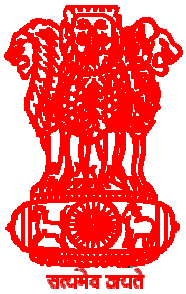


भारत सरकार Government of India
विद्युत मंत्रालय Ministry of Power
केंद्रीय विद्युत प्राधिकरण
Central Electricity Authority

उत्तर पूर्वी क्षेत्रीय विद्युत समिति
North Eastern Regional Power Committee

शिलोंग Shillong

Progress Report

For the month of

July, 2011

CONTENTS

NORTH EASTERN REGIONAL POWER COMMITTEE

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

- The maximum unrestricted demand during the month of July, 2011 was 1920 MW, which was 1758 MW in the month of June, 2011. The peak demand met in NER during the period under review was 1660 MW, which was 1564 MW last month.

- The energy requirement during the month of July, 2011 was 934.53 MU, which was 941.1 MU in the month of June, 2011. The energy availability in NER during the period under review was 848.3 MU, which was 850.23 MU last month.

- The maximum, minimum & average system frequency were 50.47, 48.85 & 49.88 Hz respectively. The maximum, minimum & average FVI were 1.700, 0.130 & 0.593 respectively. The average FVI was more than its previous month's figure. (refer Annex-II).

- Maximum export of power from NER to ER was 466 MW (on 18/07/11 at 5:42 hrs) and that from ER to NER was 358 MW (28/07/11 at 14:27 hrs). Total net energy export during the month was 51.896 MU (to ER).

SALIENT FEATURES OF
NORTH EASTERN REGIONAL GRID FOR JULY, 2011

1	New unit/ transmission lines/Transformers commissioned during this month		**132 kV Rangia-Motonga S/C line**	
2	Number of total grid disturbance during this month		**Nil**	
			Jul-11	**Jul-10**
3	**Installed Capacity** of the Region (in MW)(grid)		2054.12	2033.12
4	**Energy Generation in MU (Gross)::**			
	Thermal		399.750	343.173
	Hydel		260.457	594.005
	Diesel / Oil		0.000	0.000
	Total		660.207	937.178
5	**Demand in MW ::**			
	Registered Peak demand		1920.00	1748.00
	Peak demand met		1660.00	1468.00
	Shortage (% age)		-13.54	-16.02
6	**Regional Energy(Gross) in MU ::**			
	Energy requirement		934.53	899.68
	Energy availability		848.30	818.22
	Surplus (+) / Deficit (-) (% age)		-9.23	-9.05
7	**Inter Regional Energy Exchange in MU ::**			
	NER ----> ER		99.923	130.598
	ER ----> NER		48.027	51.378
	Net Import		-51.896	-79.22
8	**Frequency profile ::**			
	Average frequency (Hz)		49.88	49.81
	Average Frequency Variation Index		0.593	1.063
9	Load Factor (in %)		59.38	62.92

ENERGY GENERATION IN THE REGION FOR THE MONTH OF Jul-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	66.822	66.154	0.000	0.000	62.108	61.487	49.000	47.530	177.930	175.171
Meghalaya	55.314	54.761	0.000	0.000	0.000	0.000	0.000	0.000	55.314	54.761
Mizoram	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Tripura	4.839	4.791	0.000	0.000	66.406	65.742	0.000	0.000	71.245	70.532
Nagaland	11.500	11.385	0.000	0.000	0.000	0.000	0.000	0.000	11.500	11.385
Total (State Sector)									**315.989**	**311.849**
Central Sector :										
NEEPCO :										
Khd+Kop+Kop-II	182.425	180.601	0.000	0.000	0.000	0.000	0.000	0.000	182.425	180.601
K'guri	0	0	0.000	0.000	0	0	144.681	140.340	144.681	140.340
RCNagar	0	0	0	0	48.140	47.659	0	0	48.140	47.659
Doyang	50.744	50.236	0	0	0	0	0	0	50.744	50.236
Ranganadi	197.154	195.182	0	0	0	0	0	0	197.154	195.182
NHPC :										
Loktak	72.927	72.197	0.000	0.000	0.000	0.000	0.000	0.000	72.927	72.197
Total (Central Sector)									696.070	686.216
Total NER	641.725	635.307	0.000	0.000	176.654	174.887	193.681	187.870	**1012.059**	**998.065**

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.	55.04	51.14	3.90	7.08%	100	94	6	6.26%
Assam	206.33	175.17	31.16	15.10%	1095	986	109	9.94%
Manipur	362.68	357.06	5.63	1.55%	100	95	5	5.03%
M'laya	87.06	54.76	32.30	37.10%	319	262	57	17.81%
Mizoram	47.24	43.78	3.46	7.33%	66	56	10	14.51%
Nagaland	16.02	11.39	4.63	28.92%	98	90	8	8.42%
Tripura	160.16	155.00	5.16	3.22%	180	168	12	6.57%
REGION	934.53	848.30	86.24	9.23%	1920	1660	260	13.54%

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	94.00	30/07/2011	49.90	0.28	6	100.28
Assam	986.00	19/07/2011	49.70	8.87	100	1094.87
Manipur	95.00	17/07/2011	49.99	0.03	5	100.03
Meghalaya	262.00	11/07/2011	49.52	3.77	53	318.77
Mizoram	56.00	19/07/2011	49.70	0.50	9	65.50
Nagaland	90.00	07/07/2011	49.90	0.27	8	98.27
Tripura	168.00	05/07/2011	49.44	2.82	9	179.82
REGION	1660.00	19/07/2011	49.70	14.94	245	1919.94

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

ESTIMATION OF ENERGY REQUIREMENT (in MU)

Average Frequency 49.88 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	62.704	5.755	51.140	-17.320	51.140	0.187	3.71	55.037
Assam	175.171	0.000	0.000	0.000	0.000	175.171	0.642	30.52	206.332
Manipur	0.000	321.215	74.171	357.056	-38.330	357.056	1.308	4.32	362.684
M'laya	54.761	0.000	0.000	0.000	0.000	54.761	0.201	32.10	87.062
Mizoram	0.000	69.272	0.000	43.779	-25.493	43.779	0.160	3.30	47.239
Nagaland	11.385	0.000	0.000	0.000	0.000	11.385	0.042	4.59	16.017
Tripura	70.532	88.670	21.853	84.471	-26.052	155.004	0.568	4.59	160.162
REGION	311.849	541.862	101.780	536.446	-107.195	848.295	3.108	83.13	934.533

