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

- The maximum unrestricted demand during the month of September 2016 was 2430 MW, which was 2435 MW in the month of August 2016. The peak demand met in NER during the period under review was 2373 MW, which was 2387 MW in the previous month.
- The energy requirement during the month of September 2016 was 1373.26 MU, which was 1461.06 MU in the month of August 2016. The energy availability in NER during the period under review was 1335.95 MU, which was 1420.77 MU in the previous month.
- The maximum, minimum & average system frequency were 50.24 (12-September-16 07:30 Hrs), 49.67 (20-September-16 21:21 Hrs) & 50.00 Hz respectively. The maximum, minimum & average FVI were 0.075, 0.025 & 0.037 respectively. The average FVI was less than its previous month's figure of 0.040. (Refer Annex-II).
- Maximum export of power from NER to ER was 228 MW (on 01.09.16 at 08:45 Hrs) and that from ER to NER was 1427 MW (on 28.09.16 at 17:30 Hrs). The same Inter-Regional Exchanges of NER with NR and vice versa were 0 MW and 1007 MW (on 28.09.16 at 15:30 Hrs) respectively. Total net energy import during the month was 9.297MU (522.788 MU from ER and -513.491 MU from NR).

Salient Features of North Eastern Regional Grid for September 2016

		NIL	
1	New Unit/Transmission Line/Transformer commissioned during this month		
2	Number of major grid disturbance during this month	0	
		Sep-16	Sep-15
3	Installed Capacity of the Region (in MW)		
	(i) Grid	3477.00	3161.00
	(ii) Isolated	124.00	124.00
	Total (As on 31.06.2016)	3601.00	3285.00
4	Energy Generation in MU (Gross):		
	Thermal/Gas	812.06	723.54
	Hydel	628.29	637.31
	Solar	0.60	0.50
	Total	1440.95	1361.35
5	Demand in MW:		
	Registered Peak Demand	2430	2442
	Peak Demand Met	2373	2255
	Shortage (%age)	2.3	8.3
6	Regional Energy (Gross) in MU:		
	Energy Requirement	1373.26	1299
	Energy Availability	1335.95	1220
	Surplus (+)/Deficit(-) (%age)	-2.72	-6.47
7	Inter Regional Energy Exchange in MU:		
	NER -----> ER	7.147	
	ER -----> NER	529.935	
	NER -----> NR	513.491	
	NR -----> NER	0.000	
	Net Import	9.297	
8	Frequency Profile:		
	Average Frequency (Hz)	50.00	49.99
	Average Frequency Variation Index	0.037	-

Monthly Power Supply Position

1. Energy Generation In The Region For the Month of September 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	62.81				98.68				161.49	
Meghalaya	100.49								100.49	
Mizoram	1.30								1.30	
Tripura					46.18				46.18	
Nagaland	13.89								13.89	
Total (S. Sector)	178.49				144.86		0		323.35	
Central Sector :										
NEEPCO:										
Khd+Kop+Kop-II	166.5								166.5	
Kathalguri (AGBPP)					92.2				92.2	
RC Nagar					72.3				72.3	
Doyang	54.1								54.1	
Ranganadi	153.6								153.6	
Monarchak							0.6		0.6	
NHPC:										
Loktak	75.6								75.6	
OTPC:										
Pallatana Gas PP					364.7				364.7	
NTPC:										
BgTPP			138						138	
Total (C. Sector)	449.8		138		529.2		0.6		1117.6	
Total NER	628.29		138		674.06		0.6		1440.95	

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	59.56	58.07	1.490	2.50	143	136	7	4.9
Assam	888.09	858.16	29.937	3.37	1616	1576	40	2.5
Manipur	60.18	57.79	2.384	3.96	151	148	3	2.0
Meghalaya	140.95	140.95	0.000	0.00	298	298	0	0.0
Mizoram	36.67	35.43	1.248	3.40	92	91	1	1.1
Nagaland	68.09	66.89	1.203	1.77	123	121	2	1.6
Tripura	119.72	118.67	1.052	0.88	277	277	0	0.0
REGION	1373.26	1335.95	37.31	2.72	2430	2373	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	136	06.09.16	50.04	143
Assam	1576	28.09.16	50.00	1616
Manipur	148	26.09.16	50.08	151
Meghalaya	298	10.09.16	50.13	298
Mizoram	91	27.09.16	50.20	92
Nagaland	121	29.09.16	50.12	123
Tripura*	277	29.09.16	50.00	277
REGION	2373	28.09.16	50.00	2430

4. Estimation of Energy Requirement (In MU)

Constituents	Generation	Energy Drawal from Grid		Energy Availability	Actual Requirement
		Schedule	Drawal		
Arunachal Pradesh	0.000	64.218	62.662	58.07	59.56
Assam	161.49	609.787	662.061	858.16	888.09
Manipur	0.000	66.855	60.767	57.79	60.18
Meghalaya	100.49	27.175	39.246	140.95	140.95
Mizoram	1.3	33.994	36.734	35.43	36.67
Nagaland	13.89	52.462	52.480	66.89	68.09
Tripura	46.18	102.600	129.261	118.67	119.72
REGION	377.4	957.091	1043.211	1335.95	1373.26

