

भारत सरकार Government of India
शक्ति विभाग Ministry of Power
केन्द्रीय बिजली प्राधिकरण
Central Electricity Authority

उत्तर-पूर्व क्षेत्रीय बिजली प्राधिकरण
North Eastern Regional Power Committee
शिल्लॉग Shillong

Progress Report

For the month of

July, 2012

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 July, 2012

- ❖ The maximum unrestricted demand during the month of July, 2012 was 1946 MW, which was 1988 MW in the month of June, 2012. The peak demand met in NER during the period under review was 1762 MW, which was 1770 MW last month.
- ❖ The energy requirement during the month of July, 2012 was 1044.64 MU, which was 947.99 MU in the month of June, 2012. The energy availability in NER during the period under review was 972.08 MU, which was 872.76 MU last month.
- ❖ The maximum, minimum & average system frequency were 51.00, 47.44 & 49.72 Hz respectively. The maximum, minimum & average FVI were 4.65, 0.41 & 1.858 respectively. The average FVI was more than its previous month's figure. (refer Annex-II).
- ❖ Maximum export of power from NER to ER was 338 MW (on 29/07/12 at 04:47 hrs) and that from ER to NER was 372 MW (28/07/12 at 21:03 hrs). Total net energy import during the month was 64.06 MU (from ER).

**SALIENT FEATURES OF
NORTH EASTERN REGIONAL GRID FOR JULY, 2012**

		<div style="display: flex; justify-content: space-around;"> Nil One </div>	
		Jul-12	Jul-11
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)	2188.82	2054.12
4	Energy Generation in MU (Gross)::		
	Thermal	333.385	399.750
	Hydel	428.392	260.457
	Diesel / Oil	0.000	0.000
	Total	761.776	660.207
5	Demand in MW ::		
	Registered Peak demand	1946.00	1920.00
	Peak demand met	1762.00	1660.00
	Shortage (% age)	-9.46	-13.54
6	Regional Energy(Gross) in MU ::		
	Energy requirement	1044.64	1011.76
	Energy availability	972.08	925.24
	Surplus (+) / Deficit (-) (% age)	-6.95	-8.55
7	Inter Regional Energy Exchange in MU ::		
	NER ----> ER	20.294	99.923
	ER ----> NER	84.355	48.027
	Net Import	64.061	-51.90
8	Frequency profile ::		
	Average frequency (Hz)	49.72	49.88
	Average Frequency Variation Index	1.487	0.593
9	Load Factor (in %)	67.14	64.77

ENERGY GENERATION IN THE REGION FOR THE MONTH OF Jul-12

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	33.384	33.050	0.000	0.000	88.428	87.544	42.660	41.380	164.472	161.974
Meghalaya	74.917	74.168	0.000	0.000	0.000	0.000	0.000	0.000	74.917	74.168
Mizoram	4.133	4.092	0.000	0.000	0.000	0.000	0.000	0.000	4.133	4.092
Tripura	5.211	5.159	0.000	0.000	53.748	53.210	0.000	0.000	58.959	58.369
Nagaland	14.105	13.964	0.000	0.000	0.000	0.000	0.000	0.000	14.105	13.964
Total (State Sector)									316.586	312.567
Central Sector :										
NEEPCO :										
Khd+Kop+Kop-II	116.587	115.421	0.000	0.000	0.000	0.000	0.000	0.000	116.587	115.421
K'guri	0	0	0.000	0.000	0	0	136.790	132.686	136.790	132.686
RCNagar	0	0	0	0	56.496	55.931	0	0	56.496	55.931
Doyang	33.405	33.071	0	0	0	0	0	0	33.405	33.071
Ranganadi	222.118	219.897	0	0	0	0	0	0	222.118	219.897
NHPC :										
Loktak	62.719	62.092	0.000	0.000	0.000	0.000	0.000	0.000	62.719	62.092
Total (Central Sector)									628.115	619.098
Total NER	566.579	560.913	0.000	0.000	198.672	196.685	179.450	174.066	944.701	931.665

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.	51.09	48.94	2.15	4.21%	112	110	3	2.44%
Assam	611.38	564.65	46.73	7.64%	1109	1072	37	3.35%
Manipur	51.08	48.60	2.48	4.86%	117	112	4	3.53%
M'laya	147.20	137.36	9.84	6.69%	280	279	1	0.35%
Mizoram	33.27	31.15	2.12	6.36%	65	61	4	6.06%
Nagaland	52.96	49.98	2.98	5.63%	96	94	1	1.45%
Tripura	97.66	91.40	6.26	6.41%	181	178	3	1.77%
REGION	1044.64	972.08	72.56	6.95%	1946	1762	184	9.46%

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	109.75	23/07/2012	49.85	0.49	2	112.49
Assam	1071.56	16/07/2012	49.73	8.68	28	1108.68
Manipur	112.44	07/07/2012	49.54	1.55	3	116.55
Meghalaya	279.00	31/07/2012	50.24	-2.01	3	279.99
Mizoram	60.91	07/07/2012	49.54	0.84	3	64.84
Nagaland	94.38	16/07/2012	49.73	0.76	1	95.76
Tripura	178.23	16/07/2012	49.73	1.44	2	181.44
REGION	1762.00	10/07/2012	49.62	20.09	164	1946.09

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

ESTIMATION OF ENERGY REQUIREMENT (in MU)

Average Frequency 49.72 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	60.665	3.318	48.944	-15.039	48.944	0.411	1.74	51.094
Assam	161.974	279.657	63.717	402.676	59.302	564.650	4.743	41.99	611.383
Manipur	0.000	61.181	0.000	48.597	-12.583	48.597	0.408	2.07	51.077
M'laya	74.168	63.061	20.537	63.193	-20.406	137.361	1.154	8.69	147.205
Mizoram	4.092	31.860	2.417	27.059	-7.217	31.151	0.262	1.86	33.268
Nagaland	13.964	37.884	7.343	36.013	-9.214	49.977	0.420	2.56	52.958
Tripura	58.369	49.141	0.000	33.031	-16.110	91.400	0.768	5.49	97.658
REGION	312.567	583.449	97.332	659.514	-21.267	972.080	8.165	64.40	1044.643

*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)	
				Jul-12	Jul-11
STATE SECTOR : HYDRO					
ASSAM :: HYDRO					
1	KARBI HEP U - 1	50.00	50.70	18.139	33.510
2	KARBI HEP U - 2	50.00	4.60	7.597	6.750
TOTAL		100.00		25.736	40.260
MEGHALAYA :: HYDRO					
1	STAGE - 1	36.00	27.20	7.138	3.080
2	STAGE - 2	18.00	19.00	3.767	10.690
3	STAGE - 3	60.00	58.77	11.012	14.900
4	STAGE - 4	60.00	60.26	13.276	2.280
5	UMTRU	11.20	12.00	3.525	0.580
TOTAL		185.20		38.719	31.530
NAGALAND :: HYDRO					
6	LIKIMRO - 1				
7	LIKIMRO - 2	24.00	24.00	7.741	4.200
8	LIKIMRO - 3				
TOTAL		24.00		7.741	4.200
TRIPURA :: HYDRO					
9	GUMTI - 1	5.00	Gumti Stn. Peak = 0 MW	0.000	0.000
10	GUMTI - 2	5.00		1.380	0.451
11	GUMTI - 3	5.00		1.965	1.946
TOTAL		15.00		3.346	2.397
TOTAL STATE (HYDRO) :		324.20		75.541	78.387