*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)	
				Jul-11	Jul-10
	STATE SECTOR : HYDRO				
	ASSAM :: HYDRO				
1	KARBI HEP U - 1	50.00	50.00	33.510	31.960
2	KARBI HEP U - 2	50.00	50.00	6.750	33.080
	TOTAL	100.00		40.260	65.040
	MEGHALAYA :: HYDRO				
1	STAGE - 1	36.00	27.00	3.080	6.080
2	STAGE - 2	18.00	18.00	10.690	14.460
3	STAGE - 3	60.00	59.45	14.900	27.300
4	STAGE - 4	60.00	60.20	2.280	2.020
5	UMTRU	11.20	6.31	0.580	0.630
	TOTAL	185.20		31.530	50.490
	NAGALAND :: HYDRO				
6 7 8	LIKIMRO - 1 LIKIMRO - 2 LIKIMRO - 3	24.00	24.00	4.200	11.510
	TOTAL	24.00		4.200	11.510
	TRIPURA :: HYDRO				
9	GUMTI - 1	5.00	Gumti Stn. Peak =8 MW	0.000	0.890
10	GUMTI - 2	5.00		0.451	2.260
11	GUMTI - 3	5.00		1.946	1.530
	TOTAL	15.00		2.397	4.680
	TOTAL STATE (HYDRO) :	324.20		78.387	131.720

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)	
				Jul-11	Jul-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 = 42 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		14.740	15.030
5	BARAMURA - 5	21.00		15.139	0.000
6	ROKHIA - 1	8.00	Rokhia Stn. Peak = 49.8MW	0.000	0.000
7	ROKHIA - 2	8.00		0.000	0.000
8	ROKHIA - 3	8.00		0.000	3.560
9	ROKHIA - 4	8.00		4.142	4.063
10	ROKHIA - 5	8.00		0.000	0.000
11	ROKHIA - 6	8.00		0.000	0.000
12	ROKHIA - 7	21.00		14.250	14.210
13	ROKHIA - 8	21.00		14.866	14.230
	TOTAL	148.50		63.137	51.093
	ASSAM :: THERMAL				
1	LTPS - 1	15.00	LTPS Stn. Peak = 98.6 MW	8.590	6.560
2	LTPS - 2	15.00		8.510	9.370
3	LTPS - 3	15.00		9.540	9.770
4	LTPS - 4	15.00		7.770	7.430
5	LTPS - 5	20.00		12.680	10.150
6	LTPS - 6	20.00		10.370	11.640
7	LTPS - 7	20.00		5.680	7.270
8	NTPS - 1	20.00	NTPS Stn. Peak = 75.5 MW	13.510	5.420
9	NTPS - 2	21.00		14.620	11.170
10	NTPS - 3	21.00		8.730	8.880
11	NTPS - 4	11.00		7.140	5.240
12	NTPS - 5	22.00		0.000	0.000
13	NTPS - 6	22.00		6.680	6.490
14	DLF	24.50		5.130	5.200
	TOTAL	261.50		118.950	104.590
TOTAL STATE THERMAL/GAS :		432.92		182.087	155.683
TOTAL SC GEN(HY+TH/GAS)		**757.12**		**260.474**	**287.403**

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)	
				Jul-11	Jul-10
	CENTRAL SECTOR : HYDRO				
1	KHANDONG - 1	25.00	25.19	9.870	12.230
2	KHANDONG - 2	25.00	22.20	9.240	15.020
3	KOPILI Stg - II	25.00	23.30	10.360	15.120
4	KOPILI - 1	50.00	47.57	12.820	32.350
5	KOPILI - 2	50.00	56.54	18.070	0.000
6	KOPILI - 3	50.00	55.17	29.110	34.630
7	KOPILI - 4	50.00	50.96	17.530	35.570
8	DOYANG -1	25.00	21.73	1.580	18.180
9	DOYANG -2	25.00	21.60	1.630	17.190
10	DOYANG -3	25.00	22.46	1.740	17.990
11	LOKTAK - 1	35.00	29.76	1.880	15.970
12	LOKTAK - 2	35.00	33.04	0.610	23.730
13	LOKTAK - 3	35.00	37.07	1.770	24.150
14	RANGANADI - 1	135.00	138.15	23.180	58.610
15	RANGANADI - 2	135.00	137.82	21.600	70.220
16	RANGANADI - 3	135.00	139.05	21.080	71.330
TOTAL HYDRO :		**860.00**		**182.070**	**462.290**
	CENTRAL SECTOR : THERMAL/GAS				
1	KATHALGURI - 1	33.50	35.83	18.070	19.690
2	KATHALGURI - 2	33.50	31.48	21.290	19.530
3	KATHALGURI - 3	33.50	33.57	21.760	20.300
4	KATHALGURI - 4	33.50	33.92	19.370	19.760
5	KATHALGURI - 5	33.50	32.69	16.890	18.170
6	KATHALGURI - 6	33.50	32.86	20.980	0.000
7	KATHALGURI - 7	30.00	12.10	13.370	15.020
8	KATHALGURI - 8	30.00	29.84	15.300	16.130
9	KATHALGURI - 9	30.00	26.40	14.500	6.020
10	R.C.NAGAR - 1	21.00	22.64	14.392	10.810
11	R.C.NAGAR - 2	21.00	23.67	13.993	13.950
12	R.C.NAGAR - 3	21.00	21.53	13.891	13.800
13	R.C.NAGAR - 4	21.00	22.84	13.857	14.310
TOTAL THERMAL/GAS :		375.00		217.663	187.490
TOTAL CS (HY + TH/GAS) :		1235.000		399.733	649.780
TOTAL NER GEN(HY+TH/GAS) :		**1992.120**		**660.207**	**937.183**

Plant Load Factor (PLF) and Voltage Profile : Jul-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	63.140	70.72
2	NTPS*	AEGCL	117.00	50.680	58.22
3	Baramura	Tripura	58.50	29.879	68.65
4	Rokhia	Tripura	90.00	33.258	49.67
5	AGBPP	NEEPCO	291.00	161.530	**74.61**
6	AGTPP	NEEPCO	84.00	56.133	89.82

*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	420	382
2	MISA 400 kV	425	394
3	MISA 220 kV	228	208
4	SALAKATI 220 kV	237	220
5	HAFLONG 132 kV	136	126
6	AIZAWL 132kV	137	116
7	KUMARGHAT 132kV	135	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	0.10	0.00	99.70	0.20
BALIPARA	0.00	0.00	100.00	0.00

1 **INTER - REGIONAL EXCHANGE :**

All Fig in MU

NER to ER	99.923
ER to NER	48.027
NET IMPORT	-51.896

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

3	**MEETING HELD BY NERPC DURING THIS MONTH**	1. 63rd OCC Meeting was held on 08.07.11 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	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 (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	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 Biswanat	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		1st 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 (Nev	60	Dec-12						

