ABOUT CONSORTIUM

The consortium “RUBIN-AUTOMATION” consolidates professional experience of key specialists in the field of automated control systems.

- INVESTIGATION
- DESIGNING AND INSTALLATION
- MONITORING UTILITIES
- UTILITIES
- SCIENCE AND EXPERTISE
- TRAINING AND PROFESSIONAL DEVELOPMENT

SCIENTIFIC-INDUSTRIAL ENTERPRISE
«RUBIN»

A pool of scientists, experts, designers, practical engineers, highly skilled workers as well as specialists in various fields of expertise connected with issues of providing effective control over automation objects.

KRUG
SCIENTIFIC PRODUCTION COMPANY

an engineering centre engaged in a wide range of projects and services from making draft proposals, designing and coordinating the project appraisal to actualizing and maintaining automated systems.

RUBIN...
AUTOMATION

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CONSORTIUM RUBIN-AUTOMATION

Professional solutions – basis for development!

Automated system of monitoring and recording power consumption of an electricity supply network/power supply company (ASMRPC)

Control objects

Equipment installed on power lines, distribution (SS, DP) and transformer substations (TS) of an electricity supply network/power supply company.

Goals of introduction

- Increasing efficiency of dispatching-technological control over electrical equipment.
- Reducing operating costs.
- Creating information-technical base for the system further development.
- Supplying personnel with retrospective technical information to analyze, organize, plan operation of key electrical equipment and its repair.

RUBIN
AUTOMATION

Automated system of monitoring and recording power consumption of an electricity supply network/power supply company (ASMRPC)

RESOURCE-SAVING ELECTRIC POWER

System functions

- *Collecting and processing technological information from electricity meters, microprocessor protective devices, reclosers, measuring transducers, analogue and discrete signal transmitters, etc. and sending it to control stations of the company headquarters and branches.*
- *Remote monitoring distributed objects (cells, reclosers, etc.).*
- *Logging events.*
- *Generating printed documents.*
- *Manual data input.*
- *Displaying information on the dispatcher's panel.*
- *Displaying information to the operating personnel.*
- *Process signaling warning about malfunctions.*
- *Archiving parameters history.*

System features

- *At the substations controllers DevLink-C1000 are installed in special cabinets with at least IP54 level sealing protection. Digital interfaces RS485 are used as communication channels between the controllers and the substation equipment. Communication channels between DevLink-C1000 and branches dispatchers' automated workstations are Ethernet and GPRS (with a reservation option).*
- *On power lines the controllers are installed in reclosers control cabinets. GPRS is used as a communication channel between reclosers and the branch dispatcher's AWS.*
- *The company's headquarter dispatchers receive information from all branches servers due to the function of interserver exchange and multiserver access. A dedicated Internet channel with the customized VPN-tunnel is used for communication between the branch dispatcher's AWS and the headquarter server. The Ethernet local-area network is used for communication between intralayer components of the branches and components of the headquarter.*
- *On-line and archival data from DevLink-C1000 are collected via a remotely operated communication channel (RO-channel). Using the RO-channel allows decreasing the volume of transmitted traffic, transmitting data via slow and unstable communication channels and ensuring first-priority delivery of control commands.*
- Option of creating standard designs of substations and reclosers.
- Easy system scaling by the Customer in case of connecting additional objects. System step-by-step introduction.

Components

- *Control cabinets with controllers for collecting data DevLink-C1000.*
- *Archive server combined with the branch dispatcher's AWS.*
- *Dispatcher's panel.*
- *Server and AWSes of the headquarter users.*

Implemented projects

- *“Kuzbass energy network company”, Kemerovo.*
- *“Independent electronetwork company”, Saratov.*