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)	
				Jul-12	Jul-11
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 = 20.9 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		14.610	14.740
5	BARAMURA - 5	21.00		14.610	15.139
6	ROKHIA - 1	8.00	Rokhia Stn. Peak = 49.4MW	0.000	0.000
7	ROKHIA - 2	8.00		0.000	0.000
8	ROKHIA - 3	8.00		0.000	0.000
9	ROKHIA - 4	8.00		3.743	4.142
10	ROKHIA - 5	8.00		0.000	0.000
11	ROKHIA - 6	8.00		4.863	0.000
12	ROKHIA - 7	21.00		0.000	14.250
13	ROKHIA - 8	21.00		14.548	14.866
	TOTAL	148.50		52.374	63.137
ASSAM :: THERMAL					
1	LTPS - 1	15.00	0	0.000	8.590
2	LTPS - 2	15.00	13.9	6.600	8.510
3	LTPS - 3	15.00	0.0	0.000	9.540
4	LTPS - 4	15.00	14.8	6.806	7.770
5	LTPS - 5	20.00	20.9	12.975	12.680
6	LTPS - 6	20.00	76.6	15.031	10.370
7	LTPS - 7	20.00	20.2	11.957	5.680
8	NTPS - 1	20.00	20.0	8.612	13.510
9	NTPS - 2	21.00	20.5	11.455	14.620
10	NTPS - 3	21.00	15.0	7.726	8.730
11	NTPS - 4	11.00	14.4	0.542	7.140
12	NTPS - 5	22.00	0.0	0.000	0.000
13	NTPS - 6	22.00	13.5	6.947	6.680
14	DLF	24.50	6.8	4.527	5.130
	TOTAL	261.50		93.178	118.950
TOTAL STATE THERMAL/GAS :		432.92		145.552	182.087
TOTAL SC GEN(HY+TH/GAS)		757.12		221.093	260.474

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)	
				Jul-12	Jul-11
CENTRAL SECTOR : HYDRO					
1	KHANDONG - 1	25.00	29.38	16.282	9.870
2	KHANDONG - 2	25.00	24.67	5.100	9.240
3	KOPILI Stg - II	25.00	27.00	16.651	10.360
4	KOPILI - 1	50.00	50.18	25.343	12.820
5	KOPILI - 2	50.00	55.76	24.970	18.070
6	KOPILI - 3	50.00	46.46	10.760	29.110
7	KOPILI - 4	50.00	51.18	28.348	17.530
8	DOYANG -1	25.00	17.86	4.176	1.580
9	DOYANG -2	25.00	16.96	3.670	1.630
10	DOYANG -3	25.00	17.93	4.113	1.740
11	LOKTAK - 1	35.00	38.83	6.101	1.880
12	LOKTAK - 2	35.00	37.76	5.532	0.610
13	LOKTAK - 3	35.00	38.37	14.893	1.770
14	RANGANADI - 1	135.00	140.00	64.994	23.180
15	RANGANADI - 2	135.00	136.03	61.450	21.600
16	RANGANADI - 3	135.00	140.72	60.468	21.080
TOTAL HYDRO :		860.00		352.850	182.070
CENTRAL SECTOR : THERMAL/GAS					
1	KATHALGURI - 1	33.50	33.19	6.881	18.070
2	KATHALGURI - 2	33.50	32.42	13.652	21.290
3	KATHALGURI - 3	33.50	34.48	21.417	21.760
4	KATHALGURI - 4	33.50	33.54	21.670	19.370
5	KATHALGURI - 5	33.50	34.89	19.939	16.890
6	KATHALGURI - 6	33.50	35.54	19.651	20.980
7	KATHALGURI - 7	30.00	0.00	0.000	13.370
8	KATHALGURI - 8	30.00	28.75	15.390	15.300
9	KATHALGURI - 9	30.00	26.93	14.881	14.500
10	R.C.NAGAR - 1	21.00	21.86	13.676	14.392
11	R.C.NAGAR - 2	21.00	19.77	12.780	13.993
12	R.C.NAGAR - 3	21.00	20.83	13.877	13.891
13	R.C.NAGAR - 4	21.00	21.02	14.020	13.857
TOTAL THERMAL/GAS :		375.00		187.833	217.663
TOTAL CS (HY + TH/GAS) :		1235.000		540.683	399.733
TOTAL NER GEN(HY+TH/GAS) :		1992.120		761.776	660.207

Plant Load Factor (PLF) and Voltage Profile :

Jul-12

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	53.369	59.78
2	NTPS*	AEGCL	117.00	35.282	40.53
3	Baramura	Tripura	58.50	29.220	67.14
4	Rokhia	Tripura	90.00	23.154	34.58
5	AGBPP	NEEPCO	291.00	133.480	61.65
6	AGTPP	NEEPCO	84.00	54.353	86.97

*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	424	388
2	MISA 400 kV	430	383
3	MISA 220 kV	232	206
4	SALAKATI 220 kV	237	215
5	HAFLONG 132 kV	142	125
6	AIZAWL 132kV	143	110
7	KUMARGHAT 132kV	143	120

Voltage Range in kV as percentage of time for the block

SUB-STATION	kV < 360	360<kV<380	380<kV<420	kV>420
MISA	0.37	0.00	98.74	0.89
BALIPARA	0.00	5.53	94.38	0.09

1 **INTER - REGIONAL EXCHANGE :**

All Fig in MU

NER to ER	20.294
ER to NER	84.355
NET IMPORT	64.061

2 **Major Grid Disturbances during this month**

One on 31.07.12 of Category GD-V

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

1. 75th OCC Meeting was held on 06.07.12 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	2015	Being reviewed by PIB
3. Kameng HEP A. Pradesh	4	4X150	2017	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	2016-17	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	2013-14	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 Hydrel 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	2012-13	Activities in progress
(b) New Umtru HEP	2	2X20	2014-15	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:									
1	LILo of 400 kV D/C Ranganadi-Balipara at Kukurmara	20	Jul-13		20				Deposit work to PGCIL
2	220 kV, D/C Bongaigaon TPS (NTPC) -Rangia	360	Dec-13		479	6			Design apprvd, prototype test
3	220 kV, S/C BTPS(AEGCL) - Agia-Sarusajai-II	198	Mar-12		601	601	0		
4	220 kV S/C (on D/C) Namrup TPS-Mariani	141	May-13	41609					Contract awarded
5	LILo of 220 kV D/C Agia-Sarusajai at Kukurmara	4	Feb-12		8	4			Work in progress
6	132 kV D/C BTPS - Kokrajhar	18	Dec-12	Aug-12	75				Work order placed
7	132 kV D/C Kokrajhar-Bilashipara-Gauripur	70	Oct-13	Dec-13	121				
8	132 kV D/C Kukurmara-Azara	6	Dec-12	May-12	28				Contract awarded
9	132 kV D/C Kukurmara- Boko	25	May-13						Row Problem
B : Lines under MeECL :									
1	LILo of 400kV D/C Silchar - Bongaigaon at Killing (Byt	9	Dec-12		1				Evaluation of tender in progress
2	132 kV S/C New Umtru HEP-Norbong (EPIP II)	3	Mar-12						
3	132 kV D/C Killing(Bymihat)-EPIP I	17	Mar-12						Work in progress
4	132 kV D/C Mawngap - Sumer	66	Dec-11	Dec-12	102	102	102	66	
5	132 kV D/C Rongkhon - Ampati	33	Mar-12	Mar-13	103				Work in progress
6	132 kV S/C Nangalbibra - Agia	92	Mar-12		316	316	316	91	Work in progress
7	LILo of 132 kV S/C Agia-Nangalbibra at Mendipathar	5	Mar-12	Nov-12	9	9	5	0	
8	LILo of 132 kV D/C Mawlai-Cherrapunjee at Mawngap	10	Dec-11	Dec-12	15	10	5	0	
9	LILo of 132 kV D/C Mawlai-nangalbibra at Mawngap	5	Mar-12	Dec-12	13	0	0	0	Work in progress
C : Lines under Mizoram :									
1	LILo of 132 kV S/C Zemabak - W. Phaileng at Sinh	5	Dec-11						
D : Lines under TSECL :									
1	400 kV D/C Purba kanchan Bari- Surajmani Nagar	260	Mar-12						Fund not yet tied up.
2	132 kV D/C Surjyamani Nagar - 79 Tilla (Agartala)	36	Mar-12		41	18			Work in progress
3	132 kV D/C Surjyamani Nagar - Badarghat	6	Mar-12						Fund not yet tied up.
4	132 kV D/C Surjyamani Nagar - Budhjangnagar	36	Apr-12		63	25			ROW problem
5	132 kV D/C Surjyamani Nagar - Rokhia	35	Mar-12						Fund not yet tied up.
6	132 kV D/C Surjyamani Nagar - Udaipur	50	Mar-12						Fund not yet tied up.
E : Lines under NETC :									
1	400 kV D/C Palatana - Silchar	492	Feb-12	Jul-12	680	680	680	494	Forest clearance awaited
2	400 kV D/C Bongaigaon- Silchar	830	Jun-12	Apr-13	1150	950	886	440	Forest clearance awaited

