



भारत सरकार Government of India
विद्युत मंत्रालय Ministry of Power
उत्तर पूर्वी क्षेत्रीय विद्युत समिति
North Eastern Regional Power Committee
एन ई आर पी सी कॉम्प्लेक्स, डोंग पारमाओ, लापालाङ, शिल्लोंग-७९३००६, मेघालय
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दिनांक/Date: 20.11.2017

सेवा में,
To

संलग्नक सुचि के अनुसार
As per enclosed list.

विषय: उ.पू.क्षे.वि.स. की नवंबर 2016 की मासिक प्रगति रिपोर्ट
Subject: Monthly Progress Report of NERPC for the month of **November 2016**.

महोदय,
Sir,

उत्तर पूर्वी क्षेत्रीय विद्युत समिति की नवंबर 2016 की मासिक प्रगति रिपोर्ट आपके अवलोकनार्थ हेतु हमारा वेबसाइट www.nerpc.nic.in में अपलोड की गई है ।

The Monthly Progress Report of the North Eastern Regional Power Committee for the month of November 2016 is uploaded in our office website www.nerpc.nic.in for your perusal.

भवदीय / Yours faithfully,

संलग्न : यथोपरि
Encl: as above

(एल. बी. मुआनथंग/ L. B. Muanthang)
अधीक्षण अभियंता / Superintending Engineer

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

- The maximum unrestricted demand during the month of November 2016 was 2377MW, which was 2466 MW in the month of October 2016. The peak demand met in NER during the period under review was 2314MW, which was 2439 MW in the previous month.
- The energy requirement during the month of November 2016 was 1188.08 MU, which was 1352.26 MU in the month of October 2016. The energy availability in NER during the period under review was 1169.79 MU, which was 1322.23MU in the previous month.
- The maximum, minimum & average system frequency were 50.27 (18-November-16), 49.54 (30-November-16)&49.99 Hz respectively. The maximum, minimum & average FVI were 0.131, 0.029& 0.048 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 642 MW (on 29.11.16 at 03:30 Hrs) and that from ER to NER was 1460 MW (on 15.11.16 at 17:00 Hrs). The same Inter-Regional Exchanges of NER with NR and vice versa were 709.2 MW (on 21.11.16 at 21:45Hrs.) and 680 MW (on 28.11.16 at 13:00 Hrs) respectively. Total net energy import during the month was 77.86MU (427.39 MU from ER and -349.53MU from NR).

Salient Features of North Eastern Regional Grid for November 2016

		NIL	
1	New Unit/Transmission Line/Transformer commissioned during this month		
2	Number of major grid disturbance during this month	0	
		November-16	November-15
3	Installed Capacity of the Region (in MW) *		
	(i) Grid	3496.00	3161.00
	(ii) Isolated	124.00	124.00
	Total (As on 31.11.2016)	3620.00	3285.00
4	Energy Generation in MU (Gross):		
	Thermal/Gas	856.11	767.3
	Hydel	320.62	297.27
	Solar	0.60	0.6
	Total	1177.32	1065.17
5	Demand in MW:		
	Registered Peak Demand	2377	2372
	Peak Demand Met	2314	2352
	Shortage (%age)	2.7	0.85
6	Regional Energy (Gross) in MU:		
	Energy Requirement	1188.08	1185
	Energy Availability	1169.79	1116
	Surplus (+)/Deficit(-) (%age)	-1.56	-6.18
7	Inter Regional Energy Exchange in MU:		
	NER -----> ER	33.07	98.77
	ER -----> NER	460.46	45.1
	NER -----> NR	401.67	20.58
	NR -----> NER	52.14	251.51
	Net Import	77.86	76.31
8	Frequency Profile:		
	Average Frequency (Hz)	49.99	50.05
	Average Frequency Variation Index	0.048	-

*The installed capacity of NER as on 01.10.2016 as furnished by the constituents is : Grid = 3362.3MW and isolated is 109.51 MW. Total NER= 3471.81MW

Monthly Power Supply Position

1. Energy Generation In The Region For the Month of November 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	29.84				94.88					124.72		
Meghalaya	35.17									35.17		
Mizoram	0.62									0.62		
Tripura	7.46				52.63					60.09		
Nagaland	8.83									8.83		
Total (S. Sector)	81.92				147.51			0		229.42		
Central Sector :												
NEEPCO:												
Khd+Kop+Kop-II	92.9									92.9		
Kathalguri (AGBPP)					120.8					120.8		
RC Nagar					80.5					80.5		
Doyang	17.0									17.0		
Ranganadi	53.6									53.6		
Monarchak					8.4		0.6			9.0		
NHPC:												
Loktak	75.2									75.2		
OTPC:												
Pallatana Gas PP					362.9					362.9		
NTPC:												
BgTPP			136							136		
Total (C. Sector)	238.7		136		572.6		0.6			947.9		
Total NER	320.62		136		720.11		0.6			1177.32		

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	60.93	59.77	1.16	1.94	127	127	0	0
Assam	677.48	665.53	11.95	1.80	1531	1524	7	0.5
Manipur	66.20	64.65	1.55	2.40	152	151	1	0.4
Meghalaya	137.33	137.29	0.04	0.03	312	312	0	0
Mizoram	44.82	43.59	1.23	2.82	97	96	1	1.0
Nagaland	64.03	62.76	1.27	2.02	128	126	2	1.3
Tripura	137.28	136.20	1.08	0.79	266	266	0	0
REGION	1188.08	1169.79	18.29	1.56	2377	2314	63	2.6

