

TRANSMISSION COMPANY OF NIGERIA

To: Head (ISO), TCN - Abuja
From: General Manager, NCC, Osogbo

DAILY OPERATIONAL REPORT OF TUESDAY 12/06/2018

FOR: EVENTS OF MONDAY 11/06/2018

1.0 EXECUTIVE OPERATIONS SUMMARY:

1.1 GENERATION PROFILE: NATIONAL STATISTICS

DETAILS	MW	HRS	DATE
PEAK DEMAND FORECAST (CONNECTED + SUPPRESSED LOAD)	22,560	21:45	11/06/2018
GENERATION CAPABILITY	7405	-do-	-do-
UNITS ON BAR CAPABILITY AT PEAK	4159.1	-do-	-do-
PEAK GENERATION	3883.2	-do-	-do-
LOWEST GENERATION	3323.0	02:00	11/06/18
8-HOURLY DURATION PEAK	3652.2	0100-0800	-do-
	3750.8	0900-1600	-do-
	3883.2	1700-2400	-do-
PEAK GENERATION TO DATE	5222.3	21:00	18/12/2017
MAXIMUM AVAILABLE CAPACITY TO DATE	7652.8	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	355	Omotosho T/S	01:00
LOWEST VOLTAGE FOR THE DAY	300	Gombe T/S	01:00

1.3 FREQUENCY RANGE

DETAILS	HZ	HRS
NOMINAL FREQUENCY	50	
STATUTORY LIMITS	49.75 - 50.25	
HIGHEST FREQUENCY	50.42	07:49
LOWEST FREQUENCY	49.84	16:49

1.4 SYSTEM COLLAPSE UP DATE

Date of last total collapse: 8th June, 2018		No. of days since last total collapse: 03											
Date of last partial collapse: 12 th April, 2018		No. of days since last partial collapse: 56											
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	---	3	1	--	3	3	3	--	2	2	1	4	22
Partial	1	--	--	1	1	3	4	4	3	2	--	1	20
2011	--	--	--	--	4	3	1	1	1	2	1	--	13
Partial	--	1	1	--	--	--	--	1	--	1	2	--	6
2012	Total	--	2	1	5	2	1	--	--	2	2	1	16
Partial	--	2	3	--	--	--	--	1	--	1	1	1	8
2013	Total	--	1	2	2	3	4	1	1	1	4	2	22
Partial	--	--	--	--	--	--	--	--	2	--	--	--	2
2014	Total	2			2	0	3	1	0	0	1	0	9
Partial			0	0	1	0	0	0	0	0	2	1	4
2015	Total	1	0	1	0	2	0	1	0	0	1	0	6
Partial	--	--	1	0	2	0	0	0	0	1	0	0	4
2016	Total	--	--	2	3	6	5	0	0	1	1	2	22
Partial	--	--	1	0	1	3	1	0	0	0	0	0	6
2017	Total	5	3	0	3	1	1	0	0	1	1		15
Partial	1	0	1	0	0	0	1	0	0	3	3		9
2018	Total	5	1	0	0	0	1						7
Partial	0	0	0	0	1	0							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	175	146
2 JEBBA	HYDRO	170	168
3 SHIRORO	HYDRO	244	244
4 EGBIN ST2 - 5	STEAM	531	507
5 SAPELE	STEAM	46	0
6 DELTA	GAS	474	452
7 AFAM IV-V	GAS	0	0
8 GEREGU GAS	GAS	288	258
9 OMOTOSHO GAS	GAS	137.3	142
10 OLORUNSOGO GAS	GAS	170.1	165.6
11 GEREGU NIPP	GAS	0	0
12 SAPELE NIPP	GAS	215	0
13 ALAOJI NIPP	GAS	111.1	99.9
14 OLORUNSOGO NIPP	GAS	0	0
15 OMOTOSHO NIPP	GAS	109.9	97.8
16 ODUKPANI NIPP	GAS	0	0
17 IHOVBOR NIPP	GAS	206.7	85.1
18 OKPAI	GAS	137	117
19 AFAM VI	GAS	276	285
20 IBOM POWER	GAS	104.3	75.5
21 ASCO	GAS	0	0
22 A.E.S	GAS	0	0
23 OMOKU	GAS	34.8	36.5
24 TRANS AMADI	GAS	0	0
25 RIVERS IPP	(GAS)	0	0
26 AZURA - EDO IPP	(GAS)	403	375
27 EGBIN ST6	(GAS)	0	0
28 PARAS ENERGY	(GAS)	70	68.6
29 GBARAIN NIPP	GAS	0	0
TOTAL		3883.2	3323

