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

- The maximum unrestricted demand during the month of October 2016 was 2466 MW, which was 2430 MW in the month of September 2016. The peak demand met in NER during the period under review was 2439 MW, which was 2373 MW in the previous month.
- The energy requirement during the month of October 2016 was 1352.26 MU, which was 1373.26 MU in the month of September 2016. The energy availability in NER during the period under review was 1322.23 MU, which was 1335.95 MU in the previous month.
- The maximum, minimum & average system frequency were 50.25 (2-October-16), 49.74 (20-October-16) & 50.00 Hz respectively. The maximum, minimum & average FVI were 0.058, 0.028 & 0.037 respectively. The average FVI was less than its previous month's figure of 0.037. (Refer Annex-II).
- Maximum export of power from NER to ER was 893 MW (on 13.10.16 at 02:30 Hrs) and that from ER to NER was 1562 MW (on 04.10.16 at 17:15 Hrs). The same Inter-Regional Exchanges of NER with NR and vice versa were 1007 MW (on 13.10.16 at 15:45Hrs.) and 490 MW (on 28.10.16 at 1:45 Hrs) respectively. Total net energy import during the month was 6.200MU (399.529 MU from ER and -393.330 MU from NR).

Salient Features of North Eastern Regional Grid for October 2016

		NIL	
1	New Unit/Transmission Line/Transformer commissioned during this month		
2	Number of major grid disturbance during this month	0	
		October-16	October-15
3	Installed Capacity of the Region (in MW)		
	(i) Grid	3496.00	3161.00
	(ii) Isolated	124.00	124.00
	Total (As on 31.10.2016)	3620.00	3285.00
4	Energy Generation in MU (Gross):		
	Thermal/Gas	917.61	705.83
	Hydel	506.49	497.71
	Solar	0.60	1.0
	Total	1424.70	1204.54
5	Demand in MW:		
	Registered Peak Demand	2466	2401
	Peak Demand Met	2439	2301
	Shortage (%age)	1.3	4.3
6	Regional Energy (Gross) in MU:		
	Energy Requirement	1352.26	1310
	Energy Availability	1322.23	1234
	Surplus (+)/Deficit(-) (%age)	-2.22	-6.16
7	Inter Regional Energy Exchange in MU:		
	NER -----> ER	29.310	34.39
	ER -----> NER	428.839	110.7
	NER -----> NR	414.683	-
	NR -----> NER	21.353	-
	Net Import	6.200	76.31
8	Frequency Profile:		
	Average Frequency (Hz)	50.00	50.02
	Average Frequency Variation Index	0.037	-

Monthly Power Supply Position

1. Energy Generation In The Region For the Month of October 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	56.71				105.84				162.55	
Meghalaya	88.10								88.10	
Mizoram	0								0	
Tripura	4.46				52.97				57.43	
Nagaland	12.82								12.82	
Total (S. Sector)	162.09				158.81		0		320.90	
Central Sector :										
NEEPCO:										
Khd+Kop+Kop-II	118.6								118.6	
Kathalguri (AGBPP)					146.4				146.4	
RC Nagar					89.0				89.0	
Doyang	26.7								26.7	
Ranganadi	123.3								123.3	
Monarchak							0.6		0.6	
NHPC:										
Loktak	75.8								75.8	
OTPC:										
Pallatana Gas PP					391.4				391.4	
NTPC:										
BgTPP			132						132	
Total (C. Sector)	344.4		132		626.8		0.6		1103.8	
Total NER	506.49		132		785.61		0.6		1424.70	

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	63.04	61.67	1.370	2.17	128	126	2	1.6
Assam	834.99	812.85	22.141	2.65	1673	1615	62	3.7
Manipur	64.22	61.72	2.498	3.89	145	145	0	0.0
Meghalaya	149.79	149.79	0.000	0.00	300	301	0	0.1
Mizoram	40.17	38.90	1.273	3.17	95	95	0	0.0
Nagaland	68.16	66.71	1.450	2.13	130	130	0	-0.3
Tripura	131.88	130.59	1.296	0.98	284	284	0	0.1
REGION	1352.26	1322.23	30.03	2.22	2466	2439	33	1.3

3. Estimation Of Peak Demand (In MW)

Constituents	Peak Demand Met	Date	Freq (Hz)	Estimated Peak Demand at 50 Hz
Arunachal Pradesh	126	05.10.16	50.02	128
Assam	1615	04.10.16	50.08	1673
Manipur	145	04.10.16	50.11	145
Meghalaya	301	26.10.16	50.07	300
Mizoram	95	31.10.16	50.11	95
Nagaland	130	26.10.16	50.07	130
Tripura*	284	17.10.16	50.06	284
REGION	2439	06.10.16	50.08	2466

4. Estimation of Energy Requirement (In MU)

Constituents	Generation	Energy Drawal from Grid		Energy Availability	Actual Requirement
		Schedule	Drawal		
Arunachal Pradesh	0.00	67.636	63.514	61.67	63.04
Assam	162.55	594.438	630.369	812.85	834.99
Manipur	0.00	61.773	63.072	61.72	64.22
Meghalaya	88.10	39.756	61.138	149.79	149.79
Mizoram	0.000	39.320	41.631	38.90	40.17
Nagaland	12.82	54.690	56.384	66.71	68.16
Tripura	57.43	113.064	125.880	130.59	131.88
REGION	320.90	970.677	1041.988	1322.23	1352.26

