

भारत सरकार Government of India
विद्युत मंत्रालय Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority

उत्तर पूर्वी क्षेत्रीय विद्युत समिति
North Eastern Regional Power Committee

शिलोंग Shillong

Progress Report

For the month of

November, 2011

CONTENTS		
Sl. No.	Topics	Page No.
1	Brief Highlights of North Eastern Regional Power System	1
2	Salient Features	2
<u>DETAILS OF THE REPORT</u>		
3	Monthly Power Supply Position:	
	(i) Energy generation in the Region	3
	(ii) Requirement Vs Availability in the Region	3
	(iii) Estimation of Peak Demand (MW)	4
	(iv) Estimation of Energy Requirement (MU)	4
4	Station wise Energy Generation (MU) & Peak Generation (MW):	
	(i) State Sector	5, 6
	(ii) Central Sector	7
5	Plant Load Factor (PLF)	8
6	Voltage Profile of Important Sub-Stations	8
7	(i) Inter Regional Energy Exchange	9
	(ii) Major Grid disturbances	9
	(iii) Meetings held by NERPC	9
8	Status of progress of:	
	(i) Generating Units	10
	(ii) Transmission Lines	11, 12
9	Commercial Status:	
	(i) UI Accounting	13
	(ii) Schedule and CS Share Allocation	14, 15
10	NER Grid Status on (i) Regional Peak Demand day	16
	(ii) Regional Minimum Demand day	17
<u>ANNEXURES</u>		
A-1	Major Reservoir Levels	I
A-2	Frequency Analysis and it's Profile	II
A-3	Scheduled Bilateral Exchanges	III
A-4	Energy Exchanges	IV
<u>EXHIBITS</u>		
B-1	Frequency Profile:	
	(i) Duration of frequency in different ranges	I
	(ii) Frequency Variation Index	II
B-2	Voltage Profile:	
	(i) Voltage Profile of Important Sub-Stations	III
B-3	Energy Generation:	
	(i) Energy Generation by Constituents during the month	IV
	(ii) Energy scenario of State's during the month	V
B-4	Reservoir profile :	
	(i) Reservoir statistics for the month	VI

NORTH EASTERN REGIONAL POWER COMMITTEE

Brief highlights of North Eastern Regional Power System for the month of November, 2011

- ❖ The maximum unrestricted demand during the month of November, 2011 was 1745 MW, which was 1909 MW in the month of October, 2011. The peak demand met in NER during the period under review was 1689 MW, which was 1690 MW last month.
- ❖ The energy requirement during the month of November, 2011 was 864.02 MU, which was 974.49 MU in the month of October, 2011. The energy availability in NER during the period under review was 800.05 MU, which was 881.29 MU last month.
- ❖ The maximum, minimum & average system frequency were 50.62, 48.87 & 49.74 Hz respectively. The maximum, minimum & average FVI were 4.11, 0.19 & 1.108 respectively. The average FVI was less than its previous month's figure. (refer Annex-II).
- ❖ Maximum export of power from NER to ER was 2 MW (on 23/11/11 at 11:18 hrs) and that from ER to NER was 663 MW (27/11/11 at 16:53 hrs). Total net energy import during the month was 200.2 MU (from ER).

**SALIENT FEATURES OF
NORTH EASTERN REGIONAL GRID FOR **NOVEMBER, 2011****

		Nil	
		1. On 23.11.11 of GD-V category	
		Nov-11	Nov-10
1	New unit/ transmission lines/Transformers commissioned during this month		
2	Number of total grid disturbance during this month		
3	Installed Capacity of the Region (in MW)(grid)	2054.12	2054.12
4	Energy Generation in MU (Gross)::		
	Thermal	364.556	371.855
	Hydel	272.389	314.630
	Diesel / Oil	0.000	0.000
	Total	636.945	686.485
5	Demand in MW ::		
	Registered Peak demand	1745.00	1797.00
	Peak demand met	1689.00	1559.00
	Shortage (% age)	-3.21	-13.24
6	Regional Energy(Gross) in MU ::		
	Energy requirement	864.02	797.04
	Energy availability	800.05	750.44
	Surplus (+) / Deficit (-) (% age)	-7.40	-5.85
7	Inter Regional Energy Exchange in MU ::		
	NER ----> ER	0.000	4.363
	ER ----> NER	200.199	93.863
	Net Import	200.199	89.50
8	Frequency profile ::		
	Average frequency (Hz)	49.74	50.00
	Average Frequency Variation Index	1.108	0.321
9	Load Factor (in %)	63.68	58.00

ENERGY GENERATION IN THE REGION FOR THE MONTH OF Nov-11

All figures in MU

Constituents	Hydro		Coal / Oil fired		Gas Based(OpenCycle)		Gas Based(Com Cycle)		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	30.731	30.424	0.000	0.000	60.092	59.491	43.860	42.544	134.683	132.459
Meghalaya	41.454	41.040	0.000	0.000	0.000	0.000	0.000	0.000	41.454	41.040
Mizoram	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Tripura	5.371	5.318	0.000	0.000	64.333	63.690	0.000	0.000	69.705	69.008
Nagaland	5.806	5.748	0.000	0.000	0.000	0.000	0.000	0.000	5.806	5.748
Total (State Sector)									245.842	248.254
Central Sector :										
NEEPCO :										
Khd+Kop+Kop-II	61.214	60.602	0.000	0.000	0.000	0.000	0.000	0.000	61.214	60.602
K'guri	0	0	0.000	0.000	0	0	140.470	136.256	140.470	136.256
RCNagar	0	0	0	0	55.801	55.243	0	0	55.801	55.243
Doyang	5.335	5.281	0	0	0	0	0	0	5.335	5.281
Ranganadi	46.952	46.482	0	0	0	0	0	0	46.952	46.482
NHPC :										
Loktak	76.102	75.341	0.000	0.000	0.000	0.000	0.000	0.000	76.102	75.341
Total (Central Sector)									385.873	379.205
Total NER	267.159	270.235	0.000	0.000	180.226	178.424	184.330	178.800	631.715	627.459

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 freq.</i>				<i>Availability & L/S at prevailing freq.</i>			
	Requirt.	Availy.	Shortfall	%Shortfall	Requirt.	Availy.**	Shortfall	%Shortfall
Ar.Pr.	52.82	49.05	3.78	7.15%	121	118	3	2.65%
Assam	459.82	439.40	20.42	4.44%	1001	977	24	2.39%
Manipur	55.18	51.67	3.51	6.36%	116	114	2	1.51%
M'laya	150.65	123.32	27.32	18.14%	268	259	9	3.33%
Mizoram	36.27	33.42	2.86	7.88%	79	78	1	1.24%
Nagaland	40.40	37.62	2.78	6.88%	105	104	1	0.92%
Tripura	68.88	65.58	3.30	4.80%	206	203	3	1.41%
REGION	864.02	800.05	63.97	7.40%	1745	1689	56	3.21%

ESTIMATION OF PEAK DEMAND (in MW)

Constituents	Peak Demand Met	Date	Freq. (Hz)	Freq. Corr.**	L/S	Estimated Peak demand at 50 Hz
Arunachal Pradesh	117.68	17/11/2011	49.75	0.88	2	120.88
Assam	977.00	01/11/2011	49.97	0.88	23	1000.88
Manipur	114.00	18/11/2011	49.78	0.75	1	115.75
Meghalaya	259.00	03/11/2011	49.88	0.93	8	267.93
Mizoram	78.00	19/11/2011	50.01	-0.02	1	78.98
Nagaland	104.00	19/11/2011	50.01	-0.03	1	104.97
Tripura	203.00	25/11/2011	49.85	0.91	2	205.91
REGION	1689.00	09/11/2011	49.98	1.01	55	1745.01

** Freq.Correction = Demand met x 0.03 x (50 - Av. Freq.)

ESTIMATION OF ENERGY REQUIREMENT (in MU)

Average Frequency **49.74** Hz

Constituents	Generation	Energy drawal from grid			Over(+) / Under(-) Drawal	Energy Availability*	Freq. Corr.**	L / S	Actual Requirement
		Entitlement frm ISGS of NER	Entitlement frm ISGS of ER	Drawal					
Ar.Pr.	0.000	26.249	6.085	49.046	16.712	49.046	0.383	3.39	52.821
Assam	132.459	174.220	82.607	306.936	50.109	439.395	3.427	16.99	459.815
Manipur	0.000	45.742	0.000	51.673	5.931	51.673	0.403	3.11	55.184
M'laya	41.040	47.071	21.042	82.281	14.167	123.321	0.962	26.36	150.646
Mizoram	0.000	19.627	3.620	33.415	10.168	33.415	0.261	2.60	36.274
Nagaland	5.748	22.177	11.829	31.876	-2.130	37.624	0.293	2.49	40.403
Tripura	69.008	33.795	0.000	-3.431	-37.226	65.576	0.511	2.79	68.881
REGION	248.254	368.881	125.183	551.796	57.732	800.050	6.240	57.73	864.023

