

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

उत्तर पूर्वी क्षेत्रीय विद्युत समिति  
North Eastern Regional Power Committee  
शिलांग  
Shillong

Progress Report for the month of May 2016

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## **NORTH EASTERN REGIONAL POWER COMMITTEE**

### **01. Brief highlights of North Eastern Regional Power System for the month of May 2016**

- ❖ The maximum unrestricted demand during the month of May 2016 was 2487 MW, which was 2479 MW in the month of April 2016. The peak demand met in NER during the period under review was 2401 MW, which was 2358 MW in the previous month.
- ❖ The energy requirement during the month of May 2016 was 1227.06 MU, which was 1101.55 MU in the month of April 2016. The energy availability in NER during the period under review was 1169.45 MU, which was 1035.77 MU in the previous month.
- ❖ The maximum, minimum & average system frequency were 50.44 Hz (on 18.05.16 at 17:31), 49.56 Hz (on 26.05.16 at 22:12) & 50.06 Hz respectively. The maximum, minimum & average FVI were 0.11, 0.03 & 0.046 respectively. The average FVI was less than its previous month's figure of 0.055. (refer Annex-II).
- ❖ Maximum export of power from NER to ER was 592 MW (on 25.05.16 at 12:00 Hrs) and that from ER to NER was 1085 MW (on 19.05.16 at 20:00 Hrs). The same Inter-Regional Exchanges of NER with NR was 805 MW (on 21.05.16 at 04:00 Hrs.) and 1 MW (on 20.05.16 at 19:30 Hrs) respectively. Total net energy import during the month was -60.007 MU (248.306 MU from ER and -308.313 MU from NR).

02. SALIENT FEATURES OF NORTH EASTERN REGIONAL GRID FOR MAY 2016

1	New Unit/Transmission Line/Transformer commissioned during this month	315 MVA, 400/220 kV ICT-2 at 400 kV Balipara SS, PGCIL commissioned on 25.05.2016	
2	Number of major grid disturbance during this month	NIL	
		May-16	May-15
3	Installed Capacity of the Region (in MW)		
	(i) Grid	3282.50	3115.00
	(ii) Isolated	124.00	124.00
	Total (As on 31.05.2016)	3406.50	3239.00
4	Energy Generation in MU (Gross):		
	Thermal	140.960	---
	Hydel	399.780	278.16
	Gas	743.540	581.52
	Solar	0.500	0.600
	Total	1284.799	859.68
5	Demand in MW:		
	Registered Peak Demand	2487	2573
	Peak Demand Met	2401	2185
	Shortage (%age)	4.00	15.1
6	Regional Energy (Gross) in MU:		
	Energy Requirement	1071.00	1290
	Energy Availability	1019.00	1080
	Surplus (+)/Deficit(-) (%age)	-5.00	-16.3
7	Inter Regional Energy Exchange in MU:		
	NER -----> ER	25.251	7.19
	ER -----> NER	273.558	158.20
	NER -----> NR	308.318	---
	NR -----> NER	0.005	---
	<b>Net Import</b>	<b>-60.007</b>	<b>-151.01</b>
8	Frequency Profile:		
	Average Frequency (Hz)	50.06	50.04
	Average Frequency Variation Index	0.046	0.080
9	Load Factor (in %)	57.760	---

Monthly Progress Report of NERPC for the month of May 2016

**03. MONTHLY POWER SUPPLY POSITION:**

**(i) ENERGY GENERATION IN THE REGION FOR THE MONTH OF MAY 2016**

*All figures in MU*

Constituents	Hydro		Coal/Oil fired		Gas Based (OC/CC)		Solar		Total (Gen)	Total (Gen)
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
	A	B	C	D	E	F	G	H	I	J
<b>State Sector :</b>										
Assam	26.24				98.39				124.63	
Meghalaya	84.99				0.00				84.99	
Mizoram	2.07				0.00				2.07	
Tripura	3.43				56.34				59.77	
Nagaland	2.12				0.00				2.12	
Total (State Sector)	118.85		0.00		154.73		0.00		273.58	
<b>Central Sector :</b>										
<b>NEEPCO:</b>										
Khd+Kop+Kop-II	92.813								92.813	
Kathalguri					154.079				154.079	
RC Nagar					66.913				66.913	
Doyang	3.716								3.716	
Ranganadi	109.364								109.364	
Monarchak					2.35		0.50		2.85	
<b>NHPC:</b>										
Loktak	75.037								75.037	
<b>OTPC:</b>										
Pallatana Gas PP					365.513				365.513	
<b>NTPC:</b>										
BgTPP			140.960						140.960	
Total (Cen. Sector)	280.930		140.960		588.810		0.50		1011.213	
Total NER	399.780		140.960		743.540		0.50		1284.799	

**(ii) REQUIREMENT Vs AVAILABILITY IN THE REGION**

STATES	ENERGY requirement (MU) at 50 Hz				POWER requirement (MW) at 50 Hz			
	<i>Availability &amp; L/S at prevailing frequency</i>				<i>Availability &amp; L/S at prevailing frequency</i>			
	Requirement	Availability	Shortfall	% Shortfall	Requirement	Availability	Shortfall	% Shortfall
Ar. Pradesh	54.00	52.00	2.00	3.60	118.70	119.00	0.00	0.00
Assam	733.30	689.90	43.40	5.90	1496.70	1423.00	73.70	4.90
Manipur	58.30	55.30	3.00	5.10	144.60	144.30	0.70	0.50
Meghalaya	130.10	130.10	0.00	0.00	281.50	282.20	0.10	0.00
Mizoram	39.00	37.60	1.40	3.60	88.00	88.00	0.30	0.30
Nagaland	55.90	54.40	1.50	2.70	106.90	105.00	1.90	1.80
Tripura	156.06*	150.15*	5.90	3.80	252.20^	249^	3.00	1.20
<b>REGION</b>	<b>1071</b>	<b>1019</b>	<b>57</b>	<b>5</b>	<b>2487</b>	<b>2401</b>	<b>92</b>	<b>4</b>

\* Energy Requirement & Availability of Tripura including export to Bangladesh.

^ Power Requirement & Availability of Tripura excluding export to Bangladesh.

*Monthly Progress Report of NERPC for the month of May 2016*

**(iii) ESTIMATION OF PEAK DEMAND (in MW)**

Constituents	Peak Demand Met	Date	Freq (Hz)	Estimated Peak Demand at 50 Hz
Arunachal Pradesh	119	25.05.16	50.09	119
Assam	1423	24.05.16	50.00	1497
Manipur	144	28.05.16	50.09	145
Meghalaya	282	05.05.16	50.08	282
Mizoram	88	23.05.16	50.12	88
Nagaland	105	14.05.16	50.00	107
Tripura*	249	26.05.16	49.97	252
<b>REGION</b>	<b>2410</b>	<b>26.05.16</b>	<b>5008</b>	<b>2487</b>

\* Excluding Bangladesh

**(iv) ESTIMATION OF ENERGY REQUIREMENT (in MU)**

Average Frequency 50.08 Hz

Constituents	Generation	Energy Drawal from Grid		Energy Availability	Actual Requirement
		Schedule	Drawal		
Arunachal Pradesh	0.000	64.166	66.032	52.008	54.000
Assam	122.928	534.415	541.411	689.913	733.300
Manipur	0.000	58.503	56.744	55.311	58.300
Meghalaya	84.142	44.563	34.511	130.138	130.100
Mizoram	2.052	35.363	36.400	37.565	39.000
Nagaland	2.102	59.192	57.478	54.413	55.900
Tripura#	59.169	90.870	88.102	150.156	156.060
<b>REGION</b>	<b>270.393</b>	<b>887.072</b>	<b>880.678</b>	<b>1169.504</b>	<b>1226.660</b>

# Energy requirement for Tripura including export to Bangladesh.

Monthly Progress Report of NERPC for the month of May 2016

04. STATION-WISE ENERGY GENERATED (MU) AND PEAK GENERATION (MW)

S. No.	Power Stations/Units	Installed Capacity (MW)	Peak Generation (MW)	Energy Generation (MU)	
				May-16	May-15
<b>(i) STATE SECTOR : HYDRO</b>					
<b>ASSAM : HYDRO</b>					
1	KARBIHEP U-1	50	0	0.00	24.52
2	KARBIHEP U-2	50	57	26.24	12.53
TOTAL		100	57	26.24	37.04
<b>MEGHALAYA : HYDRO</b>					
3	UMIAM STAGE - 1 U-1	9	9	1.53	2.45
4	UMIAM STAGE - 1 U-2	9	9	1.89	2.44
5	UMIAM STAGE - 1 U-3	9	9	1.35	0.00
6	UMIAM STAGE - 1 U-4	9	9	1.98	0.00
7	UMIAM STAGE - 2 U-1	10	11	2.61	0.00
8	UMIAM STAGE - 2 U-2	10	10	0.99	2.58
9	UMIAM STAGE - 3 U-1	30	0	0.00	0.00
10	UMIAM STAGE - 3 U-2	30	30	10.37	8.94
11	UMIAM STAGE - 4 U-1	30	30	5.52	5.06
12	UMIAM STAGE - 4 U-2	30	30	5.83	4.30
13	UMTRU U-1	3	0	0.00	0.00
14	UMTRU U-2	3	0	0.00	0.00
15	UMTRU U-3	3	0	0.00	0.33
16	UMTRU U-4	3	0	0.00	0.00
17	MYNTDU-LESHKA U-1	42	42	21.64	13.00
18	MYNTDU-LESHKA U-2	42	42	6.94	8.65
19	MYNTDU-LESHKA U-3	42	42	23.67	14.25
20	SONAPANI	2	1	0.69	0.63
TOTAL		316	273	84.99	62.62
<b>NAGALAND : HYDRO</b>					
21	LIKIMRO - 1	8	8	0.61	1.14
22	LIKIMRO - 2	8	8	0.85	1.50
23	LIKIMRO - 3	8	8	0.66	1.37
TOTAL		24	20	2.12	4.01
<b>MIZORAM : HYDRO</b>					
24	SERLUI B U-1	4	4	2.07	1.09
25	SERLUI B U-2	4	0	0.00	0.00
26	SERLUI B U-3	4	0	0.00	0.00
TOTAL		12	4	2.07	1.09
<b>TRIPURA : HYDRO</b>					
27	GUMTI - 1	5	0	0.00	0.00
28	GUMTI - 2	5	4	2.53	0.00
29	GUMTI - 3	5	3	0.90	0.00
TOTAL		15	7	3.43	0.00
<b>TOTAL STATE (HYDRO) :</b>		<b>467</b>	<b>341</b>	<b>118.85</b>	<b>104.76</b>