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

S. No.	Power Stations/Units	Installed Capacity (MW)	Peak Generation (MW)	Energy Generation (MU)	
				Sep-16	Sep-15
(i) STATE SECTOR : HYDRO					
ASSAM : HYDRO					
1	LANGPI U-1	50	51	29.82	33.07
2	LANGPI U-2	50	56	32.99	35.28
TOTAL		100	107	62.81	68.36
MEGHALAYA : HYDRO					
3	UMIAM STAGE - 1 U-1	9	12	1.87	6.15
4	UMIAM STAGE - 1 U-2	9	9	1.78	6.00
5	UMIAM STAGE - 1 U-3	9	9	1.90	5.95
6	UMIAM STAGE - 1 U-4	9	9	1.85	6.14
7	UMIAM STAGE - 2 U-1	10	10	1.6	6.34
8	UMIAM STAGE - 2 U-2	10	10	2.4	5.93
9	UMIAM STAGE - 3 U-1	30	30	0.73	0
10	UMIAM STAGE - 3 U-2	30	31	2.35	10.99
11	UMIAM STAGE - 4 U-1	30	30	6.79	17.95
12	UMIAM STAGE - 4 U-2	30	30	13.57	17.08
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	0.92
17	MYNTDU-LESHKA U-1	42	42	23.42	26.66
18	MYNTDU-LESHKA U-2	42	42	18.25	24.18
19	MYNTDU-LESHKA U-3	42	42	23.18	28.19
20	SONAPANI	2	2	0.8	0.74
TOTAL		316	308	100.49	162.48
NAGALAND : HYDRO					
21	LIKIMRO - 1	8	8	4.71	4.24
22	LIKIMRO - 2	8	8	4.68	4.56
23	LIKIMRO - 3	8	8	4.50	4.39
TOTAL		24	24	13.89	13.18
MIZORAM : HYDRO					
24	SERLUI B U-1	4	4	1.22	0.38
25	SERLUI B U-2	4	2	0.07	0
26	SERLUI B U-3	4	0	0	0
TOTAL		12	8	1.29	0.38
TRIPURA : HYDRO					
27	GUMTI - 1	5	0	0	0
28	GUMTI - 2	5	0	0	0

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29	GUMTI - 3	5	0	0	0.11
TOTAL		15	0	0	0.11
TOTAL STATE (HYDRO) :		467	447	178.48	244.51
Sr. No.	Power Stations/Units	Installed Capacity (MW)	Peak Generation (MW)	Energy Generation (MU)	
				Sep-16	Sep-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	22	14.43	6.58
9	BARAMURA - 5	21	13	0.29	11.94
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	23	6.57	14.26
17	ROKHIA - 8	21	21	13.45	11.89
18	ROKHIA - 9	21	20	11.44	12.85
TOTAL		169.5	99	46.18	57.52
ASSAM : THERMAL					
19	LTPS - 1	15	0	0	0
20	LTPS - 2	15	14	7.94	8.55
21	LTPS - 3	15	20	5.69	8.63
22	LTPS - 4	15	20	6.84	2.37
23	LTPS - 5	20	28	11.81	14.83
24	LTPS - 6	20	19	12.82	12.64
25	LTPS - 7	20	19	11.49	12.85
26	LTPS - 8	37	30	16.85	20.91
27	NTPS - 1	20	20	4.76	10.50
28	NTPS - 2	21	19	6.63	9.69
29	NTPS - 3	21	20	4.79	8.24
30	NTPS - 4	11	7	0.07	3.48
31	NTPS - 5	24	17	5.26	8.07
32	NTPS - 6	22	11	3.71	6.26
33	DLF	25	0	0	0
TOTAL		301	244	98.66	127.02
TOTAL STATE (THERMAL/GAS) :		494.5	343	144.84	184.54
TOTAL STATE GEN (HY+TH/GAS)		961.5	790	323.32	429.05

S. No.	Power Stations/Units	Installed Capacity (MW)	Peak Generation (MW)	Energy Generation (MU)	
				Sep-16	Sep-15
(ii) CENTRAL SECTOR : HYDRO					
1	KHANDONG - 1	25	24	9.7	15.9
2	KHANDONG - 2	25	24	8.9	16.1
3	KOPILI Stg - II	25	25	10.1	15.0
4	KOPILI - 1	50	58	32.4	0.7
5	KOPILI - 2	50	58	34.2	0.7
6	KOPILI - 3	50	58	35.8	0.5
7	KOPILI - 4	50	58	35.4	0.6
8	DOYANG - 1	25	36	18.2	15.5
9	DOYANG - 2	25	33	17.7	15.2
10	DOYANG - 3	25	33	18.2	16.1
11	LOKTAK - 1	35	37	25.1	24.9
12	LOKTAK - 2	35	37	25.3	25.2
13	LOKTAK - 3	35	36	25.2	25.9
14	RANGANADI - 1	135	120	54.9	72.9
15	RANGANADI - 2	135	110	46.9	75.5
16	RANGANADI - 3	135	120	51.8	72.1
TOTAL CS HYDRO :		860	867	449.8	392.8
(ii) CENTRAL SECTOR : THERMAL/GAS					
1	KATHALGURI - 1	34	10	21.6	19.7
2	KATHALGURI - 2	34	10	20.8	16.0
3	KATHALGURI - 3	34	1	18.1	19.7
4	KATHALGURI - 4	34	1	0.5	20.2
5	KATHALGURI - 5	34	30	1.8	19.2
6	KATHALGURI - 6	34	22	2.0	16.0
7	KATHALGURI - 7	30	30	18.2	16.1
8	KATHALGURI - 8	30	30	7.8	18.1
9	KATHALGURI - 9	30	30	1.5	14.9
10	R.C. NAGAR - 1	21	22	11.5	13.3
11	R.C. NAGAR - 2	21	22	12.0	12.9
12	R.C. NAGAR - 3	21	21	13.5	6.6
13	R.C. NAGAR - 4	21	21	12.0	12.8
14	R.C. NAGAR - 5	23	24	9.8	11.9
15	R.C. NAGAR - 6	23	23	13.6	6.2
16	MONARCHAK SOLAR PV	5		0.6	0.5
17	MONARCHAK - GTG 1	66	0	0	0
18	MONARCHAK - STG 1				
19	PALLATANA - GTG 1	232	222	110.3	133.1
20	PALLATANA - STG 1	131	122	70.7	76.9
21	PALLATANA - GTG 2	232	223	112.8	65.0
22	PALLATANA - STG 2	131	125	71.0	40.4
23	BgTPP - 1	250	250	138.0	0