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

S. No.	Power Stations/Units	Installed Capacity (MW)	Peak Generation (MW)	Energy Generation (MU)	
				Oct-16	Oct-15
(i) STATE SECTOR : HYDRO					
ASSAM : HYDRO					
1	LANGPI U-1	50	51	28.90	27.38
2	LANGPI U-2	50	50	27.81	35.06
TOTAL		100	107	56.71	62.44
MEGHALAYA : HYDRO					
3	UMIAM STAGE - 1 U-1	9	9	1.60	2.84
4	UMIAM STAGE - 1 U-2	9	9	1.77	4.44
5	UMIAM STAGE - 1 U-3	9	9	1.51	3.89
6	UMIAM STAGE - 1 U-4	9	4	2.00	3.94
7	UMIAM STAGE - 2 U-1	10	10	2.98	3.05
8	UMIAM STAGE - 2 U-2	10	10	0.61	4.43
9	UMIAM STAGE - 3 U-1	30	30	1.24	0
10	UMIAM STAGE - 3 U-2	30	31	15.93	11.32
11	UMIAM STAGE - 4 U-1	30	30	4.77	13.47
12	UMIAM STAGE - 4 U-2	30	30	14.16	12.43
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	10.80	15.05
18	MYNTDU-LESHKA U-2	42	42	7.28	5.28
19	MYNTDU-LESHKA U-3	42	42	22.68	14.47
20	SONAPANI	2	1	0.76	0.75
TOTAL		316	299	88.09	95.36
NAGALAND : HYDRO					
21	LIKIMRO - 1	8	8	4.45	4.57
22	LIKIMRO - 2	8	8	4.37	4.56
23	LIKIMRO - 3	8	8	4.00	4.54
TOTAL		24	24	12.82	13.67
MIZORAM : HYDRO					
24	SERLUI B U-1	4	0	0	1.27
25	SERLUI B U-2	4	0	0	0
26	SERLUI B U-3	4	0	0	0
TOTAL		12	0	0	1.27
TRIPURA : HYDRO					
27	GUMTI - 1	5	0	0	0
28	GUMTI - 2	5	4	2.93	1.46

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29	GUMTI - 3	5	3	1.53	1.56
TOTAL		15	7	4.46	2.97
TOTAL STATE (HYDRO) :					
		467	437	162.09	175.71
Sr. No.	Power Stations/Units	Installed Capacity (MW)	Peak Generation (MW)	Energy Generation (MU)	
				Oct-16	Oct-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	15.16	8.14
9	BARAMURA - 5	21	0	0	10.19
10	ROKHIA - 1	8			
11	ROKHIA - 2	8			
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	13.44	14.18
17	ROKHIA - 8	21	19	11.98	13.23
18	ROKHIA - 9	21	21	12.40	13.09
TOTAL		169.5	82	52.97	58.83
ASSAM : THERMAL					
19	LTPS - 1	15	0	0	0
20	LTPS - 2	15	16	9.51	6.89
21	LTPS - 3	15	0	0	8.72
22	LTPS - 4	15	14	9.62	4.08
23	LTPS - 5	20	30	12.48	15.50
24	LTPS - 6	20	20	13.31	11.73
25	LTPS - 7	20	20	13.50	12.94
26	LTPS - 8	37	31	13.59	11.61
27	NTPS - 1	20	20	10.25	11.28
28	NTPS - 2	21	18	6.93	10.48
29	NTPS - 3	21	20	4.88	5.85
30	NTPS - 4	11	7	0	1.72
31	NTPS - 5	24	18	5.67	7.59
32	NTPS - 6	22	11	6.11	6.29
33	DLF	25	0	0	0
TOTAL		301	214	105.85	115.0
TOTAL STATE (THERMAL/GAS) :		494.5	296	158.81	173.83
TOTAL STATE GEN (HY+TH/GAS)		961.5	733	320.90	349.54

S. No.	Power Stations/Units	Installed Capacity (MW)	Peak Generation (MW)	Energy Generation (MU)	
				Oct-16	Oct-15
(ii) CENTRAL SECTOR : HYDRO					
1	KHANDONG - 1	25	25	6.3	4
2	KHANDONG - 2	25	26	5.4	5
3	KOPILI Stg - II	25	27	10.3	17
4	KOPILI - 1	50	55	22.4	27
5	KOPILI - 2	50	55	30.6	29
6	KOPILI - 3	50	55	21.0	29
7	KOPILI - 4	50	55	22.6	29
8	DOYANG - 1	25	27	8.8	4
9	DOYANG - 2	25	26	9.0	3
10	DOYANG - 3	25	27	8.9	4
11	LOKTAK - 1	35	36	25.5	25
12	LOKTAK - 2	35	36	25.1	26
13	LOKTAK - 3	35	37	25.2	26
14	RANGANADI - 1	135	141	42.8	34
15	RANGANADI - 2	135	141	42.2	31
16	RANGANADI - 3	135	141	38.3	30
TOTAL CS HYDRO :		860	910	344.4	322
(ii) CENTRAL SECTOR : THERMAL/GAS					
1	KATHALGURI - 1	34	35	17.0	21
2	KATHALGURI - 2	34	35	21.8	17
3	KATHALGURI - 3	34	35	18.1	19
4	KATHALGURI - 4	34	35	18.1	23
5	KATHALGURI - 5	34	35	15.2	15
6	KATHALGURI - 6	34	35	12.5	20
7	KATHALGURI - 7	30	32	16.3	17
8	KATHALGURI - 8	30	32	15.6	19
9	KATHALGURI - 9	30	32	11.8	15
10	R.C. NAGAR - 1	21	22	13.9	15
11	R.C. NAGAR - 2	21	21	14.0	15
12	R.C. NAGAR - 3	21	22	14.1	13
13	R.C. NAGAR - 4	21	20	14.5	13
14	R.C. NAGAR - 5	23	24	16.4	16
15	R.C. NAGAR - 6	23	24	16.0	13
16	MONARCHAK SOLAR PV	5		0.6	1
17	MONARCHAK - GTG 1	66	0	0	0
18	MONARCHAK - STG 1				
19	PALLATANA - GTG 1	232	213	103.2	115
20	PALLATANA - STG 1	131	121	65.1	70
21	PALLATANA - GTG 2	232	227	140.3	57
22	PALLATANA - STG 2	131	126	82.8	37
23	BgTPP - 1	250	254	132.0	0