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 Jul-11

Organisation	Actual (MU)	Schedule (MU)	UI Energy (MU)	UI Receivable (Rs. in Lakhs)	UI Payable (Rs. in Lakhs)
Arunachal Pradesh	51.140	60.169	-8.919	285.991	85.381
ASEB	357.056	365.020	-7.964	343.368	154.142
Manipur	43.779	74.965	-31.186	868.598	0.000
MeSEB	84.471	98.570	-14.099	469.219	0.689
Mizoram	29.679	33.698	-4.019	103.806	8.724
Nagaland	36.494	42.968	-6.474	200.907	33.949
Tripura	10.767	13.669	-2.902	126.750	44.850

Entitlement, Schedule, Drawal and UI Charges Jul-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	62.704	5.755	68.459	60.169	51.140	-8.919	2.006
ASEB	321.215	74.171	395.386	365.020	357.056	-7.964	1.892
Manipur	69.272	0.000	69.272	74.965	43.779	-31.186	8.686
MeSEB	88.670	21.853	110.523	98.570	84.471	-14.099	4.685
Mizoram	35.595	3.693	39.287	33.698	29.679	-4.019	0.951
Nagaland	45.121	12.021	57.142	42.968	36.494	-6.474	1.670
Tripura	53.565	0.000	53.565	13.669	10.767	-2.902	0.819

(Source : UI A/c, NERPC)

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

States	Schedule From ISGS(MWH)	Bilateral Schedule from Outside NER (MWH)	Total Schedule (MWH)	Ex.PP. Drawal (MWH)	Tr. Energy (MWH)
Arunachal Pradesh	63120.72	6279.18	69399.89	53090.76	69399.89
ASEB	326636.14	75393.88	402030.01	369875.42	402030.01
Manipur	70370.05		70370.05	45350.78	70370.05
MeSEB	90081.21	22213.50	112294.71	87504.12	112294.71
Mizoram	36171.24		36171.24	30744.66	36171.24
Nagaland	45881.67	12218.68	58100.34	37804.25	58100.34
Tripura	54281.74		54281.74	11153.92	54281.74
Total	686542.76	116105.23	802647.99	635523.92	802647.99

ISGS	Schedule (MWH)	Injection (MWH)
LOKTAK	72039.09	71683.51
KHANDONG	33310.50	33363.74
KOPILI-I	131640.76	131618.96
KOPILI-II	15659.90	15665.65
DHEP	49086.44	49077.17
RHEP	195125.93	197661.83
AGTPP	46847.57	46987.12
AGBPP	142832.59	141361.82
Total	686542.76	687419.79

Source : Provisional REA for the month: Jul-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 2009-10

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	50.0353 *	*As per CERC order dated 05.09.07 in Pet.No 171/2004

HOURLY DATA ON PEAK DEMAND MET DAY

DATE:- 30.07.2011

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	873.47	215	571.21	786.2	42	164.0	122.22	92	99.1	7.45	23.62	22.29	42.01	52.88	347.20	1221.94	1190.16	1580.05	389.9	483.58
2	872.35	219	564.14	783.1	47	193.3	146.62	92	124.6	32.85	27.34	24.70	36.76	65.09	43.36	1229.79	1254.92	1273.20	18.3	854.07
3	873.52	216	549.67	765.7	27	153.0	125.98	92	122.1	30.30	26.55	23.21	35.60	57.24	-4.76	1208.29	1183.33	1203.58	20.3	853.27
4	871.33	218	524.78	742.8	27	154.0	126.96	92	117.5	25.57	28.63	23.10	37.50	58.81	-24.69	1208.21	1162.24	1183.58	21.3	849.99
5	877.49	214	473.57	687.6	27	170.2	143.20	92	109.9	18.22	39.74	24.52	41.14	60.00	-54.72	1210.13	1133.04	1155.47	22.4	855.05
6	876.98	215	444.15	659.1	27	179.6	152.64	92	97.3	5.63	59.25	34.96	57.74	60.78	-44.80	1210.70	1148.87	1165.95	17.1	859.90
7	877.14	217	436.24	653.2	51	205.2	153.69	92	96.9	5.09	67.03	46.25	58.15	58.90	-27.38	1237.42	1185.63	1210.10	24.5	852.67
8	875.12	217	458.58	675.6	51	203.7	152.46	91	102.5	10.98	61.00	48.12	46.95	67.87	-16.44	1234.87	1205.71	1218.49	12.8	862.35
9	870.62	218	478.85	696.9	57	190.3	133.30	92	102.7	11.02	63.99	39.63	40.99	57.32	-31.59	1237.29	1191.77	1205.76	14.0	856.64
10	854.52	218	490.84	708.8	72	204.8	132.81	92	110.3	18.59	58.10	41.00	36.69	60.81	8.96	1236.19	1220.50	1245.20	24.7	829.82
11	854.32	217	532.83	749.8	66	201.3	135.03	91	105.9	14.52	52.28	40.84	33.58	57.96	40.91	1228.98	1241.69	1269.95	28.3	826.06
12	856.71	222	535.61	757.6	66	189.0	122.82	91	107.3	15.88	60.06	33.11	36.77	63.79	29.24	1236.29	1247.61	1265.59	18.0	838.73
13	630.97	225	460.35	685.4	66	170.2	104.10	91	104.4	12.92	61.32	43.11	40.23	61.14	166.41	1013.58	1165.79	1180.04	14.3	616.72
14	628.37	218	474.04	692.0	72	160.8	88.69	91	105.4	14.15	59.08	44.14	57.11	58.13	184.30	1009.68	1176.65	1194.04	17.4	610.98
15	633.96	219	499.16	718.2	62	175.5	113.44	90	115.9	25.73	58.25	47.84	36.80	61.45	226.96	1005.19	1213.90	1232.21	18.3	615.65
16	633.22	220	436.35	656.4	48	153.6	105.71	90	117.3	27.00	62.07	52.21	47.31	61.91	176.47	991.41	1150.75	1167.93	17.2	616.04
17	752.91	220	488.66	708.7	57	165.3	108.37	90	113.7	23.37	61.52	53.45	47.90	71.02	123.47	1120.14	1221.52	1243.72	22.2	730.71
18	879.55	223	559.13	782.1	57	197.7	140.75	90	128.3	38.13	70.10	53.84	59.52	85.65	148.32	1249.61	1377.18	1398.04	20.9	858.70
19	1057.52	224	749.33	973.3	42	174.3	132.40	91	140.1	48.73	83.85	60.22	67.52	74.83	217.41	1414.82	1574.18	1632.35	58.2	999.35
20	1062.76	234	701.33	935.3	78	201.8	123.38	92	141.1	49.34	91.64	58.81	66.52	92.64	152.81	1466.93	1587.84	1619.84	32.0	1030.76
21	1063.75	233	737.18	970.2	87	181.3	94.60	92	143.7	52.05	93.64	55.17	62.65	86.40	160.06	1475.05	1592.98	1635.22	42.2	1021.50
22	983.05	232	691.61	923.6	106	215.0	108.97	92	138.2	46.56	95.31	47.40	65.07	83.48	178.03	1412.78	1568.14	1590.93	22.8	960.26
23	892.82	231	638.98	870.0	81	189.9	108.75	92	139.7	47.96	85.67	38.07	52.49	67.65	145.58	1296.78	1443.53	1442.41	-1.1	893.93
24	759.45	225	631.66	856.7	72	169.7	97.65	92	140.1	48.21	73.46	30.17	46.99	66.74	263.28	1148.35	1383.77	1411.68	27.9	731.54
Max	1063.75	234	749.33	973.33	106	215.0	153.69	92	143.7	52.05	95.31	60.22	67.52	92.64	347.20	1475.05	1592.98	1635.22	389.9	1030.76
Min	628.37	214	436.24	653.24	27	153.0	88.69	90	96.9	5.09	23.62	22.29	33.58	52.88	-54.72	991.41	1133.04	1155.47	-1.1	483.58