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24	BgTPP - 2				
25	BgTPP - 3				
TOTAL CS (THERMAL/GAS) :		1471	1239	668.1	539.5
TOTAL CS GEN (HY+TH/GAS)		2331	2106	1117.9	932.3
TOTAL NER GEN (HY+TH/GAS)		3292.5	2896	1441.22	1361.35

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	73.45	64.89
2	NTPS*	AEGCL	119.00	25.23	29.32
3	Baramura	Tripura	42.00	14.72	48.35
4	Rokhia	Tripura	95.00	31.46	88.08
5	AGBPP	NEEPCO	291.00	80.094	39.24
6	AGTCCPP	NEEPCO	84.00	67.465	73.81
7		NEEPCO	46.00		
8	Monarchak	NEEPCO	66.00	0.00	0.00
9	Pallatana	OTPC	727.00	349.301	68.83
10	BgTPP	NTPC	250.00	132.069	80.63

*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	418	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	119
15	IMPHAL 132 kV	138	127
16	Byrnihat 400kV	418	396
17	Kahilipara 132kV	142	127
18	Nirjuli 132kV	135	124

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	98.41	1.52
BALIPARA	0.04	0	99.00	0.95
BONGAIGAON	0.03	0	99.97	0
PALATANA	1.46	0	98.43	0.11
SILCHAR	0.85	0.0	99.07	0.08
Azara	2.5	0	97.5	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

N E R to E R	7.147
E R to N E R	529.935
NET IMPORT FORM E R	522.788
N E R to N R	513.491
N R to N E R	0.000
NET IMPORT FROM N R	-513.491
NET IMPORT	9.297

2. Major Grid Disturbances:

No Major Grid Disturbance observed during the month.

3. Meetings Held by NERPC:

Sr. No.	Meeting	Date	Venue
1.	125 th OCC Meeting	14.09.2016	Guwahati
2.	20 th Metering Committee	14.09.2016	Guwahati
3.	44 th PCC Meeting	20.09.2016	Guwahati

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

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					of works by anti-dam activists. Since 16.12.2011 work.
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	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

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									dam.Generation 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	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	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.
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	70	348	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/foundation being taken up for rectification/recasting.

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11	132 kV Tezu-Roing S/C	60	244	240	222	46	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 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	103	98	95	12		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	1		Oct-16	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-0.62 ckm (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	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		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	28.43 8	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 September 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	73.285	3.949	77.233	68.162	64.218	62.662	-1.556	73.285
ASEB	494.648	98.095	592.743	555.705	609.787	662.061	52.274	494.648
Manipur	106.428	0.000	106.428	91.534	66.855	60.767	-6.088	106.428
MeSEB	128.480	0.000	128.480	63.590	27.175	39.246	12.072	128.480
Mizoram	51.787	2.892	54.679	49.151	33.994	36.734	2.740	51.787
Nagaland	63.148	8.728	71.876	63.949	52.462	52.480	0.018	63.148
Tripura	160.283	0.000	160.283	146.850	102.600	129.261	26.661	160.283
PGCIL-HVDC	1.683	0.000	1.683	1.116	1.116	0.703	-0.413	1.683

(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 September 2016

ISGS	Actual (MWH)	Implemented Schedule (MWH)
LOKTAK	73388.807937	73257.250000
KOPILI	136221.788031	135856.764350
Kopili-II	9975.808650	9766.852938
KHANDONG	17899.069499	17616.714250
RHEP	153532.027684	150656.431150
DHEP	51707.822488	51731.300300

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AGBPP	89051.479889	80094.489908
AGTPP	69917.068914	67464.571025
Palatana	348498.176825	349300.637005
Bongaigaon	126480.906465	129548.136250

Source: DSM for the month of September 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	7.617	26.9972	11.652
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	98.995	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 (NVVN Coal Power)	0.091912%	0.091912%	0.091912%	0.091912%	0.091912%

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

Sr. No.	Station	Unrequisitioned Power	URS Power Requisitioned
1.	AGBPP	741144.65	15.605
2.	AGTCCPP	417412.99	1.175
3.	BgTPP	774652.511	
4.	Palatana	1708794.693	
5.	FSTPP	-	820.49
6.	FSTPP-3	-	55

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7.	KHSTPP	-	161.995
8.	KHSTPP-2	-	4465.7975
9.	TSTPP	-	205.515