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24	BgTPP - 2				
25	BgTPP - 3				
TOTAL CS (THERMAL/GAS) :		1471	1160	758.8	532
TOTAL CS GEN (HY+TH/GAS)		2331	2070	1103.8	854
TOTAL NER GEN (HY+TH/GAS)		3292.5	2803	1424.70	1204.5

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	72.01	65.32
2	NTPS*	AEGCL	119.00	33.83	38.16
3	Baramura	Tripura	42.00	15.16	53.87
4	Rokhia	Tripura	95.00	37.81	93.85
5	AGBPP	NEEPCO	291.00	131.946	62.51
6	AGTCCPP	NEEPCO	84.00	83.263	88.29
7		NEEPCO	46.00		
8	Monarchak	NEEPCO	66.00	0	0.00
9	Pallatana	OTPC	727.00	374.723	71.46
10	BgTPP	NTPC	250.00	131.490	77.69

*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	426	394
2	BALIPARA 400 kV	425	391
3	BONGAIGAON 400 kV	416	387
4	RANGANADI 400 kV	429	398
5	PALLATANA 400 kV	426	408
6	SILCHAR 400 kV	417	380
7	BISHWANATH CHARIALI 400 kV	423	389
8	AZARA 400 kV	415	410
9	BgTPP 400 kV	423	396
10	MISA 220 kV	225	211
11	SALAKATI 220 kV	414	211
12	AGBPP 220 kV	230	220
13	MOKOKCHUNG 220 kV	236	224
14	AIZAWL 132 kV	135	120
15	IMPHAL 132 kV	138	126
16	Byrnihat 400kV	423	398
17	Kahilipara 132kV	141	128
18	Nirjuli 132kV	232	122

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	0	92.50	7.50
BALIPARA	0	0	96.57	3.43
BONGAIGAON	0	0.04	99.96	0
PALATANA	24.36	0	70.82	4.82
SILCHAR	0.01	0.0	99.99	0
Azara	0	0	100.00	0
Biswanath Charali	2.22	4.68	15.03	78.07
BgTPP	0	0	0	100.0
Byrnihat	0	0	0	100.0

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

1. Inter-Regional Energy Exchange

All Fig. in MU

NER to ER	29.310
ER to NER	428.839
NET IMPORT FORM ER	399.529
NER to NR	5414.683
NR to NER	21.353
NET IMPORT FROM NR	-393.330
NET IMPORT	6.200

2. Major Grid Disturbances:

No Major Grid Disturbance observed during the month.

3. Meetings Held by NERPC:

Sr. No.	Meeting	Date	Venue
1.	17 th TCC Meeting	03.10.2016	Imphal
2.	17 th NERPC Meeting	04.10.2016	Imphal
3.	30 th CC Meeting	19.10.2016 20.10.2016	Gangtok

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 16.12.2011 work.

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2	Kameng (Ar. P/NEEPCO)	4	4x150	Oct-17	Work in Progress
3	Pare (Ar. P/NEEPCO)	2	2x55	Mar-17	Work in Progress
4	Tuirial (Ar. P/NEEPCO)	2	2x30	Sept-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	64	54	34		Jan-15	Mar-17	Gen.Project delayed(ant. In 2017-18).Work under progress.Commissioning matching with HVDC Terminal. ROW issue seriously affected progress.
2	400 kV Kameng-Balipara D/C	110	149	144	129	28	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	335	444	329	228	64	Aug-13	Dec-17	Completion matching with Gen.(Sch.uncertain). Works Standstill on account of local disturbance/agitation against big

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									dam.Generation schedule uncertain.
4	400 kV Lower Subansiri-Biswanath Chariyali D/C II	348	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	22	8	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	219	102	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.
7	LILO of 220 kV Birpara-Salakati D/C at Alipurduar (New Pooling Station)	3	7	7	7	4		Mar-17	Completion matching with Alipurduar P.S.
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	102	348	345	345	103	Dec-12	Feb-16	Readiness of up & downstream system being implemented by Arunachal Pradesh Govt. Critical for commissioning of line. Damage tower/foundation being taken up for rectification/recasting.

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11	132 kV Tezu-Roing S/C	73	244	242	225	49	Apr-12	Mar-17	Progress affected due to severe ROW Problem.
12	132 kV Tezu-Namsai S/C	90	332	308	244	47	Dec-12	Jun-17	Progress affected 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 which TSECL 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 compliance for conditions completed.
MePTCL									
19	132 kV Rongkhon-Ampati D/C	33	102	101	96	13		Dec-16	No issues of forest clearance and no court cases. Work is currently under progress.
20	132 kV New Umtru-Norbong(EPI P II) S/C	2	8	8	8	2		Mar-17	No issues of forest clearance. Tower erection at 6/7 locations of 132 kV line from New Umtru to EPIP-II S/S & to EPIP-I S/S have been completed. Stringing of conductor-0.62ckm (single circuit-0.06 km & double circuit-0.28 km) completed.
MeECL									

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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 filed an FIR against Loc No. 3 to 8. Overall status 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	30	0	0	0		Sep-18	Survey works for 132 kV LILO is completed.	
24	132 kV Killing (Byrnihat) - EPIP I	17	19	19	19	22		Oct-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 km completed on 11.02.16. However, the termination end is not ready at Killing	
Mizoram										
25	132 kV Melriat (New) - Sihhmui	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	198.422		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 D/C line at Sonapur sub-station	26.624	41	41	26			Dec'13	June'17	Water logging & harvesting are reasons to be attributed for delaying.
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	51.75	86	45	35			Nov'	June'	Compensation Issue.