*Energy availability means energy consumed by constituents

** Freq.Correction = Demand met x 0.03 x (50 - Av.Freq.)

ENERGY GENERATED (MU) AND PEAK GENERATION (MW) FROM GENERATING STATIONS/UNITS:

Sl. No.	Power Stations / Units	Installed Capacity(MW)	Peak Generation(MW)	Energy Generation (MU)	
				Nov-11	Nov-10
STATE SECTOR : HYDRO					
ASSAM :: HYDRO					
1	KARBI HEP U - 1	50.00	50.20	11.924	22.190
2	KARBI HEP U - 2	50.00	50.70	18.807	18.550
TOTAL		100.00		30.731	40.740
MEGHALAYA :: HYDRO					
1	STAGE - 1	36.00	27.40	8.434	4.310
2	STAGE - 2	18.00	0.00	0.000	12.480
3	STAGE - 3	60.00	60.00	11.187	17.530
4	STAGE - 4	60.00	60.18	17.716	1.490
5	UMTRU	11.20	4.00	3.542	0.740
TOTAL		185.20		40.878	36.550
NAGALAND :: HYDRO					
6	LIKIMRO - 1				
7	LIKIMRO - 2	24.00	16.00	5.806	5.500
8	LIKIMRO - 3				
TOTAL		24.00		0.000	5.500
TRIPURA :: HYDRO					
9	GUMTI - 1	5.00		0.000	0.825
10	GUMTI - 2	5.00	Gumti Stn. Peak =6.5 MW	2.864	1.806
11	GUMTI - 3	5.00		2.507	2.349
TOTAL		15.00		5.371	4.980
TOTAL STATE (HYDRO) :		324.20		76.980	87.770

ENERGY GENERATED (MU) AND PEAK GENERATION (MW) FROM GENERATING STATIONS/UNITS:

Sl. No.	Power Stations / Units	Installed Capacity(MW)	Peak Generation(MW)	Energy Generation (MU)	
				Nov-11	Nov-10
STATE SECTOR : THERMAL/GAS					
MIZORAM ::Thermal					
1	Bairabi	22.92	0.00	0.000	0.000
TRIPURA :: THERMAL					
1	BARAMURA - 1	5.00	Baramura Stn. Peak = 21.3 MW	0.000	0.000
2	BARAMURA - 2	5.00		0.000	0.000
3	BARAMURA - 3	6.50		0.000	0.000
4	BARAMURA - 4	21.00		14.948	13.095
5	BARAMURA - 5	21.00		15.066	0.000
6	ROKHIA - 1	8.00	Rokhia Stn. Peak = 47.1MW	0.000	0.000
7	ROKHIA - 2	8.00		0.000	0.000
8	ROKHIA - 3	8.00		0.000	4.649
9	ROKHIA - 4	8.00		4.835	6.228
10	ROKHIA - 5	8.00		0.000	0.000
11	ROKHIA - 6	8.00		0.000	0.000
12	ROKHIA - 7	21.00		14.657	14.696
13	ROKHIA - 8	21.00		14.828	14.759
	TOTAL	148.50		64.333	53.427
ASSAM :: THERMAL					
1	LTPS - 1	15.00	18.1	6.860	9.400
2	LTPS - 2	15.00	20	6.940	7.840
3	LTPS - 3	15.00	0.0	0.000	7.800
4	LTPS - 4	15.00	18	8.025	0.000
5	LTPS - 5	20.00	22	13.259	9.360
6	LTPS - 6	20.00	30.23	12.408	13.770
7	LTPS - 7	20.00	21.7	7.492	13.950
8	NTPS - 1	20.00	20.0	8.860	13.530
9	NTPS - 2	21.00	21.5	13.217	13.310
10	NTPS - 3	21.00	18.5	10.480	0.000
11	NTPS - 4	11.00	11.5	4.672	7.090
12	NTPS - 5	22.00	0.0	0.000	0.000
13	NTPS - 6	22.00	12.5	6.631	8.070
14	DLF	24.50	9.8	5.108	5.070
	TOTAL	261.50		103.952	109.190
TOTAL STATE THERMAL/GAS :		432.92		168.285	162.617
TOTAL SC GEN(HY+TH/GAS)		757.12		245.266	250.387

ENERGY GENERATED (MU) AND PEAK GENERATION (MW) FROM GENERATING STATIONS/UNITS:

Sl. No.	Power Stations / Units	Installed Capacity(MW)	Peak Generation(MW)	Energy Generation (MU)	
				Nov-11	Nov-10
CENTRAL SECTOR : HYDRO					
1	KHANDONG - 1	25.00	23.42	2.738	4.550
2	KHANDONG - 2	25.00	24.19	3.015	4.810
3	KOPILI Stg - II	25.00	24.35	2.774	4.970
4	KOPILI - 1	50.00	50.55	16.577	16.120
5	KOPILI - 2	50.00	55.58	16.514	0.150
6	KOPILI - 3	50.00	49.00	6.377	24.300
7	KOPILI - 4	50.00	51.00	13.219	31.580
8	DOYANG -1	25.00	22.36	1.020	1.310
9	DOYANG -2	25.00	22.92	2.153	2.430
10	DOYANG -3	25.00	23.42	2.162	2.910
11	LOKTAK - 1	35.00	36.93	25.420	15.200
12	LOKTAK - 2	35.00	36.81	25.570	22.770
13	LOKTAK - 3	35.00	39.51	25.112	22.090
14	RANGANADI - 1	135.00	137.71	15.004	15.850
15	RANGANADI - 2	135.00	135.03	15.669	28.510
16	RANGANADI - 3	135.00	138.27	16.279	29.310
TOTAL HYDRO :		860.00		189.602	226.860
CENTRAL SECTOR : THERMAL/GAS					
1	KATHALGURI - 1	33.50	35.09	11.225	21.030
2	KATHALGURI - 2	33.50	33.01	6.607	21.640
3	KATHALGURI - 3	33.50	34.80	22.880	20.020
4	KATHALGURI - 4	33.50	34.86	23.078	19.590
5	KATHALGURI - 5	33.50	33.89	21.867	16.050
6	KATHALGURI - 6	33.50	34.45	22.361	15.860
7	KATHALGURI - 7	30.00	0.00	0.000	15.490
8	KATHALGURI - 8	30.00	24.90	15.842	15.050
9	KATHALGURI - 9	30.00	26.20	16.612	8.910
10	R.C.NAGAR - 1	21.00	20.74	14.134	14.176
11	R.C.NAGAR - 2	21.00	20.74	13.894	13.950
12	R.C.NAGAR - 3	21.00	20.88	13.841	13.681
13	R.C.NAGAR - 4	21.00	22.17	13.932	13.791
TOTAL THERMAL/GAS :		375.00		196.271	209.238
TOTAL CS (HY + TH/GAS) :		1235.000		385.873	436.098
TOTAL NER GEN(HY+TH/GAS) :		1992.120		631.139	686.485

Plant Load Factor (PLF) and Voltage Profile :

Nov-11

PLANT LOAD FACTOR OF THE THERMAL/ GAS STATIONS IN NER

Sl. No.	Power Station	State/ Constituent	Installed Capacity (MW)	Generation (in MU)	Stationwise PLF (%)
1	LTPS*	AEGCL	120.00	54.984	63.64
2	NTPS*	AEGCL	117.00	43.860	52.07
3	Baramura	Tripura	58.50	30.014	71.26
4	Rokhia	Tripura	90.00	34.320	52.96
5	AGBPP	NEEPCO	291.00	140.470	67.04
6	AGTPP	NEEPCO	84.00	55.801	92.26

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

VOLTAGE PROFILE :

A. MAXIMUM AND MINIMUM VOLTAGE (kV) OF IMPORTANT SUB - STATIONS :

Sl. No.	NAME OF S/S	MAXIMUM (kV)	MINIMUM (kV)
1	BALIPARA 400 kV	427	372
2	MISA 400 kV	435	387
3	MISA 220 kV	235	210
4	SALAKATI 220 kV	220	214
5	HAFLONG 132 kV	139	124
6	AIZAWL 132kV	139	109
7	KUMARGHAT 132kV	139	126

Voltage Range in kV as percentage of time for the block

SUB-STATION	kV < 360	360<kV<380	380<kV<420	kV>420
MISA	0.22	0.03	97.15	2.60
BALIPARA	0.13	0.07	97.16	2.64

1 **INTER - REGIONAL EXCHANGE :**

All Fig in MU

NER to ER	0.000
ER to NER	200.199
NET IMPORT	200.199

2 **Major Grid Disturbances during this month**

One major Grid disturbance on 23.11.11 of GD-V Category

3 **MEETING HELD BY NERPC DURING THIS MONTH**

1. 67th OCC Meeting was held on 08.11.11 at Guwahati.
2. 12th TCC & 12th NERPC meetings were held on 14 & 15.11.11 at Amritsar.
3. 16th CC meeting was held on 28.11.11 at Darjeeling.

