

**पावर सिस्टम ऑपरेशन कॉरपोरेशन लिमिटेड**

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

**POWER SYSTEM OPERATION CORPORATION LIMITED**

(A wholly owned subsidiary of POWERGRID)



पंजीकृत एवं केन्द्रीय कार्यालय: बी-9, प्रथम तल, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110 016  
 Registered & Corporate Office : B - 9, 1st Floor, Qutub Institutional Area, Katwaria Sarai, New Delhi - 110 016  
 Website : www.posoco.in, www.nldc.in, Tel: 011-26536832, 26524522, Fax: 011-26524525, 26536901

संदर्भ संख्या:-POSOCO/NLDC/GM/

दिनांक: 21.08.2015

सेवा में,  
 वितरण सूची के अनुसार

विषय:- निष्पादन रिपोर्ट - जुलाई 2015

महोदय,

आई०ई०जी०सी०-2010 के प्रावधान के अनुसार, - जुलाई 2015 माह की अखिल भारतीय प्रणाली की निष्पादन रिपोर्ट संलग्न है।

धन्यवाद

भवदीय

*एन नल्लारसन*  
 ( एन नल्लारसन )  
 उप महाप्रबंधक  
 (रा०भा०प्रे०के०)

संलग्नक: मासिक प्रणाली रिपोर्ट

## वितरण सूची

### Distribution List

1. सचिव, के.वि.नि.आ. तीसरा एवं चौथा तल, चंद्रलोक भवन, 36, जनपथ, नई दिल्ली - 110001  
Secretary, CERC, 3<sup>rd</sup> & 4<sup>th</sup> Floor, Chanderlok Building, 36, Janpath, New Delhi-110001
2. मुख्य अभियंता, (जी एम), के. वि. प्रा., सेवा भवन, आर. के. पुरम, नई दिल्ली - 110066  
Chief Engineer (GM), CEA, Sewa Bhavan, R.K. Puram, New Delhi-110066
3. सदस्य सचिव, ऊ. क्षे. वि. स., 18/ ए, शहीद जीत सिंह सनसनवाल मार्ग, नई दिल्ली - 110016  
Member Secretary, NRPC, 18/A, SJSS Marg, Katwaria Sarai, New Delhi-110016
4. सदस्य सचिव, प. क्षे. वि. स., एफ-3, एम आई डी सी क्षेत्र, अंधेरी, मुंबई - 400093  
Member Secretary, WRPC, F-3, MIDC Area, Andheri (East), Mumbai-400093
5. सदस्य सचिव, द. क्षे. वि. स., 29, रेस कोर्स क्रॉस रोड, बंगलुरु - 560009  
Member Secretary, SRPC, 29, Race Course Cross Road, Bangalore-560009
6. सदस्य सचिव, पू. क्षे. वि. स., 14, गोल्फ क्लब रोड, कोलकाता - 700033  
Member Secretary, ERPC, 14, Golf Club Road, Kolkata-700033
7. सदस्य सचिव, ऊ. पू. क्षे. वि. स., मेघालय राज्य आवसीय वित्त सहकारी समिति लिमिटेड भवन, नॉग्रिम हिल्स, शिलॉंग - 793003  
Member Secretary, NERPC, Meghalaya State Housing Finance Cooperative Society Ltd. Building, Nongrim Hills, Shillong -793003
8. महाप्रबंधक, पू. क्षे. भा. प्रे. के., 14, गोल्फ क्लब रोड, कोलकाता - 700033  
General Manager, ERLDC, 14, Golf Club Road, Kolkata-700033
9. महाप्रबंधक, प. क्षे. भा. प्रे. के., एफ-3, एम आई डी सी क्षेत्र, अंधेरी, मुंबई - 400093  
General Manager, WRLDC, F-3, MIDC Area, Andheri (East), Mumbai-400093
10. महाप्रबंधक, ऊ. क्षे. भा. प्रे. के., 18/ ए, शहीद जीत सिंह सनसनवाल मार्ग, नई दिल्ली - 110016  
General Manager, NRLDC, 18/A, SJSS Marg, Katwaria Sarai, New Delhi-110016
11. कार्यपालक निदेशक, द. क्षे. भा. प्रे. के., 29, रेस कोर्स क्रॉस रोड, बंगलुरु - 560009  
Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009
12. महाप्रबंधक, ऊ. पू. क्षे. भा. प्रे. के., डोंगतिह, लोअर नॉग्रह, लापलंग, शिलॉंग - 793006  
General Manager, NERLDC, Dongtieh, Lower Nongrah, Laplang, Shillong-793006



# POWER SYSTEM OPERATION CORPORATION LIMITED

(A wholly owned subsidiary of POWERGRID)

पावर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

NATIONAL LOAD DESPATCH CENTRE –राष्ट्रीय भार प्रेषण केन्द्र

मासिक ऑपरेशन रिपोर्ट

Monthly  
Operation Report



जुलाई 2015

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड  
राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली

**POWER SYSTEM OPERATION CORPORATION LTD**  
**NATIONAL LOAD DESPATCH CENTRE, NEW DELHI**



**माह जुलाई 2015 के लिए प्रचालन निष्पादन रिपोर्ट**  
**OPERATIONAL PERFORMANCE REPORT FOR THE**  
**MONTH OF JULY 2015**

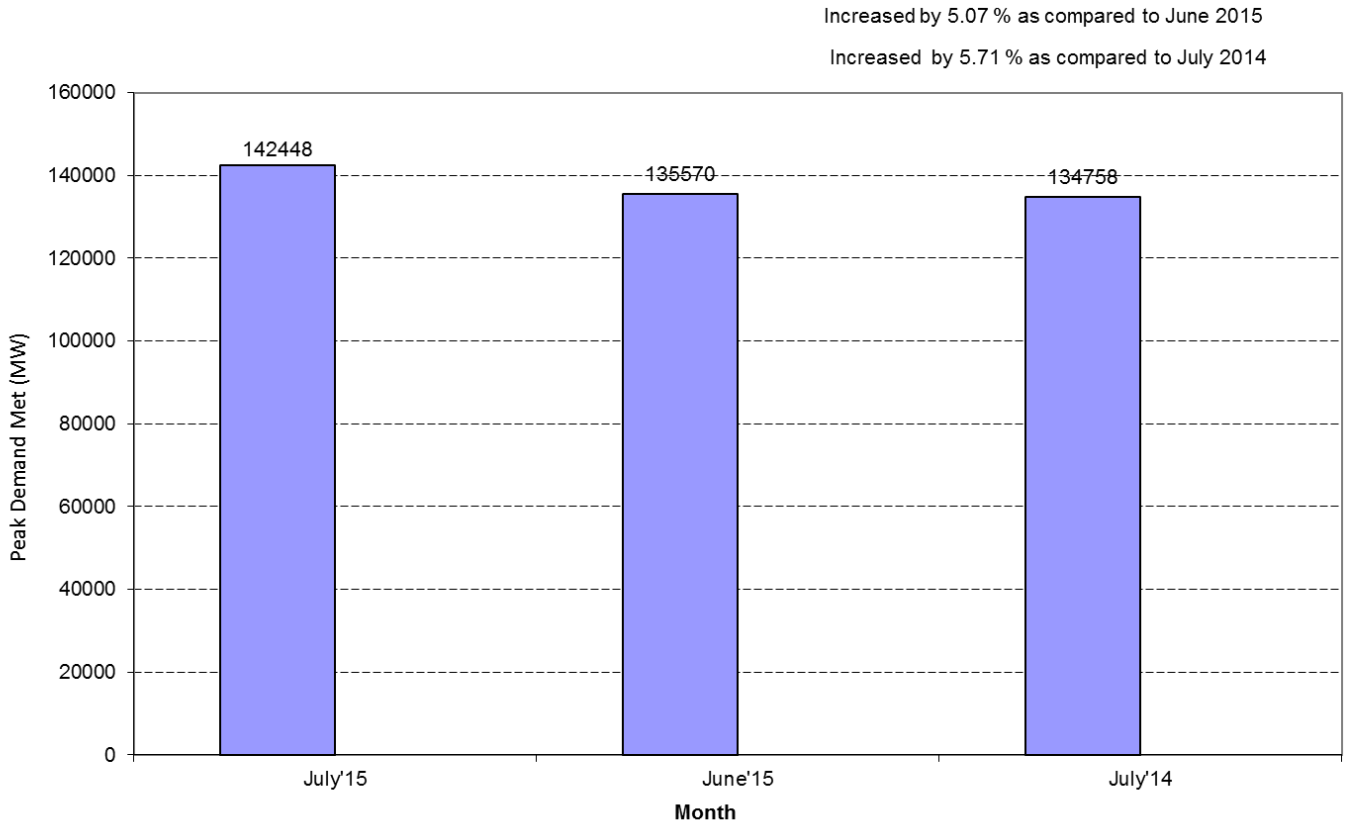
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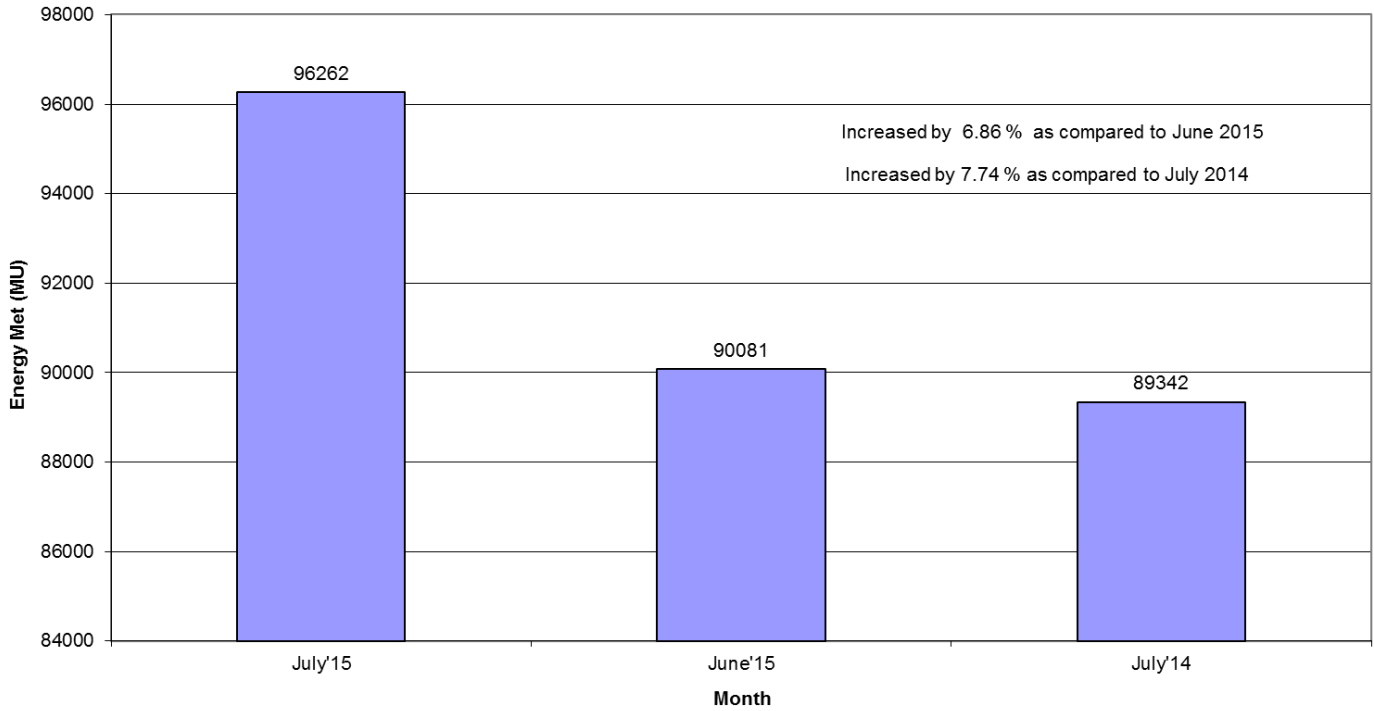
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# 1. SUMMARY OF REPORT FOR THE MONTH OF JULY 2015

