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Brief highlights of North Eastern Regional Power System for the month of August 2016

- The maximum unrestricted demand during the month of August 2016 was 2435 MW, which was 2474 MW in the month of July 2016. The peak demand met in NER during the period under review was 2387 MW, which was 2391 MW in the previous month.
- The energy requirement during the month of August 2016 was 1461.06 MU, which was 1306.12 MU in the month of July 2016. The energy availability in NER during the period under review was 1420.72 MU, which was 1260.13 MU in the previous month.
- The maximum, minimum & average system frequency were 50.45 (8-August-16 13:03 Hrs), 49.60 (02-August-16 12:40 Hrs) & 50.07 Hz respectively. The maximum, minimum & average FVI were 0.071, 0.028 & 0.0398 respectively. The average FVI was more than its previous month's figure of 0.034. (Refer Annex-II).

Salient Features of North Eastern Regional Grid for August 2016

		NIL	
1	New Unit/Transmission Line/Transformer commissioned during this month		
2	Number of major grid disturbance during this month	0	
		August 16	July 16
3	Installed Capacity of the Region (in MW)		
	(i) Grid	3477.17	3477.17
	(ii) Isolated	124	124.00
	Total (As on 31.06.2016)	3601.00	3601.00
4	Energy Generation in MU (Gross):		
	Thermal/Gas	858.49	875.7
	Hydel	611.19	794.83
	Solar	0.6	0.60
	Total	1470.28	1671.13
5	Demand in MW:		
	Registered Peak Demand	2435	2497
	Peak Demand Met	2387	2479
	Shortage (%age)	2.3	0.72
6	Regional Energy (Gross) in MU:		
	Energy Requirement	1461.06	1208.73
	Energy Availability	1420.72	1172.43
	Surplus (+)/Deficit(-) (%age)	2.76	-3.14
7	Inter Regional Energy Exchange in MU:		
	NER -----> ER	6.103	108.007
	ER -----> NER	501.151	218.290
	NER -----> NR	455.043	352.944
	NR -----> NER	0	0.002
	Net Import	40.05	-242.649
8	Frequency Profile:		
	Average Frequency (Hz)	50.07	50.01
	Average Frequency Variation Index	0.0398	0.0341

Monthly Power Supply Position

1. Energy Generation In The Region For the Month of August 2016

All figures in MU

Constituents	Hydro		Coal/Oil fired		Gas Based (OC/CC)		Solar		Total (Gen)	Total (Gen)
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
	A	B	C	D	E	F	G	H	I	J
State Sector :										
Assam	51.22				106				157.22	
Meghalaya	113.95								113.95	
Mizoram	3.05								3.05	
Tripura					43.99				43.99	
Nagaland	14.67								14.67	
Total (S. Sector)	182.89				149.99		0		332.88	
Central Sector :										
NEEPCO:										
Khd+Kop+Kop-II	177.3								177.3	
Kathalguri (AGBPP)					122.7				122.7	
RC Nagar					66.7				66.7	
Doyang	53.2								53.2	
Ranganadi	123.9								123.9	
Monarchak							0.6		0.6	
NHPC:										
Loktak	73.9								73.9	
OTPC:										
Pallatana Gas PP					390.8				390.8	
NTPC:										
BgTPP			128						128	
Total (C. Sector)	428.3		128		580.2		0.6		1137.1	
Total NER	611.19		128		730.19		.6		1469.98	

2. Requirement Vs Availability In The Region

STATES	ENERGY requirement (MU) at 50 Hz				POWER requirement (MW) at 50 Hz			
	<i>Availability & L/S at prevailing frequency</i>				<i>Availability & L/S at prevailing frequency</i>			
	Requirement	Availability	Shortfall	% Shortfall	Requirement	Availability	Shortfall	% Shortfall
Ar. Pradesh	62.07	60.69	1.383	2.23	148	140	9	6.1
Assam	970.62	938.61	32.015	3.30	1661	1633	25	1.5
Manipur	59.84	57.73	2.101	3.51	145	145	0	0.0

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Meghalaya	138.11	138.11	0.000	0.00	296	296	0	0.0
Mizoram	40.73	39.70	1.031	2.53	83	81	2	2.4
Nagaland	68.59	67.28	1.301	1.90	117	116	1	0.9
Tripura	121.10	118.64	2.460	2.03	265	266	0.2	-0.1
REGION	1461.06	1420.77	40.29	2.76	2435	2387	57	2.3

3. Estimation Of Peak Demand (In MW)

Constituents	Peak Demand Met	Date	Freq (Hz)	Estimated Peak Demand at 50 Hz
Arunachal Pradesh	140	09.08.16	50.12	148
Assam	1633	13.08.16	49.92	1661
Manipur	145	19.08.16	50.02	145
Meghalaya	296	22.08.16	50.02	296
Mizoram	81	16.08.16	50.09	83
Nagaland	116	18.08.16	50.09	117
Tripura*	266	24.08.16	50.12	265
REGION	2387	29.08.16	50.12	2435

4. Estimation of Energy Requirement (In MU)

Constituents	Generation	Energy Drawal from Grid		Energy Availability	Actual Requirement
		Schedule	Drawal		
Arunachal Pradesh	0.0	59.648	68.959	60.69	62.07
Assam	157.22	665.838	735.497	938.61	970.62
Manipur	0.0	62.995	62.742	57.73	59.84
Meghalaya	113.95	13.098	21.784	138.11	138.11
Mizoram	3.05	30.926	36.992	39.70	40.73
Nagaland	14.67	53.185	51.995	67.28	68.59
Tripura	43.99	106.713	132.017	118.64	121.10
REGION	332.88	992.403	1109.986	1420.77	1461.06

Station-Wise Energy Generated (MU) and Peak Generation (MW)