PROGRESS OF GENERATION PROJECTS IN NER

Name of the Generation Scheme	No. of Units	Capacity (MW)	Commissioning Schedule	REMARKS
[A] NEEPCO				
1. Monarchak TGBPP		104	2013	Activities in progress
2. Tuirial HEP Mizoram	2	2 X 30	WORKS HELD-UP	Being reviewed by PIB
3. Kameng HEP A. Pradesh	4	4X150	2014	Activities in progress
4. Tuival H.E. Proj. Mizoram	3	3X70	2015	Status not available
5. Tipaimukh HEP		1500	2015	Activities in progress
6. Mawphu HEP	2	90	2015	UNDER CCEA
7. Pare HEP, Ar. Pradesh		110	2015	UNDER CCEA
[B] NHPC				
a). Loktak Downstream HEP	2	66	2014	Activities in progress
b) Subansiri Lower HEP		2000	2013	Activities in progress
c) Siang Middle HEP		2000	2016	Activities in progress
d) Subansiri Upper HEP		2000	DPR Under prep	
e) Subansiri Middle HEP		1000	DPR Under prep	
f) Dibang Multipurpose Project		3000	Under TEC	
[C] NTPC				
a). Bongaigaon TPS	3	3X250	2012	Activities in progress
[D] JV PROJECT				
a). Palatana CCPP	2	2X323.3	2012	Activities in progress
[E] ASSAM				
(a) Lakwa WHRP		37.2	2012	Activities in progress
(b) Namrup CCPP	2	2X40	2014	
[F] MIZORAM				
(a) Tuivai Hydel Project	2	51	2015	Activities in progress
(b) Bairabi Dam Project	2	2 X 40	2015	Activities in progress
(G) MeECL				
(a) Myntdu - Leishka HEP	2	3x42	2011	Activities in progress
(b) New Umtru HEP	2	2X20	2013	Activities in progress

PROGRESS OF TRANSMISSION LINES IN NE REGION									
	Name of the line	Length	Comm'n'g Sch		Total no.	Stubs com	Tower	Stringing	Remarks
		ckt kms	Ann.pl	Ant/revd	of locs .	pleted(nos)	Erected	complt-ckm	
A : Lines under ASEB.									
2	132 kV, S/C Rangia - Sipajhar - Rowta- Depota	147							Work in progress
3	132 kV, S/C Sarusajai - Kahilipara	8							Work in progress
5	132 kV Nazira- Garmur (Mariani) S/C	63							Tender is in progress
6	220 kV Kathalguri - Tinsukia 2nd Ckt	50	2006-07						Work in progress
D : Lines under Meghalaya :									
1	132 kV Agia - Nangalibira	110		2012					Work in progress
E : Lines under Mizoram :									
1	132 kV Khawzawl-E Lungdar S/C	48			100	100	76	0	Work in progress
2	132 kV Khawzawl-Ngopa S/C	57			117	117	117	57	Work in progress
3	132 kV Kolasib-Tuirial S/C	41			114	114	114	41(Conductor)	Work in progress
4	Kolasib-Sairul B D/C	25							Work in progress
5	132 kV Kolasib-Melriat S/C	90			369	Nil	Nil	Nil	Work in progress
6	132 kV Bairabi-Bawktlang S/C	30			93	91	85	14	Work in progress
7	132 kV Khawzawl-Champhai S/C	30			90	Nil	Nil	Nil	Work in progress
G : CTU Lines:									
1	+/- 800kv HVDC Bipole Biswanath Chariyali - Agra	1971	Aug-13	Aug-13	4228	1836	613		Award for converter Stn. is in prog
2	400kV Balipara - Biswanath Chariyali D/C	130	Aug-13	Aug-13	167	128	90	29	Matching with L. Subansiri
3	LILO of 400 kv Ranganadhi Balipara D/C at Biswanath	54	Aug-13	Aug-13	68	39	21		Matching with Gen. of L.Subansiri
4	132 kV D/C B. Chariyali-B. Chariyali (AEGCL)	32	Aug-13	Aug-13	55	21	2		
5	400 kV Kameng-Balipara D/C	110	Feb-13	Feb-13	142	30			Matching with Gen. of Kameng
6	400kV Balipara- Bongaigaon D/C line	596	Feb-13	Feb-13	838	681	456	102	Matching with Gen. of Kameng
7	400kV Lower Subansari-Biswanath Charrali line-I	334	Feb-13	Feb-13	444	272	159	22	Matching with Gen. Project
8	400kV Lower Subansari-Biswanath Charrali Line-II	340	Feb-13	Feb-13	442	269	144	20	Matching with Gen. Project
9	132 kV Kopili- Khandong-II	12	Sep-09	2011	43	37	24	8	Forest clearance awaited
10	400 kV D/C Bongaigaon TPS-Bongaigaon line	6	Dec-11						
11	400kV D/C Pallatana- Surajmani –nagar line	70	Dec-11		87	6			Copmpl. of Suraj-maninagar by TSECL
12	400kV D/C Silchar-Purba Kanchan Bari line	244	Mar-12		325	28			ROW problem
13	400kV D/C Silchar-Melriat(New) line	280	Dec-12		400	65	14		1 st Stg Forest clearance awaited
14	400kV D/C Silchar-Imphal(New) line	280	Dec-12						Likely to be delayed
15	220kV D/C Mariani(New)-Mokikchung(PG)	112	Dec-12						Efforts to be made to match U#2 of Palatana GBPP
16	132kV Silchar-Badarpur(PG) SW Interconnecting line	42	Nov-11		72	38	13		To match with U#1 of Palatana
17	132kV D/C Melriat(New)- Melriat (Mizo) Interconnecti	60	Dec-12						Compl. Matching readiness of Melriat S/s by Mizoram
18	132kV D/C Silchar-Srikona (AEGCL) line	6	Dec-11						Engg. In progress
19	132kV D/C Silchar-Hailakandi (AEGCL) line	50	Dec-11						Completion matching with S/S
20	132kV D/C Mokikchung(PG)- Mokikchung(Naga) line	2	Dec-12						Efforts to be made to match U#2 of Palatana GBPP
21	132 kV S/C Pasighat-Roing line (on D/C)	70	Dec-12						Completion matching with S/S.
22	132 kV S/C Roing-Tezu line (on D/C)	60	Dec-12						Engg. in progress
23	132 kV S/C Tezu-Namsai line (on D/C)	90	Dec-12						Completion matching with S/S.
24	LILO of 400kV S/C Kathalguri -Misa line at Mariani(N	2	Dec-12						
25	LILO of 132 kV S/C Loktak-Imphal line at Imphal (N	60	Dec-12						

Name of the line	Length	Comm'n'g Sch		Total no. of locs .	Stubs com - pleted(nos.)	Tower Erected	Stringing complt-ckm	Remarks
	(ckt kms)	Ann.pl	Ant/revd					
H : Lines under Arunachal Pradesh								
i) Transmission Lines Plan works completed & on going								
1. 132 kV Nirjuli - Itanagar S/C (Under NLCPR)		2007-12				Completed	in progress	Work is in progress
2. 132 kV Along - Pasighat (Under NLCPR)		2007-12						Work is in progress
3. 132 kV Ranganadi - Itanagar S/C		2007-12						Work is in progress
ii) Proposed for XIth Five Years Plan (State)								
1. 132 kV Khupi - Seppa		2007-12						Work is in progress
2. 132 kV Line LILO at Bhalukpong		2007-12						Work is in progress
3. 132 kV Nirjuli - Banderdewa		2007-12						Work is in progress
4. 132 kV Along - Yingkiong		2007-12						Work is in progress
5. 132 kV Naharlagun - Seppa		2007-12						Work is in progress
6. 132 kV Roing - Anini		2007-12						Work is in progress
7. 132 kV Along - Reying		2007-12						Work is in progress
8. 132 kV Tezu - Roing		2007-12						Work is in progress
9. 132 kV Namsai - Tezu		2007-12						Work is in progress
10. 132 kV Ziro - Sangram		2007-12						Work is in progress
iii) Proposed for XIth Five Years Plan (NEC)								
1. 132 kV Pasighat - Roing		2007-12						Work is in progress
2. 132 kV Likabali - Gerukamukh		2007-12						Work is in progress
3. 132 kV Pasighat - Niglok		2007-12						Work is in progress
4. 132 kV Deomali - Khonsa		2007-12						Work is in progress
5. 132 kV Khupi - Banderdawa		2007-12						Work is in progress
6. 132 kV Banderdawa - Tawang		2007-12						Work is in progress
7. 132 kV Khonsa - Changlang		2007-12						Work is in progress
8. 132 kV Changlang - Jairampur		2007-12						Work is in progress
9. 132 kV Jairampur - Miao		2007-12						Work is in progress
10. 132 kV Itanagar - Seijusa		2007-12						Work is in progress
11. 132 kV Seijusa - Balipara		2007-12						Work is in progress
iv) Proposed for XIth Five Years Plan (NEC)								
1. 132 kV Niglok - Likabali		2007-12						Work is in progress
2. 132 kV Itanagar - Gohpur		2007-12						Work is in progress