3. Estimation Of Peak Demand (In MW)

Constituents	Peak Demand Met	Date	Freq (Hz)	Estimated Peak Demand at 50 Hz
Arunachal Pradesh	127	06.11.16	50.23	127
Assam	1524	02.11.16	50.02	1531
Manipur	151	26.11.16	50.10	152
Meghalaya	312	26.11.16	50.02	312
Mizoram	96	25.11.16	50.02	97
Nagaland	126	19.11.16	50.09	128
Tripura*	266	17.11.16	50.09	266
REGION	2314	02.11.16	50.02	2377

4. Estimation of Energy Requirement (In MU)

Constituents	Generation	Energy Drawal from Grid		Energy Availability	Actual Requirement
		Schedule	Drawal		
Arunachal Pradesh	0	55.525	59.775	59.77	60.93
Assam	124.05	512.458	545.910	665.53	677.48
Manipur	0	63.847	64.655	64.65	66.20
Meghalaya	35.17	111.594	102.275	137.29	137.33
Mizoram	0.62	35.955	40.729	43.59	44.82
Nagaland	8.83	52.258	53.935	62.76	64.03
Tripura	60.09	74.703	68.980	136.20	137.28
REGION	228.76	906.34	936.259	1169.79	1188.08

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

S. No.	Power Stations/Units	Installed Capacity (MW)	Peak Generation (MW)	Energy Generation (MU)	
				Nov-16	Nov-15
(i) STATE SECTOR : HYDRO					
ASSAM : HYDRO					
1	LANGPI U-1	50	51	12.41	17.61
2	LANGPI U-2	50	51	17.43	10.45
TOTAL		100	102	29.84	28.06
MEGHALAYA : HYDRO					
3	UMIAM STAGE - 1 U-1	9	9	0.24	1.29
4	UMIAM STAGE - 1 U-2	9	9	1.18	1.69
5	UMIAM STAGE - 1 U-3	9	9	0.63	1.15
6	UMIAM STAGE - 1 U-4	9	9	1.08	1.74
7	UMIAM STAGE - 2 U-1	10	10	1.49	0.51
8	UMIAM STAGE - 2 U-2	10	7	0.13	2.37
9	UMIAM STAGE - 3 U-1	30	0	0	0
10	UMIAM STAGE - 3 U-2	30	30	7.12	9.35
11	UMIAM STAGE - 4 U-1	30	30	0.31	4.83
12	UMIAM STAGE - 4 U-2	30	30	7.35	6.10
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	7.25	8.64
18	MYNTDU-LESHKA U-2	42	42	1.53	0
19	MYNTDU-LESHKA U-3	42	42	6.15	0.81
20	SONAPANI	2	1	0.70	0.75
TOTAL		316	270	35.17	39.11
NAGALAND : HYDRO					
21	LIKIMRO - 1	8	8	3.18	2.52
22	LIKIMRO - 2	8	8	2.55	2.23
23	LIKIMRO - 3	8	8	3.10	2.50
TOTAL		24	24	8.83	7.25
MIZORAM : HYDRO					
24	SERLUI B U-1	4	5	0.62	0.63
25	SERLUI B U-2	4	0	0	0
26	SERLUI B U-3	4	0	0	0
TOTAL		12	5	0.62	0.63
TRIPURA : HYDRO					
27	GUMTI - 1	5	0	0	0
28	GUMTI - 2	5	4	2.81	2.12

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29	GUMTI - 3	5	3	4.65	1.10
TOTAL		15	7	7.46	3.22
TOTAL STATE (HYDRO) :					
		467	408	81.92	78.27
Sr. No.	Power Stations/Units	Installed Capacity (MW)	Peak Generation (MW)	Energy Generation (MU)	
				Nov-16	Nov-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	13.01	11.18
9	BARAMURA - 5	21	21	1.98	10.36
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	20	14.28	11.89
17	ROKHIA - 8	21	19	13.01	11.25
18	ROKHIA - 9	21	21	10.35	14.42
TOTAL		169.5	102	52.63	59.10
ASSAM : THERMAL					
19	LTPS - 1	15	0	0	0
20	LTPS - 2	15	18	8.23	1.13
21	LTPS - 3	15	0	0	9.51
22	LTPS - 4	15	17	9.34	7.28
23	LTPS - 5	20	22	14.14	14.58
24	LTPS - 6	20	21	11.25	12.65
25	LTPS - 7	20	20	7.90	13.29
26	LTPS - 8	37	30	15.89	21.70
27	NTPS - 1	20	20	5.64	9.31
28	NTPS - 2	21	11	5.87	10.38
29	NTPS - 3	21	21	5.97	8.01
30	NTPS - 4	11	7	0	1.57
31	NTPS - 5	24	11	5.73	5.16
32	NTPS - 6	22	11	4.27	4.26
33	DLF	25	0	0.65	0
TOTAL		301	209	94.88	119.0
TOTAL STATE (THERMAL/GAS) :		494.5	311	147.51	178.1
TOTAL STATE GEN (HY+TH/GAS)		961.5	719	229.42	256.37