S. No.	Power Stations/Units	Installed Capacity (MW)	Peak Generation (MW)	Energy Generation (MU)	
				Aug-16	Aug-15
(i) STATE SECTOR : HYDRO					
ASSAM : HYDRO					
1	LANGPI U-1	50	51	20.22	24.5
2	LANGPI U-2	50	51	30.9	12.5
TOTAL		100	102	51.12	37
MEGHALAYA : HYDRO					
3	UMIAM STAGE - 1 U-1	9	9	5.10	3.2
4	UMIAM STAGE - 1 U-2	9	9	4.95	3.0
5	UMIAM STAGE - 1 U-3	9	9	5.09	2.7
6	UMIAM STAGE - 1 U-4	9	9	4.99	3.1
7	UMIAM STAGE - 2 U-1	10	10	4.61	2.7
8	UMIAM STAGE - 2 U-2	10	10	5.12	3.4
9	UMIAM STAGE - 3 U-1	30	30	1.29	0
10	UMIAM STAGE - 3 U-2	30	0	0	14.7
11	UMIAM STAGE - 4 U-1	30	30	10.76	12.9
12	UMIAM STAGE - 4 U-2	30	30	17.73	14.0
13	UMTRU U-1	3	0	0	0
14	UMTRU U-2	3	0	0	0
15	UMTRU U-3	3	0	0	0
16	UMTRU U-4	3	0	0	0
17	MYNTDU-LESHKA U-1	42	42	20.76	27.6
18	MYNTDU-LESHKA U-2	42	42	13.61	29.7
19	MYNTDU-LESHKA U-3	42	42	19.11	28.5
20	SONAPANI	2	2	0.81	0.7
TOTAL		316	274	113.93	146.2
NAGALAND : HYDRO					
21	LIKIMRO - 1	8	8	4.93	4.1
22	LIKIMRO - 2	8	8	4.82	4.1
23	LIKIMRO - 3	8	8	4.93	4.2
TOTAL		24	24	14.68	12.4
MIZORAM : HYDRO					
24	SERLUI B U-1	4	5	2.13	0.5
25	SERLUI B U-2	4	4	0.92	0
26	SERLUI B U-3	4	0	0	0
TOTAL		12	9	3.05	0.5
TRIPURA : HYDRO					
27	GUMTI - 1	5	0	0	0
28	GUMTI - 2	5	4	0	0.1

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29	GUMTI - 3	5	3	0	0.2
TOTAL		15	7	0	0.3
TOTAL STATE (HYDRO) :					
		467	381	214.53	176.3
Sr. No.	Power Stations/Units	Installed Capacity (MW)	Peak Generation (MW)	Energy Generation (MU)	
				Jul-16	Jul-15
(i) STATE SECTOR : THERMAL/GAS					
MIZORAM : THERMAL					
1	BAIRABI U-1	6	0	0	0
2	BAIRABI U-2	6	0	0	0
3	BAIRABI U-3	6	0	0	0
4	BAIRABI U-4	6	0	0	0
TOTAL		24	0	0	0
TRIPURA : THERMAL					
5	BARAMURA - 1	5			
6	BARAMURA - 2	5			
7	BARAMURA - 3	6.5			
8	BARAMURA - 4	21	21	8.69	8.1
9	BARAMURA - 5	21	22	6.59	11.3
10	ROKHIA - 1	8	0	0	
11	ROKHIA - 2	8	0	0	
12	ROKHIA - 3	8	0	0	0
13	ROKHIA - 4	8	0	0	0
14	ROKHIA - 5	8	0	0	0
15	ROKHIA - 6	8	0	0	0
16	ROKHIA - 7	21	21	2.81	14.4
17	ROKHIA - 8	21	20	13.31	12.7
18	ROKHIA - 9	21	20	12.59	13.3
TOTAL		169.5	104	43.99	59.8
ASSAM : THERMAL					
19	LTPS - 1	15	0	0	6.6
20	LTPS - 2	15	14	8.96	1.7
21	LTPS - 3	15	14	6.30	9.8
22	LTPS - 4	15	14	7.69	5.6
23	LTPS - 5	20	21	13.41	14.7
24	LTPS - 6	20	20	13.10	11.3
25	LTPS - 7	20	20	13.03	12.6
26	LTPS - 8	37	30	20.33	15.3
27	NTPS - 1	20	19	5.35	9.2
28	NTPS - 2	21	18	3.01	9.8
29	NTPS - 3	21	20	7.94	10.4
30	NTPS - 4	11	7	0.71	2.2
31	NTPS - 5	24	12	2.86	6.4
32	NTPS - 6	22	9	3.00	6.8
33	DLF	25	0	0	0
TOTAL		301	218	105.69	122.4
TOTAL STATE (THERMAL/GAS) :		494.5	322	149.68	182.2
TOTAL STATE GEN (HY+TH/GAS)		961.5	703	364.21	358.5

S. No.	Power Stations/Units	Installed Capacity (MW)	Peak Generation (MW)	Energy Generation (MU)	
				Aug-16	Aug-15
(ii) CENTRAL SECTOR : HYDRO					
1	KHANDONG - 1	25	26	11.8	16.3
2	KHANDONG - 2	25	26	10.4	15.8
3	KOPILI Stg - II	25	28	15.3	15.6
4	KOPILI - 1	50	50	33.1	35.5
5	KOPILI - 2	50	52	34.0	35.5
6	KOPILI - 3	50	50	35.5	36.9
7	KOPILI - 4	50	50	37.2	36.3
8	DOYANG - 1	25	36	18.3	15.3
9	DOYANG - 2	25	18	17.3	15.1
10	DOYANG - 3	25	11	17.6	15.7
11	LOKTAK - 1	35	37	25.8	24.4
12	LOKTAK - 2	35	37	26.0	25.0
13	LOKTAK - 3	35	36	22.0	25.2
14	RANGANADI - 1	135	134	43.5	80.0
15	RANGANADI - 2	135	134	40.8	79.1
16	RANGANADI - 3	135	134	39.7	73.7
TOTAL CS HYDRO :		860	859	428.3	545.4
(ii) CENTRAL SECTOR : THERMAL/GAS					
1	KATHALGURI - 1	34	10	18.9	19.6
2	KATHALGURI - 2	34	10	22.2	16.6
3	KATHALGURI - 3	34	0	20.2	19.5
4	KATHALGURI - 4	34	2	22.0	20
5	KATHALGURI - 5	34	28	4.2	8.9
6	KATHALGURI - 6	34	6	0	1.6
7	KATHALGURI - 7	30	28	16.4	16.2
8	KATHALGURI - 8	30	30	17.3	18.3
9	KATHALGURI - 9	30	28	1.5	3.2
10	R.C. NAGAR - 1	21	22	10.3	14.3
11	R.C. NAGAR - 2	21	21	13.4	13.0
12	R.C. NAGAR - 3	21	21	13.9	10.5
13	R.C. NAGAR - 4	21	21	13.6	14.6
14	R.C. NAGAR - 5	23	22	15.5	10.4
15	R.C. NAGAR - 6	23	0	0	11.1
16	MONARCHAK SOLAR PV	5	5	0.6	0.4
17	MONARCHAK - GTG 1	66	0	0	0
18	MONARCHAK - STG 1		0	0	0
19	PALLATANA - GTG 1	232	226	120.8	111.9
20	PALLATANA - STG 1	131	124	75.8	63.2
21	PALLATANA - GTG 2	232	215	118.2	78.8
22	PALLATANA - STG 2	131	119	76.0	49.4
23	BgTPP - 1	250	172	128.3	0

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24	BgTPP - 2		0	0	0
25	BgTPP - 3		0	0	0
TOTAL CS (THERMAL/GAS) :		1471	1110	709.1	501.5
TOTAL CS GEN (HY+TH/GAS)		2331	1969	1137.4	1046.9
TOTAL NER GEN (HY+TH/GAS)		3292.5	2672	1501.61	1405.4

Plant Load Factor (PLF)

