



Blaze Avenue

Empowering Business Ideas

POWER AND DISTRIBUTION
TRANSFORMERS

13th-14th NOVEMBER

PULLMAN HOTEL KUCHING, SARAWAK, MALAYSIA

2 D A Y S

W O R K S H O P

Puica Nitu

COURSE INSTRUCTOR

Limited Seats Only

Past Clients

- Kenya Power & Lighting Co. Ltd - Kenya
- PT Bekasi Power - Indonesia
- PT Perusahaan Listrik Negara (PLN) - Indonesia
- Sarawak Energy Berhad - Malaysia
- Hong Kong Electric Company - Hong Kong
- National Electric Power Regulatory Authority (NEPRA) - Pakistan
- Saudi Electricity Company - Saudi Arabia
- National Grid Corporation Philippines (NGCP) - Phillipines
- Emirates SembCorp Water & Power Company - UAE
- Tenaga Nasional Berhad (TNB) - Malaysia
- DNV GL Private Limited - Singapore
- Ceylon Electricity Board (CEB) - Sri Lanka
- Sabah Electricity - Malaysia
- Lanka Electricity Company (Pvt) Ltd - Sri Lanka
- NamPower Corporation (Proprietary) Ltd - Namibia
- Kenya Generation (Kengen) - Kenya
- Transmission Company of Nigeria (TCN) - Nigeria
- Niger Delta Power Holding Company Limited (NDPHC) - Nigeria
- Metropolitan Electricity Authority (MEA) - Thailand
- Singapore Power (SP Group) - Singapore

Blaze Avenue's Power Industry Courses:

- Reliability Centered Maintenance
- Demand Side Management
- Energy Markets Strategic Planning
- Economic Dispatch and Power System Planning
- Power Systems Planning and Operations
- Energy Trading and Energy Markets
- Energy Markets, Risk Assessment and Financial Management
- Reliability and Risk Applied to Physical Assets
- Economic Dispatch & Grid stability Constraints in Power Plants
- Power System State Estimation
- Communication Interfaces in Smart Grid
- The Role of IEC 61850 in Smart Grid
- Distributed Generation
- Distributed Wind Generation and its Impacts on the Network
- Modelling Analysis for Modern Electrical Systems
- Power Systems Economic Operation
- Reactive Power and Voltage Control on Electrical Networks
- Real Power & Control on Power System
- Substation Automation Systems
- Distribution Automation
- Power System Operations
- Power System Reliability
- Power System Restoration
- Methodologies & Implementation Strategies
- Vulnerability of Power Grids

Get in touch:

COURSE OVERVIEW

Power and distribution transformers are essential devices in the distribution and transmission of electricity. Transformer ratings can vary from distribution transformers of a few kVA up to very large power transformers of 1000 MVA or larger. The main focus of the course is on distribution transformers. For completeness, the power transformers are also discussed.

The introduction of power electronics in the design and operation of distribution equipment including transformers allows a more stable operation of the network. The course explains the design of distribution transformers with electronics that performs power quality functions through modern power electronic converters. Transformers can have operating voltages up to several hundreds of kilovolts. They represent a major asset of the power utility and any industrial plant. Transformer failures not only have large economic consequences but also present safety hazards.

The design and operation of any transformer must fulfil certain requirements in order to withstand the electric, thermal and mechanical stresses during its service life. This course focuses on the tests and maintenance strategies for transformers. The course dedicates its last section to outage data collection and Reliability Centered Maintenance.

WHO SHOULD ATTEND

- Engineers and Technicians from distribution companies, transmission companies and generating plants
- Technical Management Professionals and Department Leaders
- Engineering Professionals from companies manufacturing and operating power and/or distribution transformers
- Engineers and Technical Personnel in power utilities, petrochemical plants, service professionals
- of large infrastructure projects.