S. No.	Power Stations/Units	Installed Capacity (MW)	Peak Generation (MW)	Energy Generation (MU)	
				Nov-16	Nov-15
(ii) CENTRAL SECTOR : HYDRO					
1	KHANDONG - 1	25	25	10.5	2.5
2	KHANDONG - 2	25	24	10.3	6.2
3	KOPILI Stg - II	25	26	5.1	3.9
4	KOPILI - 1	50	55	8.6	29.1
5	KOPILI - 2	50	55	27.4	15.2
6	KOPILI - 3	50	55	13.0	12.6
7	KOPILI - 4	50	55	18.0	13.7
8	DOYANG - 1	25	28	4.9	2.2
9	DOYANG - 2	25	28	6.0	2.2
10	DOYANG - 3	25	28	6.1	2.2
11	LOKTAK - 1	35	36	25.0	24.8
12	LOKTAK - 2	35	36	25.2	25.1
13	LOKTAK - 3	35	36	25.0	25.5
14	RANGANADI - 1	135	136	17.5	18.3
15	RANGANADI - 2	135	136	19.0	18
16	RANGANADI - 3	135	136	17.1	17.5
TOTAL CS HYDRO :		860	895	238.7	219.0
(ii) CENTRAL SECTOR : THERMAL/GAS					
1	KATHALGURI - 1	34	26	16.6	20.3
2	KATHALGURI - 2	34	26	16.3	18.3
3	KATHALGURI - 3	34	26	6.6	15.6
4	KATHALGURI - 4	34	26	12.1	14.8
5	KATHALGURI - 5	34	26	15.9	15.5
6	KATHALGURI - 6	34	26	17.6	20
7	KATHALGURI - 7	30	26	13.8	16.1
8	KATHALGURI - 8	30	26	7.8	11.5
9	KATHALGURI - 9	30	26	14.1	14.4
10	R.C. NAGAR - 1	21	23	15.0	6.8
11	R.C. NAGAR - 2	21	22	9.4	14.3
12	R.C. NAGAR - 3	21	22	14.6	11.5
13	R.C. NAGAR - 4	21	21	14.5	14.6
14	R.C. NAGAR - 5	23	23	10.0	11.1
15	R.C. NAGAR - 6	23	24	17.0	15
16	MONARCHAK SOLAR PV	5		0.6	0.6
17	MONARCHAK - GTG 1	66	69	8.4	0
18	MONARCHAK - STG 1				
19	PALLATANA - GTG 1	232	206	91.2	121.8
20	PALLATANA - STG 1	131	117	57.6	77
21	PALLATANA - GTG 2	232	236	134.5	104.2
22	PALLATANA - STG 2	131	128	79.6	66.5
23	BgTPP - 1	250	254	136	0

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24	BgTPP - 2				
25	BgTPP - 3				
TOTAL CS (THERMAL/GAS) :		1471	1379	709.2	589.2
TOTAL CS GEN (HY+TH/GAS)		2331	2274	947.9	808.2
TOTAL NER GEN (HY+TH/GAS)		3292.5	2803	1177.32	1064.57

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)	StationwisePLF(%)
1	LTPS*	AEGCL	157.00	66.74	60.76
2	NTPS*	AEGCL	119.00	27.47	34.66
3	Baramura	Tripura	42.00	14.99	50.88
4	Rokhia	Tripura	95.00	37.64	88.08
5	AGBPP	NEEPCO	291.00	120.8	53.93
6	AGTPP	NEEPCO	84.00	80.5	83.45
7	AGTPP-2	NEEPCO	46.00		
8	Monarchak	NEEPCO	66.00	0.00	0.00
9	Pallatana	OTPC	727.00	362.9	68.51
10	BgTPP	NTPC	250.00	136	80.81

*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	392
2	BALIPARA 400 kV	427	390
3	BONGAIGAON 400 kV	421	392
4	RANGANADI 400 kV	426	398
5	PALLATANA 400 kV	422	414
6	SILCHAR 400 kV	426	390
7	BISHWANATH CHARIALI 400 kV	424	391
8	AZARA 400 kV	423	388
9	BgTPP 400 kV	423	396
10	MISA 220 kV	225	211
11	SALAKATI 220 kV	235	214
12	AGBPP 220 kV	230	220
13	MOKOKCHUNG 220 kV	230	218
14	AIZAWL 132 kV	164	116
15	IMPHAL 132 kV	140	127
16	Byrnihat 400kV	424	398
17	Kahilipara 132kV	142	128
18	Nirjuli 132kV	137	125

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	66.83	33.17
BALIPARA	0	0	92.92	7.08
BONGAIGAON	0	0	100	0
PALATANA	1.19	0	90.54	8.27
SILCHAR	0	0.0	100	0
Azara	0	0	100.00	0
BiswanathCharali	2.37	5.00	16.07	76.56
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	33.07
ER to NER	460.46
NET IMPORT FROM ER	427.39
NER to NR	401.67
NR to NER	52.14
NET IMPORT FROM NR	-349.53
NET IMPORT	77.86

2. Major Grid Disturbances:

No Major Grid Disturbance observed during the month.

3. Meetings Held by NERPC:

Sr. No.	Meeting	Date	Venue
1.	126 th OCC Meeting	15.11.2016	Guwahati
2.	21 th Metering Meeting	15.11.2016	Guwahati
3.	5 th NETeST Meeting	16.11.2016	Guwahati
4.	45 th PCC Meeting	30.11.2016	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 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 UmtruMeGPCL	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 BiswanathChariyali-Agra at Alipurduar	24	64	54	34		Jan-15	Mar-17	Gen.Projectdelayed(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-BiswanathChariyali 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-BiswanathChariyali 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 forestland. 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(EPIP 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- 0.62 km (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 and 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 Sonapur-	51.75	86	45	35		Nov'13	June'17	Compensation Issue.