PLANT LOAD FACTOR OF THE THERMAL/GAS STATIONS IN N.E.R.					
S. No.	Power Station	State/Constituent	Installed Capacity (MW)	Generation (in MU)	Stationwise PLF(%)
1	LTPS*	AEGCL	157.00	82.82	70
2	NTPS*	AEGCL	119.00	22.87	25
3	Baramura	Tripura	42.00	15.29	49.65
4	Rokhia	Tripura	95.00	28.71	82.76
5	AGBPP	NEEPCO	291.00	108.1510	51.23
6	AGTCCPP	NEEPCO	84.00	73.567	78.01
7		NEEPCO	46.00		
8	Monarchak	NEEPCO	66.00	0	0.00
9	Pallatana	OTPC	727.00	374.361	71.39
10	BgTPP	NTPC	250.00	132.033	78.01

*LTPS -- Lakwa Thermal Power Station; *NTPS -- Namrup Thermal Power Station

Voltage Profile

1. Maximum and Minimum Voltage (KV) Of Important Substations

S. No.	NAME of SUB-STATION	MAXIMUM (kV)	MINIMUM (kV)
1.	MISA 400 kV	428	392
2.	BALIPARA 400 kV	426	388
3.	BONGAIGAON 400 kV	418	384
4.	Ranganadi 400kV	0	0
5.	Palatana 400kV	422	412
6.	SILCHAR 400 kV	422	396
7.	Biswanath Charalli	427	383
8.	Azara 400 kV	415	410
9.	BgTPP 400 kV	425	393
10.	Misa 220kV	227	210
11.	AGBPP 220 kV	0	0
12.	Mokokchung 220 kV	236	222
13.	Kahilipara 132kV	140	128
14.	AIZAWL 132 kV	135	124
15.	Nirjuli 132kV	137	126
16.	IMPHAL 132 kV	138	126

2. Voltage Range In KV as Percentage Of Time For The Block

SUB-STATION	kV < 360	360 < kV < 380	380 < kV < 420	kV > 420
MISA	0.07	0.00	98.41	1.52
BALIPARA	0.04	0.00	99.00	0.95
BONGAIGAON	0.04	0.00	99.97	-0.01
RANGANADI				
PALATANA	1.46	0.00	98.43	0.11
SILCHAR	0.85	0.00	99.07	0.08
Azara	2.51	0.00	97.50	-0.01
Biswanath Charali	2.22	4.68	15.03	78.07
BgTPP	0	0	0	100
Byrnihat	0	0	0	100

Inter-Regional Energy Exchange, Major Grid Disturbance and Meetings held by
NERPC

1. Inter-Regional Energy Exchange

All Fig. in MU

N E R to E R	6.103
E R to N E R	501.151
NET IMPORT FORM E R	495.048
NER to NR	455.043
NR to NER	0.00
NET IMPORT FROM N R	-455.043
NET IMPORT	40.005

2. Major Grid Disturbances

- No major grid disturbance occurred in the month of August 2016.

3. Meetings Held by NERPC

Sr. No.	Meeting	Date	Venue
1.	124 th OCC Meeting	08.08.2016	Cherrapunjee
2.	4 th NETeST Sub-Committee Meeting	09.08.2016	Cherrapunjee
3.	19 th Metering Committee Meeting	08.08.2016	Cherrapunjee
4.	12 th System study Meeting	30.08.2016	Shillong

Status of Progress

1. Generating Projects in NER

Progress of Thermal Power Generation Projects in NER					
Central Sector					
Sr. No.	Plant	Units	Capacity in MW	Commissioning Schedule	Remarks
1	Bongaingaon NTPC	1st	3x250	Mar-16	<ul style="list-style-type: none"> • BLU done on 29.11.2014 & SB completed on 01.04.2015 • TG Put on Barring on 03.06.15 • Unit Synchronised on 22.06.15 & 'Commissioning-22.06.15 • 72 Hrs Trial Operation for COD done from 23.03.16 to 26.03.16
		2nd		Mar-17	<ul style="list-style-type: none"> • Boiler Hydro Test Apr'12 • TG Erection started on 30.01.16 • Boiler Light Up done on 27.03.16
		3rd		Jul-17	<ul style="list-style-type: none"> • Boiler Drum Lifting Feb'13 & Boiler Hydro test Mar'14 • Next Milestone : Boiler Light Up Nov'16
2	Tripura Gas Based Power Project Monarchak	1	35.58		Steam turbine was synchronized on 14.01.16. COD is delayed to non-availability of gas on a sustainable basis for trial run.
State Sector					
1	Namrup Replacement Power Project APGCL	1st	62.25		
		2nd	36.15		

Progress of Hydro Power Generation Projects in NER					
Central Sector					
Sr. No.	Plant	Units	Capacity in MW	Commissioning Schedule	Remarks
1	Subhansiri Lower (Ar. Pradesh/NHPC)	8	8x250	Syn. Comm: 2016-18	<ol style="list-style-type: none"> 1. Signing of MoU with State Government of Assam 2. Law & Order problem 3. Issue of Downstream Impact Assessment & demand for stoppage of works by anti-dam activists. Since

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					16.12.2011 work.
2	Kameng (Ar. P/NEEPCO)	4	4x150	Jul-17	Work in Progress
3	Pare (Ar. P/NEEPCO)	2	2x55	Mar-17	Work in Progress
4	Tuirial (Ar. P/NEEPCO)	2	2x30	Mar-17	Work in Progress
5	Demwe Lower (Ar. P)	6	5x342; 1x40	2016-17	
State Sector					
1	New Umtru MeGPCL	2	2x20	2014-15	Slow progress of civil works.
2	Ganol SHP (MePGCL)	3	3x7.5	Oct-15	LOI issued on 22nd Dec,2012. Work Order is being issued.
3	Lakroh MHP (MePGCL)	1	1.5		Delayed due to rain.
4	Myntriang SHP stg1	2	2x3	Dec-15	
5	Myntriang SHP stg2	2	2x1.5	Aug-14	

2. Transmission Lines In NER

Progress of Transmission Lines in NER									
POWERGRID									
Sr. No.	Name of Lines	Total length in Km	Construction Progress				Target Date		Remarks
			TL (nos)	STC (nos)	TE (nos)	STG (in km)	Schedule	Revised	
1	LILO of (+/-) 800 kV HVDC Biswanath Chariyali-Agra at Alipurduar	24	63	53	28		Jan-15	Mar-17	Gen.Project delayed(ant. In 2017-18).Work under progress.Commissioning matching with HVDC Terminal.
2	400 kV Kameng-Balipara D/C	114	149	144	129	26	Aug-13	Mar-17	ATS slowed down to the extent possible to match with generation of Kameng. Gen.proj. Delayed (expected in 2016-17)
3	400 kV Lower Subansiri-Biswanath Chariyali D/C I	334	444	329	228	64	Aug-13	Dec-17	Completion matching with Gen.(Sch.uncertain). Works Standstill on account of local disturbance/agitation against big dam.Generation