Peak Demand Met

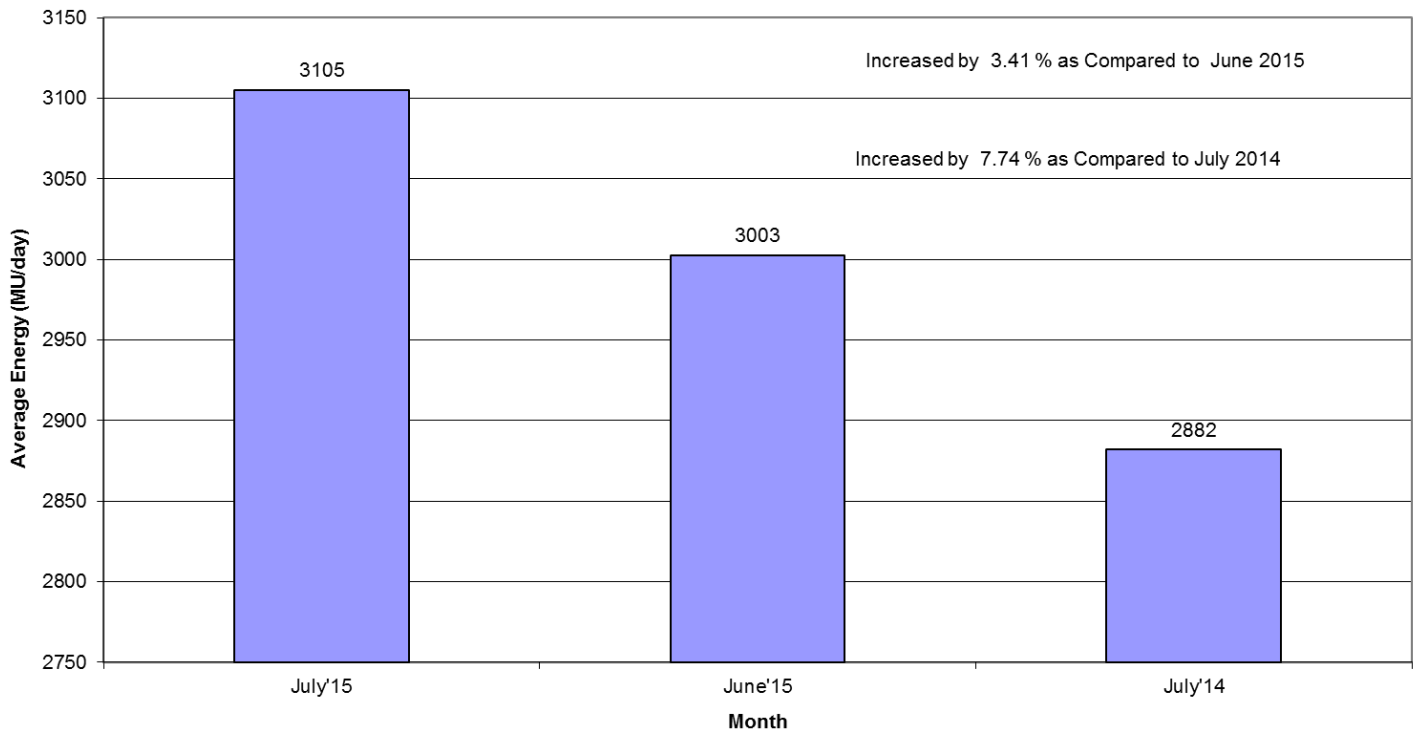


Energy Met

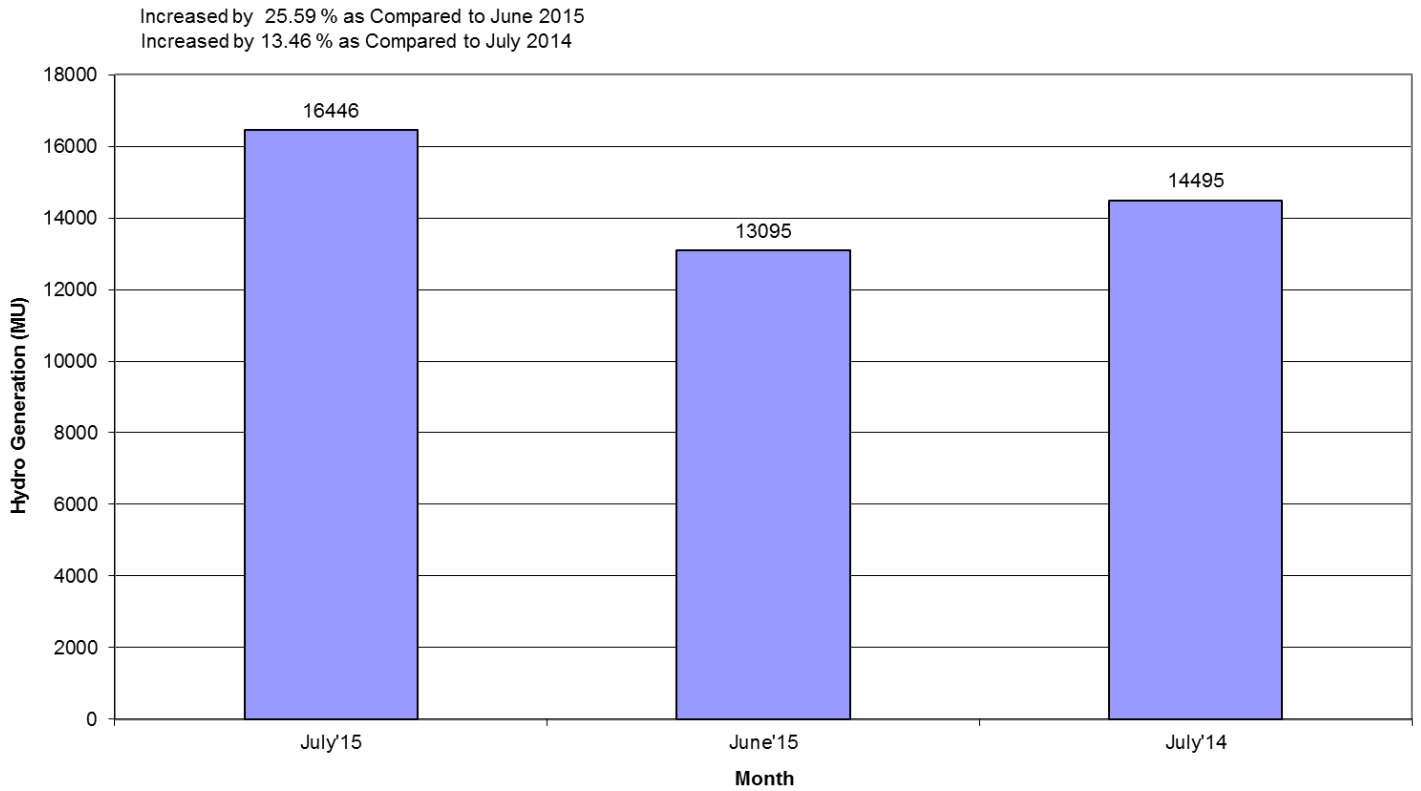


# 1. SUMMARY OF REPORT FOR THE MONTH OF JULY 2015

Average Energy (MU/day)



Hydro generation



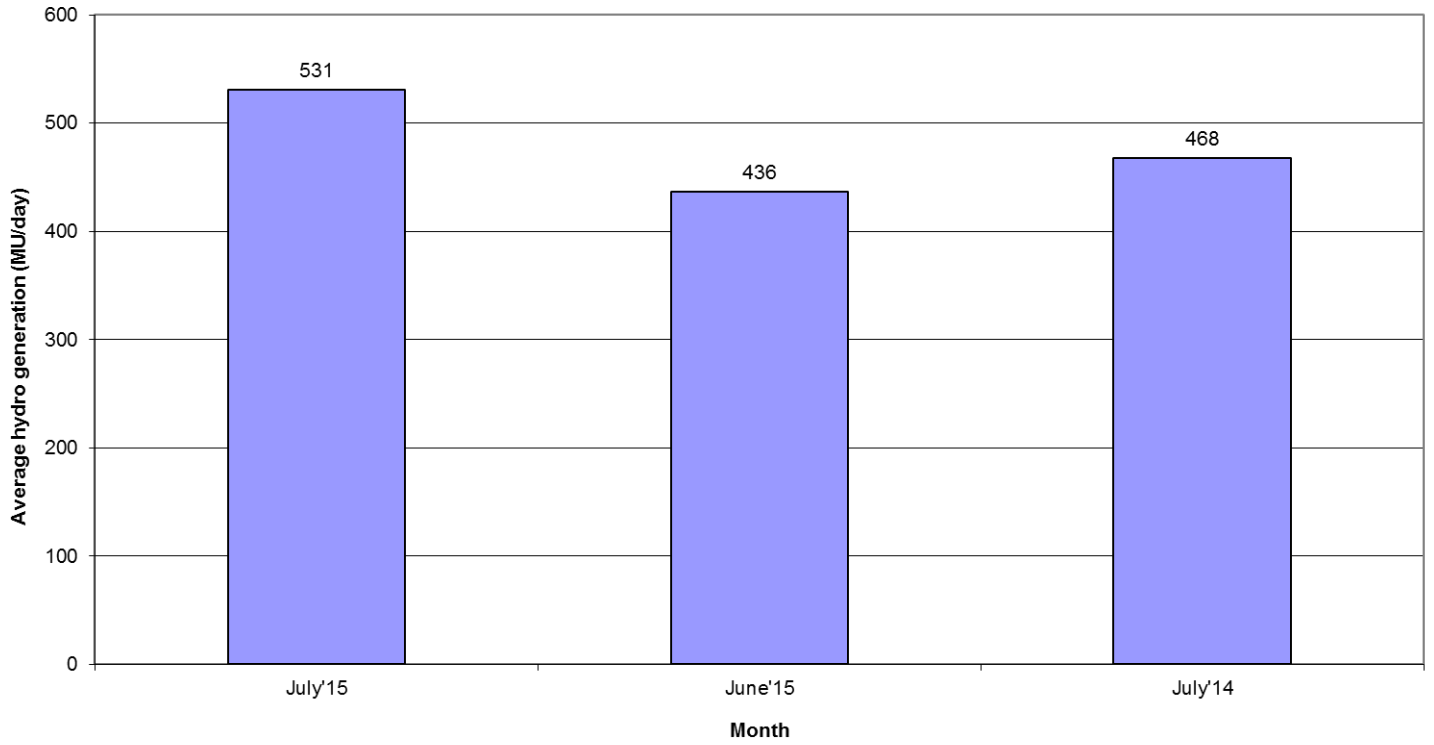


# 1. SUMMARY OF REPORT FOR THE MONTH OF JULY 2015

Average Hydro Generation

Increased by 21.54 % as Compared to June 2015

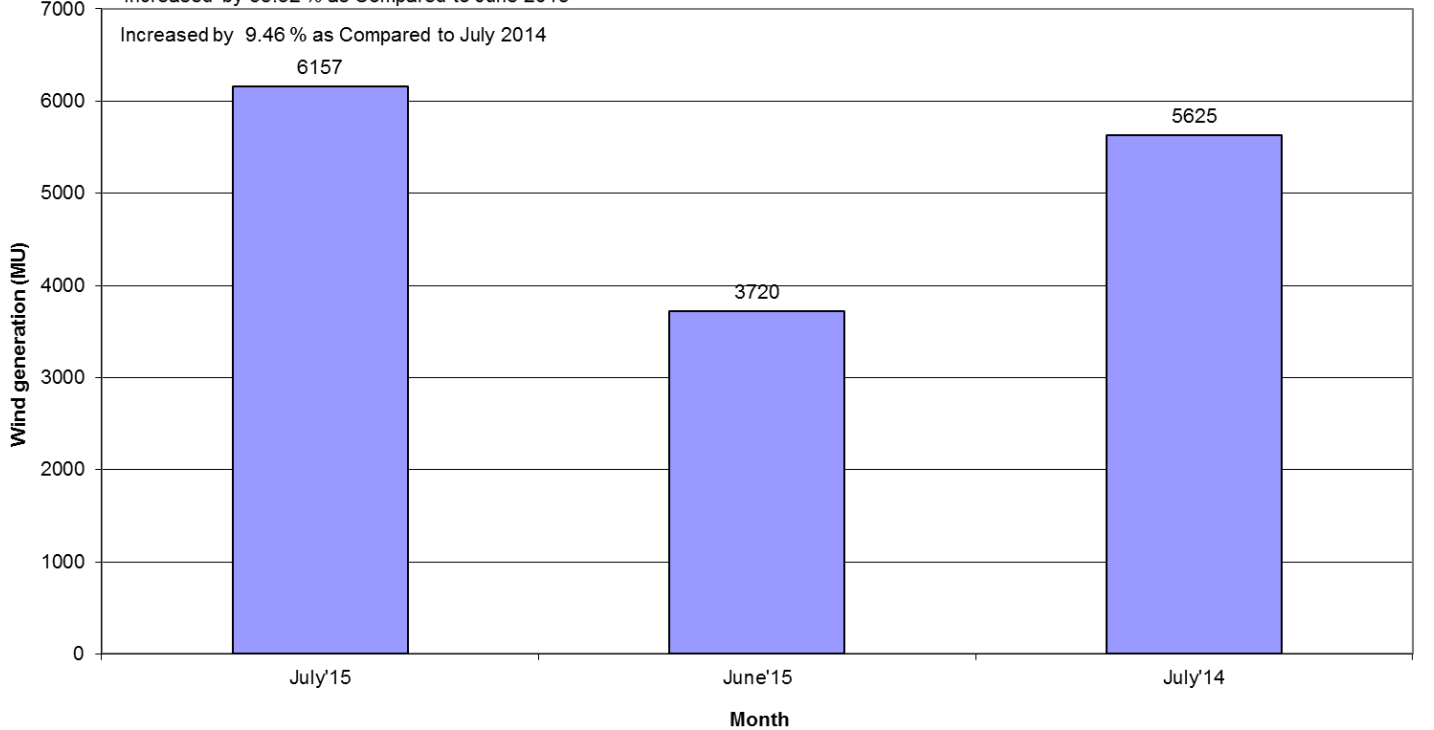
Increased by 13.46 % as Compared to July 2014



Wind Generation

Increased by 65.52 % as Compared to June 2015

Increased by 9.46 % as Compared to July 2014

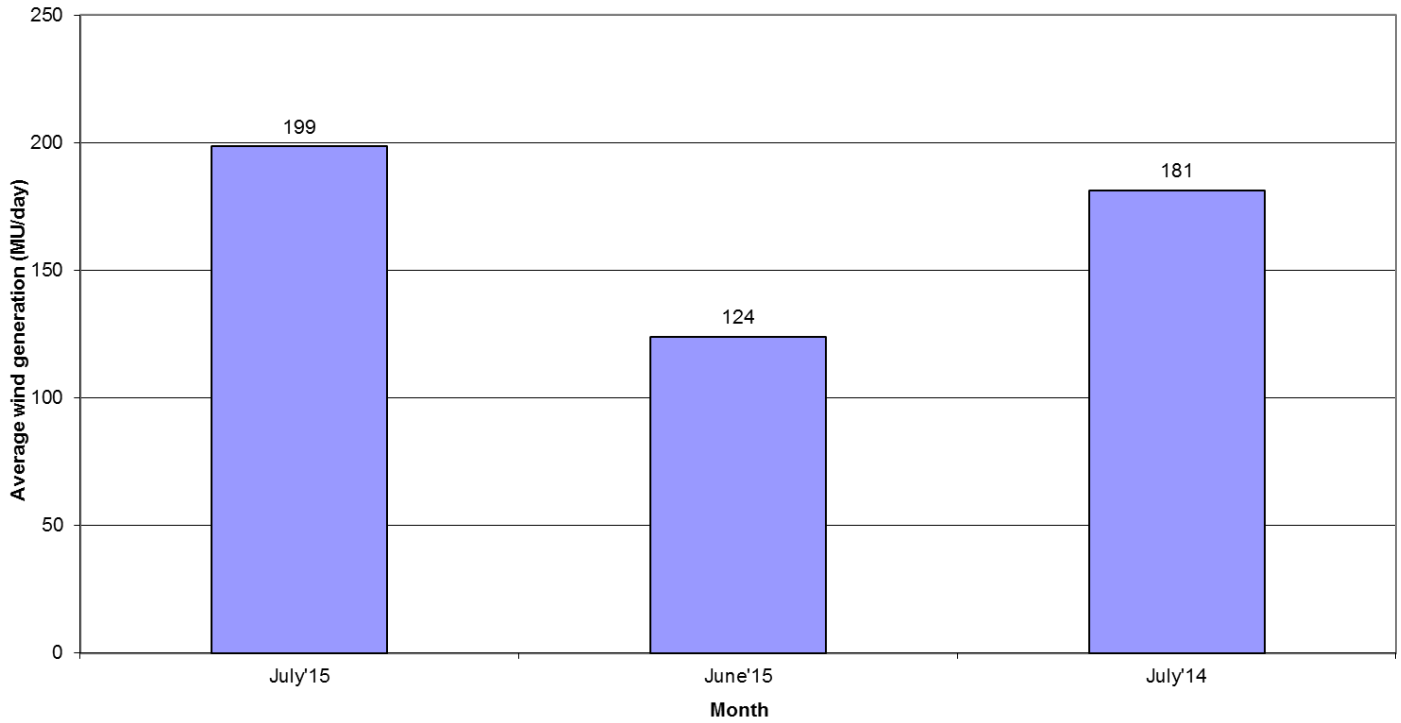


# 1. SUMMARY OF REPORT FOR THE MONTH OF JULY 2015

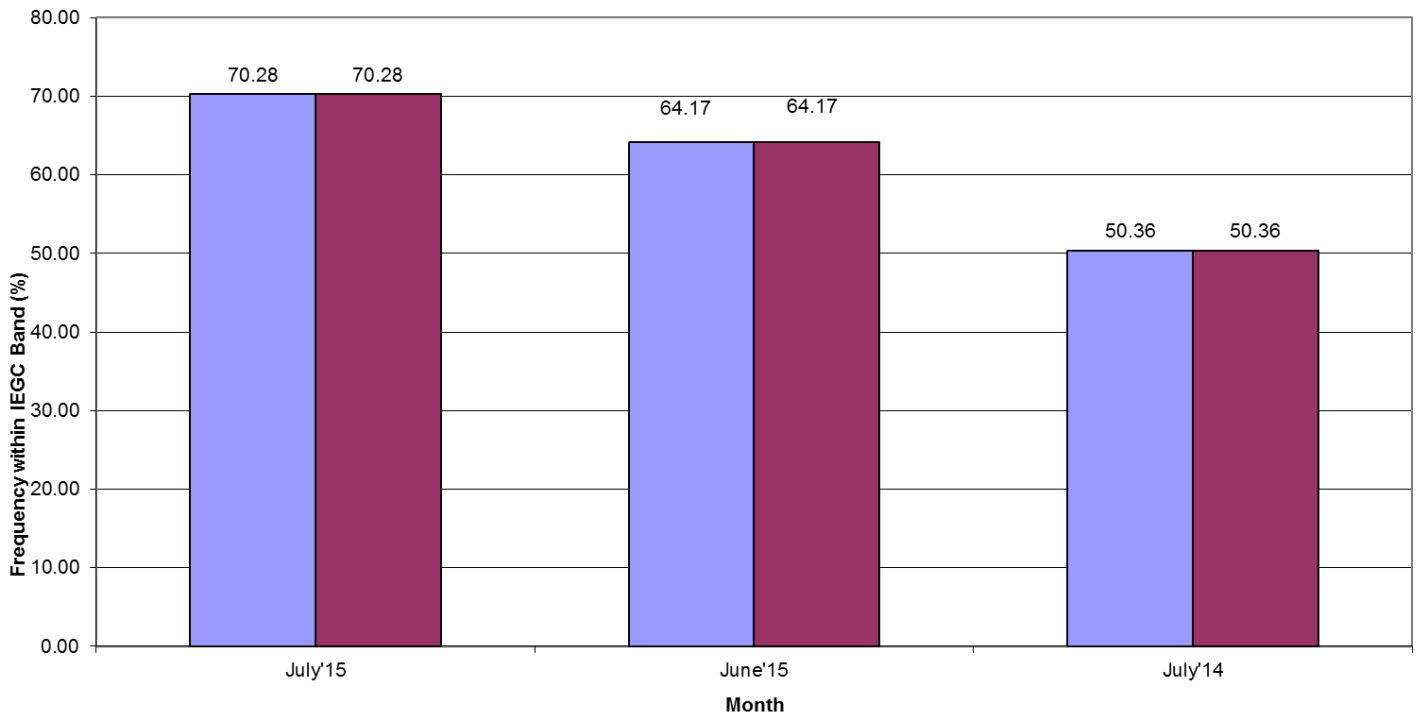
Average wind generation (MU/day)

Increased by 60.18 % as Compared to June 2015

Increased by 9.46 % as Compared to July 2014



Frequency within IEGC Band



- W.e.f 17<sup>th</sup> Feb 2014, IEGC Band has been changed to 49.90 to 50.05 from 49.70 – 50.20