HOURLY DATA ON MINIMUM DEMAND MET DAY

DATE: 03.07.2011

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	673.31	235	819.9	584.93	48	144.7	97.18	92	4.88	96.87	26.51	24.78	43.78	53.51	188.81	1047.9	1210.1	1236.72	26.6	646.71
2	609.63	238	586.9	348.90	57	153.8	96.89	92	6.68	98.83	23.70	24.97	41.77	55.88	25.90	996.7	985.9	1022.68	36.8	572.84
3	612.57	237	597.9	360.89	51	153.4	102.38	92	-7.85	84.26	20.60	23.82	38.82	54.25	12.11	992.7	973.0	1004.81	31.8	580.74
4	612.27	238	602.0	364.03	51	148.7	97.77	92	-11.23	80.63	19.74	23.64	38.39	56.64	6.63	993.1	969.8	999.78	30.0	582.31
5	638.42	234	561.2	327.24	51	151.8	100.87	92	-15.84	76.19	38.43	25.78	41.42	56.58	-31.58	1015.4	951.5	983.89	32.4	606.00
6	731.39	236	546.3	310.30	51	151.9	100.87	92	-27.84	64.30	56.07	33.72	51.59	61.68	-110.40	1110.5	965.6	996.97	31.4	699.97
7	642.37	240	563.0	323.02	51	167.4	116.49	92	-25.31	66.66	63.06	49.51	58.28	62.81	34.56	1025.2	1030.7	1059.84	29.1	613.26
8	732.10	248	601.5	353.50	51	185.3	134.46	92	-12.79	79.00	59.91	53.78	60.47	69.00	10.61	1122.8	1109.0	1133.41	24.4	707.67
9	744.88	241	619.9	378.92	56	195.3	138.88	92	-9.45	82.13	64.15	46.37	55.23	67.24	22.72	1133.9	1130.3	1156.62	26.3	718.58
10	735.38	243	625.1	382.11	56	200.0	143.69	92	-10.94	80.69	59.62	37.04	51.16	67.28	15.73	1126.3	1120.9	1142.11	21.2	714.17
11	626.53	246	632.9	386.92	71	198.5	127.30	91	-17.64	73.28	58.51	34.34	47.08	67.16	112.58	1034.7	1111.8	1147.30	35.5	591.04
12	630.41	247	632.1	385.09	71	189.5	118.13	91	-16.09	74.91	62.10	35.91	49.86	64.46	100.92	1039.8	1108.8	1140.75	31.9	598.49
13	625.36	243	615.1	372.11	72	181.6	109.77	91	-12.23	78.96	60.49	36.79	53.32	70.88	58.91	1031.3	1097.1	1090.28	-6.8	632.17
14	636.96	241	581.2	340.23	54	141.8	87.88	91	-12.13	78.84	51.48	39.15	54.87	64.13	21.88	1022.9	1011.5	1044.79	33.3	603.68
15	740.58	246	602.7	356.72	48	140.4	92.57	91	-11.02	79.56	54.77	43.30	56.69	57.95	-60.33	1125.0	1035.4	1064.73	29.3	711.27
16	743.27	247	561.1	314.14	54	161.3	107.46	91	-8.47	82.48	52.50	50.21	58.63	54.34	-75.49	1135.1	1020.6	1059.62	39.0	704.25
17	856.22	246	600.1	354.13	54	175.9	122.15	91	-6.89	84.32	48.67	48.90	57.76	71.18	-123.28	1247.2	1086.9	1123.99	37.1	819.09
18	861.54	241	658.1	417.09	60	171.9	111.91	91	9.85	101.23	60.51	48.89	66.10	74.53	-30.38	1253.9	1181.3	1223.66	42.4	819.15
19	980.71	248	833.1	585.07	56	183.3	127.62	92	68.33	160.77	80.37	55.12	78.79	88.91	166.94	1376.9	1480.4	1543.91	63.5	917.19
20	1039.79	249	871.1	622.11	63	180.4	116.97	87	71.79	158.59	84.54	52.21	73.76	91.66	121.75	1439.0	1512.2	1560.83	48.6	991.21
21	1038.68	246	885.5	639.52	63	174.1	111.00	92	46.52	138.95	72.36	50.18	72.19	89.22	87.45	1440.2	1482.5	1527.75	45.2	993.45
22	1028.71	243	795.2	552.23	66	181.4	114.96	92	25.61	118.05	73.34	41.52	62.19	79.63	-42.72	1430.6	1351.4	1387.98	36.6	992.10
23	1043.70	244	740.5	496.46	60	170.7	110.40	92	34.41	126.34	66.38	29.33	55.24	68.71	-147.84	1439.9	1257.1	1292.10	35.0	1008.73
24	1041.30	243	667.1	424.09	54	148.6	94.83	92	15.38	107.28	53.70	24.38	46.61	63.33	-289.69	1430.0	1111.0	1140.34	29.3	1011.96
Max	1043.70	249	885.5	639.52	72	200.0	143.69	92	71.79	160.77	84.54	55.12	78.79	91.66	188.81	1440.2	1512.2	1560.83	63.5	1011.96
Min	609.63	234	546.3	310.30	48	140.4	87.88	87	-27.84	64.30	19.74	23.64	38.39	53.51	-289.69	992.7	951.5	983.89	-6.8	572.84

ANNEXURES
&
EXHIBITS

Annexure-I

RESERVOIR PARTICULARS OF THE MONTH : **Jul-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	719.30	21.93	717.15	19.58
KOPILI	609.5 M	592.83 M	608.82	94.30	609.11	98.20
LOKTAK	768.5 M	766.2 M	768.63	250.00	769.23	250.00
BARAPANI	3220 Ft	3150 Ft	3199.27	29.31	3204.65	33.38
GUMTI	93.55 M	83.6 M	86.80	5.72	87.18	6.39
DOYANG	333 M	306 M	317.25	17.00	324.05	36.10