UI Receivable/ Payable for the month of**Nov-11**

Organisation	Actual (MU)	Schedule (MU)	UI Energy (MU)	UI Receivable (Rs. in Lakhs)	UI Payable (Rs. in Lakhs)
Arunachal Pradesh	49.046	35.063	13.983	0.000	680.976
ASEB	306.936	304.046	2.890	217.814	433.518
Manipur	51.673	51.189	0.485	10.654	124.341
MeSEB	82.281	60.761	21.520	0.000	979.787
Mizoram	33.415	24.995	8.421	0.000	407.504
Nagaland	31.876	33.491	-1.615	55.423	26.512
Tripura	-3.431	0.085	-3.516	100.868	8.454

Entitlement, Schedule, Drawal and UI Charges**Nov-11**

Name of beneficiaries	Entit. from scheduled energy from ISGS in NER (Ex-PP State) (in MU)	Entit. from scheduled energy from ISGS in ER (Ex-PP State) (in MU)	Total Entitlement (Ex-PP State) (in MU)	Schedule (Ex-PP State) (in MU)	Actual Drawal from Grid (MU)	Over Drawal (+) / Under Drawal (-) (MU)	UI Payable (-) / Receivable (+) (Rs. In Cr)
Arunachal Pradesh	26.249	6.085	32.334	35.063	49.046	13.983	-6.810
ASEB	174.220	82.607	256.827	304.046	306.936	2.890	-2.157
Manipur	45.742	0.000	45.742	51.189	51.673	0.485	-1.137
MeSEB	47.071	21.042	68.114	60.761	82.281	21.520	-9.798
Mizoram	19.627	3.620	23.247	24.995	33.415	8.421	-4.075
Nagaland	22.177	11.829	34.006	33.491	31.876	-1.615	0.289
Tripura	33.795	0.000	33.795	0.085	-3.431	-3.516	0.924

(Source : UI A/c, NERPC)

Schedule for ISGS's Generation and State's Draw for the month of

Nov-11

States	Schedule From ISGS(MWH)	Bilateral Schedule from Outside NER (MWH)	Total Schedule (MWH)	Ex.PP. Drawal (MWH)	Tr. Energy (MWH)
Arunachal Pradesh	26754.42	6229.23	32983.64	51425.99	51425.99
ASEB	178759.61	84572.78	263332.39	321833.60	321833.60
Manipur	46748.87		46748.87	54181.49	54181.49
MeSEB	48099.95	21543.25	69643.20	86274.62	86274.62
Mizoram	20081.52		20081.52	35037.12	35037.12
Nagaland	22754.23	12109.78	34864.00	33423.08	34864.00
Tripura	34228.87		34228.87	-3597.93	34228.87
Total	377427.46	124455.03	501882.48	578577.97	617845.69

ISGS	Schedule (MWH)	Injection (MWH)
LOKTAK	74605.12	74969.73
KHANDONG	5504.70	5524.59
KOPILI-I	52094.75	52404.24
KOPILI-II	2683.50	2714.27
DHEP	4930.45	4927.93
RHEP	45960.80	46124.73
AGTPP	54214.61	54514.16
AGBPP	137433.52	137199.62
Total	377427.46	378379.27

Source : Provisional REA for the month: **Nov-11**

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

States	KOPILI	KOPILI-II	KHANDONG	RHEP	DHEP	AGBPP	AGTPP	Loktak HEP
	(200 MW)	(25 MW)	(50 MW)	(405 MW)	(75 MW)	(291 MW)	(84 MW)	(90 MW)
Arunachal Pradesh	5.191	5.992	4.194	18.462	6.852	5.694	6.132	4.940
Assam	53.455	52.355	56.285	43.328	43.808	56.503	45.585	29.445
Manipur	7.395	6.945	6.555	8.373	7.865	8.105	8.313	30.115
Meghalaya	17.395	13.675	16.905	11.505	11.455	11.815	11.813	12.393
Mizoram	4.610	6.040	3.940	5.700	5.250	5.410	5.980	5.020
Nagaland	6.147	5.735	6.653	5.335	17.967	5.805	5.377	6.435
Tripura	5.807	9.258	5.468	7.297	6.803	6.668	16.800	11.652
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Details of Fixed and Energy Charges of CS Stations for FY 2011-12

Projects	Installed Capacity (MW)	Design Energy (GWh)	Annual Fixed Charge (Rs. Crore)	Reference
KOPILI HEP	200	1186.14*	75.1117 *	*As per CERC order dated 30.09.2011 in petition No 294/2009.
KOPILI -II	25	86.3*	12.9511 **	* Provisional, ** As per CERC order dated 01.01.08 in pet. No 70/2006
KHANDONG HEP	50	277.61*	33.886 *	*As per CERC order dated 30.09.2011 in petition No 297/2009.
RHEP*	405	1509.69	290.7301	*As per CERC order dated 10.05.2011 in petition No.296/2009.
DHEP	75	227.24	58.5 *	*As per CERC order dated 03.10.07 in petition No 88/2007.
AGBPP	291	NA	233.81 *	As per CERC order dated 6.9.2011 in Pet.No295 / 2009
AGTPP	84	NA	67.9814 *	Base Rate of energy Charge as per the CERC Order *As per CERC order dated 11.03.11 in Pet.No 299/2009,^Base Engy. charge as per CERC order
LOKTAK HEP	105	448.00	95.7935 *	*As per CERC order dated 14.06.11 in Pet.No 108/2010

HOURLY DATA ON PEAK DEMAND MET DAY

DATE:- 06.11.2011

All figures in MW

HRS.	Total ISGS Injection (MW)	STATE SECTOR													ER					Total Drawal by States
		ASEB			MeSEB			Tripura			Manipur	Mizoram	Nagaland	ArPr		Total N.E.R GEN	Total Demand Met	Gross Demand met	Actual Loss	
		GEN	Drawal	Demand Met	GEN	Demand Met	Drawal	GEN	Demand Met	Drawal	DM	DM	DM	DM						
1	441.03	171	398.96	570.1	71	96.2	167.57	102	-28.8	73.29	41.37	33.38	30.91	55.33	204.87	785.65	798.39	815.37	17.0	424.05
2	440.22	185	367.41	552.8	39	105.4	144.31	102	-31.1	71.20	34.81	32.07	30.19	55.89	175.00	766.80	780.10	800.40	20.3	419.91
3	443.58	188	343.14	530.8	39	109.1	148.00	102	-31.8	70.33	28.38	32.10	29.85	52.66	146.17	772.33	751.11	777.08	26.0	417.61
4	444.19	187	320.39	507.7	39	106.6	145.50	102	-31.5	70.78	29.64	33.47	29.25	55.14	125.53	772.67	730.30	755.68	25.4	418.81
5	445.47	189	344.85	534.3	39	99.3	138.16	102	-31.5	70.85	45.51	36.37	32.34	55.28	162.12	776.14	771.48	795.65	24.2	421.30
6	447.84	189	333.18	522.2	72	92.0	163.78	102	-25.6	76.73	65.89	46.62	45.79	60.16	199.84	810.94	807.06	834.77	27.7	420.13
7	445.53	189	351.66	540.4	72	111.4	183.39	102	-14.8	87.46	71.97	57.59	50.91	63.03	281.02	808.49	880.45	912.85	32.4	413.12
8	442.44	191	360.41	551.3	78	123.9	202.11	102	-12.6	89.27	84.17	59.46	46.32	66.55	313.36	813.44	919.07	944.25	25.2	417.27
9	435.38	190	363.28	552.9	96	91.3	187.00	102	-16.3	85.56	88.63	51.72	40.62	68.16	282.00	822.57	877.06	904.76	27.7	407.68
10	432.04	188	358.02	546.2	72	122.9	195.38	102	-20.2	81.58	75.02	42.75	36.13	59.15	267.88	794.43	862.04	886.72	24.7	407.36
11	432.38	190	355.47	545.3	72	95.3	167.58	102	-28.4	73.50	67.03	42.53	34.09	62.00	224.17	796.43	817.76	846.42	28.7	403.73
12	433.97	190	353.66	544.0	72	105.1	177.37	102	-29.7	71.99	70.76	45.24	36.68	61.58	241.07	798.33	833.59	865.45	31.9	402.11
13	482.30	187	344.91	532.3	66	106.6	172.55	102	-26.7	75.09	61.48	46.49	38.59	59.65	181.34	837.42	818.44	851.12	32.7	449.63
14	480.03	190	334.17	524.4	32	136.5	168.38	102	-27.6	74.09	90.20	45.99	44.67	59.68	234.95	803.85	873.76	905.25	31.5	448.54
15	479.90	190	320.08	510.3	32	148.4	180.22	101	-25.7	75.72	81.17	53.40	51.27	59.32	241.44	803.35	878.15	911.62	33.5	446.43
16	483.43	191	348.34	539.1	39	158.1	197.25	102	-15.9	85.98	83.71	52.76	54.54	64.66	295.27	815.26	937.01	969.57	32.6	450.88
17	623.67	211	584.84	795.6	57	158.8	216.25	102	42.6	144.65	82.56	51.86	63.10	88.17	505.93	993.92	1282.78	1340.54	57.8	565.91
18	889.57	260	673.79	934.1	78	157.9	235.51	102	51.1	153.25	87.38	55.60	66.29	90.36	310.75	1329.55	1442.80	1457.36	14.6	875.01
19	944.92	252	690.49	942.1	72	163.4	235.51	102	56.9	159.20	99.53	60.43	62.79	93.97	310.69	1370.99	1479.13	1503.74	24.6	920.31
20	946.11	192	721.98	913.8	72	161.2	233.37	102	53.8	155.92	98.64	57.90	60.19	85.59	365.78	1312.19	1431.10	1500.53	69.4	876.67
21	749.38	233	637.61	870.4	66	145.1	211.45	102	41.7	143.95	108.93	54.63	57.03	79.08	414.08	1150.88	1356.83	1393.38	36.6	712.83
22	653.71	252	509.54	761.2	62	133.0	195.40	102	19.4	121.68	108.62	43.57	52.39	74.08	310.48	1070.18	1192.21	1213.54	21.3	632.38
23	643.76	252	399.39	651.5	48	112.1	160.44	102	-5.1	97.12	92.00	40.39	46.11	61.93	128.88	1046.45	998.89	1022.76	23.9	619.89
24	455.21	252	314.77	566.9	48	111.6	159.49	82	-2.9	78.72	81.51	31.98	42.00	58.10	177.78	836.91	889.16	883.39	-5.8	460.98
Max	946.11	260	721.98	942.13	96	163.4	235.51	102	56.9	159.20	108.93	60.43	66.29	93.97	505.93	1370.99	1479.13	1503.74	69.4	920.31
Min	432.04	171	314.77	507.69	32	91.3	138.16	82	-31.8	70.33	28.38	31.98	29.25	52.66	125.53	766.80	730.30	755.68	-5.8	402.11

