Understanding the Dynamics, Drivers and Challenges of the Power Market Reform in Nigeria

Understand the power value chain and the key challenges to delivering improved electricity services in post reform West Africa

Attend this course to:

- **Appreciate** the integrated nature in operating unbundled ESI and your role in the value chain
- **Grasp** the key industry drivers in Nigeria to protect your bottom line
- **Examine** the regulatory challenges facing your business to effectively manage your risks
- **Review** the key terms of the industry contracts to ensure fulfilment
- **Appreciate** the dynamics of a Wholesale Electricity Market (WEM), how they are structured and how it will work in Nigeria
- **Analyze** best practices in sourcing funding to secure long term and valuable partnerships
- **Apply** basic financial modelling techniques and understand how this information will help you navigate your business
- **Evaluate** the revenue cycle to manage the key risks and challenges
- **Understand** how to build a committed workforce that will deliver your business objectives

16-19 September 2014, Lagos
22-25 September 2014, Abuja

Comment from a previous Clarion Training course:

“I was impressed by the deep analysis of the course materials”

Virgilijus Petuska, CFO, UAB Minijos nafta
(Attended Financing Power Projects course)

In association with:

bookings@clariontraining.com  |  +44 (0) 20 7384 8186  |  www.clariontraining.com
Understanding the Dynamics, Drivers and Challenges of the Power Market Reform in Nigeria

Why you should attend:

The Nigerian power industry has undergone major reform over the last three years, especially within the last 12 months. It is now time to deliver on the commitments to the consumers and the investors. In order to achieve this, managers need to ensure that the people driving change within your organisation have the skills and understanding to deliver. Aliko Dangote even underlined this at the World Economic Forum in Davos in January 2014, saying ‘that despite the epileptic power situation in Nigeria, the economy still grows at over six per cent’. That underlines the potency of the Nigerian economy but there is a limit to the growth rate if power availability does not improve significantly.

Clarion Training, an internationally well-known Energy Training Organisation, and CPCS, the Transaction Advisor on both the PHCN and NDPHC privatisation transactions, have partnered to develop this 4-day course that provides a comprehensive understanding of the Power Industry Value Chain, highlights where the opportunities lie and cautions where the risks have to be managed.

Who should attend:

- Utility personnel at all levels as a comprehensive introductory course for people who want to develop a breadth of knowledge of the power sector
- Managers and technical personnel from the newly unbundled PHCN successor companies and existing IPPs, investors developing new IPPs, and large power users
- Market participants who wish to gain a clear understanding of where and how their products and services can benefit their clients
- Managers from companies involved in financing the power sector, such as banks and infrastructure financing companies, and developers and contractors, such as EPC contractors

Group booking discounts:

Group bookings of 2 - 4 participants receive a 10% discount

Group bookings of 5+ participants can benefit from even better rates.

Please contact us directly for further details: contactus@clariontraining.com

10% discount is available on all bookings up to 6 weeks before the course date.

In-house Training Solutions

Tailored programmes focused on YOUR business challenges

Materials customised around your documentation, people and processes

Targeted at your team and delivered at a location of your choice

contactus@clariontraining.com

+44 (0) 20 7384 8186 www.clariontraining.com

Book early and SAVE 10% – 3 easy ways to book

bookings@clariontraining.com +44 (0) 20 7384 8186 www.clariontraining.com
Understanding the Dynamics, Drivers and Challenges of the Power Market Reform in Nigeria

Key information:

Price $3500; In certain locations VAT will be applicable but can be claimed back. Please contact our accounts department with any queries.

Course materials Each participant will be given a complete set of course materials to reference throughout the course and to keep after the course has finished.

Accommodation Participants are responsible for arranging their own accommodation. Where possible Clarion Training has special rates with certain hotels, please contact us for further information.

Venue The course will take place in an exclusive location. Participants will be provided with lunch and refreshments on each day.