Annexure-II

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

Frequency	(Freq.in Hz)	(Time: H:M)	(Date:D.M.Y)
1. Maximum frequency	50.47	17:34	03/07/2011
2. Minimum frequency	48.85	19:43	25/07/2011
3. Monthly average	49.88		

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

f < 49.5	49.5 < f < 50.2	f >50.2
3.59	93.73	2.68

Daily Frequency Variation Index :

DATE	FVI	DATE	FVI
01-Jul-11	0.570	17-Jul-11	0.150
02-Jul-11	1.120	18-Jul-11	0.220
03-Jul-11	0.390	19-Jul-11	0.410
04-Jul-11	1.470	20-Jul-11	0.220
05-Jul-11	1.020	21-Jul-11	0.360
06-Jul-11	0.760	22-Jul-11	0.580
07-Jul-11	0.380	23-Jul-11	0.460
08-Jul-11	0.460	24-Jul-11	0.460
09-Jul-11	0.236	25-Jul-11	1.590
10-Jul-11	0.340	26-Jul-11	**1.700**
11-Jul-11	0.560	27-Jul-11	1.090
12-Jul-11	1.100	28-Jul-11	0.490
13-Jul-11	0.170	29-Jul-11	0.470
14-Jul-11	0.340	30-Jul-11	0.470
15-Jul-11	**0.130**	31-Jul-11	0.360
16-Jul-11	0.310	**Average FVI**	**0.593**

Annexure-III

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

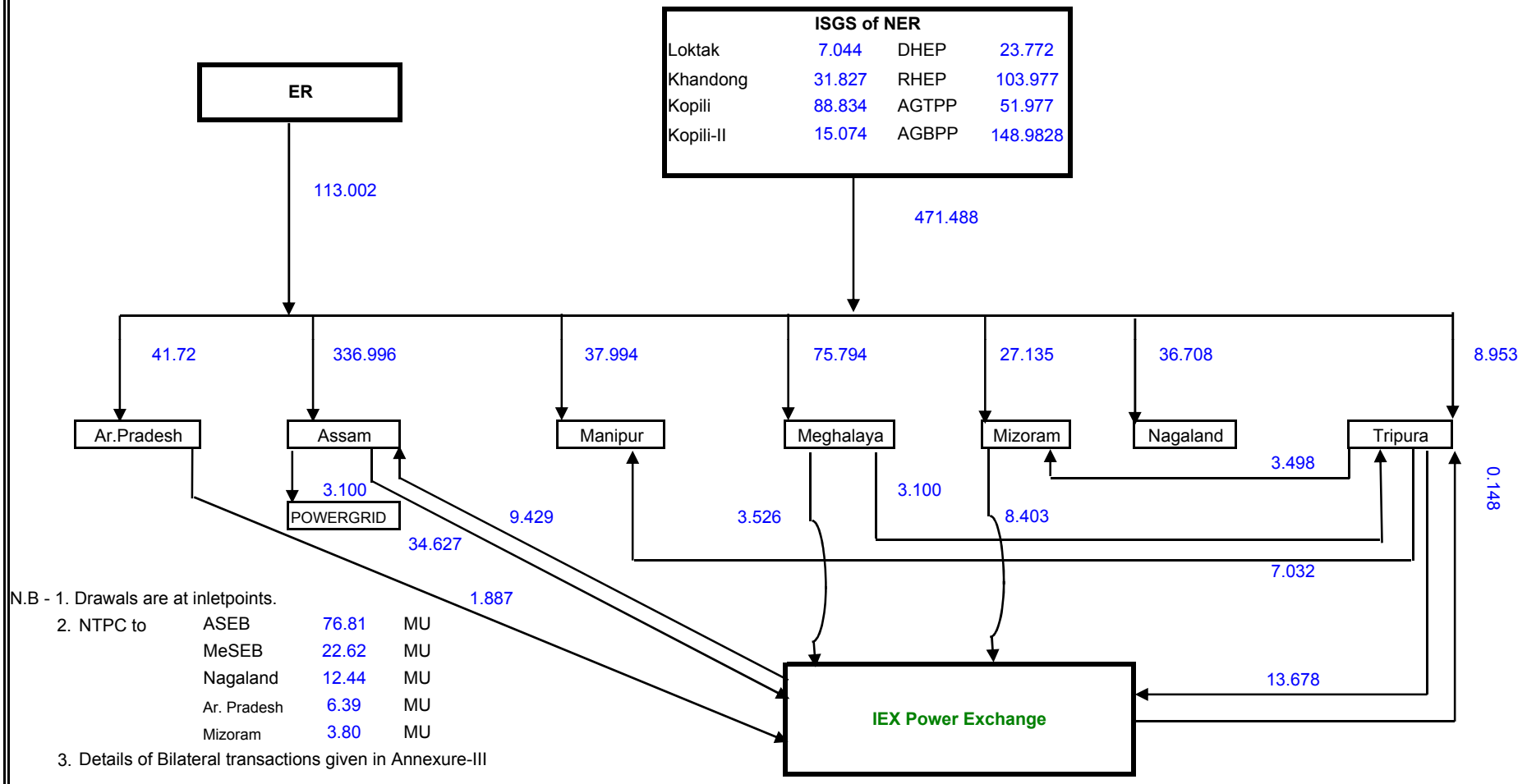
Sl.No.	From	To	Energy (At Seller Injn. Point) (MWH)		Energy (At State Periphery) (MWH)
1	Tripura(Baramura-IV)	Manipur	3498.000000		3386.101827
2	Tripura(Baramura-IV)	Mizoram	3498.000000		3386.101827
3	Tripura(Baramura-V)	Manipur	3534.000000		3420.923628
4	MeECL	TSECL (NVVN)	3100.000000		3001.050000
5	ASEB	POWERGRID^	176.467000	^ 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	AP	GETCO (IEXL)	217.500000	214.245000	
2	AP	KSEB (IEXL)	2100.000000	2067.800000	
3	AP	KSEB (APPCL)	50.000000	49.280000	
4	AP	APPCC	91.000000	89.690000	
5	AP	APTRANSCO (APPC	2823.000000	2773.360000	
6	MeECL	CSPDCL (NVVN)	3900.000000	3841.170000	
7	TSECL	PSPCL (NVVN)	17976.000000	17687.040000	
8	Farakka*	Ar. Pradesh	3763.260100	3698.825000	3639.019475
9	Kahalgaon 1*	Ar. Pradesh	1535.465550	1509.525000	1485.212438
10	Talcher*	Ar. Pradesh	1089.413750	1070.825000	1053.495463
11	Farakka*	Assam	28130.997600	27601.400000	27155.095588
12	Kahalgaon 1*	Assam	7658.802200	7516.125000	7395.053513
13	Kahalgaon 2*	Assam	34956.402800	34306.825000	33748.001988
14	Talcher*	Assam	6066.137800	5969.525000	5872.969988
15	Farakka*	MeECL	6804.396575	6673.925000	6566.017588
16	Kahalgaon 1*	MeECL	2792.872200	2744.175000	2699.977150
17	Kahalgaon 2*	MeECL	11053.408000	10858.450000	10681.588325
18	Talcher*	MeECL	1968.099250	1936.950000	1905.612238
19	Farakka*	Nagaland	7318.078825	7184.925000	7068.745088
20	Kahalgaon 1*	Nagaland	3003.130400	2953.525000	2905.956475
21	Talcher*	Nagaland	2113.814750	2080.225000	2046.568463
22	Farakka*	Mizoram	2246.983675	2213.650000	2177.855238
23	Kahalgaon 1*	Mizoram	904.944150	894.625000	880.219813
24	Talcher*	Mizoram	651.172200	644.875000	634.439013
	Bilateral exchange through IEX Power Exchange (-ve means injection, +ve means drawal)				
25	Arunachal Pradesh		-1887.140000	-1856.100000	
26	Assam		-34627.060000	-34080.600000	
27	Assam			9853.140000	9429.100000
28	MeECL		-3526.410000	-3469.450000	
29	Mizoram		-8403.150000	-8267.000000	
30	Tripura		-13677.530000	-13459.000000	
31	Tripura			150.000000	147.620000