	Name of the line	Length (ckt kms)	Comm'n'g Sch		Total no. of locs.	Stubs com - pleted(nos)	Tower Erected	Stringing complt-ckm	Remarks
			Ann.pl	Ant/revd					
F : POWERGRID Lines:									
1	+/- 800kv HVDC Bipole Biswanath Chariyali - Agra	1971	Aug-13	Sep-14	4228	3320	2710	461	Matching with HVDC Converter
2	400kV Balipara - Biswanath Chariyali D/C	130	Aug-13	Aug-13	167	146	138	67	Matching with L. Subansiri
3	LILO of 400 kv Ranganadhi Balipara D/C at Biswanath	54	Aug-13	Aug-13	76	70	68	20	Matching with Gen. of L.Subansi
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	57	9	0	Matching with Gen. of Kameng
6	400kV Balipara- Bongaigaon D/C line	596	Feb-13	Feb-13	837	764	659	224	Matching with Gen. of Kameng
7	400kV Lower Subansari-Biswanath Charrali line-I	334	Feb-13	Dec-13	444	316	218	56	Matching with Gen. Project
8	400kV Lower Subansari-Biswanath Charrali Line-II	340	Feb-13	Feb-13	442	325	196	35	Matching with Gen. Project
9	132 kV Kopili- Khandong-II	12	Sep-09		43	37	24	8	Forest clearance awaited
10	400 kV D/C Bongaigaon TPS-Bongaigaon line	6	Mar-12		11	8	4	0	
11	400kV D/C Pallatana- Surajmani -nagar line	70	Dec-11	Jun-12	118	118	118	74	Compl. of Suraj-mannagar by TSECL
12	400kV D/C Silchar-Purba Kanchan Bari line	252	Mar-12	Jun-12	373	306	181	38	ROW problem
13	400kV D/C Silchar-Melriat(New) line	320	Dec-12	Mar-13	435	135	84	32	1st Stg Forest clearance awaited
14	400kV D/C Silchar-Imphal(New) line	280	Dec-12	Jun-12	427	128	19	0	Likely to be delayed Efforts to be made to match U#2 of Palatana GBPP
15	220kV D/C Mariani(New)-Mokikchung(PG)	112	Dec-12	Mar-13	160	44	18	0	
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) Interconnecting line	60	Dec-12	Mar-13	85				Melriat S/s by Mizoram
18	132kV D/C Silchar-Srikona (AEGCL) line	6	Dec-11		10	7	7	2	Award Placed
19	132kV D/C Silchar-Hailakandi (AEGCL) line	50	Dec-11		65	65	65	39	Completion matching with S/S Efforts to be made to match U#2 of Palatana GBPP
20	132kV D/C Mokikchung(PG)- Mokikchung(Naga) line	2	Dec-12	Mar-13	4				
21	132 kV S/C Pasighat-Roing line (on D/C)	70	Dec-12	Mar-13	550	124	39	0	Completion matching with S/S.
22	132 kV S/C Roing-Tezu line (on D/C)	60	Dec-12	Mar-13	241	70	37	0	Engg. in progress
23	132 kV S/C Tezu-Namsai line (on D/C)	90	Dec-12	Mar-13	330	48	14	0	Completion matching with S/S.
24	LILO of 400kV S/C Kathalguri -Misa line at Mariani(Ne)	2	Dec-12		20				
25	LILO of 132 kV S/C Loktak-Imphal line at Imphal (Ne)	60	Dec-12		150	0	0	0	
26	220 kV D/C Bongaigaon TPS (NTPC-Bongaigaon)	15	Dec-12		11	10	10	3	

UI Receivable/ Payable for the month of**Jul-12**

Organisation	Actual (MU)	Schedule (MU)	UI Energy (MU)	UI Receivable (Rs. in Lakhs)	UI Payable (Rs. in Lakhs)
Arunachal Pradesh	48.944	63.983	-15.039	675.440	6.999
ASEB	402.676	395.796	6.880	333.248	644.278
Manipur	48.597	67.970	-19.373	862.188	1.723
MeSEB	63.193	71.236	-8.043	438.966	23.095
Mizoram	27.059	36.337	-9.278	434.916	0.657
Nagaland	36.013	32.531	3.482	50.323	273.779
Tripura	33.031	37.361	-4.330	196.386	48.395

Entitlement, Schedule, Drawal and UI Charges**Jul-12**

Name of beneficiaries	Entit. from scheduled energy from ISGS in NER (Ex-PP State)	Entit. from scheduled energy from ISGS in ER (Ex-PP State)	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	60.665	3.318	63.983	63.983	48.944	-15.039	6.684
ASEB	279.657	63.717	343.374	395.796	402.676	6.880	-3.110
Manipur	61.181	0.000	61.181	67.970	48.597	-19.373	8.605
MeSEB	63.061	20.537	83.599	71.236	63.193	-8.043	4.159
Mizoram	31.860	2.417	34.277	36.337	27.059	-9.278	4.343
Nagaland	37.884	7.343	45.227	32.531	36.013	3.482	-2.235
Tripura	49.141	0.000	49.141	37.361	33.031	-4.330	1.480

(Source : UI A/c, NERPC)

* In addition to total entitlement, bilateral exchanges and purchase/sell through traders/exchange are covered in Annexure-III

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

Jul-12

States	Schedule From ISGS(MWH)	Bilateral Schedule from Outside NER (MWH)	Total Schedule (MWH)	Ex.PP. Drawal (MWH)	Tr. Energy (MWH)
Arunachal Pradesh	62766.38	3372.90	66139.28	50751.25	66139.28
ASEB	290335.00	64982.30	355317.30	417541.20	417541.20
Manipur	63224.03		63224.03	50391.24	63224.03
MeSEB	65657.66	21009.60	86667.26	65525.50	86667.26
Mizoram	33157.10	2471.65	35628.75	28058.19	35628.75
Nagaland	39322.41	7487.50	46809.91	37342.48	46809.91
Tripura	50699.60		50699.60	34250.62	50699.60
Total	605162.18	99323.95	704486.13	683860.49	766710.02

