GRID PLANNING SUPPORT AND A DIRECT CONTACT PERSON FOR ALL QUESTIONS REGARDING YOUR POWER GRID

Grid expert support services

At a glance

Siemens PTI offers a power grid consultancy agreement that provides system operators in the public and industrial spheres with fast access to a range of network planning services. A Siemens power grid expert functions as the central contact person, knows the respective network well, and consults the operator in all questions regarding system operation and strategy. Our services at a glance:

- Building and maintenance of a network database in the grid calculation tool, including plausibility testing
- Regular discussions and coordination of upcoming tasks
- Network planning services available quickly at the agreed-upon terms and conditions, or as part of a predefined allotment of hours
- An individual contact person for your system

The challenge

Often, fast and expert support is required to quickly handle technical problems in public and industrial power grids, for example during start-up or troubleshooting of the plant. If a company does not have an expert available, the task is then assigned to a third-party service provider. However, appropriate and fast support is ensured only if the expert knows the network and can access current grid data.

Our solution

Whether public power supply or industrial applications, wherever reliable consultation with powerful grid calculation software and comprehensive expertise is needed, Siemens PTI offers a fast, cost-optimized solution for system operators in form of a power grid consultancy package.

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A power grid consultancy package includes the one-time creation and ongoing maintenance of network data in a calculation tool, the provision of always up-to-date network models via the internet, centralized processing of requests on short notice, from network calculation to troubleshooting, as well as a dedicated power grid consultant as your personal contact. For our customers this means: You can access Siemens engineering expertise for all questions regarding your system, without the need to provide specially trained expert personnel of your own.

Single source network model administration

All data required for system planning services is maintained centrally in a calculation tool. This includes initial input of the power grid and continuous updating of the data. As a result, both partners can access an up-to-date, consistent, and tested database at any time. On this basis, last-minute requests and small projects can be processed quickly, with fast delivery of results. The single line diagrams and calculation results are exchanged on an ongoing basis.

Power grid consultant – your personal Siemens power expert

The power grid consultant is the first point of contact for all questions regarding the supported power grid. As the coordinator of network data entry and maintenance, the consultant has the specific required know-how regarding your system and is therefore able to offer fast support when there are technical questions. If necessary, the power grid consultant can refer to colleagues with specialized knowledge from various areas – an optimal prerequisite for a fast response, even to the most complex questions. Solutions and the procedure going forward are discussed jointly at regular intervals.

Contractual framework

With a power grid consultancy package, the terms and conditions for small individual projects need to be defined. Therefore, all services, rights, and obligations of both partners are maintained in a framework agreement.

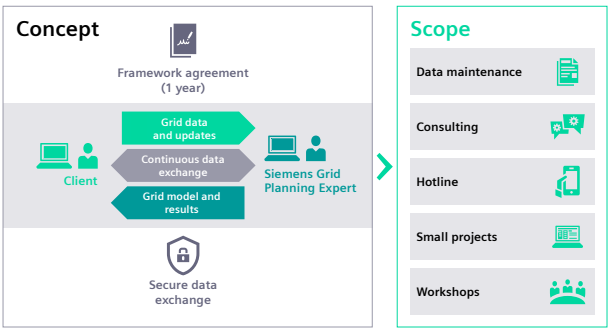

Figure 1: Overview of the concept and services of a power grid consultancy agreement

This basic agreement includes regulations regarding

- network data maintenance: Scope and cycle of grid updates,
- establishment of contacts,
- data security and confidentiality,
- warranty and liability.

As a result, the contractual conditions do not have to be established for each project individually. The basic agreement forms the foundation of the trusting cooperation of both partners, and significantly reduces the administrative effort on both sides.

Our consulting services

In Siemens PTI you have a partner that brings together a large team of experts from various fields, as well as business consultants and software developers. This means we cover a broad spectrum of services as needed, even for questions that go beyond the ordinary. Our services include the following network calculations:

- Load flow calculations
- Short circuit calculations
- Stability analyses
- Harmonic analyses
- Protection simulation
- Protection setting value calculation
- Reliability analysis

Depending on the task, the results are delivered as measurement results, a single line diagram, report, summary report, or similar.

Application examples

Often, public system operators deal with the question of how to include new decentralized feeders and new distribution grid stations in the network. In such cases the power grid consultant can provide prompt support because he has access to the up-to-date network model and can perform the required investigations without time-consuming model entry.

In the same manner, updated protection settings can be determined immediately; the required protection simulations, and therefore the current network impedance, can be determined based on a current network model.

These smaller projects that have to be completed quickly can be processed as part of the agreed upon project hours, without any red tape.

Power grid consultancy also proves its benefit in larger structural planning: This kind of grid planning can be carried out without major ramp-up because critical information such as network topology and load development are already known. Because of his close contact with you, the power grid consultant is well versed in the specific issues, which means problems can be handled efficiently and precisely. This in turn results in lower costs for the study.

What we offer

A power grid consultancy agreement enables flexible and trusting cooperation. In addition, you benefit from

- automatic cost control through establishment of terms and conditions or an annual allotment of hours,
- time and cost savings when assigning small projects,
- fast processing, even for last minute requests,
- data entry and maintenance in a software tool you specify: no need to change to a different grid planning software,
- reliable grid data maintenance with simultaneous data quality control,
- access to the full expertise across Siemens PTI through a personal contact who coordinates and consolidates various subjects as needed,
- access to software development teams for fast implementation of your requirements,
- no need to build up expert staff,
- well-informed operational and strategic decision making.

Still have questions? We are happy to answer them. Get in touch at pti.consulting.si@siemens.com.

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