

TRANSMISSION COMPANY OF NIGERIA

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

DAILY OPERATIONAL REPORT OF MONDAY 04/06/2018

FOR: EVENTS OF SUNDAY 03/06/2018

1.0 EXECUTIVE OPERATIONS SUMMARY:

1.1 GENERATION PROFILE: NATIONAL STATISTICS

DETAILS	MW	HRS	DATE
PEAK DEMAND FORECAST (CONNECTED + SUPPRESSED LOAD)	22,560	20:30	03/06/2018
GENERATION CAPABILITY	7157.5	-do-	-do-
UNITS ON BAR CAPABILITY AT PEAK	4998.7	-do-	-do-
PEAK GENERATION	4589.5	-do-	-do-
LOWEST GENERATION	2963.1	11:00	03/06/2018
8-HOURLY DURATION PEAK	3754.7	0100-0800	-do-
	3621.1	0900-1600	-do-
	4589.5	1700-2400	-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	357	Omotosho T/S	08:00
LOWEST VOLTAGE FOR THE DAY	300	Kumbotso, Gombe & Yola T/S	04:00, 12:00 & 13:00

1.3 FREQUENCY RANGE

DETAILS	HZ	HRS
NOMINAL FREQUENCY	50	
STATUTORY LIMITS	49.75 - 50.25	
HIGHEST FREQUENCY	50.62	23:51
LOWEST FREQUENCY	49.68	19:29

1.4 SYSTEM COLLAPSE UP DATE

Date of last total collapse: 1st Feb., 2018		No. of days since last total collapse: 114												
Date of last partial collapse: 12 th April., 2018		No. of days since last partial collapse: 50												
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	3	--	2	2	1	4	22
	Partial	1	--	--	1	1	3	4	4	3	2	--	1	20
2011	Total	--	--	--	--	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	8
2013	Total	--	1	2	2	3	4	1	1	1	1	4	2	22
	Partial	--		--	--	--	--	--	2					2
2014	Total	2			2	0	3	1	0	0	1	0	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	0	1	0	6
	Partial	--	--	1	0	2	0		0	0	1	0	0	4
2016	Total	--	--	2	3	6	5	0	0	1	1	2	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			9
2018	Total	5	1	0	0	0								6
	Partial	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	221	109
2 JEBBA	HYDRO	170	145
3 SHIRORO	HYDRO	494	304
4 EGBIN ST2 - 5	STEAM	570	459
5 SAPELE	STEAM	0	0
6 DELTA	GAS	587	321
7 AFAM IV-V	GAS	0	0
8 GEREGU GAS	GAS	417	150
9 OMOTOSHO GAS	GAS	137.4	101.6
10 OLORUNSOGO GAS	GAS	168.4	123.9
11 GEREGU NIPP	GAS	0	0
12 SAPELE NIPP	GAS	181.6	74.8
13 ALAOJI NIPP	GAS	114.7	80
14 OLORUNSOGO NIPP	GAS	0	0
15 OMOTOSHO NIPP	GAS	218.3	90.5
16 ODUKPANI NIPP	GAS	0	0
17 IHOVBOR NIPP	GAS	187.1	165
18 OKPAI	GAS	232	202
19 AFAM VI	GAS	276	228
20 IBOM POWER	GAS	73	62.4
21 ASCO	GAS	0	0
22 A.E.S	GAS	0	0
23 OMOKU	GAS	84.6	80.9
24 TRANS AMADI	GAS	0	0
25 RIVERS IPP	(GAS)	0	0
26 AZURA - EDO IPP	(GAS)	275	150
27 EGBIN ST6	(GAS)	113	116
28 PARAS ENERGY	(GAS)	69.4	0
29 GBARAIN NIPP	GAS	0	0
TOTAL		4589.5	2963.1

