NIGERIAN POWER SECTOR REFORMS AND PRIVATISATION

By

Bolanle Onagoruwa

Director General, Bureau of Public Enterprises

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Outline

• Introduction
• FGN Power Reform Agenda
• Bulk Trader’s Role in the reform
• Milestones Achieved
• Privatization Strategy
• Critical Success Factors
• Challenges of the Power Sector Reform
• Transaction Update
• Conclusion
Introduction

At the onset of the democratically elected civilian administration in 1999, the Nigerian electric power sector had reached, perhaps, the lowest point in its 100 year history:

• Of the 79 generation units in the country, only 19 units were operational. Average daily generation was 1,750 MW.
• No new electric power infrastructure was built between 1989-1999. The newest plant was completed in 1990 and the last transmission line built in 1987.
• An estimated 90 million people were without access to grid electricity.
• Accurate and reliable estimates of industry losses were unavailable, but were believed to be in excess of 50%.
Geography of Economic Activity
## Nigeria on the World Stage

<table>
<thead>
<tr>
<th>Country *</th>
<th>Generation Capacity (GW)</th>
<th>Watts per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. Africa</td>
<td>40.498</td>
<td>826</td>
</tr>
<tr>
<td>Egypt</td>
<td>20.46</td>
<td>259</td>
</tr>
<tr>
<td><strong>Nigeria</strong></td>
<td>5.96</td>
<td><strong>40 (25 available)</strong></td>
</tr>
<tr>
<td>Ghana</td>
<td>1.49</td>
<td>62</td>
</tr>
<tr>
<td>USA</td>
<td>977.06</td>
<td>3,180</td>
</tr>
<tr>
<td>Germany</td>
<td>120.83</td>
<td>1,468</td>
</tr>
<tr>
<td>UK</td>
<td>80.42</td>
<td>1,316</td>
</tr>
<tr>
<td>Brazil</td>
<td>96.64</td>
<td>486</td>
</tr>
<tr>
<td>China</td>
<td>623.56</td>
<td>466</td>
</tr>
<tr>
<td>India</td>
<td>143.77</td>
<td>124</td>
</tr>
<tr>
<td>Indonesia</td>
<td>24.62</td>
<td>102</td>
</tr>
</tbody>
</table>

**Sources:**
- Energy Information Administration – [www.eia.doe.gov](http://www.eia.doe.gov)
Effect of Power Outages

Figure 10. Power outages are a major tax on Africa’s economies

Economic cost of power outages in select countries

- Nigeria
- Malawi
- Uganda
- Kenya
- South Africa
- Tanzania
- Madagascar
- Benin
- Cabo Verde
- Senegal
- Cameroon
- Burkina Faso

Source: Derived from Eberhard and others (2009).
FG’s reform of power sector is predicated mainly on

- The need to reduce the cost of doing business in Nigeria in order to attract new investment through provision of quality and dependable power supply to the economy for industrial, commercial and socio-domestic activities;

- The growing demand for stable and reliable power requiring heavy investment in sector; and

- The desire and need to be up to global standards.

- The need for improvement in the efficiency of the distribution, generation and transmission network which is in an unacceptable state.

- The need to provide our people with the basic and affordable infrastructure to enable them create employment for themselves.
And our vision for its Achievement

Through promotion of:

- Competition in the generation segment of the industry;
- Good corporate governance and financial discipline;
- Social accountability and efficient use of resources; and
- A sustainable environment for meeting the need/demand.
Overriding and Short Term Goals

To fully implement the Electricity Power Sector Reform Act of 2005 and transform the ownership and control of the Nigerian Electricity Supply Industry (NESI)

✓ Short Term Goal (2011 – 2012)

“Our goal is to generate, transmit and distribute 5,000MW of stable and reliable electricity supply by January 2012 and 6,000MW by December 2012. To achieve this we will closely collaborate with the Ministry of Petroleum Resources to provide adequate gas supply and ensure that all stakeholders are motivated to contribute to the development of this strategic sector” Prof. Bart Nnaji, Minister of Power - 2011
Medium and Long Term Goals

✓ “2013 – 2015:

