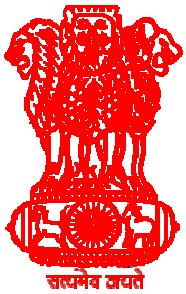


भारत सरकार Government of India
विद्युत मंत्रालय Ministry of Power
केंद्रीय विद्युत प्राधिकरण
Central Electricity Authority

उत्तर पूर्वी क्षेत्रीय विद्युत समिति
North Eastern Regional Power Committee

शिलोंग Shillong

Progress Report

For the month of

December, 2011

CONTENTS

NORTH EASTERN REGIONAL POWER COMMITTEE

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

- The maximum unrestricted demand during the month of December, 2011 was 1767 MW, which was 1745 MW in the month of November, 2011. The peak demand met in NER during the period under review was 1648 MW, which was 1689 MW last month.

- The energy requirement during the month of December, 2011 was 871.46 MU, which was 864.02 MU in the month of November, 2011. The energy availability in NER during the period under review was 786.19 MU, which was 800.05 MU last month.

- The maximum, minimum & average system frequency were 50.50, 48.89 & 49.76 Hz respectively. The maximum, minimum & average FVI were 2.37, 0.53 & 0.893 respectively. The average FVI was less than its previous month's figure. (refer Annex-II).

- Maximum export of power from NER to ER was 53 MW (on 23/12/11 at 19:45 hrs) and that from ER to NER was 558 MW (06/12/11 at 16:52 hrs). Total net energy import during the month was 241.9 MU (from ER).

SALIENT FEATURES OF
NORTH EASTERN REGIONAL GRID FOR DECEMBER, 2011

1	New unit/ transmission lines/Transformers commissioned during this month		**Nil**	
2	Number of total grid disturbance during this month		**Nil**	
			Dec-11	**Dec-10**
3	**Installed Capacity** of the Region (in MW)(grid)		2133.32	2054.12
4	**Energy Generation in MU (Gross)::**			
	Thermal		380.350	381.983
	Hydel		202.675	218.465
	Diesel / Oil		0.000	0.000
	Total		583.025	600.448
5	**Demand in MW ::**			
	Registered Peak demand		1767.00	1676.00
	Peak demand met		1648.00	1529.00
	Shortage (% age)		-6.73	-8.77
6	**Regional Energy(Gross) in MU ::**			
	Energy requirement		871.46	785.99
	Energy availability		786.19	741.11
	Surplus (+) / Deficit (-) (% age)		-9.78	-5.71
7	**Inter Regional Energy Exchange in MU ::**			
	NER ----> ER		0.648	0.099
	ER ----> NER		242.577	167.393
	Net Import		241.929	167.294
8	**Frequency profile ::**			
	Average frequency (Hz)		49.76	49.92
	Average Frequency Variation Index		0.893	0.500
9	Load Factor (in %)		59.80	59.43

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

All figures in MU

Constituents	Hydro		Coal / Oil fired		Gas Based(OpenCycle)		Gas Based(Com Cycle)		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	19.844	19.646	0.000	0.000	71.555	70.840	44.220	42.893	135.619	133.379
Meghalaya	31.504	31.189	0.000	0.000	0.000	0.000	0.000	0.000	31.504	31.189
Mizoram	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Tripura	5.065	5.014	0.000	0.000	69.973	69.273	0.000	0.000	75.037	74.287
Nagaland	4.034	3.994	0.000	0.000	0.000	0.000	0.000	0.000	4.034	3.994
Total (State Sector)									**246.194**	**242.848**
Central Sector :										
NEEPCO :										
Khd+Kop+Kop-II	38.997	38.607	0.000	0.000	0.000	0.000	0.000	0.000	38.997	38.607
K'guri	0	0	0.000	0.000	0	0	141.952	137.693	141.952	137.693
RCNagar	0	0	0	0	56.966	56.396	0	0	56.966	56.396
Doyang	6.184	6.122	0	0	0	0	0	0	6.184	6.122
Ranganadi	37.887	37.508	0	0	0	0	0	0	37.887	37.508
NHPC :										
Loktak	59.161	58.569	0.000	0.000	0.000	0.000	0.000	0.000	59.161	58.569
Total (Central Sector)									341.147	334.896
Total NER	202.675	200.649	0.000	0.000	198.494	196.509	186.172	180.587	**587.341**	**577.744**

REQUIREMENT Vs AVAILABILITY IN THE REGION

STATES	ENERGY requirement (MU) at 50 Hz				POWER requirement (MW) at 50 Hz			
	Availability & L/S at prevailing freq.				*Availability & L/S at prevailing freq.*			
	Requirt.	Availy.	Shortfall	%Shortfall	Requirt.	Availy.**	Shortfall	%Shortfall
Ar.Pr.	58.64	54.52	4.12	7.03%	112	106	6	5.23%
Assam	451.56	420.20	31.35	6.94%	966	949	17	1.73%
Manipur	54.26	49.97	4.29	7.90%	116	115	1	0.74%
M'laya	149.65	113.85	35.81	23.93%	273	251	22	8.19%
Mizoram	38.67	35.25	3.42	8.84%	75	70	5	6.81%
Nagaland	41.32	38.90	2.42	5.86%	111	105	6	5.76%
Tripura	77.35	73.49	3.86	4.99%	167	166	1	0.57%
REGION	871.46	786.19	85.27	9.78%	1767	1648	119	6.73%

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	106.00	05/12/2011	49.42	1.84	4	111.84
Assam	949.00	31/12/2011	49.80	5.69	11	965.69
Manipur	115.00	26/12/2011	49.75	0.86	0	115.86
Meghalaya	251.00	21/12/2011	49.55	3.39	19	273.39
Mizoram	70.00	15/12/2011	49.95	0.10	5	75.12
Nagaland	105.00	21/12/2011	49.55	1.42	5	111.42
Tripura	166.00	19/12/2011	50.01	-0.05	1	166.95
REGION	1648.00	31/12/2011	49.80	9.89	109	1766.89

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

ESTIMATION OF ENERGY REQUIREMENT (in MU)

Average Frequency 49.76 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	22.839	4.533	54.518	27.146	54.518	0.390	3.73	58.641
Assam	133.379	155.857	66.848	286.824	64.119	420.203	3.002	28.35	451.556
Manipur	0.000	38.722	0.000	49.974	11.252	49.974	0.357	3.93	54.262
M'laya	31.189	40.788	19.538	82.659	22.333	113.848	0.813	34.99	149.655
Mizoram	0.000	17.450	3.041	35.251	14.760	35.251	0.252	3.17	38.669
Nagaland	3.994	19.619	9.483	34.905	5.802	38.898	0.278	2.14	41.321
Tripura	74.287	30.176	0.000	-0.793	-30.969	73.494	0.525	3.33	77.351
REGION	242.848	325.451	103.443	543.338	114.444	786.186	5.617	79.65	871.456