Annexure-IV

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



N.B - 1. Drawals are at inletpoints.

2. NTPC to

ASEB	76.81	MU
MeSEB	22.62	MU
Nagaland	12.44	MU
Ar. Pradesh	6.39	MU
Mizoram	3.80	MU

3. Details of Bilateral transactions given in Annexure-III

Exhibit-I

Frequency Duration for July, 2011

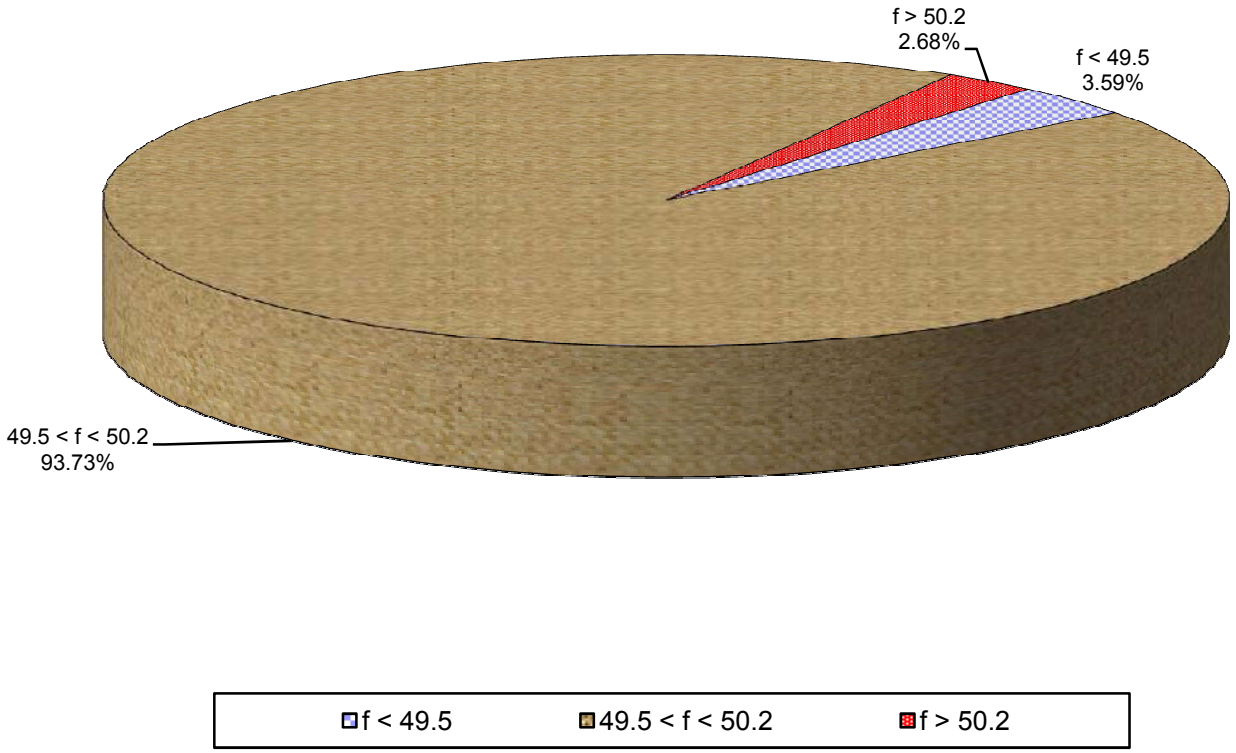


Exhibit-II

FVI Characteristics for July, 2011

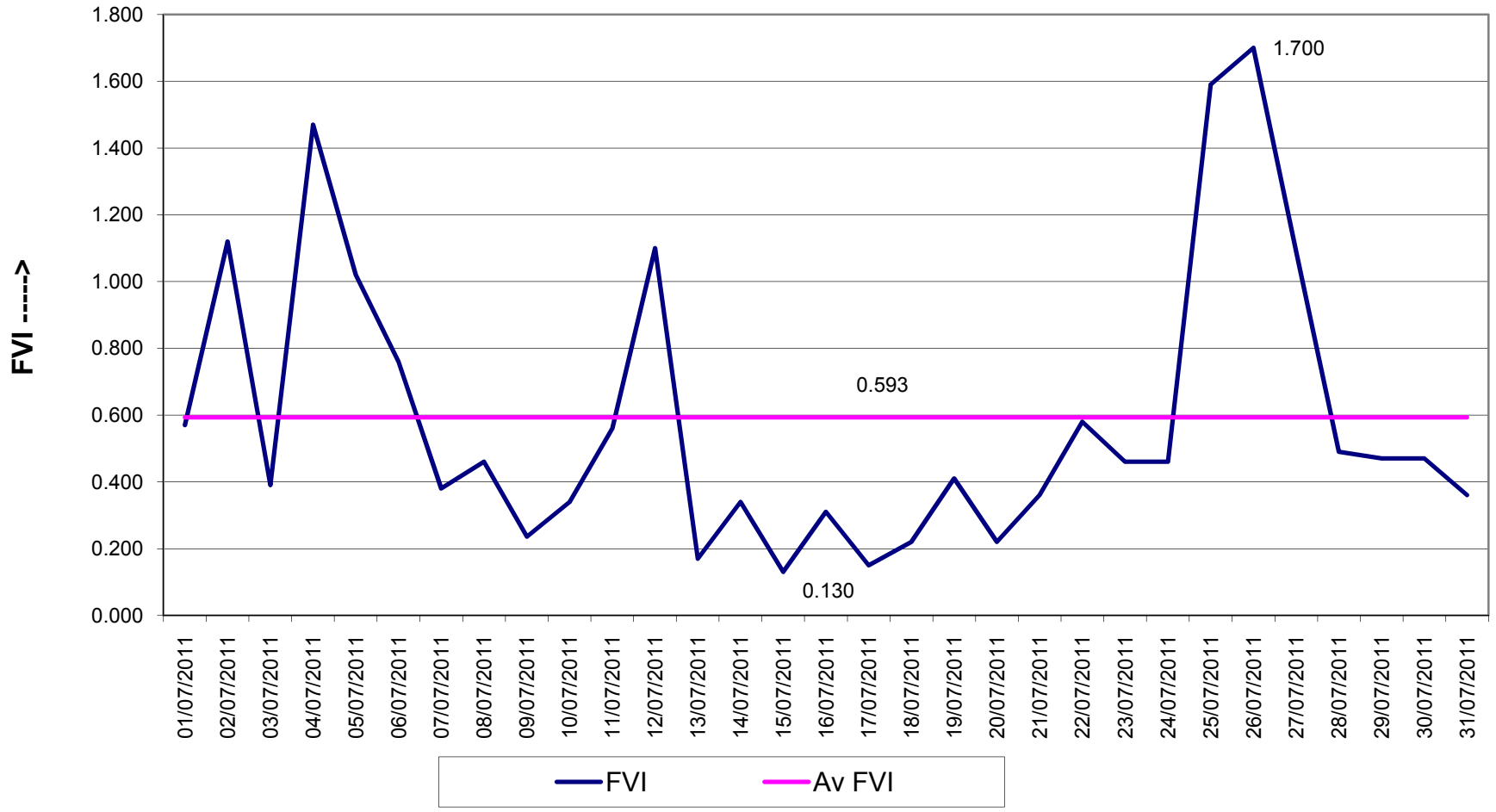


Exhibit-III

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

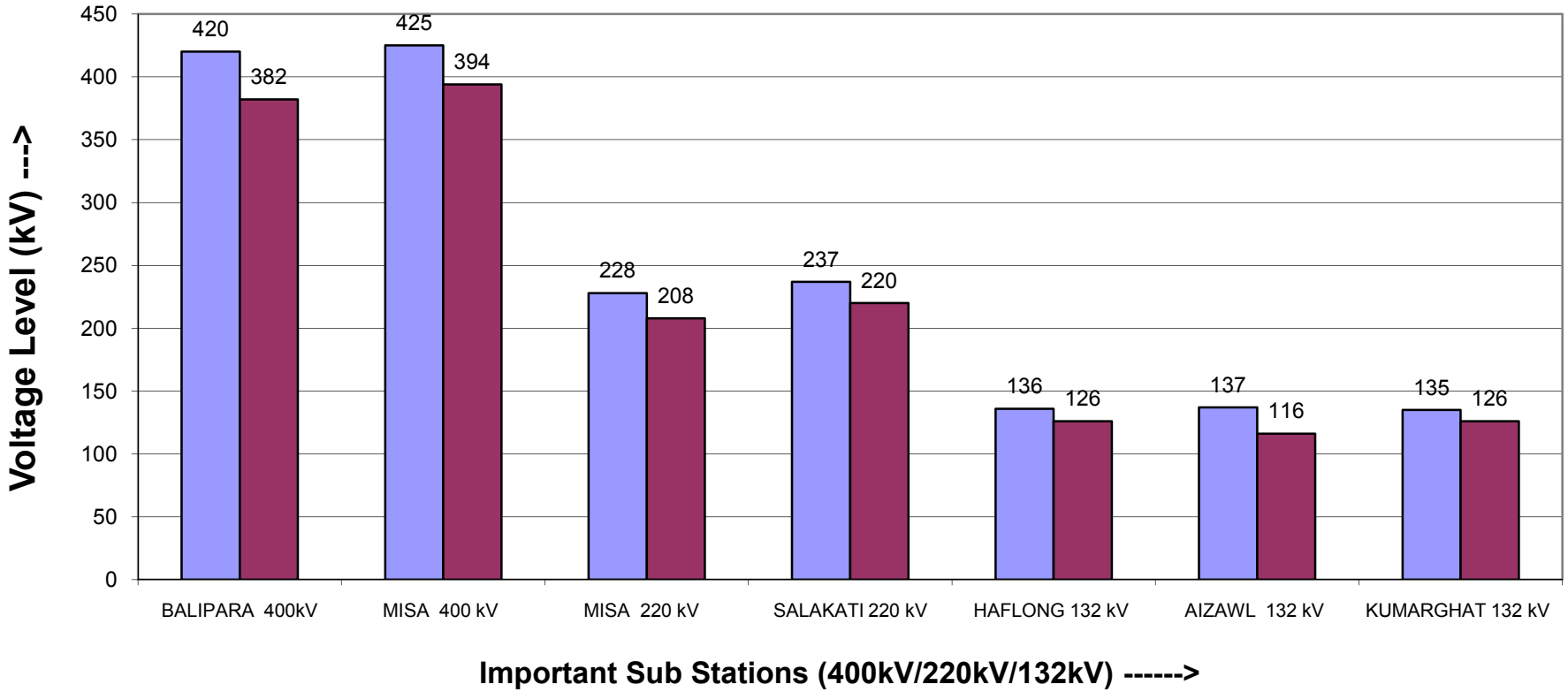