**Monthly Progress Report of NERPC for the month of May 2016**

S. No.	Power Stations/Units	Installed Capacity (MW)	Peak Generation (MW)	Energy Generation (MU)	
				May-16	May-15
<b>(i) STATE SECTOR : THERMAL/GAS</b>					
<b>MIZORAM : THERMAL</b>					
1	BAIRABI U-1	6	0	0.00	0.00
2	BAIRABI U-2	6	0	0.00	0.00
3	BAIRABI U-3	6	0	0.00	0.00
4	BAIRABI U-4	6	0	0.00	0.00
TOTAL		24	0	0.00	0.00
<b>TRIPURA : THERMAL</b>					
5	BARAMURA - 1	5			
6	BARAMURA - 2	5			
7	BARAMURA - 3	6.5			
8	BARAMURA - 4	21	20	7.22	8.19
9	BARAMURA - 5	21	21	10.28	12.27
10	ROKHIA - 1	8			
11	ROKHIA - 2	8			
12	ROKHIA - 3	8	0	0.00	0.00
13	ROKHIA - 4	8	0	0.00	0.00
14	ROKHIA - 5	8	0	0.00	0.00
15	ROKHIA - 6	8	0	0.00	0.00
16	ROKHIA - 7	21	21	14.20	14.42
17	ROKHIA - 8	21	20	12.26	13.46
18	ROKHIA - 9	21	20	12.38	14.18
TOTAL		169.5	89	56.34	62.52
<b>ASSAM : THERMAL</b>					
19	LTPS - 1	15	0	0.00	6.66
20	LTPS - 2	15	14	9.11	1.74
21	LTPS - 3	15	14	2.34	9.76
22	LTPS - 4	15	14	2.52	5.58
23	LTPS - 5	20	22	15.10	14.66
24	LTPS - 6	20	21	13.77	11.25
25	LTPS - 7	20	19	13.61	12.58
26	LTPS - 8	37	30	19.06	15.32
27	NTPS - 1	20	20	11.20	9.19
28	NTPS - 2	21	17	0.96	9.77
29	NTPS - 3	21	18	1.71	10.35
30	NTPS - 4	11	7	2.86	2.20
31	NTPS - 5	24	8	2.19	6.39
32	NTPS - 6	22	11	3.97	6.85
33	DLF	25	0	0.00	0.00
TOTAL		301	168	98.40	122.00
<b>TOTAL STATE (THERMAL/GAS) :</b>		<b>494.5</b>	<b>257</b>	<b>154.74</b>	<b>184.52</b>
<b>TOTAL STATE GEN (HY+TH/GAS)</b>		<b>961.5</b>	<b>598</b>	<b>273.59</b>	<b>289.28</b>

**Monthly Progress Report of NERPC for the month of May 2016**

S. No.	Power Stations/Units	Installed Capacity (MW)	Peak Generation (MW)	Energy Generation (MU)	
				May-16	May-15
<b>(ii) CENTRAL SECTOR : HYDRO</b>					
1	KHANDONG - 1	25	0	4.90	4.00
2	KHANDONG - 2	25	27	17.60	7.70
3	KOPILI Stg - II	25	25	16.70	5.40
4	KOPILI - 1	50	40	0.10	26.60
5	KOPILI - 2	50	40	3.80	23.70
6	KOPILI - 3	50	49	24.30	0.00
7	KOPILI - 4	50	49	25.40	0.00
8	DOYANG - 1	25	14	1.30	1.30
9	DOYANG - 2	25	15	1.00	0.60
10	DOYANG - 3	25	14	1.40	1.40
11	LOKTAK - 1	35	37	24.40	2.20
12	LOKTAK - 2	35	36	25.50	3.10
13	LOKTAK - 3	35	37	25.10	5.40
14	RANGANADI - 1	135	147	47.40	28.80
15	RANGANADI - 2	135	147	46.80	31.70
16	RANGANADI - 3	135	147	15.20	31.50
<b>TOTAL CS HYDRO :</b>		<b>860</b>	<b>745</b>	<b>280.90</b>	<b>173.40</b>
<b>(ii) CENTRAL SECTOR : THERMAL/GAS</b>					
1	KATHALGURI - 1	34	30	20.50	21.10
2	KATHALGURI - 2	34	30	18.50	16.20
3	KATHALGURI - 3	34	30	19.50	20.30
4	KATHALGURI - 4	34	32	21.50	5.40
5	KATHALGURI - 5	34	25	12.70	20.20
6	KATHALGURI - 6	34	26	15.70	16.00
7	KATHALGURI - 7	30	24	16.80	14.50
8	KATHALGURI - 8	30	24	18.00	10.40
9	KATHALGURI - 9	30	28	11.00	13.50
10	R.C. NAGAR - 1	21	22	5.80	13.30
11	R.C. NAGAR - 2	21	23	11.00	13.90
12	R.C. NAGAR - 3	21	23	14.30	13.50
13	R.C. NAGAR - 4	21	22	13.60	13.20
14	R.C. NAGAR - 5	23	24	6.90	0.00
15	R.C. NAGAR - 6	23	25	15.20	3.90
16	MONARCHAK SOLAR PV	5		0.50	0.60
17	MONARCHAK - GTG 1	56	60	2.30	0.00
18	MONARCHAK - STG 1				
19	PALLATANA - GTG 1	232	226	115.70	78.40
20	PALLATANA - STG 1	131	124	74.50	49.00
21	PALLATANA - GTG 2	232	232	107.10	47.40
22	PALLATANA - STG 2	131	126	68.20	26.20
23	BgTPP - 1	250	262	143.00	0.00
24	BgTPP - 2				
25	BgTPP - 3				
<b>TOTAL CS (THERMAL/GAS) :</b>		<b>1461</b>	<b>1095</b>	<b>732.30</b>	<b>397.00</b>
<b>TOTAL CS GEN (HY+TH/GAS)</b>		<b>2321</b>	<b>1777</b>	<b>1011.213</b>	<b>570.40</b>
<b>TOTAL NER GEN (HY+TH/GAS)</b>		<b>3282.5</b>	<b>2375</b>	<b>1284.799</b>	<b>859.68</b>

**05. PLANT LOAD FACTOR (PLF)**

PLANT LOAD FACTOR OF THE THERMAL/GAS STATIONS IN N.E.R.					
S. No.	Power Station	State/Constituent	Installed Capacity (MW)	Generation (in MU)	Stationwise PLF(%)
1	LTPS*	AEGCL	157.00	75.51	64.54
2	NTPS*	AEGCL	119.00	22.89	30.73
3	Baramura	Tripura	42.00	17.50	56.00
4	Rokhia	Tripura	95.00	38.84	82.86
5	AGBPP	NEEPCO	291.00	154.20	63.79
6	AGTPP	NEEPCO	84.00	44.70	64.74
7	AGTPP-2	NEEPCO	46.00	22.10	64.74
8	Monarchak	NEEPCO	61.00	2.80	04.95
9	Pallatana	OTPC	726.60	365.50	66.61
10	BgTPP	NTPC	250.00	143.00	78.64

\*LTPS -- Lakwa Thermal Power Station; \*NTPS -- Namrup Thermal Power Station

**06. VOLTAGE PROFILE:**

**A. MAXIMUM AND MINIMUM VOLTAGE (kV) OF IMPORTANT SUBSTATIONS**

S. No.	NAME of SUB-STATION	MAXIMUM (kV)	MINIMUM (kV)
1	MISA 400 kV	424	394
2	BALIPARA 400 kV	425	391
3	BONGAIGAON 400 kV	420	391
4	RANGANADI 400 kV	421	389
5	PALLATANA 400 kV	430	412
6	SILCHAR 400 kV	425	398
7	BISHWANATH CHARIALI 400 kV	420	387
8	AZARA 400 kV	415	410
9	BgTPP 400 kV	425	397
10	MISA 220 kV	231	212
11	SALAKATI 220 kV	232	213
12	AGBPP 220 kV	229	221
13	MOKOKCHUNG 220 kV	230	218
14	HAFLONG 132 kV	139	129
15	AIZAWL 132 kV	138	113
16	KUMARGHAT 132 kV	138	126
17	IMPHAL 132 kV	142	127
18	KHLIEHRIAT_PG 132 kV	138	129

**B. 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	95.74	4.26
BALIPARA	0.00	0.00	98.53	1.47
BONGAIGAON	0.00	0.00	99.92	0.08
RANGANADI	0.00	0.00	99.92	0.08
PALATANA	0.00	0.00	57.35	42.65
SILCHAR	0.00	0.00	98.51	1.49

**07. (i) INTER - REGIONAL ENERGY EXCHANGE:**

All Fig. in MU

NER to ER	25.251
ER to NER	273.558
NET IMPORT FORM ER	248.306
NER to NR	308.318
NR to NER	0.005
NET IMPORT FROM NR	- 308.313
NET IMPORT	- 60.007

**(ii) Major Grid Disturbances:**

Major Grid Disturbances during this month	No major Grid Disturbances occurred during this month
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**(iv) Meetings Held by NERPC:**

1. 121 <sup>st</sup> OCC Meeting was held on 05.05.16 at Guwahati.
2. 16 <sup>th</sup> Metering Committee Meeting was held on 05.05.16 at Guwahati

**Monthly Progress Report of NERPC for the month of May 2016**

**08. STATUS OF PROGRESS OF :**

**(i) GENERATING PROJECTS IN N E R :**

Name of Generation Scheme	No. of Units	Capacity (MW)	Commissioning Schedule	Remarks
1. Monarchak STG, TGBPP, NEEPCO, Tripura	1	36 MW	July -2013	COD in March 2017
2. Tuirial HEP, NEEPCO, Mizoram	2	60x2	March-2017	Project under review
3. Kameng HEP, NEEPCO, Ar. Pradesh First two units (2x150 MW) Next two units (2x150 MW)	4	150x4	March -2017 November-2016	Project under review by Internal Committee of NEEPCO.
4. Pare HEP, NEEPCO, Ar. Pradesh	2	55x2	Dec-2016	June 2017
5. Trial Operation & CoD of Monarchak GBPP of NEEPCO			November-2016	Subject to availability of gas
6. Lower Subansiri, NHPC, Ar. Pradesh	8	250x8	2016-18	i) Signed MOU with Assam Govt. ii) Law & order problem iii) Issue of Downstream Impact Assessment & Demand for stoppage of work by anti-dam activists since 2011.
7. Bongaigaon TPS, NTPC, Assam	1	250	March-2016	Unit synchronized on 22.06.15; Commissioned on 22.06.15; COD on 01.04.16
	2	250	March-2017	TG Erection started on 30.01.16; Boiler Light Up done on 27.03.16
	3	250	July-2017	Boiler Light Up to be done on Nov-16.