*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 Sations / Units	Installed Capacity(MW)	Peak Generation(MW)	Energy Generation (MU)	
				Dec-11	Dec-10
	STATE SECTOR : HYDRO				
	ASSAM :: HYDRO				
1	KARBI HEP U - 1	50.00	50.50	10.860	16.970
2	KARBI HEP U - 2	50.00	50.90	8.984	9.190
	TOTAL	100.00		19.844	26.160
	MEGHALAYA :: HYDRO				
1	STAGE - 1	36.00	27.01	7.144	4.850
2	STAGE - 2	18.00	0.00	0.414	12.170
3	STAGE - 3	60.00	47.24	9.101	15.680
4	STAGE - 4	60.00	39.43	11.196	1.780
5	UMTRU	11.20	12.00	3.649	0.610
	TOTAL	185.20		31.504	35.090
	NAGALAND :: HYDRO				
6	LIKIMRO - 1				
7	LIKIMRO - 2	24.00	12.00	4.034	4.500
8	LIKIMRO - 3				
	TOTAL	24.00		4.034	4.500
	TRIPURA :: HYDRO				
9	GUMTI - 1	5.00	Gumti Stn. Peak =6.5 MW	0.000	0.000
10	GUMTI - 2	5.00		2.656	2.656
11	GUMTI - 3	5.00		2.409	2.409
	TOTAL	15.00		5.065	5.065
	TOTAL STATE (HYDRO) :	324.20		60.447	70.815

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

Sl. No.	Power Sations / Units	Installed Capacity(MW)	Peak Generation(MW)	Energy Generation (MU)	
				Dec-11	Dec-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		15.086	14.580
5	BARAMURA - 5	21.00		14.934	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	5.343
9	ROKHIA - 4	8.00		4.978	4.002
10	ROKHIA - 5	8.00		0.000	0.000
11	ROKHIA - 6	8.00		5.024	0.000
12	ROKHIA - 7	21.00		14.756	15.569
13	ROKHIA - 8	21.00		15.195	14.889
	TOTAL	148.50		69.973	54.383
	ASSAM :: THERMAL				
1	LTPS - 1	15.00	18	10.330	8.620
2	LTPS - 2	15.00	15.1	2.150	7.670
3	LTPS - 3	15.00	0.0	0.000	7.560
4	LTPS - 4	15.00	18	9.854	0.000
5	LTPS - 5	20.00	21	12.254	14.780
6	LTPS - 6	20.00	24.18	15.825	15.340
7	LTPS - 7	20.00	22.0	11.850	12.060
8	NTPS - 1	20.00	20.0	7.480	10.330
9	NTPS - 2	21.00	21.5	14.450	13.430
10	NTPS - 3	21.00	18.5	8.830	2.910
11	NTPS - 4	11.00	12.5	7.530	7.650
12	NTPS - 5	22.00	0.0	0.000	0.000
13	NTPS - 6	22.00	12.0	5.930	7.150
14	DLF	24.50	7.37	4.976	5.370
	TOTAL	261.50		111.459	112.870
TOTAL STATE THERMAL/GAS :		432.92		181.432	167.253
TOTAL SC GEN(HY+TH/GAS)		**757.12**		**241.878**	**238.068**

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

Sl. No.	Power Sations / Units	Installed Capacity(MW)	Peak Generation(MW)	Energy Generation (MU)	
				Dec-11	Dec-10
	CENTRAL SECTOR : HYDRO				
1	KHANDONG - 1	25.00	23.69	2.787	2.400
2	KHANDONG - 2	25.00	24.76	3.105	2.760
3	KOPILI Stg - II	25.00	0.00	0.000	1.980
4	KOPILI - 1	50.00	50.96	12.550	7.980
5	KOPILI - 2	50.00	58.15	11.926	6.320
6	KOPILI - 3	50.00	0.00	0.000	11.120
7	KOPILI - 4	50.00	52.26	8.629	10.970
8	DOYANG -1	25.00	22.88	1.611	1.970
9	DOYANG -2	25.00	23.02	2.410	2.840
10	DOYANG -3	25.00	23.59	2.163	2.330
11	LOKTAK - 1	35.00	38.28	17.870	0.090
12	LOKTAK - 2	35.00	38.02	17.588	25.330
13	LOKTAK - 3	35.00	38.60	23.702	22.640
14	RANGANADI - 1	135.00	136.70	6.054	13.570
15	RANGANADI - 2	135.00	137.00	15.026	20.050
16	RANGANADI - 3	135.00	135.00	16.807	15.300
TOTAL HYDRO :		**860.00**		**142.229**	**147.650**
	CENTRAL SECTOR : THERMAL/GAS				
1	KATHALGURI - 1	33.50	37.41	8.266	23.550
2	KATHALGURI - 2	33.50	33.10	6.678	23.370
3	KATHALGURI - 3	33.50	35.09	23.629	2.590
4	KATHALGURI - 4	33.50	34.86	23.135	22.670
5	KATHALGURI - 5	33.50	35.48	23.188	23.580
6	KATHALGURI - 6	33.50	35.59	23.433	24.060
7	KATHALGURI - 7	30.00	0.00	0.000	12.980
8	KATHALGURI - 8	30.00	25.61	16.129	8.310
9	KATHALGURI - 9	30.00	27.64	17.494	19.220
10	R.C.NAGAR - 1	21.00	21.02	11.712	14.420
11	R.C.NAGAR - 2	21.00	23.48	14.933	12.130
12	R.C.NAGAR - 3	21.00	23.79	15.029	13.800
13	R.C.NAGAR - 4	21.00	23.54	15.292	14.050
TOTAL THERMAL/GAS :		375.00		198.918	214.730
TOTAL CS (HY + TH/GAS) :		1235.000		341.147	362.380
TOTAL NER GEN(HY+TH/GAS) :		**1992.120**		**583.025**	**600.448**

Plant Load Factor (PLF) and Voltage Profile :

Dec-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	62.263	69.74
2	NTPS*	AEGCL	117.00	44.220	50.80
3	Baramura	Tripura	58.50	30.020	68.97
4	Rokhia	Tripura	90.00	39.953	59.67
5	AGBPP	NEEPCO	291.00	141.952	**65.57**
6	AGTPP	NEEPCO	84.00	56.966	91.15

*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	431	385
2	MISA 400 kV	433	393
3	MISA 220 kV	233	212
4	SALAKATI 220 kV	222	220
5	HAFLONG 132 kV	140	126
6	AIZAWL 132kV	137	116
7	KUMARGHAT 132kV	136	123

Voltage Range in kV as percentage of time for the block

SUB-STATION	kV < 360	360<kV<380	380<kV<420	kV>420
MISA	0.00	0.00	83.18	16.82
BALIPARA	0.00	0.11	98.60	1.29

1 **INTER - REGIONAL EXCHANGE :**

All Fig in MU

NER to ER	0.648
ER to NER	242.577
NET IMPORT	241.929

2	**Major Grid Disturbances during this month**	**Nil**

3	**MEETING HELD BY NERPC DURING THIS MONTH**	1. 68th OCC Meeting was held on 08.12.11 at Guwahati.