1.6 ENERGY GENERATED/ENERGY SENT OUT:		ENERGY GENERATED		ENERGY SENT OUT	
STATION	TURBINE	MWH	MWH/H	MWH	MWH/H
1 KAINJI	HYDRO	3823.00	159.29	3809.40	158.73
2 JEBBA	HYDRO	4053.00	168.88	4035.44	168.14
3 SHIRORO	HYDRO	6014.00	250.58	5985.13	249.38
4 EGBIN ST2 - 5	STEAM	12761.00	531.71	12130.90	505.45
5 SAPELE	STEAM	177.10	7.38	172.70	7.20
6 DELTA	GAS	11018.20	459.09	10815.10	450.63
7 AFAM IV-V	GAS	36.00	1.50	31.69	1.32
8 GEREGU GAS	GAS	6250.40	260.43	6223.04	259.29
9 OMOTOSHO GAS	GAS	3285.00	136.88	3260.40	135.85
10 OLORUNSOGO GAS	GAS	4021.60	167.57	3992.59	166.36
11 GEREGU NIPP	GAS	0.00	0.00	0.00	0.00
12 SAPELE NIPP	GAS	2675.17	111.47	2658.56	110.77
13 ALAOJI NIPP	GAS	2607.50	108.65	2601.40	108.39
14 OLORUNSOGO NIPP	GAS	0.00	0.00	0.00	0.00
15 OMOTOSHO NIPP	GAS	2545.10	106.05	2522.60	105.11
16 ODUKPANI NIPP	GAS	0.00	0.00	0.00	0.00
17 IHOVBOR NIPP	GAS	3693.00	153.88	3677.00	153.21
18 OKPAI	GAS	3095.00	128.96	3052.10	127.17
19 AFAM VI	GAS	6646.86	276.95	6552.56	273.02
20 IBOM	GAS	1864.33	77.68	1855.00	77.29
21 ASCO	GAS	0.00	0.00	0.00	0.00
22 AZURA - EDO IPP	GAS	9553.25	398.05	9527.10	396.96
23 A.E.S	GAS	0.00	0.00	0.00	0.00
24 OMOKU	GAS	854.40	35.60	831.00	34.63
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	1689.70	70.40	1686.30	70.26
29 GBARAIN NIPP	GAS	0.00	0.00	0.00	0.00
TOTAL		86,663.61	3,610.98	85,420.01	3,559.17