ISGS	Schedule (MWH)	Injection (MWH)
LOKTAK	54602.97	25762.55
KHANDONG	32878.54	21454.67
KOPILI-I	66470.81	88686.10
KOPILI-II	15374.70	16252.50
DHEP	31617.94	11340.75
RHEP	221173.40	187300.20
AGTPP	53837.91	53391.66
AGBPP	129205.92	130348.29
Total	605162.18	534536.70

Source : Provisional REA for the month: Jul-12

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*	81.2979 *	*As per CERC order dated 30.09.2011 in petition No 294/2009.
KOPILI -II	25	86.3*	13.3856 **	* Provisional, ** As per CERC order dated 01.01.08 in pet. No 70/2006
KHANDONG HEP	50	277.61*	44.7731 *	*As per CERC order dated 30.09.2011 in petition No 297/2009.
RHEP*	405	1509.69	291.3941	*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	238.82 *	As per CERC order dated 6.9.2011 in Pet.No295 / 2009
AGTPP	84	NA	69.8278 *	Base Rate of energy Charge as per the CERC Order
LOKTAK HEP	105	448.00	101.2114 *	*As per CERC order dated 11.03.11 in Pet.No 299/2009,^Base Engy. charge as per CERC order
				*As per CERC order dated 14.06.11 in Pet.No 108/2010

HOURLY DATA ON PEAK DEMAND MET DAY

DATE:- 29.07.2012

All figures in MW

HRS.	Total ISGS Injection (MW)	STATE SECTOR																		ER					Total Drawal by States
		ASEB			MeSEB			Tripura			Manipur		Mizoram			Nagaland		Ar. Pradesh			Total N.E.R GEN	Total Demand Met	Gross Demand met	Actual Loss	
		GEN	Drawal	Demand Met	GEN	Drawal	Demand Met	GEN	Drawal	Demand Met	Drawal	Demand Met	GEN	Drawal	Demand Met	Drawal	Demand Met	Drawal	Demand Met						
1	805	229	479	708	83	66	150	78	46	124	62	62	7	21	28	36	36	65	65	27	1202	1173	1229	56	749
2	803	190	475	664	83	51	134	78	42	120	54	54	7	19	26	34	34	48	48	-21	1161	1080	1140	60	744
3	994	190	478	668	54	67	121	78	44	122	49	49	7	19	26	34	34	55	55	-178	1323	1074	1145	71	923
4	992	187	438	624	42	63	105	79	38	116	37	37	7	19	26	31	31	58	58	-257	1306	996	1049	53	939
5	997	186	389	575	18	55	73	79	30	109	38	38	7	19	26	35	35	57	57	-324	1287	913	963	50	946
6	948	185	364	549	63	67	130	78	18	96	74	74	7	31	38	46	46	67	67	-234	1281	1000	1048	48	900
7	929	185	371	556	64	80	144	79	20	99	73	73	7	49	56	45	45	72	72	-194	1263	1046	1069	23	905
8	928	180	407	588	87	102	190	79	28	107	74	74	7	54	61	44	44	72	72	-125	1281	1135	1156	21	907
9	916	186	460	646	71	110	182	78	21	100	77	77	7	41	48	41	41	80	80	-60	1258	1172	1198	26	890
10	979	188	497	685	79	106	185	78	26	103	79	79	7	30	37	43	43	67	67	-103	1330	1200	1228	28	951
11	974	137	489	626	87	120	207	78	21	99	77	77	7	29	36	33	33	71	71	-114	1284	1149	1170	20	954
12	987	147	523	670	78	114	192	78	17	94	76	76	7	36	43	38	38	72	72	-92	1296	1184	1204	20	967
13	973	192	576	768	70	121	191	77	25	102	69	69	7	34	41	36	36	76	76	-6	1319	1283	1313	30	943
14	978	191	599	790	93	120	213	77	27	104	66	66	7	34	40	43	43	72	72	5	1346	1328	1351	22	956
15	984	187	624	811	75	120	195	76	34	110	76	76	7	44	50	46	46	71	71	62	1328	1359	1390	32	953
16	981	183	531	714	83	122	205	76	37	114	72	72	7	48	55	50	50	71	71	-25	1331	1281	1306	25	956
17	979	182	508	690	93	105	198	77	41	118	78	78	7	48	55	44	44	78	78	-50	1338	1262	1288	26	953
18	989	182	543	725	65	103	168	78	64	142	79	79	5	51	57	53	53	89	89	13	1319	1311	1332	21	968
19	996	221	687	907	99	133	232	78	77	155	94	94	0	52	52	57	57	106	106	237	1394	1605	1631	26	970
20	1001	136	710	846	102	136	238	79	66	144	104	104	1	50	51	51	51	99	99	244	1318	1534	1562	28	972
21	946	139	706	845	138	98	236	79	72	151	106	106	6	48	54	49	49	99	99	260	1308	1539	1569	29	917
22	947	147	725	873	122	84	206	79	65	144	106	106	7	40	47	48	48	97	97	247	1302	1521	1548	28	919
23	953	146	604	750	80	51	131	79	48	127	92	92	7	30	37	40	40	82	82	21	1265	1258	1286	28	925
24	965	146	578	724	59	95	155	79	55	134	76	76	7	22	29	37	37	74	74	6	1256	1228	1263	34	931
Max	1001	229	725	907	138	136	238	79	77	155	106	106	7	54	61	57	57	106	106	260	1394	1605	1631	71	972
Min	803	136	364	549	18	51	73	76	17	94	37	37	0	19	26	31	31	48	48	-324	1161	913	963	20	744

HOURLY DATA ON **MINIMUM DEMAND MET DAY**

DATE:- **31.07.2012**

All figures in MW

HRS.	Total ISGS Injection (MW)	STATE SECTOR																		ER					Total Drawal by States
		ASEB			MeSEB			Tripura			Manipur		Mizoram			Nagaland		Ar. Pradesh			Total N.E.R GEN	Total Demand Met	Gross Demand met	Actual Loss	
		GEN	Drawal	Demand Met	GEN	Drawal	Demand Met	GEN	Drawal	Demand Met	Drawal	Demand Met	GEN	Drawal	Demand Met	Drawal	Demand Met	Drawal	Demand Met						
1	797	204	596	800	72	89	161	75	53	128	56	56	7	24	31	26	26	76	76	151	1154	1277	1305	28	769
2	812	163	610	773	90	82	172	75	48	123	45	45	7	21	28	27	27	74	74	124	1146	1241	1270	29	783
3	807	160	631	790	89	82	171	75	47	123	39	39	7	21	28	25	25	70	70	136	1138	1246	1274	28	779
4	810	154	622	775	89	84	173	76	41	117	18	18	7	21	28	17	17	72	72	86	1135	1200	1222	21	789
5	826	151	571	722	87	88	175	76	36	111	19	19	7	25	31	28	28	69	69	43	1146	1156	1189	33	792
6	828	135	504	639	89	88	178	76	24	100	68	68	7	39	46	45	45	79	79	32	1135	1153	1176	23	806
7	937	133	511	644	90	86	177	76	27	103	74	74	7	51	58	42	42	87	87	-38	1243	1185	1205	20	917
8	926	125	508	633	114	91	205	76	35	111	74	74	7	49	56	35	35	87	87	-30	1247	1200	1218	18	908
9	916	110	535	644	113	80	193	76	35	110	67	67	7	38	45	32	32	78	78	-51	1221	1169	1171	2	914
10	808	115	471	586	102	72	174	75	35	111	66	66	7	37	44	23	23	80	80	-4	1107	1084	1103	19	789
11	733	114	501	615	79	65	144	74	33	107	66	66	7	33	40	32	32	83	83	95	1008	1087	1103	16	717
12	815	116	601	716	79	50	129	73	36	109	73	73	7	35	42	31	31	81	81	103	1090	1181	1193	12	803
13	566	134	509	643	41	73	114	73	23	96	59	59	7	33	40	28	28	47	47	201	820	1028	1021	-7	573
14	60	184	7	191	64	3	68	72	28	100	5	5	7	6	13	1	1	6	6	0	388	384	388	4	57
15	187	215	64	279	81	3	84	76	29	106	35	35	7	30	37	29	29	6	6	0	566	576	566	-10	197
16	326	219	102	320	80	8	88	76	41	118	65	65	7	38	45	30	30	14	14	0	708	680	708	28	298
17	401	220	146	366	42	20	62	77	27	103	84	84	7	32	38	35	35	21	21	-29	747	710	718	8	393
18	576	222	316	538	81	24	105	78	46	124	86	86	7	42	48	34	34	59	59	14	963	993	977	-16	591
19	745	216	414	631	93	42	135	79	36	115	83	83	7	34	40	31	31	34	34	-38	1139	1070	1102	32	713
20	761	218	364	582	103	57	160	79	43	122	101	101	7	35	41	25	25	50	50	-65	1167	1081	1102	21	740
21	800	213	400	613	85	36	121	79	50	129	110	110	7	38	44	40	40	45	45	-38	1184	1102	1146	44	756
22	936	204	475	678	89	55	145	80	75	154	110	110	7	42	48	44	44	50	50	-19	1315	1230	1296	66	869
23	915	203	654	857	90	59	149	80	73	152	8	8	7	35	42	38	38	63	63	72	1294	1311	1366	55	860
24	932	200	739	939	90	86	176	79	62	141	59	59	7	30	37	30	30	56	56	165	1308	1438	1473	35	897
Max	937	222	739	939	114	91	205	80	75	154	110	110	7	51	58	45	45	87	87	201	1315	1438	1473	66	917
Min	60	110	7	191	41	3	62	72	23	96	5	5	7	6	13	1	1	6	6	-65	388	384	388	-16	57

