

## VAMP protection relays to a new substation of Joroisten Energia

**Vamp Ltd, a Finnish company, has delivered the VAMP feeder protection relays for the Paro 110/20 kV substation owned by Joroisten Energia during the summer of 2002. The feeder protection relays included integrated arc protection.**

We considered the new substation necessary for the undisturbed delivery of power to our customers summarises **Mr. Erkki Salmi**, the managing director of Joroisten Energia. The design criteria was a demand for a modern, user-friendly and safe substation.

### Flexible co-operation

During the project there were several suppliers whose co-operation went extremely well mentions Mr. Salmi. He points out that various suppliers agreed together on the technical solutions which brought added value to the usability of the substation.

### Professional know-how from planning to execution

The switchyard design and delivery of the components for the Paro substation were made by **SLT Consults Oy**. The substation control system hardware and engineering was contracted by **Netcontrol Oy**. A Vaasa Group company, **Vaasa Service Oy** took the responsibility of the 110 kV switchyard control cable design, installation, commissioning and substation building.

They also installed a medium voltage switchgear made by **Unipower Oy** with all necessary feeder protection relays and peripherals.



With our new substation we secure an undisturbed distribution of electricity to our customers in the future, the managing director Erkki Salmi insures.

### VAMP protection relays as a process interface for the power distribution

We chose the VAMP feeder protection because they represent the newest technology on the market, design engineer **Mr. Mika Häkkinen** refers. Electrical arc sensors are connected to VAMP 245 relays in order to increase the scope of the arc protection in the whole switchgear system. VAMP feeder protection also serves as the process interface unit between the substation

control system and power distribution. VAMP relays provide control, measuring, event and disturbance information from the distribution network into the utility control room.

Joroisten Energia owned by the municipality has distributed electricity in the region of Joroinen for more than 90 years. In addition to the downtown area district heating, the company also does electrical contracting for households and industry. The company has two own hydroelectric power plants the production of which represents about 20% of their power trading capacity. There are more than 700 kilometres overhead medium voltage power distribution lines and around 300 distribution transformers.

More Information  
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