(2) ALL INDIA REGIONWISE INSTALLED CAPACITY

As on 31.07.2015  
(All figures are in MW)

S No	Region	THERMAL				NUCLEAR	HYDRO	RES @ MNRE	GRAND TOTAL
		COAL	GAS	DIESEL	TOTAL				
1	NR	40943	5331	0	46274	1620	17797	7512	73203
2	WR	67029	10815	0	77844	1840	7448	13006	100138
3	SR	30843	4963	917	36723	2320	11398	15245	65686
4	ER	28583	190	0	28773	0	4113	435	33321
5	NER	310	1663	36	2009	0	1242	262	3513
6	ISLANDS	0	0	40	40	0	0	11	51
		167708	22962	993	191663	5780	41998	36471	275912

Remarks: Data from CEA website

3. राष्ट्रीय स्तर पर संध्याकालीन शिखर विद्युत मांग पूर्ति  
PEAK DEMAND MET AT NATIONAL LEVEL

माह:- जुलाई 201५

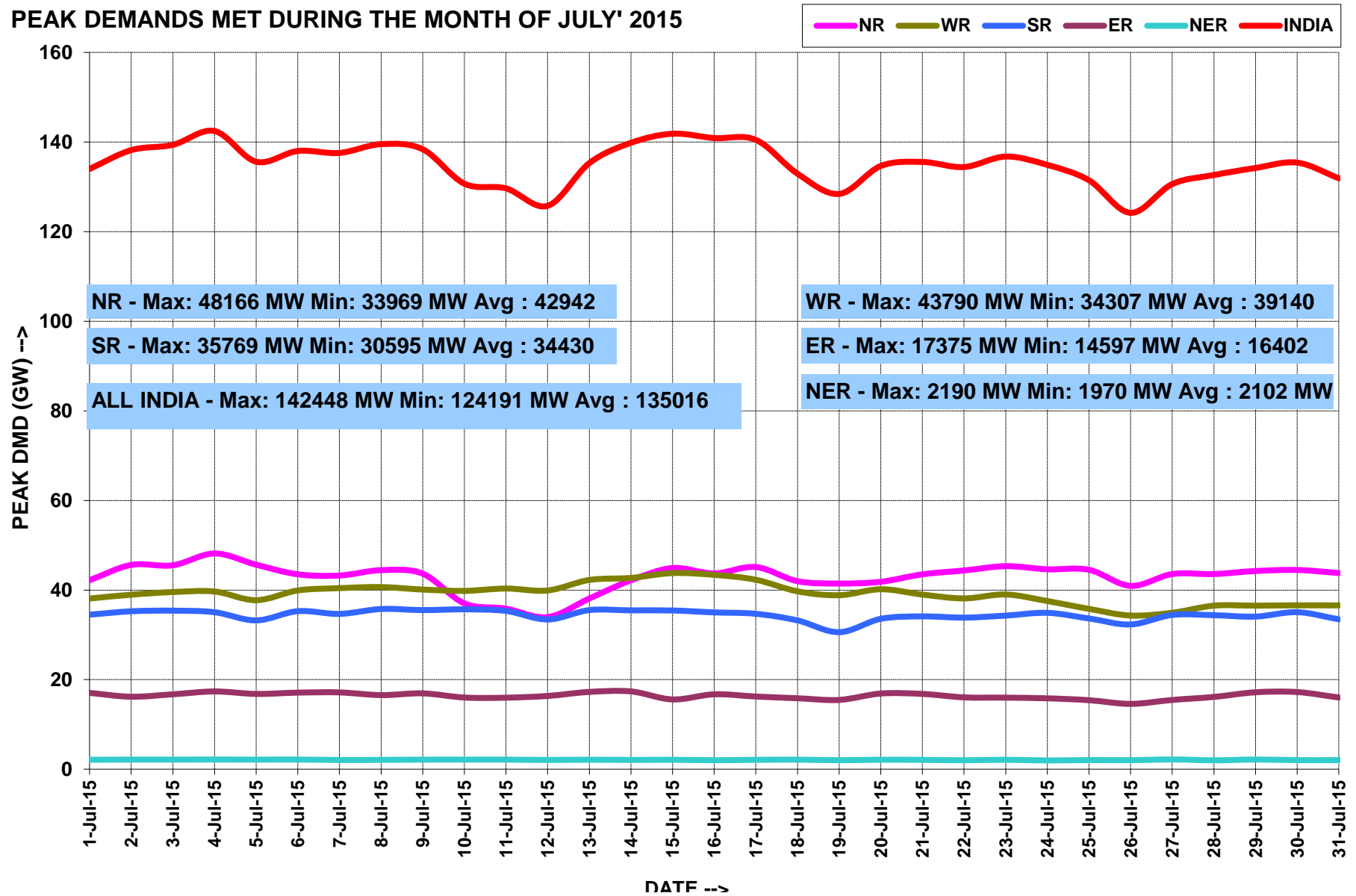
MONTH:- July 2015

सभी आकड़े मेगावाट में All figures in MW

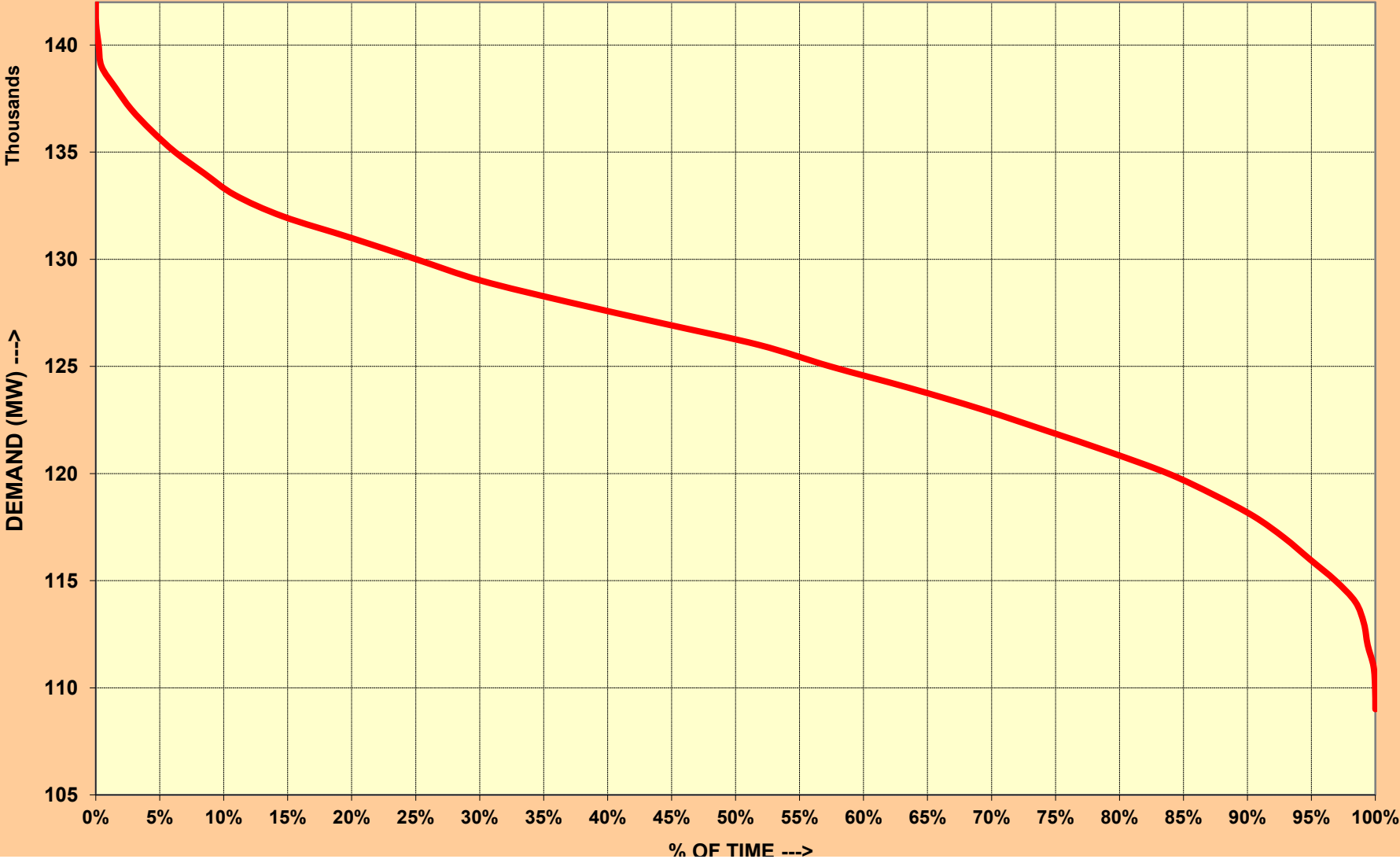
दिनांक Date	उत्तरी क्षे. NR	पश्चिमी क्षे. WR	दक्षिणी क्षे. SR	पूर्वी क्षे. ER	पूर्वोत्तर क्षे. NER	कुल TOTAL
01-Jul-15	42202	38111	34510	17043	2126	133992
02-Jul-15	45611	38972	35261	16193	2156	138193
03-Jul-15	45531	39553	35398	16735	2154	139371
04-Jul-15	48166	39674	35054	17371	2183	142448
05-Jul-15	45658	37737	33230	16819	2152	135596
06-Jul-15	43515	39913	35288	17107	2179	138002
07-Jul-15	43244	40424	34682	17157	2063	137570
08-Jul-15	44432	40666	35769	16553	2099	139519
09-Jul-15	43653	40112	35529	16940	2148	138382
10-Jul-15	37019	39814	35696	16011	2156	130696
11-Jul-15	35840	40342	35336	15979	2150	129647
12-Jul-15	33969	39910	33435	16363	2079	125756
13-Jul-15	38113	42250	35524	17264	2134	135285
14-Jul-15	42183	42710	35467	17375	2084	139819
15-Jul-15	44914	43790	35439	15591	2115	141849
16-Jul-15	43718	43389	35013	16733	2025	140878
17-Jul-15	45141	42299	34704	16234	2109	140486
18-Jul-15	41981	39714	33219	15854	2151	132919
19-Jul-15	41458	38852	30595	15482	2021	128408
20-Jul-15	41851	40180	33583	16906	2132	134652
21-Jul-15	43515	38993	34123	16821	2102	135554
22-Jul-15	44367	38135	33851	16046	2012	134411
23-Jul-15	45333	39015	34300	15988	2120	136756
24-Jul-15	44635	37541	34914	15833	1970	134893
25-Jul-15	44523	35800	33658	15418	2059	131458
26-Jul-15	40933	34307	32323	14597	2031	124191
27-Jul-15	43575	34934	34447	15474	2190	130620
28-Jul-15	43574	36517	34391	16146	2003	132631
29-Jul-15	44249	36517	34074	17186	2177	134203
30-Jul-15	44483	36591	35062	17232	2036	135404
31-Jul-15	43802	36574	33469	16016	2043	131904
उच्चतम MAXIMUM	48166	43790	35769	17375	2190	142448
निम्नतम MINIMUM	33969	34307	30595	14597	1970	124191
औसत AVERAGE	42942	39140	34430	16402	2126	135016
अब तक का उच्चतम All Time Max.	48166	43790	36518	17790	2190	142448
दिनांक Date	04.07.15	15.07.15	26.03.15	25.03.15	06.01.2015	04.07.15

नोट : सभी आकड़े 1900 बजे की मांगपूर्ति पर आधारित हैं । Note: The above figures corresponds to value at 1900 Hrs

# PEAK DEMANDS MET DURING THE MONTH OF JULY' 2015



# ALL INDIA LOAD DURATION CURVE FOR JULY' 2015



4. राष्ट्रीय स्तर पर विद्युत ऊर्जा आपूर्ति ENERGY MET AT NATIONAL LEVEL

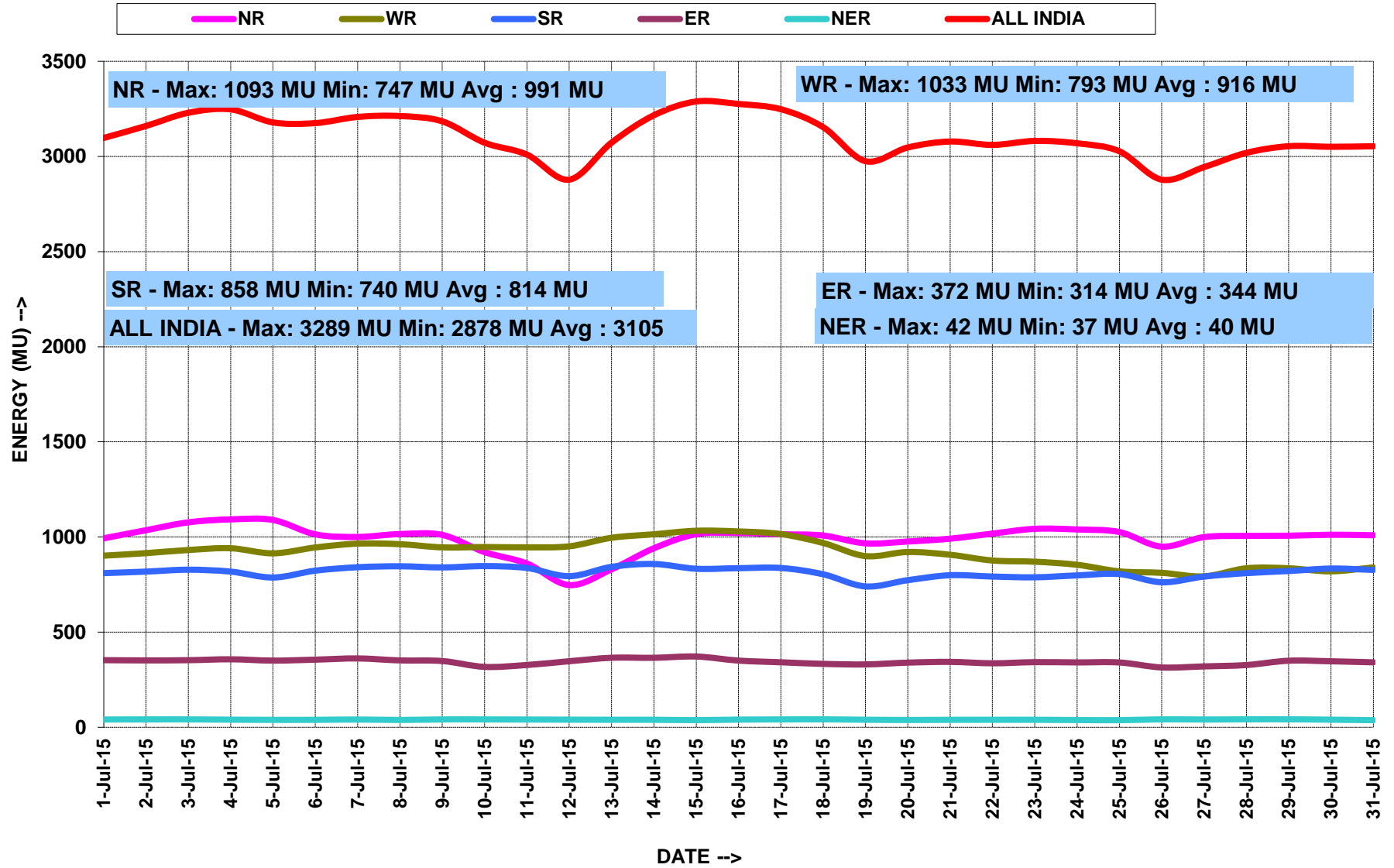
माह:- जुलाई 201५

MONTH:- July 2015

सभी आंकड़े मिलियन यूनिट में All figures in MU

दिनांक Date	उत्तरी क्षे. NR	पश्चिमी क्षे. WR	दक्षिणी क्षे. SR	पूर्वी क्षे. ER	पूर्वोत्तर क्षे. NER	कुल TOTAL
01-Jul-15	993	902	810	353	41	3098
02-Jul-15	1036	915	818	351	41	3161
03-Jul-15	1077	932	828	352	41	3230
04-Jul-15	1093	941	818	357	40	3248
05-Jul-15	1090	914	787	350	39	3179
06-Jul-15	1014	945	823	355	39	3176
07-Jul-15	1000	965	841	362	40	3208
08-Jul-15	1015	962	846	351	38	3213
09-Jul-15	1011	945	840	348	41	3185
10-Jul-15	921	947	847	317	41	3073
11-Jul-15	860	945	837	327	40	3010
12-Jul-15	747	951	794	347	40	2879
13-Jul-15	830	996	843	365	39	3073
14-Jul-15	941	1014	858	365	39	3217
15-Jul-15	1015	1033	833	372	37	3289
16-Jul-15	1021	1029	836	350	40	3276
17-Jul-15	1014	1015	837	341	41	3249
18-Jul-15	1008	968	804	333	41	3154
19-Jul-15	967	900	740	330	39	2976
20-Jul-15	976	921	773	339	38	3048
21-Jul-15	991	907	799	343	39	3079
22-Jul-15	1018	876	792	336	39	3061
23-Jul-15	1043	870	788	342	39	3082
24-Jul-15	1040	854	798	341	38	3070
25-Jul-15	1026	819	805	340	37	3027
26-Jul-15	950	812	762	314	41	2878
27-Jul-15	999	793	792	320	40	2944
28-Jul-15	1006	836	810	327	41	3019
29-Jul-15	1007	836	821	350	42	3054
30-Jul-15	1012	819	834	347	40	3051
31-Jul-15	1009	840	827	341	37	3055
कुल TOTAL	30727	28401	25241	10666	1226	96262
उच्चतम MAXIMUM	1093	1033	858	372	42	3289
निम्नतम MINIMUM	747	793	740	314	37	2878
औसत AVERAGE	991	916	814	344	40	3105
अब तक का उच्चतम All Time Max.	1107	1033	893	383	42	3251
दिनांक Date	19.06.15	15.07.15	26.03.15	29.05.15	30.06.15	27.05.15

