

# TRANSMISSION COMPANY OF NIGERIA

To: Head (ISO), TCN - Abuja

From: General Manager, NCC, Osogbo

DAILY OPERATIONAL REPORT OF SATURDAY 06/01/2018

FOR: EVENTS OF FRIDAY 05/01/2018

1.0 EXECUTIVE OPERATIONS SUMMARY:

1.1 GENERATION PROFILE: NATIONAL STATISTICS

DETAILS	MW	HRS	DATE
PEAK DEMAND FORECAST (CONNECTED + SUPPRESSED LOAD)	17,720	23:00	05/01/2018
GENERATION CAPABILITY	7697	-do-	-do-
UNITS ON BAR CAPABILITY AT PEAK	4292.1	-do-	-do-
PEAK GENERATION	3741.1	-do-	-do-
LOWEST GENERATION	107	11:00	05/1/2018
8-HOURLY DURATION PEAK	3689.2	0000-0800	-do-
	3525.4	0900-1600	-do-
	3741.1	1700-2300	-do-
PEAK GENERATION TO DATE	5222.3	21:00	18/12/2017
MAXIMUM AVAILABLE CAPACITY TO DATE	7652.6	06:00	14/04/2014
MAXIMUM ENERGY GENERATED (MWH) TO DATE	109,372.01	0000-2400	02/02/2016

## 1.2 CRITICAL VOLTAGE

DETAILS	KV	STATION	HRS
NOMINAL VOLTAGE	330		
STATUTORY LIMITS	280.5 - 346.6		
HIGHEST VOLTAGE FOR THE DAY	348	Ikot-Ekpene T/S	04:00
LOWEST VOLTAGE FOR THE DAY	298	Akangba T/S	08:00

## 1.3 FREQUENCY RANGE

DETAILS	HZ	HRS
NOMINAL FREQUENCY	50	
STATUTORY LIMITS	49.75-50.25	
HIGHEST FREQUENCY	50.696	11:10
LOWEST FREQUENCY	50.021	08:02

## 1.4 SYSTEM COLLAPSE UP DATE

Date of last total collapse: 2nd Jan., 2018		No. of days since last total collapse: 04											
Date of last partial collapse: 17 <sup>th</sup> Oct., 2017		No. of days since last partial collapse: 79											
Highest No of days ever attained in-between total collapses: 134		Highest No of days ever attained in-between partial collapses: 240											
	Jan	Feb.	Mar.	Apr	May	Jun	Jul	Aug	Sep.	Oct	Nov	Dec	Total
2010	Total	--	3	1	--	3	3	--	2	2	1	4	22
	Partial	1	--	--	1	3	4	4	3	2	--	1	20
	Total	--	--	--	--	4	3	1	1	1	2	--	13
2011	Partial	--	1	1	--	--	--	1	--	1	2	--	6
	Total	--	--	2	1	5	2	1	--	2	2	1	16
	Partial	--	--	2	3	--	--	--	1	--	1	1	8
2013	Total	--	1	2	2	3	4	1	1	1	4	2	22
	Partial	--	--	--	--	--	--	--	2	1	0	0	2
2014	Total	2	--	2	0	3	1	0	0	1	0	0	9
	Partial	--	--	0	0	0	0	0	0	0	2	1	4
2015	Total	1	0	1	0	2	0	1	0	0	0	1	6
	Partial	--	--	1	0	2	0	0	0	1	0	0	4
	Total	--	--	2	0	0	0	0	1	0	2	2	22
2016	Partial	--	--	1	0	1	3	1	0	0	0	0	6
	Total	5	3	0	3	1	1	0	0	1	1	0	15
2017	Partial	1	0	1	0	0	1	0	3	3			9
	Total	1											1