**Monthly Progress Report of NERPC for the month of May 2016**

**(ii) TRANSMISSION LINES IN N E REGION :**

	Name of the Line	Length (ckt kms)	Comm'ng Schedule		Total no. of locs.	Stubs complete d	Tower erected	Stringing compl- ckm	Remarks
			Ann. pl	Ant/revd					
<b>A. Lines under ASEB:</b>									
1	220 kV BTPS-Rangia D/C Line	326.374	Mar-13	Jun-16	517	504	486	147.01	Overall 84.29% completed.
2	LILO of 220 kV Samaguri-Sarusajai D/C at Sonapur (1 Ckt)	26.624	Dec-13	Jun-16	41	36	23		RoW issue
3	132 kV Sonapur-Jagi Road D/C	51.75	Nov-13	Jun-16	86	40	55		Delayed due to Compensation issue.
4	132 kV Sonapur-Chandrapur D/C	28.438	Nov-13	Jun-16	51	42	36		Railway Xing/ RoW/Compensation issue.
5	LILO of Rangia-Sishugram-Kahelipara Line at Kamakhya SS	0.60	May-14	May-15	2				Not yet started
6	132 kV Kukumara-Azara Line on DC tower	4.82	Dec-11	Mar-16	24	0	0	0	Check survey in progress
7	132 kV Hailakandi-Karimganj Line on DC tower	26	Jan-16	-	83	8	0	0	Land acquisition in progress
8	132 kV BTPS-APM Line on DC tower	42	Aug-16	-	163	2	0	0	Detail survey completed
9	132 kV Agia-Sonapur SC line on DC tower	102	Apr-16	-	371	0	0	0	Tower drawing & profile approved
10	220 kV Sonabil-B'Chariali SC line on DC tower	39.6	June-17	220	126	0	0	0	Contract agreement signed.
<b>B. Lines under MeCL:</b>									
10	132 kV Rongkhon-Ampati D/C	33		Mar-16	102	97	86	12	Work delayed presently due to fund constraint.
11	132 kV New Umtru-Norbong (EPIP-II) S/C	2		Mar-16	6	5	0	0	Work in progress.
12	LILO of 132 kV Mawlai-Cherrapunjee at Mawngap	10		Jun-16	16	15	15	5	Work held up due to RoW problem.
13	LILO of 132 kV NEIGRIHMS-Khliehriat at Lad Nongkrem	6		Jul-16	9	0	0	0	Material procurement in progress.
14	LILO of 132 kV Rongkhon-Ampati at Praharinagar	20		Dec-16	34	0	0	0	Land for S/S identified and procurement process going on.
15	132 kV Killing(Byrnihat)-EPIP-I	17		Jun-16	19	19	19	18	Termination end is not ready at Killing.
<b>C. Lines under Mizoram:</b>									
16	132 kV Melhriat (New)-Sihmui D/C	12	Dec-12	Dec-16	30	0	0	0	Stage-I forest clearance awaited. Package under re-tendering.
17	132 kV Tuirial-Aizawl S/C	132		Mar-14					
<b>D. Lines under TSECL:</b>									
18	132 kV Monarchak-Surjamaninagar D/C	42		Mar-15	150	49	38	6	Work in progress
19	132 kV Surjamaninagar-Badarghat D/C	6		Mar-15	0	0	0	0	Fund proposed in World Bank.
20	132 kV Suryamaninagar-Rokhia D/C	20		Dec-14	80	32	5	0	Small portion forest clearance yet to be applied. LOA issued.
21	132 kV Suryamaninagar-Udaipur D/C	50		Jun-15	50	0	0	0	Proposed under NEC
22	132 kV Gamaitilla-Dhalabil S/C	31		Sep-13	107	101	78	17	RoW problem affected the work.
23	132 kV PK Bari-Kanchanpur S/C	47		Mar-15	113	109	99	17	Stage 1 forest clearance received and compliance for condition completed.

**Monthly Progress Report of NERPC for the month of May 2016**

24	LILO of 132 kV Rokhia-Udaipur at Melaghar	20		Jun-15	40	0	0	0	
25	132 kV Surjamaninagar-Udaipur D/C Line	50	June-15		50	0	0	0	Proposed under NEC
<b>E. POWERGRID Lines:</b>									
26	LILO of +/- 800 kV HVDC BNC-Agra at Alipurduar	24	Jan-15	Dec-16	63	39	19		Gen. project delayed. Work under progress
27	400 kV Kameng-Balipara D/C	110	Aug-13	Dec-16	149	142	123	1	ATS slowed down to match with generation. Gen. project delayed.
28	400 kV Lower Subansiri-Bishwanath Chariali D/C-I	334	Aug-13	Dec-17	444	329	228	64	Completion matching with generation. Standstill on a/c of local disturbance /agitation against big Dam. Gen. Sch. uncertain.
29	400 kV Lower Subansiri-Bishwanath Chariali D/C-II	340	Aug-13	Dec-17	465	327	196	35	Completion matching with generation. Standstill on a/c of local disturbance /agitation against big Dam. Gen. Sch. uncertain.
30	400 kV Silchar-Melhriat (New) D/C (Charged at 132 kV)	286	Dec-12	Dec-16	436	366	211	101	Major portion in forest. Severe RoW problem. Package under re-tendering.
32	LILO of 132 kV Aizawl-Zemabawk at Melhriat	30	Dec-12	Dec-16	45	0	0	0	Package under re-tendering.
33	132 kV Pasighat-Roing S/C	70	Dec-12	Mar-17	345	345	345	101	Readiness of Up & Down stream system critical for commissioning being implemented by State Deptt.
34	132 kV Tezu-Roing S/C	60	Apr-12	Mar-17	244	235	208	38	Progress affected due to severe RoW problem.
35	132 kV Tezu-Namsai S/C	90	Dec-12	Mar-17	332	280	180	36	Progress affected due to severe RoW problem.
36	LILO of 220 kV Birpara-Salakati D/C at Alipurduar (New Pooling Station)	3	Sep-16		07	06	06	02	Completion matching with Alipurduar Pooling Station.

**Monthly Progress Report of NERPC for the month of May 2016**

**09. COMMERCIAL STATUS:**

**(i) DSM Receivable/Payable for the month of May 2016**

Organization	Actual (MU)	Schedule (MU)	Deviation Energy (MU)	DSM Receivable (₹. in Lakh)	DSM Payable (₹. in Lakh)
Arunachal Pradesh	66.032	64.166	1.866	0.000	31.300
ASEB	541.411	534.415	6.996	0.000	573.600
Manipur	56.744	58.503	-1.759	0.000	2.900
Meghalaya	34.511	44.563	-10.052	151.200	0.000
Mizoram	36.400	35.363	1.037	0.000	28.300
Nagaland	57.478	59.192	-1.713	12.400	0.000
Tripura	88.102	90.812	-2.710	0.000	35.000
PGCIL-HVDC	0.502	1.461	-0.958	14.600	0.000

**Entitlement, Schedule, Drawal and DSM Charges for the month of May 2016**

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 Energy against entitlement (in MU)	Schedule Drawal (for Dev A/c) (Ex-PP State) (in MU)	Actual Drawal from Grid (in MU)	Over Drawal(+)/ Under Drawal (-) (in MU)	UI Payable (-)/ Receivable (+) (including additional deviation) (₹. in Cr.)
Arunachal Pradesh	61.399	4.029	65.428	63.985	64.166	66.032	1.866	-0.313
ASEB	447.053	102.271	549.323	462.982	534.415	541.411	6.996	-5.736
Manipur	97.938	0.000	97.938	92.911	58.503	56.744	-1.759	-0.029
MeECL	111.938	0.000	111.938	57.583	44.563	34.511	-10.052	1.512
Mizoram	46.409	2.949	49.358	45.723	35.363	36.400	1.037	-0.283
Nagaland	50.944	8.900	59.844	55.758	59.192	57.478	-1.713	0.124
Tripura	154.407	0.000	154.407	143.440	90.812	88.102	-2.710	-0.350
PGCIL-HVDC	1.518	0.000	1.518	1.461	1.461	0.502	-0.958	0.146

(Source: DSM A/c, NERPC)

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

**Monthly Progress Report of NERPC for the month of May 2016**

**(ii) Schedule for ISGS Generation for the month of May 2016**

ISGS	Schedule (MWH)	Injection (MWH)
LOKTAK HEP	<b>72882.000000</b>	<b>64136.160000</b>
KHANDONG HEP	<b>21882.750000</b>	<b>16870.480800</b>
KOPILI - I HEP	<b>52951.750000</b>	<b>40563.016150</b>
KOPILI - II HEP	<b>16615.500000</b>	<b>13346.333250</b>
DHEP	<b>3424.650000</b>	<b>2617.378230</b>
RHEP	<b>110553.000000</b>	<b>84538.940850</b>
AGTCCPP	<b>63406.790000</b>	<b>63406.790000</b>
AGBPP	<b>141215.901000</b>	<b>141215.901000</b>
OTPC, PALLATANA	<b>133499.492000</b>	<b>133499.492000</b>
BgTPP	<b>303251.094000</b>	<b>303251.094000</b>

Source : Final REA for the month of May 2016.

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

States	Kopili (200 MW)	Kopili- II (25 MW)	Khando ng (50 MW)	RHEP (405 MW)	DHEP (75 MW)	AGBPP (291 MW)	AGTCC PP (130 MW)	BgTPP (250 MW)	OTPC (726.6 MW)	Loktak HEP (105 MW)
Arunachal Pradesh	5.191	5.992	4.194	18.462	6.852	5.694	6.645	5.1325	3.0303	4.940
Assam	53.455	52.355	56.285	43.328	43.808	56.503	43.907	57.420	33.058	29.445
Manipur	7.395	6.945	6.555	8.373	7.865	8.105	8.234	7.505	5.7851	42.508
Meghalaya	17.395	13.675	16.905	11.505	11.455	11.815	12.551	11.980	10.882	0.000
Mizoram	4.610	6.040	3.940	5.700	5.250	5.410	5.998	5.415	3.0303	5.020
Nagaland	6.147	5.735	6.653	5.335	17.967	5.805	5.701	4.930	3.7190	6.435
Tripura	5.807	9.258	5.468	7.297	6.803	6.668	16.964	7.618	26.9972	11.652
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	86.5014	100.00

**Share Allocation (%) in CS Stations from Eastern Region**

States	Farakka-I	Kahelgaon-I	Kahelgaon-II	Talcher	Farakka-III
Assam	<b>2.455737%</b>	<b>2.104847%</b>	<b>5.093479%</b>	<b>2.095419%</b>	<b>0.000000%</b>
Meghalaya	<b>0.000000%</b>	<b>0.000000%</b>	<b>0.000000%</b>	<b>0.000000%</b>	<b>0.000000%</b>
Nagaland	<b>0.429803%</b>	<b>0.424446%</b>	<b>0.000000%</b>	<b>0.424823%</b>	<b>0.000000%</b>
Arunachal Pradesh	<b>0.191917%</b>	<b>0.191747%</b>	<b>0.000000%</b>	<b>0.196898%</b>	<b>0.000000%</b>
Mizoram	<b>0.141736%</b>	<b>0.141610%</b>	<b>0.000000%</b>	<b>0.141736%</b>	<b>0.000000%</b>
Assam (NVVN Coal Power)	<b>0.091912%</b>	<b>0.019192%</b>	<b>0.019192%</b>	<b>0.019192%</b>	<b>0.019192%</b>

*Monthly Progress Report of NERPC for the month of May 2016*

**(iii) Details of Fixed and Energy Charges of CS Stations for FY 2015-16**

Projects	Installed Capacity (MW)	Design Energy (GWh)	Annual Fixed Charge (₹ Crore)	Reference
KOPILI HEP	200	1186.14	109.8446	As per CERC order dated 13.01.2016 in petition No 46/GT/2015.
KOPILI - II	25	86.30	13.2283	As per CERC order dated 23.01.2012 in pet. No 298/2009
KHANDONG HEP	50	277.61	40.3627	As per CERC order dated 13.01.2016 in petition No 42/GT/2015.
RHEP	405	1509.69	260.4693	As per CERC order dated 05.01.2016 and corrigendum 07.03.2016 in petition No.40/GT/2015.
DHEP	75	227.24	101.5605	As per CERC order dated 13.01.2016 and corrigendum dtd. 07.03.16 in petition No 43/GT/ 2015.
AGBPP	291	NA	296.5691	As per CERC order dated 15.02.2016 in Pet. No 459/GT/ 2014& 41/GT/2015. Base Rate of energy Charge as per the CERC Order
AGTPP	84	NA	71.7633	As per CERC order dated 11.03.2011 in Pet.No 299/2009, ^Base Energy charge as per CERC order
LOKTAK HEP	105	448.00	107.1660	As per CERC order dated 22.10.2012 in RP No. 24/2011 in Pet.No 108/2010
PALLATANA	726.6	NA	763.9771	As per CERC order dated 17.06.2015 in Pet. No 129/GT/2015
BgTPP	250	NA	NA	

10. Regional Transmission Account (RTA) for the month of May 2016

Figure in `.