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	Jagiroad Tr. Line.								
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 November 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	49.82	3.918	53.74	52.32	55.52	59.77	4.250	-1.206
ASEB	408.22	101.319	509.53	488.69	512.46	545.91	33.452	-7.451
Manipur	91.45	0	91.45	77.76	63.85	64.65	0.808	-0.275
MeSEB	102.99	0	102.99	56.14	111.59	102.27	-9.319	1.442
Mizoram	41.997	2.874	44.87	42.69	35.95	40.73	4.774	-0.994
Nagaland	48.165	8.689	56.85	49.62	52.26	53.94	1.677	-0.464
Tripura	147.83	0	147.83	132.18	74.70	68.98	-5.722	0.621
PGCIL-HVDC	1.613	0	1.613	0.81	0.81	93.68	-0.206	0.039

(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 November 2016

ISGS	Schedule (MWH)	Injection (MWH)
LOKTAK HEP	72669.21	73052.78
KHANDONG HEP	19781.24	20237.05
KOPILI - I HEP	63831.86	66085.91
KOPILI - II HEP	4776.95	4949.07
DHEP	15694.45	16087.36
RHEP	52025.84	52844.26

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AGTCCPP	76195.18	77866.83
AGBPP	110300.76	117040.29
OTPC, PALLATANA	347660.20	348101.24
BgTPP	126673.67	124343.59

Source: Final REA for the month of November 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
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. Details of Fixed and Energy Charges of CS Stations for FY 2015-16

Projects	Installed Capacity (MW)	Design Energy (GWh)	Annual Fixed Charge (Crore)	Reference
KOPI LI HEP	200	1186.14	109.8446	As per CERC order dated 13.01.2016 in petition No 46/GT/2015.
KOPI LI - II	25	86.30	13.2283	As per CERC order dated 23.01.2012 in pet. No 298/2009
KHANDONG HEP	50	277.61	40.3627	As per CERC order dated 13.01.2016 in petition No 42/GT/2015.

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RHEP	405	1509.69	260.4693	As per CERC order dated 05.01.2016 and corrigendum 07.03.2016 in petition No.40/GT/ 2015.
DHEP	75	227.24	101.5605	As per CERC order dated 13.01.2016 and corrigendum dtd. 07.03.16 in petition No 43/GT/ 2015.
AGBPP	291	NA	296.5691	As per CERC order dated 15.02.2016 in Pet. No 459/GT/ 2014& 41/GT/2015. Base Rate of energy Charge as per the CERC Order
AGTPP	84	NA	71.7633	As per CERC order dated 11.03.2011 in Pet.No299/2009,^Base Energy charge as per CERC order
LOKTAK HEP	105	448.00	107.1660	As per CERC order dated 22.10.2012 in RP No. 24/2011 in Pet.No 108/2010
PALLATANA	726.6	NA	763.9771	As per CERC order dated 17.06.2015 in Pet. No 129/GT/2015
BgTPP	250	NA	NA	

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

1. At 18:45 Hr on 5th November 2016, 132 kV Dimapur (PG)-Dimapur (NA) I line tripped. It was restored at 22:06 hrs. Outage duration: 3:21 hrs. Load Loss: 59MW. Category- GD-I. Due to tripping of these elements, Dimapur area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.
2. At 06:44 Hr on 27.11.16, 132 kV Ranganadi-BiswanathCharali Line I tripped. It was restored at 06:57 hrs. Outage duration: 0:13 hrs. Load Loss: 39 MW. Category- GD-I. Due to tripping of this element, Ziro area, Lekhi area & Capital area of Arunachal Pradesh & Gohpur Area of Assam were separated from rest of NER Grid and subsequently collapsed due to no source in this area.
3. At 13:21 Hr on 29.11.16, 132 kV Loktak-Ningthoukhong line tripped. It was restored at 13:47 hrs. Outage duration: 0:26 hrs. Load Loss: 26 MW. Category- GD-I. Due to tripping of this element, Ningthoukhong area was 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.)	Nov 2016	Nov 2015
			Level in mtr/ft	Level in mtr/ft
KHANDONG	719.3	704	719.5	714.1
KOPILI	609.5	592.83	609.4	602.8
LOKTAK	768.5	766.2	769.2	768.4
BARAPANI	3220 ft	3150 ft	3176.6	3211.2
GUMTI	93.55	83.6	90.2	92.5
DOYANG	333	306	324.5	315.8

Frequency Analysis For The Month of November 2016

Frequency	Freq. (in Hz.)	Time (H:M)	Date (D.M.Y)
1. Maximum Frequency	50.27		27.11.2016
2. Minimum Frequency	49.54		30.11.2016
3. Monthly Average	50.0		

Frequency in Hz as %age of Time for the Blocks

$f < 49.90$	$49.90 < f < 50.05$	$f > 50.05$
9.28	72.2	18.5

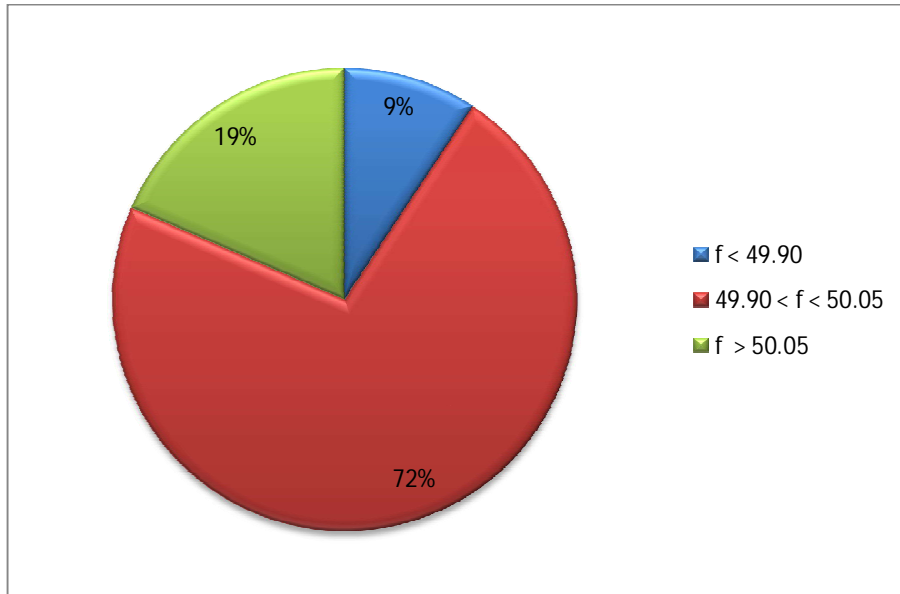
Daily Frequency Variation Index (FVI):

