

PSIcontrol

Efficient and Secure Grid Management for Medium-sized and Large Energy Grids



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Efficient and Secure Grid Management

PSIcontrol is the control system for monitoring, controlling and simulating transmission, distribution and traction power networks for grid operators and industry.

Grid operators are obliged to ensure the transmission and distribution of electrical power to customers without interruption. Therefore the power grids belong to critical infrastructure.

Service interruptions due to external influences (e.g. weather or accidents) are undesirable yet unavoidable. Maintenance is necessary to ensure the safe operation of the grids. In any case, the impact on the customers supplied by the grid must be minimized. In addition, energy networks are increasingly exposed to digital

attacks aiming at disrupting the supply. Furthermore, legal requirements the energy transition leads to an accelerated change of rules and requirements.

This makes it all the more important for the grid operator to use a control system that keeps pace with changes and „grows“ with them.

PSIcontrol is constantly developed further by young, innovative product developers and experienced project staff in dialog with energy supply practitioners making it the first choice of grid operators.

Research is necessary - PSI spends a substantial share of its revenues on research. Such is executed by PSI individually or in cooperation with other relevant players in the energy markets in private or publicly funded research. This is how we ensure that PSIcontrol is more than just a state-of-the-art solution supporting and inspiring you and your employees, both now and in the future.

Special features of PSIcontrol | You benefit from



Operator training simulator

The training simulator is used to train control room staff. The training objective is to master both - every-day and abnormal situations. The simple preparation of training sessions supports setting up frequent exercises with new training cases. So, PSIcontrol's functions support the operators optimally so that the necessary actions can be carried out quickly and purposefully to restore service to customers in a real life fault or a blackout event.

In cooperation with a customer, PSI has developed a method for „network restoration within 5 minutes“ after a large-scale network collapse as an example of how to quickly restore service after major faults.

Network calculations

The network calculation functions exchange data with the PSIconrol SCADA system using specific interfaces. They are designed for large data models and offer investment security as they enable a high dynamic and sizing scalability. The network calculation functions can be used as part of the interlocking checks - without interrupting the operator's flow of operations.

Dynamics

Network control systems are always real-time applications providing the operator with up-to-date data. Whether network calculations, calling up networks or station displays, updating a list or restoring service after a fault - PSIconrol offers extremely fast response times in all situations and thus promotes the highest quality of supply.

Multi-tenancy capability

Several companies may share a single PSIconrol instance while we take care that your network and status data is protected from access by other clients. The location independence of the control system in particular means that simple and cost-effective high-availability and high-performance solutions can be provided.

Data Engineering

PSIconrol's user friendly data editing and management has impressed every user to date. It is highly configurable and can be flexibly adapted to specific requirements. It was designed for large volumes of data. The high degree of automation increases user productivity and contributes to user satisfaction.

Distributed system

A single control system may be installed at several locations connected by communication networks. In addition to increased security, this also supports implementing control systems that do not require a local presence 24/7. At weekends or at night, the network can be operated from one location with reduced staffing.

If the multi-tenancy capability of PSIconrol is used, this can also be provided for the users of the system with individual data models through authorization control.

Redundancy

PSIconrol offers you a sophisticated redundancy concept based on 3 extremely important pillars: Security of supply, economic efficiency, cyber security.

Whether there is a fire in one of your server rooms, hardware fails or needs to be serviced, a control center fails completely or needs to be evacuated - PSIconrol's redundancy concept lets you manage your network securely and comprehensively at all times.

**Would you like to find out more?
Get in touch with your PSI contact
and arrange a demonstration!**





PSI Software SE

Boschweg 6
63741 Aschaffenburg
Germany

Phone: +49 6021 366-0
energie-ee@psi.de
www.psi.de | www.psienergy.de

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