Name of DIC	Demand/ Injection Zone	PoC Charges	Reliability Support Charges	HVDC Charges	Total
Arunachal Pradesh	Arunachal Pradesh	16879277.40	3838536.02	1215728.30	21933541.71
ASEB	Assam	356483012.00	26364032.064	8349928.11	391196972.17
Manipur	Manipur	26277720.55	4609501.22	1459905.82	32347127.58
MeECL	Meghalaya	80821915.31	5977259.77	1893097.74	88692272.81
Mizoram	Mizoram	33897338.26	2506909.12	793979.88	37198227.25
Nagaland	Nagaland	38560165.12	3155983.16	999552.44	42715700.72
Tripura	Tripura	32416839.16	7371950.92	2334819.66	42123609.74
HVDC-BNC	Assam	708539.95	52400.73	16596.18	777536.86

## **11. Grid Disturbance Report**

### ***List of Important Grid Disturbances in N E Regional Grid during May 2016:***

1. At 00:58 Hrs. on 01.05.16, 132 kV Dimapur (PG) - Kohima tripped on earth fault. It was restored at 01:49 Hrs. Outage Duration: 0:51 Hrs. Load Loss : 24 MW. Category - GD-I. Due to this tripping capital area of Nagaland was separated from rest of NER Grid and subsequently collapsed due to no source in this area.
2. At 01:24 Hrs. on 01.05.16, 132 kV Silchar - Dullavcherra tripped on earth fault. It was restored at 15:20 Hrs. Outage Duration: 13:56 Hrs. Load Loss : 12 MW. Category - GD-I. Due to this tripping Dullavcherra area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.
3. At 19:54 Hrs. on 01.05.16, 132 kV Agartala - Dhalabil (Khowai) line & 132 kV Ambasa - Teliamura line tripped on earth fault. Due to tripping of these elements, the network got reduced. At 20:07 Hrs. on 01.05.16, 132 kV AGTPP - Agartala I&II lines, 132 kV Agartala - Kumarghat line along with AGTPP Unit I, II & III tripped. At 20:13:50, 125 MVA, 400/132 kV ICT at Palatana tripped resulting in loss of power supply to gas boost compressor and subsequent tripping of Palatana GTG-I and STG-I units. Due to tripping of these elements part of Tripura system, part of Bangladesh system (Comilla area) and AGTPP system were separated from rest of NER Grid and subsequently collapsed due to load - generation mismatch. The system was progressively restored by 23:38 Hrs. Load Loss : 230 MW & Loss of Generation: 161 MW. Category - GD-II. Antecedent Conditions of NER Grid: Antecedent Generation : 1642 MW; Antecedent Load : 11652 MW
4. At 21:55 Hrs. on 01.05.16, 132 kV Dimapur (PG) - Kohima again tripped on earth fault. It was restored at 22:53 Hrs. Outage Duration: 0:58 Hrs. Load Loss : 13 MW. Category - GD-I. Due to this tripping capital area of Nagaland was separated from rest of NER Grid and subsequently collapsed due to no source in this area.
5. At 21:42 Hrs. on 01.05.16, 132 kV Khliehriat (PG) - Khliehriat (MePTCL) I&II lines, 132 kV NEHU - NEIGRIHMS & 132 kV Mustem - NEHU line tripped. The system was progressively restored by 22:17 Hrs. Outage Duration: 0:53 Hrs. Load Loss : 12 MW & Loss of Generation (Leshka U-2): 42 MW. Category - GD-I. Due to tripping of these elements Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load - generation mismatch. Antecedent Conditions of NER Grid: Antecedent Generation : 1164 MW; Antecedent Load : 1842 MW
6. At 20:27 Hrs. on 01.05.16, 132 kV Aizawl - Zuangtui line tripped. The system was restored by 00:14 Hrs. on 02.05.16. Outage Duration: 03:47 Hrs. Load Loss : 48 MW. Category - GD-I. Due to tripping of this elements Zuangtui area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.
7. At 08:05 Hrs. on 02.05.16, 132 kV Balipara - Khupi line tripped. The system was restored by 19:53 Hrs. Outage Duration: 11:48 Hrs. Load Loss : 23 MW. Category - GD-I. Due to tripping of this elements Khupi area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.
8. At 18:17 Hrs. on 09.05.16, 400 kV Ranganadi - B'Chariali-I, III & IV lines and Ranganadi U-I got tripped. The system was restored by 20:25 Hrs. Outage Duration: 03:08 Hrs. Load Loss : 79 MW & Loss of Generation : 104 MW. Category - GD-I. Due to tripping of this line Ziro area & Lekhi area of Ar. Pradesh and part of Gohpur area of Assam were separated from rest of NER Grid and subsequently collapsed due to load - generation mismatch. Antecedent Conditions of NER Grid: Antecedent Generation : 1316 MW; Antecedent Load : 1536 MW

### **Monthly Progress Report of NERPC for the month of May 2016**

9. At 16:51 Hrs. on 12.05.16, 132 kV Silchar - Panchgram line tripped and at 16:58 Hrs 132 kV Silchar - Dullavcherra line, 132 kV Srikona - Panchgram line & 132 kV Silchar - Srikona I&II lines tripped. The system was progressively restored by 18:50 Hrs. Outage Duration: 01:59 Hrs. Load Loss : 24 MW. Category - GD-I. Due to tripping of these elements part of South Assam area was separated from rest of NER Grid and subsequently collapsed due to no source in the area.

10. At 12:01 Hrs. on 15.05.16, 132 kV Loktak - Ningthoukhong line tripped. The system was restored by 11:55 Hrs. on 16.05.16. Outage Duration: 23:54 Hrs. Load Loss : 18 MW. Category - GD-I. Due to tripping of this element Ningthoukhong area was separated from rest of NER Grid and subsequently collapsed due to no source in the area.

11. At 21:28 Hrs. on 15.05.16, 132 kV Imphal - Imphal I&II lines tripped on earth fault. The system was restored by 21:51 Hrs. Outage Duration: 0:23 Hrs. Load Loss : 46 MW. Category - GD-I. Due to tripping of these elements capital area & Karong area were separated from rest of NER Grid and subsequently collapsed due to no source in the area.

### **List of Grid Incidents in North Eastern Regional Grid during May 2016:**

1. At 19:14 Hrs. on 01.05.16, AGTPP Unit 3&4, STG-1&2 tripped due to voltage jerk. It was revived at 20:07 Hrs. Outage Duration: 0:53 Hrs. Generation Loss : 68 MW; Load Loss : 0 MW. Category - GI-I

2. At 05:30 Hrs. on 04.05.16, AGTPP Unit-3 tripped on Reverse Power. It was revived at 06:44 Hrs. Outage Duration : 01:14 Hrs. Generation Loss : 21 MW; Load Loss : 0 MW. Category - GI-I.

3. At 01:05 Hrs. on 06.05.16, AGTPP Unit 1,2,3&4, STG-1 tripped due to high gas scrubber level. It was revived at 02:18 Hrs. Outage Duration: 1:13 Hrs. Generation Loss : 86 MW; Load Loss : 0 MW. Category - GI-I

4. At 11:16 Hrs. on 11.05.16, Khandong Unit 2 tripped due to governor problem. It was revived at 20:46 Hrs. Outage Duration: 09:30 Hrs. Generation Loss : 13 MW; Load Loss : 0 MW. Category - GI-I

5. At 20:14 Hrs. on 12.05.16, Kopili Stg-II tripped. It was revived at 17:01 Hrs. on 13.05.16. Outage Duration: 20:47 Hrs. Generation Loss : 24 MW; Load Loss : 0 MW. Category - GI-I

6. At 19:14 Hrs. on 01.05.16, AGTPP Unit 3&4, STG-1&2 tripped due to voltage jerk. It was revived at 20:07 Hrs. Outage Duration: 0:53 Hrs. Generation Loss : 68 MW; Load Loss : 0 MW. Category - GI-I

7. At 03:03 Hrs. on 29.05.16, AGTPP Unit 3 tripped due to high exhaust pressure. It was revived at 03:53 Hrs. Outage Duration: 0:50 Hrs. Generation Loss : 17 MW; Load Loss : 0 MW. Category - GI-I

8. At 21:24 Hrs. on 29.05.16, BgTPP Unit 1 tripped due to oil leakage from Turbine Control System. It was revived at 21:24 Hrs. on 31.05.16. Outage Duration: 60:40 Hrs. Generation Loss : 79 MW; Load Loss : 0 MW. Category - GI-II

9. At 21:35 Hrs. on 31.05.16, AGBPP Unit 2,3,4,5,8&9 tripped due to low gas pressure. It was revived at 21:45 Hrs. Outage Duration: 0:10 Hrs. Generation Loss : 164 MW; Load Loss : 0 MW. Category - GI-II

***ANNEXURES***

***&***

***EXHIBITS***

*Monthly Progress Report of NERPC for the month of May 2016*

A-1

**Annexure - I**

**MAJOR RESERVOIRS LEVEL OF THE MONTH :**

	FRL (mtr.)	MDDL (mtr.)	Beginning of the Month		End of the Month	
			Level in mtr/ft	Energy Content in (MU)	Level in mtr/ft	Energy Content in (MU)
KHANDONG	719.3	704	719.2	21.9	719.8	24.7
KOPILI	609.5	592.83	606.3	66.9	609.4	98.2
LOKTAK	768.5	766.2	767.1	34.0	768.3	191.0
BARAPANI	3220 ft	3150 ft	3174.7 ft	10.8	3176.2 ft	11.5
GUMTI	93.55	83.6	89.4	13.0	89.6	13.7
DOYANG	333	306	306.3	0.0	308.4	2.7

