

# 2023 BUSSEC

2023 Belarusian-Ural-Siberian Smart Energy  
Conference (BUSSEC)

📍 Ekaterinburg, Russia

## Conference program Sept. 26–28, Ekaterinburg Marins Park Hotel

Please register on the link <https://leader-id.ru/events/452721>

26 Sept.		
11:00	<b>The opening ceremony</b> <b>Welcome speech from the Program Committee Chairman</b>	
11:20	<b>Invited speakers</b>	
11:20	Alena Rybushkina	NTI EnergyNet: Segments, Projects and Opportunities for Universities and Scientists <b><i>Center Energynet</i></b>
11:45	Fedor Nepsha	Modern Solutions Implemented by RTSoft <b><i>Smart Grid center RTSoft-Smart Grid (RTSoft Group)</i></b>
12:10	Alena Sidorova	Production Activities of Main electrical networks of the East <b><i>Branch of PJSC Rosseti – Main electrical networks of the East</i></b>
12:35	Anton Antipchenko	Tavrida Electric. Company and Technologies <b><i>Tavrida Electric Ural</i></b>
13:00	<b>Lunch</b>	
14:00	<b>Automated Electrical Systems</b>	
14:00	Ismoil Odinaev	Accelerated Power System Equivalent Algorithm for Emergency Control Based on Phasor Measurement Units <b>(ID 2645)</b>
14:15	Denis Snegirev	The Selection of Machine Learning Model and Its Hyperparameters Using Bayesian Optimization for Short-Term Wind Power Forecasting <b>(ID 2662)</b>
14:30	Ismoil Odinaev	Methodology for Forming a Training Sample for Power Systems Emergency Control Algorithm Based on Machine Learning <b>(ID 2709)</b>
14:45	Alena Sidorova	Assessment of the Hydroelectric Power Plant Cascade Economic Efficiency <b>(ID 2722)</b>
15:00	<b>The first day closing</b>	

# 2023 BUSSEC

2023 Belarusian-Ural-Siberian Smart Energy  
Conference (BUSSEC)

Ekaterinburg, Russia

## Conference program Sept. 26–28, Ekaterinburg

Marins Park Hotel

Please register on the link <https://leader-id.ru/events/452721>

27 Sept.		
11:00	<b>Automated Electrical Systems</b>	
11:00	Yulia Sysoeva	Analysis of PWM Method for TFC (3L-NPC) <b>(ID 2793)</b>
11:15	Sergei Dekhtiar	Intermittent Arc Fault Model for Distribution Network <b>(ID 2798)</b>
11:30	Alena Sidorova	Influence of Machine Learning Method Choice on the Accuracy of Power Load Forecast Models and HPP Cascade Mode <b>(ID 2858)</b>
11:45	Alena Sidorova	Algorithm for Calculating the Water and Energy Mode of the Cascade of Hydroelectric Power Plants on the Basis of the Integrated Mathematical Model <b>(ID 2861)</b>
12:00	Pavel Bannykh	Voltage Stability Limit Calculation for Power Transfer Capability Between Two Area <b>(ID 2773)</b>
12:15 (online)	Kiryl Artsiomenka	Structural-Parametric Optimization of Automatic Control System for Power Unit 300 MW <b>(ID 2697)</b>
12:30	<b>Diagnostic, Prognostic and Maintenance Methods and Tools</b>	
12:30	Ilia Storgev	Short Circuit Monitoring System on Power Lines <b>(ID 2922)</b>
12:45	Alina Stepanova	The Methodology for Overhead Power Transmission Lines Technical State Assessment Based on Machine Learning <b>(ID 2771)</b>
13:00	<b>Lunch</b>	
14:00	<b>Diagnostic, Prognostic and Maintenance Methods and Tools</b>	
14:00	Alexey Romanov	MAD Robot: Concept and Prototype Description of the Robot for Multi-Spectral Power Equipment Diagnostics <b>(ID 3011, ID 3012)</b>
14:30	Marina Mazunina	Localization of the Overhead Power Transmission Line Insulators Defects Using Computer Vision Algorithms <b>(ID 3020)</b>
14:45	Yaroslav Mironenko	Development of Automated Life Cycle Management System for Electrically Driven Compressor Units in the Oil and Gas Industry <b>(ID 3019)</b>
15:00	<b>The second day closing</b>	

