

## Siemens supplies process bus technology to high-voltage substation in Peru

- **Process bus significantly increases level of digitalization in substations**
- **Faster installation and commissioning**
- **Improved system reliability**
- **Benchmark for future-proof design**

Siemens Smart Infrastructure has installed process bus technology at the new high-voltage substation in Los Sauces for one of the largest Peruvian distribution network operators, Luz del Sur. This process bus installation with Siprotec merging units and Siprotec protection devices is one of the first fully digitized energy automation system in operation. The new technology sets benchmarks with its future-proof design and will help optimize the entire operation of the power grid.

Luz del Sur is currently expanding its 220 kV network. Instead of conventional 1:1 cabling between the transducer and the protection device, a merging unit records the measured values from the transducer, converts them into digital format and sends them to the respective protection units via a fiber-optic Ethernet cable. The merging unit is a modular, interoperable and powerful solution between primary and secondary technology which offers multifaceted process data recording, self-sustaining automation and secure communication. In total, 13 Siprotec 6MU85 merging units are used in this latest installation in Los Sauces, which is one of the first to utilize this technology on a large scale. The process bus from Siemens makes it possible to cover the digitalization along the process level using merging units to improve the reliability of the system, optimization of the installation, reduction of hard-wired components, and security of the maintenance staff.

The process and station bus systems are physically split between two Ethernet networks. This design deliberately separates the applications, increases performances and improves cyber security.

“Siemens is driving the digitization of the power grid on all voltage levels,” said Robert Klaffus, CEO Digital Grid at Siemens Smart Infrastructure. “The process bus technology in substations digitalizes the information at the process level and communicates via fiber optic cables to the protection and station control system. Efforts for cabling, installation and maintenance are significantly reduced and at the same time the flexibility of the overall protection system is increased. A particular advantage of the process bus is the significantly increased safety for people and the system itself. Together with our local Siemens team in Peru, we are proud that our customer Luz del Sur is planning to adopt process bus technology as the standard for the implementation of all its new high-voltage substations.”

This press release and a press picture / press pictures/ further material is available at <https://sie.ag/3np9wMj>

For further information on process bus technology, please see <https://new.siemens.com/global/en/products/energy/energy-automation-and-smart-grid/protection-relays-and-control/general-protection/process-bus.html>

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In fiscal 2020, which ended on September 30, 2020, the Siemens Group generated revenue of €57.1 billion and net income of €4.2 billion. As of September 30, 2020, the company had around 293,000 employees worldwide. Further information is available on the Internet at [www.siemens.com](http://www.siemens.com).