A-2

**Annexure - II**

**FREQUENCY ANALYSIS FOR THE MONTH OF MAY 2016**

Frequency	Freq. (in Hz.)	Time (H:M)	Date (D.M.Y)
<b>1. Maximum Frequency</b>	<b>50.44</b>	<b>17:31</b>	<b>18.05.2016</b>
<b>2. Minimum Frequency</b>	<b>49.56</b>	<b>22:12</b>	<b>26.05.2016</b>
<b>3. Monthly Average</b>	<b>50.00</b>		

**Frequency in Hz as %age of Time for the Blocks :**

<b>f &lt; 49.90</b>	<b>49.90 &lt; f &lt; 50.05</b>	<b>f &gt; 50.05</b>
<b>6.11</b>	<b>68.64</b>	<b>25.25</b>

**Daily Frequency Variation Index (FVI) :**

<b>Date</b>	<b>FVI</b>	<b>Date</b>	<b>FVI</b>
01-May-16	0.05	17-May-16	0.03
02-May-16	0.04	18-May-16	0.04
03-May-16	0.04	19-May-16	0.04
04-May-16	0.05	20-May-16	0.04
05-May-16	0.04	21-May-16	0.04
06-May-16	0.05	22-May-16	0.04
07-May-16	0.03	23-May-16	0.07
08-May-16	0.06	24-May-16	0.11
09-May-16	0.03	25-May-16	0.04
10-May-16	0.04	26-May-16	0.08
11-May-16	0.04	27-May-16	0.06
12-May-16	0.03	28-May-16	0.05
13-May-16	0.04	29-May-16	0.06
14-May-16	0.05	30-May-16	0.04
15-May-16	0.04	31-May-16	0.04
16-May-16	0.03	<b>Average FVI</b>	<b>0.046</b>

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**Annexure - III**

**Consolidated Scheduled Bilateral Exchanges in NE Region during May 2016**

Name of Trader	Energy at NER periphery (in MWH)
MPPL	51161.93916
APPCPL	47343.52496
OTPC	45323.50000
TPTL	15018.04007
NVVN	8122.914963
GMRETL	800.00000
I IPL	177.6000061
I EXL	95.00000

### Energy Bilateral Exchanges during the month of May 2016

Page No. :

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NERPC, Shillong

Bilateral Exchanges for May 2016

Dated 17th June 2016

#### A. Details of Scheduled Bilateral Exchanges within the Region

Sl.No.	From	To	Trader	Energy ( At Seller Periphery) (MWH)	Energy ( At NER-ER Periphery) (MWH)	Energy ( At Buyer Periphery) (MWH)	Approval No.
1	Tripura (Baramura-IV)	Manipur		-3534.000000		-3448.551158	
2	Tripura (Baramura-IV)	Mizoram		-3534.000000		-3437.525220	
3	Tripura (Baramura-V)	Manipur		-3534.000000		-3448.551158	
4	Tripura (Baramura-V)	Mizoram		-3534.000000		-3437.525220	
5	ASEB	POWERGRID <sup>^</sup>		1470.857800	^ The actual energy consumed by POWERGRID		
6	Palatana (OTPC)	APDCL	OTPC	30398.640000	29928.000000	29598.000000	2245/F
7	Palatana (OTPC)	APDCL	OTPC	634.230000	623.500000	614.510000	2253/D
8	Palatana (OTPC)	APDCL	OTPC	523.560000	516.000000	509.760000	2258/D
9	Palatana (OTPC)	APDCL	OTPC	535.680000	528.000000	521.760000	2265/D
10	Palatana (OTPC)	APDCL	OTPC	535.680000	528.000000	521.760000	2268/D
11	Palatana (OTPC)	APDCL	OTPC	535.680000	528.000000	521.760000	2274/D
12	Palatana (OTPC)	APDCL	OTPC	535.680000	528.000000	521.760000	2276/D
13	Palatana (OTPC)	APDCL	OTPC	535.680000	528.000000	521.760000	2278/D
14	Palatana (OTPC)	APDCL	OTPC	11804.160000	11616.000000	11491.200000	2272/F
15	Assam	Meghalaya	MPPL	9304.320000	9276.000000	9152.880000	2214/A
16	Assam	Meghalaya	MPPL	1156.800000	1152.000000	1135.680000	2289/F
17	Meghalaya	Assam	APPCL	144.000000	143.280000	141.600000	2267/D
18	Meghalaya	Assam	APPCL	144.000000	143.280000	141.600000	2269/D
19	Meghalaya	Assam	APPCL	144.000000	143.280000	141.600000	2273/D
20	Meghalaya	Assam	APPCL	3449.280000	3438.720000	3401.760000	2271/F

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**Scheduled Bilateral Exchange with SEBs / Organisations in other Regions**

Sl.No.	From	To	Trader	Energy ( At Seller Periphery) (MWH)	Energy ( At NER-ER Periphery) (MWH)	Energy ( At Buyer Periphery) (MWH)	Approval No.
							2300/D
28	HPSEB	APDCL	MPPL		282.720000	279.360000	
29	DAGACHU	APDCL	MPPL		407.520000	402.720000	2303/C
30	HPSEB	APDCL	MPPL		1130.880000	1117.440000	2302/F
31	DBPL	APDCL	TPTL		301.000000	296.660000	2256/C
32	DPTPTCL	APDCL	TPTL		336.960000	332.880000	2260/D
33	DPTPTCL	APDCL	TPTL		325.440000	321.600000	2262/C
34	DPTPTCL	APDCL	TPTL		313.680000	309.840000	2263/D
35	HPSEB	APDCL	MPPL		282.720000	279.360000	2297/C
36	HPSEB	APDCL	MPPL		282.720000	279.360000	2299/D
							2301/D
37	DPTPTCL	APDCL	TPTL		419.040000	414.240000	
38	HPSEB	APDCL	MPPL		282.720000	279.360000	2304/D
							2306/D
39	DPTPTCL	APDCL	TPTL		419.040000	414.240000	
40	DPTPTCL	APDCL	TPTL		349.200000	345.12	2307/C
41	DPTPTCL	APDCL	TPTL		698.640000	690.24	2308/D
42	DPTPTCL	APDCL	TPTL		698.640000	690.24	2311/D
43	PSEB	APDCL	APPCL		1200.000000	1182.720000	2257/C
44	APDCL	UPPCL	MPPL	-296.34	-294.240000		33202-S
45	APDCL	UPPCL	MPPL	-295.56	-294.240000		33215
46	APDCL	UPPCL	MPPL	-74.31	-73.980000		33231-D
47	APDCL	UPPCL	MPPL	-110.59	-110.100000		33257-S
48	APDCL	UPPCL	GMRETL	-135.34	-135.000000		33390-S
49	APDCL	UPPCL	GMR	-305.765	-305.000000		33405-S

50	APDCL	UPPCL	GMRETL	-361.08	-360.000000	33424-S
51	APDCL	UPPCL	MPPL	-325.975	-325.000000	33432/D
52	APDCL	UPPCL	MPPL	-121.7375	-121.375000	33460/D
53	APDCL	UPPCL	MPPL	-221.2575	-220.260000	33237-S
54	APDCL	UPPCL	MPPL	-184.98	-184.140000	33263-S

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**Scheduled Bilateral Exchange with SEBs / Organisations in other Regions**

Sl.No.	From	To	Trader	Energy ( At Seller Periphery) (MWH)	Energy ( At NER-ER Periphery) (MWH)	Energy ( At Buyer Periphery) (MWH)	Approval No.
							33423-S
55	APDCL	UPPCL	APPCPL	-150.45	-150.000000		
56	APDCL	UPPCL	APPCPL	-601.8	-600.000000		33436/S
57	APDCL	UPPCL	APPCPL	-214.2675	-213.625000		33468-S
58	APDCL	BSPHCL	IEXL	-80.24	-80.000000		INTERIM2/C
59	APDCL	CSPDCL	IEXL	-15.045	-15.000000		27125/C
60	MSPDCL	CEC	MPPL	-637.980000	-630.000000		11448/D
61	MSPDCL	CEC	MPPL	-769.670000	-760.000000		11456/D
62	MSPDCL	CEC	MPPL	-611.990000	-604.375000		11465/C
63	MSPDCL	CEC	MPPL	-658.240000	-650.000000		11475/C
64	MSPDCL	CEC	MPPL	-658.240000	-650.000000		11483/D
65	MSPDCL	CEC	MPPL	-238.985000	-236.000000		11486/D
							11492/D
66	MSPDCL	CEC	MPPL	-763.695000	-753.750000		
67	MSPDCL	CEC	MPPL	-797.85	-787.500000		Interim8/C
68	MSPDCL	CEC	MPPL	-669.95	-661.250000		11510/C
69	MSPDCL	CEC	MPPL	-463.79	-457.750000		11521/D

70	MSPDCL	CEC	MPPL	-660.875	-652.250000		11528/D
71	MSPDCL	CEC	MPPL	-476.725	-470.500000		11534/C
72	MSPDCL	CEC	MPPL	-832.9	-821.250000		11543/D
73	MSPDCL	CEC	MPPL	-828.2325	-816.625000		11549/C
74	MSPDCL	CEC	MPPL	-927.4925	-914.500000		11567/D
75	MSPDCL	CEC	MPPL	-991.35	-977.500000		11571/D
76	MSPDCL	CEC	MPPL	-448.7625	-442.500000		11585/D
77	MSPDCL	CEC	MPPL	-436.3675	-430.250000		11588/C
78	MSPDCL	CEC	MPPL	-894.985	-882.000000		11593/D
79	MSPDCL	UPPCL	MPPL	-729.4775	-720.000000		33528/S
80	MSPDCL	CEC	MPPL	-635.6725	-626.750000		11539/D
81	PDDJ&K	MePDCL	MPPL		8483.700000	8366.690000	2215/A

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**Scheduled Bilateral Exchange with SEBs / Organisations in other Regions**

Sl.No.	From	To	Trader	Energy ( At Seller Periphery) (MWH)	Energy ( At NER-ER Periphery) (MWH)	Energy ( At Buyer Periphery) (MWH)	Approval No.
82	OPGS	MePDCL	IPL		177.600000	175.200000	2291/C
83	MePDCL	UPPCL	MPPL	-289.512500	-287.500000		33203-S
84	MePDCL	UPPCL	MPPL	-351.610000	-350.000000		33216
85	MePDCL	UPPCL	MPPL	-176.207500	-175.417500		33229-D
86	MePDCL	UPPCL	MPPL	-206.217500	-205.275000		33255-D
87	MePDCL	BSES RPL	APPCL	-351.540000	-350.000000		33278-S
88	MePDCL	UPPCL	MPPL	-60.270000	-60.000000		33297-S
89	MePDCL	CEC	MPPL	-150.700000	-150.000000		11435/D
90	MePDCL	CEC	MPPL	-421.120000	-420.000000		11438/D