1.7A GENERATION POSITION AT 06:00HRS OF TUESDAY 12/06/2018

	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 & 12 3	340	270	1G5, 6 & 12 3	270	192	1G7 - Out on stator winding failure. 1G8 - Out due to oil leakage on governor runner head. 1G9 - Out due to burnt 7.5MVA 330.415kV & 183.6MVA 16/330kV station service transformer and generator transformer. 1G10 - Shut down due to thrust bearing temperature problem. 1G11 - Out on maintenance.
	JEBBA HYDRO	6	2G1 - 5 5	475	475	2G1, 3 & 5 3	285	232	2G2 & 4 - Out on water management. 2G6 - Out due to burnt generator winding and AVR.
	SHIRORO HYDRO	4	411G 2 & 4 2	280	280	411G2 & 4 2	280	246	411G1 - Out due to synchronization problem. 411G3 - Out on maintenance. Generation reduced due to low gross operating head.
	EGBIN STEAM	5	ST1, 2 & 4 3	660	550	ST1, 2 & 4 3	550	550	ST3 - Out on high vibration since 19th June 2017. ST5 - Out due to boiler tube leakage.
	SAPELE (STEAM)	1	0 0	0	0	0 0	0	0	ST1 - Out on low drum level. ST2 - Tripped on low air instrument. ST3 - Out on stator winding problem. ST4 & 5 - Awaiting major overhaul. ST6 - Out on gas control valve not following reference point.
	DELTA (GAS)	18	GT7, 9-13, 15, 16 & 18-20 11	635	635	GT7, 9-11, 13, 15 & 16 & 18-20 10	595	551	GT3 & 5 - Out due to generator winding fault. GT4 - Out on loss of excitation. GT6, 8 & 14 - Out on major overhaul. GT12 - Out due to low gas pressure. GT17 - Tripped on bearing vibration than maximum.
	AFAM IV & V (GAS)	8	0 0	0	0	0 0	0	0	GT1 - 12 - De-commissioned and scrapped. GT13 - 16 - Out on blade failure. GT17 - Shut down due to oil leakage on the unit bearing compartment. GT18 - Out due to severe oil leakage. GT19 & 20 - Awaiting major overhaul.
	GEREGU GAS	3	GT11 - 13 3	435	435	GT11 & 13 2	290	196	GT12 - Out due to low gas pressure. Generation reduced due to gas constraint.
	OMOTOSHO GAS	8	GT1 - 8 8	336	304	GT2, 6, 7 & 8 4	152	140.9	GT1, 3 - 5 - Out due to low gas pressure.
	OLORUNSOGO GAS	8	GT1 - 8 8	336	304	GT1, 4, 5, 6 & 8 5	190	172.3	GT2, 3 & 7 - Out due to low gas pressure.
NIPP	GEREGU NIPP	3	GT21 - 23 3	435	435	0 0	0	0	GT21 - 23 - Out due to gas constraint.
	SAPELE NIPP	4	GT1 & 3 2	225	225	GT1 & 3 2	225	164.3	GT2 - Out due to high air inlet differential pressure. GT4 - Out on general fire alarm.
	ALAOJI NIPP GAS	4	GT1 & 4 2	250	240	GT4 1	107.6	107.6	GT1 - Out due to low gas pressure. GT2 - Tripped on bearing lube oil high temperature. GT3 - Shut down due lack of spare parts.
	OLORUNSOGO NIPP	6	GT1 - 3 3	375	360	0 0	0	0	GT1 - 3 - Out due to gas constraint. GT4 - Out due to ignition failure and control relay failure alarm. ST13 & ST23 - Out on maintenance.
	OMOTOSHO NIPP GAS	4	GT1, 2 & 4 3	375	360	GT2 1	120	95.8	GT1 & 4 - Out due to low gas pressure. GT3 - Shut down due to oil leakage on the unit.
	ODUKPANI NIPP	5	GT4 & 5 2	240	230	0 0	0	0	GT1 - Out on fault. GT2 - Out due to malfunctioning gas regulating valve. GT3 - Out on high air inlet differential pressure. GT4 & 5 - Shut down due to work on gas pipe line equipment.
	IHOVBOR NIPP	4	GT1 - 3 3	337.5	315	GT1 & 2 2	220	197	GT3 - Out due to gas constraint. GT4 - Out on maintenance.
	GBARAIN NIPP GAS	1	0 0	0	0	0 0	0	0	GT2 - Out on loss of back feed.
IPP	OKPAI GAS/STEAM	3	GT11 & 12 2	300	300	GT12 1	150	107	GT11 - Out due to high voltage. ST18 - Out due to water shortage.
	AZURA - EDO	3	GT11 - 13 3	459	459	GT11 - 13 3	459	351	Available units on bar
	AFAM VI GAS/STEAM	4	GT11 - 13 & ST10 4	650	640	GT11 & 13 2	300	245	GT12 - Out to reduce load flow on cct T4A. ST10 - Out due to low gas pressure.
	IBOM POWER GAS	3	GT3 1	115	115	GT3 1	115	66.8	Generation reduced due to line constraint.
	AES	0	0 0	0	0	0 0	0	0	Out of production since 27/09/2014.
	ASCO	2	0 0	0	0	0 0	0	0	ST1 - Shut down due to leakage in the furnace.
	OMOKU GAS	6	GT1 & 2 2	50	40	GT1 & 2 2	40	36.5	GT3 - Out due to gas leakage. GT4 - Awaiting major overhaul. GT5 - Out due to VT problem. GT6 - Out due to lube oil low pressure.
	TRANS-AMADI	4	GT1 & 2 2	50	40	0 0	0	0	GT1 & 2 - Out due to vandalism of 132kV Port Harcourt mains/Trans-Amadi line. GT3 - Out on fault. GT4 - Tripped on generator differential lockout.
	RIVERS	1	0	0	0	0	0	0	GT1 - Out on maintenance.
	SUB TOTAL	126	75	7358.5	7012	47	4348.6	3651.2	Frequency = 50.41Hz.