HOURLY DATA ON MINIMUM DEMAND MET DAY

DATE: 23.11.2011

All figures in MW

HRS.	Total ISGS Injection (MW)	STATE SECTOR													ER	Total N.E.R GEN	Total Demand Met	Gross Demand met = Sum of demand met of all the states+loss	Actual Loss	Total Drawal by States
		ASEB			MeSEB			Tripura			Manipur	Mizoram	Nagaland	ArPr						
		GEN	Demand Met	Drawal	GEN	Demand Met	Drawal	GEN	drawal	Demand Met	DM	DM	DM	DM						
1	343.56	167	377.1	543.79	48	104.6	152.88	102	-30.97	70.70	47.14	33.78	40.92	60.66	322.12	660.2	734.9	767.38	32.5	311.09
2	350.28	129	368.8	497.86	48	114.8	162.86	102	-32.79	69.13	40.83	31.46	40.22	60.47	307.16	629.4	725.6	759.39	33.7	316.54
3	346.39	129	361.6	490.43	24	113.5	137.58	102	-34.52	67.25	29.14	31.08	40.04	60.76	290.65	601.1	703.4	738.84	35.5	310.91
4	347.96	131	369.2	500.48	24	109.4	133.45	102	-35.02	67.14	32.96	31.72	40.63	61.77	295.91	605.5	712.8	746.06	33.3	314.66
5	351.60	135	387.1	522.18	24	120.6	144.54	102	-30.82	71.25	34.66	33.77	46.93	65.28	344.64	612.7	759.6	798.34	38.8	312.82
6	398.04	134	400.2	534.40	24	120.6	144.43	102	-24.42	77.82	61.93	47.52	59.59	73.20	346.63	658.3	840.8	861.81	21.0	377.05
7	445.51	183	377.8	561.01	63	103.6	166.89	102	-9.60	92.46	72.24	61.23	55.21	79.47	331.07	794.1	842.0	878.67	36.7	408.84
8	434.40	182	381.2	563.36	72	118.0	190.34	102	-8.06	93.77	79.91	58.72	46.22	75.14	331.46	790.7	853.0	867.73	14.8	419.64
9	445.72	183	354.1	536.76	72	88.5	160.78	102	-18.82	83.08	76.51	44.18	46.44	67.54	232.71	802.5	760.4	780.35	20.0	425.77
10	398.94	181	325.3	505.86	72	63.6	135.96	102	-16.70	84.84	70.88	42.41	39.35	64.52	220.73	753.4	690.9	721.24	30.3	368.59
11	392.50	180	376.8	556.42	66	74.0	140.15	101	-20.10	81.23	64.23	41.27	37.22	66.20	265.97	739.6	740.9	759.83	18.9	373.62
12	66.93	132	34.3	166.03	42	0.0	42.11	101	44.45	145.83	0.58	14.43	0.90	6.09	24.96	342.1	202.2	193.30	-8.9	75.82
13	260.10	22	205.5	227.49	0	24.6	24.73	74	-17.80	56.24	40.27	39.23	12.05	30.85	82.70	356.3	408.7	416.87	8.2	251.94
14	209.25	106	319.8	425.27	32	60.2	92.59	99	-23.65	75.61	77.40	40.80	47.47	50.30	375.36	446.5	671.5	683.91	12.4	196.85
15	325.32	129	402.9	531.43	48	70.1	118.09	101	-23.27	77.42	81.60	54.33	46.61	57.80	390.56	602.5	790.8	816.59	25.8	299.50
16	330.36	143	438.1	580.85	48	84.9	132.97	101	-13.88	87.22	74.72	52.00	45.25	66.74	418.29	622.3	848.9	849.78	0.9	329.47
17	572.86	119	474.7	594.02	48	83.4	131.42	101	49.92	151.04	66.46	54.99	54.88	82.54	352.02	841.3	968.1	1026.06	58.0	514.86
18	743.11	221	653.3	874.43	60	107.3	167.76	101	43.16	144.22	89.19	56.46	54.24	96.70	408.77	1125.7	1201.4	1252.99	51.6	691.56
19	855.64	226	638.5	864.38	71	100.5	171.25	102	49.84	151.57	90.55	61.34	58.76	87.55	270.36	1254.0	1188.7	1227.78	39.0	816.61
20	883.42	232	636.9	868.67	71	97.6	168.48	102	53.86	155.71	99.82	62.14	58.87	86.18	260.04	1287.9	1197.2	1245.38	48.2	835.27
21	727.50	231	619.5	850.33	73	135.5	208.20	102	46.43	148.22	98.98	58.20	54.95	87.45	414.00	1132.8	1202.8	1243.35	40.5	686.95
22	604.79	221	511.6	732.93	69	131.1	199.79	102	19.97	121.63	91.58	48.83	43.70	81.11	361.15	996.5	1029.5	1067.66	38.1	566.68
23	441.44	168	356.7	524.96	45	123.9	168.74	102	-5.80	95.94	86.74	40.80	41.19	66.16	295.57	756.3	811.4	838.78	27.4	414.09
24	439.55	175	340.6	516.03	41	130.1	170.67	102	-22.33	79.27	76.09	35.81	34.69	63.38	285.36	757.1	760.0	826.53	66.5	373.01
Max	883.42	232	653.3	874.43	73	135.5	208.20	102	53.86	155.71	99.82	62.14	59.59	96.70	418.29	1287.9	1202.8	1252.99	66.5	835.27
Min	66.93	22	34.3	166.03	0	0.0	24.73	74	-35.02	56.24	0.58	14.43	0.90	6.09	24.96	342.1	202.2	193.30	-8.9	75.82

ANNEXURES
&
EXHIBITS

RESERVOIR PARTICULARS OF THE MONTH :

Nov-11

Name of the Reservoirs	FRL	MDDL	Beginning of the month		End of the month	
			Level	Energy content(MU)	Level	Energy content(MU)
KHANDONG	719.3 M	704 M	717.45	19.58	716.60	17.08
KOPILI	609.5 M	592.83 M	603.28	51.20	600.69	34.20
LOKTAK	768.5 M	766.2 M	768.67	250.00	768.17	161.00
BARAPANI	3220 Ft	3150 Ft	3202.10	30.21	3196.58	26.72
GUMTI	93.55 M	83.6 M	87.60	7.47	85.70	3.50
DOYANG	333 M	306 M	319.45	21.50	319.16	21.50

FREQUENCY ANALYSIS FOR THE MONTH OF : Nov-11

Frequency	(Freq.in Hz)	(Time: H:M)	(Date:D.M.Y)
1. Maximum frequency	50.62	08:03	05-Nov-11
2. Minimum frequency	48.87	16:43	14-Nov-11
3. Monthly average	49.74		