TAKE AWAYS

Upon completion of this course, the trainees will become aware and gain understanding of the following operational aspects:

1. Electronics applied to Transmission and Distribution Systems
2. Design guidelines and different types
3. Maintenance and commissioning procedures
4. Troubleshooting checklists and failure analysis techniques
5. Diagnostics and monitoring technologies
6. Practical solutions for specifying, operating and maintaining power transformers
7. Comprehensive understanding of principles, selection, testing and commissioning, protection,
8. maintenance and troubleshooting of distribution and power transformers
9. Safety procedures for optimal transformer operation and equipment protection
10. Testing and maintenance of transformers



COURSE INSTRUCTOR

Puica Nitu



Puica Nitu is an energy leader who has a passion for bringing people together and delivering above expectations. Puica has a tremendous experience in the electrical utility space: carried large power systems studies, derived system reliability criteria, was involved in the risk management of energy markets from frontmidback office.

Puica worked in Power System Planning and Operations, Hydroelectric, Energy Markets and Information Technology. Puica started her career in power systems designing large real time applications, and on a NASA satellite for environmental applications.

Puica holds a Masters in Science with major in Power Systems and Economics from the Polytechnic University of Bucharest, Romania. Her Masters Thesis formed the core of her first co authored book on the Reliability and Security of Nuclear Power Plants.

Puica co authored the first financial engineering course offered to the Power Engineering Society and to Power companies in Japan, South Africa, Romania and Portugal. EDP Portugal, adopted this seminar as mandatory training in RISK and asked Puica give a key note address to their executive team.

Puica Nitu is a Utility Executive with extensive experience in all aspects of power systems operation from fundamentals to energy trading, enterprise risk and regulatory oversight. Over 25 years with Ontario Power Generation (Revenue \$1.2 Billion) Puica Nitu is a reviewer of NERC and NPCC standards for the Ontario electricity market, NSERC (Natural Sciences and Engineering Research Council of Canada), IEEE and Elsevier. Puica also a Key advisor on large investment funds in infrastructure projects and Co founder of the Canadian Institute World Energy System (1994).

PROFESSIONAL EXPERIENCE

Principal Consultant, Utilities & Financial Sector	2014- present
APEX Global Lecturer on power systems subject areas	2014
Rolta, Rolta Americas Energy Specialist	2014
Heenan Blackie Energy Advisor on large investments in infrastructure	2014

ONTARIO POWER GENERATION 10,001+ employees; Annual revenue: \$1.2B 1987 2013

Telecom/ Information Technology, Program Manager (2007 2013)

Manage up to \$10+M portfolio of capital projects for Nuclear, Finance, Human Resources, Hydroelectric and Fossil business groups. Lead team of 10+ contributors. Employee Recognition Award, 2008.

Present Business Cases for large projects. Leverage resources among vendors. Work with Supply Chain, Legal, and Labor Relations to structure complex contracts. Identify risks and business value. Energy Markets, Senior Advisor (2000 2006)

Member of core team on Risk Management applied to the Ontario's electricity market to implement financial systems and quantify the associated risks as applied to electricity.

Developed Asset Management strategy to OPG executives to improve productivity and equipment reliability. Engineered processes for Energy Markets. Developed prototype Service Agreement.

OPG's representative in joint venture with ENECO/Royal Dutch Shell to extend to OPG.

Led multidisciplinary team to review Energy Market's policy on Generation Reserve. Integrated/ benchmarked generation indicators. Defended case to OPG's Risk Oversight Committee.

ONTARIO HYDRO 30,001+ employees 1987 - 2005

Hydroelectric, Senior Engineer(1994 2005)

Designed and managed complex projects for an integrated Reliability Information System, delivering cost savings of \$3.5M. Project nominated for Corporate Awards.

Power Systems Operations / Power System Planning, Senior Engineer (1987 1994)

Conducted large system studies; led IEEE task force that derived operations and planning reliability criteria for NERC. Provided input into NPCC criteria. Led revision of the Reliability of the Ontario Bulk Electricity System (1993), generating savings of \$10M. Presented methodology to the Canadian Electrical Association resulting in benchmarking across Canadian utilities. Answered interrogatories for the Ontario Energy Board and Environmental Assessment hearings resulting in fair rate structures.

CAE (CANADIAN ASTRONAUTICS ELECTRONICS), Montreal 1986

-Implemented first Real/Time Optimal Power Flow for PSE&G Control Centre, New Jersey.

AIT CORP, OTTAWA (NASA PROGRAM: WINDII PROJECT / NRC CANADA) 1985