1.7B GENERATION POSITION AT 06:00HRS OF TUESDAY 12/06/2018 FOR UNITS ON BILATERAL AGREEMENT

EGBIN	1	ST6	220	90	0	0	0	ST6- Out due to un-disclosed fault.
		1			0			
PARAS ENERGY	8	GT2 - 9	69.4	69.4	GT2 - 9	69.4	69.4	Available units on bar.
		8			8			
SUB TOTAL	9	9	289.4	159.4	8	69.4	69.4	
GRAND TOTAL	135	84	7647.9	7171.4	55	4,418.00	3,720.60	Frequency = 50.41Hz.

1.7C BILATERAL AGREEMENT UNITS DISPATCH - MONDAY 11/06/2018

FEEDERS NAME	MAX. LOAD (MW)	TIME (HRS)		REMARK	
Egbin ST6 120MW GENERATION TO IKEJA ELECTRICITY DISTRIBUTION COMPANY					
OGBA	U-STEEL	1	0900HRS	24	NIL
	PTCEXPRESS	5	1900HRS	7	TRIPPED ON E/F
	SANKYO	ON	0100HRS	24	NIL
	FEEDER 8	12	2200HRS	24	NIL
IKORODU	PULK IT	4	0200	24	NIL
	INDUSTRIAL	21	2100	24	NIL
	SPINTEX	11	2100	24	NIL
	DANGOTE	3	1600	24	NIL
ALAUSA	LAND CRAFT	15	2200	24	NIL
	TR4 15MVA	6.9	09'00	24	NIL
	TR5 -15MVA	5.9	1700	"	NIL
W/LAND	ALAUSA	17.5	0900	22	URGENT OUTAGE, LMD REPLACED BURNT CLAMP AND PLATE ON YELLOW PHASE LINE ISOLATOR
	PTC (MARYLAND)	14	0700HRS	20HRS	PLANNED OUTAGE
	LORDSMITH (PAPALANTO)	0.2	2100	24	NIL
	TOTAL LOAD	116.5			

BILATERAL AGREEMENT LOAD DISPATCH
60MW PARAS ENERGY GENERATION TO CEB

FEEDER	MAX	TIME	HOURS IN SERVICE	REMARK
Ikeja West/Sakete 330kV line	71.8	12:00	24	NIL

BILATERAL AGREEMENT MAIN STREAM ENERGY KAINJI LOAD DISPATCH TO THE FOLLOWING COMPANIES OF MONDAY 11/06/2018

COMPANY NAME	VOLTAGE LEVEL	EXPECTED CONTRACTUAL LOAD (MW)	MAX	TIME	HOUR IN SERVICE	REMARK
INNER GALAXY	132kV line	25	38	09:00	24	NIL
KAM STEEL		Not commissioned				
ASAKA CEMENT		0	12	01:00	24	NIL
KAM INTEGRATED	33kV feeder	15	1.3	15:00	24	NIL
OLAM FLOUR MILLS		3	2.1	15:00	24	NIL
LORDSMITH		3	0.2	10:00	24	NIL

5.0 **OUTAGES:-**

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

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

- 1 00:23 – 00:42Hrs, Ayede/Mcpherson/Shagamu/Ijebu-Ode 132kV line CB tripped at Ayede T/S on the following relay indications:
Optimho relay – Z1 A – N, location = 27.3km, period = 71ms.
Micom relay: Instantaneous E/F and O/C. LHR = 22MW.
00:39Hrs, Trial restoration failed on the following relay indications:
Optimho relay – SOTF, location = 692.6km, period = 126ms.
Micom relay – Instantaneous E/F & O/C Red & Blue Phases.
- 2 01:32 through 24:00Hrs, Mcpherson T/S 40MVA 132/33kV transformer T1 primary and secondary CBs tripped on general trip and REF. LHR = 0.1MW.
- 3 08:32 – 08:54Hrs, Birnin-Kebbi/Sokoto 132kV line CB tripped at Birnin-Kebbi T/S on 86 lockout minimal voltage relay, led 1(General trip)
Led 6 (R –PU) Led 7 (Y –PU) . LHR = 52MW.

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

- 1 09:16 – 11:10Hrs, Ikeja West/Agbara 132kV line 1 main and tie CBs were taken out for annual preventive maintenance. No load loss as line 2 was in service.

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

- 1 07:12 through 24:00Hrs, Delta P/S GT15 was shut down due to low gas pressure. Load loss = 60MW.
- 2 09:36 – 10:26Hrs, Gusau T/S 132kV incomer CB was opened to isolate Gusau T/S for maintenance crew to treat hot spot on 30MVA 132/33kV transformer T1B secondary CB Yellow Phase CT clamp. Load loss = 3MW.