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+1	3x42	2011-12	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 (ckt kms)	Commi'ng Sch Ann.pl	Commi'ng Sch Ant/revd	Total no. of locs .	Stubs com - pleted(nos)	Tower Erected	Stringing complt-ckm	Remarks
	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 - Nangalbibra	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	Sep-14	4228	2591	1286		Matching with HVDC Converter
2	400kV Balipara - Biswanath Chariyali D/C	130	Aug-13	Aug-13	167	137	121	41	Matching with L. Subansiri
3	LILO of 400 kv Ranganadhi Balipara D/C at Biswanat	54	Aug-13	Aug-13	76	70	33	2	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	Mar-14	142	54	4		Matching with Gen. of Kameng
6	400kV Balipara- Bongaigaon D/C line	596	Feb-13	Feb-13	838	778	539	140	Matching with Gen. of Kameng
7	400kV Lower Subansari-Biswanath Charrali line-I	334	Feb-13	Dec-13	444	297	213	38	Matching with Gen. Project
8	400kV Lower Subansari-Biswanath Charrali Line-II	340	Feb-13	Feb-13	442	314	195	30	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	15	Mar-12		15	11	5		
11	400kV D/C Pallatana- Surajmani –nagar line	70	Dec-11	Mar-12	87	78	38		Copmpl. of Suraj-maninagar by TSECL
12	400kV D/C Silchar-Purba Kanchan Bari line	244	Mar-12	Jun-12	325	196	84		ROW problem
13	400kV D/C Silchar-Melriat(New) line	320	Dec-12	Mar-13	400	123	58		1st Stg Forest clearance awaited
14	400kV D/C Silchar-Imphal(New) line	280	Dec-12	Jun-12	389	9			Likely to be delayed
15	220kV D/C Mariani(New)-Mokikchung(PG)	112	Dec-12	Mar-13	160	11			Efforts to be made to match U#2 of Palatana GBPP
16	132kV Silchar-Badarpur(PG) SW Interconnecting line	42	Nov-11		69	68	64	28	To match with U#1 of Palatana
17	132kV D/C Melriat(New)- Melriat (Mizo) Interconnecti	60	Dec-12	Mar-13	85				Compl. Matching readiness of Melriat S/s by Mizoram
18	132kV D/C Silchar-Srikona (AEGCL) line	6	Dec-11	Jan-12	7	7	7		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	Mar-13	4				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	Mar-13	550	62			Completion matching with S/S.
22	132 kV S/C Roing-Tezu line (on D/C)	60	Dec-12	Mar-13	550	62			Engg. in progress
23	132 kV S/C Tezu-Namsai line (on D/C)	90	Dec-12		180	8			Completion matching with S/S.
24	LILO of 400kV S/C Kathalguri -Misa line at Mariani(N	2	Dec-12		20				
25	LILO of 132 kV S/C Loktak-Imphal line at Imphal (Ne	60	Dec-12		150				

Name of the line	Length	Commi'ng Sch		Total no.	Stubs com -	Tower	Stringing	Remarks
	(ckt kms)	Ann.pl	Ant/revd	of locs .	pleted(nos.)	Erected	complt-ckm	
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 (N								
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 Dec-11

Organisation	Actual (MU)	Schedule (MU)	UI Energy (MU)	UI Receivable (Rs. in Lakhs)	UI Payable (Rs. in Lakhs)
Arunachal Pradesh	54.518	33.411	21.107	0.000	1083.405
ASEB	286.824	280.146	6.679	40.166	415.684
Manipur	49.974	44.282	5.692	16.456	461.354
MeSEB	82.659	67.462	15.197	16.942	845.642
Mizoram	35.251	26.211	9.041	0.000	519.520
Nagaland	34.905	28.591	6.314	0.000	321.562
Tripura	-0.793	2.263	-3.055	21.776	60.463

Entitlement, Schedule, Drawal and UI Charges Dec-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	22.839	4.533	27.372	33.411	54.518	21.107	-10.834
ASEB	155.857	66.848	222.705	280.146	286.824	6.679	-3.755
Manipur	38.722	0.000	38.722	44.282	49.974	5.692	-4.449
MeSEB	40.788	19.538	60.326	67.462	82.659	15.197	-8.287
Mizoram	17.450	3.041	20.491	26.211	35.251	9.041	-5.195
Nagaland	19.619	9.483	29.102	28.591	34.905	6.314	-3.216
Tripura	30.176	0.000	30.176	2.263	-0.793	-3.055	-0.387

(Source : UI A/c, NERPC)

Schedule for ISGS's Generation and State's Drawl for the month of Dec-11

States	Schedule From ISGS(MWH)	Bilateral Schedule from Outside NER (MWH)	Total Schedule (MWH)	Ex.PP. Drawal (MWH)	Tr. Energy (MWH)
Arunachal Pradesh	23333.24	4651.85	27985.09	57767.76	57767.76
ASEB	160298.66	68620.23	228918.89	303921.06	303921.06
Manipur	39668.91		39668.91	52952.86	52952.86
MeSEB	41777.34	20061.35	61838.69	87585.83	87585.83
Mizoram	17896.46		17896.46	37352.62	37352.62
Nagaland	20180.23	9733.20	29913.43	36985.18	36985.18
Tripura	30632.67		30632.67	-839.86	30632.67
Total	333787.51	103066.63	436854.14	575725.45	607197.97

ISGS	Schedule (MWH)	Injection (MWH)
LOKTAK	57876.93	58169.30
KHANDONG	5663.50	5641.24
KOPILI-I	33213.50	33028.32
KOPILI-II	0.00	-33.54
DHEP	5654.67	5714.03
RHEP	36873.30	36748.82
AGTPP	55324.64	55962.17
AGBPP	139180.99	138565.64
Total	333787.51	333795.97

Source : Provisional REA for the month: Dec-11

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)	AGTPP (84 MW)	Loktak HEP (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*	57.6738 *	*As per CERC order dated 19.02.08 in petition No 76/2007.
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*	19.6328 *	*As per CERC order dated 14.01.08 in petition No 26/2007.
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	233.59 *	*As per CERC order dated 22.02.08 in Pet.No150/ /2005, ^ Base Rate of energy Charge as per CERC Order
AGTPP	84	NA	67.9814 *	*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:- 11.12.2011