Date & Location

16-19 September 2014, Lagos
22-25 September 2014, Abuja

Delivered by:

Clarion Training is a provider of industry relevant practical learning and knowledge development.

Leveraging knowledge from across the business, we produce courses with a real enthusiasm and understanding for professional and personal development. We are committed to delivering interactive and sector specific training solutions.

This programme combines the strength of market knowledge in CPCS with the extensive experience of delivering high quality learning from Clarion Training. We are committed to provide interactive and sector specific training with learning outcomes that are directly transferable to the business challenges faced by you.

Supported by:

CPCS is an international consulting firm providing advisory services to public and private sector clients in key infrastructure sectors. At the forefront of energy sector development and reform, CPCS provides clients with substantial experience in identifying, planning, and implementing strategies for energy infrastructure development, with the objective of expanding and improving services. CPCS leverages the expertise of our practice areas to provide the following services to clients:

- Transaction advisory services for Governments
- Bid management services for Investors
- Feasibility Studies
- Business Plans

CPCS Solutions for growing economies

www.cpcs.ca

www.clariontraining.com

Book early and SAVE 10% – 3 easy ways to book
bookings@clariontraining.com  +44 (0) 20 7384 8186  www.clariontraining.com
Understanding the Dynamics, Drivers and Challenges of the Power Market Reform in Nigeria

Expert Facilitators

Mr Seye Bassir has spent nearly 15 years working with project sponsors, helping to secure financing for large complex infrastructure projects. He started his Investment Banking career with the Wall Street firm, Nova Capital Partners. Seye was a member of the founding management team of Aterios Capital (now UniCapital PLC), serving as Head of Project Finance and later as Head of Investment Banking. Since 2013 he has worked as a power project developer, creating infrastructure assets with private and public counterparties. Seye’s recent experience with power projects in Nigeria has involved advising bidders for recently privatised PHCN successor companies and a bidder for one of the NIPPs. Seye is currently developing 2 embedded generation plants, one in Lagos with a Federal government entity as the counterparty, and another with one of the newly privatised distribution companies as counterparty.

Dr. Cezley Sampson is the Head of CPCS Energy Practice with extensive practical experience as a power economist and institutional and regulatory specialist in the power sector and in international infrastructure consulting. He holds a PhD in Government from the University of the West Indies, specialising in Electricity Utility Economics. He has been consulting in the electricity sector since 1991 and was responsible for establishing one of the first multi-sector regulatory agencies to regulate both the electricity and telecommunications sector in a developing country in Jamaica in 1995, and in the introduction of one of the first sets of IPPs into the electricity sector in Jamaica, also one of the first of its kind for a developing country. In the case of Nigeria he has been involved in the ESI reforms since 2007. More specifically he has been involved as a lead member of the CPCS Transaction Advisory Team advising the Government of Nigeria on the electricity sector reform and NDPHC in the divestiture of the NIPP generation, transmission, and distribution and gas network assets. He is currently Team Leader on the Iraq Distribution Sector Reform project, was Team Leader on the Kenya Power Options Reform project and Team Leader for the development of Consumer Subsidy mechanism for NERC.