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										schedule uncertain.
4	400 kV Lower Subansiri-Biswanath Chariyali D/C II	340	465	327	196	35	Aug-13	Dec-17		Completion matching with Gen. (Sch. uncertain). Works Standstill on account of local disturbance/agitation against big dam. Generation schedule uncertain.
5	LILO of 400 kV Bongaigaon-Siliguri D/C at Alipurduar	13	23	23	21	4	Jan-15	Mar-17		Work under progress. Completion matching with Alipurduar PS
6	400 kV Silchar-Melriat (New) D/C (Charged at 132 kV)	286	436	366	211	101	Dec-12	Jun-17		Major portion of line in forest. severe ROW in vicinity of Aizawl town due to stiff resistance from influential local owner. Package re-awarded in Jun'16. Completion matching with Alipurduar P.S.
7	LILO of 220 kV Birpara-Salakati D/C at Alipurduar (New Pooling Station)	3	7	6	6	2		Mar-17		
8	132 kV Aizawl (PG) - Zemabawk at Melriat (PG)	30	45	0	0	0	Dec-12	Jun-17		Package under re-awarded in Jun'16.
9	LILO of 132 kV Zemabawk - W. Phaileng at	5	0	0	0	0		Dec-13		
10	132 kV Pasighat-Roing S/C	70	345	345	345	101	Dec-12	Dec-16		Readiness of up & downstream system being implemented by Arunachal Pradesh Govt. Critical for commissioning of line. Damage tower/fd

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									n being taken up forrectification/recasting.
11	132 kV Tezu-Roing S/C	60	244	236	212	43	Apr-12	Mar-17	Progress affected due to severe ROW Problem.
12	132 kV Tezu-Namsai S/C	90	332	299	217	43	Dec-12	Jun-17	Progress affecetd due to severe ROW Problem.
TSECL									
13	132 kV Monarchak-Surajmani Nagar D/C	42	150	49	38	6		Sep-16	Work in Progress
14	132 kV Surjyamani Nagar-Badarghat D/C	6		0	0	0		Aug-16	Fund proposed in World Bank.
15	132 kV Surjyamani Nagar(TSECL)-Rokhia DC	20	80	32	5	0		Dec-14	3.598 km line in forest land for whichTSECL will supply for forest clearance.LOA issued.
16	132 kV Surjyamani Nagar-Udaipur D/C	50	50	0	0	0		Jun-15	Proposed under NEC.
17	132 kV Gamai Tilla - Dhalabil	31	107	101	78	17		Sep-13	ROW problems affected the work
18	132 kV P K Bari - Kanchanpur	47	113	109	99	17		Mar-15	All works completed in non forest land.Stage I clearance received and compliancefor conditions completed.
MePTCL									
19	132 kV Rongkhon-Ampati D/C	33	102	98	95	12		Mar-17	No issues of forest clearance and no court cases. Work is currentlty under progress.
20	132 kV New Umtru-Norbong(EPIP II) S/C	2	7	6	6	1		Oct-16	No issues of forest clearance.Tower erectionat 6/7 locations of 132 kV line from NewUmtru to EPIP-II S/S & to EPIP-I S/S havebeen completed.Stringing of conductor-0.62ckm (single circuit-0.06 km

									&doublecircuit-0.28 km) completed.
MeECL									
21	LILO of 132 kV Mawlai-Cherrapunje at Mawngap	10	16	15	15	5		Dec-16	No issue on forest clearance and no courtcases.Work held up due to ROW problem.The PHED,GOMe has complained and filedand FIR against Loc No. 3 to 8. Overallstatus is 90% completed.
22	LILO of 132 kV NEIGRIHMS - Khliehriat at Lad Nongkrem	6	9	0	0	0		Mar-17	No issues on Forest Clearance. Materials procurement is in process.
23	LILO of 132 kV Rongkhon - Ampati at Praharinagar	20	34	0	0	0		Dec-16	Survey works for 132 kV LILO is completed.
24	132 kV Killing (Byrnihat) - EPIP I	17	19	19	19	22		Jul-16	Work for stringing of 132 kV MC Line-5.82 ckm , 132 kV S/C line- 0.6 Km, &stringing only of 132 kV line-3.006 kmcompleted on 11.02.16. However, thetermination end is not ready at Killing
Mizoram									
25	132 kV Melriat (New) - Sihmui	12	30	0	0	0	Dec-12	Jun-17	Stage-I forest clearance awaited.Package re-award in Jun'16.
AEGCL									
26	BTPS - Rangia D/C line	326.374	517	513	508	197.188	Mar'13	June'17	1. Overall 89%completed.A. All normal foundation completed.B. 5 nos. of Pile foundation completed.
27	LILO of one Ckt. of Samaguri - Sarusajai	26.624	41	41	26		Dec'13	June'17	Water logging &harvesting are reasons to be attributed fordelaying.

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	D/C line at Sonapur sub-station								
28	Agia - Matia (Dudhnoi) S/C line on D/C tower	23.5	87	87	87	23.5	Nov' 13		Test charged on 29.06.2016
29	132 kV DC Sonapur-Jagiroad Tr. Line.	51.75	86	45	35		Nov' 13	June' 17	Compensation Issue.
30	132 kV DC Sonapur-Chandrapur Tr. Line	28.438	51	45	29		Nov' 13	June' 17	Railway X'ing/ ROW/ Compensation issue.

Commercial Status

1. Entitlement, Schedule, Drawal and DSM Charges for the month of August 2016

Name of states	Entitlement from ISGS in NER (in MU)	Entitlement from ISGS in ER (in MU)	Total Entitlement (in MU)	Scheduled energy against entitlement (in MU)	Schedule Drawal (for Dev A/c) (Ex-PP State) (in MU)	Actual Drawal from Grid (in MU)	Over Drawal (+) / Under Drawal (-) (in MU)	Dev Payable (-) / Receivable (+) (including additional deviation) (Rs. In Cr)
Arunachal Pradesh	71.367	4.369	75.736	66.449	59.648	68.959	9.311	-1.878
ASEB	516.411	107.809	624.220	575.320	665.838	735.497	69.659	-18.512
Manipur	108.813	0.000	108.813	96.080	62.995	62.742	-0.253	-0.212
MeSEB	134.425	0.000	134.425	67.328	13.098	21.784	8.686	-2.857
Mizoram	53.529	3.203	56.732	51.858	30.926	36.992	6.066	-1.231
Nagaland	65.380	9.641	75.021	67.478	53.185	51.995	-1.190	-0.134
Tripura	169.971	0.000	169.971	156.414	106.713	132.017	25.304	-5.966
PGCIL-HVDC	1.612	0.000	1.612	1.033	1.033	0.734	-0.299	0.028

(Source: PSP, NERPC)

* In addition to total entitlement, bilateral exchanges and purchase/sell through traders/exchange are covered in Annexure-III.