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	IMPORT(+)/ EXPORT(-)					
1	375.51	184	290.60	474.8	28	122.6	150.59	102	-24.3	77.46	37.34	34.14	34.52	66.76	219.29	689.47	745.92	779.01	33.1	342.42
2	378.75	142	330.66	473.0	24	104.8	129.15	102	-29.0	72.99	33.08	31.46	35.09	64.41	219.23	647.45	712.76	740.28	27.5	351.23
3	378.28	146	325.68	472.1	24	97.9	122.11	102	-32.8	69.07	34.05	31.62	33.73	62.99	205.68	650.81	699.60	730.39	30.8	347.49
4	381.36	147	320.87	467.6	24	83.7	107.80	102	-31.7	70.31	32.84	31.55	36.69	63.56	190.55	654.23	684.23	718.64	34.4	346.95
5	388.96	88	346.59	434.2	24	112.6	136.70	102	-30.1	71.53	44.80	32.34	38.43	67.56	272.68	602.26	699.81	749.19	49.4	339.58
6	386.01	85	400.37	485.4	0	143.9	143.92	102	-27.8	74.21	72.50	38.61	45.34	70.59	365.15	572.98	828.57	836.14	7.6	378.43
7	483.82	101	405.51	506.4	12	124.5	136.91	102	-12.6	89.21	83.87	55.77	43.39	69.77	319.32	698.97	871.12	904.05	32.9	450.89
8	479.41	143	413.05	555.9	53	136.3	188.88	102	-7.7	94.06	71.86	46.04	47.83	68.49	331.59	776.52	918.70	953.79	35.1	444.32
9	450.87	121	395.07	516.1	52	128.4	180.83	102	-12.4	89.36	63.31	46.02	46.66	64.45	327.91	726.13	852.45	899.77	47.3	403.55
10	407.49	125	309.55	434.5	58	130.5	188.05	102	-17.5	84.03	64.99	44.09	39.43	65.85	259.11	691.57	761.87	791.57	29.7	377.80
11	412.58	124	310.89	434.7	70	126.7	196.25	101	-23.5	77.98	70.71	41.73	39.20	63.75	246.05	707.47	753.30	782.45	29.1	383.43
12	411.47	127	318.25	445.7	52	137.8	189.63	101	-28.8	72.56	77.11	43.91	41.44	68.90	274.87	692.10	786.12	813.79	27.7	383.79
13	412.72	127	327.15	454.5	48	130.0	177.75	101	-28.1	73.33	86.40	40.36	37.10	58.31	263.49	689.22	778.57	803.53	25.0	387.77
14	410.14	127	319.65	446.9	48	124.0	171.66	101	-27.2	73.98	85.79	41.07	40.32	58.92	264.83	686.26	769.75	802.19	32.4	377.71
15	411.52	127	331.26	457.8	30	151.4	181.41	101	-26.8	74.43	76.74	47.84	44.41	65.62	314.57	669.31	816.93	852.59	35.7	375.86
16	428.12	127	354.19	481.4	30	147.0	177.03	101	-17.7	83.72	83.94	58.02	42.61	66.82	342.59	686.74	862.13	897.91	35.8	392.35
17	705.40	128	530.49	658.8	48	137.3	185.36	101	39.1	140.46	83.10	65.94	56.68	94.97	408.85	983.10	1135.92	1242.52	106.6	598.80
18	822.31	129	618.47	747.2	72	142.4	214.34	100	38.6	138.98	88.92	64.84	66.35	107.57	382.37	1123.31	1255.94	1333.37	77.4	744.88
19	928.16	211	580.28	791.7	70	146.0	215.97	100	51.4	151.72	98.08	63.27	60.44	101.73	237.76	1309.91	1312.65	1377.34	64.7	863.47
20	917.06	209	553.82	762.8	70	151.8	221.76	102	51.3	152.85	98.47	61.73	64.30	105.96	249.90	1297.56	1296.41	1375.94	79.5	837.53
21	819.61	212	502.25	714.0	70	135.9	205.88	102	40.5	142.22	100.45	56.35	60.85	102.20	246.64	1203.09	1210.19	1277.95	67.8	751.85
22	751.14	216	448.21	663.7	28	137.6	165.75	102	19.2	120.95	90.85	47.84	48.15	95.01	184.07	1096.53	1102.44	1150.71	48.3	702.87
23	605.32	215	306.88	521.9	24	120.8	144.77	102	-7.4	94.49	93.29	39.63	41.20	76.44	104.34	946.17	885.88	924.66	38.8	566.54
24	375.50	180	314.06	493.7	24	113.7	137.78	102	-18.8	82.97	78.65	34.59	38.11	72.33	288.67	681.08	812.24	843.81	31.6	343.93
Max	928.16	216	618.47	791.74	72	151.8	221.76	102	51.4	152.85	100.45	65.94	66.35	107.57	408.85	1309.91	1312.65	1377.34	106.6	863.47
Min	375.50	85	290.60	434.16	0	83.7	107.80	100	-32.8	69.07	32.84	31.46	33.73	58.31	104.34	572.98	684.23	718.64	7.6	339.58

HOURLY DATA ON MINIMUM DEMAND MET DAY

DATE: 06.12.2011

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	IMPORT(+)/ EXPORT(-)					
1	379.80	205	314.7	519.47	32	141.2	173.58	102	-32.91	69.47	28.46	32.56	34.47	65.38	220.95	719.3	686.2	703.11	16.9	362.93
2	391.54	205	326.8	532.01	32	115.2	147.45	102	-19.08	82.96	26.18	31.52	36.95	64.08	215.23	731.1	683.7	708.79	25.1	366.40
3	388.57	205	343.7	549.14	32	125.6	157.93	102	-35.98	66.06	26.19	30.02	37.84	65.29	225.80	728.4	694.7	716.39	21.7	366.88
4	390.39	125	350.1	474.79	32	126.9	159.26	102	-35.67	66.57	28.52	29.36	37.78	68.11	240.05	649.7	707.4	732.66	25.3	365.08
5	393.53	125	380.0	504.59	24	127.0	150.96	102	-33.77	68.45	43.90	32.86	39.03	71.73	294.88	644.4	762.9	790.62	27.7	365.85
6	391.94	124	412.2	536.43	0	127.0	126.97	102	-26.69	75.32	73.29	45.16	48.12	74.91	382.12	618.2	856.0	878.84	22.9	369.06
7	482.65	125	447.7	572.61	0	124.5	124.53	102	-15.63	86.54	74.75	40.20	54.18	74.60	345.34	709.7	902.5	930.14	27.7	454.99
8	484.62	124	333.2	457.58	0	130.2	130.19	102	-8.49	93.82	78.60	42.19	43.72	78.76	243.57	711.4	800.4	830.48	30.0	454.58
9	358.33	125	340.1	464.98	24	120.2	144.09	102	-14.44	87.95	71.36	33.48	41.83	67.28	334.76	609.5	762.2	795.46	33.3	325.07
10	307.08	167	319.3	486.70	24	90.6	114.45	103	-19.32	83.21	60.88	41.16	39.17	68.20	329.68	600.9	702.5	739.27	36.8	270.31
11	305.43	167	327.7	495.14	42	85.7	127.73	102	-22.94	79.07	72.25	34.23	33.43	71.20	320.92	616.9	703.6	728.35	24.8	280.65
12	298.45	163	337.7	500.61	45	81.3	126.26	102	-24.96	77.13	50.76	37.77	30.25	69.20	309.40	608.4	684.1	709.92	25.8	272.62
13	301.69	158	365.0	522.96	66	84.1	150.20	102	-26.42	75.48	54.76	41.11	34.28	65.87	343.50	627.6	720.6	747.07	26.4	275.27
14	304.14	157	394.8	552.16	66	91.8	157.66	102	-27.00	74.55	89.41	45.49	42.18	60.71	403.18	628.9	799.0	808.85	9.9	294.27
15	295.73	113	368.1	481.00	66	94.3	160.25	101	-23.65	77.82	78.30	54.39	40.75	65.34	418.80	576.0	779.0	815.98	37.0	258.76
16	299.46	107	386.0	493.11	66	108.9	174.85	102	-13.44	88.30	76.75	59.90	45.48	66.24	477.53	574.3	831.5	878.72	47.2	252.27
17	552.66	104	536.3	640.71	42	111.0	152.73	101	52.68	153.82	67.47	61.07	51.98	91.10	510.58	800.0	1072.7	1164.34	91.6	461.03
18	802.96	101	586.9	688.36	42	86.4	128.38	101	42.36	143.48	94.50	56.17	63.81	88.46	304.29	1047.4	1119.8	1208.33	88.5	714.43
19	850.64	106	558.4	664.93	42	108.2	150.11	101	40.61	141.87	99.80	59.03	63.19	103.71	258.31	1100.3	1134.2	1210.18	76.0	774.69
20	792.19	151	547.9	698.89	72	120.2	192.18	101	40.34	141.77	101.85	61.20	63.42	98.72	328.74	1116.7	1135.0	1222.32	87.3	704.86
21	790.57	169	463.5	632.55	66	126.5	191.99	101	31.28	132.76	111.65	59.77	60.16	91.04	224.66	1126.6	1045.4	1116.68	71.3	719.26
22	656.90	215	422.7	638.07	65	118.3	183.70	102	13.71	115.26	100.37	53.15	48.24	85.68	243.62	1039.3	943.6	1002.04	58.4	598.50
23	480.48	217	357.5	574.00	54	90.0	143.73	102	-9.77	91.83	92.58	41.63	42.49	70.18	234.04	852.4	786.2	816.11	29.9	450.54
24	395.51	218	324.3	542.31	23	121.4	144.87	102	-27.65	73.92	76.45	36.45	42.11	70.48	276.31	738.5	745.2	773.37	28.2	367.31
Max	850.64	218	586.9	698.89	72	141.2	192.18	103	52.68	153.82	111.65	61.20	63.81	103.71	510.58	1126.6	1135.0	1222.32	91.6	774.69
Min	295.73	101	314.7	457.58	0	81.3	114.45	101	-35.98	66.06	26.18	29.36	30.25	60.71	215.23	574.3	683.7	703.11	9.9	252.27