Mr. Chiedu Ugbo has over 23 years of experience as a legal practitioner in Nigeria. He is particularly well-versed in energy and infrastructure law with extensive experience in power project documentation, electric power reforms and privatisation, Public/Private Partnerships (PPP), and Infrastructure Regulations and commercial litigation. He attended University of Lagos, Lagos (for his LL.B. and LLM. Degrees) and was admitted to Nigerian Bar in 1991. He also holds a Diploma in International Legal Practice from College of Law of England and Wales, UK; a Certificate in Electricity Industry Restructuring from Canadian Energy Research Institute, Calgary, Canada and a professional certification as Certified Regulation Specialist, from Institute for Public-Private Partnerships, Washington D.C., USA in conjunction with WEDC, Loughborough University UK. He is a member of the Chartered Institute of Arbitrators, UK and an IBA Fellow. For the past 10 years, Mr. Ugbo has been providing legal advisory services to the Government of Nigeria on electricity industry reform and privatisation. Mr. Ugbo’s energy consultancy experience includes privatisation of 20 Power Holding Company of Nigeria (PHCN) successor companies (including Egbin, Olorunsogo and Omotosho successor companies) and for the corporate restructuring of Niger Delta Power Holding Company Ltd and the privatisation of 10 NIPP power plant companies. Since 2013, he has been providing legal support to Nigerian Bulk Electricity Trading Plc (NBET) on electric power contracts. He has been working with CPCS as a Legal Consultant on infrastructure projects in Nigeria (and a few other countries in Africa) for the past seven years and especially in developing the transaction documents. Mr. Ugbo is a partner at Benchmac & Ince, a law firm with offices in Victoria Island, Lagos and Abuja.

Engr. Uzoma D. Achinanya is the MD/CEO of Emtech Energy Services Ltd. He graduated from the University of Ife, Ile-Ife in 1980, with a B.Sc in Electrical/Electronic Engineering. He also holds a M.Sc. in Economics, as well as an MBA degree, both from the Enugu State University of Technology. After one year National Service with the Borno State Water Utility, he joined the services of the Nigerian Electricity Industry in 1981 and has served the industry for 31 years in many capacities. He was appointed the Senior Special Assistant to the President of the Federal Republic of Nigeria on Power in 2010 and during this period, he served in the Presidential Task Force on Power as the Senior Performance Monitor (Electricity Distribution & Market Operations). In 2012, Engr. Achinanya set up the Emtech Energy...
Services Ltd, a multi-disciplinary consultancy and service firm specialising in electric utility management and infrastructural development. He has served in technical positions in generation, distribution and transmission at PHCN in Nigeria. He was also involved in the power sector reforms and in the unbundling of the transmission sector and the establishment of TCN. In 2010 he was appointed Executive Director, Market Operation at TCN. He recently carried out a consultancy assignment covering metering, revenue cycle management and network designs, development and operations, regulatory support to the electric power companies, utility business analysis, power sector reform, and electricity market operations and settlement.

**Barrister Eyo Olagoke Ekpo** is a law graduate and commenced legal practice in Nigeria in 1988. He became a founding legal partner of Coram (Solicitors) in 1995 and in 2001 joined the Bureau of Public Enterprise as a Team Leader in Power Reform and was involved in the development of the Nigerian Power Reform Agenda. From BPE he was appointed Attorney General and Commissioner of Justice in Cross Rivers State. In 2010 was appointed Commissioner for Market and Competition at the Nigerian Regulatory Commission (NERC), a post he still holds.

**Mrs. Enife Atobiloye** holds a Master’s degree in Organizational Performance from the Cranfield School of Management and a Certificate of Competence from the British Psychological Society for occupational Testing. She also holds a Bachelor’s degree in English from Bendel State University, Ekpoma. Enife’s is a distinguished HR professional with a passion for change and Organisational development. With over 25 years of experience in Human Resources, Enife began her career with Emerald holdings and moved on to Landmark Graphics (a Halliburton Company) in 1997 where she became HR representative for Sub-Saharan Africa and was a Landmark World Wide Employee of the year nominee in 1999. After 5 years in Halliburton, Enife embarked on 9 productive years as the Managing Consultant to build and establish Kimberly Ryan, a major HR solutions Firm in the region. After that, she set up HUMAN LEADERSHIP RESOURCES Limited with the objective of maximising the opportunities between Employers & Employees as a means of providing the synergy required for accomplishing organizational goals. In the course of her work, Enife has designed, developed and implemented various HR solutions for clients ranging from Indigenous to Multinational companies as well as non-profit and Government sectors. Projects include workforce manning and rationalisation, resolving systemic Labour Relations and Talent Management issues related with ‘Ghost workers’, with major implications on the Employee & Payroll.

