

RENEWABLE RESOURCES: FROM PLANNING TO OPERATIONS

3 D A Y S W O R K S H O P

11th - 13th September 2017
Marriott Hotel Manila, Philippines



Blaze Avenue
Empowering Business Ideas

PUICA NITU

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COURSE INSTRUCTOR

Our Past Clients :

- Kenya Power & Lighting Co. Ltd
- PT PBJV
- PT Bekasi Power
- PT Perusahaan Listrik Negara (PLN)
- Sarawak Energy Berhad
- Hong Kong Electric Company
- National Electric Power Regulatory Authority - NEPRA
- Saudi Electricity Company
- National Grid Cooperation Philippines- NGCP
- PT IPMOMI
- Emirates SembCorp Water & Power Company
- Tenaga Nasional Berhad- TNB
- National University, Singapore
- DNV GL Private Limited
- Ceylon Electricity Board
- Sabah Electricity

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

INTRODUCTION

This course will assist managers and power system engineers in planning and operating a power system with increasing penetration of renewable resources. The course will discuss the planning and the operating requirements for an integrated, reliable and stable power system. The unique characteristics of renewable resources are discussed from a local, consumer centric and from a system perspective. The planning and the operating requirements of a system with increased penetration of intermittent resources are discussed. The financial implications of managing a system wind and solar power are discussed along with case studies.

The reliability criteria are examined in detail along with the revised requirements for generation reserve margins. The commercial terms of solar or wind contracts are examined from both a public and private investment perspective. Examples of

TAKE AWAYS

The course will provide a good understanding in the following areas:

1. Control and operation of Renewable resources
2. The technical characteristics of wind and solar resources
3. How Renewables integrate with the Transmission and Distribution networks
4. Financial structures of solar or wind contracts, and
5. The lifecycle of solar and wind projects from approval phase to connection to the grid
6. Examples and challenges of Renewable generation in China, Europe and North America
7. Smart Grid and how is changing the resiliency Distribution networks
8. Wide-scale adoption of consumer owned renewable generation

Get in touch

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. She 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

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|----------------------------------------------------------------------|----------------|
| Principal Consultant, Utilities & Financial Sector | 2014 - present |
| APEX Global Lecturer on power systems subject areas | 2014 |
| Rollta, Rollta 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

ONTARIO HYDRO 30,001+ employees

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

Get in touch