- To have set the Nigerian power sector on an irreversible path to self-sustaining mode - equivalent to Telecom sector operation today
- To have available power of up to 8,000MW by 2013 and 13,000MW by 2015

✓ 2016 – 2020:

- The Nigerian power market to have reached stability for willing-buyer, willing-seller mode
- To ensure that all aspects and stakeholders of the NESI are working together to deliver quality, reliable and efficient electricity to consumers at reasonable prices”

Prof. Bart Nnaji, Minister of Power - 2011
Design of The Nigerian Electricity Market

NIGERIA ADOPTED THE WHOLESALE COMPETITION MODEL AS ITS LONG RUN MARKET DESIGN

THE NIGERIAN ELECTRICITY MARKET IS EXPECTED TO EVOLVE THROUGH THE FOLLOWING STAGES:

- **PRE–TRANSITIONAL STAGE (Where we are today)**
  Characterized by inadequate and unreliable supply of electricity.

- **TRANSITIONAL STAGE (Where we about to move into)**
  - Demand remains larger than supply.
  - All trading is made through contracts.
  - Trading at this stage is “physical” through contracts.
  - Existing power will traded through vesting contracts
  - The conditions and prices of vesting contracts are not freely negotiated.
  - Transparent and competitive mechanisms for entering in the market (new PPAs).
MEDIUM TERM STAGE

- There is competition to enter in the market.
- There is competition in the market to supply the demand.
- Contracts can be negotiated freely and power can be traded like a commodity (financial contracts)
- There is a centralised merit order dispatch (power at least cost is dispatched first) by the System Operator, where Generators must submit the dispatch nomination (availability, constraints, costs / prices) to be used in the security constrained economic (least cost) dispatch.

LONG TERM STAGE

Similar to the medium term stage but characterized by more competition and greater freedom by eligible consumers to choose their suppliers
Bulk Trader’s Role in the Transitional Market

- Negotiate and enter into Power Purchase Agreements (PPAs) with privatised generation companies

- Assume PHCN obligations under existing PPAs with Independent Power Producers (IPPs) [outstanding liabilities to be transferred to Nigerian Electricity Liability Management Company (NELMCo) – power and possible gas portfolio]

- Negotiate and enter into PPAs with potential IPPs

- Negotiate and enter into Vesting Contracts with Distribution Companies
Transitional Market Trading Arrangement

- GenCo1
- GenCo2
- GenCo3
- Existing IPPs
- Existing IPPs
- Existing IPPs
- New IPPs
- GenCo4
- GenCo5
- GenCo6

- DisCo 1
- DisCo 2
- DisCo 3
- DisCo 4
- DisCo 5
- DisCo 6
- DisCo 7
- DisCo 8
- DisCo 9
- DisCo 10
- DisCo 11

POWER PURCHASE AGREEMENTS

BULK TRADER (NBET)

VESTING CONTRACTS

PPAs

Eligible Customers

Additional Capacity
Drive is to see commercial performance improvement so that each entity can adequately handle:
(1) Payment of invoices
(2) Salaries
(3) O+M and system improvement
(4) Reasonable return on investment (ROI)
Milestones Achieved

To Transform the Electric Power Sector FGN/ BPE took the following steps:

• The Electricity (Amendment) Decree 1998 and the NEPA (Amendment) Act 1998 were passed, terminating the monopoly status of NEPA and inviting private sector participation.

• The Electric Power Reform Implementation Committee (EPIC) was inaugurated by NCP and resulted in FEC approving the National Electric Power Policy in September 2001, which recommended:

  • Establishment of a sector regulator.
  • Privatization of the electric power sector
  • A market trading design and new rules, codes and processes
Milestones Achieved (Passage of Electric Power Sector Reform)

• In March 2005 the Federal legislature passed the Electric Power Sector Reform Act. The Act outlined the framework of the reform as follows:

• Unbundle the state owned power entity (NEPA) into generation, transmission and distribution segments;

• Provide for the transfer of assets, liabilities and staff of NEPA to PHCN and then to successor generation, transmission and distribution companies

• Create a competitive market for electricity services in Nigeria

• Set up an independent regulator
Milestones Achieved (Implementation of EPSR Act)

