

Curriculum Vitae

Djordje Dobrijevic

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Year of Birth: 1967
Place of Birth: Knin, Croatia

SUMMARY OF QUALIFICATIONS

1992 Graduate Electrical Engineer – *dipl.ing.*
Faculty of Electrical Engineering, University of BELGRADE, SERBIA

FURTHER TRAINING

2009 Financial/Economic Analysis Workshop, held by USAID
2005 PSS/E Training Course for Optimal Power Flow, held by Red Electrica España
2004 PSS/E Training Course for Load Flow and Dynamic Simulations, held by Siemens-PTI
2002 SDDP Training Course, held by PSR

MEMBERSHIP

- Senior Member of the IEEE
- UCTE Workgroup for UCTE format

KEY QUALIFICATIONS

- ☞ Planning of high voltage transmission network
- ☞ Load flow analysis and security assessment
- ☞ Short-circuit analysis
- ☞ Power system stability, dynamics and control
- ☞ Hydro power plants modeling

- ☞ Digital and adaptive control
- ☞ Software development
- ☞ Conducting technical analysis of energy sector projects and developments
- ☞ Contribution in the regional relationship and cooperation among power utilities in South East European countries
- ☞ Determination and checking the criteria for choice of high voltage equipment
- ☞ Education and training

SPECIAL SKILLS

- ☞ Languages
 - English (excellent)
 - Spanish (beginner)
- ☞ Professional software
 - PTI PSS/E (load flow, fault analyses, dynamic analyses, etc.)
 - Power System Analyzer (load flow, network transfer capacities evaluation)
 - CLF/OPF (load flow analyses)
- ☞ Microsoft Office Applications (Word, Excel, Power Point, Visio, etc.)
- ☞ Management tools (Microsoft Project)
- ☞ Graphical design (AutoCAD, Adobe applications, CorelDraw, Origin)
- ☞ Software development (Visual C++, Visual Basic, Fortran, Oracle)
- ☞ Other skills (Windows NT/2000/XP/Vista administration, network, internet and email administration)

PROFESSIONAL EXPERIENCE

- | | |
|-------------------------|---|
| 2007 – up to now | <i>Head of Team for Studies and Research</i>
Electricity Coordinating Center Ltd. |
| 2004 – 2007 | <i>Research Engineer</i>
Electricity Coordinating Center Ltd. |
| 1993 – 2004 | <i>Research Engineer</i>
The Institute of Electrical Engineering "Nikola Tesla" - Belgrade |

SELECTED STUDIES AND PROJECTS

Projects in progress

Project SECI project group on development of interconnection of electric power systems of SECI countries for better integration to the European system.

Regional Transmission Planning Project, Southeast Europe

Construction of Regional Models for 2015

Team Member, model integrator

client: USEA, USAID

Study on interconnection of countries in South East Europe (Romania, Hungary, Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Macedonia, Albania, Greece, Bulgaria and Turkey) and network development plans on regional level. The following tasks have been provided: load flow analyses, transfer capacities evaluation, steady state stability, fault studies, dynamic system modeling, transient stability studies...

Responsibility on project: checking of national models in SEE and merging the models into common models, updating of models, performing load flow and security analyses

2010 **Uncertainties in the SEE Transmission Network and Evaluation of Risk for Future Infrastructure Investments**

Project Manager

client: USAID, USEA

In this study analyses of uncertainties in investments in SEE have been performed. Influence of selected major investments in SEE on transmission network has been performed. In addition selected major changes in balances of SEE countries and their influence on transmission network have been analyzed also. The main result is ranking of weak points in SEE transmission network.

Responsibility on project: project manager, preparation of base models for load flow analyses

Cost/Benefit Analysis of the Proposed Solution of Connection of SS Bistrica into Serbian Grid

Task Leader

client: MVV-Decon, Germany

Purpose of the Study is to prove integrity of constructing new substation 220/110 kV Bistrica (150 MVA) concept from the network improvements point of view (security, reliability, decreasing transmission losses, elimination firm connection etc.) and also from profitability of investment point of view by evaluation of future benefits which can be expressed as potential income.