**Mr. Dare Okewusi** has nearly 2 decades of hands-on experience in Energy and Power technology management. He was part of the team that delivered the first private power plant owned by AES (formerly ENRON) in Nigeria. Dare holds a degree in electrical/electronic engineering from University of Ibadan and a master’s in business administration specializing in technology management with OJT in Sweden and South Africa. He holds a diploma from the prestigious Huthwaite international on revenue management and improvement. He is trained on eliminating technical and commercial losses in power distribution by Phaseun France. He worked briefly with NEPA (PHCN) distribution sector. He has consulted with top firms like Eltek, Grintek, Airtel, MTN, Siemens power with detailed works which include analysis, dimensioning, procurement, industry KPI, revenue management of power, energy and communications solutions. He is trained in revenue management and leakages with Turbo-Tronics Services Texas. He is presently consulting for American firms of Aclara tech and Hexagon CS developing smart grid and smart metering.
# Understanding the Dynamics, Drivers and Challenges of the Power Market Reform in Nigeria

## FULL AGENDA

### DAY ONE: Understanding the Power Value Chain

*Registration, welcome and objectives setting*

### MODULE 1: FUNDAMENTALS OF THE POWER SYSTEM – THE ELECTRICITY VALUE CHAIN

- Power Economics Fundamentals
- Electricity Sector Reform Models
- How has the structure evolved in Nigeria
- Structure of the Industry – Key Players
- The Value Chain (Fuel supply, generation, transmission, distribution and retailing) Electricity Flows and Financial Flows
- Deregulation and what it means for investors
- Changes necessary under a private sector driven industry - The importance of working together as an industry to move it forward
- Major problems with West African Electricity system (Nigerian problems highlighted)
- Nigeria Transitional Electricity Market Problems,
- Problems with Distribution/Retail Supply in Nigeria
- The Delhi Electricity Industry Reform Case Study
- Industry long term trends

### MODULE 2: INDUSTRY DRIVERS IN NIGERIA and SSA COUNTRIES

- Why Nigeria and SSA countries have been reforming their Electricity Industries
- The Challenge of the Demand/Supply Gap
- Demand Forecasting: how to assess Demand and especially Suppressed Demand?
- How much electricity does Nigeria need?
- Planning and regulating for Capacity Addition in the Single/Principal Buyer Market
- IPP in the Nigeria Electricity Market
- KPIs in Generation
- Fuel Choices
- Technology Drivers of Electricity
- Renewable Energy
- Where are the opportunities in Nigeria and SSA Countries?

### DAY TWO: The Regulatory Environment

### MODULE 3: TACKLING REGULATORY ISSUES

- The Nigerian Electricity Regulatory Structure: Role of the Nigerian Electricity Regulatory Commission
- The MYTO 2 Tariff going forward
- Load Flow and Capacity forecasting and problems
- How will the regulator handle capacity addition?
- Meeting Universal Services Obligation – Tariff for the Pro-Poor

### MODULE 4: The CONTRACTUAL FRAMEWORK

- The Industry Licences
- Power Purchase Agreements and the Vesting Contracts
- Pricing and Payment Mechanism
- Relationship of the PPA Price Mechanism and the MYTO Tariff
- Price Adjustments
- Force Majeure and Contract Termination Issues (Put Call Options Agreement)
- Gas Supply and Gas Transportation Agreements
- Transmission Agreements: Transmission Use of Service (TUoS)
- Generation and Distribution Grid Connection and Ancillary Services Agreements

### MODULE 5: THE WHOLESALE ELECTRICITY MARKET AND THE TRANSMISSION SYSTEM

- Types of Wholesale Electricity Markets
- Nigeria Wholesale Electricity Market
- TCN: Transmission Services Provider’s Role
- Transmission KPIs
- Financing the Transmission System
- The Role of Bulk Electricity Trader (NBET), The Role of the Systems Operator
- The Grid Code, Distribution and Metering Code