2. Schedule for ISGS Generation for the month of August 2016

ISGS	Actual (MWH)	Implemented Schedule (MWH)
LOKTAK	71766.16	71880.00
KOPILI	137794.55	137235.81
Kopili-II	15154.60	15009.54
KHANDONG	21528.49	21570.98
RHEP	123630.21	122318.86

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DHEP	50968.38	50713.57
AGBPP	119143.36	108150.03
AGTPP	77048.04	73562.20
Palatana	373849.35	374360.92
Bongaigaon	116973.09	121691.92

Source: Final REA for the month of July 2016.

3. Cumulative Wt. Average Share Allocation (%) (Up to this month) in CS Stations

States	Kopili (200 MW)	Kopili-II (25 MW)	Khandong (50 MW)	RHEP (405 MW)	DHEP (75 MW)	AGBPP (291 MW)	AGTCCPP (130 MW)	BgTPP (250 MW)	OTPC (726.6 MW)	Loktak HEP (105 MW)
Arunachal Pradesh	5.191	5.992	4.194	18.462	6.852	5.694	6.702	5.1325	3.0303	4.940
Assam	53.455	52.355	56.285	43.328	43.808	56.503	43.720	57.420	33.058	29.445
Manipur	7.395	6.945	6.555	8.373	7.865	8.105	8.225	7.505	5.7851	42.508
Meghalaya	17.395	13.675	16.905	11.505	11.455	11.815	12.633	10.980	10.882	0.000
Mizoram	4.610	6.040	3.940	5.700	5.250	5.410	6.0	5.415	3.0303	5.020
Nagaland	6.147	5.735	6.653	5.335	17.967	5.805	5.737	4.930	3.7190	6.435
Tripura	5.807	9.258	5.468	7.297	6.803	6.668	16.983	7.6175	26.9972	11.652
BNC HVDC	0	0	0	0	0	0	0	1	0	0
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	86.5019	100.00

4. Share Allocation (%) in CS Stations from Eastern Region

States	Farakka-I	Kahelgaon-I	Kahelgaon-II	Talcher	Farakka-III
Assam	2.455737%	2.104847%	5.093479%	2.095419%	0.000000%
Meghalaya	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%
Nagaland	0.429803%	0.424446%	0.000000%	0.424823%	0.000000%
Arunachal Pradesh	0.191917%	0.191747%	0.000000%	0.196898%	0.000000%
Mizoram	0.141736%	0.141610%	0.000000%	0.141736%	0.000000%
Assam (NVDN Coal Power)	0.091912%	0.091912%	0.091912%	0.091912%	0.091912%

5. URS Power Requisitioned by NER States for the month of August 2016

Sr. No.	Station	Unrequisitioned Power	URS Power Requisitioned
1.	AGBPP	7890.389	12.5775
2.	AGTCCPP	5127.266	-
3.	BgTPP	41916.328	-

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4.	Palatana	5657.543	-
5.	FSTPP	-	350.085
6.	KHSTPP	-	929.7479
7.	KHSTPP-2	-	2107
8.	TSTPP	-	582.7073

Regional Transmission Account (RTA) for the month of August 2016

Name of DIC	Demand/ Injection Zone	PoC Charges	Reliability Support Charges	HVDC Charges	Total
Arunachal Pradesh	Arunachal Pradesh	39780907.78	4221187.24	1195641.32	45197736.35
ASEB	Assam	383907726.88	28986129.45	8210252.77	421104109.10
Manipur	Manipur	34856645.41	5068480.48	1435635.13	41360761.02
MeECL	Meghalaya	70273395.14	6569100.52	1860682.22	78703177.87
Mizoram	Mizoram	36492896.19	2755317.85	780437.28	40028651.32
Nagaland	Nagaland	23865366.86	3470246.33	982939.09	28318552.28
Tripura	Tripura	35098126.58	8105476.81	2295857.18	45499460.57
HVDC BNC	Assam	785282.23	59291.05	16794.05	861367.33

Grid Disturbance Report

List of Important Grid Disturbances in N E Regional Grid during August 2016

1. At 10:12 Hrs on 01.08.16, 132 kV Dimapur (PG)-Dimapur (NA) I line tripped.. It was restored at 10:35 hrs. Outage duration: 0:23 hrs. Load Loss: 49MW. Category- GD-I. Due to tripping of this element, Dimapur area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

2. At 13:07 Hrs on 04.08.16, 132 kV Ranganadi-Lekhi line tripped. It was restored at 13:34 hrs. Outage duration: 0:27 hrs. Load Loss: 40 MW. Category- GD-I. Due to tripping of this element, Lekhi area & Capital area & Gohpur area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.

3. At 21:06 Hrs on 05.08.16, 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines, 132 kV NEHU - NEIGRIHMS line and 132 kV Mustem-NEHU line tripped. It was restored at 21:47 hrs. Outage duration: 0:41 hrs. Load Loss: 43 MW, Generation Loss = 84 MW. Category- GD-I. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.

4. At 03:19 Hrs on 15.08.16, 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines, 132 kV NEHU - NEIGRIHMS line and 132 kV Mustem-NEHU line tripped. It was restored at 6:35 hrs. Outage duration: 3:16 hrs. Load Loss: 26 MW, Generation Loss : 126 MW. Category- GD-I. to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.

Annexures and Exhibits

A-1

Major Reservoirs Level for the Month of August 2016

	FRL (mtr.)	MDDL (mtr.)	August 2016	August 2015
			Level in mtr/ft	Level in mtr/ft
KHANDONG	719.3	704	709	720
KOPILI	609.5	592.83	599	609
LOKTAK	768.5	766.2	767	769
BARAPANI	3220 ft	3150 ft	3187	3214
GUMTI	93.55	83.6	90	93
DOYANG	333	306	308	320

A-2

Frequency Analysis For The Month of August 2016

Frequency	Freq. (in Hz.)	Time (H:M)	Date (D.M.Y)
1. Maximum Frequency	50.43	13:03	10.08.2016
2. Minimum Frequency	49.60	12:40	02.08.2016
3. Monthly Average	50.07		

Frequency in Hz as %age of Time for the Blocks

$f < 49.90$	$49.90 < f < 50.05$	$f > 50.05$
5.90	73.10	21.00

Daily Frequency Variation Index (FVI):