Responsibility on project: task leader, preparation of models for load flow analyses, performing of load flow analyses and security assessment

2009 **Study of the 400 kV OHL Serbia – Romanian border**

Project Manager

client: MVV-Decon, Germany

Feasibility study on connection Serbia and Romania with new 400 kV tie-line. Techno-economical analyses for four different connection variants have been performed. The following tasks have been provided: load flow analyses, security assessment, TTC calculation and cost-benefit analysis.

Responsibility on project: project manager, preparation of base models for load flow analyses

CAO - Freising - IT system for coordinated flow based allocation and related services

EKC: Technical Parameters Calculation PTDF/MF

Team Member

client: Riecado (Siemens, CEE CAO Freising/Munich, Germany)

Technical Parameters Calculation software for flow-based Coordinated Auctions in Central-East Europe: validation and merging of network models, load flow, security analyses, calculation of PTDF factors and maximum Flow capacities, preparation of technical parameters as auction input for yearly, monthly and daily auctions.

Responsibility on project: main performer in production of software for validation of input models and their merging in common model for further usage

Connection of the TPP Tuzla G8 (450W) to the EPS of Bosnia and Herzegovina

Task Leader

client: ESOTECH, Slovenia, EPBIH

Study on connection of the new production unit G7 in TPP Tuzla. Following design studies have been provided: Load flow studies, fault studies, transient stability studies, frequency response studies, auxiliary supply analyses, techno-economical aspects.

Responsibility on project: leader of part of project which includes static and dynamic stability analysis, preparation of model for stability analysis, performing stability analysis, consulting in part of project for selection of electromechanical parameters

Connection of the TPP Kakanj G8 (350MVA) to the EPS of Bosnia and Herzegovina

Task Leader

client: IBE, Slovenia

Study on connection of the new production unit G8 in TPP Kakanj. The following design studies have been provided: Load flow studies, fault studies, transient stability studies, frequency response studies, auxiliary supply analyses, techno-economical aspects.

Responsibility on project: leader of part of project which includes static and dynamic stability analysis, preparation of model for stability analysis, performing stability analysis, consulting in part of project for selection of electromechanical parameters

Generation surplus projections in Eastern Europe (EE) region and electricity market scenarios in the period 2008 – 2020, [Updated data and scenarios]

Team Member

client: TERNA, Italy

The objective of the study is to analyze different scenarios of generation surplus in SEE/EE region and features of electricity market development, as well as to analyze the transmission network evolution in the period under analysis (2008-2020). This Study presents an Update of similar SEE Market Study performed in 2007, with extended time horizon (until 2020), scenarios (optimistic, besides pessimistic and realistic) and countries (Ukraine, Moldova, Hungary).

Responsibility on project: preparation of models for load flow and security analyses

Construction and Verification of Computer Dynamic Simulation Model of Serbia with Neighbors

Project Manager

client: EMS, Serbia

Study on creation and verification of dynamic model of Serbia with neighbors in application software PSS/E and DlgSILENT. The dynamic model should include models of all power plants in Serbia, including ones connected to 110 kV level. Also, the dynamic model should support all type of stability and dynamic analysis (transient stability analysis, short-term, mid-term and long-term dynamics, small signal stability,...).

Responsibility on project: leader of part of project for construction of dynamic simulation model in PSS/E, main executor of construction of the model in PSS/E, main executor in preparation and checking of input data for both application software

2008 Connection of TPP Stanari to EPS of B&H

Task Leader

client: Energy Financing Team, UK

Study on connection of the TPP Stanari. The following design studies have been provided: Load flow studies, fault studies, transient stability studies, auxiliary supply analyses, techno-economical aspects.

Responsibility on project: leader of part of project which includes static and dynamic stability analysis, preparation of model for stability analysis, performing stability analysis

Feasibility Study: Synchronous Interconnection of the Power Systems of IPS/UPS with UCTE

Team Member, Model Integrator

client: European Commission

Feasibility study on connection of IPS/UPS systems (Russia, Ukraine, Moldova...) with UCTE main grid. The following tasks have been provided: load flow analyses, dynamic system modeling, dynamic system equivalencing, transient stability studies, and frequency response studies.