## 1.5 BREAKDOWN OF PEAK & OFF PEAK GENERATION (NATIONAL PEAK & OFF PEAK)

STATION	TURBINE	PEAK GEN. (MW)	OFF-PEAK GEN(MW)	
1	KAINJI	HYDRO	402	0
2	JEBBA	HYDRO	407	0
3	SHIRORO	HYDRO	417	13
4	EGBIN ST2 - 5	STEAM	0	0
5	SAPELE	STEAM	0	0
6	DELTA	GAS	449	44
7	AFAM IV-V	GAS	63	0
8	GEREGU GAS	GAS	396	0
9	OMOTOSHO GAS	GAS	0	0
10	OLORUNSOGO GAS	GAS	0	0
11	GEREGU NIPP	GAS	220	0
12	SAPELE NIPP	GAS	170.2	0
13	ALAOJI NIPP	GAS	0	0
14	OLORUNSOGO NIPP	GAS	0	0
15	OMOTOSHO NIPP	GAS	0	0
16	ODUKPANI NIPP	GAS	211.7	0
17	IHOVBOR NIPP	GAS	91.7	0
18	OKPAI	GAS	235	0
19	AFAM VI	GAS	414	0
20	IBOM POWER	GAS	1012	48.2
21	ASCO	GAS	0	0
22	A.E.S	GAS	0	0
23	OMOKU	GAS	61.7	1.8
24	TRANS AMADI	GAS	0	0
25	RIVERS IPP	(GAS)	0	0
26	AZURA - EDO IPP	GAS	0	0
27	EGBIN ST6	(GAS)	0	0
28	PARAS ENERGY	(GAS)	101.6	0
29	GBARAIN NIPP	GAS	0	0
<b>TOTAL</b>		<b>3741.1</b>	<b>107</b>	

## 1.6 ENERGY GENERATED/ENERGY SENT OUT:

STATION	TURBINE	ENERGY GENERATED		ENERGY SENT OUT		
		MWH	MWH/H	MWH	MWH/H	
1	KAINJI	HYDRO	6930.00	288.75	6916.70	288.20
2	JEBBA	HYDRO	7065.00	294.38	7046.80	293.62
3	SHIRORO	HYDRO	8364.00	348.50	8338.25	347.43
4	EGBIN ST2 - 5	STEAM	0.00	0.00	0.00	0.00
5	SAPELE	STEAM	0.00	0.00	0.00	0.00
6	DELTA	GAS	10535.34	438.97	10320.30	430.01
7	AFAM IV-V	GAS	1013.00	42.21	1009.80	42.08
8	GEREGU GAS	GAS	5276.20	219.84	5248.62	218.69
9	OMOTOSHO GAS	GAS	0.00	0.00	0.00	0.00
10	OLORUNSOGO GAS	GAS	0.00	0.00	0.00	0.00
11	GEREGU NIPP	GAS	2521.25	105.05	2505.75	104.41
12	SAPELE NIPP	GAS	3484.83	145.20	3465.65	144.40
13	AZURA - EDO IPP	GAS	0.00	0.00	0.00	0.00
14	ALAOJI NIPP	GAS	0.00	0.00	0.00	0.00
15	OLORUNSOGO NIPP	GAS	0.00	0.00	0.00	0.00
16	OMOTOSHO NIPP	GAS	0.00	0.00	0.00	0.00
17	ODUKPANI NIPP	GAS	3744.61	156.03	3720.40	155.02
18	IHOVBOR NIPP	GAS	1289.50	53.73	1273.00	53.04
19	OKPAI	GAS	3406.00	141.92	3374.10	140.59
20	AFAM VI	GAS	6127.24	255.30	5998.00	249.92
21	IBOM	GAS	2200.85	91.70	2192.00	91.33
22	ASCO	GAS	0.00	0.00	0.00	0.00
23	A.E.S	GAS	0.00	0.00	0.00	0.00
24	OMOKU	GAS	1303.30	54.30	1275.77	53.16
25	TRANS AMADI	GAS	0.00	0.00	0.00	0.00
26	RIVERS IPP	GAS	0.00	0.00	0.00	0.00
27	EGBIN ST6	STEAM	0.00	0.00	0.00	0.00
28	PARAS ENERGY	GAS	0.00	0.00	0.00	0.00
29	GBARAIN NIPP	GAS	273.70	11.40	265.80	11.08
<b>TOTAL</b>		<b>63,535.02</b>	<b>2,647.29</b>	<b>62,950.94</b>	<b>2,622.96</b>	