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	Sonapur-Jagiroad Tr. Line.						13	17	
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 October 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	68.226	4.253	72.478	69.608	67.636	63.514	-4.122	0.043
ASEB	489.749	106.045	595.794	565.198	594.438	630.369	35.931	-10.368
Manipur	105.612	0.000	105.612	91.712	61.773	63.072	1.299	-0.559
MeSEB	124.792	0.000	124.792	64.516	39.756	61.138	21.382	-4.608
Mizoram	51.107	3.116	54.223	49.554	39.320	41.631	2.311	-0.590
Nagaland	58.663	9.421	68.084	59.659	54.690	56.384	1.694	-0.410
Tripura	167.341	0.000	167.341	152.088	113.064	125.880	12.816	-3.891
PGCIL-HVDC	1.697	0.000	1.697	1.152	1.152	0.675	-0.477	0.071

(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 October 2016

ISGS	Actual (MWH)	Implemented Schedule (MWH)
LOKTAK	73789.036735	73746.750000
KOPILI	95533.495914	93938.610275
Kopili-II	10107.166575	9916.601000
KHANDONG	11334.443352	11174.644500
RHEP	123101.957534	120325.852600

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DHEP	25528.809591	24743.488120
AGBPP	142123.775790	131946.439490
AGTPP	86013.201786	83263.430826
Palatana	374808.651628	374722.981165
Bongaigaon	132549.438417	133843.973263

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 October 2016

Sr. No.	Station	Unrequisitioned Power	URS Power Requisitioned
1.	AGBPP	8790.992	5.1925
2.	AGTCCPP	3665.307	0.75
3.	BgTPP	37572.995	-

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4.	Palatana	6928.543	27.51
5.	FSTPP	-	1604.148
6.	FSTPP-3	-	-
7.	KHSTPP	-	1723.46
8.	KHSTPP-2	-	3944.278
9.	TSTPP	-	-

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

Name of DIC	Demand/ Injection Zone	PoC Charges	Reliability Support Charges	HVDC Charges	Total
Arunachal Pradesh	Arunachal Pradesh	23989922.83	4101169.60	1131340.38	29222432.81
ASEB	Assam	364111697.49	28161990.02	7768709.78	400042397.28
Manipur	Manipur	34615881.89	4924372.42	1358427.45	40898681.76
MeECL	Meghalaya	82518307.39	6382326.54	1760615.73	90661249.65
Mizoram	Mizoram	34611156.40	2676978.10	738465.78	38026600.28
Nagaland	Nagaland	43591790.54	3371579.60	930077.15	47893447.28
Tripura	Tripura	27481242.51	7875020.27	2172387.21	37528649.99
HVDC BNC	Assam	744789.50	57605.28	15890.88	818285.65

Grid Disturbance Report

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

1. At 16:17 Hrs on 02.10.16, 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines, 132 kV NEHU - NEIGRIHMS line & 132 kV Mustem-NEHU line tripped. It was restored at 16:50 hrs. Outage duration: 0:33 hrs. Load Loss: 91MW. 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.
2. At 09:28 Hrs on 06.10.16, 132 kV Imphal-Imphal I & II lines tripped. It was restored at 09:51 hrs. Outage duration: 0:23 hrs. Load Loss: 41 MW. Category- GD-I. Due to tripping of these elements, Capital area & Karong area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.
3. At 18:52Hrs on 08.10.16, 132 kV Dhaligaon-BTPS I & II lines tripped. It was restored at 20:10 hrs. Outage duration: 1:18 hrs. Load Loss: 110 MW. Category- GD-I. Due to tripping of these elements, Dhaligaon area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.
4. At 08:11 Hr on 24.10.2016, 132 kV Imphal-Imphal I & II lines tripped. It was restored at 8:30 hrs. Outage duration: 0:19 hrs. Load Loss: 31 MW. Category- GD-I. Due to tripping of these elements, Capital area & Karong area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Annexures and Exhibits

Major Reservoirs Level of The Month

	FRL (mtr.)	MDDL (mtr.)	Oct 2016	Oct 2015
			Level in mtr/ft	Level in mtr/ft
KHANDONG	719.3	704	714.3	716.6
KOPILI	609.5	592.83	604.8	605.5
LOKTAK	768.5	766.2	768.9	768.9
BARAPANI	3220 ft	3150 ft	3176.6	3213.6
GUMTI	93.55	83.6	90.6	93.0
DOYANG	333	306	321.0	317.8

Frequency Analysis For The Month of October 2016

Frequency	Freq. (in Hz.)	Time (H:M)	Date (D.M.Y)
1. Maximum Frequency	50.25		02.10.2016
2. Minimum Frequency	49.74		20.10.2016
3. Monthly Average	50.0		

Frequency in Hz as %age of Time for the Blocks

$f < 49.90$	$49.90 < f < 50.05$	$f > 50.05$
5.72	74.78	19.50

Daily Frequency Variation Index (FVI):

Date	FVI	Date	FVI
01-10-2016	0.036	17-10-2016	0.039
02-10-2016	0.039	18-10-2016	0.034
03-10-2016	0.037	19-10-2016	0.036
04-10-2016	0.029	20-10-2016	0.058
05-10-2016	0.031	21-10-2016	0.048
06-10-2016	0.028	22-10-2016	0.045
07-10-2016	0.034	23-10-2016	0.039
08-10-2016	0.028	24-10-2016	0.035
09-10-2016	0.029	25-10-2016	0.042
10-10-2016	0.035	26-10-2016	0.055
11-10-2016	0.029	27-10-2016	0.040
12-10-2016	0.033	28-10-2016	0.051
13-10-2016	0.035	29-10-2016	0.032
14-10-2016	0.041	30-10-2016	0.033
15-10-2016	0.029	31-10-2016	0.037
16-10-2016	0.028		