### ENERGY MET DURING THE MONTH OF JULY' 2015





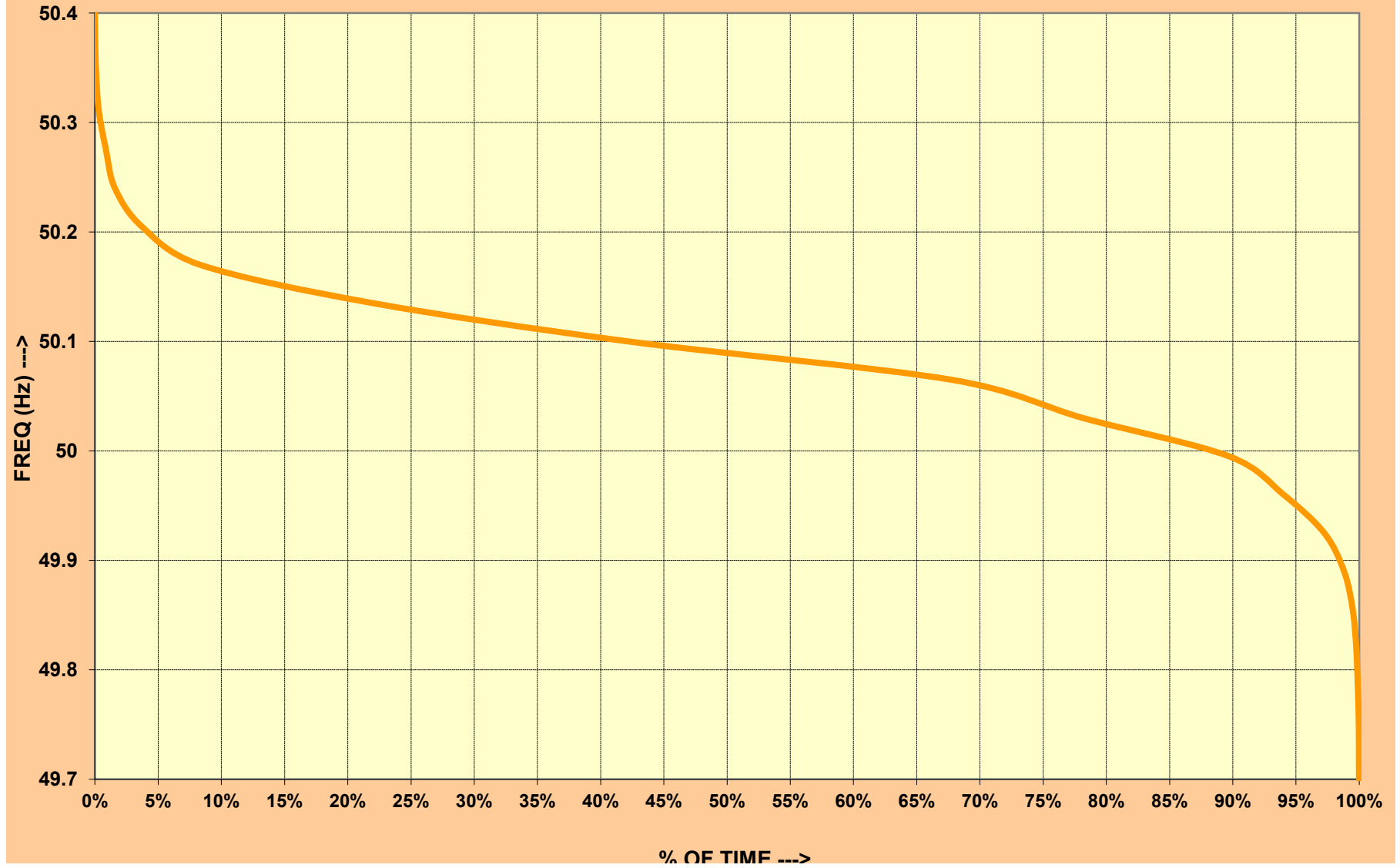
**5.वर्ष 2015-16 के लिए आवृत्ति रूपरेखा FREQUENCY PROFILE FOR YEAR 2015-16**

राष्ट्रीय गिड NATIONAL GRID									
फ़िक्वेंसी रूपरेखा (Hz)		49.0-49.9	<49.9	49.9-50.05	>50.05	उच्चतम फ़िक्वेंसी	निम्नतम फ़िक्वेंसी	औसत फ़िक्वेंसी	
% समय	Jul-15	All India Grid	10.64	10.64	70.28	19.08	50.33	49.58	49.99
	Jun-15	All India Grid	9.20	9.20	64.17	26.63	50.55	49.56	49.98
	May-15	N-E-W Grid	15.64	15.64	64.77	19.59	50.55	49.55	49.98
		SR Grid	15.75	15.75	64.67	19.58	50.55	49.19	49.99
	Apr-15	All India Grid	14.89	14.89	60.12	24.99	50.55	49.50	

5.2 जुलाई 201५ के लिए आवृत्ति रूपरेखा FREQUENCY PROFILE FOR JULY 2015

फ़िक्वेंसी रूपरेखा (Hz)		<49.0	49.0-49.9	<49.9	49.9-50.05	>50.05	उच्चतम फ़िक्वेंसी	निम्नतम फ़िक्वेंसी	औसत फ़िक्वेंसी
% समय	01-Jul-15	0.00	12.04	12.04	75.68	12.28	50.19	49.71	49.98
	02-Jul-15	0.00	6.92	6.92	76.24	16.84	50.19	49.75	49.99
	03-Jul-15	0.00	4.35	4.35	74.80	20.84	50.20	49.80	50.00
	04-Jul-15	0.00	6.16	6.16	76.46	17.38	50.17	49.76	50.00
	05-Jul-15	0.00	3.47	3.47	70.86	25.67	50.20	49.84	50.00
	06-Jul-15	0.00	5.86	5.86	65.87	28.28	50.27	49.77	50.01
	07-Jul-15	0.00	17.36	17.36	70.50	12.14	50.17	49.66	49.97
	08-Jul-15	0.00	8.72	8.72	75.90	15.38	50.25	49.78	49.99
	09-Jul-15	0.00	7.97	7.97	75.56	16.47	50.26	49.75	49.99
	10-Jul-15	0.00	8.77	8.77	68.69	22.53	50.28	49.71	50.00
	11-Jul-15	0.00	16.02	16.02	71.16	12.82	50.17	49.74	49.97
	12-Jul-15	0.00	4.54	4.54	62.86	32.60	50.28	49.73	50.02
	13-Jul-15	0.00	43.13	43.13	55.42	1.46	50.10	49.58	49.91
	14-Jul-15	0.00	29.85	29.85	60.56	9.59	50.23	49.64	49.95
	15-Jul-15	0.00	11.85	11.85	74.97	13.18	50.19	49.76	49.98
	16-Jul-15	0.00	9.91	9.91	72.87	17.22	50.21	49.75	49.99
	17-Jul-15	0.00	9.76	9.76	75.09	15.15	50.22	49.76	49.98
	18-Jul-15	0.00	7.74	7.74	78.78	13.47	50.22	49.75	49.99
	19-Jul-15	0.00	2.86	2.86	68.52	28.62	50.25	49.82	50.02
	20-Jul-15	0.00	4.44	4.44	71.24	24.32	50.19	49.79	50.01
	21-Jul-15	0.00	8.47	8.47	62.71	28.82	50.26	49.79	50.01
	22-Jul-15	0.00	8.87	8.87	72.65	18.48	50.22	49.75	49.99
	23-Jul-15	0.00	8.56	8.56	75.54	15.89	50.17	49.79	49.99
	24-Jul-15	0.00	16.97	16.97	73.82	9.21	50.22	49.75	49.96
	25-Jul-15	0.00	9.63	9.63	74.61	15.76	50.27	49.77	49.99
	26-Jul-15	0.00	2.56	2.56	54.04	43.40	50.33	49.79	50.04
	27-Jul-15	0.00	4.63	4.63	52.18	43.19	50.31	49.76	50.04
	28-Jul-15	0.00	7.86	7.86	72.16	19.98	50.19	49.71	49.99
	29-Jul-15	0.00	13.67	13.67	73.67	12.66	50.20	49.70	49.97
	30-Jul-15	0.00	16.41	16.41	72.30	11.28	50.19	49.67	49.97
	31-Jul-15	0.00	10.56	10.56	73.01	16.44	50.24	49.66	49.99

# NATIONAL GRID FREQUENCY DURATION CURVE FOR JULY' 2015



6.राष्ट्रीय स्तर पर जल विद्युत उत्पादन  
HYDRO GENERATION AT NATIONAL LEVEL

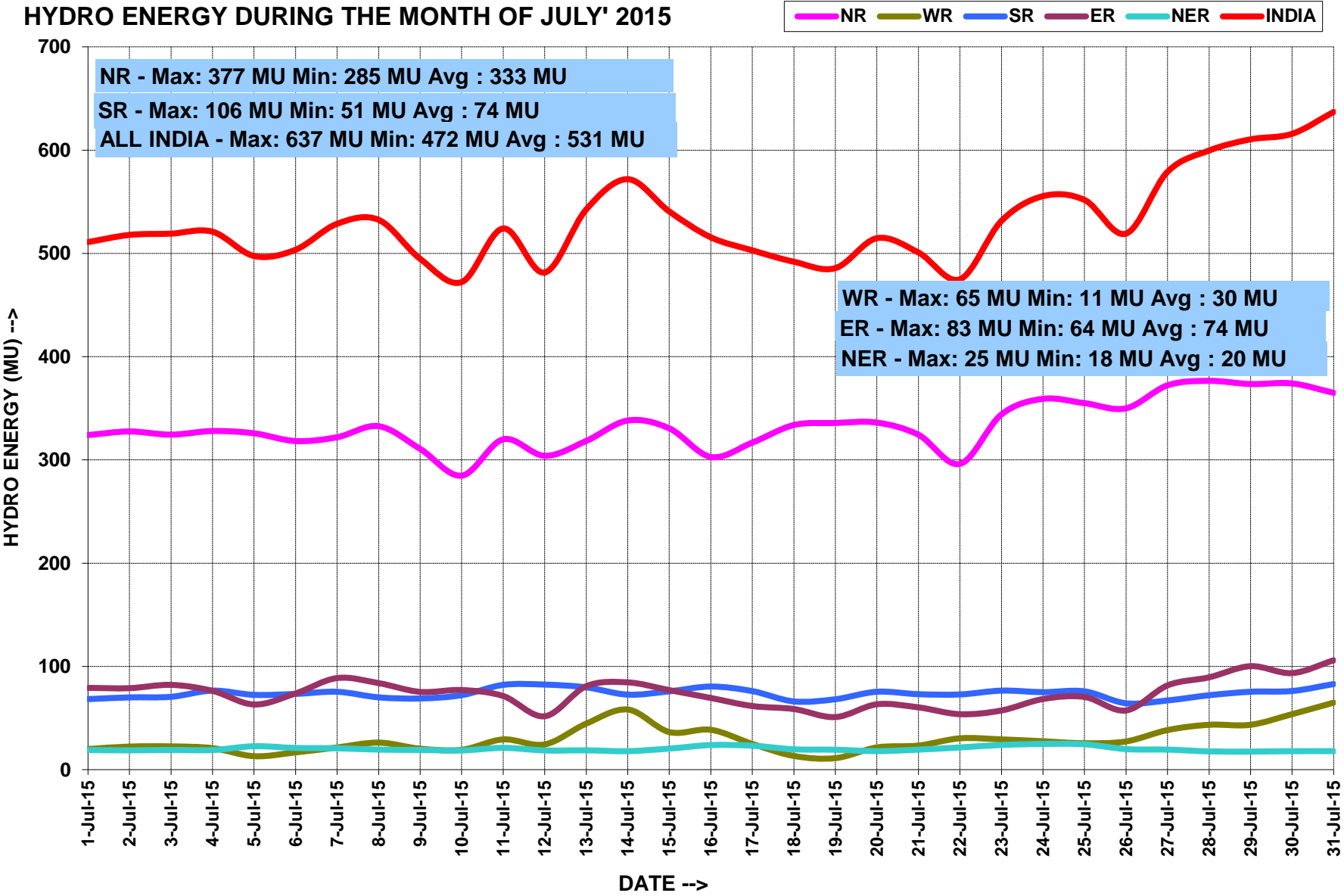
माह:- जुलाई 201५

MONTH:- July 2015

सभी आंकड़े मिलियन यूनिट में All figures in MU

दिनांक Date	उत्तरी क्षे. NR	पश्चिमी क्षे. WR	दक्षिणी क्षे. SR	पूर्वी क्षे. ER	पूर्वोत्तर क्षे. NER	कुल TOTAL
01-Jul-15	324	20	79	68	19	511
02-Jul-15	328	22	79	70	19	518
03-Jul-15	325	23	82	71	19	519
04-Jul-15	328	21	76	77	19	521
05-Jul-15	326	13	63	73	23	497
06-Jul-15	318	17	74	73	21	504
07-Jul-15	322	22	89	76	21	529
08-Jul-15	333	26	84	70	20	533
09-Jul-15	311	20	75	69	19	495
10-Jul-15	285	19	77	72	19	472
11-Jul-15	320	29	71	82	21	524
12-Jul-15	304	25	52	82	19	482
13-Jul-15	318	45	81	80	19	543
14-Jul-15	338	58	85	73	18	572
15-Jul-15	331	37	77	76	21	541
16-Jul-15	303	39	70	81	24	516
17-Jul-15	317	25	62	76	23	503
18-Jul-15	334	13	59	66	20	492
19-Jul-15	336	11	51	68	19	486
20-Jul-15	336	22	63	76	18	515
21-Jul-15	324	23	60	73	20	501
22-Jul-15	296	30	54	73	22	475
23-Jul-15	344	29	57	77	24	532
24-Jul-15	359	28	69	75	25	555
25-Jul-15	355	26	71	76	25	552
26-Jul-15	350	27	57	64	20	519
27-Jul-15	372	38	82	67	20	579
28-Jul-15	377	44	90	72	18	600
29-Jul-15	374	44	100	76	18	610
30-Jul-15	374	54	94	76	18	616
31-Jul-15	365	65	106	83	18	637
कुल TOTAL	10326	915	2289	2291	626	16446
उच्चतम MAXIMUM	377	65	106	83	25	637
निम्नतम MINIMUM	285	11	51	64	18	472
औसत AVERAGE	333	30	74	74	20	531
अब तक का उच्चतम All Time Max.	377	167	202	94	27	712
दिनांक Date	28.07.15	18.12.14	09.08.13	09.09.14	14.09.10	27.08.13