Date	FVI	Date	FVI
01-11-2016	0.029	17-11-2016	0.041
02-11-2016	0.040	18-11-2016	0.044
03-11-2016	0.062	19-11-2016	0.036
04-11-2016	0.044	20-11-2016	0.043
05-11-2016	0.036	21-11-2016	0.056
06-11-2016	0.030	22-11-2016	0.043
07-11-2016	0.055	23-11-2016	0.056
08-11-2016	0.041	24-11-2016	0.049
09-11-2016	0.041	25-11-2016	0.049
10-11-2016	0.047	26-11-2016	0.060
11-11-2016	0.034	27-11-2016	0.047
12-11-2016	0.042	28-11-2016	0.051
13-11-2016	0.042	29-11-2016	0.061
14-11-2016	0.041	30-11-2016	0.131
15-11-2016	0.037		
16-11-2016	0.042		

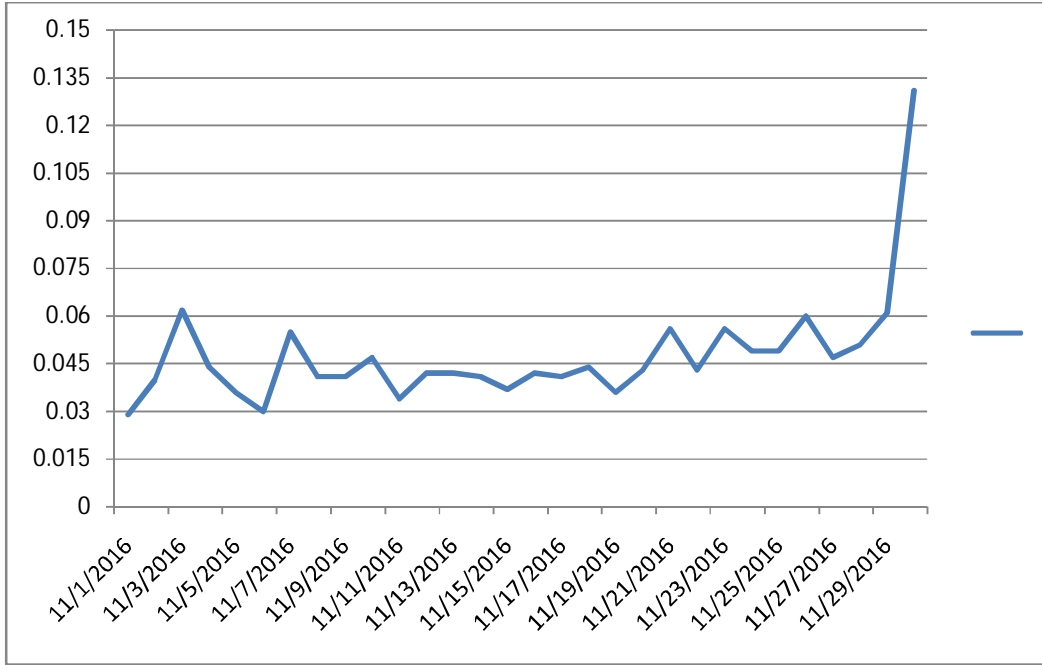
Consolidated Scheduled Bilateral Exchanges in NE Region during November
2016

Name of Trader	Energy at NER periphery (in MWH)
MPPL	49373.00
APPCPL	34527.3175
OTPC	43740.00