Responsibility on project: checking of UCTE national models and their merging into common UCTE models, fine tuning of the UCTE models, checking of reduced UCET models, checking of IPS/UPS models and their merging with UCTE models in common models for further calculations, fine tuning of the common models

Short Circuit, Voltage and Dynamic Stability Analyses, Reliability and Harmonic impact for new under-sea HVDC interconnection between Italy and Montenegro

Task Leader

client: TERNA, Italy

Analyses of impacts of new undersea HVDC interconnection between Italy and Montenegro have been performed. These analyses consist of short circuit calculation, voltage and dynamic stability analyses and reliability and harmonic impact analyses.

Responsibility on project: leader of part of project which includes dynamic stability analysis, preparation of model for stability analysis, performing stability analysis

Impact of new generation by SECI Energia's hydro power plants on transmission networks of Srpska Republic of BiH and neighboring South-east Europe countries

Project Manager

client: TERNA, Italy

Study on connection of new hydro power plants in region of East BiH and possibilities of the new HPPs to export energy. The following design studies have been provided: Load flow analysis and contingency analysis under various market scenarios.

Responsibility on project: *project manager, preparation of models for analyses, performing all analyses*

2007 Integration of Baraha 400/132 kV substation into DEWA 400kV System, Dubai

Team Member

client: DEWA, Dubai

Study on connection of the new substation 400/132 kV Baraha into DEWA power system. The following design studies have been provided: Load flow studies and fault studies with breakers duty calculations.

Responsibility on project: *performing load flow and contingency analyses*

Ten years master plan for Khuzestan regional electrical company, Iran

Team Member

client: Khuzestan Regional Electrical Company KZREC, Iran

Ten years master plan for Khuzestan (West Iran) regional electrical company. In this study following tasks have been performed: Load flow analysis and security assessment, fault studies, techno-economical aspects.

Responsibility on project: *construction of models for load flow analyses*

Regional Balkans Infrastructure Study REBIS – Update of Generation Investment Study GIS, Regional Transmission Planning Project, Southeast Europe

Team Member

client: European Union, World Bank

Study on connection of the new production units in South East European region till 2020. The following design studies have been provided: Load flow studies, fault studies, techno-economical aspects.

Responsibility on project: *preparation of models for load flow and security analyses, performing load flow and security analyses*

In-Depth Analysis of Transmission Options to Diversify Energy Supply, Black Sea region

Project Manager

client: USAID, USEA

In this study of transmission options to diversify energy supply in Moldova load-flow analysis and security assessment have been applied to different exchange and transit scenarios. Target year was 2015.

Responsibility on project: *project manager, preparation of models for load flow and security analyses, performing load flow and security analyses, TTC calculations*

Transmission Network Investment Criteria, Southeast Europe

Project Manager

client: USEA, USAID

Study on development of transmission network investment criteria from regional point of view. The study defines criteria for evaluation of planned elements in transmission network as elements of regional significance. For all planned elements of regional significance it defines technical and economical criteria for ranking.

Responsibility on project: *project manager, definition of criteria for technical and economical ranking of projects*

Regional power transmission extension plan for Caucasus countries, Caucasus region

Team Member

client: KfW Kreditanstalt für Wiederaufbau (Credit Institute for Reconstruction), Germany

Study on interconnection of countries in Caucasus region (Georgia, Armenia, Russia, Turkey, Azerbaijan). The following design studies have been provided: Load flow studies, fault studies, transient stability studies, dynamic model building, frequency response studies.