91	MePDCL	CESC	MPPL	-421.120000	-420.000000	11455/D
92	MePDCL	CESC	MPPL	-394.800000	-393.750000	11464/C
93	MePDCL	CESC	MPPL	-421.120000	-420.000000	11474/C
94	MePDCL	CESC	MPPL	-421.120000	-420.000000	11482/D
95	MePDCL	UPPCL	MPPL	-250.650000	-250.000000	33401-D
96	MePDCL	CESC	MPPL	-421.26	-420.000000	11491/D
97	MePDCL	CESC	MPPL	-5743.7	-5722.500000	11501/F
98	MePDCL	UPPCL	MPPL	-50.23	-50.000000	33235-S
99	MePDCL	UPPCL	MPPL	-225.5975	-224.582500	33238-S
100	MePDCL	UPPCL	MPPL	-195.6075	-194.725000	33264-S
101	MePDCL	CESC	MPPL	-180.45	-180.000000	11439/D
102	MePDCL	CESC	MPPL	-421.12	-420.000000	11447/D
103	MePDCL	CESC	MPPL	-240.64	-240.000000	11485/D
104	MePDCL	BSES RPL	APPCL	-200.640000	-200.000000	33417-D
105	MePDCL	UPPCL	MPPL	-451.380000	-450.000000	33434/S
106	MePDCL	UPPCL	MPPL	-178.800000	-178.262500	33461-D
107	MePDCL	BSES RAJDHANI	MPPL	-200.640000	-200.000000	33480-S
108	MePDCL	BYPL	APPCL	-73.2075	-72.975000	33502/D

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**Scheduled Bilateral Exchange with SEBs / Organisations in other Regions**

Sl.No.	From	To	Trader	Energy ( At Seller Periphery) (MWH)	Energy ( At NER-ER Periphery) (MWH)	Energy ( At Buyer Periphery) (MWH)	Approval No.
							33520/D
109	MePDCL	BSES	APPCL	-175.560000	-175.000000		
110	MePDCL	BYPL	APPCL	-250.750000	-250.000000		33537-D
111	MePDCL	BYPL	APPCL	-251.000000	-250.000000		33554-D
112	MePDCL	CESC	MPPL	-391.560000	-390.000000		11542/D
113	MePDCL	CESC	MPPL	-376.752500	-375.250000		11550/C

114	MePDCL	UPPCL	MPPL	-253.510000	-252.500000	6728/R
115	MePDCL	CESC	MPPL	-67.267500	-67.000000	11589/C
116	MePDCL	CESC	MPPL	-251.150000	-250.000000	11595/C
117	MePDCL	BYPL	MPPL	-226.010000	-225.000000	33266-S
118	MePDCL	UPPCL	APPCL	-225.675000	-225.000000	33420-D
119	MePDCL	BSES	APPCL	-175.560000	-175.000000	33430/D
120	MePDCL	BSES	APPCL	-102.185000	-101.865000	33458-D
121	MePDCL	BSES	APPCL	-200.640000	-200.000000	33481-S
122	MePDCL	BRPL	APPCL	-54.967500	-54.800000	33503/S
123	MePDCL	BSES	APPCL	-401.200000	-400.000000	33523/D
124	MePDCL	BRPL	APPCL	-100.300000	-100.000000	33538-D
125	MePDCL	BRPL	APPCL	-351.400000	-350.000000	33555-D
126	MePDCL	BRPL	APPCL	-833.320000	-830.000000	33567-D
127	MePDCL	CESC	MPPL	-230.287500	-229.375000	11552/C
128	MePDCL	BRPL	APPCL	-218.370000	-217.500000	33600-S
129	MePDCL	UPPCL	MPPL	-272.555000	-271.737500	33466-S
130	MePDCL	BRPL	APPCL	-145.645000	-145.200000	33509-S
131	MePDCL	BRPL	MPPL	-120.360000	-120.000000	33540-D
132	MePDCL	BYPL	APPCL	-351.400000	-350.000000	33566-D
133	MePDCL	BRPL	APPCL	-401.600000	-400.000000	33582-D
134	MePDCL	BYPL	APPCL	-158.382500	-157.750000	33601-S
135	MePDCL	BYPL	APPCL	-181.830000	-181.250000	33510-S
						33578-D
136	MePDCL	BYPL	APPCL	-125.500000	-125.000000	
137	TSECL	NVVNA	NVVN	-210.622500	-207.075000	11398/C
138	TSECL	NVVNA	NVVN	-226.597500	-222.750000	11399/C
139	Rajasthan Solar(Assam) - SECI *				3743.635000	3743.635000
140	Rajasthan Solar(Assam) - NVVN				790.600000	790.600000
141	Bundled Coal Power (Rajasthan Solar) - Assam			3182.034800	3158.850000	3123.573800

**C. Scheduled Energy from Eastern Region**

Sl.No.	From	To	Energy ( At Seller Periphery) (MWH)	Energy ( At NER-ER Periphery) (MWH)	Energy ( At Buyer Periphery) (MWH)
1	Farakka* Kahalgaon	Ar. Pradesh	1588.795707	1573.680000	1557.032500
2	1*	Ar. Pradesh	1064.782571	1053.745000	1043.005000
3	Talcher*	Ar. Pradesh	1335.243884	1316.897500	1303.742500
4	Farakka* Kahalgaon	Assam	19480.105247	19287.680000	19074.812500
5	1*	Assam	6305.910212	6251.890000	6182.712500
6	Kahalgaon 2*	Assam	25093.080734	24887.225000	24610.012500
7	Talcher*	Assam	8022.263980	7915.277500	7827.665000
8	Farakka 3*	Assam	232.951255	230.652500	227.982500
9	Farakka* Kahalgaon	Mizoram	1183.998556	1172.175000	1147.337500
10	1*	Mizoram	794.869332	788.470000	772.530000
11	Talcher*	Mizoram	969.937573	956.122500	936.872500
12	Farakka* Kahalgaon	Nagaland	3609.905682	3574.555000	3499.187500
13	1*	Nagaland	2380.004855	2359.225000	2309.652500
14	Talcher*	Nagaland	2910.394550	2871.020000	2810.685000

**D. Collective transactions through IEX Power Exchange (-ve means injection, +ve means drawal)**

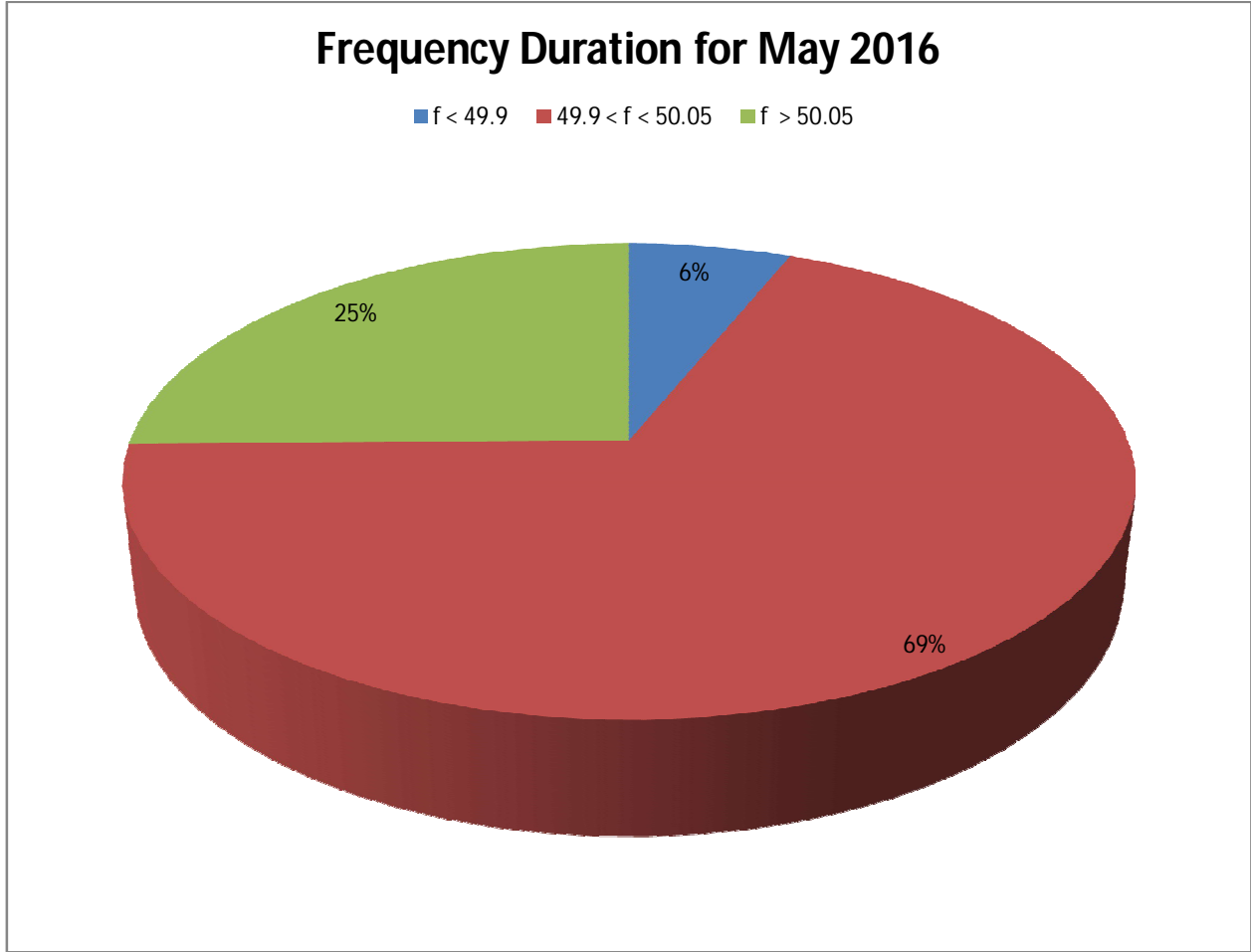
Sl.No.	From	To	Energy ( At Seller Periphery) (MWH)	Energy ( At NER-ER Periphery) (MWH)	Energy ( At Buyer Periphery) (MWH)
1	Ar. Pradesh			183.200000	181.040000
2	Nagaland		-74.720000	-73.345000	
3	APDCL			36984.570000	36568.895000
4	APDCL		-55631.342500	-55429.617500	
5	MSPDCL		-27170.890000	-26818.757500	
6					
7	MePDCL		-15859.090000	-15795.000000	
8	MePDCL			5528.800000	5453.200000
9	Mizoram		-17237.137500	-16874.670000	
10	Nagaland			3585.000000	3508.660000
11	Tripura		-38114.665000	-37911.805000	
12	Tripura			60.000000	59.860000
13	AGBPP(NEEPCO)		-11925.432500	-11881.752500	
14	Kopili(NEEPCO)		-3887.860000	-3875.407500	
15	AGTCCPP(NEEPCO)		-6519.472500	-6477.012500	
16	RHEP(NEEPCO)		-7357.035000	-7279.222500	
17	DHEP(NEEPCO)		-329.612500	-323.975000	