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

1. At 19:50 Hrs on 08.09.16, 132 kV Ranganadi-Lekhi line tripped. It was restored at 20:17 hrs. Outage duration: 0:27 hrs. Load Loss: 33MW. Category- GD-I. Due to tripping of this element, Nirjuli area & Gohpur area were separated from rest of NER Grid and subsequently collapsed due to no source in these areas.
2. At 15:40 Hrs on 13.09.16 , 132 kV Aizawl- Zuangtui line tripped.It was restored at 15:56 hrs. Outage duration: :16 hrs. Generation Loss: 36 MW. Category- GD-I. Due to tripping of this element, Zuangtui area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.
3. At 10:55 Hrs on 14.09.16, 132 kV Imphal-Imphal I & II lines tripped. It was restored at 11:24 hrs. Outage duration: 0:29 hrs. Load Loss: 44 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.
4. At 21:07 Hrs on 16.09.16, 220 kV BTPS - Salakati I line tripped. It was restored at 22:12 hrs. Outage duration: 1:05 hrs. Load Loss: 204 MW. Category- GD-I. Due to tripping of this element, Dhaligaon area was separated from rest of NER Grid and collapsed due to no source in this area. Part of Eastern Bhutan was connected with Indian Grid through 132 kV Salakati - Gelephu line (some of the internal lines of Bhutan kept open for system requirement). At 21:07 Hrs on 16.09.16, 132 kV Salakati - Gelephu line tripped. Due to tripping of this element, Eastern Bhutan was separated from rest of NER Grid and subsequently collapsed due to no source in this area.
5. At 13:39 Hrs on 20.09.16, 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines and 132 kV EPIP II - Killing(Byrnihat) I&II lines tripped. It was restored at 15:22 hrs. Outage duration: 1:42 hrs. Load Loss: 70 MW. Category- GD-I. Due to tripping of these elements, Khliehriat area and Byrnihat area were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.

Annexures and Exhibits

A-1

Major Reservoirs Level of The Month

	FRL (mtr.)	MDDL (mtr.)	Sept 2016	Sept 2015
			Level in mtr/ft	Level in mtr/ft
KHANDONG	719.3	704	712.7	719.20
KOPILI	609.5	592.83	608.3	609.58
LOKTAK	768.5	766.2	769	768.97
BARAPANI	3220 ft	3150 ft	3176.6	3218.80
GUMTI	93.55	83.6	91.9	93.60
DOYANG	333	306	322.6	318.35

A-2

Frequency Analysis For The Month of September 2016

Frequency	Freq. (in Hz.)	Time (H:M)	Date (D.M.Y)
1. Maximum Frequency	50.24	07:30	12.09.2016
2. Minimum Frequency	49.67	21.:21	20.09.2016
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
6.17	75.06	18.76

Daily Frequency Variation Index (FVI):

Date	FVI	Date	FVI
01-09-2016	0.040	17-09-2016	0.027
02-09-2016	0.031	18-09-2016	0.028
03-09-2016	0.027	19-09-2016	0.063
04-09-2016	0.028	20-09-2016	0.063
05-09-2016	0.033	21-09-2016	0.030
06-09-2016	0.042	22-09-2016	0.030
07-09-2016	0.075	23-09-2016	0.026
08-09-2016	0.040	24-09-2016	0.028
09-09-2016	0.031	25-09-2016	0.031
10-09-2016	0.026	26-09-2016	0.051
11-09-2016	0.028	27-09-2016	0.058
12-09-2016	0.032	28-09-2016	0.068
13-09-2016	0.030	29-09-2016	0.036
14-09-2016	0.029	30-09-2016	0.027
15-09-2016	0.025		
16-09-2016	0.027		

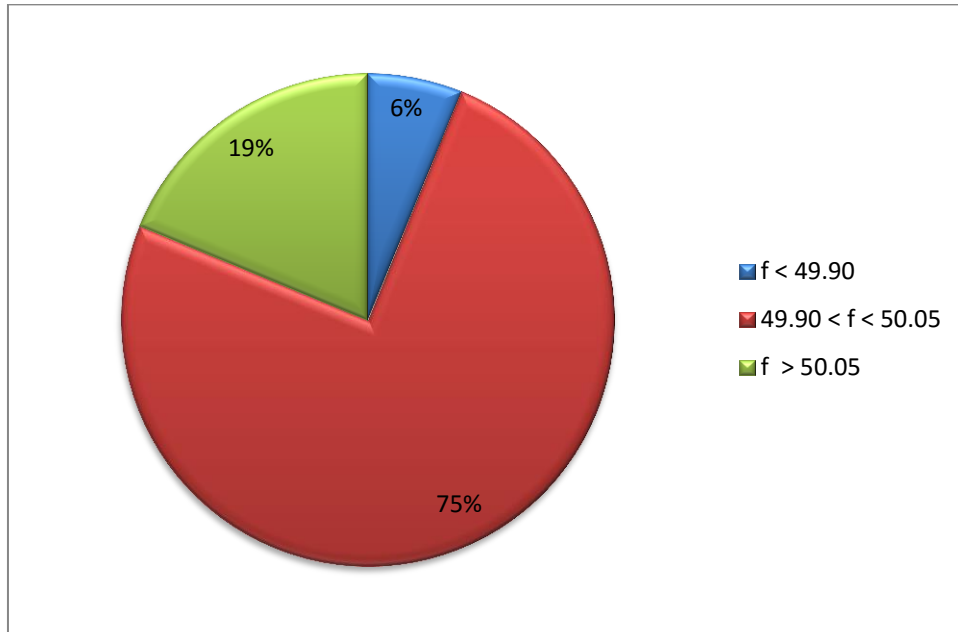
A-3

Consolidated Scheduled Bilateral Exchanges in NE Region during September 2016

Name of Trader	Energy at NER periphery (in MWH)
MPPL	58632.03111
APPCPL	19660.988541
OTPC	46515
IEXL	140
PTC	22159.45