Responsibility on project: *performing load flow and contingency analyses*

Black Sea Transmission Planning Project, Black Sea Region – Phase II

Project group on development of interconnection of electric power systems of Black Sea region,

- **BSR Transmission System planning project,**

- **Update of regional models for year 2010**
- **Calculations of NTC and maximum exchange scenarios,**

Team Member, Model Integrator
client: USAID and USEA

Study on connection of countries forming the Black Sea ring (Russia, Ukraine, Moldova, Romania, Bulgaria, Turkey, Georgia, Armenia, Azerbaijan). The following tasks have been provided: regional model update, network adequacy checking, transfer capacity calculation.

Responsibility on project: *checking of national models and merging the models into common models, updating of models, performing load flow and security analyses, held training course for TTC and NTC calculations*

Connection of New (Second) Block in TPP Gacko to EPS of B&H, Bosnia & Herzegovina

Project Manager
client: CEZ, Czech Republic

Study on connection of the new production unit in TPP Gacko. The following design studies have been provided: Load flow studies, fault studies, transient stability studies, frequency response studies, auxiliary supply analyses, techno-economical aspects.

Responsibility on project: *project manager, preparation of models for load flow and contingency analyses, preparation of model for stability analyses, performing analyses of static and dynamic stability*

Technical Study for the synchronous parallel Operation of the Turkish Power System with UCTE

Team Member, Model Integrator
client: European Commission

Feasibility study on connection of Turkish power system with UCTE main grid. The following tasks have been provided: load flow analyses, transfer capacities evaluation.

Responsibility on project: *checking of national models in SEE region and their merging into common models, updating of national models, fine tuning of the common models*

2006 Black Sea Transmission Planning Project, Black Sea Region – Phase I

Project group on development of interconnection of electric power systems of Black sea region, Regional model construction for 2010

Team Member, Model Integrator
client: USAID and USEA

Study on connection of countries forming the Black Sea ring (Russia, Ukraine, Moldova, Romania, Bulgaria, Turkey, Georgia, Armenia, Azerbaijan). The following tasks have been provided: regional model construction, network adequacy checking.

Responsibility on project: *checking of national models in BS region and merging the models into common models, updating of models, performing load flow and security analyses*

Project SECI project group on development of interconnection of electric power systems of SECI countries for better integration to the European system. Regional Transmission Planning Project, Southeast Europe

- **Update and expanding of existing Regional Transmission Network Model for year 2005**
- **Construction of Regional Transmission Network Model for year 2010,**

Team Member, Model Integrator
client: USEA, USAID

Study on interconnection of countries in South East Europe (Romania, Hungary, Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Albania, Greece, Bulgaria and Turkey) and network development plans on regional level. The following tasks have been provided: load flow analyses, transfer capacities evaluation, steady state stability, fault studies, dynamic system modeling, transient stability studies...

Responsibility on project: *checking of national models in SEE region and merging the models into common models, updating of models, performing load flow and security analyses*

2005 Regional Balkans Infrastructure Study REBIS – Generation Investment Study GIS, Regional Transmission Planning Project, Appendix 12: PSS/E ANALYSES AND RESULTS, Southeast Europe

Team Member
client: European Union, World Bank

Study on feasibility of generation investment plans in accordance with parallel network development plan for South East European region. The following tasks have been provided: load flow analyses, transfer capacities evaluation, steady state stability.

Responsibility on project: preparation of models for load flow and security analyses, performing load flow and security analyses

2004 Development and Implementation of Application Software for Automatic Calculation of Net Transfer Capabilities of Interconnected Power Systems, Serbia

Task Leader

client: Electric Power Utility of Serbia, Serbia

The upgrade of already developed application software for off-line security assessment with module for automatic calculation of NTC. Also, this application has modules for two-way exchange data with UCTE format and PSS/E format.

Responsibility on project: leader and main executor in creation of interface software for communication with data base and creation of modules for two-way exchange data with UCTE format and PSS/E format

2002 Improvement in Application Software for Security Assessment and Linking with the Application Software for Short Hydro-Thermo Coordination and Demand Forecast, Serbia

Project Manager

client: Electric Power Utility of Serbia, Serbia

The improvement of already developed application software for off-line security assessment. This software is connected to existing Oracle database for electrical parameters of power system grid of Serbia as well as with Oracle database for short hydro-thermo coordination and demand forecast. Every calculated generation pattern (for every hour in next 72 hours) can be checked against security assessment. This software has integrated module for load flow calculation which makes possible to have autonomy.

