Blaze Avenue

Empowering Business Ideas

MODERN POWER SYSTEM

21st- 23rd November 2017

Sheraton Mustika Yogyakarta, Indonesia

3 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:

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INTRODUCTION

This course introduces the building blocks for the modern power systems. The electric power system is undergoing changes due to short-, mid-, and long term business objectives. In the same time, it has become increasingly necessary to leverage the changes brought by the new technologies in renewable resources and power electronics and balance these with the ever changing consumer expectations.
This course discusses the integration of new technologies within the power systems in light of regulatory changes and the penetration of renewable energy resources facilitated by the operating flexibility brought by power electronics.

TAKE AWAYS:

The participants will get exposure to all the aspects of the stable and reliable operation of the power system and gain understanding of system operation in a deregulated power market.

1. The physical phenomena of the main components of the power systems.
2. The key aspects of large power system components such as rotating machines and transformers and offers a review of the transmission and the generation system:

a. The operating characteristics of rotating machines
b. The effect of magnetic flux in transformers

3. Renewable energy generation and the integration of renewable energy into the modern power grid is discussed from the perspective of power system operation and financial cost structures.
4. Design and operation consideration of the Transmission system
5. The power system in steady state with a review of the Load Flow
6. Conversion of primary resources into electricity and the basic elements of construction and operation of:

a. Fossil generating Plants
b. Hydroelectric Generating Plants
c. Nuclear Generating Plants

7. Optimum cost strategies
8. Fundamental aspects of power system stability.
9. Power system operation, operating requirements imbedded in a deregulated energy market
10. Policies and methodologies to maintain the reliability and adequacy of the power system.

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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