ANNEXURES
&
EXHIBITS

RESERVOIR PARTICULARS OF THE MONTH :

Jul-12

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	719.20	21.93
KOPILI	609.5 M	592.83 M	604.00	55.40	609.30	98.20
LOKTAK	768.5 M	766.2 M	766.76	17.50	767.04	31.12
BARAPANI	3220 Ft	3150 Ft	3175.20	10.94	3191.30	21.94
GUMTI	93.55 M	83.6 M	88.00	8.60	88.25	9.50
DOYANG	333 M	306 M	309.30	4.05	318.10	18.90

FREQUENCY ANALYSIS FOR THE MONTH OF : Jul-12

Frequency	(Freq.in Hz)	(Time: H:M)	(Date:D.M.Y)
1. Maximum frequency	51.00	02:36	30-Jul-12
2. Minimum frequency	47.44	13:02	31-Jul-12
3. Monthly average	49.72		

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

f < 49.5	49.5 < f < 50.2	f >50.2
1887.8%	7774.0%	338.3%

Daily Frequency Variation Index :

DATE	FVI	DATE	FVI
1-Jul-12	2.010	17-Jul-12	2.250
2-Jul-12	3.840	18-Jul-12	2.800
3-Jul-12	2.700	19-Jul-12	2.430
4-Jul-12	1.320	20-Jul-12	4.650
5-Jul-12	0.570	21-Jul-12	3.800
6-Jul-12	0.410	22-Jul-12	3.800
7-Jul-12	0.540	23-Jul-12	2.970
8-Jul-12	0.480	24-Jul-12	2.510
9-Jul-12	0.480	25-Jul-12	2.590
10-Jul-12	0.660	26-Jul-12	2.840
11-Jul-12	0.830	27-Jul-12	2.920
12-Jul-12	0.920	28-Jul-12	1.640
13-Jul-12	0.760	29-Jul-12	0.690
14-Jul-12	0.760	30-Jul-12	1.920
15-Jul-12	0.580	31-Jul-12	0.550
16-Jul-12	2.380	Average FVI	1.858

Annexure-III

Details of Scheduled Bilateral Exchanges within the Region in

Jul-12

Sl.No.	From	To	Energy (At Seller Injn. Point) (MWH)		Energy (At State Periphery) (MWH)
1	Tripura (Baramura-IV)	Manipur	-3500.625000		-3378.748004
2	Tripura (Baramura-IV)	Mizoram	-3500.625000		-3358.144666
3	Tripura (Baramura-V)	Manipur	-3534.000000		-3410.732769
4	Tripura (Baramura-V)	Mizoram	-3534.000000		-3389.933697
5	MeECL	TSECL (MeECL)	-1596.660000		1533.350000
6	ASEB	POWERGRID^	254.629700	^ The actual energy consumed by POWERGRID	

