

CONTEMPORARY & TOPICAL ISSUES IN TRANSITIONAL ELECTRICITY MARKET

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OUTLINE

- 1. MARKET RULES COMPLIANCE & ENFORCEMENT;**
- 2. POOR MKT PERFORMANCE AND COST-REFLECTIVE TARIFF;**
- 3. NETTING OFF GENCOS CONSUMED ENERGY FROM THEIR OUTPUT TO THE GRID;**
- 4. INTER-DISCO TRADING THROUGH OVERLAPPING FEEDERS;**
- 5. IMBALANCE PAYMENT BY TEM ORDER .**

COMPLIANCE WITH MARKET RULES (MR)

- **MARKET PARTICIPANTS' MAIN OBLIGATION DURING TEM: MR - Sect. 20.2.1**
- All Contracts for the Purchase and Sale Of Energy Ancillary Services in the Wholesale Electricity Market During TEM Shall Include Provisions to the Effect that : **Both Parties Accept to be Bound by these Rules and the Grid Code;**
- **In line with the MR, Sect. 1.3.3 Pursuant to Section 26(2)** of the Power Reform Act -2005, the Minister has recommended these Rules to the President and the President has approved same by order No. 3 of 2010, of 15th February, 2010, published in the Federal Gazette of 17th February, 2010.
- Every Market Participant that has signed Mkt Participation Agreement, has agreed to be bound by the terms of the Market Rules as long as no other rules or orders have derogated the MR.
- The intermittent Performance Improvement Plans are therefore temporary and will never take precedence over the Market Rules. It is only the Act that supersedes the Market Rules and the Grid Code in NESI business.

COMPLIANCE CONT.

- MR Sect,1.4.4 provides that the Market Rules shall have the effect of a contract between each Participant and the Market Operator by virtue of the execution by the Market Operator and each Participant, of a **Market Participation Agreement** under which the Market Operator and each Participant shall agree to observe and perform the requirements of these Rules so far as they are applicable to the Market Operator and the Participant.
- Again, MR Section 1.4.5 provides that: Nothing in these Rules shall derogate from the **obligations imposed** upon any person under any License.

MR INTERPRETATION

- **The Market Rules provide in Sect. 3.4.1, that:**
- **The Market Operator is responsible for the administration, supervision and interpretation of these Rules.**
- **and**
- **3.4.5 Notwithstanding anything in the foregoing Clauses, any interpretation of these Rules provided by the Market Operator shall be valid and binding on all Participants, System Operator and the TSP where:**
 - **(a) due to practical and operational considerations, the Market Operator has not been able to present the interpretation to the Stakeholder Advisory Panel before the implementation of the interpretation;**
 - **(b) the Market Operator has presented the interpretation to the Stakeholder Advisory Panel, which has agreed with the interpretation and the Commission has not notified the Market Operator that the interpretation is incorrect or invalid; or**
 - **(c) the Market Operator is yet to reach an agreement with the Stakeholder Advisory Panel on the interpretation, and a dispute exists which is yet to be resolved.**

POOR MARKET PERFORMANCE AND COST-REFLECTIVE TARIFF.

- **What is responsible for Poor Market Performance – Difficulties in Rev Collection, Non-Cost Reflective Tariff or deliberate Non-Compliance to the MR ?**
- **Rev. Collection:**
- **Consumers Mentality - Electricity as a social good;**
- **Inadequate Metering of the consumers;**
- **Lack of Strategies: Capacity; Consumer Enlightenment; Technology; Retailers; Value-added Services; Energy Theft**

POOR MARKET PERFORMANCECONT.

- Non-Cost Reflective Tariff

- $$\text{Tariff} = \frac{\text{Mkt. Rev. Requirement}}{\text{Energy Vol. (KW/h)}}$$

- Load Rejection = Asset Stripping: - Reduction in Network Capacity – Tangible & Intangible Capacity Tampering,
- Hence - Call for Cost-Reflective Tariff. If the so-called non-cost reflective is collected 100%, then there wouldn't be invoice payment gap. The Gencos would strive to generate more !!!

POOR MARKET PERFORMANCE....CONT.

- **Non-Compliance to the Market Rules**
- Two of the important Pre-conditions for TEM commencement, as stipulated in the MR, include:
 - (a) Registration of all Market Participants with MO; (b) Posting of Bank Guarantee (BG) to boost the confidence of the Gencos and Service Providers.
- From the inception of TEM, some participants failed to register formerly and/or post their BG as well as update their BG. Monthly invoice payments have never been paid in full as required by the MR. This culminated into poor Market Performance right from the commencement of TEM. If this is not deliberate, I wonder what you would term it.

NETTING-OFF GENERATORS' METERED IMPORT FROM THEIR METERED EXPORT ENERGY: IMPLICATIONS.

- **The TEM Supplementary Order No. NERC/15/0011 of 2015, Clause-8g**
- **“At the end of each Settlement Cycle, every Genco’s metered energy imports will be netted off against its metered exports; that is deduction of the power it consumed from the power it injected into the grid network respectively”**
- **While in Clause 8i of same Order:**
- **“The Settlement for Gencos’ import energy shall in view of the provisions of this Order, exclude fees that apply to to retail tariff such as, NERC Regulatory Charges, MO, System Operations, TSP, Ancillary and NBET Services Charges.”**

GENCO IMPORT CONT.