Responsibility on project: project manager and main executor in creation of interface software for communication with data base

Feasibility Study for the Rehabilitation of Transmission Network of Serbia, Serbia

Task Leader

client: KfW (Kreditanstalt für Wiederaufbau) (Credit Institute for Reconstruction), Germany

The study was related to reconstruction of electric power grid of Serbia. Analyzed horizons were 2001, 2006 and 2010 with different load growth ratios. The result of the study was to create list of priorities for reconstruction of power system grid of Serbia, based on economical aspects as well as technical aspects (load flow analyses, security assessment and short circuit calculation).

Responsibility on project: task leader and main executor in creation models for load flow and security analyses, performer of load flow and security analyses

Development of Database of 400, 220, 110 and 35 kV Network of Serbia and Linking the Database with Software for Power System Planning and Analysis, Serbia

Project Manager

client: Electric Power Utility of Serbia, Serbia

The database was developed in Oracle and consists of all electrical data of power grid of Serbia. Also, the database is connected to other Paradox database for historical 15-minutes loads of the system of Serbia, so user can easily create model for analyzing snapshots from the past.

Responsibility on project: project manager

1999 Development of Application Software for Off-Line Security Assessment, Serbia

Task Leader

client: Electric Power Utility of Serbia, Serbia

Development of application software for fast off-line security assessment. Software was developed in MS Visual C++ v6. Steady-state results are taken from output of the program CLF-OPF as base case.

Responsibility on project: leader and main executor in creation of interface software for communication between the software and CLF/OPF

1998 National Energy Database, Serbia

Project Manager

client: Electric Power Utility of Serbia and Statistical Bureau of Yugoslavia, Serbia

The national energy Oracle database should consist of complete historical data about any kind of energy or fuel (oil, coal, electricity, nuclear energy, hydroenergy,...). The application can give (for desired year) list of energy of fuel (produced, imported, transformed in other type of energy, consumed,...) as well as graphic representation of outputs.

Responsibility on project: *project manager*

Effects of connecting power systems of Republic of Srpska and Serbia with new 400 kV interconnection line Ugljevik - S. Mitrovica, Serbia

Team Member

client: Electric Power Utility of Serbia, Serbia

Study on technical effects of construction of new 400 kV tie-line Ugljevik (BiH) - Sremska Mitrovica (SRB). The following tasks have been provided: load flow analyses, transfer capacities evaluation.

Responsibility on project: *performing load flow calculations and contingency analyses*

1997 Study of Development of 110 i 35 kV Network of Montenegro (years 1995-2000, respect to 2020), Montenegro

Task Leader

client: Electric Power Utility of Montenegro, Montenegro

Development of 100 and 35 kV network of Montenegro until 2010 with rough analysis until to 2020. Beside economical aspects, this analyses also included load flow analysis, security assessment and short circuit analysis.

Responsibility on project: *performing short-circuit calculations*

Operation of Power System of Serbia in Condition of High Consumption, Serbia

Team Member

client: Electric Power Utility of Serbia, Serbia

Load flow and security assessment of the day with peak load in Serbia. The reason of this analysis was because that day had the biggest consumption ever and some demands of Serbia were out of electricity in order to maintain stable operation of power system.

Responsibility on project: *performing load flow calculations and contingency analyses*

Study of Development of Distribution Network of PDC Pale (Republic of Srpska), Bosnia & Herzegovina

Team Member

client: Electric Power Utility of Republic of Srpska, Bosnia & Herzegovina

Study of development of distribution network of power distribution company Pale (B&H) included load-flow and security analyses as well as economic analyses.

Responsibility on project: *graphical representation of results*

1996 Technical Information System of Power Distribution Company Nis, Serbia

Team Member

client: Power Distribution Company of Nis, Serbia

Creation Oracle database software for complete technical database for power distribution company of Nis.