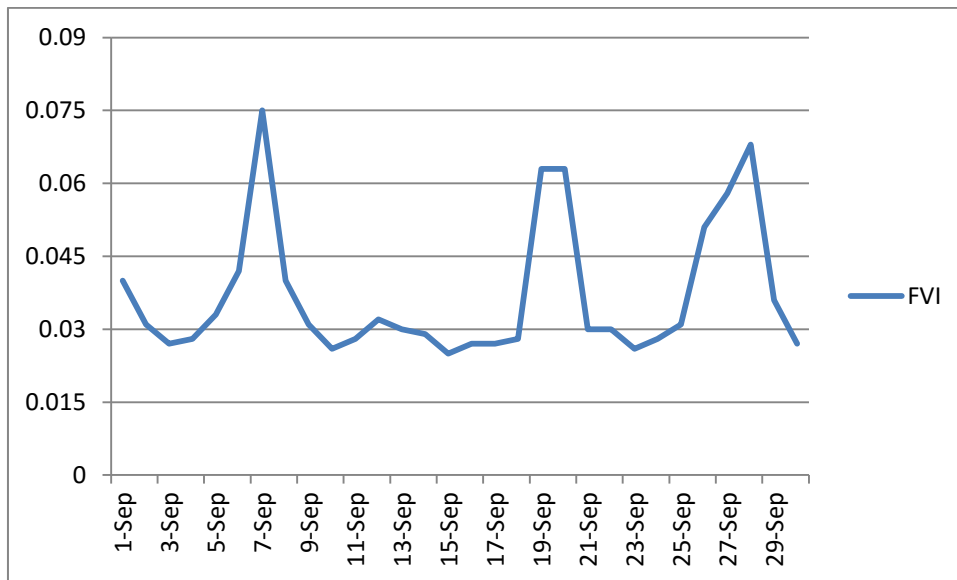
B-1

Frequency Duration for September 2016



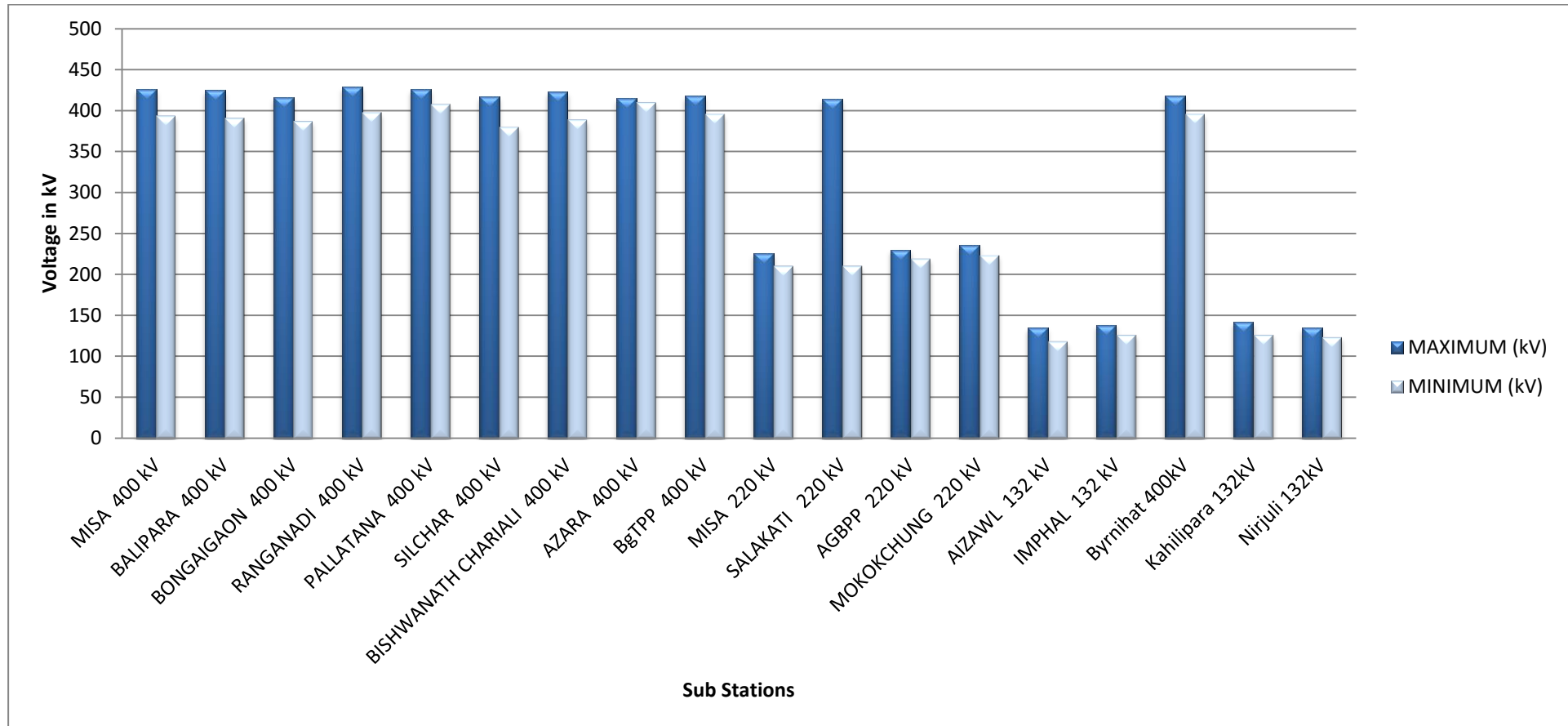
B- 2

FVI Characteristic for September 2016