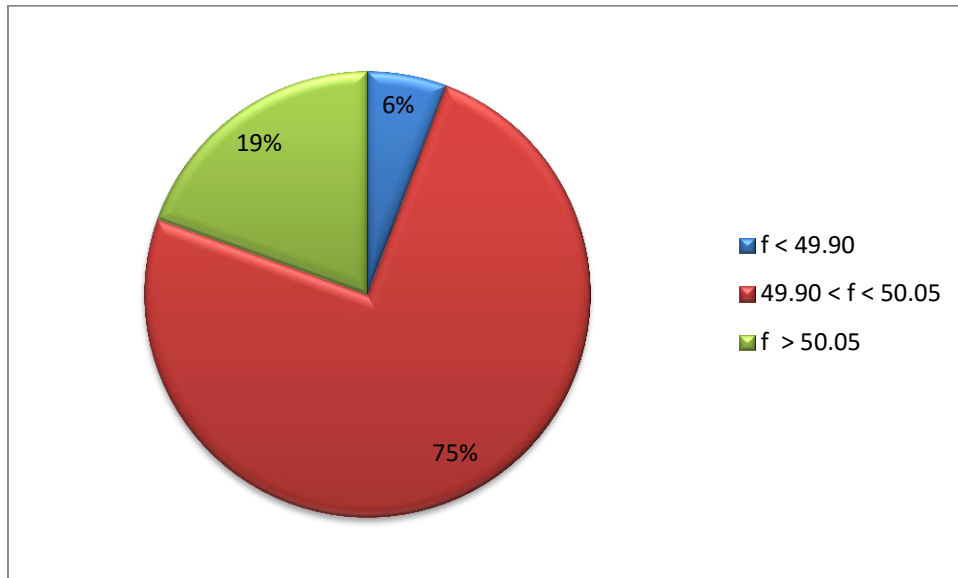
A-3

Consolidated Scheduled Bilateral Exchanges in NE Region during October 2016

Name of Trader	Energy at NER periphery (in MWH)
MPPL	26987.5675
APPCPL	20125.77
OTPC	46355
MSEB	1260
PTC	23067.89
NVVN	950
TPTL	1080

