



## **EKC - Electricity Coordinating Center Ltd. System Monitoring and Control**

A highly skilled multi-disciplined team with extensive experience in research, development and implementation of advanced solutions

The focus of EKC services in power system monitoring and control is maximization of benefits and efficiency of our clients existing control centers under ever evolving electricity market conditions.

Our extensive experience in power system operation and control place us in unique position to provide valuable support in development of new power system control centers according to the latest standards and prudent utility practice with focus on end-user.

**EKC** was initially established as a power system interconnection coordination centre. This allowed our company to accumulate vast amount of experience in design, development and operation of the power system control or coordination centres. Ever since then, we have been actively participating in major projects of development of national control and coordination centres in the region of Southeast Europe.

In domain of power system monitoring and control our focus is to provide Transmission and Distribution System operators with advisory services that would lead to:

- Development and implementation of the power system control centres according to the latest standards and prudent utility practice
- Maximizing operational and technical benefits and efficiency of the existing control centres under ever-changing environment of electricity market evolution, and conventional versus renewable generation mix.

EKC specialists in domain of power system monitoring and control have both important aspects necessary for successful implementation of the advanced power system control solutions: competence and knowledge of the contemporary control centres and practical, end-user oriented experience available with specialists who once run power systems themselves.



**EKC** provides full owner-engineering services in the process of development and implementation of the new control centres.

**EKC** has been credible advisor to TSOs in Southeast Europe in domain of power system monitoring and control.

EKC's services in domain of power system monitoring and control comprise:

- Selection of optimal locations for measurement points and control actions for implementation of advanced solutions for power system monitoring and control
- Development and implementation of software solutions for power loss optimization
- Implementation and setting of parameters for Wide Area Monitoring and Control System WAMS
- Post-disturbance analyses based on recordings
- Determination of observability area and implementation of state estimator
- Development of software solutions for electricity balancing
- Dynamic simulations for training of dispatchers in TSO control centers and operational departments
- Preparation of tender documents with detail technical specifications for new dispatching centres, technical support in evaluation of the contractors' bids for implementation of SCADA/EMS/MMS, and owner engineering services in the process of project implementation
- Supervision and testing during SCADA/EMS/MMS implementation
- Management and control of electric power system
  - Management and control of production unit
  - Development and implementation of the power system control centres
  - Maximization of the operational and technical benefits and efficiency of the existing control centres
  - Consultancy services in domain of power system monitoring and control

EKC specialists provide TSOs with advisory services in all relevant aspects of the control centres including:

- System architecture
- End-user interface
- SCADA
- Automatic Generation Control - AGC
- Power system analysis
- Demand forecast modules
- Reactive power - voltage control
- Operational reports
- Work orders and work planning
- Dispatcher training simulators
- Management of the auxiliary services

**Our success:**

*... reliable and highly competent consultant who delivers at agreed commitments in professional and collegial manner ...*



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