**Details of operation of UFR (Under Frequency Relay)**

**\*\* There was no report of UFR operation in the month of May 2016.**

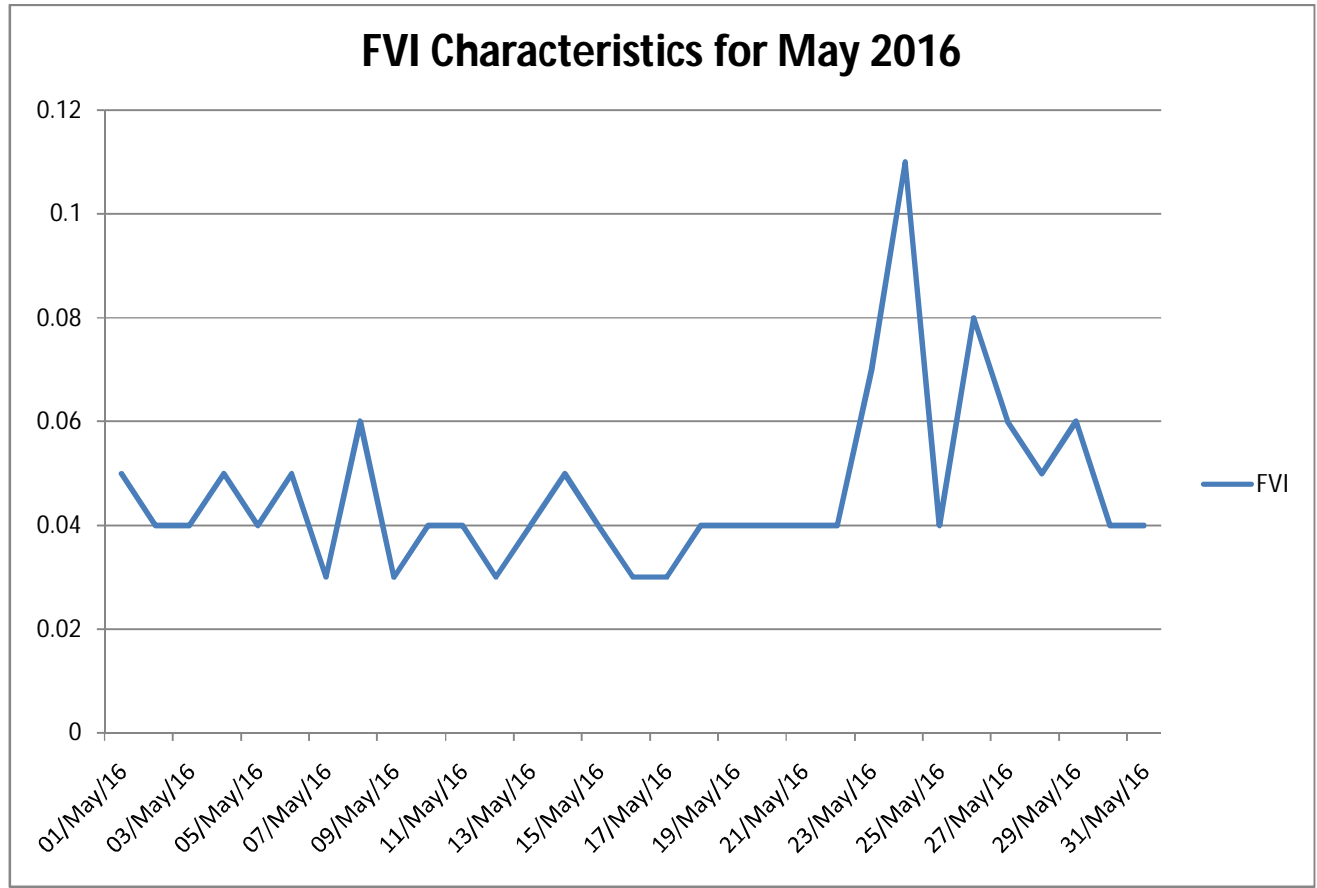
B-1 (i)

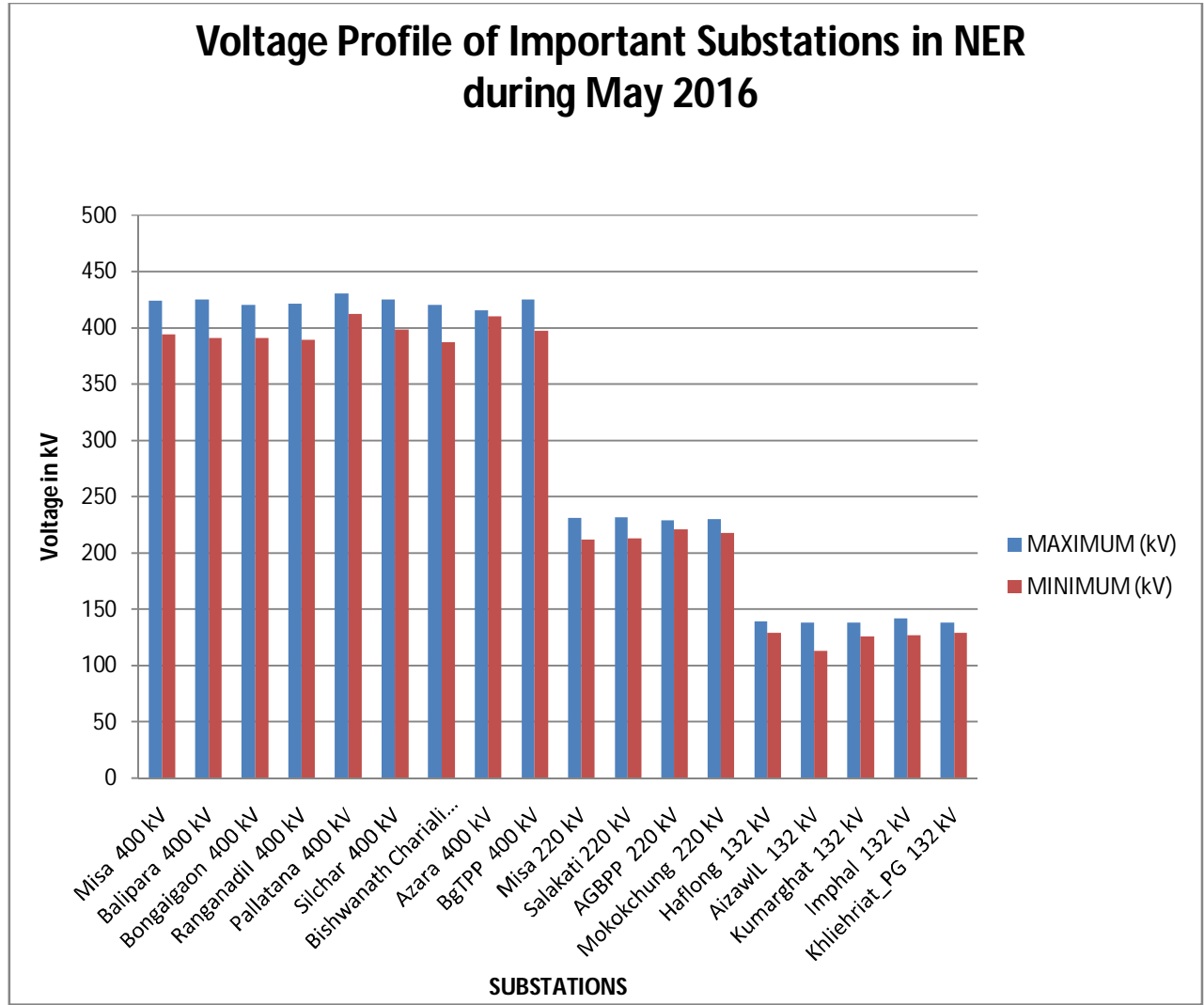
Exhibit - I



B-1 (ii)

Exhibit - II

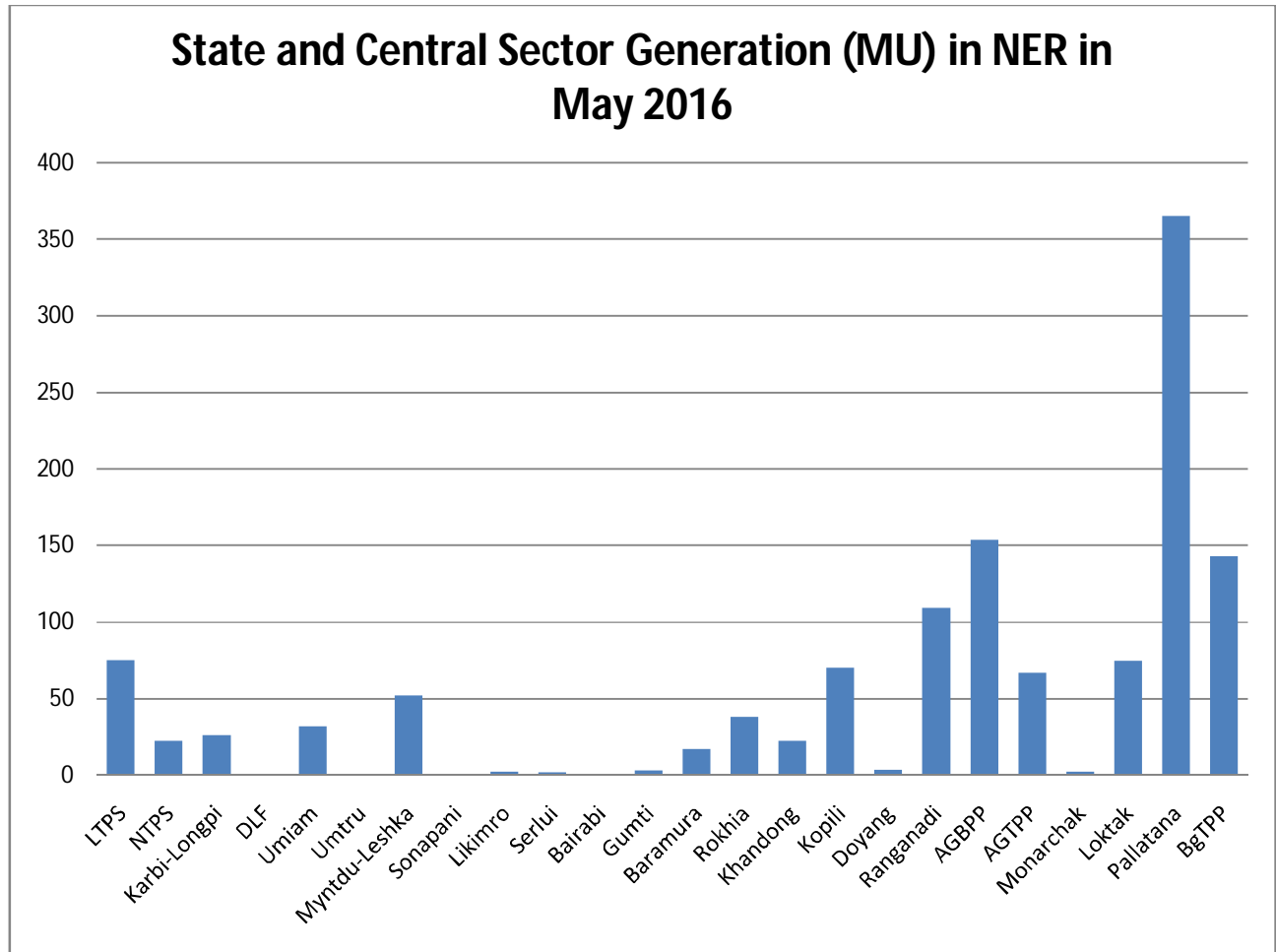




B-3 Energy Generation

(i) Energy Generation by Constituents during the month.