- NEPA was transformed into PHCN Plc as a holding company for the assets, liabilities, employees, rights and obligations of NEPA. The process of incorporation of PHCN was concluded on 5th May 2005;
- NCP by an Order published in a Federal Gazette gave 1st July 2005 as the initial transfer date of assets, liabilities and staff of NEPA to PHCN;
- NERC was inaugurated in October 2005 as the sector regulator.
Milestones Achieved (Implementation of EPSR Act)

• In November 2005, 18 New successor Companies comprising of 6 generation companies, 1 transmission company and 11 distribution companies were incorporated;

• On 1st July 2006, the assets, liabilities and staff of PHCN were transferred to the successor companies, thereby granting the latter greater operational autonomy
Milestones Achieved (Implementation of EPSR Act)

- Relevant market codes (Grid, Distribution, Performance, Metering etc) have been issued;
- Companies to carry on the role of bulk trading in transition and liability management have been incorporated as Nigeria Bulk Electricity Trading Co Plc and Nigerian Electricity Liability Management Company (NELMCO);
- The Market Rules to guide the operations in the electricity industry were approved in 2008.
Milestones Achieved (Implementation of EPSR Act)

• Rural Electrification policy developed by the Bureau was approved in 2006 and the Agency established but operations suspended in 2009;

• We are working with the Federal Ministry of Power to define the framework for the operations of the Rural Electrification Agency (REA) post-privatization;

• Liquidation Committee established on April 12, 2011 to wind down the operations of PHCN.
• Approved privatisation strategies for the Successor Companies and TCN:
  - Core investor sale
  - Asset sale
  - Management Contract
  - Concessions

DisCos → • Core Investor Sale (Sale of Equity)

TranSysCo → • Management Contract

GenCos → • Core Investor Sale (Thermal)
            • Concession (Hydro)
Core Investor Sale Method was approved for Distribution Companies (Discos) privatisation.

Bidding parameters will primarily be based on:

- the use of quality of service/efficiency parameters considered against investment proposals made by bidders aimed at reducing Aggregate Technical, Commercial and Collection (ATC&C) losses over an agreed time frame;

Other key Characteristics of the strategy:

- The strategy will be built around the Multi Year Tariff Order (MYTO);
- MYTO will stipulate the annual investment requirement, allowable operational expenditure, approved rate of return on equity and other allowable expenses for each distribution company;
• Emphasizes technical, financial and managerial competence of operators
• Loss reduction and investments, are the main parameters for assessing potential bidders;
• Has the shortest curve for reducing subsidies, guarantees and section payment delinquency
• The benefits for efficiency improvements will be shared between the operators and consumers through tariff reductions.
• To the extent that an operator fails to meet the regulatory targets in terms of efficiency improvements, any additional costs will have to be absorbed by the operator
• Investors have certainty on recovery of investments
• Government for the first time will begin to earn some return on its remaining equity interest in the Discos and can within a specified time cease financial support altogether.
Privatisation Cont’; Strategy For Transmission Company

• 5-Year Management Contract is proposed.

• Management Contractor to oversee the entire TCN operations including Market Operations, System Operations and Transmission System Provider.

• Management Contract will bring required expertise to transform TCN into a world class company.

• Skills necessary to manage System and Market Operations in a liberalized market to be provided by the Management Contractor.

• Technical loss reduction and network improvement criteria to be adopted in selecting the Management Contractor.

• Transmission network investment to be funded through bonds issued by TCN Plc.

• The bond issued by TCN Plc to be retired from revenues accruing from consumer tariffs at no extra cost to government.
Generation
• Generation projections can be achieved by privatization
• 4 Thermal Gencos up for privatisation: Core Investor Sale

Thermal stations

**Geregu Power Plc**
- Kogi State
- Installed capacity, 414 MW
- On stream Dec 2007

**Ughelli Power Plc**
- Delta State
- Built between 1966 and 1975
- Installed capacity, 900 MW

**Sapele Power Plc**
- Delta State
- Installed Capacity 1020 MW
- Built 1978

**Afram Power Plc**
- Comprising of Afam I-V
- Rivers State
- Installed Capacity 987.2 MW
- Built 1963, 2001
Generation
• 2 Hydro Gencos up for privatisation: Concession