Frequency in Hz as %age of time for the blocks :

f < 49.5	49.5 < f < 50.2	f > 50.2
3.0%	91.4%	5.7%

Daily Frequency Variation Index :

DATE	FVI	DATE	FVI
01-Nov-11	0.410	17-Nov-11	1.270
02-Nov-11	0.630	18-Nov-11	1.440
03-Nov-11	0.730	19-Nov-11	1.300
04-Nov-11	0.550	20-Nov-11	1.020
05-Nov-11	0.810	21-Nov-11	0.190
06-Nov-11	0.690	22-Nov-11	0.190
07-Nov-11	1.030	23-Nov-11	1.300
08-Nov-11	0.630	24-Nov-11	1.440
09-Nov-11	1.120	25-Nov-11	4.110
10-Nov-11	1.340	26-Nov-11	1.160
11-Nov-11	1.400	27-Nov-11	0.530
12-Nov-11	1.280	28-Nov-11	0.960
13-Nov-11	0.930	29-Nov-11	0.830
14-Nov-11	1.620	30-Nov-11	1.560
15-Nov-11	1.370		
16-Nov-11	1.390	Average FVI	1.108

Annexure-III

Details of Scheduled Bilateral Exchanges within the Region in

Nov-11

Sl.No.	From	To	Energy (At Seller Injn. Point) (MWH)		Energy (At State Periphery) (MWH)
1	Tripura (Baramura-IV)	Manipur	3346.056099		3255.764995
2	Tripura (Baramura-IV)	Mizoram	3346.056099		3255.764995
3	Tripura (Baramura-V)	Manipur	3310.750000		3218.578278
4	Tripura (Baramura-V)	Mizoram	3310.750000		3218.578278
5	APDCL	MeECL (NVVN)	202.500000		193.500000
6	ASEB	POWERGRID^	178.283050	^ The actual energy consumed by POWERGRID	

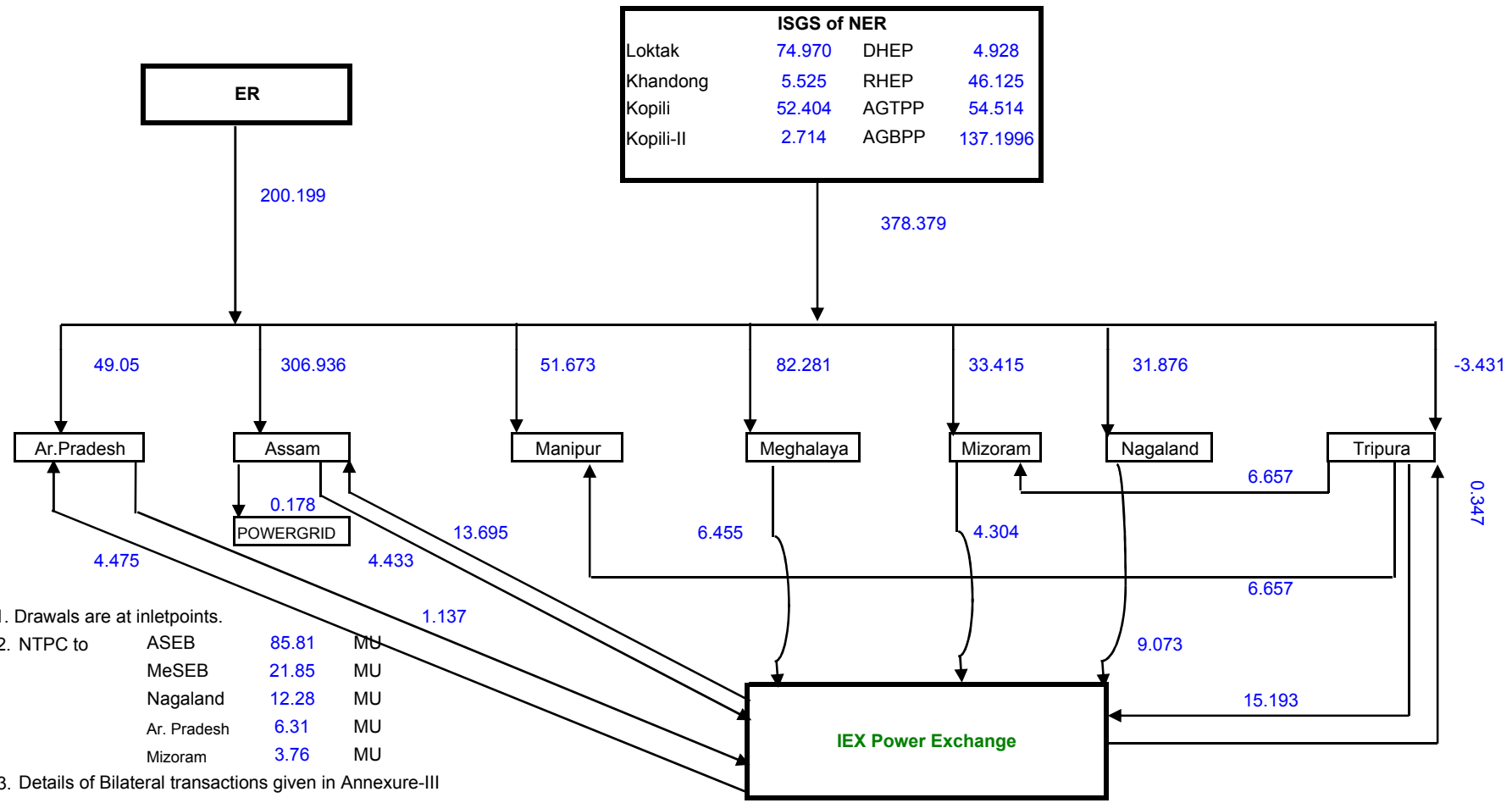
Scheduled Bilateral Exchange with SEBs / Organisations in other Regions

Sl.No.	From	To	Energy (At Seller Periphery) (MWH)	Energy (At NER-ER Periphery) (MWH)	Energy (At Buyer Periphery) (MWH)
1	Jindal	APDCL (APDCL)		43200.000000	42199.920000
2	TSECL	BSEB (NVVN)	-4442.640000	-4338.000000	
3	Farakka*	Ar. Pradesh	3104.811275	3053.525000	2982.616713
4	Kahalgaon 1*	Ar. Pradesh	1786.162125	1772.575000	1731.553338
5	Talcher*	Ar. Pradesh	1423.186750	1403.125000	1370.662100
6	Farakka*	Assam	29504.771150	29069.625000	28394.540313
7	Kahalgaon 1*	Assam	12514.140750	12327.925000	12042.544838
8	Kahalgaon 2*	Assam	32935.881550	32447.450000	31690.700613
9	Talcher*	Assam	10858.385250	10727.775000	10479.536900
10	Farakka*	MeECL	5612.252050	5530.125000	5401.701375
11	Kahalgaon 1*	MeECL	3246.903000	3201.625000	3127.505713
12	Kahalgaon 2*	MeECL	10414.508000	10267.725000	10028.240475
13	Talcher*	MeECL	2574.689750	2543.775000	2484.911238
14	Farakka*	Nagaland	6029.986075	5935.525000	5797.686213
15	Kahalgaon 1*	Nagaland	3484.398875	3440.175000	3360.535738
16	Talcher*	Nagaland	2769.107000	2734.075000	2670.808475
17	Farakka*	Mizoram	1854.497925	1826.025000	1783.614600
18	Kahalgaon 1*	Mizoram	1053.850875	1040.825000	1016.737113
19	Talcher*	Mizoram	849.176500	838.725000	819.317475