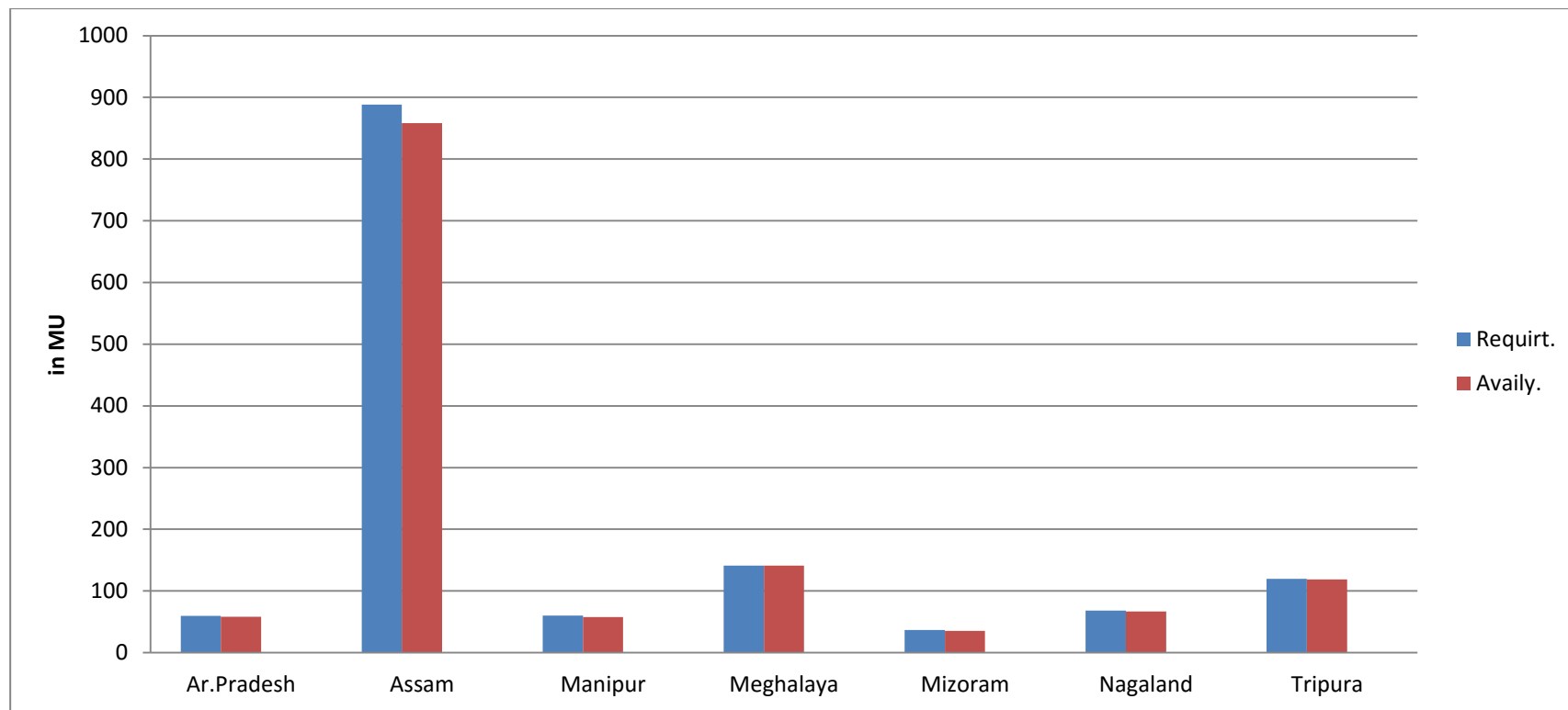
B-3

Voltage Variation Range for September 2016



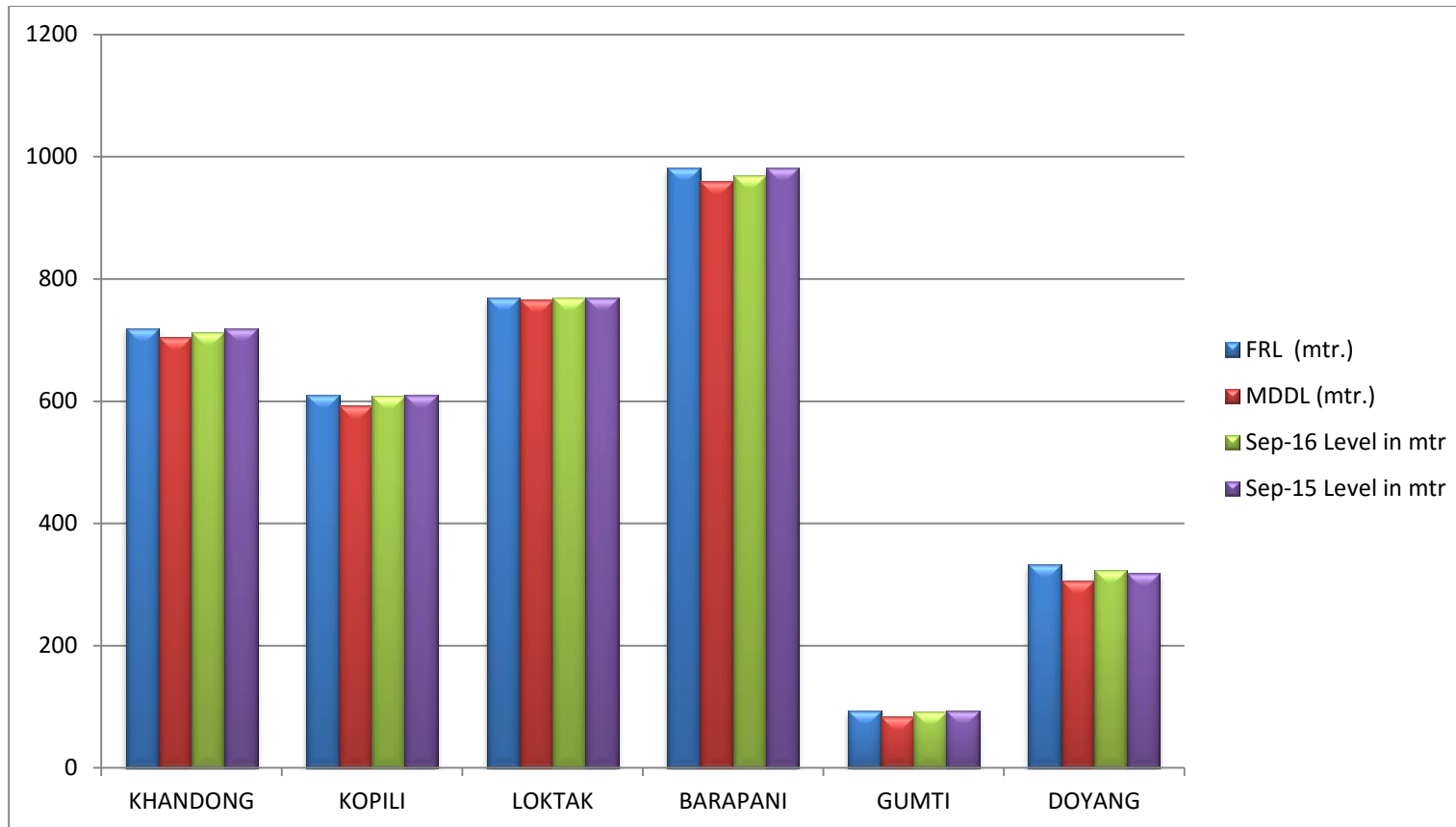
B-4

Energy Profile for September 2016