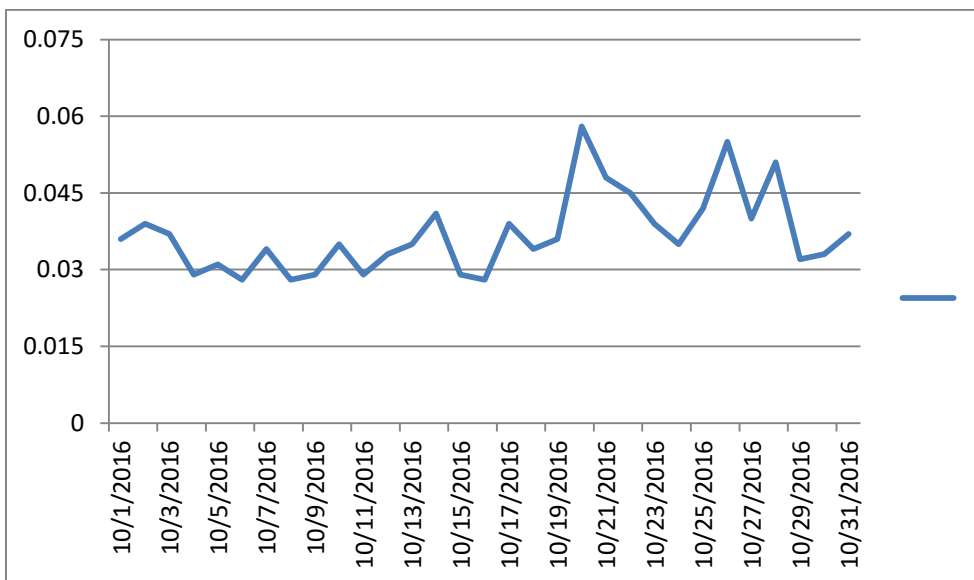
B-1

Frequency Duration for October 2016



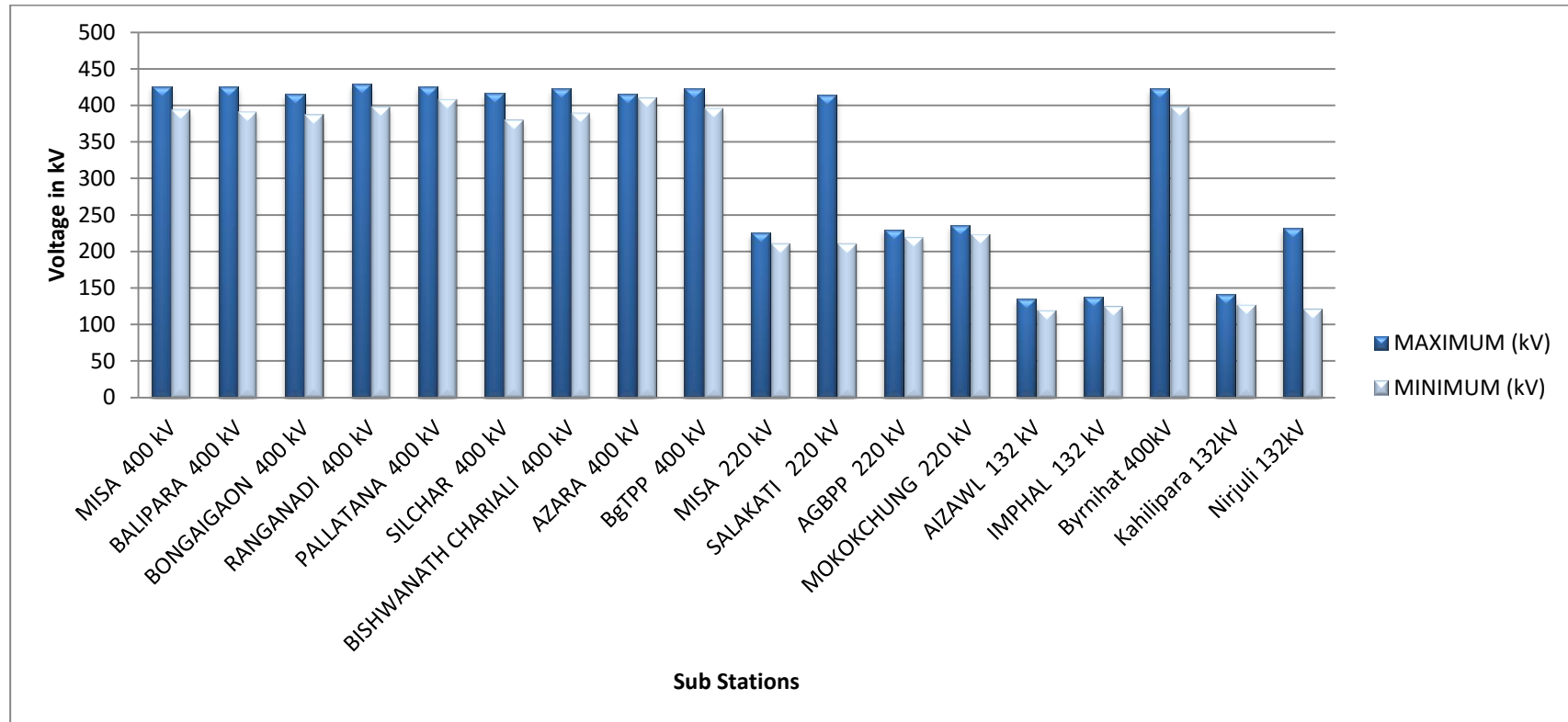
B- 2

FVI Characteristic for October 2016



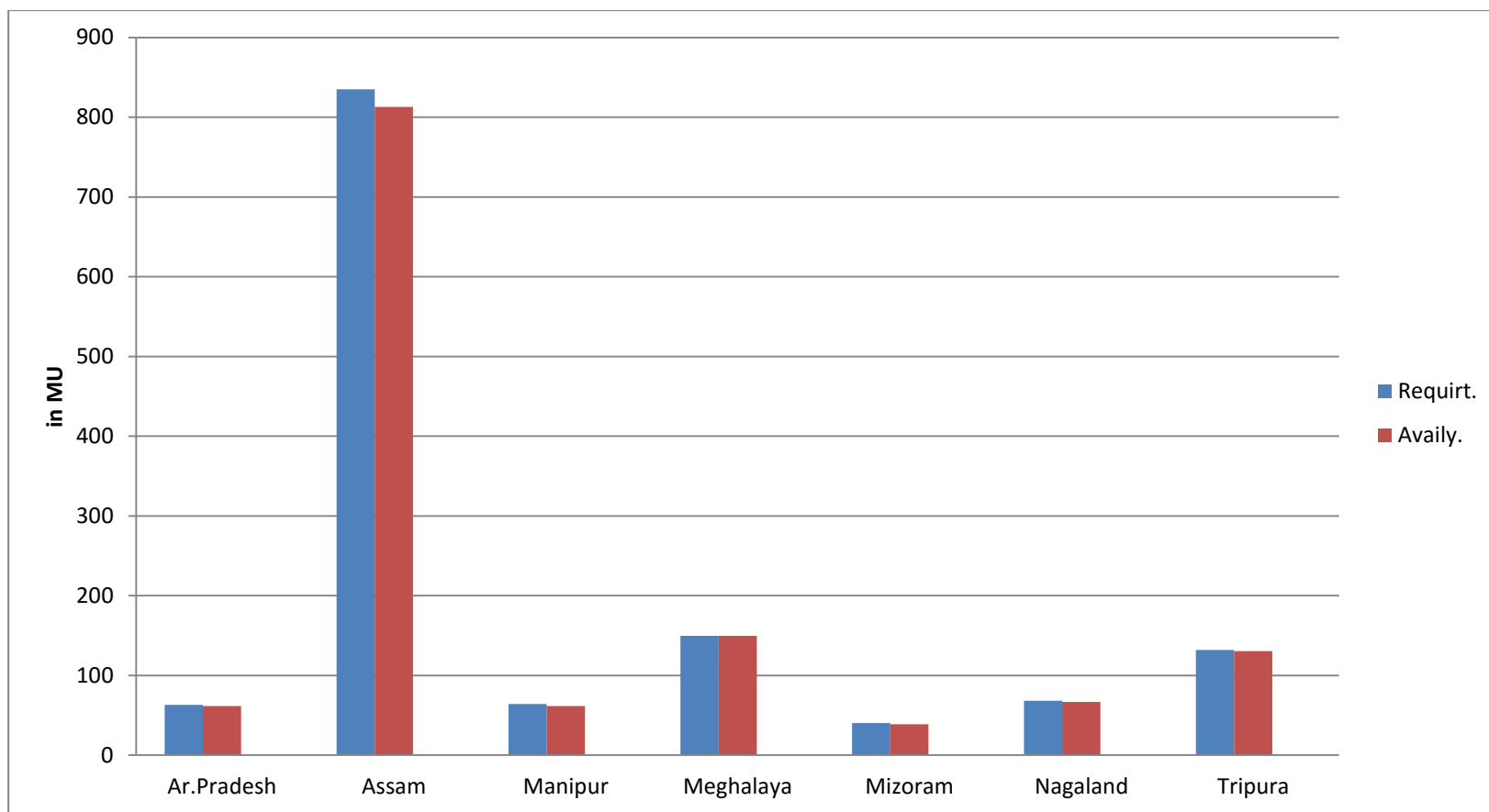
B-3