Scheduled Bilateral Exchange with SEBs / Organisations in other Regions

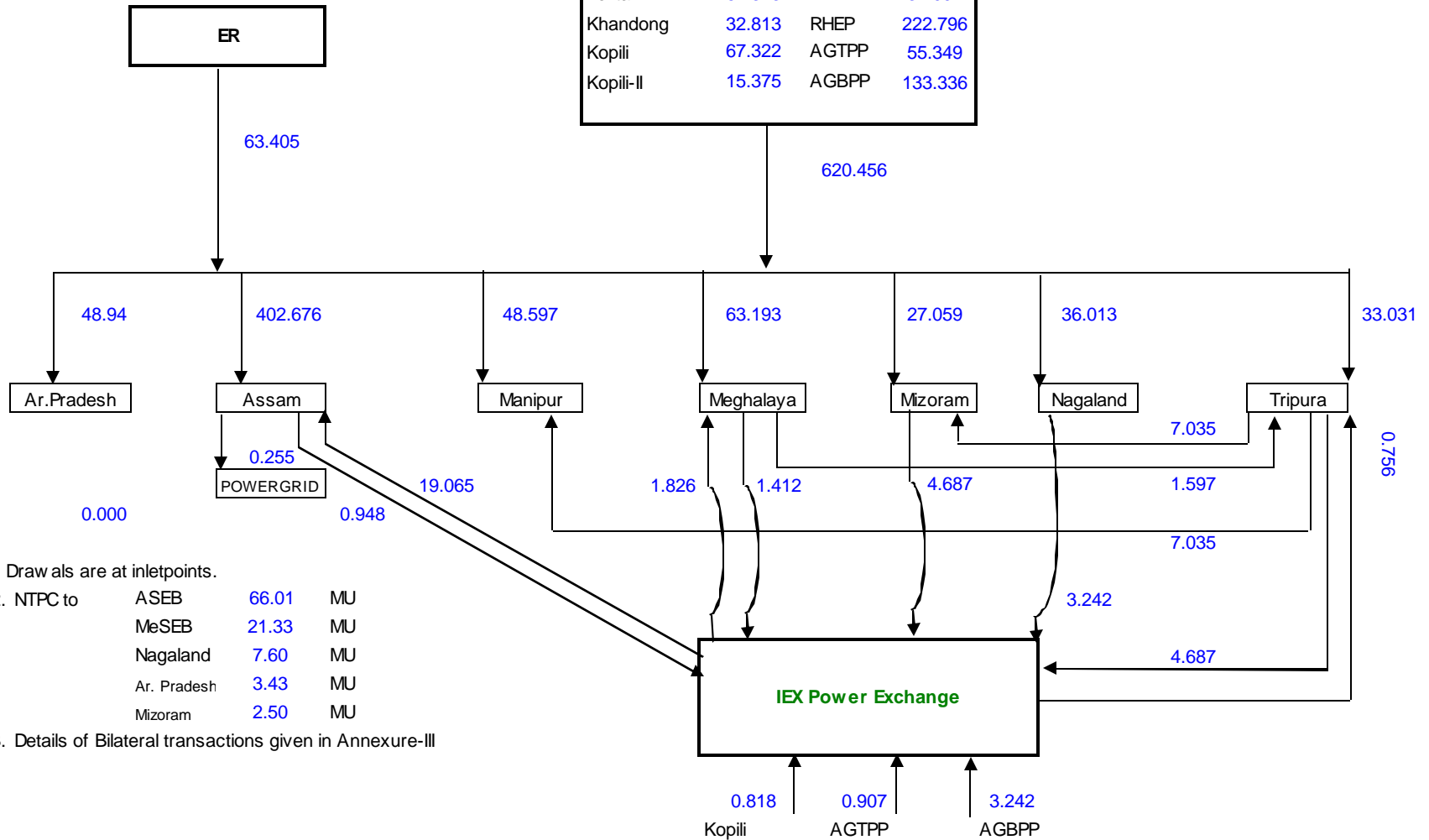
Sl.No.	From	To	Energy (At Seller Periphery) (MWH)	Energy (At NER-ER Periphery) (MWH)	Energy (At Buyer Periphery) (MWH)
1	MONNET-RAIGARH	APDCL (NVVN)		18600.000000	18239.760000
2	MONNET-RAIPUR	APDCL (NVVN)		6120.000000	6001.920000
3	BALCO	APDCL (GMR)		5348.160000	5252.150000
4	CIAL	APDCL (GMR)		4749.340000	4663.940000
5	JSW	APDCL (IEX)		150.000000	147.300000
6	MeECL	WBSEDCL (NVVN)	-11179.820000	-10933.200000	
7	Nag	Solaris (Nag)	-1542.447500	-1518.017500	
8	Nag	Solaris (Nag)	-1548.235000	-1521.570000	
9	Nag	BSES (Nag)	-9605.480000	-9450.000000	
10	Farakka*	Ar. Pradesh	1301.858875	1279.175000	1258.320913
11	Kahalgaon 1*	Ar. Pradesh	749.133975	728.400000	716.584338
12	Talcher*	Ar. Pradesh	1378.388250	1365.325000	1343.212475
13	Farakka*	Assam	13357.538025	13176.475000	12922.106025
14	Kahalgaon 1*	Assam	6443.613800	6333.025000	6211.197838
15	Kahalgaon 2*	Assam	34046.969000	33473.125000	32813.837338
16	Talcher*	Assam	12166.327500	11999.675000	11769.520013
17	Farakka*	MeECL	4066.439375	4012.500000	3922.980375
18	Kahalgaon 1*	MeECL	2318.500300	2290.750000	2239.791913
19	Kahalgaon 2*	MeECL	10765.840000	10590.025000	10349.677325
20	Talcher*	MeECL	4183.386250	4116.325000	4025.009000
21	Farakka*	Nagaland	2946.360400	2906.300000	2850.192338
22	Kahalgaon 1*	Nagaland	1667.043950	1641.200000	1609.606475
23	Talcher*	Nagaland	2982.4775	2940.000000	2883.613325
24	Farakka*	Mizoram	959.554025	948.325000	927.1620875
25	Kahalgaon 1*	Mizoram	552.637075	551.225000	538.966675
26	Talcher*	Mizoram	991.080750	972.100000	950.528713

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

27	Assam		-948.480000	-930.000000	
28	Assam			19440.000000	19065.090000
29	MeECL		-1412.302500	-1382.760000	
30	MeECL			1867.750000	1825.932500
31	Mizoram		-4687.487500	-4614.047500	
32	Tripura			767.712500	756.070000
33	NHPC (Loktak)		-7537.875000	-7417.525000	
34	NEEPCO (AGBPP)		-3241.620000	-3185.500000	
35	NEEPCO (AGTPP)		-907.060000	-891.100000	
36	NEEPCO (KOPILI)		-818.400000	-804.000000	

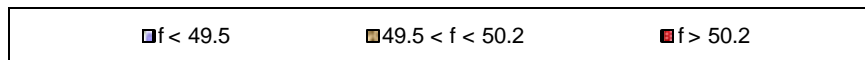
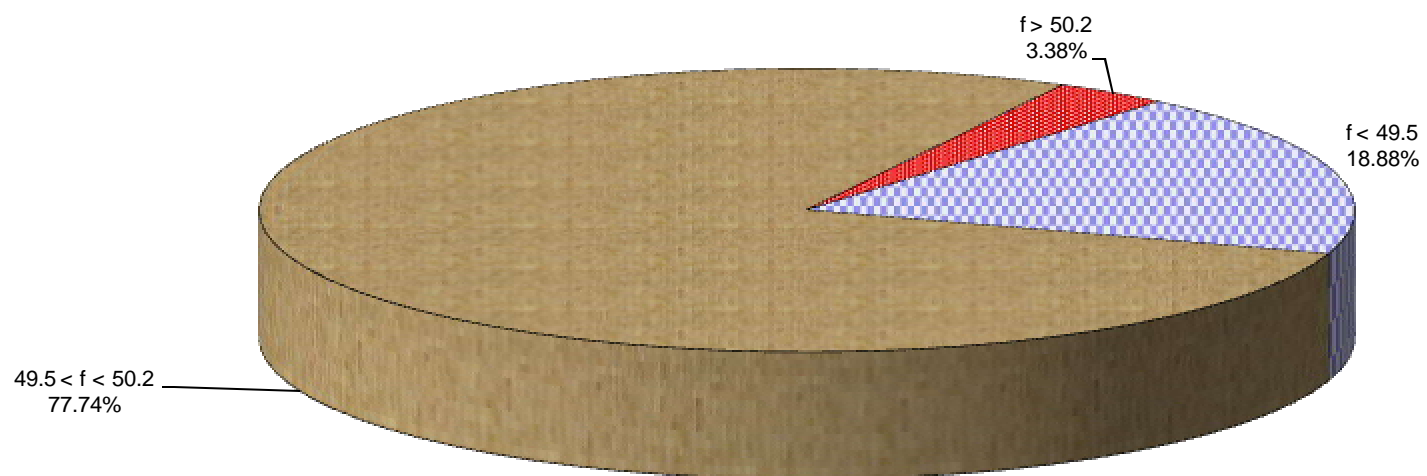
ENERGY EXCHANGE(in MU) IN NER DURING July, 2012

ISGS of NER			
Loktak	61.373	DHEP	32.092
Khandong	32.813	RHEP	222.796
Kopili	67.322	AGTPP	55.349
Kopili-II	15.375	AGBPP	133.336