Frequency Duration for November 2016

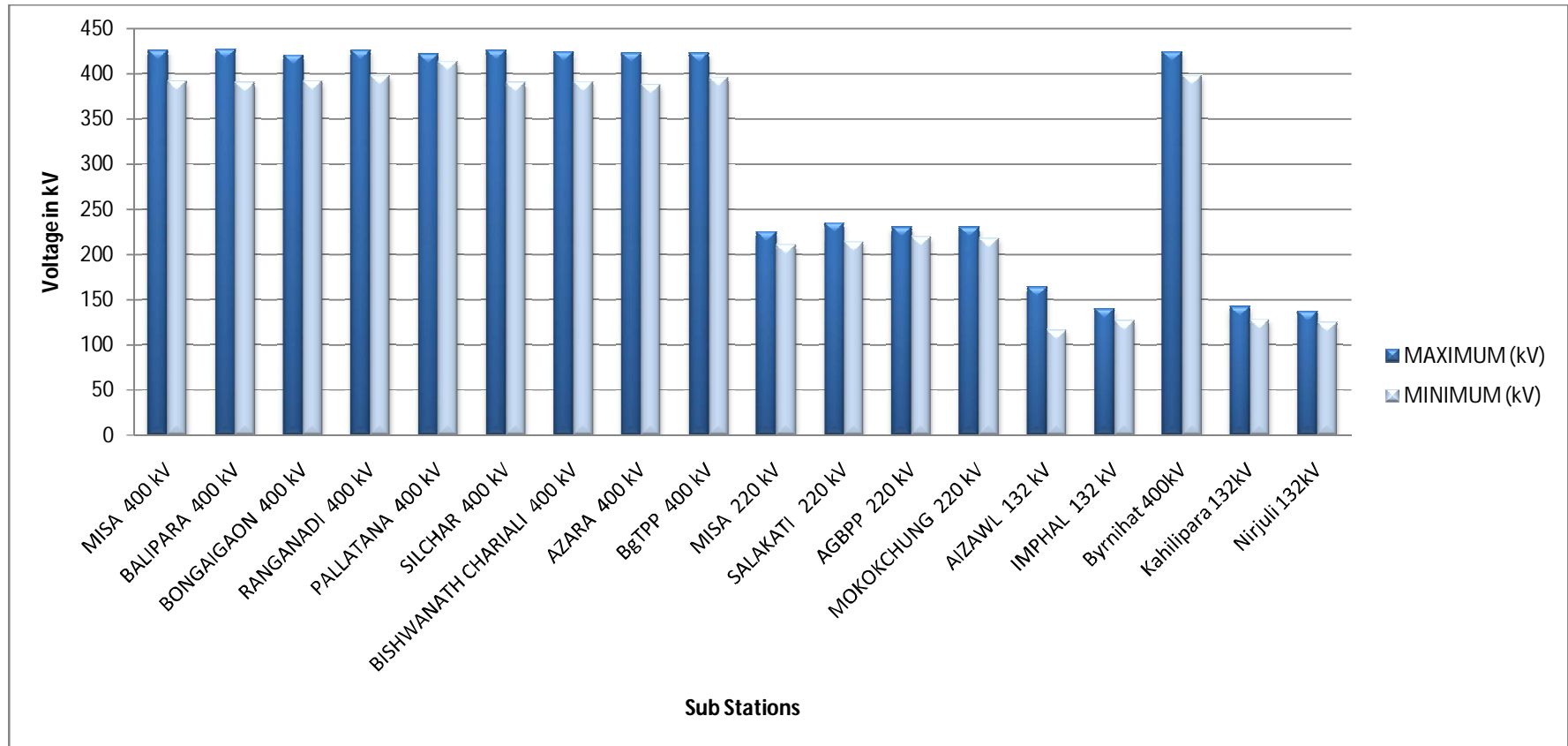


FVI Characteristic for November 2016



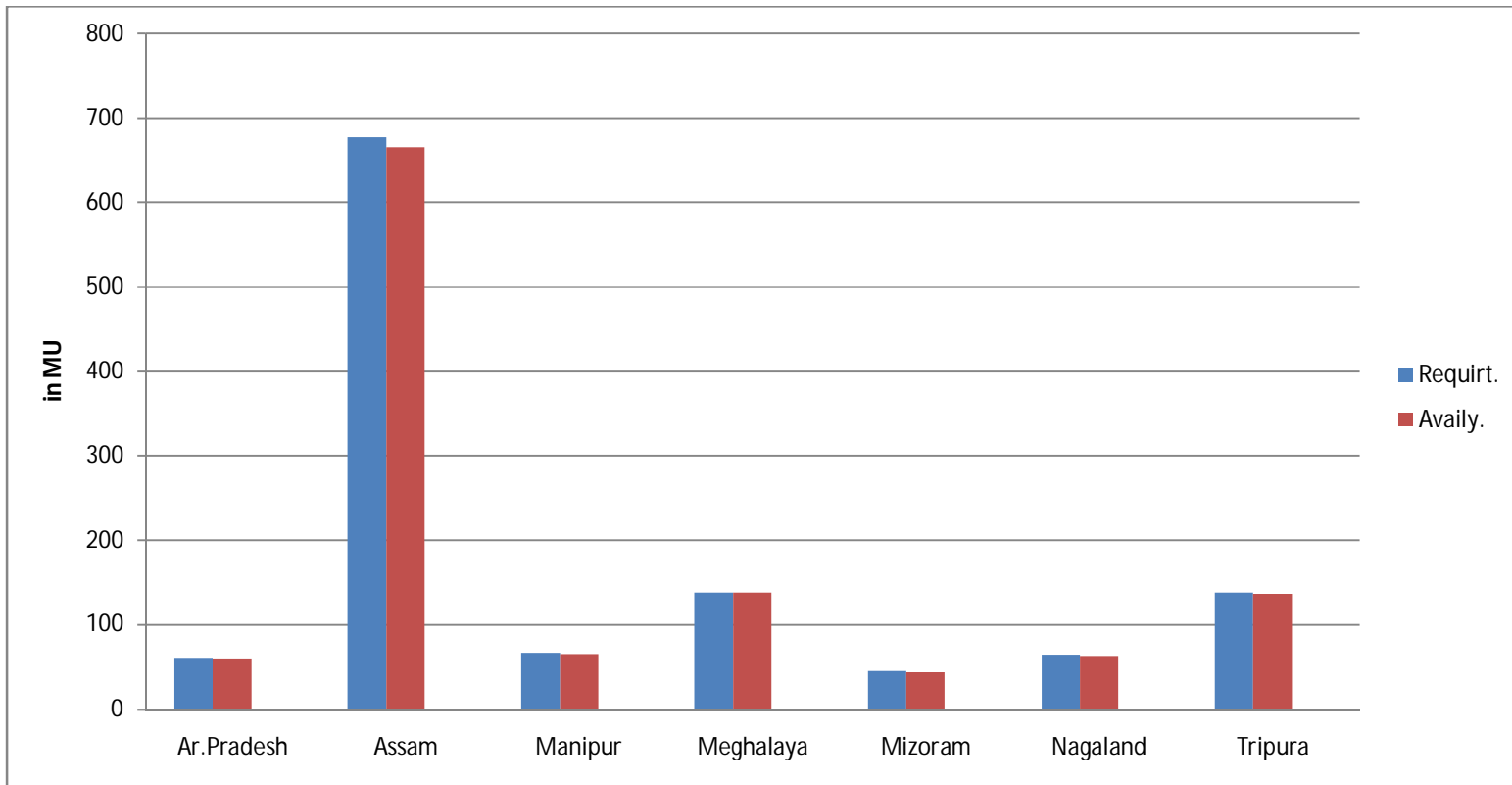
B-3

Voltage Variation Range for November 2016