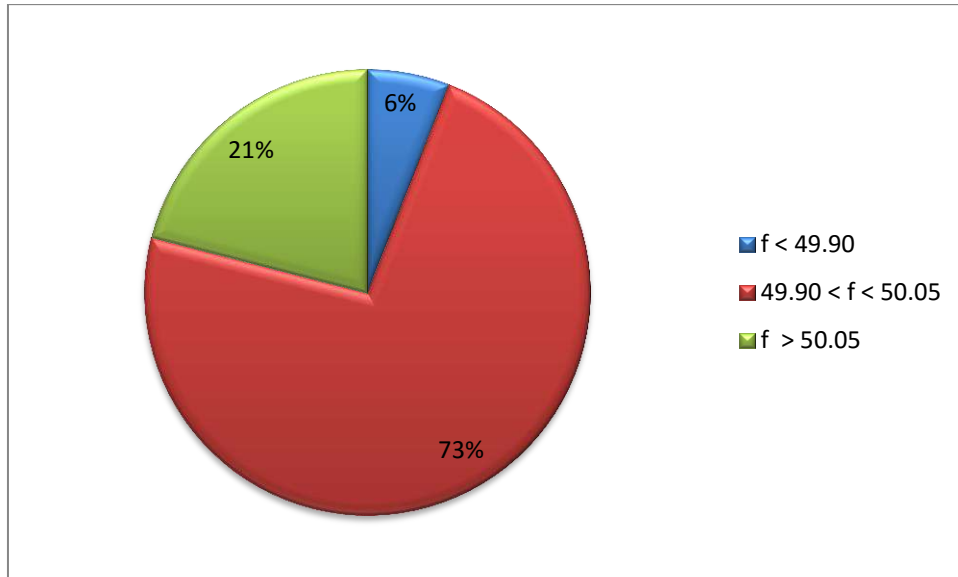
Date	FVI	Date	FVI
01-08-16	0.052	17-08-16	0.030
02-08-16	0.037	18-08-16	0.039
03-08-16	0.033	19-08-16	0.060
04-08-16	0.033	20-08-16	0.064
05-08-16	0.033	21-08-16	0.049
06-08-16	0.041	22-08-16	0.053
07-08-16	0.032	23-08-16	0.071
08-08-16	0.033	24-08-16	0.044
09-08-16	0.030	25-08-16	0.029
10-08-16	0.038	26-08-16	0.038
11-08-16	0.030	27-08-16	0.033
12-08-16	0.044	28-08-16	0.028
13-08-16	0.057	29-08-16	0.031
14-08-16	0.033	30-08-16	0.030
15-08-16	0.041	31-08-16	0.029
16-08-16	0.040		

A-3

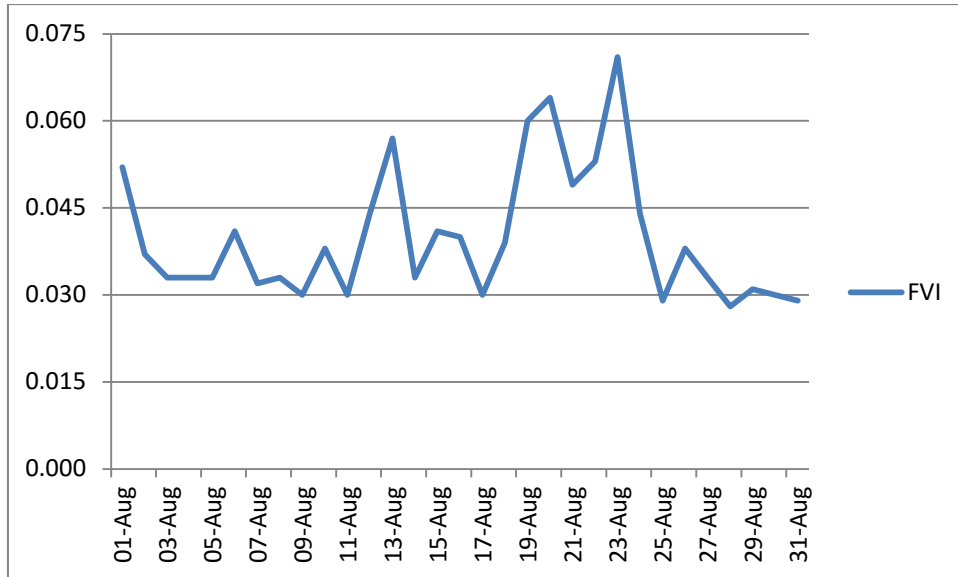
Consolidated Scheduled Bilateral Exchanges in NE Region during August 2016

Name of Trader	Energy at NER periphery (in MWH)
MPPL	71743.8425
APPCPL	45948.2375
OTPC	47807.5
IEXL	115.57
PTC	30704.2750
NVVN	589.75
SECI	3625.3675