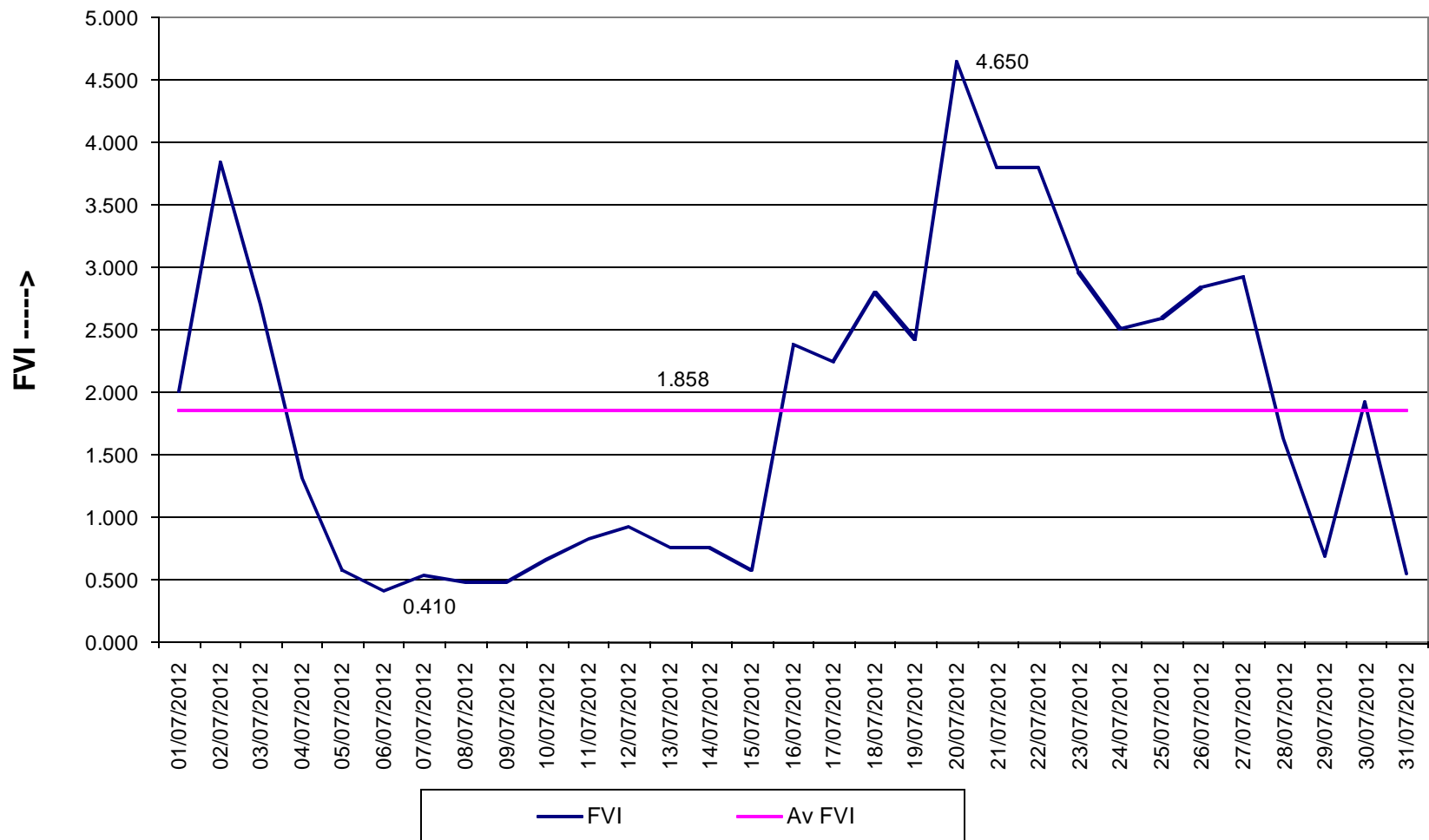


- N.B - 1. Draw als are at inletpoints.
 2. NTPC to
 ASEB 66.01 MU
 MeSEB 21.33 MU
 Nagaland 7.60 MU
 Ar. Pradesh 3.43 MU
 Mizoram 2.50 MU
 3. Details of Bilateral transactions given in Annexure-III