### HYDRO ENERGY DURING THE MONTH OF JULY' 2015



7. राष्ट्रीय स्तर पर पवन ऊर्जा उत्पादन  
WIND GENERATION AT NATIONAL LEVEL

माह:- जुलाई 201५

MONTH:- July 2015

सभी आंकड़े मिलियन यूनिट में All figures in MU

दिनांक Date	ऊत्तरी क्षे. NR	पश्चिमी क्षे. WR	दक्षिणी क्षे. SR	पूर्वी क्षे. ER	पूर्वोत्तर क्षे. NER	कुल TOTAL
01-Jul-15	22	73	89	-----	-----	184
02-Jul-15	21	69	89	-----	-----	179
03-Jul-15	30	76	101	-----	-----	206
04-Jul-15	34	96	111	-----	-----	241
05-Jul-15	34	114	112	-----	-----	260
06-Jul-15	32	117	124	-----	-----	273
07-Jul-15	20	104	118	-----	-----	242
08-Jul-15	14	91	127	-----	-----	232
09-Jul-15	27	103	120	-----	-----	250
10-Jul-15	27	108	120	-----	-----	254
11-Jul-15	7	81	117	-----	-----	204
12-Jul-15	11	59	101	-----	-----	170
13-Jul-15	18	45	96	-----	-----	159
14-Jul-15	30	54	90	-----	-----	173
15-Jul-15	33	79	92	-----	-----	204
16-Jul-15	24	90	112	-----	-----	226
17-Jul-15	17	93	121	-----	-----	231
18-Jul-15	10	90	112	-----	-----	211
19-Jul-15	15	90	103	-----	-----	208
20-Jul-15	8	78	99	-----	-----	185
21-Jul-15	5	55	102	-----	-----	161
22-Jul-15	3	40	89	-----	-----	132
23-Jul-15	2	29	91	-----	-----	122
24-Jul-15	3	50	83	-----	-----	136
25-Jul-15	4	88	102	-----	-----	194
26-Jul-15	7	101	94	-----	-----	202
27-Jul-15	11	103	88	-----	-----	201
28-Jul-15	4	86	74	-----	-----	164
29-Jul-15	6	86	79	-----	-----	171
30-Jul-15	12	95	90	-----	-----	197
31-Jul-15	22	85	77	-----	-----	183
कुल TOTAL	510	2527	3122	...	...	6157
उच्चतम MAXIMUM	34	117	127	...	...	273
निम्नतम MINIMUM	2	29	74	...	...	122
औसत AVERAGE	16	82	101	...	...	199
अब तक का उच्चतम All Time Max.	34.9	117.5	126.5	...	...	273.1
दिनांक Date	12.06.12	06.07.15	08.07.15	...	...	06.07.15

**8. ACTUAL POWER SUPPLY POSITION - JULY 2015**

REGION	STATE	Requirement/Availability in MU/DAY			Requirement/Availability in MU				Peak Demand/Peak Met in MW			
		Requirement	Energy met	Surplus(+)/ Deficit(-)	Requirement	Energy met	Surplus(+)/ Deficit(-)	% Shortage	Requirement	Peak Demand Met	Surplus(+)/ Deficit(-)	% Shortage
NR	Chandigarh	5.7	5.7	0.0	178.0	178.0	0.0	0.0	331	331	0	0.0
	Delhi	99.2	99.2	0.0	3076.2	3074.9	-1.2	0.0	5743	5743	0	0.0
	Haryana	157.1	156.4	-0.7	4869.2	4848.3	-20.9	-0.4	8504	8504	0	0.0
	H.P.	25.4	25.0	-0.4	788.2	776.2	-12.0	-1.5	1337	1337	0	0.0
	J&K	40.8	34.6	-6.2	1264.8	1073.2	-191.6	-15.1	2318	1967	-351	-15.1
	Punjab	200.3	200.3	0.0	6210.8	6210.8	0.0	0.0	10824	10824	0	0.0
	Rajasthan	162.9	162.2	-0.7	5050.9	5029.0	-21.8	-0.4	8431	8431	0	0.0
	U.P.	307.4	268.9	-38.5	9530.3	8337.1	-1193.2	-14.3	14263	13373	-890	-6.2
	Uttarakhand	37.6	37.2	-0.4	1164.6	1151.7	-12.8	-1.1	1948	1948	0	0.0
NFF/Railway	2.2	2.2	0.0	68.8	68.8	0.0	0.0	116	116	0	0.0	
TOTAL	1038.8	991.9	-46.9	32201.7	30748.1	-1453.6	-4.5	52078	49028	-3050	-5.9	
WR	Gujarat	269.5	269.4	-0.1	8354.9	8351.8	-3.1	0.0	14912	14886	-26	-0.2
	Madhya Pradesh	139.4	139.5	0.1	4320.5	4324.8	4.2	0.1	7494	7494	0	0.0
	Chhattisgarh	75.7	74.5	-1.2	2346.9	2310.2	-36.7	-1.6	3889	3558	-331	-8.5
	Maharashtra	395.9	394.0	-1.9	12274.0	12214.0	-60.0	-0.5	20260	19792	-468	-2.3
	Goa	8.3	8.3	0.0	258.4	258.4	0.0	0.0	409	405	-4	-1.0
	D&D	6.5	6.5	0.0	201.7	201.7	0.0	0.0	302	302	0	0.0
	DNH	16.1	16.1	-0.1	500.1	498.4	-1.7	-0.3	734	734	0	0.0
	ESIL	7.7	7.7	0.0	238.6	237.7	-0.9	-0.4	494	494	0	0.0
TOTAL	919.2	916.0	-3.2	28495.1	28396.8	-98.2	-0.3	45448	44803	-645	-1.4	
SR	Andhra Pradesh	147.5	147.4	-0.1	4572.5	4569.9	-2.7	-0.1	6899	6847	-52	-0.8
	Telangana	141.1	138.7	-2.4	4373.2	4300.0	-73.2	-1.7	6480	6480	0	0.0
	KPTCL	177.8	174.8	-3.1	5512.1	5417.4	-94.6	-1.7	8990	8705	-285	-3.2
	KSEB	59.8	59.3	-0.4	1853.2	1839.5	-13.7	-0.7	3561	3440	-121	-3.4
	TNEB	288.8	287.1	-1.7	8952.7	8901.3	-51.4	-0.6	14615	13766	-849	-5.8
	PONDICHERRY	6.9	6.9	0.0	212.7	212.4	-0.3	-0.1	334	334	0	0.0
TOTAL	821.8	814.2	-7.6	25476.4	25240.5	-235.9	-0.9	37484	37384	-100	-0.3	
ER	Bihar	64.7	58.9	-5.7	2004.2	1826.5	-177.7	-8.9	3106	3092	-14	-0.4
	JSEB	20.8	20.8	0.0	643.4	643.3	-0.1	0.0	1083	1083	0	0.0
	DVC	75.1	75.1	0.0	2327.0	2327.0	0.0	0.0	2688	2688	0	0.0
	Odisha	72.1	72.1	0.0	2236.6	2236.6	0.0	0.0	4096	4096	0	0.0
	West Bengal	140.9	140.4	-0.5	4368.4	4352.7	-15.7	-0.4	7489	7462	-27	-0.4
	Sikkim	0.8	0.8	0.0	25.5	25.5	0.0	0.0	91	91	0	0.0
TOTAL	374.4	368.1	-6.2	11605.1	11411.6	-193.5	-1.7	17684	17662	-22	-0.1	
NER	Arunachal Pradesh	1.8	1.8	-0.1	57.2	55.4	-1.7	-3.0	110	108	-2	-1.8
	Assam	26.6	24.2	-2.3	823.7	751.3	-72.4	-8.8	1491	1326	-165	-11.1
	Manipur	2.2	2.0	-0.2	69.0	61.6	-7.4	-10.8	139	139	0	-0.3
	MeSEB	4.9	4.8	-0.1	151.2	149.4	-1.8	-1.2	317	315	-2	-0.6
	Mizoram	1.3	1.3	0.0	40.3	38.8	-1.5	-3.7	79	78	-1	-0.8
	Nagaland	2.2	2.2	0.0	68.5	67.6	-0.9	-1.3	140	138	-2	-1.4
	Tripura	3.8	3.5	-0.3	117.0	107.0	-10.0	-8.5	250	249	-1	-0.4
TOTAL	42.8	39.7	-3.1	1326.9	1231.2	-95.7	-7.2	2526	2353	-173	-6.9	
ALL INDIA	3196.9	3129.9	-67.0	99105.2	97028.3	-2076.9	-2.1	155220	151230	-3990	-2.6	

**9. ENERGY COMPARISON OF July 2015 Vs July 2014**

REGION	STATE	Energy Requirement (MU)					Energy Met (MU)				
		Jun-14	Jun-15	Difference	% Change	Average MU/day for Jul-15	Jun-14	Jun-15	Difference	% Change	Average for MU/day Jul-15
NR	Chandigarh	182	178	-4	-2	6	182	178	-4	-2	6
	Delhi	3322	3076	-245	-7	103	3320	3075	-245	-7	102
	Haryana	5340	4869	-471	-9	162	5333	4848	-484	-9	162
	H.P.	765	788	23	3	26	754	776	22	3	26
	J&K	973	1265	292	30	42	925	1073	148	16	36
	Punjab	6642	6211	-431	-6	207	6447	6211	-236	-4	207
	Rajasthan	5644	5051	-593	-11	168	5535	5029	-506	-9	168
	U.P.	9470	9530	61	1	318	7966	8337	371	5	278
	Uttarakhand	1084	1165	80	7	39	1048	1152	104	10	38
	NFF/Railway	69	69	0	0	2	69	69	0	0	2
<b>TOTAL</b>	<b>33491</b>	<b>32202</b>	<b>-1289</b>	<b>-4</b>	<b>1073</b>	<b>31579</b>	<b>30748</b>	<b>-831</b>	<b>-3</b>	<b>1025</b>	
WR	Gujarat	7879	8355	476	6	278	7858	8352	494	6	278
	Madhya Pradesh	4283	4321	38	1	144	4244	4325	81	2	144
	Chhattisgarh	2067	2347	280	14	78	2035	2310	275	14	77
	Maharashtra	11318	12274	956	8	409	11261	12214	953	8	407
	Goa	243	258	15	6	9	240	258	18	8	9
	D&D	187	202	15	8	7	187	202	15	8	7
	DNH	467	500	33	7	17	464	498	34	7	17
	ESIL	199	239	40	20	8	198	238	40	20	8
<b>TOTAL</b>	<b>26643</b>	<b>28495</b>	<b>1852</b>	<b>7</b>	<b>950</b>	<b>26487</b>	<b>28397</b>	<b>1910</b>	<b>7</b>	<b>947</b>	
SR	Andhra Pradesh	4201	4573	371	9	152	4011	4570	558	14	152
	Telangana	4255	4373	118	3	146	3780	4300	520	14	143
	KPTCL	4954	5512	558	11	184	4782	5417	635	13	181
	KSEB	1765	1853	88	5	62	1733	1840	107	6	61
	TNEB	8557	8953	396	5	298	8532	8901	369	4	297
	PONDY	211	213	1	1	7	206	212	7	3	7
<b>TOTAL</b>	<b>19689</b>	<b>25476</b>	<b>5788</b>	<b>29</b>	<b>849</b>	<b>19264</b>	<b>25241</b>	<b>5976</b>	<b>31</b>	<b>841</b>	
ER	Bihar	1312	2004	692	53	67	1374	1826	452	33	61
	JSEB	650	643	-7	-1	21	612	643	31	5	21
	DVC	1575	2327	752	48	78	1711	2327	616	36	78
	Odisha	2232	2237	5	0	75	2249	2237	-12	-1	75
	West Bengal	4118	4368	250	6	146	4366	4353	-13	0	145
	Sikkim	23	25	2	11	1	23	25	2	11	1
<b>TOTAL</b>	<b>9887</b>	<b>11605</b>	<b>1718</b>	<b>17</b>	<b>387</b>	<b>10312</b>	<b>11412</b>	<b>1100</b>	<b>11</b>	<b>380</b>	
NER	Arunachal Pradesh	52	57	5	9	2	51	55	5	10	2
	Assam	820	824	4	0	27	756	751	-5	-1	25
	Manipur	52	69	17	33	2	49	62	12	25	2
	MeSEB	155	151	-4	-2	5	131	149	18	14	5
	Mizoram	38	40	3	7	1	36	39	3	8	1
	Nagaland	52	69	17	33	2	50	68	18	36	2
	Tripura	101	117	16	16	4	93	107	14	15	4
<b>TOTAL</b>	<b>1269</b>	<b>1327</b>	<b>58</b>	<b>5</b>	<b>44</b>	<b>1167</b>	<b>1231</b>	<b>65</b>	<b>6</b>	<b>41</b>	
<b>ALL INDIA</b>	<b>90978</b>	<b>99105</b>	<b>8127</b>	<b>9</b>	<b>3304</b>	<b>91303</b>	<b>97028</b>	<b>8219</b>	<b>9</b>	<b>3234</b>	



**10. DEMAND COMPARISON OF July 2015 Vs July 2014**

REGION	STATE	Peak Requirement (MW)				Peak Met (MW)			
		Jul-14	Jul-15	Difference	% Change	Jul-14	Jul-15	Difference	% Change
NR	Chandigarh	367	331	-36	-9.8	367	331	-36	-9.8
	Delhi	5925	5743	-182	-3.1	5925	5743	-182	-3.1
	Haryana	8752	8504	-248	-2.8	8752	8504	-248	-2.8
	H.P.	1248	1337	89	7.1	1248	1337	89	7.1
	J&K	2413	2318	-95	-3.9	1931	1967	36	1.9
	Punjab	10377	10824	447	4.3	10377	10824	447	4.3
	Rajasthan	9403	8431	-972	-10.3	9403	8431	-972	-10.3
	U.P.	14407	14263	-144	-1.0	12027	13373	1346	11.2
	Uttarakhand	1780	1948	168	9.4	1780	1948	168	9.4
	NFF/Railway	100	116	16	16.0	100	116	16	16.0
WR	Gujarat	13969	14912	943	7	13833	14886	1053	7.6
	Madhya Pradesh	7121	7494	373	5	7090	7494	404	5.7
	Chhattisgarh	3414	3889	475	14	3118	3558	440	14.1
	Maharashtra	19385	20260	875	5	19283	19792	509	2.6
	Goa	459	409	-50	-11	459	405	-54	-11.8
	D&D	287	302	15	5.2	287	302	15	5.2
	DNH	721	734	13	1.8	721	734	13	1.8
	ESIL	532	494	-38	-7.1	532	494	-38	-7.1
SR	Andhra Pradesh	6230	6899	669	10.7	6072	6847	775	12.8
	Telangana	6556	6480	-76	-1.2	5949	6480	531	8.9
	KPTCL	8228	8990	762	9.3	8137	8705	567	7.0
	KSEB	3373	3561	188	5.6	3218	3440	222	6.9
	TNEB	13298	14615	1318	9.9	13293	13766	473	3.6
	PONDY	327	334	7	2.2	325	334	9	2.8
ER	Bihar	2650	3106	456	17.2	2433	3092	659	27.1
	JSEB	1050	1083	33	3.1	1033	1083	50	4.8
	DVC	2625	2688	63	2.4	2630	2688	58	2.2
	Odisha	3750	4096	346	9.2	3814	4096	282	7.4
	West Bengal	7500	7489	-11	-0.1	7602	7462	-140	-1.8
	Sikkim	87	91	4	5.1	87	91	4	5.1
NER	Arunachal Pradesh	118	110	-8	-6.4	116	108	-8	-6.9
	Assam	1329	1491	162	12.2	1187	1326	139	11.7
	Manipur	131	139	8	6.4	125	139	14	10.9
	MeSEB	299	317	18	6.0	297	315	18	6.1
	Mizoram	83	79	-4	-5.2	82	78	-4	-5.0
	Nagaland	120	140	20	17.1	117	138	21	17.9
	Tripura	239	250	11	4.7	238	249	11	4.5

