

TRANSMISSION COMPANY OF NIGERIA PLC

THE ROLE OF THE MARKET OPERATOR IN THE NIGERIAN ELECTRICITY SUPPLY INDUSTRY

presented by

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Introduction

- ❑ The Electric Power Sector Reform Act of 2005 gave credence to the creation of Market Operations
- ❑ a major vehicle under the Transmission Company of Nigeria (TCN) to drive the Nigerian Electricity Market.
- ❑ the Act itself had provided for the unbundling of the power sector into public and privatized entities which is the fundamental basis for the need of the market Operator
- ❑ having been empowered by the Act, Mr. President then inaugurated a set of guiding principles, called **“the market rules”**

Introduction. Cont.

- the Market Rule set out the roles of Market Operator in the Electricity Market:**
- at each developmental stages of the market;**
- and serves as the operational guide in execution of its duties.**

Overview Of The Role Of The MO

The Market Operator performs the following functions in accordance with the Market Rules:

- **guarantee an efficient, transparent and non-discriminatory market administration service to all Participants,**
- **facilitate the development of a sustainable competitive Market;**
- **adapt to regional Markets or regional electricity trading agreements**

Overview Cont

- **Implement the Market Rules and draft and implement Market Procedure**
- **Review the efficiency and adequacy of Market Rules and propose amendments**
- **Admit and register Participants**
- **Organise and maintain a Participants Register**

Overview Cont

- **Centralise the information required for market administration, and organise and maintain the related data bases;**
- **Verify that each connection point where a Participant injects or extracts energy has proper commercial metering related to physical exchanges (injections, consumption) and commercial transactions and provision of Ancillary Services;**
- **Calculate and recover Ancillary Service and Must Run Generation costs, when necessary;**

Overview Cont.

- **Centralization and processing of commercial metering data**
- **Administer the Market settlement process and Market payment system**
- **Calculate and settle all market participants payments in respect of ancillary services and other costs of operating the system and administering the Market;**
- **Calculate and settle payments in respect of transmission charges.**

Implementation Channels

- To effectively carry out the above roles specified in the market rule, the following departments were created as the implementation channels for the various market operations tasks:

Channels

1. Technical Data Administration Division
2. Treasury Subsector
3. Settlement & Commercial Reconciliation Division
4. Audit division
5. Information Tech. Department
6. Regulatory Affairs & Stakeholders Division
7. Market Development Business Analysis Division
8. Human resources/Admin. Unit

Technical Data Administration

Duties:

- ❖ Updating of Grid Metering systems Specifications
- ❖ Installation, Programming and Maintenance of Grid Metering Systems
- ❖ Monthly Grid Energy reconciliation.
- ❖ Grid Meter Reading, Collation and Reconciliation at Genco, IPP, Disco and Eligible Customers Trading Points.

Technical Data Administration Cont.

- ❖ Installation and Maintenance of Telemetry System
- ❖ Production of Technical Reports
- ❖ Technical adjudication and Operationalising the current PPAs
- ❖ Technical Database Administration
- ❖ Maintenance of Meter Information Register and Regular Metering Systems Derogation

Treasury Sub-sector

duties:

- ❖ **Administration of settlement payment system**
- ❖ **Management of Market Fund Accounts.**
- ❖ **Treasury management at the wholesale level.**

Settlement & Commercial Reconciliation Division

Duties:

- ❖ **Handles settlement reconciliation and calculations**
- ❖ **Compilation of monthly cash collection from the Distribution Companies**
- ❖ **Preparation and dispatch of monthly settlement Statements and Credit notes**

Audit Division

- ❖ **Formation of long/short term audit plans.**
- ❖ **Maintenance of internal control system in MO**
- ❖ **Ensuring that periodic routine audit is carried out on all financial transactions in the Sector and that Quality reports are rendered timely**
- ❖ **Ensuring that Prepayment audit is conducted in strict compliance with the approved circulars and guidelines**

Information Technology Dept.

- ❖ **Provision of general I.T. support services to all Departments in Market Operations**
- ❖ **Designs, Updates and Maintains MO software**
- ❖ **General Database Administration for Market Operations.**
- ❖ **Computer Hardware/Networking Specifications and Maintenance.**
- ❖ **Market Operations Website Design and Administration**

Regulatory Division

- ❖ This division interfaces between the MO and the market participants
- ❖ enforces compliance with market rules
- ❖ sees to market rules review
- ❖ ensures that contracts comply with the set down regulations
- ❖ Registration of Market Participants
- ❖ Public affairs and media matters

Administration Unit

- ❖ **Manages Human Resources**
- ❖ **Articulates capacity development needs of the sector**
- ❖ **General administration**

Business Analysis Division

- Market research activities
- Market performance evaluation
- Prepares market annual reports

Market Stages

Pre – Transitional stage

- Start Implementation, test- run, and make operational the Market Rules

Transitional Market

- All trading at this stage is made through contracts. It is characterised by a “competitive market.

Medium Term Market

- Electricity market transiting to full wholesale competition with increased participants(by generators)

Long Term Market

Will entail more competition generally ,for the eligible customers allowing for more innovation and sophistication .

Stage of the Market

- Currently in pre-transitional market
- About to enter into the transitional stage of the market
- Challenges of conditions precedent are being tackled

Status Report

- ❑ To Effectively Carry out the Metering and Energy Audit in the Transitional stage of the Market and beyond, the Market Operator has acquired an **Automatic Meter Reading** (AMR) System located at the TCN HQs in Abuja and a backup (Disaster Recovery Station) being located at Ikeja-West in Lagos.

Status Report Cont.

- The AMR enables MO to timely download accurate Metered Data for energy billings and settlement in the Market.**
- All the Energy Trading Point Meters are being replaced with the state-of-the arts digital AMR compliant Energy meters.**

Status Report. Cont.

- ❑ In line with the Market Rules, the MO has developed a robust Market **Transactions Software** which integrates all the MO roles implementation processes for ease of operations.
- ❑ The MO has also developed a very rich **Website** for ease of Market Information Exchange.

• **THANK YOU**