Frequency Duration for August 2016

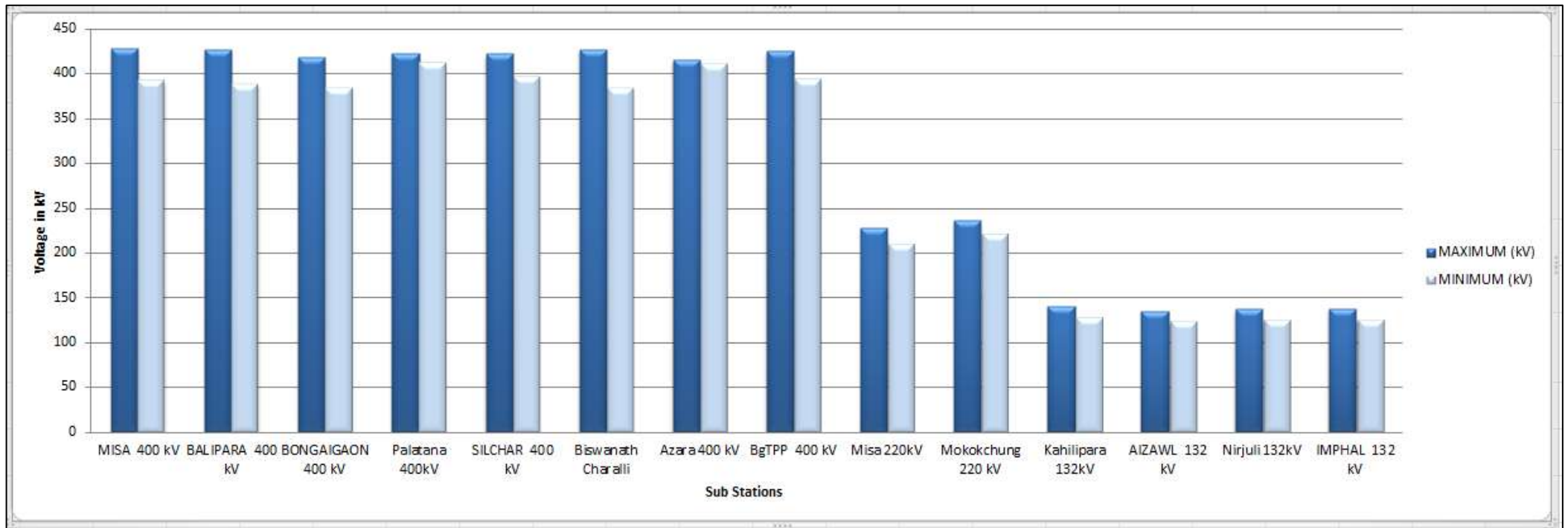


FVI Characteristic for August 2016



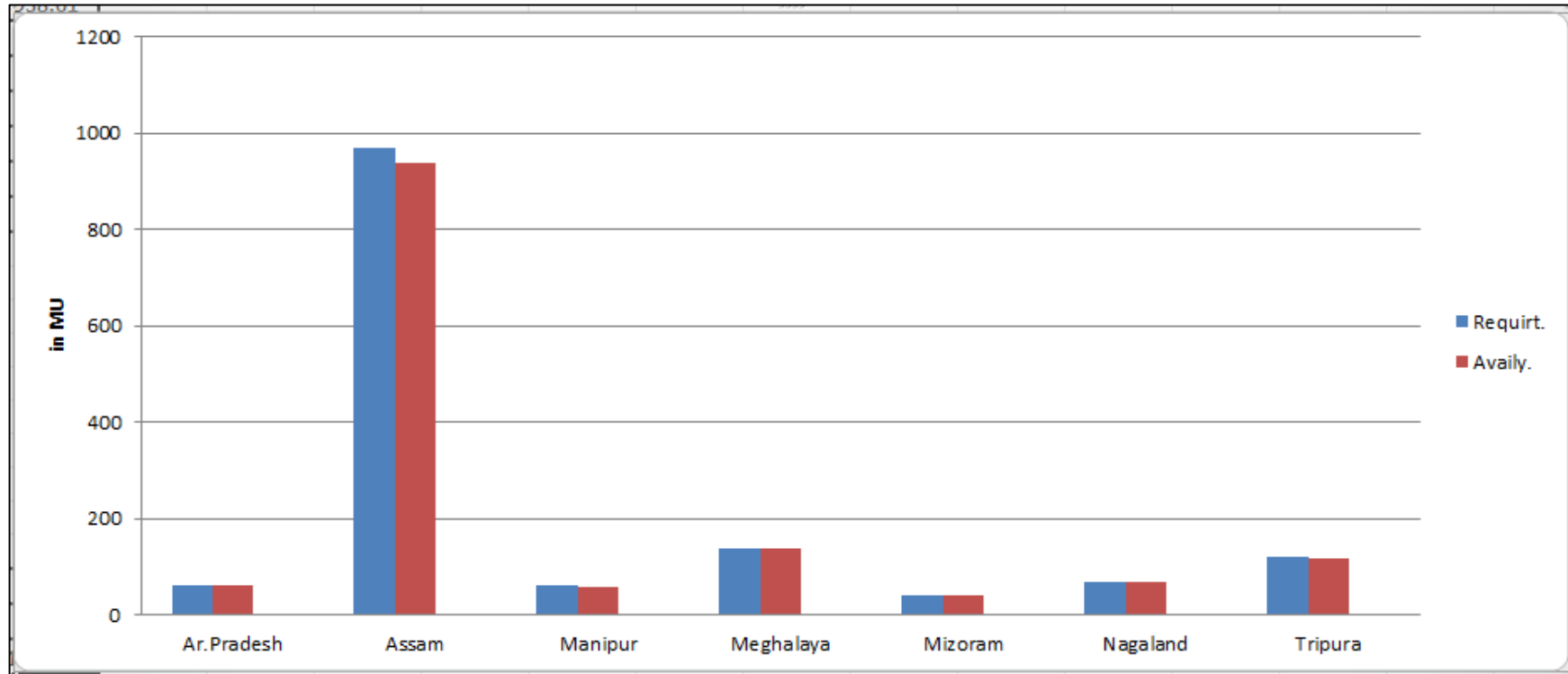
B-3

Voltage Variation Range for August 2016



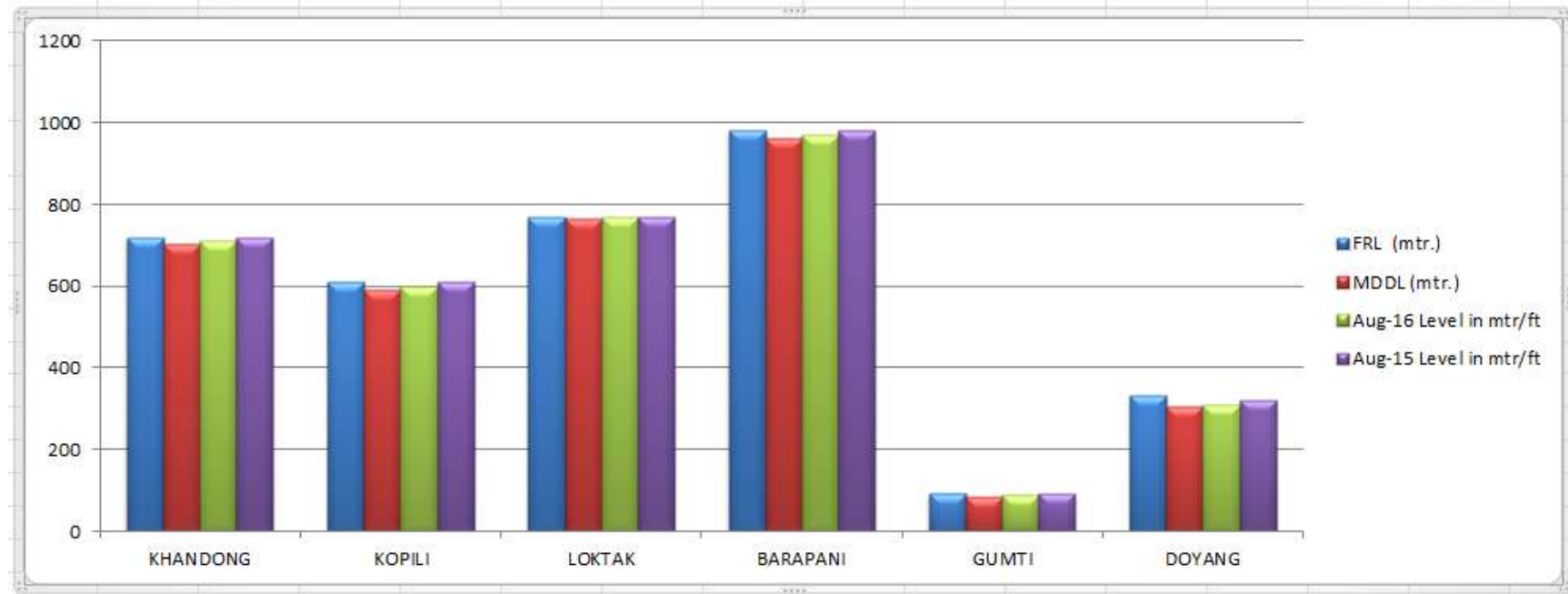
B-4

Energy Profile for August 2016