1.6 ENERGY GENERATED/ENERGY SENT OUT:

STATION	TURBINE	ENERGY GENERATED		ENERGY SENT OUT	
		MWH	MWH/H	MWH	MWH/H
1 KAINJI	HYDRO	3930.00	163.75	3916.50	163.19
2 JEBBA	HYDRO	3714.00	154.75	3699.96	154.17
3 SHIRORO	HYDRO	9673.00	403.04	9645.13	401.88
4 EGBIN ST2 - 5	STEAM	11378.00	474.08	10779.60	449.15
5 SAPELE	STEAM	0.00	0.00	0.00	0.00
6 DELTA	GAS	11726.60	488.61	11557.50	481.56
7 AFAM IV-V	GAS	0.00	0.00	0.00	0.00
8 GEREGU GAS	GAS	7155.10	298.13	7124.68	296.86
9 OMOTOSHO GAS	GAS	2866.00	119.42	2842.80	118.45
10 OLORUNSOGO GAS	GAS	3360.91	140.04	3331.40	138.81
11 GEREGU NIPP	GAS	0.00	0.00	0.00	0.00
12 SAPELE NIPP	GAS	2228.90	92.87	2212.92	92.21
13 ALAOJI NIPP	GAS	2255.00	93.96	2234.38	93.10
14 OLORUNSOGO NIPP	GAS	0.00	0.00	0.00	0.00
15 OMOTOSHO NIPP	GAS	2661.90	110.91	2635.20	109.80
16 ODUKPANI NIPP	GAS	0.00	0.00	0.00	0.00
17 IHOVBOR NIPP	GAS	4150.00	172.92	4124.90	171.87
18 OKPAI	GAS	5148.00	214.50	5075.00	211.46
19 AFAM VI	GAS	6016.22	250.68	5967.47	248.64
20 IBOM	GAS	1659.82	69.16	1651.00	68.79
21 ASCO	GAS	0.00	0.00	0.00	0.00
22 AZURA - EDO IPP	GAS	5004.70	208.53	4982.73	207.61
23 A.E.S	GAS	0.00	0.00	0.00	0.00
24 OMOKU	GAS	1963.70	81.82	1920.14	80.01
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	2700.00	112.50	2567.70	106.99
28 PARAS ENERGY	GAS	1024.30	42.68	1019.20	42.47
29 GBARAIN NIPP	GAS	0.00	0.00	0.00	0.00
TOTAL		88,616.15	3,692.34	87,288.21	3,637.01

1.7A GENERATION POSITION AT 06:00HRS OF MONDAY 04/06/2018

	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	159	1G7 - Out on stator winding failure. 1G8 - Out due to oil leakage on governor runner head. 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. 1G11- Out on maintenance.
	JEBBA HYDRO	6	2G1 - 5 5	475	475	2G1 & 5 2	190	151	2G2-4 - Out on water management. 2G6 – Out due to burnt generator winding and AVR.
	SHIRORO HYDRO	4	411G1 - 4 4	560	560	411G1 - 4 4	560	428	411G2 - Generation reduced on frequency management.
	EGBIN STEAM	5	ST1, 2, 4 & 5 4	880	547	ST1, 2, 4 & 5 4	547	487	ST3 - Out on high vibration since 19th June 2017. Generation reduced on frequency management.
	SAPELE (STEAM)	6	0 0	0	0	0 0	0	0	ST1 - Out on low drum level. ST2 - Out on instrument air compressor low. 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 -13, 15, 16 18 & 20 10	515	460	GT3 & 5 - Out due to generator winding fault. GT4 - Out on loss of excitation. GT6, 8 & 14 - Out on major overhaul. GT17 - Out on excitation trouble. GT19 - Out on frequency management.
	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 on lube oil pressure problem. GT19 & 20 - Awaiting major overhaul.
	GEREGU GAS	3	GT11 - 13 3	435	435	GT11 - 13 3	435	347	GT11 - 13 - Generation reduced on frequency management.
	OMOTOSHO GAS	8	GT1 - 8 8	336	304	GT1, 6, 7 & 8 4	152	121.9	GT2 - 5 - Out due to gas constraint.
	OLORUNSOGO GAS	8	GT1 - 8 8	336	304	GT1, 2, 5, 6 & 8 5	190	140.8	GT3, 4 & 7 - Out due to gas constraint.
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	109.6	GT2 - Out due to high air inlet differential pressure. GT4 - Out on general fire alarm.
	ALAOJI NIPP GAS	4	GT1 & 4 2	250	240	GT1 1	120	86	GT1 - Generation reduced on frequency management. GT3 - Shut down due to generator air inlet filter trouble. GT4 - Out due to low gas pressure.
	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	GT1 & 4 2	240	158	GT2 - Out due to gas constraint. 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 & 3 2	205	105.2	GT2 - 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	GT11 & 12 2	300	184	ST18 - Out due to water shortage.
	AZURA - EDO	3	GT11 - 13 3	459	459	GT11 & 13 2	306	250	GT12 - Out on line constraint.
	AFAM VI GAS/STEAM	4	GT11 - 13 & ST10 4	650	450	GT11 - 13 3	450	326	ST10 - Out on frequency management.
	IBOM POWER GAS	3	GT3 1	115	115	GT3 1	115	72.6	GT1 & 2 - Out on fault. GT3 - 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, 5 & 6 4	100	84.3	GT1, 2, 5 & 6 4	84.3	84.3	GT3 - Out due to gas leakage. GT4 - Awaiting major overhaul.
	TRANS-AMADI	4	GT1 & 2 2	50	40	0 0	0	0	GT1 & 2 - Out due to line constraint since 03/04/2018. GT3 - Out on fault. GT4 - Tripped on generator differential lockout.
	RIVERS	1	GT1 1	180	160	0 0	0	0	GT1 - Out due to low gas pressure.
SUB TOTAL	131	81	8088.5	7303.3	54	4904.3	3670.4	Frequency = 50.55Hz.	