- When Gencos that are supposed to supply energy to the grid, participate in receiving energy from the grid, it is referred to as Energy Import and as such should be treated as a Disco or a special customer in the Market. This is to ensure accurate Energy Audit and Capacity alignment during billing
- In 2018 the total imported energy by all the Gencos was 107,891,470.00kWh which was about 0.35% of the total energy generated in 2018. The amount accrued to this imported energy from Gencos has continued to add to the gap in the current shortfall of the Market.

	IMPORT SUMMARY FROM 2015 TO DATE					
	TSP	MO	SO	Ancillary	NERC	Total (N)
IHOVBOR	66,762,392.58	861,885.02	7,744,663.83	1,336,362.32	6,590,520.96	83,295,824.71
ODUKPANI	44,603,494.47	402,010.24	4,888,074.69	1,833,140.36	3,858,497.54	55,585,217.30
RIVERS IPP	13,576,728.73	383,309.07	1,886,600.50	350,790.40	1,756,586.33	17,954,015.03
EGBIN	546,412,853.16	7,401,068.68	63,853,297.83	11,079,159.95	54,072,561.15	682,818,940.77
AFAM	29,852,329.51	249,243.55	3,218,675.84	415,813.75	2,677,900.09	36,413,962.74
OMOTOSHO	3,923,467.48	121,048.01	561,529.49	105,638.39	510,845.99	5,222,529.36
OLORUNSO						
GO	2,190,681.22	33,894.67	259,449.13	45,659.77	251,261.45	2,780,946.24
ALAOJI	67,220,486.64	837,235.52	7,691,496.96	1,324,509.67	6,404,522.32	83,478,251.11
IBOM	3,757,380.76	43,631.53	427,411.66	73,489.41	351,027.74	4,652,941.10
AGIP	2,546,081.61	18,176.25	276,023.71	44,894.25	240,404.73	3,125,580.55
DELTA	44,803,567.63	575,534.54	5,240,283.21	908,954.75	5,103,020.11	56,631,360.24
SHELL	20,690,317.87	217,198.53	2,279,866.24	396,205.35	1,956,496.46	25,540,084.45

TRANS AMADI IPP	6,145,365.72	39,633.11	645,848.76	108,734.07	494,009.54	7,433,591.20
GEREGU NIPP	14,675,208.11	153,910.90	1,653,997.61	279,298.00	1,454,859.96	18,217,274.58
GEREGU SAPELE NIPP	31,627,895.75	401,072.37	3,663,007.70	629,581.88	3,152,074.54	39,473,632.24
SAPELE	25,198,996.36	187,087.24	2,688,571.44	454,870.81	2,238,075.64	30,767,601.49
OMOTOSHO NIPP	251,734,685.58	4,568,664.47	31,257,842.50	5,335,600.83	27,177,865.20	320,074,658.58
OLORUNSOGO NIPP	41,542,526.77	594,780.16	4,926,140.66	849,096.70	4,231,209.18	52,143,753.47
GBARAIN	175,427,763.11	3,737,104.99	22,545,834.87	4,082,628.28	19,628,838.12	225,422,169.37
AZURA	11,694,319.54	75,168.59	1,160,613.18	564,135.30	962,540.20	14,456,776.81
KAINJI	5,798,509.33	35,691.25	586,928.55	99,629.15	469,037.75	6,989,796.03
	9,145,524.42	58,083.93	955,167.71	162,136.49	782,101.85	11,103,014.40

GENCOS' NETTING-OFF CONT.

- **Implications:**

- **1.** Gencos' imported energy is a "processed" energy and as such satisfies the necessary conditions to attract service charges or else the TSP is denied revenue for energy it has evacuated as well as other Service Providers whose revenue depends on the energy volume evacuated by the TSP.
- **2.** Netting-off will increase Transmission Loss Factor (TLF) – a KPI to measure the power evacuation efficiency of TSP.
- **3.** The Capacity Charge associated to the imported energy is transferred to the Discos unfairly;
- **4.** Netting-off prompts imbalance in the final Energy Balance Sheet and Settlement System;

- **RECOMMENDATION:**

- Meter and Bill Gencos' Imported Energy applying the Franchise Disco's Wholesale Tariff and Net off Bill from the Gencos' monthly Invoice.

DISCOS OVERLAPPING FEEDERS FOR INTER-DISCO TRADING

Section 4.B(iii) of the Metering Market Procedure (MMP) states that:

“Inter-Disco Trading Point: The actual geographic network delineation and the location of the inter-disco boundary trading point meters (Trading Point between two Distribution Networks), are the exclusive decision to be taken by both Discos involved. Having taken the meter reading at the Transmission/Distribution trading point as defined in the Metering Code, the MO will not exercise any other jurisdiction over inter-disco trading points”

Section 3 (e) of the Metering Code equally states:

“Interfaces among different Discos (Type 5) (I) Main and Check Metering Systems shall be owned by the relevant Discos”.