**11. SCHEDULE AND DRAWAL OF CONSTITUENTS - JULY 2015**

REGION	STATE	SCHEDULE (MU)	ACTUAL DRAWAL (MU)	Over drawal(+)/ Under Drawal(-) (MU)	% OD/UD	SCHEDULE (MU/DAY)	ACTUAL DRAWAL (MU/DAY)	Over drawal(+)/ Under Drawal(-) (MU/DAY)
NR	Chandigarh	181.99	195.84	13.84	7.61	5.87	6.32	0.45
	Delhi	2526.21	2511.39	-14.82	-0.59	81.49	81.01	-0.48
	Haryana	3668.14	3796.50	128.36	3.50	118.33	122.47	4.14
	H.P.	22.28	52.55	30.27	135.85	0.72	1.70	0.98
	J&K	606.25	581.28	-24.97	-4.12	19.56	18.75	-0.81
	Punjab	3577.36	3609.92	32.56	0.91	115.40	116.45	1.05
	Rajasthan	1672.71	1718.82	46.11	2.76	53.96	55.45	1.49
	U.P.	4059.41	4070.62	11.21	0.28	130.95	131.31	0.36
	Uttarakhand	445.94	451.55	5.61	1.26	14.39	14.57	0.18
	NFF/Railway	52.68	68.67	15.99	30.34	1.70	2.22	0.52
WR	Gujarat	1664.22	1589.72	-74.50	-4.48	53.68	51.28	-2.40
	Madhya Pradesh	2511.11	2455.07	-56.05	-2.23	81.00	79.20	-1.81
	Maharashtra	3513.42	3590.48	77.06	2.19	113.34	115.82	2.49
	Chhattisgarh	730.77	770.59	39.82	5.45	23.57	24.86	1.28
	Goa	222.43	240.26	17.83	8.02	7.18	7.75	0.58
	D&D	194.54	201.68	7.14	3.67	6.28	6.51	0.23
	D&NH	503.40	498.38	-5.02	-1.00	16.24	16.08	-0.16
	ESIL	235.06	237.70	2.64	1.12	7.58	7.67	0.09
SR	Andhra Pradesh	898.03	1003	105.43	11.74	28.97	32.37	3.40
	Telangana	2835.22	2849.70	14.48	0.51	91.46	91.93	0.47
	KPTCL	850.76	929.24	78.48	9.22	27.44	29.98	2.53
	KSEB	1042.90	1092.09	49.19	4.72	33.64	35.23	1.59
	TNEB	2886.72	2886.82	0.10	0.00	93.12	93.12	0.00
	PONDICHERRY	212.44	212.39	-0.05	-0.02	6.85	6.85	0.00
ER	Bihar	1792.73	1769	-24.17	-1.35	57.83	57.05	-0.78
	JSEB	384.38	347	-37.60	-9.78	12.40	11.19	-1.21
	DVC	-541.33	-564	-22.80	4.21	-17.46	-18.20	-0.74
	GRIDCO	543.16	552	8.87	1.63	17.52	17.81	0.29
	WBSEB	1478.45	1497	18.07	1.22	47.69	48.27	0.58
	Sikkim	34.02	25	-8.53	-25.06	1.10	0.82	-0.28
NER	Arunachal Pradesh	55.78	55.45	-0.33	-0.58	1.80	1.79	-0.01
	Assam	623.46	619.99	-3.47	-0.56	20.11	20.00	-0.11
	Manipur	66.62	61.58	-5.04	-7.56	2.15	1.99	-0.16
	MeSEB	67.20	24.38	-42.82	-63.72	2.17	0.79	-1.38
	Mizoram	33.63	37.43	3.80	11.31	1.08	1.21	0.12
	Nagaland	51.13	54.30	3.16	6.19	1.65	1.75	0.10
	Tripura	37.71	47.37	9.66	25.62	1.22	1.53	0.31

12. INTER REGIONAL EXCHANGES 2015-16					
	April'15	May'15	June'15	July'15	Fin. Year 2015-16 Till July 2015
<b>Name of Line</b>					
<b>Import of NR from WR (WR-NR)</b>					
WR - NR 765 kV Gwalior - Agra D/C	1166.87	1164.39	1284.75	1186.78	4802.78
WR - NR HVDC Vindhyachal	67.20	32.23	130.54	111.79	341.75
WR - NR 400 kV Zerda Kankroli	0.00	0.00	0.00	82.40	82.40
WR - NR 400 kV Zerda Bhinmal	0.00	1.87	0.00	0.00	1.87
WR - NR 220 kV Badod - Kota/ Modak	1.05	3.06	2.34	9.69	16.13
WR - NR 220 kV Auraiya - Malanpur/Mehgaon	1.07	0.00	0.00	1.34	2.41
WR - NR 400 kV Vindhyachal-Rihand	330.03	339.28	252.08	242.90	1164.29
WR - NR HVDC Mundra - Mohindergarh	1674.31	1705.73	1708.08	1470.90	6559.02
<b>Total WR - NR</b>	<b>3240.52</b>	<b>3246.55</b>	<b>3377.78</b>	<b>3105.80</b>	<b>12970.65</b>
<b>Import of NR from ER (ER-NR)</b>					
ER - NR 765 kV Sasaram - Fatehpur	3.99	121.43	35.00	58.99	219.40
ER - WR 765 kV Gaya - Fatehpur	57.99	62.01	73.50	136.28	329.79
ER - WR 765 kV Gaya - Balia	16.86	61.19	42.42	44.25	164.72
ER-NR 400 kV Patna - Balia 2xD/C	156.63	294.16	192.61	191.35	834.76
ER - NR 400 kV Muzaffarpur - Gorakhpur D/C	22.81	182.87	185.29	292.00	682.97
ER - NR 400 kV Biharshariff - Balia D/C	5.85	75.34	68.43	97.42	247.04
ER - NR 400 kV Barh - G'pur D/C			157.93	156.20	314.13
ER - NR HVDC Sasaram ( Bypass)	162.04	77.34	220.42	223.96	683.76
ER - NR 220 kV Pusauli - Sahupuri	102.74	123.30	98.01	100.55	424.60
ER - NR 132 kV Sahupuri - Karamnasa	7.68	4.85	6.66	6.29	25.48
ER - NR 132 kV Rihand - Son Nagar	0.00	0.00	0.00	0.49	0.49
<b>Total NR - WR</b>	<b>536.58</b>	<b>1002.49</b>	<b>1080.28</b>	<b>1307.78</b>	<b>3927.13</b>
<b>Export of NR to WR (NR-WR)</b>					
NR - WR 765 kV Gwalior - Agra D/C	0.00	0.00	0.00	0.14	0.14
NR - WR HVDC Vindhyachal	94.41	90.93	36.10	64.31	285.76
NR - WR 400 kV Zerda Kankroli	174.57	155.75	103.03	117.93	551.28
NR - WR 400 kV Zerda Bhinmal	135.49	107.23	70.40	102.81	415.94
NR - WR 220 kV Badod - Kota/ Modak	36.54	20.87	14.34	10.96	82.71
NR - WR 220 kV Auraiya - Malanpur/Mehgaon	29.00	15.48	1.03	17.80	63.31
NR - WR HVDC Mundra - Mohindergarh	0.00	0.00	0.00	0.00	0.00
<b>Total NR - WR</b>	<b>470.02</b>	<b>390.26</b>	<b>224.89</b>	<b>313.96</b>	<b>1399.13</b>
<b>Export of NR to ER (NR-ER)</b>					
NR - ER 765 kV Sasaram - Fatehpur	53.29	2.60	20.49	7.44	83.82
NR - ER 765 kV Gaya - Fatehpur	0.62	0.00	0.37	0.00	0.99
NR - ER 765 kV Gaya - Balia	1.75	0.61	0.36	3.34	6.05
NR - ER 400 kV Patna - Balia 2xD/C	0.00	0.00	0.00	0.00	0.00
NR - ER 400 kV Muzaffarpur - Gorakhpur D/C	9.19	0.00	0.00	0.00	9.19
NR - ER 400 kV Biharshariff - Balia D/C	30.97	3.54	4.97	0.00	39.49
ER - NR 400 kV Barh - G'pur D/C			0.00	0.00	0.00
ER - ER HVDC Sasaram ( Bypass)	12.49	155.54	18.18	5.78	191.99
NR - ER 220 kV Pusauli - Sahupuri	7.79	0.00	2.95	4.61	15.35
NR - ER 132 kV Sahupuri - Karamnasa	2.40	0.50	0.96	0.48	4.34
NR - ER 132 kV Rihand - Son Nagar	22.33	23.85	23.95	16.23	86.36
<b>Total NR - ER</b>	<b>140.82</b>	<b>186.63</b>	<b>72.23</b>	<b>37.88</b>	<b>437.56</b>

<b>Export of WR to ER (WR-ER)</b>					
WR - ER 765 kV Ranchi - Dharamjaygarh	1.94	17.79	10.97	12.35	<b>43.06</b>
WR - ER 400 kV Sipat - Ranchi D/C	1.94	21.14	60.56	26.05	<b>109.70</b>
WR - ER 400 kV Raigarh - Sterlite D/C	0.12	0.36	4.48	6.18	<b>11.13</b>
WR - ER 765 kV Dharamjaygarh - Jharsuguda D/C	7.73	25.18	31.06	32.79	<b>96.76</b>
WR - ER 400 kV Raigarh - Jharsuguda D/C	0.00	0.00	2.78	6.35	<b>9.12</b>
WR - ER 220 kV Korba - Budhipadar D/C	0.25	5.70	0.99	4.62	<b>11.56</b>
WR - ER 220 kV Raigarh - Budhipadar	0.82	0.00	0.00	0.00	<b>0.82</b>
<b>Total WR - ER</b>	<b>12.80</b>	<b>70.17</b>	<b>110.84</b>	<b>88.34</b>	<b>282.15</b>
<b>Import of WR from ER (ER - WR)</b>					
ER - WR 765 kV Ranchi - Dharamjaygarh	2.18	17.23	6.16	17.76	<b>43.33</b>
ER - WR 400 kV Sipat - Ranchi D/C	2.66	11.84	1.68	5.17	<b>21.36</b>
ER - WR 400 kV Raigarh - Sterlite D/C	232.49	308.83	244.90	150.11	<b>936.33</b>
ER - WR 400 kV Dharamjaygarh - Jharsuguda D/C	63.81	97.48	79.08	41.61	<b>281.98</b>
ER - WR 400 kV Raigarh - Jharsuguda D/C	28.29	43.07	19.12	56.28	<b>146.76</b>
ER - WR 220 kV Korba - Budhipadar D/C	24.54	20.37	61.78	43.52	<b>150.21</b>
ER - WR 220 kV Raigarh - Budhipadar	73.09	54.74	0.00	18.17	<b>145.99</b>
<b>Total ER - WR</b>	<b>427.06</b>	<b>553.56</b>	<b>412.72</b>	<b>332.63</b>	<b>1725.97</b>
<b>Export of ER to NER</b>					
ER - NER 400 kV Binaguri - Bongaigaon 2xD/C	206.56	212.27	54.30	0.33	<b>473.46</b>
ER - NER 220 kV Birpara - Salakati D/C	29.33	52.31	39.44	35.76	<b>156.85</b>
<b>Total ER - NER</b>	<b>235.90</b>	<b>264.59</b>	<b>93.74</b>	<b>36.09</b>	<b>630.31</b>
<b>Import of ER from NER (NER - ER)</b>					
NER - ER 400 kV Binaguri - Bongaigaon 2xD/C	0.00	0.00	46.09	116.25	<b>162.35</b>
NER - ER 220 kV Birpara - Salakati D/C	0.00	0.00	0.10	2.12	<b>2.22</b>
<b>Total NER - ER</b>	<b>0.00</b>	<b>0.00</b>	<b>46.19</b>	<b>118.37</b>	<b>164.57</b>
<b>Export of ER to SR (ER - SR)</b>					
ER - SR HVDC Gazuwaka	443.51	469.85	441.50	526.03	<b>1880.89</b>
ER - SR HVDC Talchar - Kolar	1360.36	1428.22	1193.46	1441.16	<b>5423.20</b>
<b>Total ER - SR</b>	<b>1803.87</b>	<b>1898.08</b>	<b>1634.95</b>	<b>1967.19</b>	<b>7304.09</b>
<b>Import of ER from SR (SR - ER)</b>					
SR - ER HVDC Gazuwaka	0.00	0.00	0.00	0.00	<b>0.00</b>
SR - ER HVDC Talchar - Kolar	0.00	0.00	0.00	0.00	<b>0.00</b>
<b>Total SR - ER</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Export of WR to SR (WR-SR)</b>					
WR - SR HVDC Bhadravati	708.30	709.31	695.57	715.62	<b>2828.80</b>
WR - SR 765 kV Sholapur - Raichur	263.68	315.71	304.74	343.65	<b>1227.78</b>
<b>Total WR - SR</b>	<b>971.98</b>	<b>1025.03</b>	<b>1000.31</b>	<b>1059.27</b>	<b>4056.58</b>
<b>Import of WR from SR (SR - WR)</b>					
SR - WR HVDC Bhadravati	0.00	0.00	0.00	0.00	<b>0.00</b>
SR - WR 765 kV Raichur - Sholapur	17.71	10.54	11.13	7.96	<b>47.35</b>
<b>Total SR - WR</b>	<b>17.71</b>	<b>10.54</b>	<b>11.13</b>	<b>7.96</b>	<b>47.35</b>
<b>TOTAL ALL INDIA</b>	<b>7857</b>	<b>8648</b>	<b>8065</b>	<b>8375</b>	<b>32945</b>