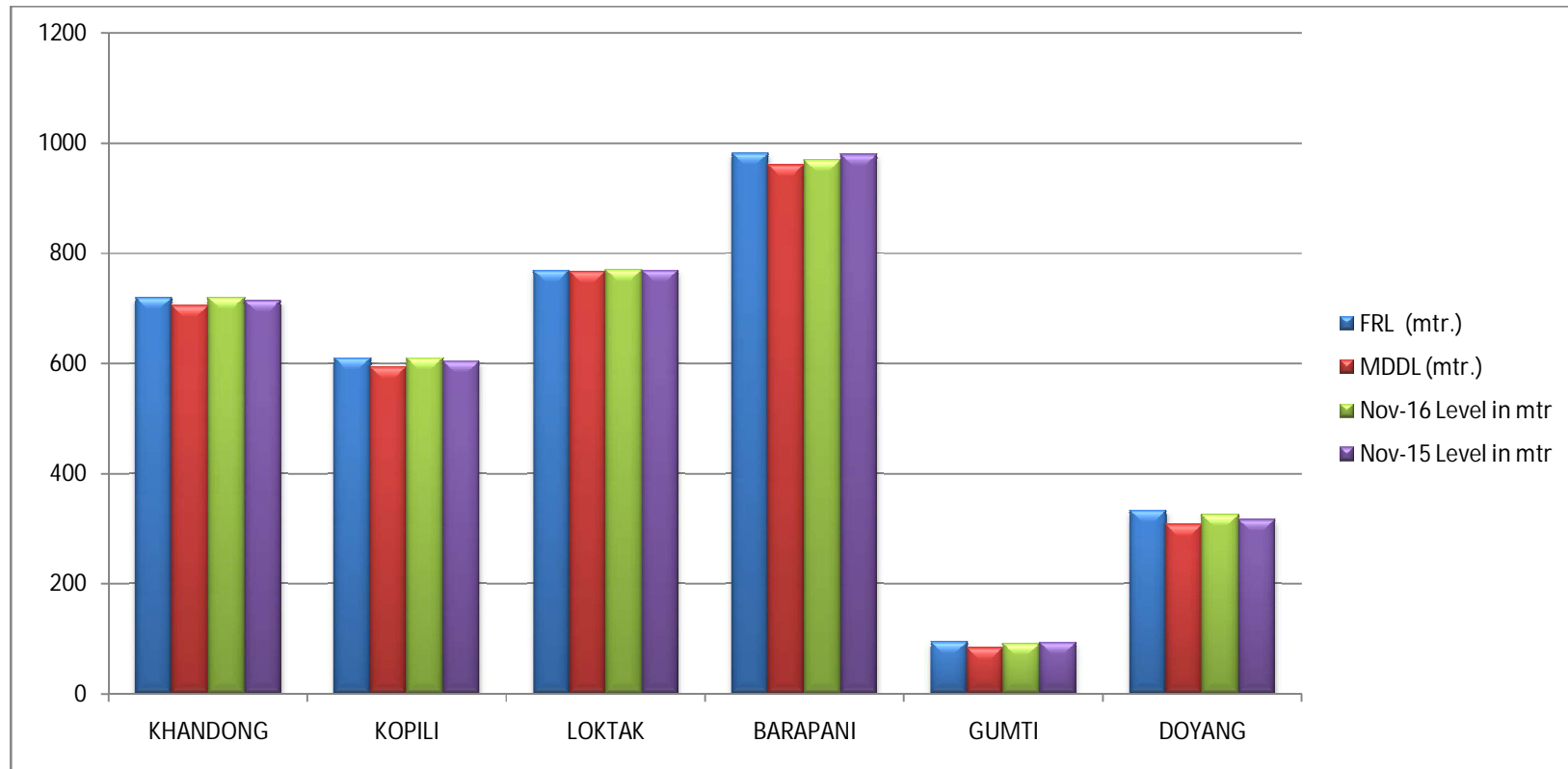
B-4

Energy Profile for November 2016



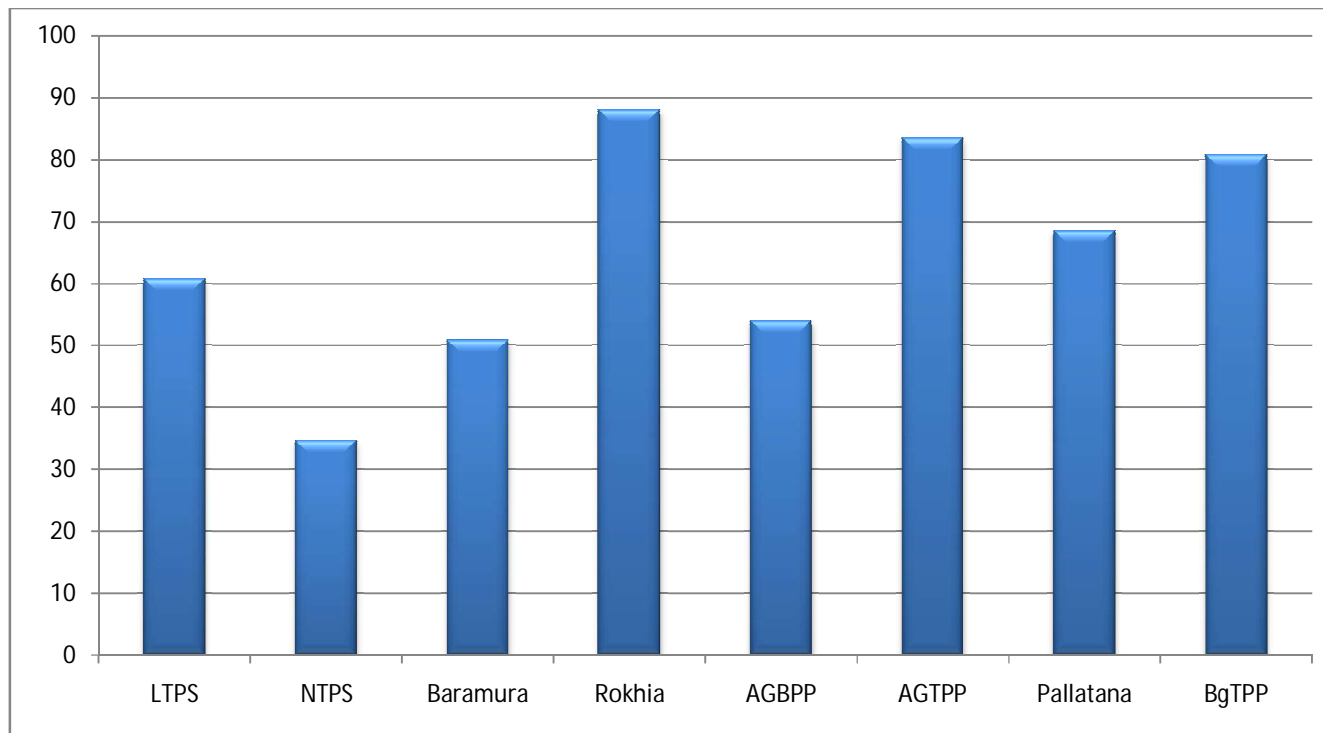
B-5

Reservoir Profile for November 2016



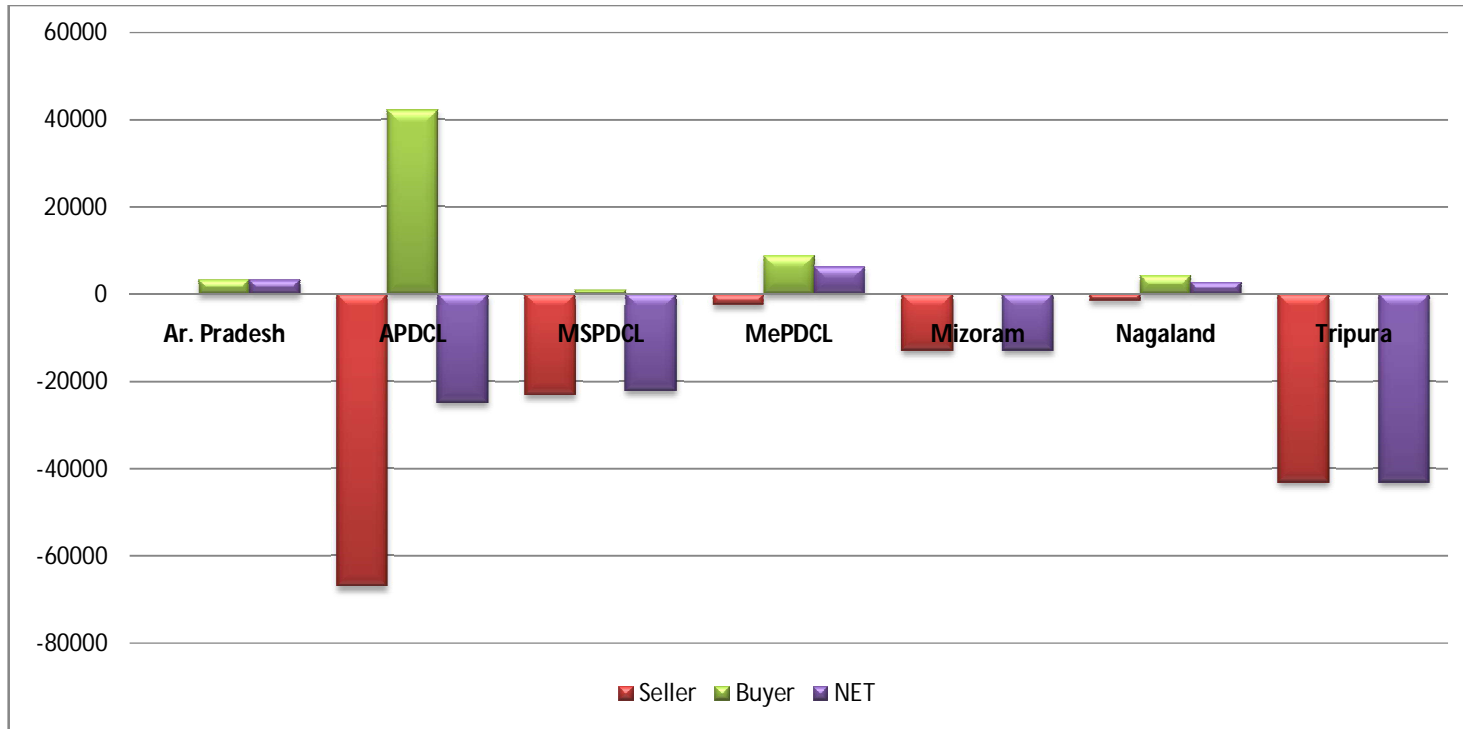
B-6

Station-wise Plant Load Factor for November 2016



B-7

Collective Transaction through IEX Power Exchange November 2016



B-8

Consolidated SEB in NE Region for the month of November 2016