1.7B GENERATION POSITION AT 06:00HRS OF MONDAY 04/06/2018 FOR UNITS ON BILATERAL AGREEMENT

FEEDER	MAX. LOAD (MW)	TIME (HRS)	REMARK
EGBIN	1	ST6 1	220
PARAS ENERGY	8	GT2 - 9 8	67.8
SUB TOTAL	9	9	287.8
GRAND TOTAL	140	90	8376.3

1.7C BILATERAL AGREEMENT UNITS DISPATCH - SUNDAY 03/06/2018

FEEDERS NAME	MAX. LOAD (MW)	TIME (HRS)	REMARK
Egbin ST6 120MW GENERATION TO IKEJA ELECTRICITY DISTRIBUTION COMPANY			
OGBA	U-STEEL	1	0700HRS
	PTCEXPRESS	10	1800HRS
	SANKYO	ON	0100HRS
	FEEDER 8	17	1100HRS
IKORODU	PULK IT	4	0900HRS
	INDUSTRIAL	19	090HRS
	SPINTEX	9	1700HRS
	DANGOTE	1	0100HRS
	LAND CRAFT	16	0100HRS
ALAUUSA	TR4 15MVA	8.3	16;00
	TR5 -15MVA	6	09;00
	ALAUUSA	16.2	15;00
M/LAND	PTC (MARYLAND)	15	1800HRS
	LORDSMITH (PAPALANTO)	0.4	0100HRS
	TOTAL LOAD	122.9	

BILATERAL AGREEMENT LOAD DISPATCH
60MW PARAS ENERGY GENERATION TO CEB

FEEDER	MAX	TIME	HOURS IN SERVICE	REMARK
Ikeja West/Sakete 330kV line	69.4	04:00	15	Due to planned outage on Ikorodu/Shagamu 132kV line.

BILATERAL AGREEMENT MAIN STREAM ENERGY KAINJI LOAD DISPATCH TO THE FOLLOWING COMPANIES OF SUNDAY - 03/06/2018

COMPANY NAME	VOLTAGE LEVEL	EXPECTED CONTRACTUAL LOAD (MW)	MAX	TIME	HOUR IN SERVICE	REMARK
INNER GALAXY	132kV line	25	26	02:00	24	NIL
KAM STEEL		Not commissioned				
ASAKA CEMENT	33kV feeder	0	7.6	10:00	24	NIL
KAM INTEGRATED		15	0.6	23:00	24	NIL
OLAM FLOUR MILLS		3	0.7	22:00	24	NIL
LORDSMITH		3	0.4	09:00	24	NIL