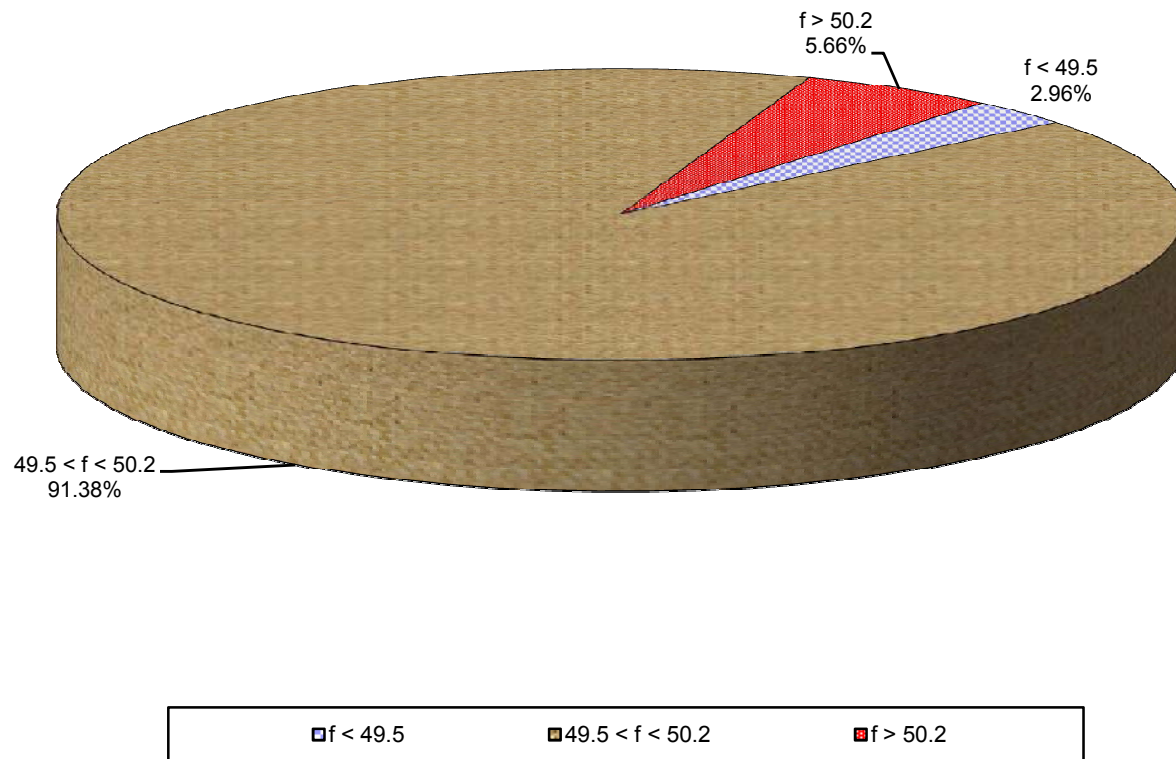
Bilateral exchange through IEX Power Exchange (-ve means injection, +ve means drawal)

20	Ar. Pradesh		-1136.990000	-1110.000000	
21	Ar. Pradesh			4579.800000	4475.030000
22	Assam		-4432.690000	-4330.000000	
23	Assam			14020.000000	13695.280000
24	MeECL		-6454.520000	-6305.700000	
25	Mizoram		-4304.450000	-4204.000000	
26	Nagaland		-9072.740000	-8943.860000	
27	Tripura		-15192.570000	-14841.000000	
28	Tripura			355.000000	346.770000

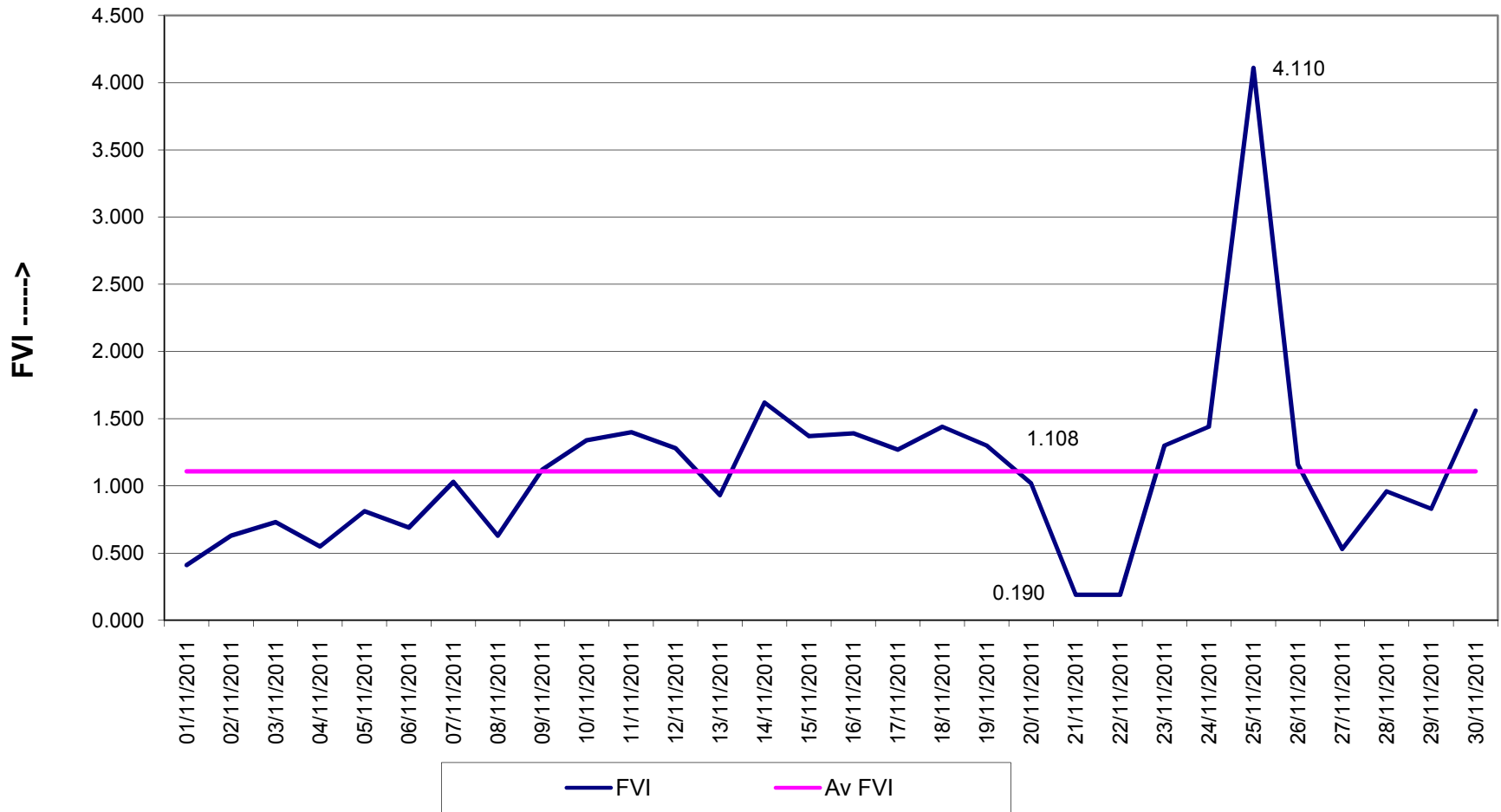
ENERGY EXCHANGE(in MU) IN NER DURING November, 2011



