



RELIABLE ELECTRICITY TRANSMISSION

Finland's E.ON companies are part of the international E.ON energy group. E.ON Kainuu Sähköverkko Oy is engaged in the planning, construction, use and maintenance of electricity networks and in the purchase of related services. The company is also responsible for electricity transmission in the municipalities of Kainuu and Pyhäntä and in the new Siikalatva municipality in North Ostrobothnia.

Best solutions found in cooperation with experts

When E.ON Kainuu Sähköverkko Oy, which continually develops its operations, was looking for an expert and reliable partner for the data transmission of its remote-controlled disconnecter stations, it opted for SATEL Oy.

It wanted to replace the old radio transmission technology with an efficient, modern solution. It was also seeking easily PC-programmable equipment to help in building a routable radio network. Management of the radio network was a particularly important aspect.

Efficient equipment for every need

SATELLINE radio modems helped in achieving the objectives of the network changes. Efficient data transmission is now handled by over 100 outdoor-compliant, high transmission power SATELLINE-3AS / -3ASd radio modems, and by nearly 100 SATELLINE-3AS NMS / -3ASd NMS radio modems controllable via an NMS network management program.

The excellent working relationship between the companies was later also extended to switching stations.

Now data on the state, measurement and control of the disconnecter and switching stations are transferred efficiently in a distribution management system, using the IEC 870-5-101 protocol. An effective solution was also found for power plant needs. Lake surface level measurement data are transferred easily to the power station's logic controller using a SATEL HLINK.

Remote management of electricity network brings savings

E.ON Kainuu Sähköverkko Oy is particularly satisfied with the remote management features of SATEL's NMS network. The state of the



Intelligent data transmission

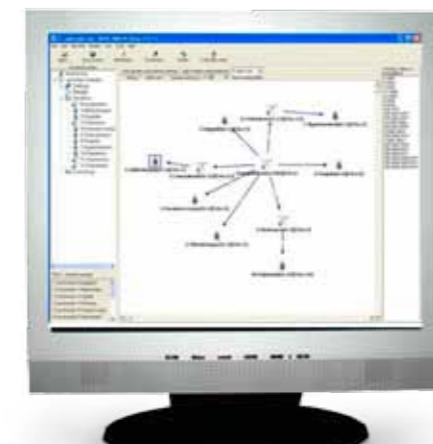
- Long-term cooperation brings results
- Savings through remote management
- Different SATEL products for different locations on the network



radio network is easy to monitor, and possible problems are quickly detected. The Kainuu electricity network extends over long distances, so remote management also brings savings in work time and travel costs.

Forward together

The reliability of SATEL's technology is tried and tested. This brings certainty to network and production management, and the equipment's easy connectivity with the remote management system is a clear advantage. In future, the intention is to expand in the direction of the NMS network. The challenges of an intelligent electricity network will create the need to develop the radio network in future, too.



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