

1 control room – 30, 40 or more plants: Minimized operational costs across the fleet

Control System

Instrumentation, Controls & Electrical



Your Benefits

- Safe and reliable operation thanks to uniform HMI for all plants
- Significant reduction in operational costs compared to around-the-clock, on-site staffing
- Lowest possible investment thanks to the retention of existing control systems in individual plants as well as the potential to use preexisting communication infrastructure

Central control rooms with SPPA-T3000

allow for the operation of numerous power plants with one small central team – even over long distances – thanks to the SPPA-T3000's homogenization concept.

The Task

Central control rooms are the answer to current demographic and economic developments, such as a lack of experienced personnel or plants running below capacity to the extent that around-the-clock staffing is no longer viable. However, central control rooms only make sense if they are more than just multiple control desks for different plants in one single room. Operators must be able to control a whole group of different plants with heterogeneous control systems as if they were physically on-site. And the whole concept is only economically feasible if the underlying control systems do not need to be modified or replaced and the existing communication infrastructure can be used.

Our Solution

This cannot be achieved with standard Remote Access or SCADA solutions. This is why Siemens relies on its proven SPPA-T3000 power plant control system in a multi-unit configuration. To ensure that the operators in the central

control room are in complete and safe control of every plant at all times, especially during unexpected faults or disturbances, Siemens implements a homogenization concept based on its intuitive and ergonomically optimized SPPA-T3000 operator control principle:

A uniform user interface and a singular operating and alarm philosophy for all plants.

A server is installed at every plant to act as a "translator" for the purpose of homogenization.

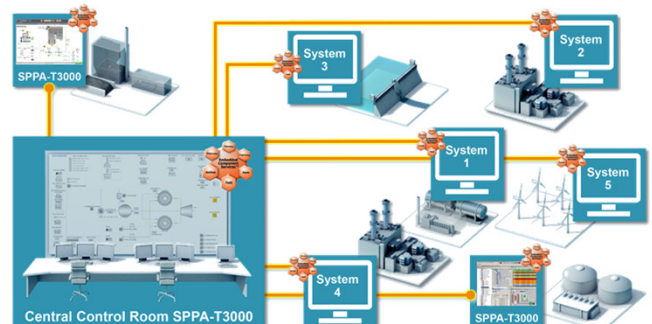
It "translates" all the data required for the day-to-day operation of the plant from the original system format into the SPPA-T3000 data structure. The SPPA-T3000's outstanding strength in connecting, integrating and coupling of different systems, standards and protocols is then used to connect to the existing underlying control systems.

Communication between the homogenized plants and the central control room can then also take place via pre-existing communications networks.

The central control room concept fits the bill. The original systems remain untouched while the central control room works exclusively according to a singular operating and alarm philosophy: keeping the entire fleet safely under control at all times.

Central control room with SPPA-T3000:

- Uniform HMI in SPPA-T3000
- Homogenization concept for the connection and integration of existing underlying control systems



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