1.7A GENERATION POSITION AT 06:00HRS OF SATURDAY 06/01/2018

	STATIONS	NO OF INSTALLED UNITS	AVAILABLE UNITS	INSTALLED CAPACITY OF AVAILABLE UNITS(MW)	GENERATION CAPABILITY OF AVAILABLE UNITS(MW)	UNITS ON BAR	CAPABILITY OF UNITS ON BAR (MW)	GENERATION AT 06:00HRS (MW)	REMARKS
PRIVATISED COMPANIES	KAINJI HYDRO	8	1G5, 6, 11 & 12	440	440	1G5, 6, 11 & 12	440	418	1G7 - Out on stator winding failure. 1G8 - Out due to loss of supply to the auxiliary. 1G9 - Out due to burnt 7.5MVA 33/0.415kV & 183.6MVA 16/330kV station service transformer and generator transformer. 1G10 - Shut down due to thrust bearing temperature problem.
	JEBBA HYDRO	6	2G1 - 5	475	475	2G1, 3, 4 & 5	380	352	2G2 - Out on frequency management. 2G6 - Out due to burnt generator winding and AVR.
	SHIRORO HYDRO	4	411G1 - 4	580	580	411G1 - 3	450	341	411G2 - Generation reduced on frequency management. 411G4 - Out on water management.
	EGBIN STEAM	5	ST2, 4 & 5	660	660	0	0	0	ST1 - Tripped on generator CB trouble. ST3 - Tripped on high vibration. ST2, 4 & 5 - Out due to gas constraint. Station out due to fire outbreak on gas pipeline.
	SAPELE (STEAM)	6	0	0	0	0	0	0	ST1 - Tripped on low drum level. ST2 - Out on maintenance. ST3 - Out on stator winding problem. ST4 & 5 - Awaiting major overhaul. ST6 - Tripped on gas control valve not following reference point.
	DELTA (GAS)	18	GT4, 7, 9 - 11, 15, 16, 18, 19 & 20	645	645	GT4, 7, 9 - 11, 15, 16, 19 & 20	515	503	GT3 & 5 - Out due to generator winding fault. GT6 & 14 - Out on major overhaul. GT8 & 12 - Out on maintenance. GT13 - Out due to oil leakage. GT17 - Out on excitation trouble. GT18 - Out on frequency management.
	AFAM IV & V (GAS)	8	GT18	75	65	GT18	65	65	GT1 - 12 - De-commissioned and scrapped. GT13 - 16 - Out on blade failure. GT17 - Tripped on loss of excitation. GT19 & 20 - Awaiting major overhaul.
	GEREGU GAS	3	GT11 - 13	435	435	GT11 - 13	435	408	Available units on bar.
	OMOTOSHO GAS	8	GT1 - 8	336	304	0	0	0	GT1, 4 & 8 - Out due to gas constraint. Station shut down due to fire outbreak on gas pipeline.
	OLORUNSOGO GAS	8	GT1 - 8	336	304	0	0	0	GT1, 3 & 7 - Out due to gas constraint. Station shut down due to fire outbreak on gas pipeline.
NIPP	GEREGU NIPP	3	GT22 & 23	290	290	GT22 & 23	290	208	GT21 - Out on maintenance. GT22 - Generation reduced due to gas constraint.
	SAPELE NIPP	4	GT1 & 2	225	225	GT1 & 2	225	178.5	GT3 - Out on undisclosed fault. GT4 - Tripped on fire protection alarm.
	ALAOJI NIPP GAS	4	GT1 & 2	250	240	0	0	0	GT1 & 2 - Tripped due to low gas pressure. GT3 - Shut down due to generator air inlet filter trouble. GT4 - Out on maintenance.
	OLORUNSOGO NIPP GAS	6	GT1 - 3	360	360	0	0	0	GT1 - Shut down due to fire outbreak on gas pipeline. GT2 & 3 - Out due to gas constraint. GT4 - Out of production since 25/10/2016. ST13 & ST23 - Out on maintenance.
	OMOTOSHO NIPP GAS	4	GT1, 2 & 4	375	360	0	0	0	GT3 - Shut down due to oil leakage on the unit. GT1 & 4 - Out due to gas constraint. Station shut down due to fire outbreak on gas pipeline.
	ODUKPANI NIPP	5	GT3 & 5	240	230	GT3 & 5	230	217.5	GT1 - Out due to auxiliary loop oil problem. GT2 - Out due to control system problem. GT4 - Shut down to avoid fire outbreak.
	IHOVBOR NIPP	4	GT1 - 3	337.5	337.5	GT2	112.5	95	GT1 & 3 - Out due to gas constraint. GT4 - Out on maintenance.
	GBARAIN NIPP GAS	1	GT2	112.5	112.5	GT2	103.3	103.3	Available unit on bar.
IPP	OKPAI GAS/STEAM	3	GT11 & 12	300	300	GT11 & 12	300	239	GT12 - Generation reduced due to air inlet differential pressure. ST18 - Out on maintenance.
	AZURA - EDO	0	0	0	0	0	0	0	GT11 - Undergoing commissioning tests. GT12 & 13 - Awaiting commissioning.
	AFAM VI GAS/STEAM	4	GT11 - 13 & ST10	650	650	GT11 - 13	450	432	ST10 - Out on frequency management.
	IBOM POWER GAS	3	GT3	115	115	GT3	115	111.1	GT1 & 2 - Out on fault.
	AES	0	0	0	0	0	0	0	Out of production since 27/09/2014.
	ASCO	0	0	0	0	0	0	0	GT1 - Shut down due to leakage in the furnace.
	OMOKU GAS	6	GT1, 2, 5 & 6	100	80	GT1, 2, 5 & 6	80	62	GT3 - Out due to gas leakage. GT4 - Awaiting major overhaul. Generation reduced due to gas constraint.
	TRANS-AMADI	4	GT1 & 4	50	40	0	0	0	GT1 & 4 - Out due to gas constraint.
	RIVERS	1	GT1	180	160	0	0	0	GT1 - Out due to gas constraint.
	<b>SUB TOTAL</b>	<b>126</b>	<b>78</b>	<b>7567</b>	<b>7408</b>	<b>42</b>	<b>4190.8</b>	<b>3733.4</b>	Frequency = 50.26Hz.