ANNEXURES
&
EXHIBITS

Annexure-I

RESERVOIR PARTICULARS OF THE MONTH : **Dec-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	716.60	17.08	715.75	17.08
KOPILI	609.5 M	592.83 M	600.69	34.20	598.78	23.60
LOKTAK	768.5 M	766.2 M	768.14	155.00	767.67	71.75
BARAPANI	3220 Ft	3150 Ft	3196.58	26.72	3191.12	21.75
GUMTI	93.55 M	83.6 M	85.50	3.21	84.00	1.52
DOYANG	333 M	306 M	319.10	21.50	317.13	17.00

Annexure-II

FREQUENCY ANALYSIS FOR THE MONTH OF : **Dec-11**

Frequency	(Freq.in Hz)	(Time: H:M)	(Date:D.M.Y)
1. Maximum frequency	50.50	16:05	31-Dec-11
2. Minimum frequency	48.89	20:08	05-Dec-11
3. Monthly average	49.76		

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-Dec-11	1.730	17-Dec-11	1.910
02-Dec-11	1.650	18-Dec-11	0.640
03-Dec-11	1.650	19-Dec-11	0.640
04-Dec-11	1.400	20-Dec-11	1.830
05-Dec-11	2.180	21-Dec-11	1.640
06-Dec-11	1.740	22-Dec-11	1.010
07-Dec-11	1.740	23-Dec-11	1.850
08-Dec-11	**2.370**	24-Dec-11	1.930
09-Dec-11	0.760	25-Dec-11	1.250
10-Dec-11	1.020	26-Dec-11	1.250
11-Dec-11	**0.530**	27-Dec-11	1.210
12-Dec-11	0.930	28-Dec-11	1.210
13-Dec-11	0.820	29-Dec-11	0.750
14-Dec-11	1.650	30-Dec-11	1.240
15-Dec-11	1.450	31-Dec-11	0.770
16-Dec-11	1.010	**Average FVI**	**0.893**

Annexure-III

Details of Scheduled Bilateral Exchanges within the Region in **Dec-11**

Sl.No.	From	To	Energy (At Seller Injn. Point) (MWH)		Energy (At State Periphery) (MWH)
1	Tripura (Baramura-IV)	Manipur	3534.000000		3351.860747
2	Tripura (Baramura-IV)	Mizoram	3534.000000		3351.860747
3	Tripura (Baramura-V)	Manipur	3387.937500		3213.640240
4	Tripura (Baramura-V)	Mizoram	3387.937500		3213.640240
5	TSECL	MeECL (NVVN)	2050.530000		1938.030000
6	TSECL	Mizoram (TSECL)	971.670000		918.960000
7	ASEB	POWERGRID^	178.283050	^ The actual energy consumed by POWERGRID	

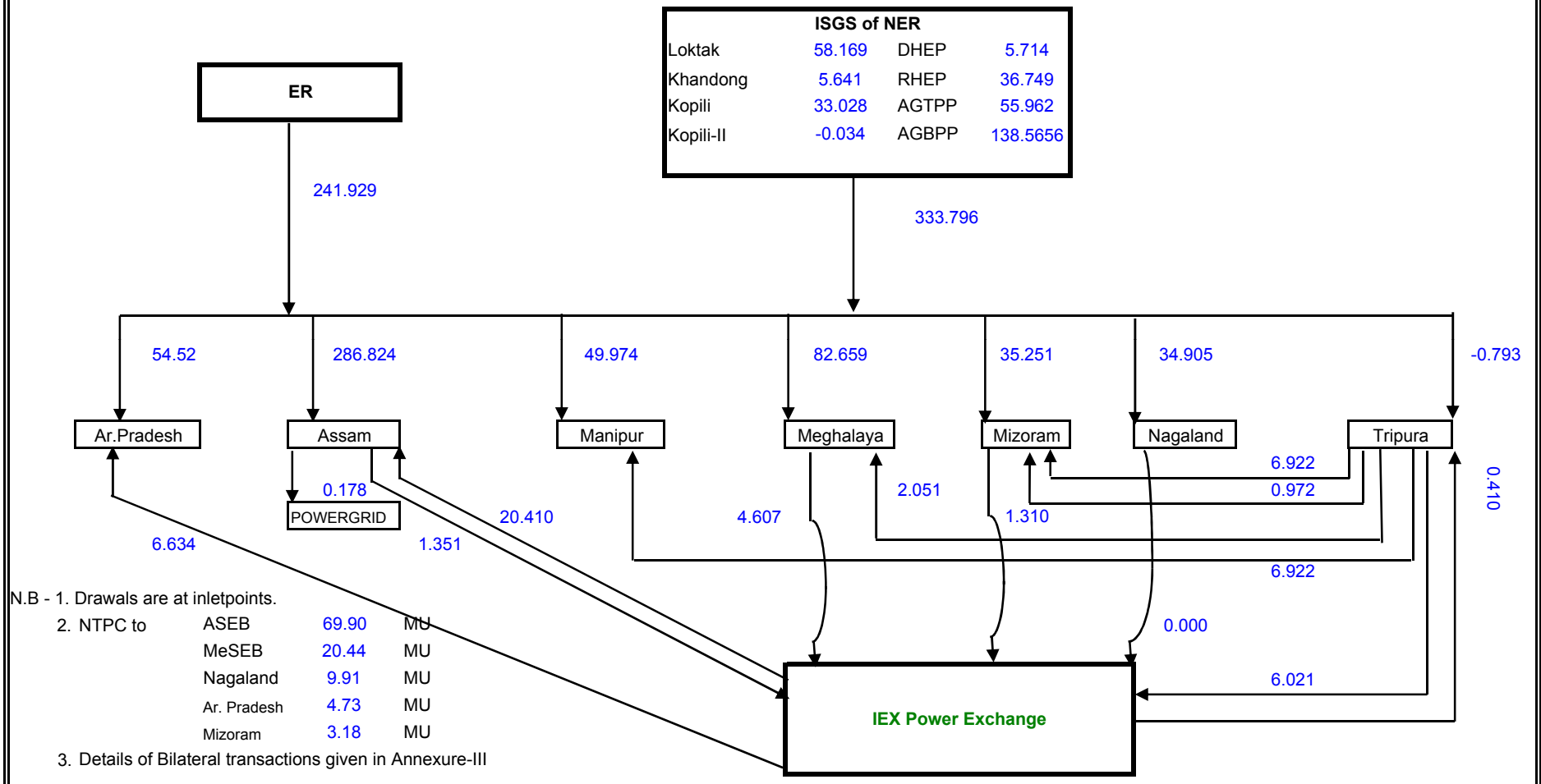
Scheduled Bilateral Exchange with SEBs / Organisations in other Regions