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 2A - UNITS FROM ODUKPANI, AZURA, SHELL AFAM VI AGIP OKPAI, OLORUNSOGO POWER PLC AND OMOTOSHO POWER PLC.

GROUP 2B - OTHER GENERATING 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 CONTRACTED 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 (NOT YET IDENTIFIED).

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

The under mentioned lines were opened on frequency control.

- 1 09:18 - 09:47Hrs, Akangba/Isolo 132kV line 1. Load loss = 73MW. Frequency was 49.86Hz.
- 2 11:03 – 11:08Hrs, Osogbo/Ilesha/Ife 132kV line. Load loss = 48MW. Frequency was 49.98Hz.
- 3 12:58 – 13:04Hrs, Osogbo/Akure/Ado-Ekiti 132kV line. Load loss = 41MW. Frequency was 49.84Hz.

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

5 (G) **330KV LINES THAT ARE OUT ON VOLTAGE CONTROL:-** ccts A2K, U1A & A1S.

5 (H) **330KV LINES THAT ARE OUT ON BREAKER PROBLEM:- NIL**

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

5 (J) **330KV LINES THAT ARE OUT ON LINE FAULT:-** ccts K4U & S5B.

5 (K) **330KV LINES THAT ARE ON SOAK:-** ccts N4J & F1K.

6 **WEATHER REPORT:-** Rainfall was reported at Makurdi.

7 **INTERNATIONAL LINES:-**

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

Maximum load - 285MW at 21:00Hrs.
Minimum load - 211MW at 07:00Hrs.

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

Maximum load - 104.0MW at 16:00Hrs.
Minimum load - 80.0MW at 03:00Hrs.

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

Maximum load - 47.5MW at 17:00Hrs.
Minimum load - 39.0MW at 11:00Hrs.

8 **MISCELLANEOUS:-**

- 1 05:22Hrs, Sapele NIPP GT1 was tied. The unit was out due to system disturbance of 08/06/2018.
- 2 05:35Hrs, Delta P/S GT15 was tied. The unit was out due to low gas pressure.
- 3 09:31Hrs, Ihovbor NIPP GT2 was tied. The unit was out due to low gas pressure.
- 4 14:07Hrs, Sapele NIPP GT3 was tied. The unit was out due to system disturbance of 08/06/2018.
- 5 09:47Hrs, Kaduna Town T/S 2 x 60MVA 132/33kV transformers T1A & T1B were commissioned on soak by the Honourable Minister of Works, Power and Housing.
- 6 10:30Hrs, Mando T/S 150MVA 330/132/33kV transformer T1A was commissioned on soak by the Honourable Minister of Works, Power and Housing.
- 7 20:04Hrs, Sapele ST2 was tied. The unit tripped on low gas instrument.

8 23:15Hrs, Afam IV P/S GT17 was tied. The unit was out due to oil leakage on the unit bearing compartment.

***** LACK OF REACTOR AND UNRELIABLE STATION SERVICE SUPPLY AT IKOT-EKPENE T/S ARE HINDERING SMOOTH OPERATION.

***** THE SCADA COVERAGE OF ONLY LIMITED AREAS IS NOT GOOD FOR THE SMOOTH OPERATION OF THE GRID.

11 (A) COMMUNICATION MEDIA

STATIONS	NO INSTALLED	NO. WORKING
PLC/PAX	37	26
OPTIC FIBRE	13	8
PLS	14	0

11 (B) SCADA RTU STATUS

STATIONS	NO. INSTALLED	NO OF RTU DISTURBED	NO OF RTU WORKING
POWER STATIONS	8	5	3
330kV	19	6	13
132kV	102	84	18

12(A) UNAVAILABLE TRANSFORMERS/REACTORS:

SHIROR

- 1 Birnin Kebbi 75MX Reactor R1.

ABUJA REGION

- 1 Apo T/S 60MVA 132/33kV transformer TR3 - Burnt.

KADUNA REGION:

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

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.

BENIN REGION:

- 1 Omotosho T/S 330kV, 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

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

12(C) LAGOS REGION

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

12(D) UNAVAILABLE CAPACITOR BANK:

- 1 (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.

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 Shiroro T/S 330kV Jebba line 2 - 28 spans

ABUJA REGION

- 1 Apo T/S 132kV Keffi line - 36 spans

12 (E) 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