Responsibility on project: *Oracle programming*

Connection of HPPs Dabar, Nevesinje and Bileca into EPS of East Herzegovina, Bosnia & Herzegovina, BiH

Task Leader

client: Electric Power Utility of Republic of Srpska, Bosnia & Herzegovina

Study of connection of HPPs Dabar, Nevesinje and Bileca into EPS of East Herzegovina (part of BiH). Following tasks have been performed within this study: load-flow and security analyses, transient stability and dynamic analyses, short circuit calculations.

Responsibility on project: *leader and main executor of short-circuit calculations*

1995 Calculation of relevant currents and voltages related to damage in TPP Pljevlja

Team Member

client: Electric Power Utility of Montenegro, Montenegro

Analysis of relevant currents and voltages related to damage in TPP Pljevlja. Values of currents and voltages caused by asymmetry (blocked circuit breaker).

Responsibility on project: performing calculations of parameters caused by asymmetry

Calculation of short-circuit parameters in grid of Republic of Srpska, BiH

Project Manager

client: Electric Power Utility of Republic of Srpska, BiH

Study of calculation of short-circuit parameters in grid of Republic of Srpska (part of Bosnia and Herzegovina).

Responsibility on project: project manager and main executor of short-circuit calculations

1994 Techno-Economic Analysis of Placement Providing of Electrical Energy and Power from HPP Visegrad, Bosnia & Herzegovina

Team Member

client: Electric Power Utility of Republic of Srpska, Bosnia & Herzegovina

Techo-economical analysis of possibilities for evacuation of power produced in HPP Visegrad. The main connection of HPP Visegrad to power system grid of B&H was through one 400 kV line. Because of war in Former Yugoslavia this line was damaged and out of operation, so it was unable to evacuate all possible power generated in this power plant through 110 kV lines only. According to results from the study new 220 kV tie-line Visegrad (BiH) – Pozega (SRB) has been constructed.

Responsibility on project: performing load flow calculations and contingency analyses

Calculation of short-circuit parameters in grid of Republic of Serb Krayna

Project Manager

client: Electric Power Utility of Republic of Serb Krayna

Study of calculation of short-circuit parameters in grid of Krayna (part of Croatia which was under UN protection during civil war).

Responsibility on project: project manager and main executor of short-circuit calculations

Decrease of Technological Losses of Electric Energy during Transportation from Sources to Consumers

Team Member

client: Ministry of Science and Technology of Serbia, Serbia

Study with analyses of possible ways for decrease of technological losses of electrical energy during transportation from sources to consumers. Analyses of several measures have been performed, such as optimum power flow, sectioning of power grid,...

Responsibility on project: main executor of load flow calculations and analysis influence of sectioning on decrease of power losses

PUBLICATIONS

Selected international journal and conference papers:

2007 Short Circuit Studies in Transmission Networks Using Improved Fault Model

Vladimir Terzija, Djordje Dobrijevic,

Proceeding of the IEEE Power Tech Conference, Lausanne, Switzerland, July 1-5, 2007

2005 A Unified Application Software for Steady-State Security and Automatic Cross-Border Transmission Capacity Assessments

Dragan P. Popovic, Djordje M. Dobrijevic, Sasa Minic, Marija Marinkovic, Ana Petric, Bojan Ivanovic

Proc. of EUROCON 2005, 2005, Belgrade, Serbia, November 22-24

2004 Automatic Cross-Border Transmission Capacity Assessment in the Open Electricity Market Environment

Dragan P. Popovic, Djordje M. Dobrijevic, Snezana V. Mijailovic, Zoran Z. Vujasinovic

Proc. of CIGRE 2004 Session, Paris, France, pp C2.209

2001 An Improved Methodology for Security Assessment of Power Systems in Conditions of a Deregulated Environment

Dragan P. Popovic, Djordje M. Dobrijevic

Proceeding of the International Symposium - Bulk Power System Dynamics and Control V, Onomichi, Japan, August 26-31, 2001, pp. No. 10