Sl.No.	From	To	Energy (At Seller Periphery) (MWH)	Energy (At NER-ER Periphery) (MWH)	Energy (At Buyer Periphery) (MWH)
1	SPDCL	APDCL (TPCL)	43588.270000	42448.360000	
2	WBSEDCL	MeECL (NVVN)	11160.000000	10868.580000	
3	TSECL	JVVNL (PTCIL)	-4819.920000	-4695.000000	
4	KWHEPS	TSECL (PTC)	175.000000	170.240000	
5	Farakka*	Ar. Pradesh	2570.737650	2520.750000	2456.602063
6	Kahalgaon 1*	Ar. Pradesh	1063.893250	1047.425000	1020.925325
7	Talcher*	Ar. Pradesh	1097.138625	1083.675000	1055.216575
8	Farakka*	Assam	25404.825475	24936.525000	24300.192913
9	Kahalgaon 1*	Assam	8253.303500	8097.600000	7891.109075
10	Kahalgaon 2*	Assam	26977.896000	26468.825000	25780.126338
11	Talcher*	Assam	9263.993875	9117.275000	8876.784025
12	Farakka*	MeECL	6401.555550	6283.650000	6120.219163
13	Kahalgaon 1*	MeECL	2590.218000	2534.500000	2468.992350
14	Kahalgaon 2*	MeECL	8530.560000	8372.700000	8154.850463
15	Talcher*	MeECL	2920.326375	2870.500000	2793.907000
16	Farakka*	Nagaland	5397.013550	5297.850000	5162.240100
17	Kahalgaon 1*	Nagaland	2209.796125	2166.450000	2111.368775
18	Talcher*	Nagaland	2300.410750	2268.900000	2209.133588
19	Farakka*	Mizoram	1723.786400	1695.275000	1651.739800
20	Kahalgaon 1*	Mizoram	704.767250	689.225000	671.638913
21	Talcher*	Mizoram	748.821875	737.250000	717.760888

	Bilateral exchange through IEX Power Exchange (-ve means injection, +ve means drawal)				
22	Ar. Pradesh			6813.400000	6634.480000
23	Assam		-1351.340000	-1320.000000	
24	Assam			20966.000000	20409.550000
25	MeECL		-4607.270000	-4490.400000	
26	Mizoram		-1310.240000	-1278.000000	
27	Tripura		-6021.240000	-5873.000000	
28	Tripura			420.000000	409.940000

Annexure-IV

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



N.B - 1. Drawals are at inletpoints.

2. NTPC to

ASEB	69.90	MU
MeSEB	20.44	MU
Nagaland	9.91	MU
Ar. Pradesh	4.73	MU
Mizoram	3.18	MU