---

**Book early and SAVE 10% – 3 easy ways to book**

bookings@clariontraining.com  +44 (0) 20 7384 8186  [www.clariontraining.com](http://www.clariontraining.com)
Understanding the Dynamics, Drivers and Challenges of the Power Market Reform in Nigeria

DAY THREE: Financing Projects in Nigeria

MODULE 7: FINANCING OPTIONS
- How to value energy assets and therefore how to finance energy projects
- Project Appraisal and Capital Investment Analysis
- Composing a Bankable Feasibility Study
- How to fully document your Business Plan
- Project Finance and Financing in PPP in the Energy Sector
- Assessing Funding Options for the Energy Financing: Debt vs Equity
- Working Capital: Facilities Available; Expansion Costs
- Risk Analysis of Capital Investment and Management
- What Risks you should be aware of to guard your bottom line?
- Profit Drivers
- Financial Key Performance Indicators
- Introduction to Financial Modelling in Excel for the Power Sector
- Case studies

DAY FOUR: Operational Management

MODULE 8: REVENUE CYCLE MANAGEMENT
- Explanation of the cycle
- How holding on to money prevents the cycle working
- Breakdown of what you need to know to make a profitable venture
- Revenue leakages
- Tackling Distribution losses: Technical, Commercial and Payment Losses
- How to collect bills from all the customers
- How can you estimate a bill with no meters?
- Procurement fraud and employing the right personnel to tell you what should be in stock to avoid losses
- Electricity theft/vandalism: suggestions to reduce this and dealing with this to reduce loss of revenue
- Distribution Key Performance Indicator (KPIs)
- New technologies to address systems loss reduction

Case study review
Wrap-up session

MODULE 9: CAPACITY BUILDING
- The industry’s lack of talent/ageing talent
- Manpower requirement
- Training for newcomers and the importance of long term investment
- Skill Training
- Management Training
- How much bigger is the workforce going to need to be to cater for the increased amount of power?
- What new equipment should you invest in?
- What does the foreign investor expect?
- How to manage your workers to keep them motivated
- Role of NAPTIN (Dept. for training in power sector)

FOUR - DAY COURSE SCHEDULE:

DAY ONE Registration on first day 9.00am | DAY ONE, TWO & THREE: 9.30 am to 5pm | DAY FOUR 9am to 3.30pm | Each day has two 15 minute refreshment breaks and one hour for lunch

In-House Training
This programme can be tailored and developed to focus on your specific business challenges
contactus@clariontraining.com +44 (0) 20 7384 8186

Book early and SAVE 10% – 3 easy ways to book
bookings@clariontraining.com +44 (0) 20 7384 8186 www.clariontraining.com
Understanding the Dynamics, Drivers and Challenges of the Power Market Reform in Nigeria

**Course Booking form**

<table>
<thead>
<tr>
<th>COURSE INFORMATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Date:</strong></td>
<td>Location:</td>
</tr>
<tr>
<td><strong>DELEGATE 1</strong></td>
<td>Code:</td>
</tr>
<tr>
<td>Name:</td>
<td></td>
</tr>
<tr>
<td>Job title:</td>
<td>Email:</td>
</tr>
<tr>
<td>Company:</td>
<td>Phone:</td>
</tr>
<tr>
<td>Address:</td>
<td></td>
</tr>
</tbody>
</table>

| Postcode: | Country: |  |

| **DELEGATE 2** |  |
| Name: |  |
| Job title: | Email: |
| Company: | Phone: |
| Address: |  |

| Postcode: | Country: |  |

| INVOICE/BOOKING CONTACT (IF DIFFERENT FROM ABOVE) |  |
| Name: |  |
| Job title: | Email: |
| Company: | Phone: |
| Address: |  |