Date	12.1 Import of NR from WR & ER during July 2015																					
	Import of NR from WR (WR-NR)									Import of NR from ER (ER-NR)												
	WR - NR 765 kV Gwalior - Agra D/C	WR - NR HVDC V'chal	WR - NR 400 kV Zerdakankroli	WR - NR 400 kV Zerdabhinmal	WR - NR 220 kV Badod - Kota / Modak	WR - NR 220 kV Auraiya - Malanpur / Mehgaon	WR-NR 400 KV Rihand Vindhychal	WR - NR HVDC Mundra - M'garh	Total WR - NR	ER - NR 765 kV Sasaram - Fatehpur	ER - WR 765 kV Gaya - Fatehpur	ER - WR 765 kV Gaya Balia	ER-NR 400 kV Patna - Ballia 2xD/C	ER - NR 400 kV Muzaffarpur - G'pur D/C	ER - NR 400 kV B'shariff - Ballia D/C	ER - NR 400 kV Barh - G'pur D/C	ER - NR HVDC Sasaram (Byepass)	ER - NR 220 kV Pusauli - Sahupuri	ER - NR 132 kV Sahupuri - K'nasa	ER - NR 132 kV Rihand - Son Nagar	Total ER - NR	
1-Jul-15	36.84	9.65	0.00	0.00	0.00	0.00	11.74	58.74	116.97	3.84	4.99	0.42	6.31	9.70	3.94	5.14	2.45	3.48	0.00	0.00	40.26	
2-Jul-15	32.58	7.58	0.00	0.00	0.00	0.00	11.69	53.75	105.60	3.65	3.76	0.00	4.19	9.31	3.85	4.31	2.44	3.72	0.00	0.00	35.23	
3-Jul-15	42.35	8.98	0.00	0.00	0.70	0.00	11.59	56.83	120.45	0.00	5.87	0.30	4.73	10.35	3.24	5.03	4.48	3.57	0.48	0.00	38.05	
4-Jul-15	40.45	3.42	0.00	0.00	0.28	0.00	12.07	57.56	113.78	2.67	4.20	0.00	5.22	10.20	3.21	5.27	7.32	3.84	0.00	0.00	41.92	
5-Jul-15	31.54	7.10	0.00	0.00	0.20	0.00	12.08	53.21	104.13	2.47	4.89	2.60	4.92	10.09	2.97	4.73	7.29	0.00	0.00	0.00	39.96	
6-Jul-15	29.97	2.58	0.00	0.00	0.00	0.00	11.53	52.12	96.20	1.90	4.50	2.03	4.26	8.65	2.12	4.77	7.17	3.84	0.00	0.00	39.24	
7-Jul-15	31.29	1.61	0.00	0.00	0.00	0.00	11.87	50.81	95.57	1.25	4.07	0.00	3.95	7.50	1.14	5.00	7.29	3.37	0.00	0.00	33.58	
8-Jul-15	37.05	1.61	0.00	0.00	0.00	0.00	11.79	40.05	90.50	0.64	3.45	0.00	8.60	8.28	1.37	5.78	7.17	3.36	0.00	0.00	38.64	
9-Jul-15	37.04	10.31	0.00	0.00	0.00	0.00	3.11	45.59	96.05	1.30	4.16	1.04	6.92	8.56	2.86	4.72	7.25	3.21	0.48	0.00	40.51	
10-Jul-15	35.84	10.21	0.00	0.00	0.39	0.00	0.00	49.57	95.99	2.81	4.73	2.92	8.13	11.60	5.55	4.64	7.29	2.92	0.96	0.00	51.54	
11-Jul-15	31.53	2.23	0.00	0.00	0.19	0.00	0.00	49.55	83.51	1.67	3.68	1.07	5.50	8.23	3.09	3.90	7.14	2.46	0.48	0.00	37.23	
12-Jul-15	16.98	0.12	0.00	0.00	0.00	0.00	0.00	38.14	55.24	0.00	0.86	0.57	4.71	6.84	2.09	4.17	7.27	3.02	0.00	0.00	29.52	
13-Jul-15	34.94	0.02	0.00	0.00	0.03	0.00	7.67	43.59	86.24	0.00	2.00	2.04	5.97	8.22	1.93	5.31	7.24	3.31	0.00	0.00	36.02	
14-Jul-15	50.68	1.59	0.00	0.00	0.00	0.00	11.60	57.04	120.90	1.00	4.33	2.15	6.83	8.26	1.95	5.83	7.31	3.70	0.00	0.00	41.37	
15-Jul-15	49.83	0.28	0.00	0.00	0.00	0.02	11.77	58.60	120.51	1.87	5.95	1.27	9.12	9.87	2.20	6.41	7.92	3.71	0.48	0.00	48.79	
16-Jul-15	48.77	0.00	0.00	0.00	0.00	0.00	11.67	56.87	117.31	4.60	7.92	1.97	7.30	11.35	2.64	5.72	9.21	3.27	0.00	0.00	53.99	
17-Jul-15	45.41	0.00	0.00	0.00	1.01	0.20	11.82	48.97	107.40	3.01	6.67	2.01	7.23	11.59	4.67	5.44	9.27	3.59	0.48	0.00	53.96	
18-Jul-15	49.75	0.00	0.00	0.00	0.76	0.30	-11.79	51.33	90.34	1.56	5.21	2.91	4.74	11.17	4.19	4.75	9.20	3.99	0.00	0.00	47.70	
19-Jul-15	45.53	1.67	0.00	0.00	2.44	0.00	8.16	46.64	104.45	0.00	4.84	3.68	4.89	10.44	3.90	4.38	9.18	0.00	0.00	0.00	41.30	
20-Jul-15	47.98	1.67	0.00	0.00	0.00	0.01	11.08	52.71	113.45	1.57	5.41	2.40	6.49	10.44	3.53	5.36	9.20	4.70	0.00	0.00	49.10	
21-Jul-15	55.42	0.00	0.00	0.00	0.00	0.32	10.26	34.71	100.71	1.72	6.09	1.77	8.87	10.38	3.10	6.47	9.16	3.90	0.48	0.00	51.94	
22-Jul-15	46.56	4.27	0.00	0.00	0.00	0.00	10.94	45.26	107.02	2.93	6.62	2.23	6.62	11.21	3.67	5.75	9.34	3.72	0.48	0.00	52.56	
23-Jul-15	42.54	3.52	0.00	0.00	0.81	0.00	10.94	46.41	104.22	2.88	6.34	2.49	6.35	12.14	4.41	5.35	9.35	3.78	0.05	0.00	53.12	
24-Jul-15	2.27	0.00	38.09	0.00	0.00	0.00	0.00	0.00	40.37	6.36	0.44	1.01	11.39	7.75	6.71	3.70	0.00	2.89	0.00	0.00	40.25	
25-Jul-15	40.21	2.59	0.00	0.00	0.74	0.00	9.22	56.44	109.20	2.09	5.67	2.23	5.53	10.31	2.83	4.95	9.46	3.66	0.00	0.49	47.21	
26-Jul-15	37.12	0.63	0.00	0.00	0.73	0.00	7.71	49.06	95.23	0.39	4.01	0.46	5.33	9.36	2.84	4.82	9.25	4.43	0.48	0.00	41.38	
27-Jul-15	48.09	7.55	0.00	0.00	0.97	0.50	6.93	47.88	111.92	1.33	5.05	1.27	5.63	10.04	3.21	5.40	9.32	4.25	0.48	0.00	45.98	
28-Jul-15	10.13	0.00	44.31	0.00	0.00	0.00	0.00	0.00	54.43	4.18	0.54	1.15	7.25	9.30	4.97	4.25	0.00	0.33	0.00	0.00	31.98	
29-Jul-15	41.44	10.13	0.00	0.00	0.43	0.00	8.07	56.77	116.84	0.33	4.18	0.59	4.52	5.77	1.47	5.04	9.30	4.25	0.96	0.00	36.42	
30-Jul-15	45.35	5.03	0.00	0.00	0.03	0.00	9.83	58.03	118.27	0.00	2.40	0.30	4.71	6.08	0.84	5.16	9.40	4.15	0.00	0.00	33.04	
31-Jul-15	41.30	7.46	0.00	0.00	0.00	0.00	9.57	54.68	113.01	0.97	3.43	1.36	5.15	9.04	2.96	4.68	6.31	2.14	0.00	0.00	36.04	
Total	1186.78	111.79	82.40	0.00	9.69	1.34	242.90	1470.90	3105.80	58.99	136.28	44.25	191.35	292.00	97.42	156.20	223.96	100.55	6.29	0.49	1307.78	

Date	12.2 Export of NR to WR & ER during July 2015																			
	Export of NR to WR (NR- WR)								Export of NR to ER (NR- ER)											
	WR - NR 765 kV Gwalior - Agra D/C	WR - NR HVDC V'chal	WR - NR 400 kV Zerdakankroli	WR - NR 400 kV ZerdakBhinmal	WR - NR 220 kV Badod - Kota / Modak	WR - NR 220 kV Auraiya - Malanpur / Mehgaon	WR - NR HVDC Mundra - M'garh	Total NR - WR	ER - NR 765 kV Sasaram - Fatehpur	ER - WR 765 kV Gaya - Fatehpur	ER - WR 765 kV Gaya - Balia	ER-NR 400 kV Patna - Balia 2xD/C	ER - NR 400 kV Muzaffarpur - G'pur D/C	ER - NR 400 kV B'shariff - Balia D/C	ER - NR 400 kV Barh - G'pur D/C	ER - NR HVDC Sasaram (Bypass)	ER - NR 220 kV Pusauli - Sahupuri	ER - NR 132 kV Sahupuri - K'nasa	ER - NR 132 kV Rihand - Son Nagar	Total NR - ER
1-Jul-15	0.00	0.00	4.49	3.91	0.98	1.07	0.00	10.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.45	0.93
2-Jul-15	0.00	0.00	5.68	5.08	0.70	1.35	0.00	12.82	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.77	1.82
3-Jul-15	0.00	0.00	4.41	3.99	0.00	1.26	0.00	9.66	3.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.96	2.46
4-Jul-15	0.00	2.46	5.91	5.92	0.00	1.56	0.00	15.85	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
5-Jul-15	0.00	0.00	5.34	5.24	0.00	2.11	0.00	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6-Jul-15	0.00	1.95	5.81	5.72	0.34	1.89	0.00	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.66
7-Jul-15	0.00	2.34	5.41	4.51	0.00	0.68	0.00	12.94	0.00	0.00	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	1.66
8-Jul-15	0.00	2.34	5.41	2.99	0.07	0.29	0.00	11.10	0.00	0.00	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	2.27
9-Jul-15	0.00	0.00	6.29	5.39	0.92	0.20	0.00	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.49
10-Jul-15	0.00	0.00	5.54	4.94	0.00	0.95	0.00	11.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.48	0.58	0.10
11-Jul-15	0.00	0.82	4.55	3.05	0.00	0.97	0.00	9.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.59
12-Jul-15	0.00	7.34	5.26	3.58	-0.31	1.67	0.00	17.55	1.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	2.21
13-Jul-15	0.00	2.62	5.08	4.22	0.00	0.96	0.00	12.87	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91	1.45
14-Jul-15	0.00	0.55	4.55	3.96	1.23	0.00	0.00	10.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.88
15-Jul-15	0.00	2.39	4.54	4.48	0.94	0.00	0.00	12.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.87
16-Jul-15	0.00	4.46	3.56	3.19	1.24	0.48	0.00	12.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.58
17-Jul-15	0.00	7.28	2.68	1.58	0.00	0.00	0.00	11.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.69
18-Jul-15	0.00	8.25	3.22	1.34	0.00	0.00	0.00	12.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.90
19-Jul-15	0.00	2.16	2.82	0.60	0.00	0.03	0.00	5.60	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.61	0.00	0.85	6.45
20-Jul-15	0.00	2.16	3.40	0.60	2.60	0.01	0.00	8.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.91
21-Jul-15	0.00	8.59	2.60	0.37	1.84	0.00	0.00	13.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.92
22-Jul-15	0.00	0.55	2.91	1.60	0.08	0.05	0.00	5.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.94
23-Jul-15	0.00	1.25	2.27	1.57	0.00	0.47	0.00	5.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.88	-0.88
24-Jul-15	0.14	0.00	0.00	3.18	0.00	0.00	0.00	3.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.24	0.00	0.00	0.48	2.72
25-Jul-15	0.00	0.80	1.48	1.36	0.00	0.24	0.00	3.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.49
26-Jul-15	0.00	5.89	2.88	3.46	0.00	0.02	0.00	12.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.28
27-Jul-15	0.00	0.00	2.07	2.67	0.00	0.50	0.00	5.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.78
28-Jul-15	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.54	0.00	0.00	0.00	3.54
29-Jul-15	0.00	0.00	1.70	4.54	0.00	0.27	0.00	6.51	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.72
30-Jul-15	0.00	0.15	3.83	4.37	0.00	0.27	0.00	8.61	1.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	1.83
31-Jul-15	0.00	0.00	4.24	5.26	0.33	0.49	0.00	10.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.53
Total	0.14	64.31	117.93	102.81	10.96	17.80	0.00	313.96	7.44	0.00	3.34	0.00	0.00	0.00	0.00	5.78	4.61	0.48	16.23	37.88

Date	12.3 Import - Export of ER with WR & NER during July 2015																													
	Export of WR to ER (WR-ER)										Import of WR from ER (ER - WR)										Export of ER to NER (ER-NER)					Import of ER from NER (NER-ER)				
	WR - ER 765 kV Dharamjygarh - Ranchi D/C	WR - ER 400 kV Sipat - Ranchi D/C	WR - ER 400 kV Raigarh - Sterilite	WR - ER 765 kV Dharamjygarh - Jharsuguda	WR - ER 400 kV Raigarh - IND Bharat	WR - ER 400 kV Raigarh - Rourkela	WR - ER 400 kV Raigarh - Jharsuguda	WR - ER 220 kV Korba - Budhipadar D/C	WR - ER 220 kV Raigarh - Budhipadar	Total WR - ER	WR - ER 765 kV Dharamjygarh - Ranchi D/C	ER - WR 400 kV Sipat - Ranchi D/C	ER - WR 400 kV Raigarh - Sterilite	ER_WR 765 kV Dharamjygarh - Jharsuguda	ER_WR 400 kV Raigarh - IND Bharat	ER_WR 400 kV Raigarh - Rourkela	ER - WR 400 kV Raigarh - Jharsuguda	ER - WR 220 kV Korba - Budhipadar D/C	ER - WR 220 kV Raigarh - Budhipadar	Total ER - WR	ER - NER 132 kV Geylegphus - Salakati	ER - NER 132 kV Deothan - Rangia	ER - NER 400 kV Binaguri - Bongaigaon 2x2D/C	ER - NER 220 kV Birpara - Salakati D/C	Total ER - NER	ER - NER 132 kV Geylegphus - Salakati	ER - NER 132 kV Deothan - Rangia	NER - ER 400 kV Binaguri - Bongaigaon 2x2D/C	NER - ER 220 kV Birpara - Salakati D/C	Total NER - ER
1-Jul-15	0.0	0.9	0.0	1.6	0.0	0.0	0.0	0.00	2.47	0.7	0.0	4.7	0.0	0.7	0.6	1.5	2.4	0.0	10.60	0.24	0.71	0.0	0.00	0.95	0.00	0.00	2.90	1.32	4.22	
2-Jul-15	0.0	0.4	0.0	1.9	0.0	0.0	0.0	0.00	2.26	0.7	0.0	4.7	0.0	1.4	1.5	2.1	2.4	0.0	8.06	0.22	0.79	0.0	1.61	2.62	0.00	0.00	2.95	0.00	2.95	
3-Jul-15	0.4	1.8	0.0	2.3	0.0	0.0	0.0	0.00	4.48	0.0	0.0	4.7	0.0	1.6	1.1	0.0	2.4	0.0	9.88	0.12	0.47	0.0	1.22	1.81	0.00	0.00	3.36	0.00	3.36	
4-Jul-15	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.00	0.16	0.4	0.0	5.2	1.3	2.1	1.6	1.0	1.3	0.0	12.98	0.17	0.48	0.0	1.15	1.80	0.00	0.00	2.62	0.00	2.62	
5-Jul-15	0.0	0.6	0.0	4.7	0.0	0.0	0.0	0.00	5.26	0.7	0.0	1.9	0.0	1.1	0.9	1.6	1.8	0.0	8.02	0.00	0.68	0.0	0.72	1.41	0.00	0.00	7.02	0.00	7.02	
6-Jul-15	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.00	0.94	3.1	0.0	3.2	0.2	0.8	1.3	1.1	2.8	0.0	12.57	0.11	0.39	0.0	0.91	1.42	0.00	0.00	3.84	0.00	3.84	
7-Jul-15	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.00	2.51	3.9	0.0	5.1	3.5	0.0	1.5	1.2	2.1	0.0	17.30	0.00	0.42	0.0	0.95	1.38	0.09	0.00	3.39	0.00	3.47	
8-Jul-15	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.71	0.0	0.0	4.8	2.4	2.6	1.0	1.8	2.2	0.0	14.82	0.00	0.66	0.0	0.85	1.51	0.02	0.00	5.11	0.00	5.12	
9-Jul-15	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.00	0.37	0.0	0.0	4.9	0.1	1.2	1.3	1.8	2.6	0.0	11.86	0.06	0.36	0.0	1.13	1.54	0.00	0.00	3.05	0.00	3.05	
10-Jul-15	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.00	0.62	0.1	0.0	5.3	3.0	1.1	1.0	1.7	1.0	0.0	13.27	0.09	0.42	0.0	1.17	1.68	0.00	0.00	3.30	0.00	3.30	
11-Jul-15	0.0	0.9	0.0	4.6	0.0	0.0	2.6	0.00	8.13	0.2	0.0	3.7	0.0	0.9	0.6	2.1	0.0	0.0	7.48	0.00	0.48	0.0	0.99	1.46	0.12	0.00	2.14	0.00	2.26	
12-Jul-15	0.2	1.3	0.0	3.4	0.0	0.0	1.5	0.00	6.31	0.0	0.0	5.8	0.0	0.6	0.3	1.4	0.0	0.0	8.07	0.00	0.50	0.0	1.33	1.83	0.18	0.00	2.93	0.00	3.11	
13-Jul-15	0.7	0.9	0.0	1.7	0.0	0.0	0.0	0.4	0.00	3.79	0.0	5.8	0.0	0.9	0.8	1.3	0.0	0.0	8.75	0.14	0.45	0.0	1.25	1.85	0.00	0.00	2.05	0.00	2.05	
14-Jul-15	0.8	1.2	0.0	0.0	0.0	0.0	0.0	0.00	1.97	0.0	0.0	5.9	1.2	1.3	1.5	1.9	0.2	0.0	11.94	0.17	0.85	0.0	1.34	2.36	0.00	0.00	1.04	0.00	1.04	
15-Jul-15	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.00	0.12	0.1	0.0	5.5	3.1	1.0	1.4	1.5	1.1	0.0	13.84	0.11	0.85	0.0	1.11	2.07	0.00	0.00	5.48	0.00	5.48	
16-Jul-15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	2.5	2.5	4.1	4.8	0.4	1.2	0.6	1.6	0.0	17.60	0.05	0.89	0.0	0.93	1.87	0.00	0.00	7.23	0.00	7.23	
17-Jul-15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	2.4	1.3	4.7	7.9	0.6	1.4	0.5	0.8	0.0	19.59	0.10	0.78	0.0	1.26	2.15	0.00	0.00	6.02	0.00	6.02	
18-Jul-15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	1.0	0.0	4.8	0.0	0.0	1.1	7.5	1.7	0.0	15.99	0.00	0.75	0.0	0.00	0.75	0.07	0.00	2.50	0.80	3.37	
19-Jul-15	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.00	0.73	0.1	0.0	3.7	4.0	0.3	0.0	1.5	1.4	0.0	10.88	0.00	0.97	0.0	1.87	2.84	0.78	0.00	2.00	0.00	2.78	
20-Jul-15	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.00	0.94	0.0	0.0	3.2	1.7	0.0	0.1	0.0	1.1	0.0	6.13	0.00	0.95	0.0	1.62	2.57	0.87	0.00	1.46	0.00	2.34	
21-Jul-15	1.7	1.5	0.0	0.0	0.1	0.2	0.1	0.00	3.53	0.0	0.0	3.5	1.9	0.0	0.0	0.0	2.2	0.0	7.61	0.89	0.92	0.0	1.22	3.03	0.00	0.00	1.81	0.00	1.81	
22-Jul-15	0.4	0.8	0.0	0.0	0.0	0.0	0.0	0.00	1.12	0.0	0.0	4.5	2.0	0.4	0.6	0.7	2.6	0.0	10.69	0.62	0.97	0.0	1.05	2.64	0.00	0.00	3.55	0.00	3.55	
23-Jul-15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.5	0.3	4.8	3.6	0.5	0.8	0.7	1.8	0.0	12.97	0.93	0.99	0.0	0.96	2.88	0.00	0.00	6.03	0.00	6.03	
24-Jul-15	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.00	0.84	0.6	0.1	4.9	0.0	0.5	1.0	1.1	2.6	0.0	10.80	0.93	0.95	0.0	0.69	2.57	0.00	0.00	8.09	0.00	8.09	
25-Jul-15	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.00	0.90	0.1	0.2	4.6	0.0	0.0	0.5	0.5	2.0	0.6	8.52	0.05	0.73	0.0	0.74	1.52	0.00	0.00	7.44	0.00	7.44	
26-Jul-15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.5	0.8	3.5	0.5	1.1	0.5	0.0	0.7	2.4	9.98	0.16	0.91	0.0	1.68	2.75	0.00	0.00	3.61	0.00	3.61	
27-Jul-15	0.8	0.8	0.0	0.0	0.0	0.0	0.4	0.00	2.06	0.0	0.0	3.2	0.0	0.0	0.5	0.0	0.0	2.8	6.57	0.16	0.86	0.0	1.69	2.70	0.00	0.00	5.09	0.00	5.09	
28-Jul-15	0.7	0.9	0.0	0.0	0.0	0.2	0.0	0.00	1.89	0.0	0.0	3.4	0.4	0.0	0.0	0.0	0.1	2.2	6.12	0.17	0.87	0.0	1.70	2.74	0.00	0.00	1.88	0.00	1.88	
29-Jul-15	1.4	1.7	0.0	1.5	0.4	1.1	0.6	0.00	6.70	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.2	2.6	5.97	0.18	0.83	0.3	1.60	2.94	0.00	0.00	0.00	0.00	0.00	
30-Jul-15	2.7	3.4	0.0	5.4	1.0	2.4	1.4	0.00	16.24	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.7	3.4	6.32	0.21	0.88	0.0	1.63	2.72	0.00	0.00	3.40	0.00	3.40	
31-Jul-15	1.5	3.8	0.0	4.0	0.9	1.8	1.3	0.00	13.28	0.0	0.0	1.9	0.0	0.0	0.0	0.0	1.5	4.1	7.44	0.07	0.75	0.0	1.39	2.21	0.00	0.00	4.98	0.00	4.98	
Total	12.35	26.05	0.00	32.79	2.59	6.18	3.75	4.62	0.00	88.34	17.76	5.17	126.22	41.61	21.15	23.89	35.12	43.52	18.17	332.63	5.96	22.52	0.33	35.76	64.57	2.13	0.00	116.25	2.12	120.50