3. Details of Bilateral transactions given in Annexure-III

Exhibit-I

Frequency Duration for December, 2011

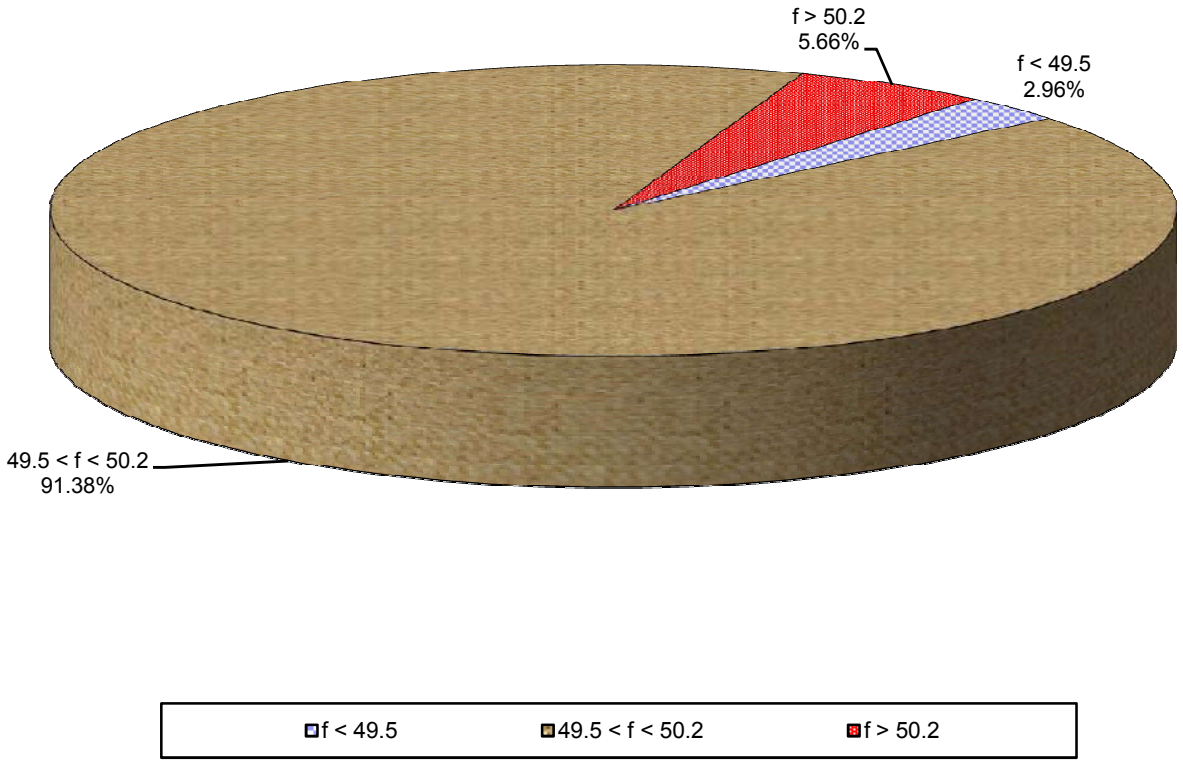


Exhibit-II

FVI Characteristics for December, 2011

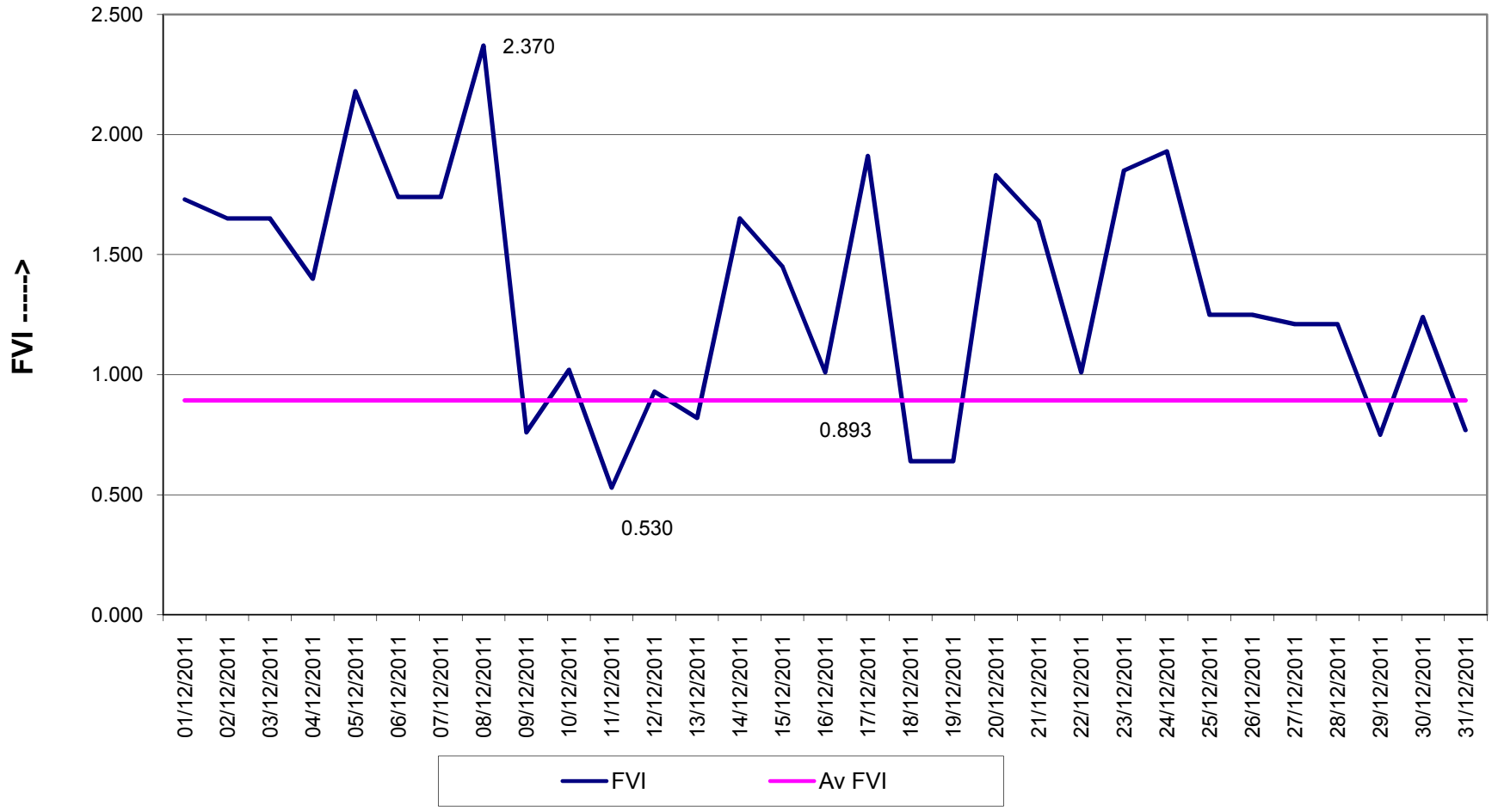


Exhibit-III

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

