the software? PSS®E Subject Matter Experts (SMEs) can augment your modeling or planning and analysis staff, and advise them on modeling best practices, help to debug your model, support with workflow automation and scripting, short notice training, etc.

Benefits

- PSS®E SMEs works as part of your team
- Obtain modeling, application, grid planning and program automation advice and support, resolve product issues immediately – customer support on steroids (hyper-care)
- Utilize our SMEs in your day-to-day activities
- Utilize our expertise to achieve your goals fast and efficiently



PSS®E Team: Expertise, stability, and responsiveness ... when you need us

We are dedicated to serving the utility industry and the grid model building and maintenance team. Whether it is through one of the capabilities listed in this brochure, or something else that we can support, when you are a PSS®E user, we become an active partner in your success.

Our implementation and services team gets your team started quickly and confidently. We are known for our ongoing technical support: Expert, thoughtful, and very responsive.

How can we help you?

Contact us any time. Our dedicated staff is happy to answer your questions about putting PSS®E to work to improve the effectiveness of your **planning and analysis function**



Published by
Siemens AG
Smart Infrastructure
Grid Software
Humboldtstrasse 59
90459 Nuremberg
Germany

For the U.S. published by
Siemens Industry, Inc.
100 Technology Drive
Alpharetta, GA 30005
United States
For more information, please contact
E-mail: pti-pss-info.si@siemens.com

Article No.
SIGSW-B10107-00-4A00
PSS®E Service Offerings
© Siemens 2025

Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract. The technical data presented in this document is based on an actual case or on as-designed parameters, and therefore should not be relied upon for any specific application and does not constitute a performance guarantee for any projects. Actual results are dependent on variable conditions. Accordingly, Siemens does not make representations, warranties, or assurances as to the accuracy, currency or completeness of the content contained herein. If requested, we will provide specific technical data or specifications with respect to any customer's particular applications. Our company is constantly involved in engineering and development. For that reason, we reserve the right to modify, at any time, the technology and product specifications contained herein.