INTERDISCO TRADING CONT.

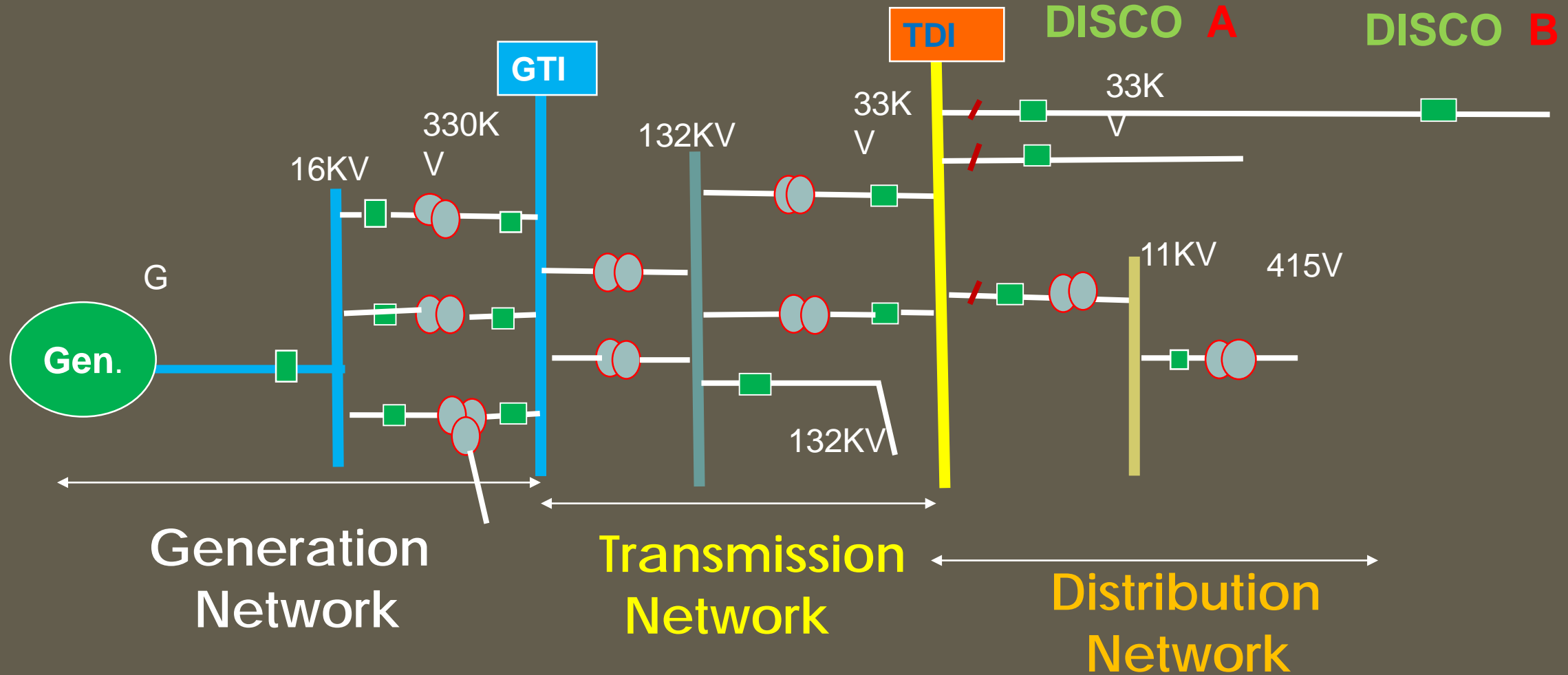
- **From the above sections of both ruling documents, it is clear that MO has no jurisdiction in the affairs of inter-disco boundary trading points.**

Nevertheless, as the administrator of the Market, we cannot totally divorce ourselves from the challenges emanating from inter-disco energy transactions.

We therefore submit, as recommendation, the following:

- **FACILITIES NEEDED:**
- A Set of Free-Standing VTs and CTs;
- Erecting a H-Pole at the boarder;
- Compliant Meter of Accuracy 0.5 Class installed in a water-tight or Sealed Panel;
- Develop a transaction MOU for Settlement;
- The Two Discos may consult the MO for assistance.

GRID NET-WORK SINGLE LINE DELINEATION DIAGRAM



IMBALANCE PAYMENT

Imbalance occurs when the power supplied to a Distribution Company is either in excess or in deficit of the percentage of capacity allocated to it based on the MYTO load allocation.

In July of 2015, NERC came out with an Order on Imbalance Application during the Transitional Electricity Market **(TEM) ORDER NO. NERC/139**.

The order among states that: “To address the issue of imbalance going forward, 4500MW will be the applicable benchmark for load allocation”.

“Where a Distribution Company has a constraint on its network that makes it unable to receive load the distribution company shall declare such constraint to the system operator a day ahead. Where a Distribution Company fails to give the required notice, the Distribution Company will be penalized.”

THANK YOU

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