Voltage Variation Range for October 2016



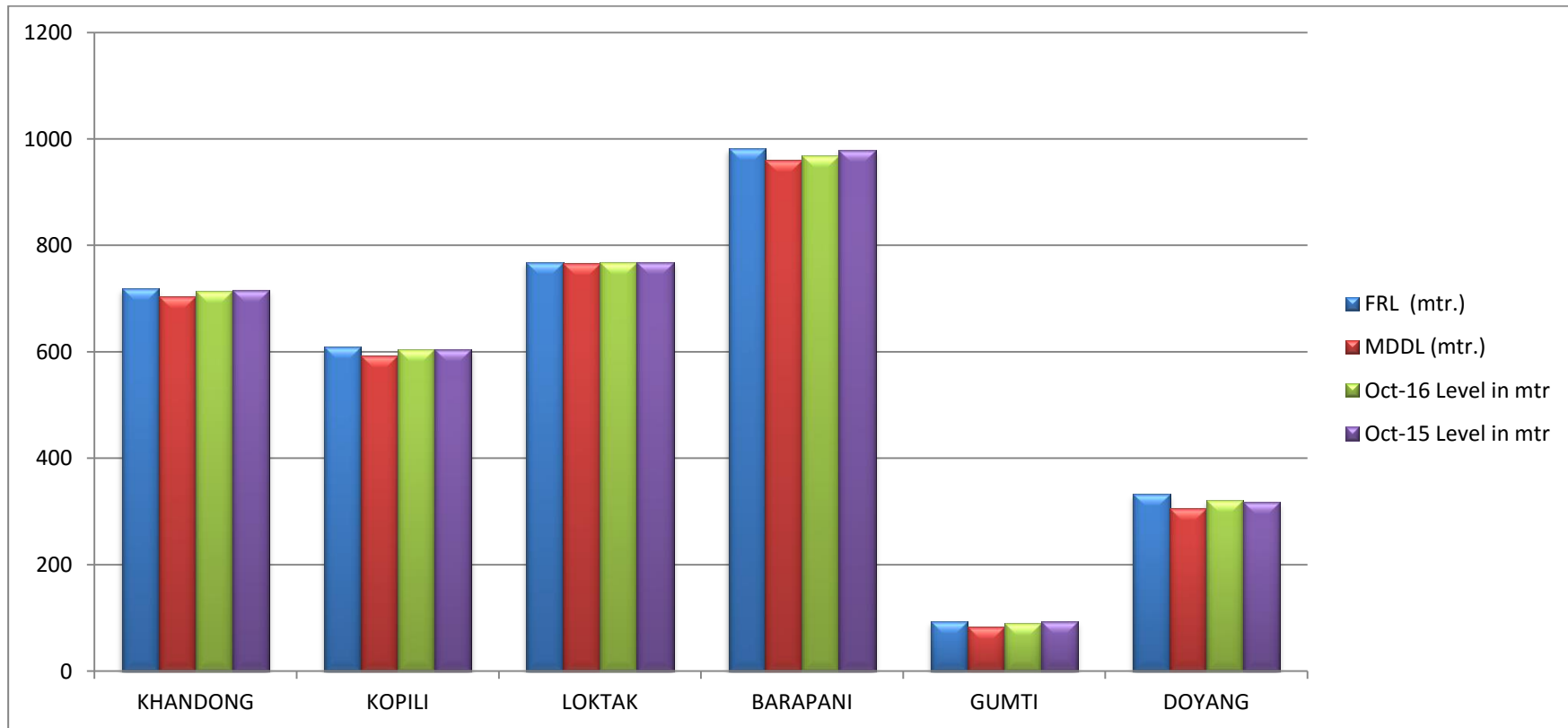
B-4

Energy Profile for October 2016



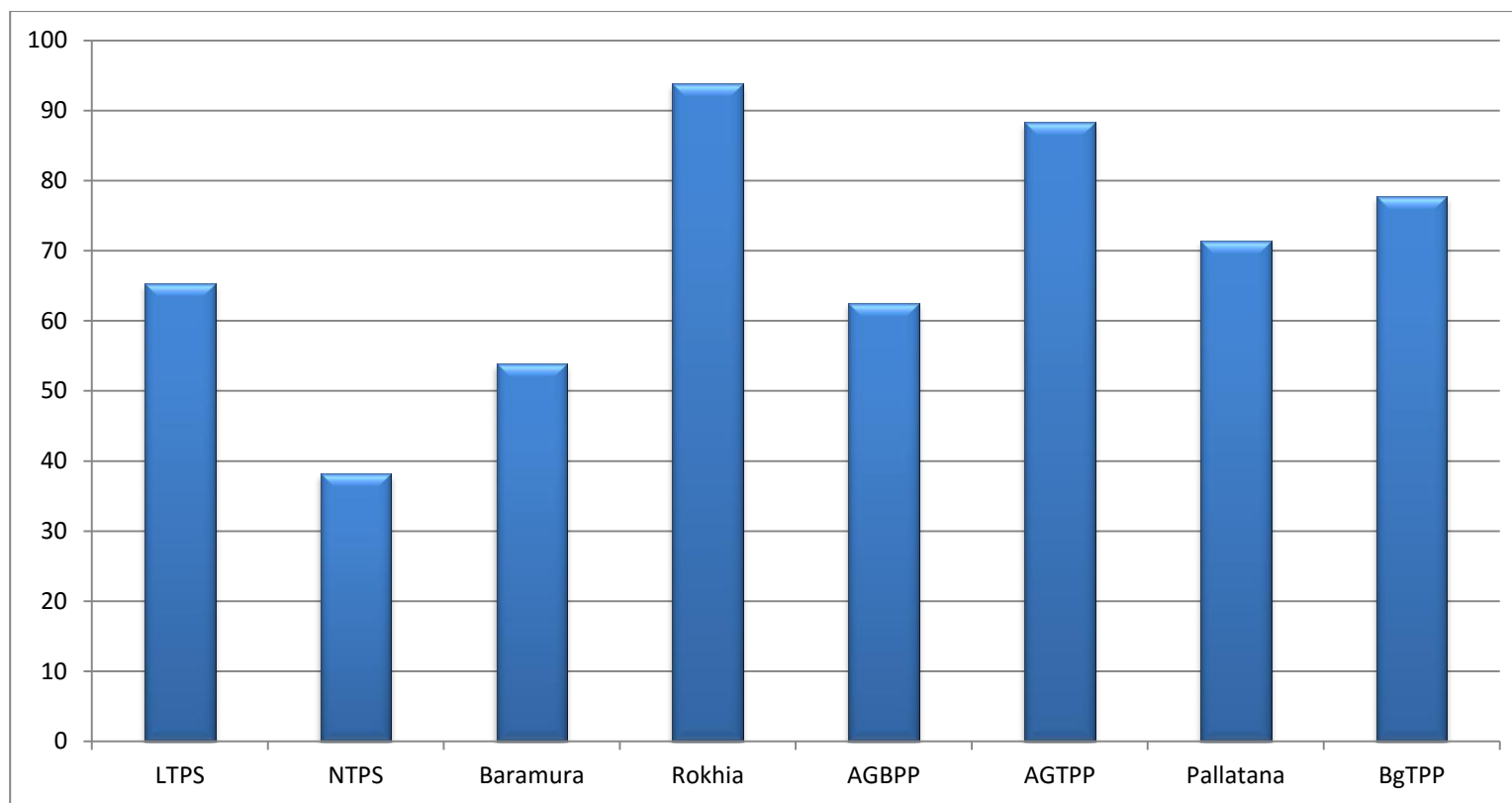
B-5

Reservoir Profile for October 2016