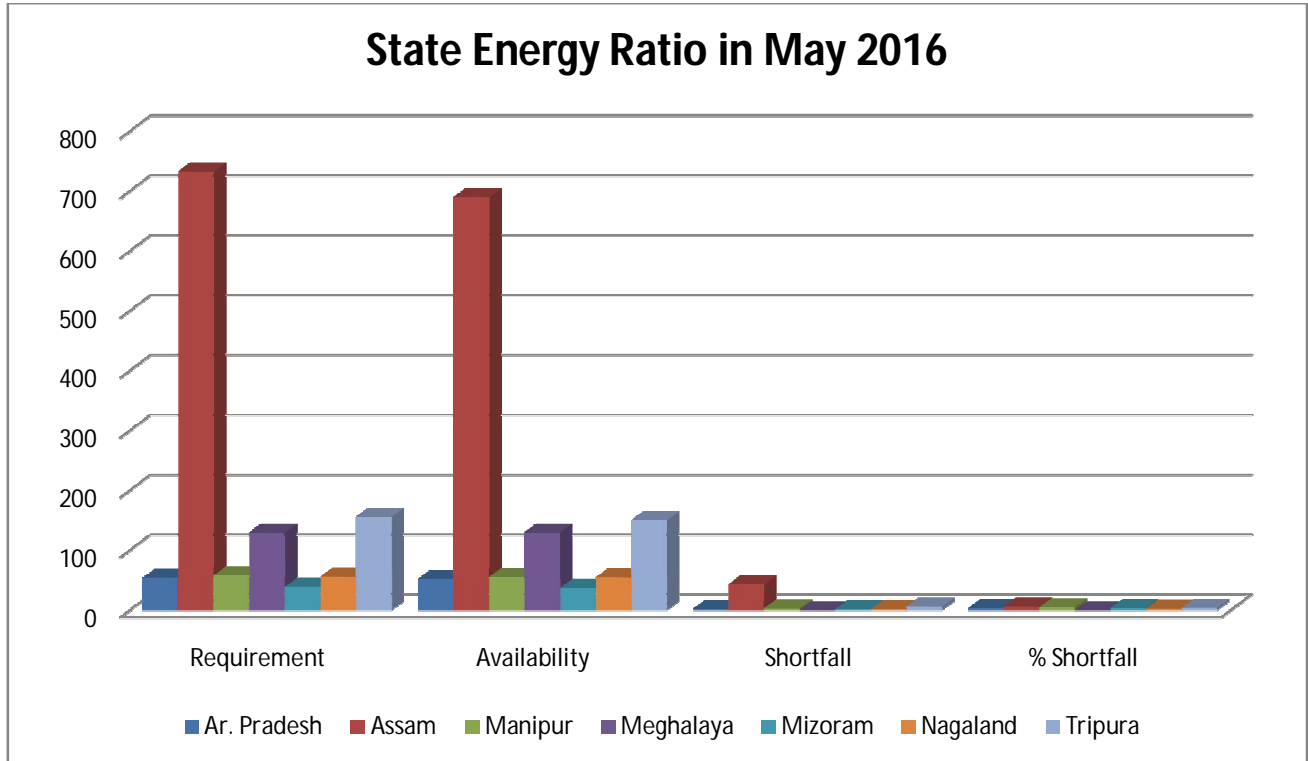
Exhibit - IV



B-3 Energy Generation

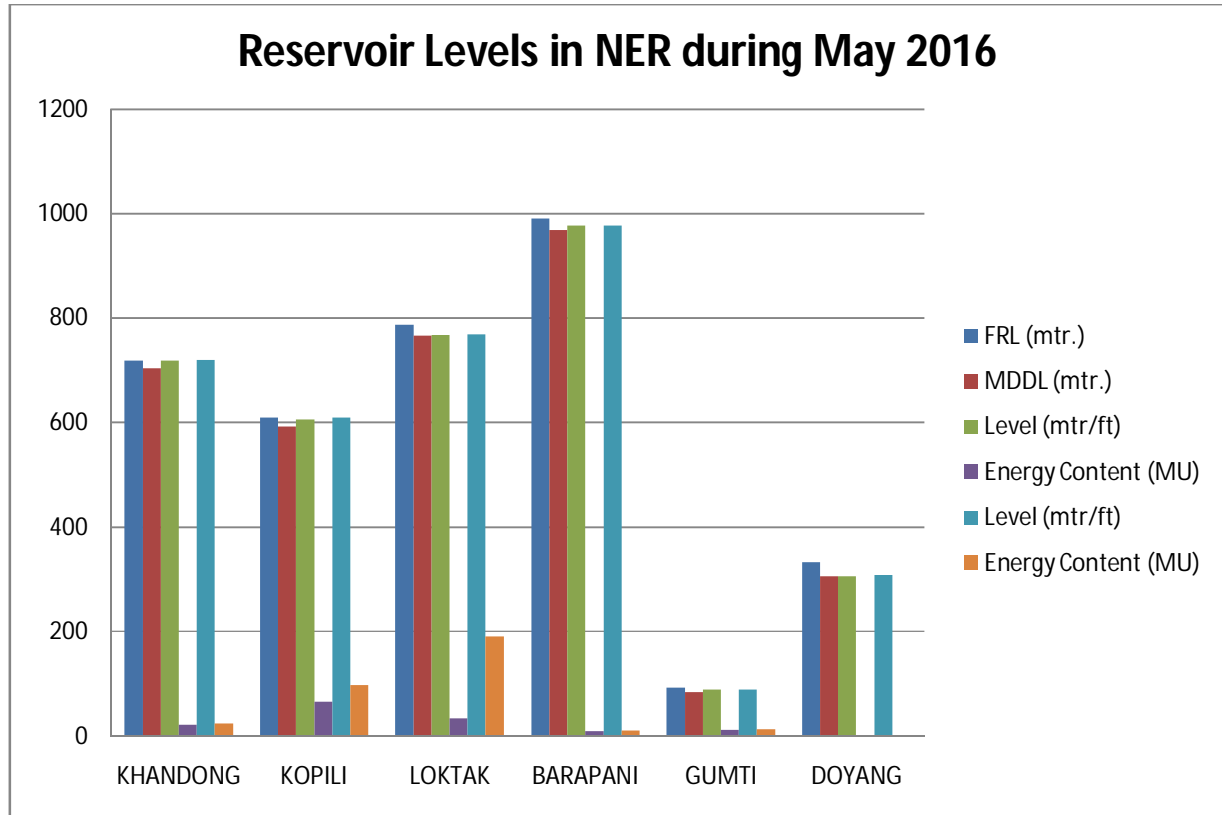
(ii) Energy Scenario of States during the month

Exhibit - V



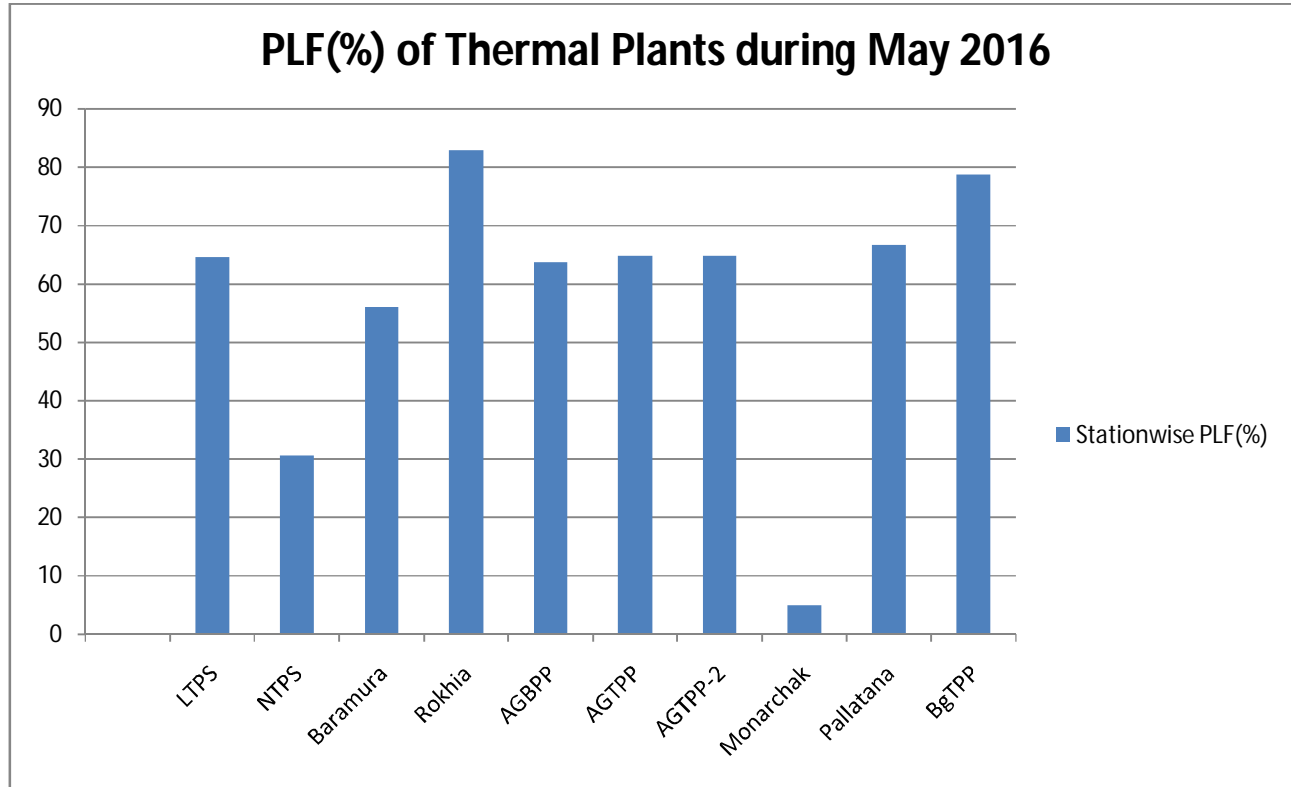
B-4 Reservoir Profile

Exhibit - VI



B-5 Station-wise Plant Load Factor

Exhibit - VII



LTPS	-	64.54%
NTPS	-	30.73%
Baramura	-	56.00%
Rokhia	-	82.86%
AGBPP	-	63.79%
AGTPP	-	64.74%
AGTPP-2	-	64.74%
Monarchak	-	04.95%
Pallatana	-	66.61%
BgTPP	-	78.64%