Exhibit-IV

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

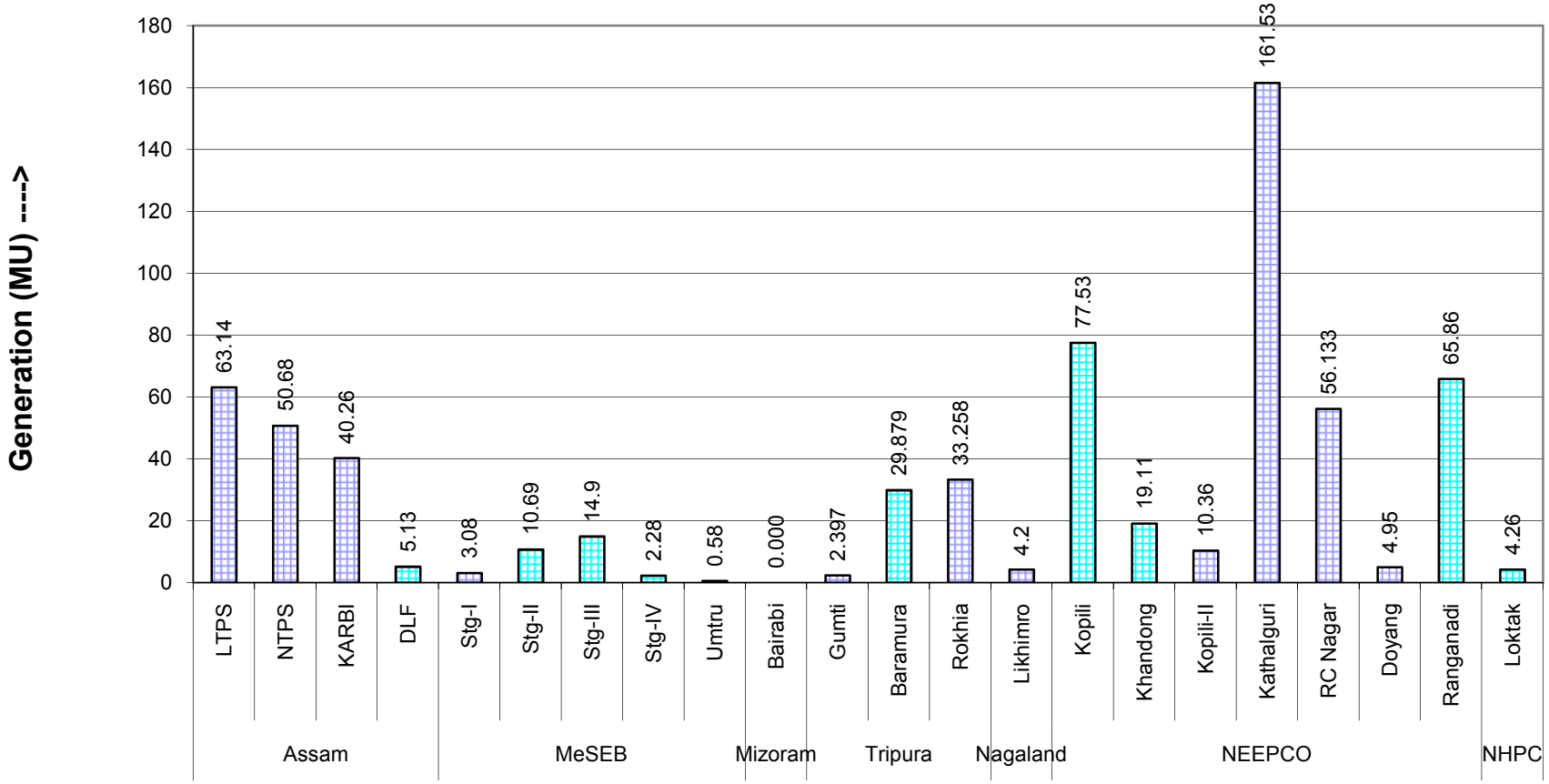


Exhibit-V

NER States Energy Scenario in July, 2011

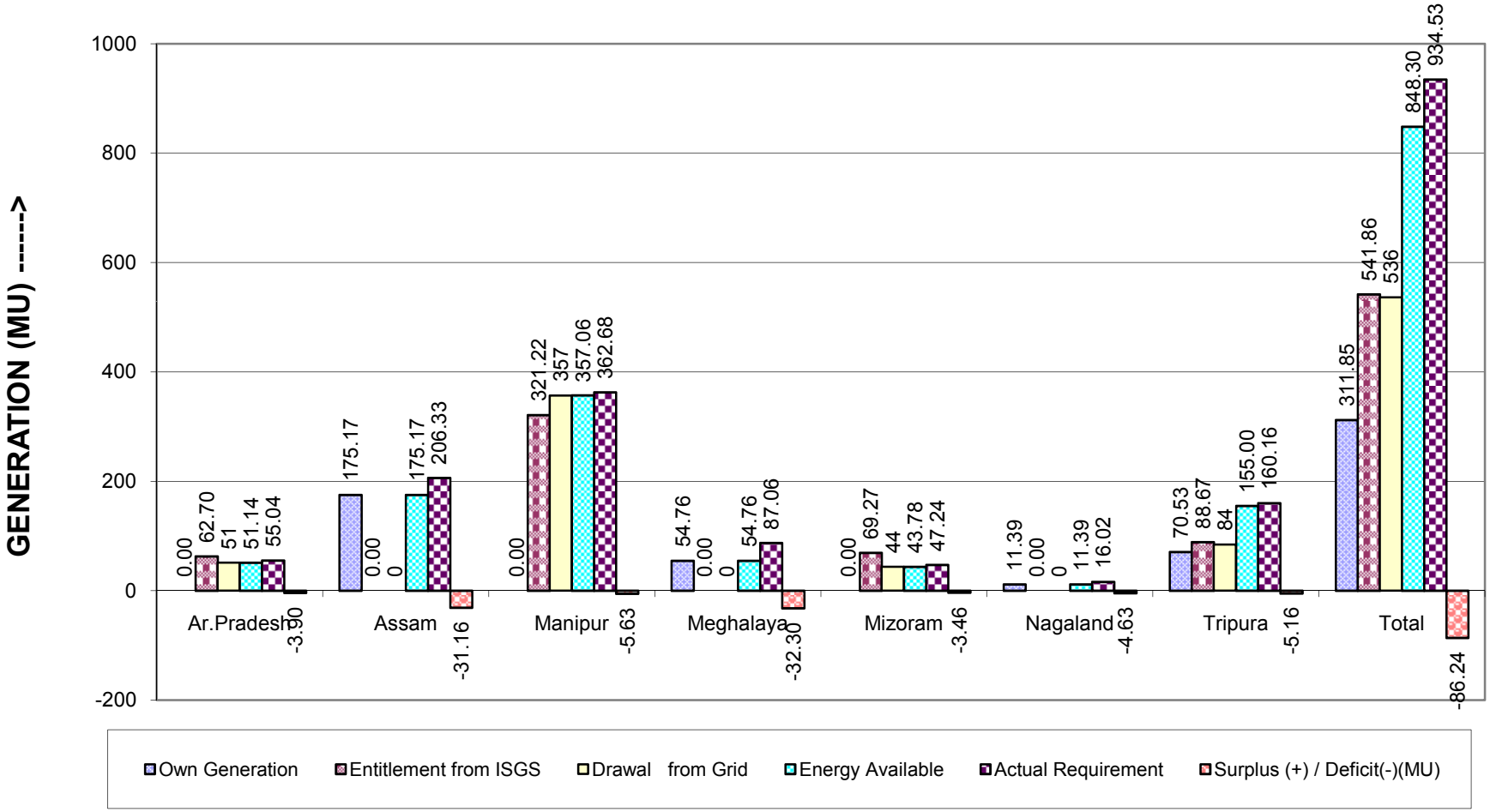


Exhibit-VI

Reservoir Statistics of NER in July, 2011