1.7B GENERATION POSITION AT 06:00HRS OF SATURDAY 06/01/2018 FOR UNITS ON BILATERAL AGREEMENT

FEEDER	NO. UNITS	ST6		TOTAL UNITS	TOTAL MW	TOTAL HRS	TOTAL MWH	REMARK
		ON	OFF					
EGBIN	1	1	0	220	220	0	0	ST6 - Out due to fire outbreak on gas pipe line.
		0	0			0	0	
PARAS ENERGY	8	8	0	71	71	0	0	Out due to fire outbreak on gas pipe line.
		0	0			0	0	
<b>SUB TOTAL</b>	<b>9</b>	<b>9</b>	<b>0</b>	<b>291</b>	<b>291</b>	<b>0</b>	<b>0</b>	
<b>GRAND TOTAL</b>	<b>135</b>	<b>87</b>	<b>0</b>	<b>7858</b>	<b>7699</b>	<b>42</b>	<b>4,190.80</b>	<b>3,733.40</b> Frequency = 50.26Hz.

NB: Observation shows that many stations remove their units from frequency response at 06:00Hrs without instruction from NCC.

1.7C

BILATERAL AGREEMENT UNITS DISPATCH - FRIDAY 05/01/2018					
FEEDERS NAME	MAX. LOAD (MW)	TIME (HRS)	HOURS IN SERVICE	REMARK	
Egbin ST6 120MW GENERATION TO IKEJA ELECTRICITY DISTRIBUTION COMPANY					
OGBA	U-STEEL	ON	0100HRS	16	SYSTEM OUTAGE
	PTCEXPRESS	9	0900HRS	16	SYSTEM OUTAGE
	SANKYO	ON	0100HRS	16	SYSTEM OUTAGE
	FEEDER 8	10	1000HRS	16	SYSTEM OUTAGE
IKORODU	PULK IT	ON	0100HRS	13	SYSTEM OUTAGE
	INDUSTRIAL	12	0900HRS	13	SYSTEM OUTAGE
	SPINTEX	4	0100HRS	13	SYSTEM OUTAGE
	DANGOTE	3	1000HRS	13	SYSTEM OUTAGE
	LAND CRAFT	38	0200HRS	13	SYSTEM OUTAGE
ALAUJA	TR4 15MVA	5.5	1100HRS	16	SYSTEM OUTAGE
	TR5 -15MVA	3.7	1100HRS	16	SYSTEM OUTAGE
	ALAUJA	8.7	0100HRS	16	SYSTEM OUTAGE
MLAND	PTC (MARYLAND)	11	0800HRS	312:00:00	SYSTEM OUTAGE
	<b>TOTAL LOAD</b>	<b>104.9</b>			

BILATERAL AGREEMENT LOAD DISPATCH  
60MW PARAS ENERGY GENERATION TO CEB

FEEDER	MAX	TIME	HOURS IN SERVICE	REMARK
Ikeja West/Sakete 330kV line				Out due to fire outbreak on gas pipe line.