Frequency Duration for July, 2012

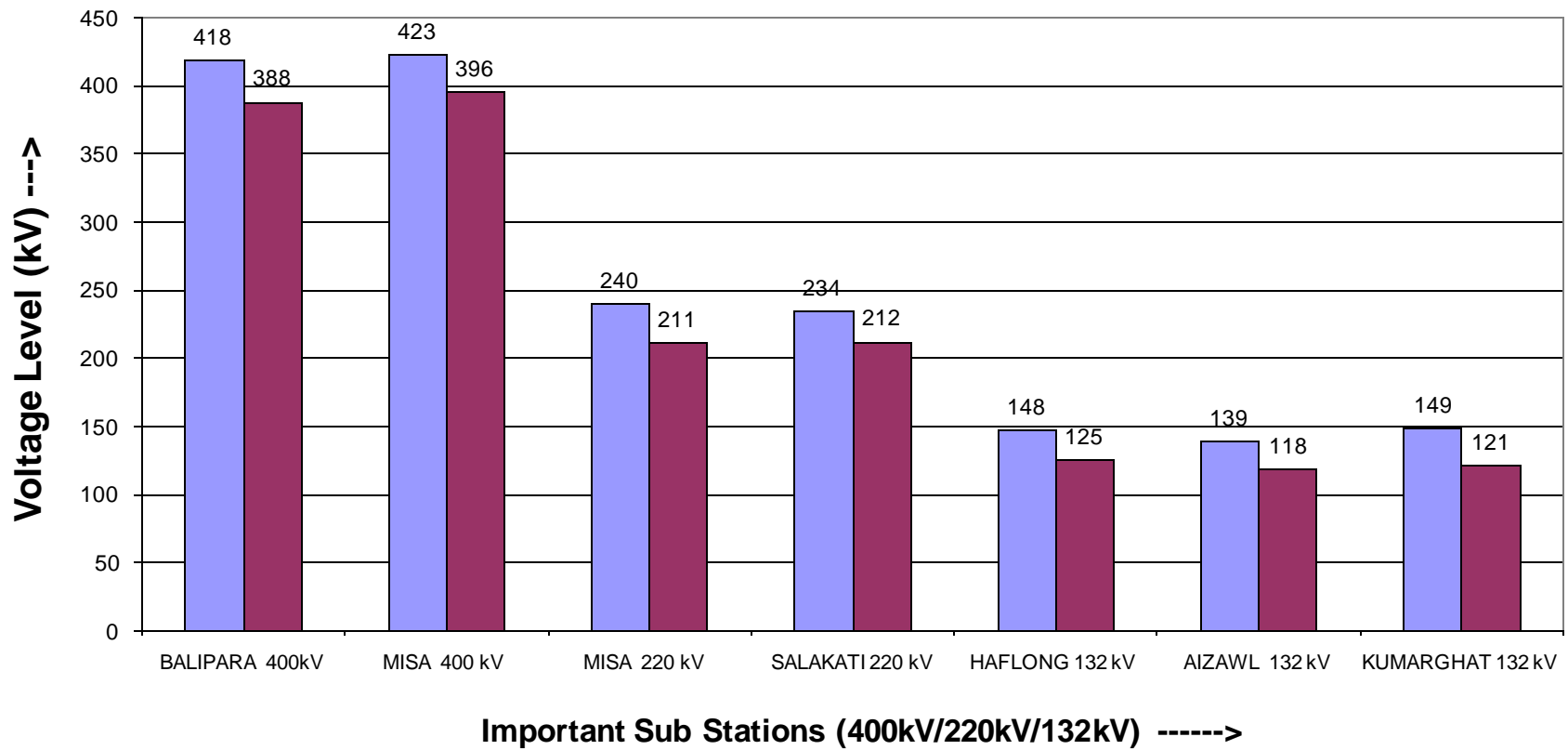


FVI Characteristics for July, 2012

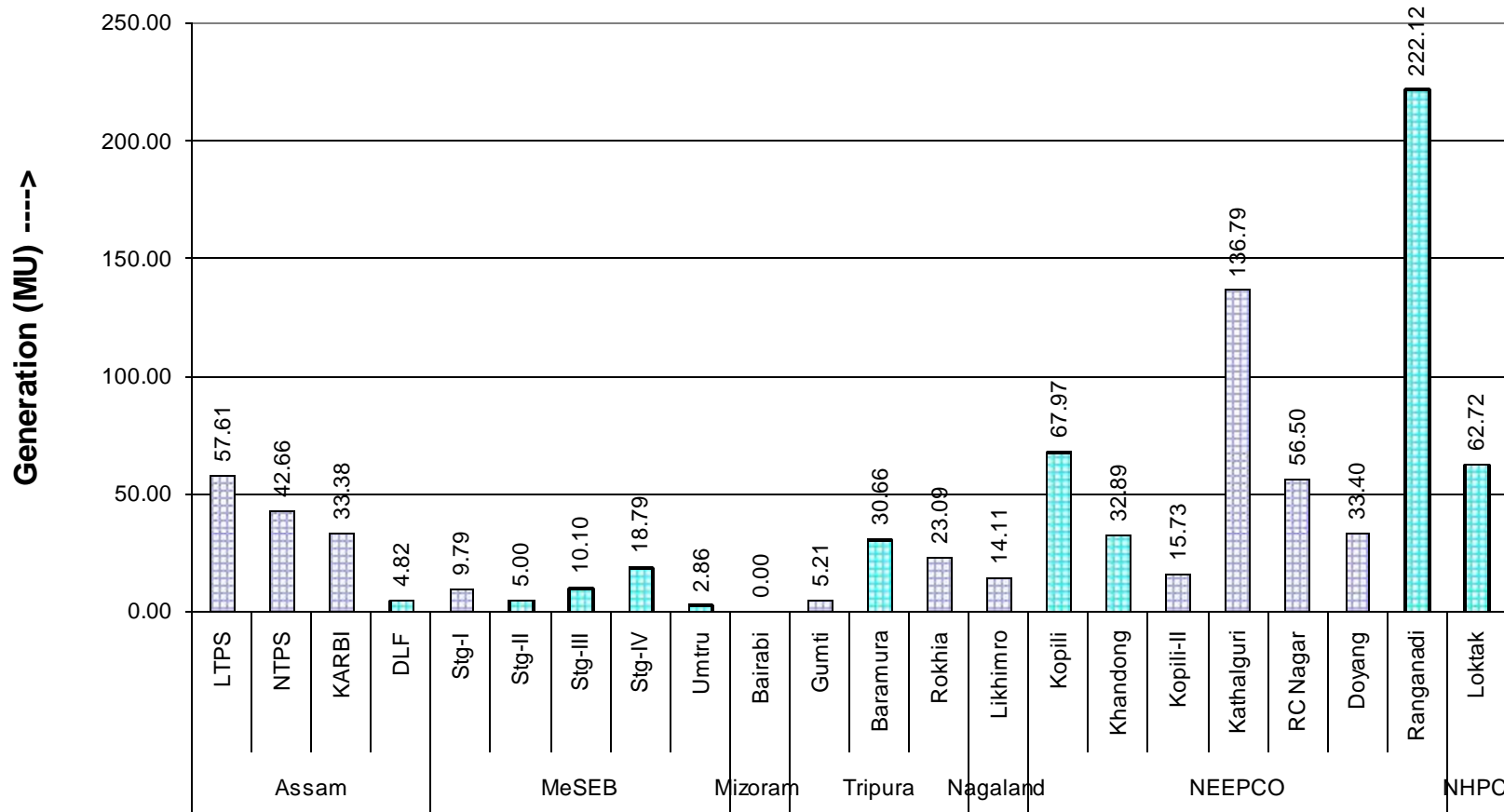


Maximum & Minimum Voltage Levels of Important Substations in NER during

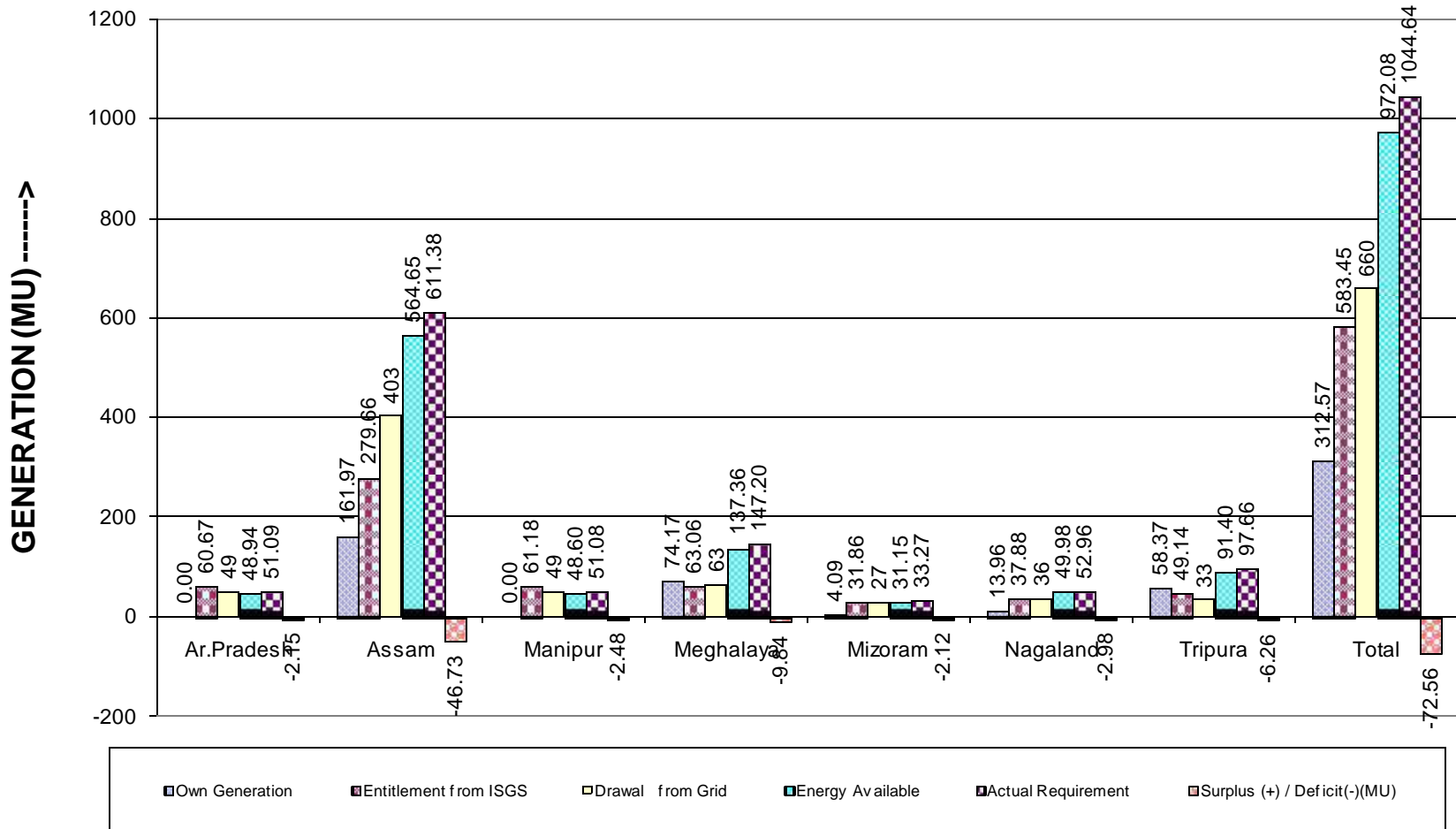
July, 2012



State and Central Sector Generation (MU) in NER in July, 2012



NER States Energy Scenario in July, 2012



Reservoir Statistics of NER in July, 2012