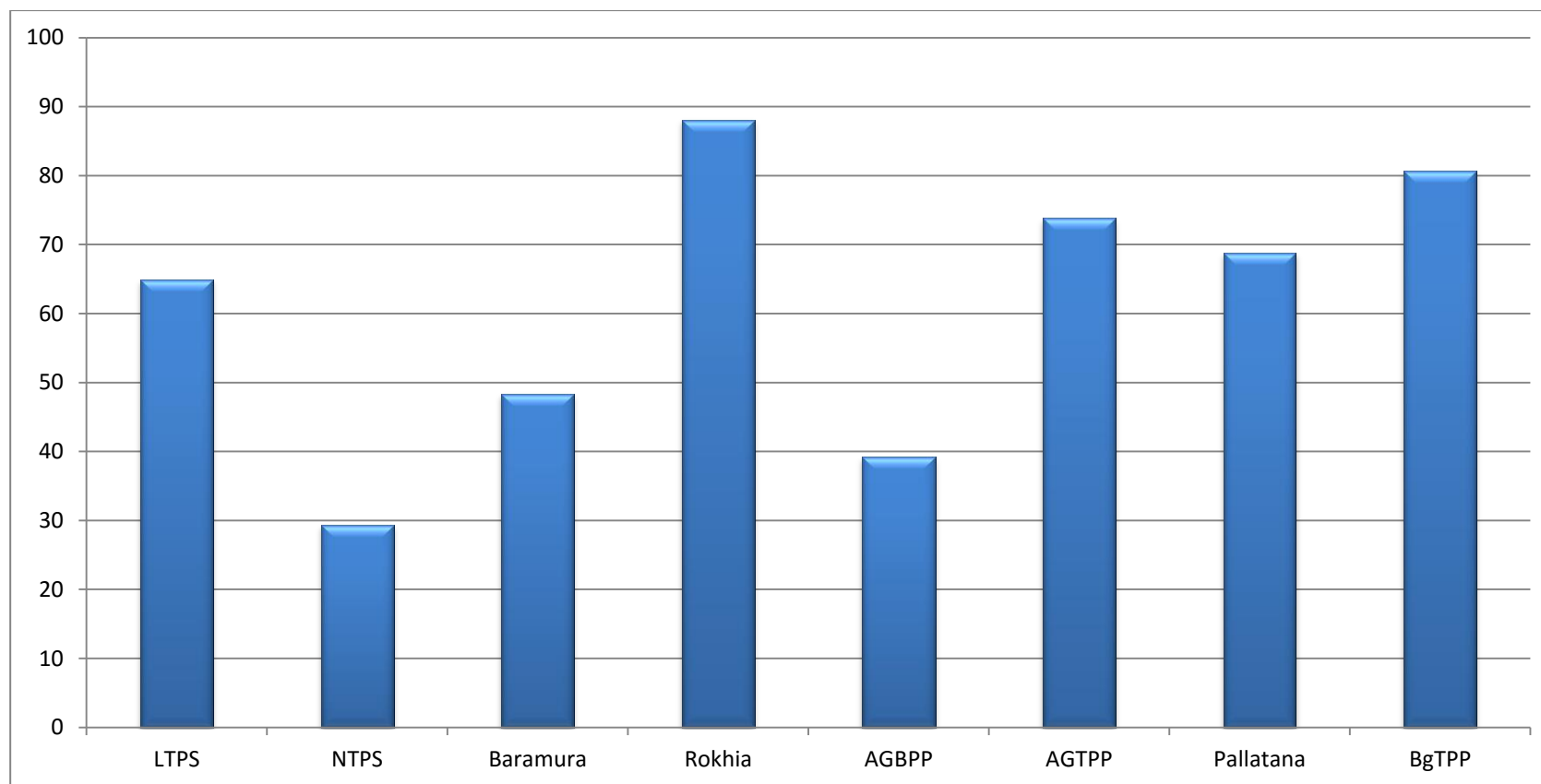
B-5

Reservoir Profile for September 2016



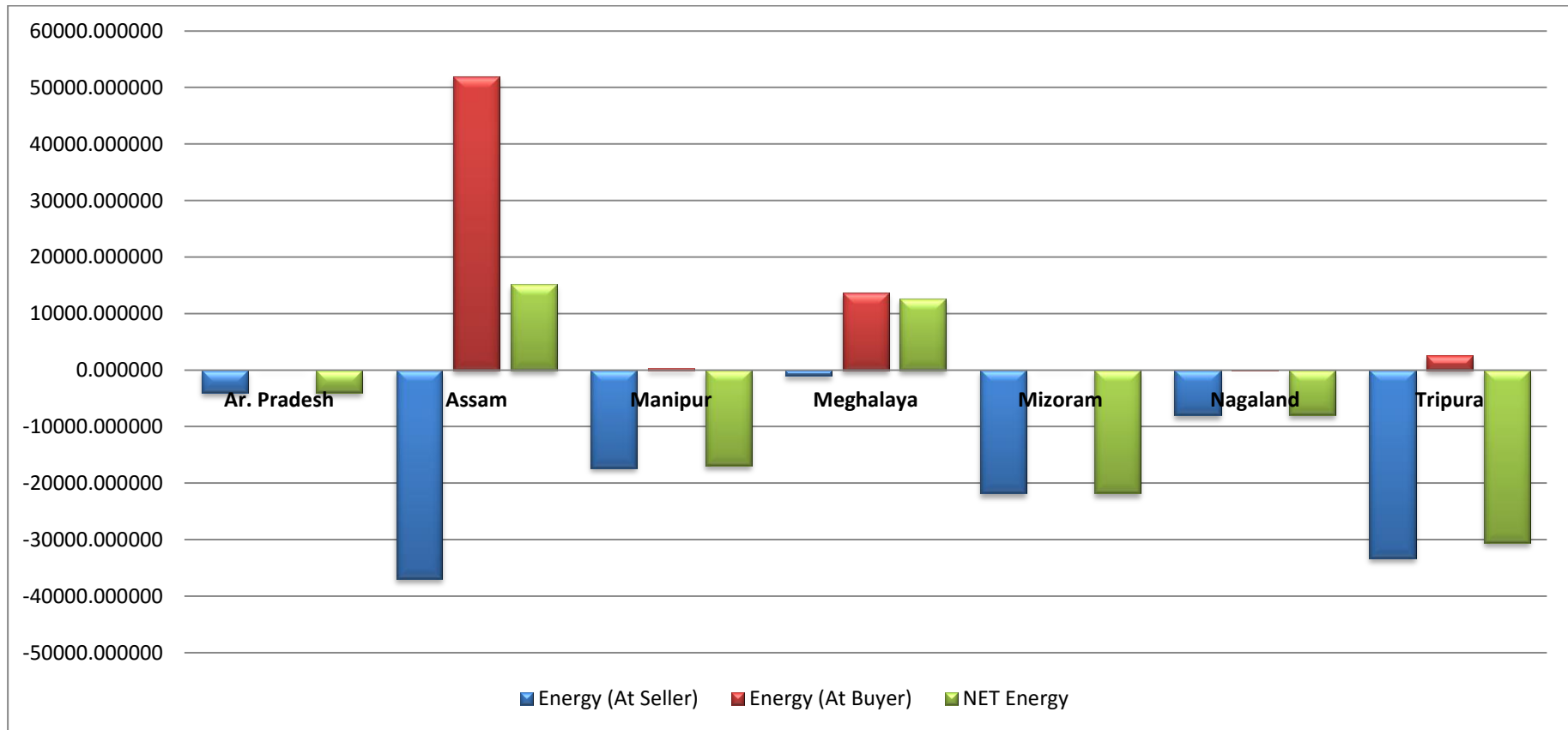
B-6

Station-wise Plant Load Factor for September 2016



B-7

Collective Transaction through IEX Power Exchange September 2016



B-8

Consolidated SEB in NE Region for the month of September 2016