An unified external network equivalent in steady-state security assessment of Balkan interconnection
Djordje M. Dobrijevic, Dragan P. Popovic, Neso A. Mijuskovic, Dragan J. Vlasisavljević
Proceedings of CIGRE Regional Meeting, BLACK SEA ELNET 2001, Suceava, Romania, June 10-15 2001, pp I.2.2

An Advanced Methodology for Steady-State Security Assessment of Power Systems
Dragan P. Popovic, Djordje M. Dobrijevic, Neso A. Mijuskovic, Dragan J. Vlasisavljevic
European Transactions on Electric Power, Vol. 11, No. 4, July/August 2001, pp. 227-233

2000 Analytical Tools for the Transfer Capability Evaluation of Balkan Interconnection
Dragan P. Popovic, Djordje M. Dobrijevic, Neso A. Mijuskovic, Dragan J. Vlasisavljevic, Snezana V. Mijailovic
Proc. of CIGRE 2000 Session, Paris, France, pp. 39-206

1999 Methodological and Practical Aspects of Steady-State Security Assessment of Yugoslav Power System
Dragan P. Popovic, Djordje M. Dobrijevic, Neso A. Mijuskovic, Dragan J. Vlasisavljevic
Proceedings of the IEEE Budapest PowerTech '99, Budapest, Hungary, August 29 – September 2, 1999, pp. BPT99-382-13

An Improved Method of Damping of Generator Oscillations
Djordje M. Dobrijevic, Marko V. Jankovic
IEEE Transactions on Energy Conversion, Vol. 14, No. 4, December 1999, pp. 1624-1629

An Approach to Damping of Local Modes of Oscillations Resulting from Large Hydraulic Transients
Djordje M. Dobrijevic, Marko V. Jankovic
IEEE Transactions on Energy Conversion, Vol. 14, No. 3, September 1999, pp. 754-759

1997 Coordinated Stabilizing Control for the Exciter and Governor Loops Using Fuzzy Set Theory and Neural-Nets
Miodrag B. Djukanovic, Djordje M. Dobrijevic, Milan S. Calovic, Milovan Novicevic, Dejan J. Sobajic
International Journal of Electrical Power and Energy Systems, Vol. 19, No. 8, November 1997, pp. 489-499

1996 Torsional Oscillations and Stability of a Turbogenerator
Djordje M. Dobrijevic, Jovica V. Milanovic
Proceedings of the XXXII Symposium on Electrical Machines – SME '96, Cracow, Poland, June 26-29, 1996, pp. 138-141

1995 Application of Fuzzy Sets and Neural Networks to Stabilizing Control in Electric Power Systems (invited paper)
Miodrag B. Djukanovic, Djordje M. Dobrijevic, Milovan Novicevic
Proceedings of the 3rd Seminar on Neural Network Applications in Electrotechnics - NEUREL '95, Belgrade, Serbia, September 29.-30, 1995, pp. 117-125

Neural-Net Based Coordinated Stabilizing Control for the Exciter and Governor Loops of Low Head Hydropower Plants
Miodrag B. Djukanovic, Milovan Novicevic, Djordje M. Dobrijevic, Borivoje S. Babic, Dejan J. Sobajic, Yoh-Han Pao
IEEE Transactions on Energy Conversion, Vol. 10, No. 4, December 1995, pp. 760-767

1994 Fuzzy System Based Coordinated Stabilizing Control for the Exciter and Governor Loops of Low Head Hydropower Plants
Miodrag B. Djukanovic, Djordje M. Dobrijevic, Milovan Novicevic
Proceedings of the Artificial Neural Networks in Engineering - ANNIE '94, St. Louis, Missouri, USA, November 13-16, 1994, pp. TA 2.1

1993 Effects of Distributed Mechanical Torques on Stable Operation of the Turbogenerator
Jovica V. Milanovic, Djordje M. Dobrijevic

Proceedings of the International Conference on Electrical Machines in Australia - ICEMA 93, Adelaide, SA, Australia, September 14-16, 1993, Vol. 2, pp. 303-308