Hydro stations

Kainji HydroElectric Plc (Comprising Kainji & Jebba Plants)
• first hydro power station, established on the River Niger
• total installed capacity, 1344 MW

Shiroro Hydro Electric Plc
• on the Shiroro Gorge on the River Kaduna
• newest Hydro Station established in 1990
• installed capacity, 600 MW
Critical Success Factors

✓ Completion of Privatization of DisCos and FGN GenCos

✓ Cost reflective tariff

✓ Resolution of labour issues

✓ Providing comfort/guarantees along the value chain

✓ FGN policy consistency and commitment
1 A NEW MULTI-YEAR-TARIFF-ORDER

A new tariff regime which will ensure that consumers are charged cost reflective tariffs is currently being developed. It is expected that the tariff will be operational be January 1, 2012.

2 PROVISION OF SUBSIDY TO AVOID RATE SHOCK

To ensure that the government cushions the effect of moving from the current tariff to a cost reflective tariff over a three-year period, there is a need to provide subsidy (FGN through the Ministry of Finance has committed to providing N100 billion in first year and proposes another N100 billion the second year and N50 billion in the third year)
3 RESOLUTION OF LABOUR ISSUES

- The Federal Government of Nigeria has commenced negotiations with representatives of the labor unions in the electric power sector.
- Alhaji Hassan Sunmonu was engaged as the negotiator/conciliator for resolution of labor issues.
- The first and second rounds of negotiations were held in May and July 2011 respectively.
- Some agreements were reached during the first round of negotiations
  - Payment of 50% salary increase
  - Regularization of casual staff
  - Holding of labor Workshop
  - Final negotiations to hold on November 30, 2011 to discuss pensions and severances
Transaction Update

<table>
<thead>
<tr>
<th></th>
<th>Thermal</th>
<th>Hydro</th>
<th>Disco</th>
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<tbody>
<tr>
<td>Shortlisted Firms</td>
<td>87</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>Firms that Purchased bid documents</td>
<td>56</td>
<td>24</td>
<td>72</td>
</tr>
</tbody>
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### Bid Timeline

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft Industry Agreements Posted</td>
<td>August 15, 2011</td>
</tr>
<tr>
<td>Deadline to confirm intention to bid, $20,000 fee due for purchase of RFP documents</td>
<td>August 26, 2011</td>
</tr>
<tr>
<td>Issuance of RFP, Information Memorandum Documents</td>
<td>September 01, 2011</td>
</tr>
<tr>
<td>Access to virtual Data Room</td>
<td>September 01, 2011</td>
</tr>
<tr>
<td>Pre-Due Diligence Conference</td>
<td>October 14, 2011</td>
</tr>
<tr>
<td>Opening of Physical Data Rooms</td>
<td>October 24, 2011</td>
</tr>
<tr>
<td>Bidders’ Site Visits</td>
<td>Nov 14- January 30, 2011</td>
</tr>
<tr>
<td>Transaction and Industry Review Conference</td>
<td>November 28 and 29, 2011</td>
</tr>
<tr>
<td>Distribution of Final Bid Documents</td>
<td>December 14, 2011</td>
</tr>
<tr>
<td>Generation Company Bids to be Submitted</td>
<td>January 30, 2012</td>
</tr>
<tr>
<td>Distribution Company Bids to be Submitted</td>
<td>February 13, 2012</td>
</tr>
<tr>
<td>Complete Bid Evaluation Process- Generation</td>
<td>March 2, 2012</td>
</tr>
<tr>
<td>Complete Bid Evaluation Process- Distribution</td>
<td>March 12, 2012</td>
</tr>
</tbody>
</table>
Transaction Timeline

- Successfully hosted the due diligence conference on October 14, 2011
- The Physical data room opened in 17 locations on 24 October 2011
- The site visits commenced on 14 November 2011 and it is still on going in some locations
- The electric power transaction conference is currently on going (28 & 29 November 2011)
Conclusion

• The privatization of the successor companies of PHCN is ongoing.
• The FGN is committed towards concluding the transaction as clearly indicated by vigorous implementation of the transaction timeline.
Thank You