| Postcode: | Country: |  |

<table>
<thead>
<tr>
<th><strong>PAYMENT DETAILS</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(please note that payment must be made in advance of the event clarion training reserve the right to refuse admission if payment has not been received – see attached for full terms and conditions)</strong></td>
<td></td>
</tr>
<tr>
<td>Total fee (excl VAT): $3500; EARLY BOOKING: I wish to pay $3150 - Available on all bookings placed 6 weeks or more before the start date (automatically applied to online bookings)</td>
<td></td>
</tr>
<tr>
<td>I would like to pay by bank transfer (BACS)</td>
<td>PO No:</td>
</tr>
<tr>
<td>I would like to pay by credit card</td>
<td></td>
</tr>
<tr>
<td><strong>2% handling fee will be applied to all credit card transactions.</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Please charge my</th>
<th>Mastercard</th>
<th>Visa</th>
</tr>
</thead>
</table>

| Card no: |  |
| Expiry: | Sec Code: |
| Date: |  |

| Cardholder name: |  |

**Signature:**

Many thanks for your booking. You will receive confirmation via email in 72 hours. In the meantime please don’t hesitate to contactus@clariontraining.com if you have any queries.

We look forward to welcoming you on the course.

*BY SIGNING THIS FORM YOU ACCEPT THE FOLLOWING TERMS AND CONDITIONS*

**PAYMENT** of the full delegate fee is due 14 days after the invoice date, or immediately, if the registration is made within one month of the event. Our invoice will show your registration fee in British pounds or US dollars. Our full bank account details are on the invoice. Please note your booking is valid only after full payment is received. We recommend you check with your finance department that payment has been made before travelling to the course. All ‘Early Bird’ and other discounts require full payment at the time of registration and before any cut-off date in order to receive the discount. Should payment not be made, a subsequent charge will be applied to bring the registration fee up to the full rate. CANCELLATION/s made one month prior to the start of the conference will be refunded less a 15% administrative charge. Refunds will be made after the course. Cancellations made within one month of the start date of the conference will receive no refund. TRANSFERS made up to one month before the date of the course will be charged a 10% administrative fee on payment of the difference if transferring to a higher value event or course. A maximum of one transfer is allowed; after that transfer no cancellations or further transfers can be accepted and the full fee will be charged. No transfers can be accepted one month or less before the course and the full fee will be charged. Substitute participants may be named at any time. PLEASE NOTE Clarion Training reserves the right to change the content and timing of the programme, the speakers, the date and venue due to reasons beyond their control. If in the unlikely event that the course is cancelled Clarion Training will refund the full amount and disclaim any further liability. VAT All prices are exclusive of VAT, VAT will be charged at the rate applicable to location. FORCE MAJEURE please note that in case of force majeure Clarion Training is relieved of all obligations; force majeure includes any circumstances beyond the will of Clarion Training, that impedes permanent or temporary compliance with the obligations, such as ‘acts of God’ including war, danger of war, government regulations, revolts, strikes, transportation difficulties, fire or severe disturbances affecting the conference organisation or its suppliers. MULTIPLE COURSE AND GROUP BOOKING OFFERS: Are at the sole discretion of Clarion Training and may not be used in conjunction with any other offers. REGISTRATION FEE The registration fee covers attendance at all sessions, refreshments, lunches, and documentation containing the presentations. Please note it may be necessary to alter the content or timing of the programme or its speakers. LANGUAGE The course will be presented in English. CUSTOMER SERVICES For questions concerning your registration, attendance, visa support and invoice payments, please contact our Customer Services department, Tel: +44 (0)20 7384 8186. DATA PROTECTION Clarion events are committed to protect your personal information which is processed in accordance with our privacy policy which can be found at www.clarionevents.com Clarion events would like to keep you informed about our events and services. Please tick this box if you do not wish to hear about offers from our event marketing partners. If you do not wish to receive information from selected third parties about their products/services and special offers by email, please tick this box.