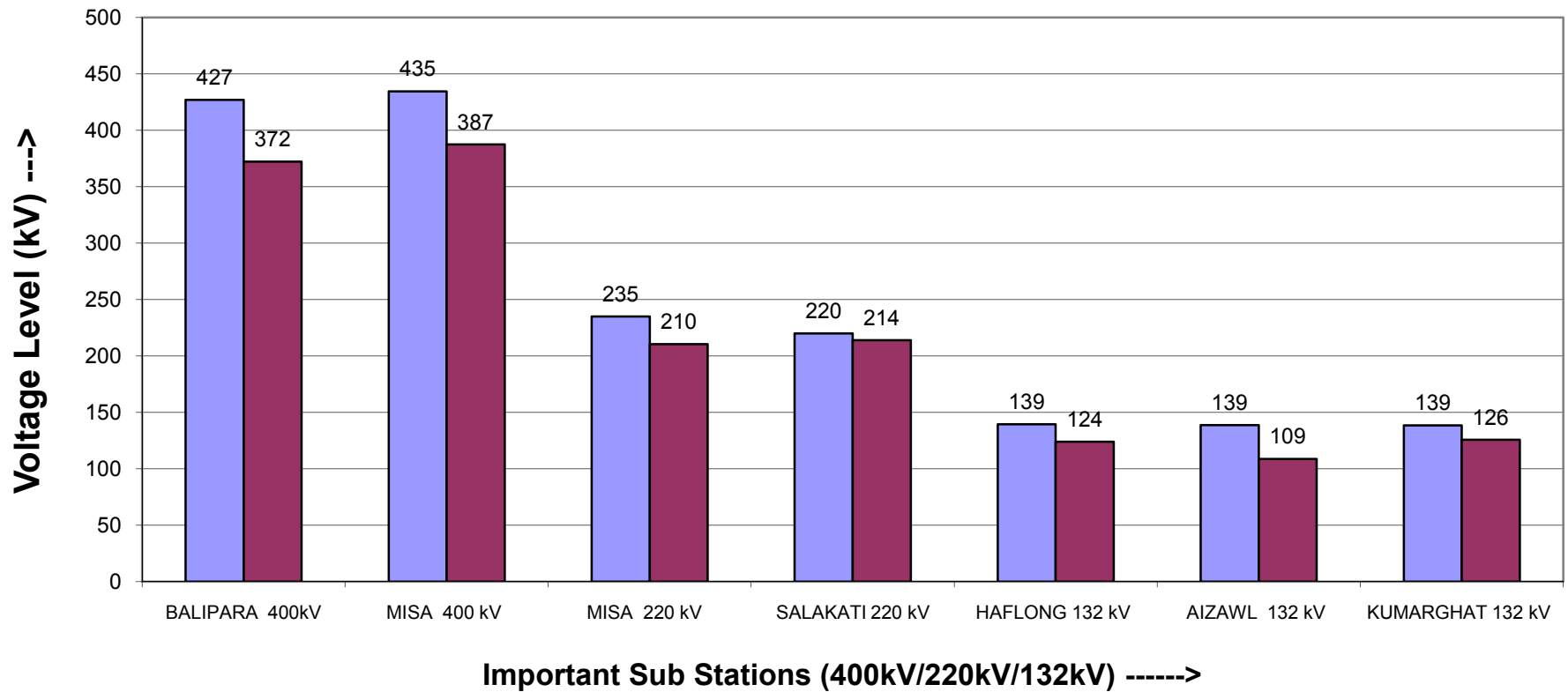
Frequency Duration for November, 2011



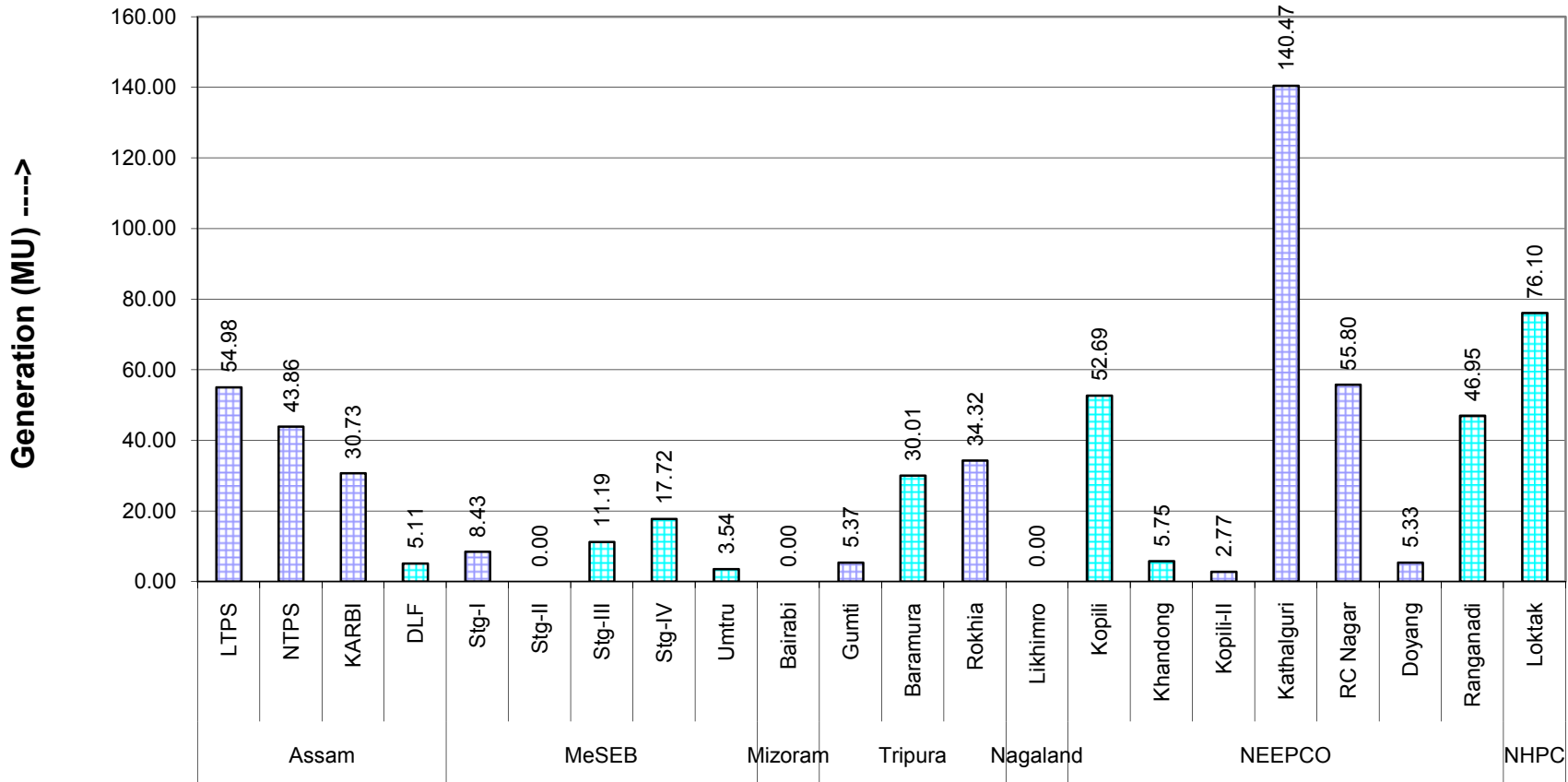
FVI Characteristics for November, 2011



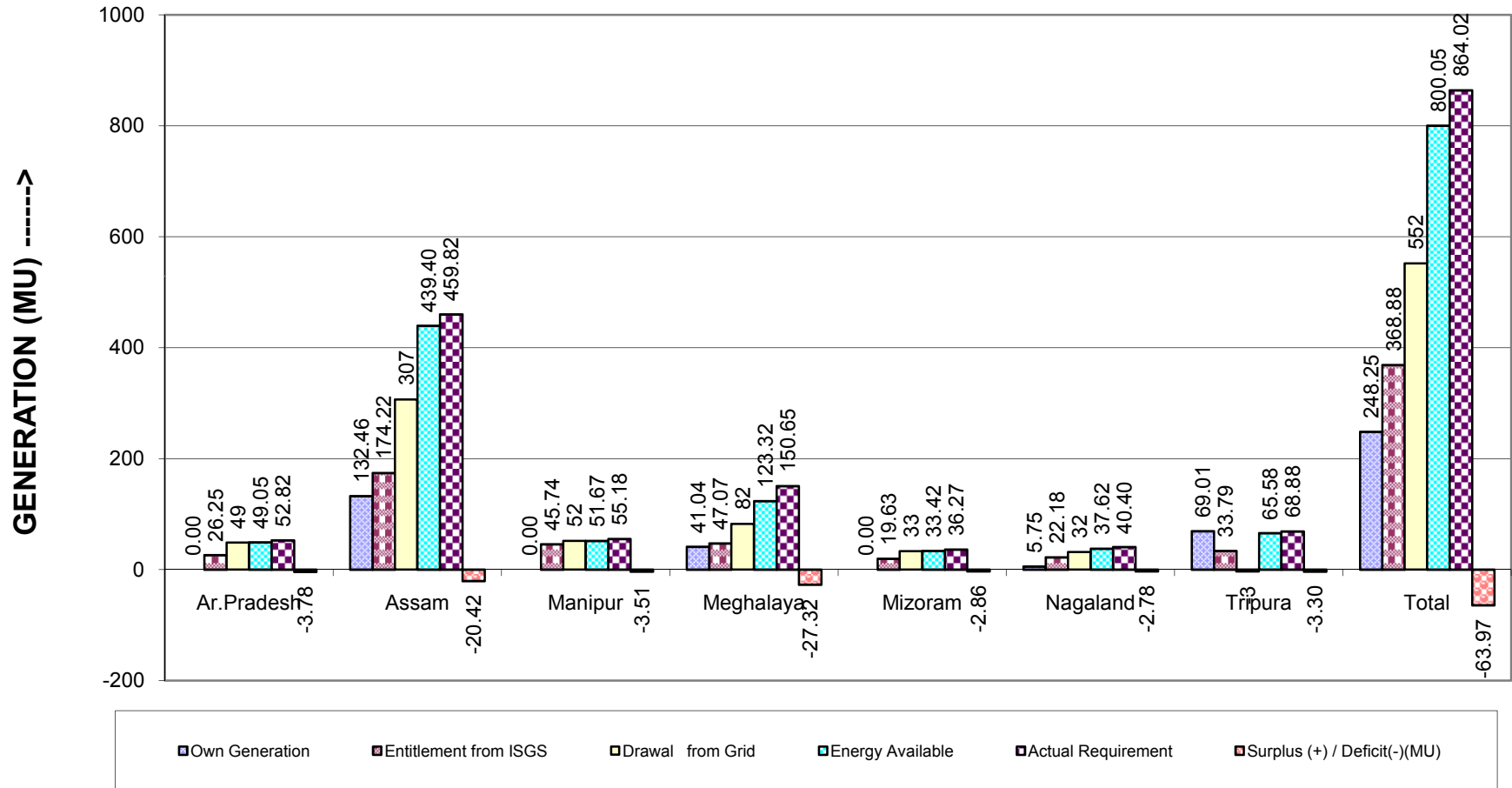
Maximum & Minimum Voltage Levels of Important Substations in NER during **November, 2011**



State and Central Sector Generation (MU) in NER in November, 2011



NER States Energy Scenario in November, 2011



Reservoir Statistics of NER in November, 2011