5.0 OUTAGES:

5 (A) FORCED OUTAGES (GENERATION):-

- 1 02:59 - 04:08Hrs, Kainji 1G6 tripped on turbine guide bearing high temperature. LHR = 61MW
- 2 06:26 - 10:55Hrs, Kainji 1G6 tripped on turbine guide bearing high temperature. LHR = 53MW

5(B) FORCED OUTAGES (TRANSMISSION):

- 1 10:23 - 10:31Hrs, Shiroro/Minna 132kV line 2 CB tripped at Shiroro T/S on Back up trip 86BU, instantaneous O/C trip, 3 phases. LHR = 7MW
- 2 17:46 – 18:06Hrs, Adiator/Calabar 132kV line 2 CB tripped at Adiator T/S on E/F. LHR = 17MW.
- 3 22:42 – 23:16Hrs, Uguwaji/Makurdi 330kV line 2 (cct U2A) CBs tripped at both ends on the following relay indications:
At Uguwaji T/S: Directional O/C & E/F 3 Phases and lockout relay.
At Makurdi T/S: Line differential relay ABC, line distance relay ABC, inter posing relay. LHR = 257MW.
- 4 22:42 through 24:00Hrs, Uguwaji T/S 150MVA 330/132kV transformer T01 primary CB tripped on differential relay while the secondary CB tripped on REF and lockout relay. LHR = 14.2MW.
- 5 23:16 – 23:38Hrs, Alaoji/Ikot-Ekpene 330kV line 1 (cct A1K) CBs tripped at both ends on the following relay indications
At Alaoji T/S: SEL Relay: Phase A - Ground zone 1.
At Ikot-Ekpene T/S: Over voltage relay. LHR = 2MW.
- 6 23:16 – 23:52Hrs, Odukpani T/S 150MVA 330/132kV transformer primary CB tripped on over voltage and main protection while the secondary CB tripped on backup protection. LHR = 0.01MW.

5 (C) PLANNED OUTAGES:-

- 1 06:51 – 17:54Hrs, Mando/Kaduna Town 1 132kV lines 1 & 2 were taken out to enable LMD crew and contractor continue with the replacement of ACSR conductor and disc insulator with ACCC and silicone composite type on the line. Load loss = 34MW.
- 2 08:49 - 15:11Hrs, Zaria/Dangora 132kV line was taken out to enable maintenance crew replace broken insulators on towers #436, 447, 449 478, 481 and 504. Load loss = 5MW
- 3 09:28 - 09:39Hrs, Zaria/Funtua/Gusau 132kV line was taken out to isolate Gusau T/S for maintenance crew to install lightening arrester and CT for New 60/66MVA 132/33kV transformer. Load loss = 3.4MW
- 3 09:28 – 16:11Hrs, Funtua/Gusau 132kV line CB was taken out at Gusau T/S to enable maintenance crew install primary & secondary lightening arresters for 60/66MVA 132/33kV transformer T1C. Load loss = 13.4MW.
- 4 10:13 - 19:05Hrs, Ikorodu/Shagamu 132kV line was taken out to enable maintenance crew remove loose sky wire that is almost touching the line between pole #260 and 261. Load loss = 30MW.

5(D) URGENT OUTAGES:

- 1 10:12Hrs, Paras Energy GTs 2 - 9 were shut down due to planned outage on Ikorodu/Shagamu 132kV line. Load loss = 69.4MW.
19:10Hrs – GT2 was tied, 19:12Hrs – GT3 was tied, 19:15Hrs – GT4 was tied, 19:17Hrs – GT5 was tied, 19:18Hrs – GT6 was tied, 19:18Hrs – GT7 was tied, 19:22Hrs – GT8 was tied & 19:25Hrs = GT9 was tied.
- 2 16:02 – 16:11Hrs, Zaria/Funtua/Gusau 132kV line was taken out to close Funtua/ Gusau 132kV line isolator at Funtua T/S. Load loss = 8MW.

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 19:27 – 19:34Hrs, Osogbo/Offa/Omuaran 132kV line. LHR = 13MW. Frequency was 49.68Hz.
- 2 19:28 – 19:38Hrs, Osogbo/Akure/Ado-Ekiti 132kV line. LHR = 50MW. Frequency was 49.52Hz.