# 2023 BUSSEC

2023 Belarusian-Ural-Siberian Smart Energy  
Conference (BUSSEC)

Ekaterinburg, Russia

## Conference program Sept. 26–28, Ekaterinburg

Please register on the link <https://leader-id.ru/events/452721>

28 Sept.		
11:00	<b>Information and Communication Technologies in Industry. Smart Grids &amp; Microgrids</b>	
11:00	Fedor Nepsha	Open Data Platform as a Source of Data-Driven Innovations in the Energy Sector (ID 2641)
11:15	Nikita Sergeev	Prediction the Power Generated Low-Power Wind Turbine Based on Multilayer Perceptron (ID 2745)
11:30	Vyacheslav Voronin	Analysis of the Efficiency of Electric Vehicle Charging Control in Urban Distribution Networks (ID 2836)
11:45	Vyacheslav Voronin	Power Consumption Management at Coal Mining Enterprises: Demand Response and Tariff-based Mechanisms (ID 2762)
12:00	Andrey Bramm	Effects of the Hyperparameters of the Firefly Optimization Algorithm on the Renewable Energy Sources Power Plants' Optimal Placement Problem Results (ID 2699)
12:15	Artem Tronin	Application of Optimized Wavelet Transformation for Analysis of Digital Substation Electrical Equipment Operating Modes (ID 2746)
12:30	Igor Grekhnev	Comparative Analysis of Machine Learning Algorithms and Evaluation of the Effectiveness of Temperature Forecast and Day of the Week in Predicting Electricity Consumption (ID 2717)
12:45 (online)	Tuvshin Osgonbaatar	Ensemble Machine Learning Model for Day Ahead Solar Power Forecasting (ID 2749)
13:00	<b>Lunch</b>	
14:00	<b>Power Equipment, Electrical Machines and Drives</b>	
14:00	Danil Davydov	Conversion of a Spark-Ignition Gasoline Engine to Syngas: Assessment of Technical and Economic Indicators Based on Numerical Modeling (ID 2649)
14:15	Ilya Bezdenezhnykh	Advantages of Synchronous Reluctance Motors and Synchronous Motors with Permanent Magnets as Drive of Liquid Natural Gas Submerged Pumps for Process Loss Reduction (ID 2693)
14:30	Vladislav Popovtsev	Improvement of Voltage Distribution Uniformity Factor for Glass Suspension Insulator String (ID 3013)
14:45	Vladislav Popovtsev	Research of Alternative Arc Extinguishing and Insulating Gas Media to SF6 (ID 3015)
15:00	Evgeniy Shmakov	Reconstruction of Volumetric Force Density in Single-Sided Linear Induction Motors (ID 3010)
15:15	Victor Lytkin	Feasibility of Producing Magnetic Wedges of Figured Shape for AC Electric Motors (ID 2698)
15:30 (online)	Nadzeya Papkova	Comparative Analysis of Active Power Losses per Corona Using the Example of 330 kV Overhead Lines (ID 2666)
15:45 (online)	Yaroslav Potachits	Determination of the Place of Destruction of Electrical Apparatus Under Dynamic Influence of Short-Circuit Currents (ID 2723)
16:00	Konstantin Suslov	Study of a Self-tuning Predictive Voltage and Frequency Controller on a Cyber-physical Model of a Distributed Generation Plant (ID 2694)
16:15	<b>THE CLOSING CEREMONY</b>	
17:00	<b>GALA DINNER</b>	