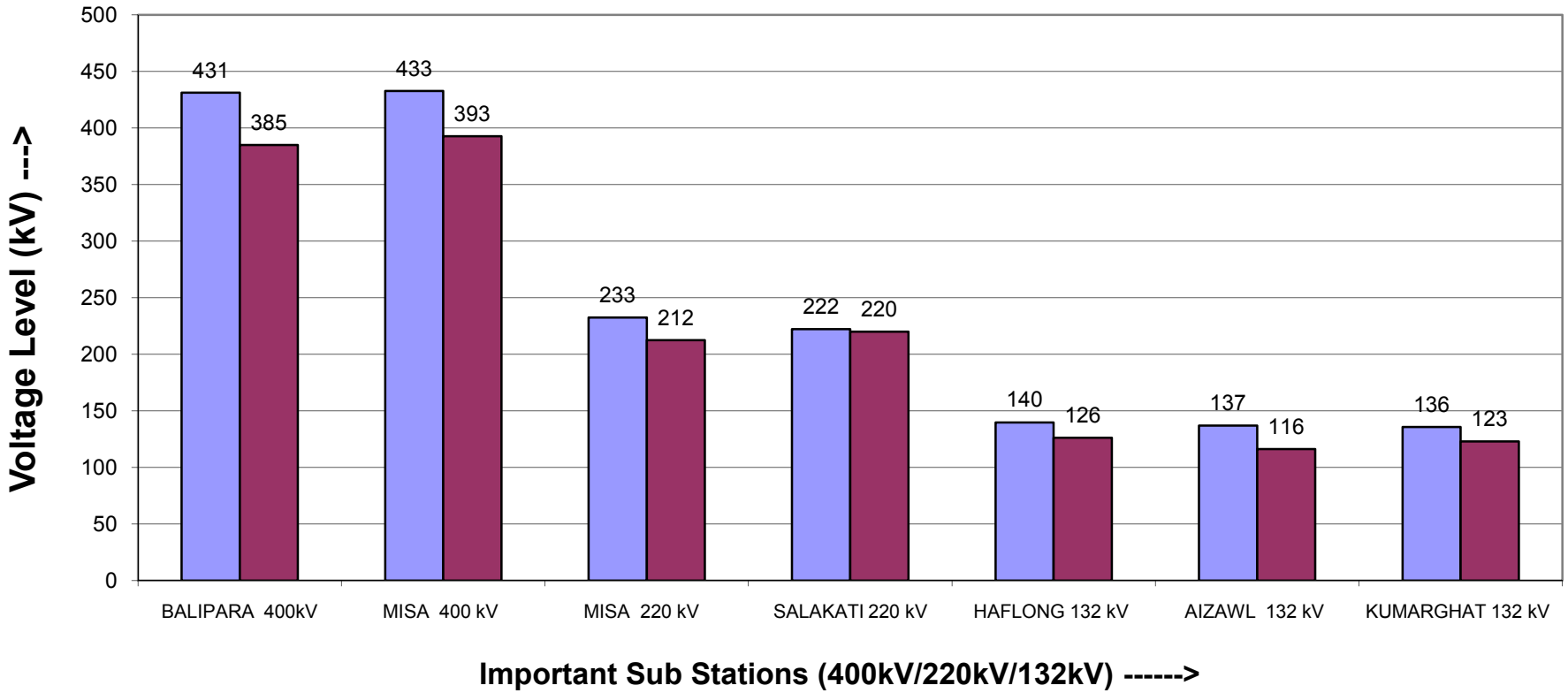


Exhibit-IV

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

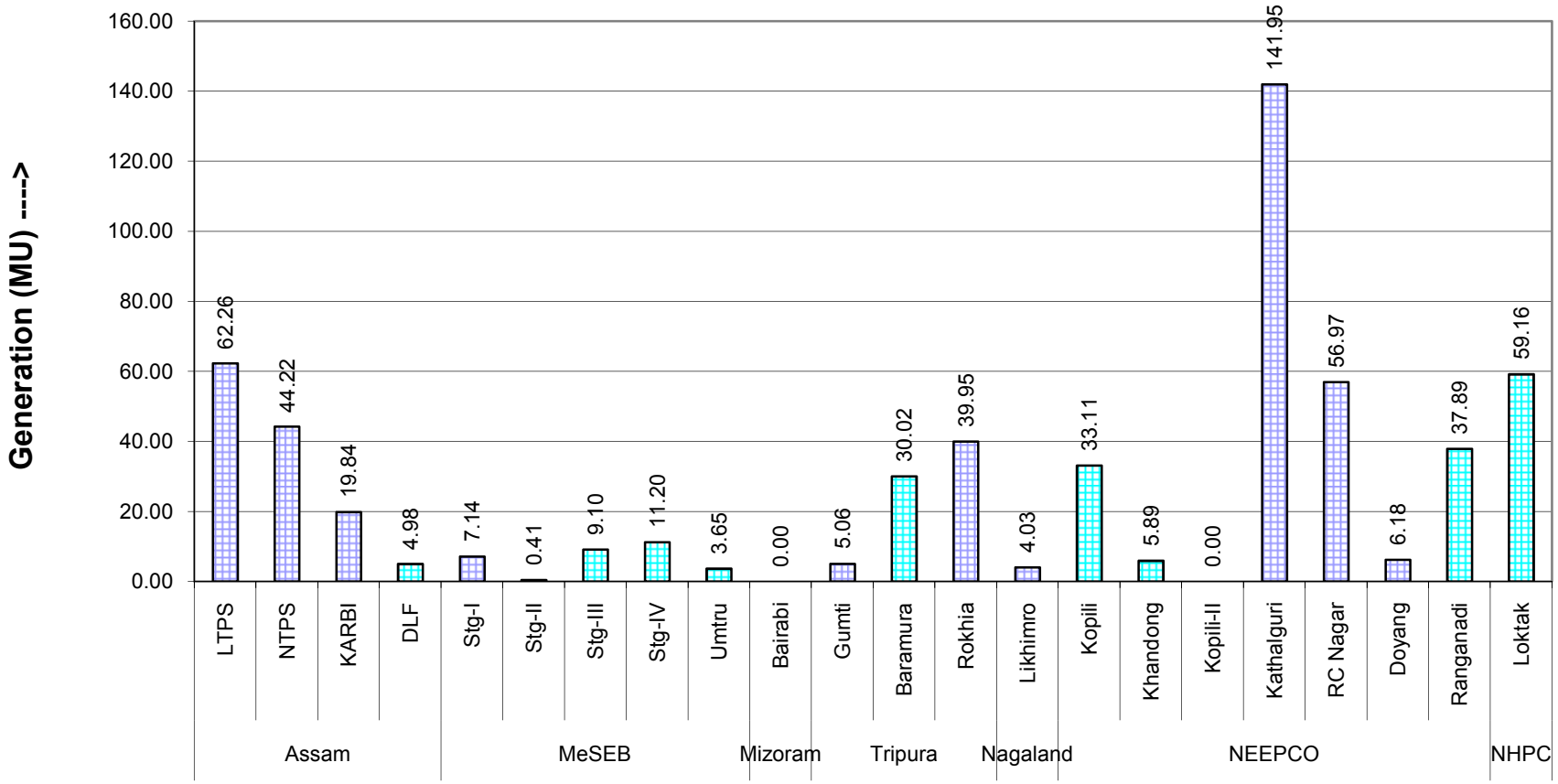


Exhibit-V

NER States Energy Scenario in December, 2011

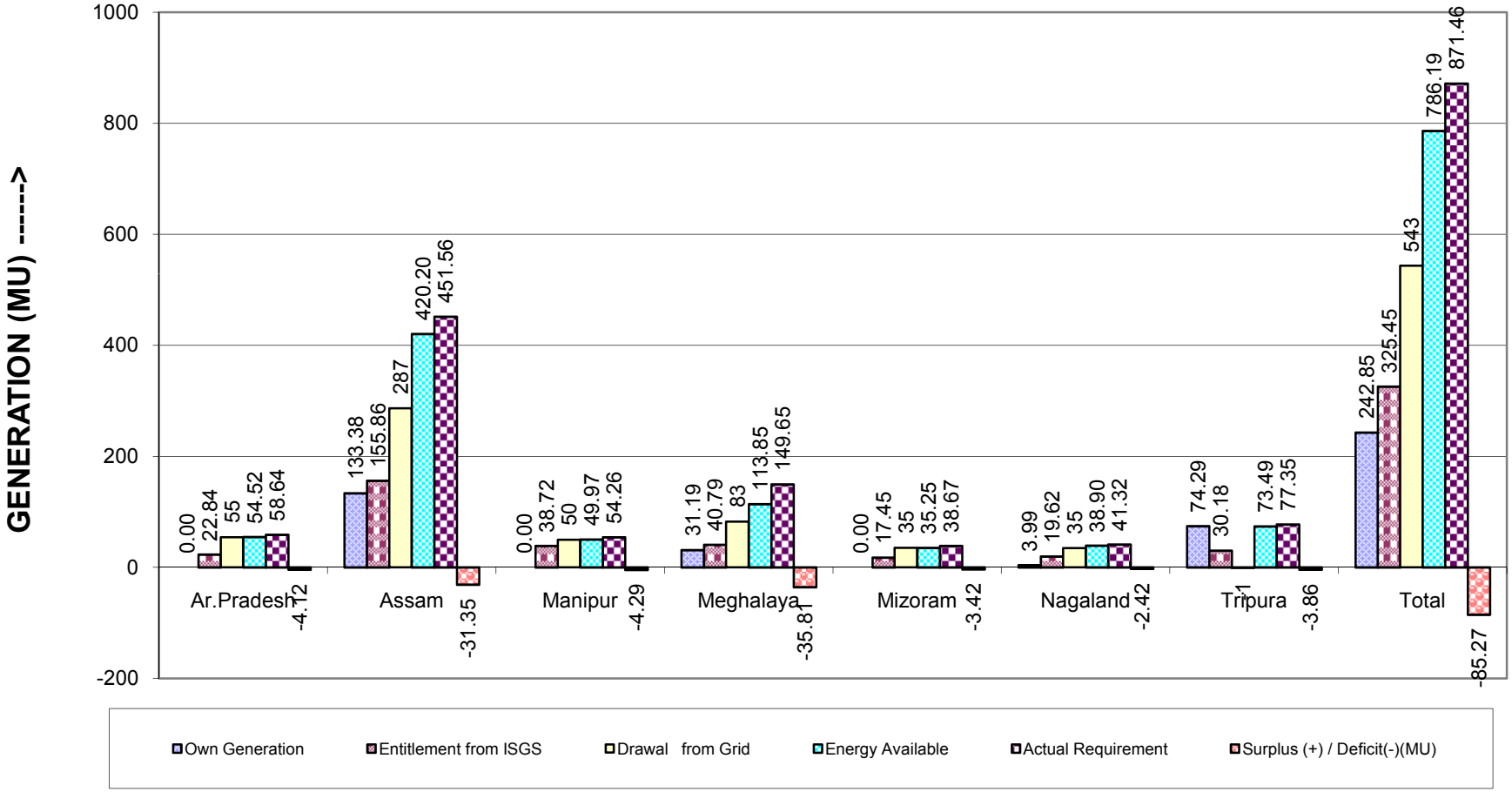


Exhibit-VI

Reservoir Statistics of NER in December, 2011