5.0 **OUTAGES:**

5 (A) **FORCED OUTAGES (GENERATION):-**

- 1 08:05Hrs, Sapele NIPP GT2 tripped on shifter separator B high level. LHR = 99.4MW.
- 2 18:45 through 24:00Hrs, Ihovbor NIPP GT2 tripped due to low gas pressure. LHR = 5MW.

5 (B) **FORCED OUTAGES (TRANSMISSION):**

- 1 12:45 – 13:15Hrs, Benin/Ajaokuta 330kV line 2 (cct B12J) CBs tripped at both ends on the following relay indications:  
**At Benin T/S:** ABB Relay: Trip – trip, Trip – TRL1, 2 7 3, PHS-STFW (L2, TE), ZM2 – trip, EFC-CS, ZM2, B-start, fault locator: No data, lock-out trip, LOTR flagged DEF flagged on DEITX.  
Auxiliary Relay: MVAJ K86 ABC flagged.  
**At Ajaokuta T/S:** ABB Relay: Trip, start L1, start L1, 2 & 3, start – PE zone 1 trip, ZCOM-CS, Trip-trip, trip RL1 2 3 PHS-STFW (L2, PE) ZMI – Trip, EFC-CF, ZM2 – start, ZM3 – start, ZCIP – CSL2, fault loop L2-N, distance = 72.6km. No load interruption as the line was on soak.
- 2 16:58 – 17:19Hrs, Shiroro/Mando 330kV line 1 (cct R1M) CB tripped at Mando T/S on O/C Red & Yellow Phases, zone 1 and elementary CS. LHR = 205MW.

5 (C) **PLANNED OUTAGES:-** Nil.

5(D) **URGENT OUTAGES:-**

- 1 09:00Hrs, Delta GT18 was shut down due to high hydrogen leakage. Load loss = 82MW.
- 2 09:09Hrs, Shiroro 411G3 was shut down due to water leakage on the generator cooling water line. No load loss as 144MW was transferred to 411G4.
- 2 09:09Hrs, Shiroro 411G3 was shut down due to water leakage on the generator cooling water line. No load loss as 144MW was transferred to 411G4.
- 3 09:39 – 17:15Hrs, Akure T/S 60MVA 132/33kV transformer T3A primary CB was taken out due to explosion on a section of MVAC board. The transformer was restored after Yellow Phase 415kV cable that got cut was re-terminated, also burnt bolts and nuts at the transformer secondary side isolator clamp were replaced. Load loss = 22MW.
- 4 10:49 – 16:24Hrs, Omotosho T/S 150MVA 330/132/33kV transformer T1 was taken out to enable maintenance crew top up low SF6 gas of primary GCB to normal. No load interruption as the transformer was on soak.
- 5 16:53 – 17:54Hrs, Shiroro/Mando 330kV line 2 (cct R2M) was taken out to enable the maintenance crew attend to lock-out line CB at Mando T/S. No load interruption as cct R1M was in service.
- 6 20:22 – 20:30Hrs, Omotosho T/S 150MVA 330/132/33kV transformer primary CB #3313 and tie CB #3312 were taken out due to abnormal noise on newly installed outdoor 33kV current transformer. The transformer was restored after isolating the outdoor 33kV current transformer. No load interruption as the transformer was on soak.

9 **GENERATOR MERIT ORDER BASED ON SYSTEM RESPONSE AND GRID RELIABILITY**

GROUP 1 - HYDRO UNITS (LEAST COST) ON FREE GOVERNOR CONTROL AND ANCILLARY SERVICE .

GROUP 2 - OTHER UNITS IDENTIFIED TO BE ON FREE GOVERNOR CONTROL .

GROUP 3 - OTHER UNITS IDENTIFIED TO BE OFFERING REGULATORY RESERVE.