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 A2S, K4U & S5B.

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

6 WEATHER REPORT:- Rainfall reported at Afam 1 T/S, New Haven, Osogbo & Uguwaji.

7 INTERNATIONAL LINES:-

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

Maximum load - 278MW at 21:00Hrs.
Minimum load - 197MW at 11:00Hrs.

B BIRNIN KEBBI/NIAMEY 132KV LINE

Maximum load - 86.0MW at 15:00Hrs.
Minimum load - 73.0MW at 20:00Hrs.

C KATSINA/GAZAOUA/MARADI 132KV LINE

Maximum load - 46.0MW at 20:00Hrs.
Minimum load - 33.0MW at 11:00Hrs.

8 MISCELLANEOUS:-

- 1 00:05Hrs, Shiroro P/S reduced generation by 90MW. Frequency was 50.58Hz
- 2 00:06Hrs, Geregu Gas P/S reduced generation by 50MW. Frequency was 50.58Hz
- 3 00:44Hrs, Kaduna Town 1 T/S 60MVA 132/33kV transformer T3 was restored. The transformer was out on fault
- 4 02:01Hrs, Shiroro P/S reduced generation by 100MW. Frequency was 50.50Hz
- 5 07:18 - 19:04Hrs, Delta GT16 was shut down on frequency management. Load loss = 65MW
- 6 07:19Hrs, Lokoja/Gwagwalada 330kV line 2 (cct L7G) was taken out on voltage control. Voltage profile: Lokoja T/S 354/352kV & Gwagwalada T/S = 350/345kV.
- 7 08:18 - 08:30Hrs, Mando T/S 90MVA 330/132/13.8kV transformer T2A was taken out to restore 75MX 330kV Reactor 3R3 on voltage control. V/P = 345/338kV. The transformer was on soak.
- 8 08:19Hrs, Shiroro P/S reduced generation by 90MW. Frequency was 50.60Hz

- 9 08:30 - 18:35Hrs, Delta GT19 was shut down on frequency management. Load loss = 40MW
15:00Hrs, Azura-Edo IPP GT12 was declared available. The unit was out on maintenance.
- 11 19:15Hrs of 02/06/2018 – 13:13Hrs, Shagamu T/S 30MVA 132/33kV transformer primary CB tripped on bias differential relay. LHR = 15MW. Cut Red Phase secondary jumper was amended before restoration.
- 12 22:12Hrs, Afam VI P/S GT11 was tied. The unit was out on gas constraint.
- ***** 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	6	2
330kV	19	7	12
132kV	102	85	17

12(A) UNAVAILABLE TRANSFORMERS/REACTORS:

SHIRO

- 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/ISOLATORS

LAGOS REGION:

- 1 Akangba T/S. 132kV Bus Coupler CB - Serious Air leakage.(Undergoing repair)
- 1 Egbin/Aja 330kV line 2 (cct N4J) - faulty breaker at Aja T/S
- 1 Otta/Ogba 132kV line isolator - defective control shaft.
- 1 Osogbo/Ikeja West and Olorunsogo/Ikeja West tie CB at Ikeja West T/S - defective pole
- 1 Oke-Aro/Ikeja West 330kV lines 1 & 2 tie CB at Ikeja West T/S - Defective pole.
- 1 Jebba G.S/Jebba T.S 330kV line 2 CB at Jebba T/S.
- 1 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.
- 1 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.
- 1 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.
- 1 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.
- 1 Ikeja West/Olorunsogo line (cct R1W) - 80 spans.
- 1 330kV Ikeja West/Osogbo line. - 95 spans.
- 1 Ikeja West/Alimosho/Ogba 132kV lines 1 & 2 - 15 spans.
- 1 Ikeja West/Akangba 330kV line 2 - 1 span.
- 1 Ikeja West/ Ilupeju 132kV lines 1 & 2 - 8 spans.
- 1 Akangba/tire 132kV lines 1 & 2 - 1 span.
- 1 Ikeja West/Agbara 132kV lines 1 & 2 - 61 spans.
- 1 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
- 1 Minna T/S 132kV Bida line - 32 spans
- 1 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, Uguwaji, 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