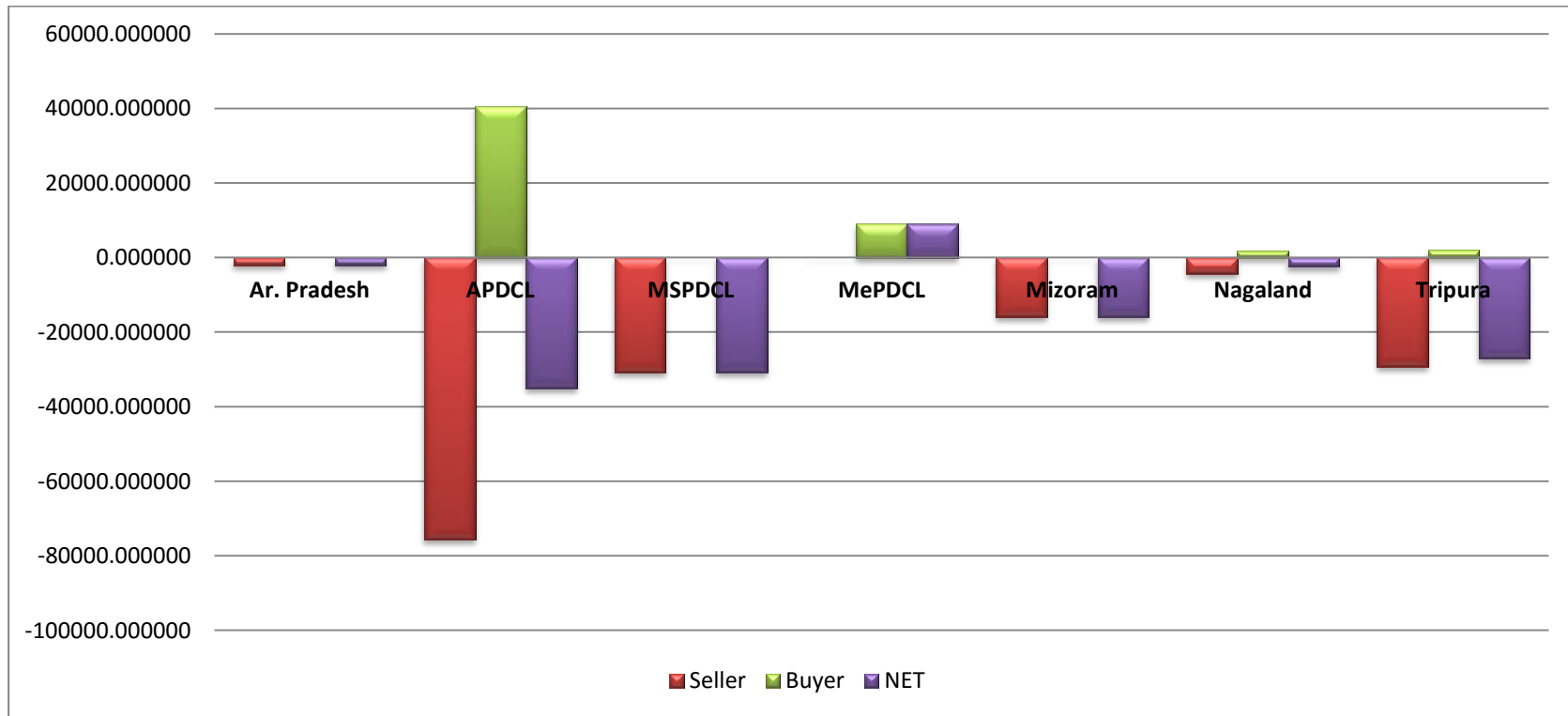
B-6

Station-wise Plant Load Factor for October 2016



B-7

Collective Transaction through IEX Power Exchange October 2016



B-8

Consolidated SEB in NE Region for the month of October 2016