GROUP 4 - OTHER UNITS OFFERING SPINNING RESERVE (THE POWER PLANTS CONTACTED FOR THE ANCILLARY SERVICE)

GROUP 5 - ALL PLANTS DISPATCHED SUBJECT TO TRANSMISSION CONSTRAINT (NOT YET IDENTIFIED)

GROUP 6 - ALL PLANTS PROVIDING VOLTAGE SUPPORT ABOVE STATUTORY LIMIT.

GROUP 7 - ALL OTHER PLANTS.

5 (E) **EMERGENCY OUTAGES:-** Nil.

5 (F) **AUTOMATIC UNDER FREQUENCY OPERATION:-**

5 (G) **330KV LINES THAT ARE OUT ON VOLTAGE CONTROL:-** ccts A1S, U1A, D2K & K4U.

5 (H) **330KV LINES THAT ARE OUT ON BREAKER PROBLEM:-** cct N4J (on soak at Egbin T/S)

5 (I) **330KV LINES THAT ARE OUT ON PLANNED OUTAGE:-**

5 (J) **330KV LINES THAT ARE OUT ON LINE FAULT:-** cct S5B

6 **WEATHER REPORT:-** NIL

7 **INTERNATIONAL LINES:-**

A **IKEJA WEST/SAKETE 330KV LINE(TCN+PARAS)**

Maximum load - 135MW at 20:00Hrs.

Minimum load - 35MW at 01:00Hrs.

B **BIRNIN KEBBI/NIAMEY 132KV LINE**

Maximum load - 85MW at 20:00Hrs.

Minimum load - 46MW at 0:00Hrs.

C **KATSINA/GAZAOUA/MARADI 132KV LINE**

Maximum load - 28.4MW at 20:00Hrs.

Minimum load - 12.0MW at 03:00Hrs.

8 **MISCELLANEOUS:-**

- 1 05:25Hrs, Afam VI ST10 was tied. The unit was out due to gas constraint.
- 2 08:24Hrs, Geregu Gas GT11 was tied. The unit was out due to gas constraint.
- 3 09:08Hrs, Shiroro 411G4 was tied to swap with 411G3.
- 4 09:28Hrs, Ikeja West T/S 330kV 75MX Reactor R2 was switched off on voltage control. Voltage profile: 301/306kV.
- 5 14:49Hrs, supply was restored to Onitsha T/S through Benin/Onitsha 330kV line 1 (cct B1T).  
**Note:** The station lost supply at 10:15Hrs due to fire out break on Onitsha/Alaoji 330kV line (cct T4A) Blue Phase Bus isolator.
- 6 17:20 – 17:31Hrs, Mando/Jos 330kV line (cct M2S) was taken out due to high voltage (367kV).
- 7 21:10Hrs, Gbarain NIPP GT2 was tied. The unit was out on fault.  
**LACK OF REACTOR AND UNRELIABLE STATION SERVICE SUPPLY AT IKOT-EKPENE T/S ARE HINDERING SMOOTH OPERATION.**

10 SYSTEM BLACK START CAPABILITY

Delta, Shiroro & Egbin - Available.

11 (A) COMMUNICATION MEDIA

STATIONS	NO. INSTALLED	NO. WORKING
PLC/PAX	37	31
OPTIC FIBRE	13	10
PLS	14	5

11 (B) SCADA RTU STATUS

STATIONS	NO. INSTALLED	NO OF RTU DISTURBED	NO OF RTU WORKING
POWER STATIONS	8	7	1
330kV	19	11	8
132kV	102	92	10

12(A) UNAVAILABLE TRANSFORMERS/REACTORS:

SHIRORO REGION:

- 1 Apo T/S 60MVA 132/33kV transformer TR3 - Burnt.
- 2 Birnin Kebbi 75MX Reactor R1.

KADUNA REGION:

- 1 Kumbotso 150MVA 330/132/33kV transformer T1A - Burnt control cables.

12(D) LAGOS REGION

- 1 Agbara/Ojo 132kV line 1 on soak from Agbara end.

SHIRORO REGION:- Nil

12(E) UNAVAILABLE CAPACITOR BANK:

- (i) Ogba T.S, (ii) Maiduguri T/S, (iii) Isolo T/S, (iv) Ado-Ekiti T/S, (v) Ilorin T/S, (vi) Akure T/S.

**BAUCHI REGION:**

- 1 Gombe T/S -30MX Reactor R2A.