1992 The Influence of Torsional Oscillations on the Static Stability of the Turbogenerator

Dragan S. Petrovic, Jovica V. Milanovic, Djordje M. Dobrijevic

Proceedings of the International Conference on Electrical Machines - ICEM 92, Manchester, UK, September 15-17, 1992, Vol. 1, pp. 88-92

Finals:

1992 Faculty of Electrical Engineering, University of BELGRADE, SERBIA

"Modeling and Dynamic Analysis of Low-Head Hydro Power Plants in Island Operation"

SOFTWARE

Software being continuously updated

2005 Merlin Conversion & Merge Utility

Project Manager, Author

clients: UCTE Secretariat, 16 TSOs in Europe, other companies

This is part of Merlin Application Software which is developing in Electricity Coordinating Center. Main features of the software are as follows: converting from UCTE format data to PTI raw format data and vice versa; converting between different versions of UCTE format data; converting between different versions of PTI raw format data; merging several models (UCTE format data and/or PTI raw format data) into one UCTE format data as well as into one PTI raw format data; checking and fixing found problems in the UCTE format input data; checking and fixing found problems in the PTI raw format input data.

Software completed and delivered

2009 IT system for coordinated flow based allocation and related services

Co-Author, Task Leader

client: CAO – Freising, 7 TSOs in CEE

Technical Parameters Calculation software for flow-based Coordinated Auctions in Central-East Europe: validation and merging of network models, load flow, security analyses, calculation of PTDF factors and maximum Flow capacities, preparation of technical parameters as auction input for yearly, monthly and daily auctions.

2004 Application Software for Automatic Calculation of Net Transfer Capabilities of Interconnected Power Systems

Team Leader, co-Author

client: Electric Power Utility of Serbia, Serbia

Application software for off-line security assessment with module for automatic calculation of NTC. This application is connected to Oracle database for electrical parameters of power system grid of Serbia as well as with Oracle database for short hydro-thermo coordination and demand forecast. Every calculated generation pattern (for every hour in next 72 hours) can be checked against security assessment and used for NTC calculation. This application has integrated module for load flow calculation which make it to have autonomy in performing calculations. Also, this application has modules for two-way exchange data with UCTE format and PSS/E format.

2000 Oracle Database of 400, 220, 110 and 35 kV Network of Serbia, Serbia

Project Manager, co-Author

client: Electric Power Utility of Serbia, Serbia

Oracle database software for all electrical data of power grid of Serbia. The database is connected to other Paradox database for historical 15-minutes loads of the system of Serbia, so user can easily create model for analyzing snapshots from the past.

1998 National Energy Database, Serbia

Project Manager, co-Author

client: Electric Power Utility of Serbia, Statistical Bureau of Yugoslavia, Serbia

Oracle database software for complete database for historical data about any kind of energy or fuel (oil, coal, electricity, nuclear energy, hydro energy,...). The application can give (for desired year) list of energy of fuel (produced, imported, transformed in other type of energy, consumed,...) as well as graphic representation of outputs.

1996 Technical Information System of Power Distribution Company Nis, Serbia

Team Member, co-Author

client: Power Distribution Company of Nis, Serbia

Oracle database software for complete technical database for Power Distribution Company of Nis.

OTHER REFERENCES

Held training courses:

2007 Training course for PSS/E v30

place: Sarajevo (BiH)

client: NOS BiH

Basic load-flow and short-circuit training course for PSS/E version 30.

2006 Training course for PSS/E v30

place: Banja Luka (BiH)

client: Electric power Utility of BiH

Basic load-flow and short-circuit training course for PSS/E version 30.

Training course for PSS/E v30

place: Skopje (MK)

client: MEPSO

Basic load-flow and short-circuit training course for PSS/E version 30.

2005 Training course for PSS/E v29 and PSA

place: Sarajevo (BiH)

client: NOS BiH

Basic training course for PSS/E version 29 and PSA (Power System Analyzer). For PSS/E the training course included: load-flow and short-circuit analysis.