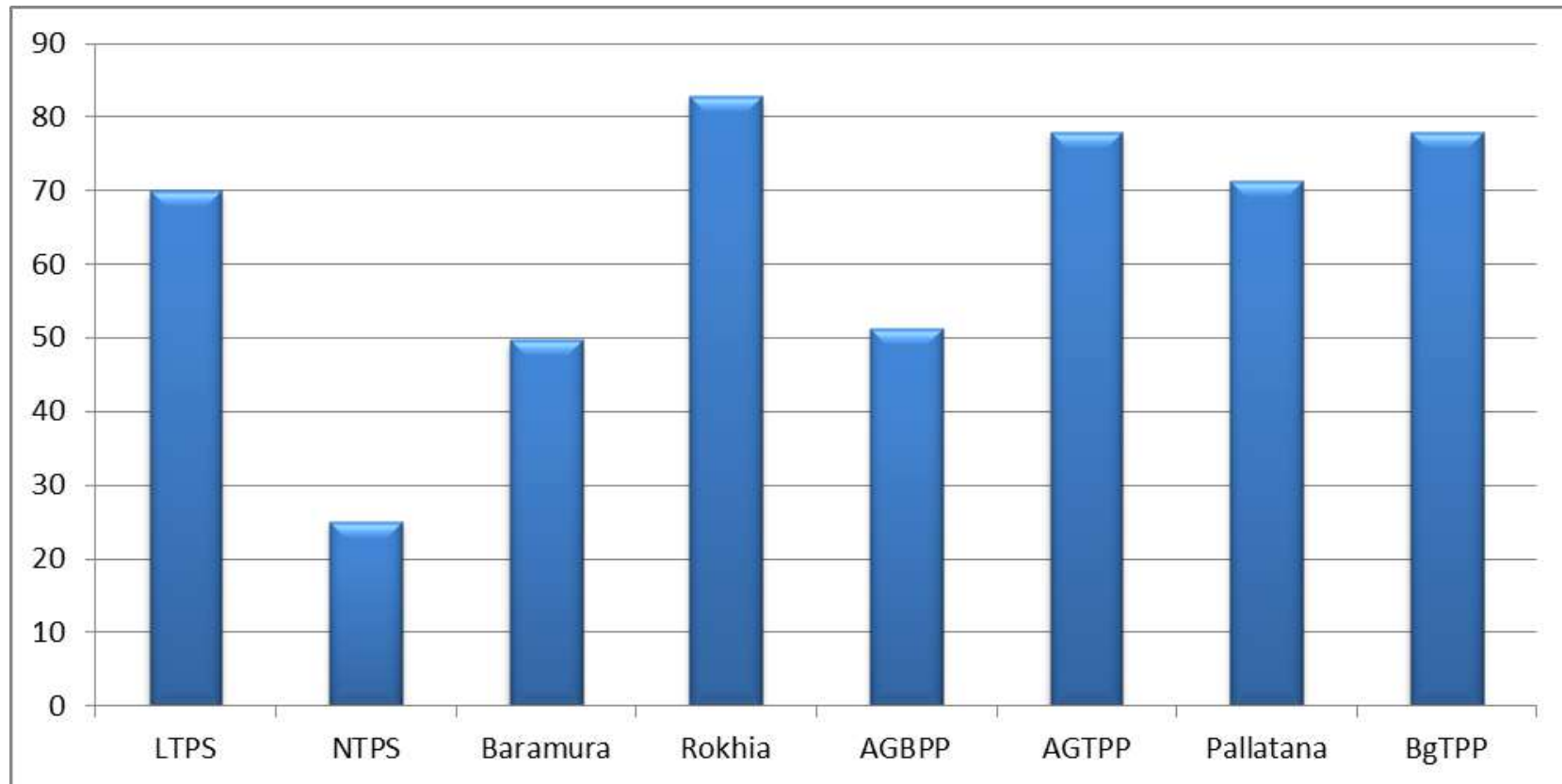
B-5

Reservoir Profile for August 2016



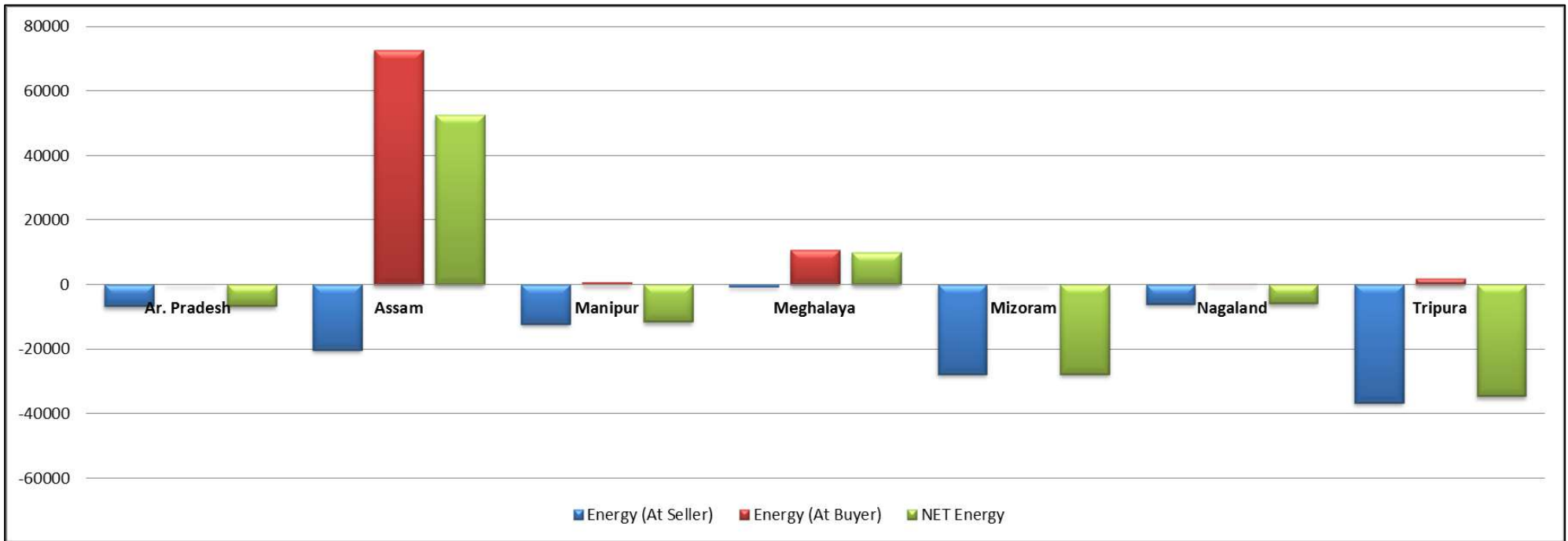
B-6

Station-wise Plant Load Factor for August 2016



B-7

Collective Transaction through IEX Power Exchange August 2016



B-8

Consolidated SEB in NE Region for the month of August 2016