**ENUGU REGION:**

- 1 Onitsha T/S 90MVA 330/132/13.8kV transformer 9T2 - Out due to differential fault.

**LAGOS REGION:**

- 1 Oke-Aro T/S 75MX Reactor R1.

**PORT HARCOURT REGION**

- 1 Ikot-Ekpene T/S: No available reactor.

**12 (B) UNAVAILABLE BREAKERS/SOLATORS**

**LAGOS REGION:**

- 1 Akangba T/S. 132kV Bus Coupler CB - Serious Air leakage.(Undergoing repair)
- 2 Egbin/Aja 330kV line 2 (cct N4J) - faulty breaker at Aja T/S.
- 3 Otta/Ogba 132kV line isolator - defective control shaft.
- 4 Osogbo/Ikeja West and Olorunsogo/Ikeja West tie CB at Ikeja West T/S - defective pole
- 5 Oke-Aro/Ikeja West 330kV lines 1 & 2 tie CB at Ikeja West T/S - Defective pole.
- 6 Jebba G.S/Jebba T.S 330kV line 2 CB at Jebba T/S.
- 7 Omotosho/Ikeja West 330kV line CB at Ikeja West T/S.

**OSOGBO REGION:**

- 1 Omotosho 330kV T/S, 2nd series 330kV CB #3322 out due to control circuit problem.

**ENUGU REGION:**

- 1 New Haven/Yandev 132kV line CB - Faulty Red phase CB pole. Protection is transferred to the bus coupler CB.
- 2 Abakaliki T/S 30MVA 132/33kV transformer T1A and 60MVA 132/33kV transformer T2 primary CBs - Breakers were not provided since commissioning but the transformers are protected by Nkalagu 132kV line CB.
- 3 Oji River T/S 30MVA 132/33kV transformer T1A primary CB - The breaker is completely out of service and bypassed. The transformer is either protected by Onitsha/Oji 132kV line CB or New Haven/Oji 132kV line CB.
- 4 Oturkpo/Yandev 132kV By pass isolator - Canibalized to repair the line isolator.

**SHIRORO REGION**

- 1 Jebba T/S 75MX reactor 2R2 CB - exploded.

**PORT HARCOURT REGION NIL**

- 1 New Haven/Nkalagu 132kV line 2 ground switch - Canibalized Red phase female contact and canibalized Yellow phase male contact.

**12 (F) LINES WITH MISSING SKY WIRE**

**LAGOS REGION**

- 1 Omotosho/Ikeja West line (M5W) and Egbin/Ikeja West line 3 (N6W) - 21 spans.
- 2 Ikeja West/Olorunsogo line (cct R1W) - 80 spans.
- 3 330kV Ikeja West/Osogbo line. - 95 spans.
- 4 Ikeja West/Alimosho/Ogba 132kV lines 1 & 2 - 15 spans.
- 5 Ikeja West/Akangba 330kV line 2 - 1 span.
- 6 Ikeja West/ Ilupeju 132kV lines 1 & 2 - 8 spans.
- 7 Akangba/Itire 132kV lines 1 & 2 - 1 span.
- 8 Ikeja West/Agbara 132kV lines 1 & 2 - 61 spans.
- 9 Ikeja West/Otta 132kV lines 1 & 2- 17 spans.

**SHIRORO REGION**

- 1 Jebba T/S 330kV Osogbo lines 1 & 2 and Ganmo line - 9 spans
- 2 Minna T/S 132kV Bida line - 32 spans
- 3 Apo T/S 132kV Keffi line - 36 spans
- 4 Shiroro T/S 330kV Jebba line 2 - 28 spans

**12 (G) UNAVAILABLE SYNCHROSCOPES :**

- 1 Benin, Ikeja West, Onitsha, Egbin, Ugwuaji, Osogbo, Kaduna, Jos, Gwagwalada & Alaoji T/S.

**FOR MORE INFORMATION: NCC Telephone Lines -**

- a PAX 09/300, 309, 303 & 305.
- b NCC GSM - 08074888524, 08069379367, 08023572651 & 08051401331. CUG Nos. 08129458488, 08129458489, 08129929806; 08036665323.
- c PLS - 622
- d GM (NCC) - 08036744641.
- e AGM (S/O) - 08056002757, CUG: 08129458475