Date	12.4 Import and Export of SR with ER & WR during July 2015											
	Export of ER to SR (ER - SR)			Import of ER from SR (SR - ER)			Export of WR to SR (WR-SR)			Import of WR from SR (SR - WR)		
	ER - SR HVDC Gazuwaka	ER - SR HVDC Talchar -Kolar	Total ER - SR	SR - ER HVDC Gazuwaka	SR - ER HVDC Talchar -	Total SR - ER	WR - SR HVDC Bhadrawati	WR - SR 765 kV Sholapur - Raichur	Total WR - SR	SR - WR HVDC Bhadrawati	SR - WR 765 kV Raichur - Sholapur	Total SR - WR
1-Jul-15	17.2	43.7	60.85	0.00	0.00	0.00	23.83	5.49	29.32	0.00	0.52	0.52
2-Jul-15	16.1	47.9	64.01	0.00	0.00	0.00	23.85	12.33	36.18	0.00	0.01	0.01
3-Jul-15	17.2	49.4	66.65	0.00	0.00	0.00	23.84	8.79	32.63	0.00	0.96	0.96
4-Jul-15	16.5	46.4	62.97	0.00	0.00	0.00	23.88	13.27	37.15	0.00	0.00	0.00
5-Jul-15	18.0	49.7	67.63	0.00	0.00	0.00	6.62	11.66	18.29	0.00	0.12	0.12
6-Jul-15	18.1	49.2	67.32	0.00	0.00	0.00	21.77	16.35	38.12	0.00	0.03	0.03
7-Jul-15	18.1	49.0	67.09	0.00	0.00	0.00	23.97	15.30	39.27	0.00	0.00	0.00
8-Jul-15	17.5	48.5	65.97	0.00	0.00	0.00	23.92	12.14	36.07	0.00	0.00	0.00
9-Jul-15	16.6	42.3	58.90	0.00	0.00	0.00	23.89	11.48	35.37	0.00	0.17	0.17
10-Jul-15	16.1	43.7	59.81	0.00	0.00	0.00	20.73	9.03	29.76	0.00	0.28	0.28
11-Jul-15	16.6	44.4	61.05	0.00	0.00	0.00	23.31	5.73	29.04	0.00	0.81	0.81
12-Jul-15	16.6	45.0	61.61	0.00	0.00	0.00	23.88	10.20	34.08	0.00	0.02	0.02
13-Jul-15	17.6	47.0	64.64	0.00	0.00	0.00	23.50	10.26	33.76	0.00	0.25	0.25
14-Jul-15	18.1	42.0	60.09	0.00	0.00	0.00	23.02	10.97	33.98	0.00	0.23	0.23
15-Jul-15	18.1	42.2	60.33	0.00	0.00	0.00	23.95	10.55	34.50	0.00	0.05	0.05
16-Jul-15	18.1	45.4	63.56	0.00	0.00	0.00	23.88	9.09	32.98	0.00	0.54	0.54
17-Jul-15	18.1	49.1	67.24	0.00	0.00	0.00	23.96	9.08	33.04	0.00	0.37	0.37
18-Jul-15	18.0	46.0	64.02	0.00	0.00	0.00	23.85	10.69	34.54	0.00	0.05	0.05
19-Jul-15	17.8	44.7	62.44	0.00	0.00	0.00	23.88	7.73	31.62	0.00	0.84	0.84
20-Jul-15	17.0	45.5	62.48	0.00	0.00	0.00	23.88	8.89	32.77	0.00	0.49	0.49
21-Jul-15	14.7	42.0	56.73	0.00	0.00	0.00	23.90	12.07	35.97	0.00	0.04	0.04
22-Jul-15	14.4	43.4	57.80	0.00	0.00	0.00	23.90	8.67	32.57	0.00	0.03	0.03
23-Jul-15	14.6	47.3	61.91	0.00	0.00	0.00	23.91	10.85	34.76	0.00	0.08	0.08
24-Jul-15	15.9	47.8	63.64	0.00	0.00	0.00	23.91	12.62	36.53	0.00	0.00	0.00
25-Jul-15	15.6	47.3	62.85	0.00	0.00	0.00	23.88	9.74	33.62	0.00	0.24	0.24
26-Jul-15	16.9	48.1	64.98	0.00	0.00	0.00	23.82	12.00	35.81	0.00	0.03	0.03
27-Jul-15	18.1	51.0	69.16	0.00	0.00	0.00	23.85	16.55	40.40	0.00	0.00	0.00
28-Jul-15	16.7	50.1	66.77	0.00	0.00	0.00	23.76	18.24	42.00	0.00	0.00	0.00
29-Jul-15	16.2	44.6	60.85	0.00	0.00	0.00	23.84	11.40	35.24	0.00	0.37	0.37
30-Jul-15	17.0	49.4	66.43	0.00	0.00	0.00	23.53	14.81	38.34	0.00	0.03	0.03
31-Jul-15	18.2	49.2	67.43	0.00	0.00	0.00	23.88	7.67	31.55	0.00	1.39	1.39
Total	526.03	1441.16	1967.19	0.00	0.00	0.00	715.62	343.65	1059.27	0.00	7.96	7.96



13. भूटान , नेपाल एवं बांग्लादेश के साथ अंतरराष्ट्रीय विद्युत विनिमय  
INTERNATIONAL EXCHANGE WITH BHUTAN, NEPAL AND BANGLADESH

अप्रैल 2015 से जुलाई 2015 April 2015 to July 2015

अंतरराष्ट्रीय विद्युत विनिमय [भारत से दूसरे देश को आयात (+) / निर्यात (-)] Transnational  
Exchange (Import=(+ve) /Export =(-ve))

माह MONTH	भूटान BHUTAN	नेपाल NEPAL	बांग्लादेश BANGLADESH
	Energy Exchange (In MU)	Energy Exchange (In MU)	Energy Exchange (In MU)
अप्रैल 2015 APR'15	243.70	-120.56	-303.01
मई 2015 MAY'15	449.85	-98.12	-334.82
जून 2015 JUN'15	676.37	-109.91	-317.91
जुलाई 2015 JUL'15	1010.50	-120.50	-312.40
कुल Total	2380.42	-449.09	-1268.14

**14. एसटीओए (द्विपक्षीय एवं सामूहिक) एवं डी एस एम बिलिंग का ब्योरा – माह जुलाई 2015  
STOA (BILATERAL AND COLLECTIVE) & DSM BILLING DETAILS- JULY 2015**

**द्विपक्षीय एसटीओए BILATERAL SHORT TERM OPEN ACCESS**

जुलाई 2015 July 2015			April'15- July'15	
क्षे.आ.प्रे.के. का नाम Name of RLDC	लेन – देनों की संख्या No. of Transactions	अनुमोदित ऊर्जा (मि.यु.) Energy Units Approved(MU)	लेन – देनों की संख्या No. of Transactions	अनुमोदित ऊर्जा (मि.यु.) Energy Approved (MU)
ऊ.क्षे. NR	387	2906	1499	7323
प.क्षे. WR	198	749	1091	2806
द.क्षे. SR	276	2182	1225	7557
पू.क्षे. ER	140	799	746	3572
पूर्वोत्तर क्षे. NER	10	116	70	444
कुल TOTAL	1011	6752	4631	21702

**एसटीओए SHORT TERM OPEN ACCESS**

माह MONTH	सामूहिक एसटीओए Collective STOA		द्विपक्षीय एसटीओए Bilateral STOA	
	क्रैताओं / विक्रेताओं की सं. NO. of Buyers/Sellers	अनुमोदित ऊर्जा (मि.यु.) Approved Energy (MU)	क्रैताओं / विक्रेताओं की सं. NO. of Buyers/Sellers	अनुमोदित ऊर्जा (मि.यु.) Approved Energy (MU)
अप्रैल 2015 APR'15	2495	2493	1134	4029
मई 2015 May'15	2547	2913	1314	4481
जून 2015 June'15	2453	2468	1172	6440
जुलाई 2015 July '15	2536	2535	1011	6752
कुल TOTAL	10031	10409	4631	21702

मासिक डी एस एम बिलिंग का ब्योरा 2015-16  
MONTHLY DSM BILLING DETAILS 2015-16

अनंतिम आकड़े  
Provisional data  
subject to change

करोड़ रु. में (RS. IN CRORES)

क्षेत्र REGION	उत्तरी क्षेत्र NORTH	पश्चिमी क्षेत्र WEST	दक्षिणी क्षेत्र SOUTH	पूर्वी क्षेत्र EAST	पूर्वोत्तर क्षेत्र NORTH EAST
29/06/2015 to 05/07/2015	49.65	20.27	12.07	19.46	2.34
06/07/2015 to 12/07/2015	48.27	14.15	10.65	17.25	3.04
13/07/2015 to 19/07/2015	63.58	28.26	12.76	12.11	2.57
20/07/2015 to 26/07/2015	34.43	26.15	9.28	10.91	4.28

15. पावर मार्केट की सूचना (स्रोत : आई.ई.एक्स. एवं पी.एक्स.आई.एल.)  
POWER MARKET INFORMATION (Source IEX & PXIL)

पावर एक्स्चेंज के माध्यम से विनिमय - माह जुलाई 201५  
EXCHANGES THROUGH POWER EXCHANGES - July 2015

क्र. स. S. No.	क्षेत्रीय ईकाई Regional Entity	क्षेत्र Region	पावर एक्स्चेंज के माध्यम से (मि.यु. मे) Through Power Exchange in MU	
			विक्रय Sale	क्रय Purchase
1	पंजाब Punjab	उत्तरी क्षेत्र NR	0.00	113.96
2	हरियाणा Haryana		75.74	164.22
3	राजस्थान Rajasthan		54.74	397.84
4	दिल्ली Delhi		81.69	48.70
5	उत्तर प्रदेश Uttar Pradesh		0.00	0.00
6	उत्तराखंड Uttarakhand		0.00	33.68
7	हिमाचल प्रदेश Himachal Pradesh		214.81	7.44
8	जम्मू और कश्मीर J & K		42.94	28.40
9	केंद्र शासित चंडीगढ़ UT Chandigarh		1.71	4.06
10	ए डी हाइड्रो AD Hydro		50.10	0.00
11	करचम वागतू KW		92.00	0.00
12	श्री सीमेंट Shree Cement		17.71	0.00
13	नाथपा झाकरी Nathpa Jhakri		51.24	0.00
14	बैरासूल Baira Siul HEP(BS0)		2.60	0.00
15	चमेरा -1 Chamera-I HEP(CM1)		7.85	0.00
16	चमेरा -2 Chamera-II HEP(CM2)		6.95	0.00
17	धौलीगंगा Dhauliganga HEP(DG0)		6.73	0.00
18	धौलीगंगा Dulahasti HEP(DU0)		0.00	0.00
19	सलाल Salal HEP(SLO)		13.60	0.00
20	सेवा -2 Sewa-II NHPC(SW2)		2.56	0.00
21	टनकपुर Tanakpur HEP(TP0)		2.05	0.00
22	उरी Uri HEP(UR0)		9.70	0.00
23	लांको बुधिल LANCO Budhil		49.06	0.00
24	चमेरा-3 chamera 3		5.25	0.00
25	अदानी एचवीडीसी ADANI HVDC(NORGU0)		0.00	0.00
26	मलाना MALANA		8.70	0.00
27	उरी-II Uri-II HEP(UR2)		0.00	0.00
28	मध्य प्रदेश MP	पश्चिमी क्षेत्र WR	38.14	58.10
29	महाराष्ट्र Maharashtra		18.84	382.64
30	गुजरात Gujarat		84.35	256.72
31	छत्तीसगढ़ Chattisgarh		70.95	11.17
32	गोवा Goa		3.59	14.58
33	दमन और दीव Daman and Diu		0.00	33.10
34	दादरा और नगर हवेली Dadra & Nagar Haveli		0.00	43.50
35	जिंदल JD		35.27	0.00
36	लांको अमरकंटक LANCO AMK		0.00	0.00
37	आर्यन कोल ACB India Limited		42.26	0.00
38	जिंदल स्टील एंड पावर Jindal Steel and Power Ltd		48.51	0.00
39	बालको -2 Balco-II		0.00	30.76
40	स्टरलाइट Sterlite(w3rse0)		17.86	0.00
41	एमको EMCO		0.67	0.00
42	वन्दना विद्युत VANDANA VIDYUT		0.00	0.00
43	एस्सार पावर ESSAR POWER		0.00	0.00
44	एस्सार स्टील ESSAR STEEL		0.00	195.39
45	के एस के महानदी KSK Mahanadi		0.00	0.00
46	जिंदल स्टील -II Jindal Stg-II		75.06	0.00
47	कोरबा (प.) Korba(W) Comp. Ltd.		45.73	0.00
48	डी बी पावर D B Power		0.16	0.00
49	धारीवाल Dhariwal		0.00	0.00
50	जे पी निगी Jaypee Nigire		30.44	0.00
51	जी एम आर छत्तीसगढ़ GMR Chhattisgarh		0.00	0.00
52	डी जीईएन मेगा पावर DGEN Mega Power		0.00	0.00
53	एम बी मेगा पावर MB Power		21.31	0.00
54	एपीएल मुंद्रा स्टेज-I APL Mundra Stg-I		23.50	0.00
55	एपीएल मुंद्रा स्टेज-II APL Mundra Stg-II		20.20	0.00
56	एपीएल मुंद्रा स्टेज-III APL Mundra Stg-III		27.06	0.00
57	टोरेंट सुगेन Torrent Sugan		0.00	0.00

15. पावर मार्केट की सूचना ( स्रोत : आई.ई.एक्स. एवं पी.एक्स.आई.एल.)

POWER MARKET INFORMATION ( Source IEX & PXIL)

पावर एक्स्चेंज के माध्यम से विनिमय - माह जुलाई 201५

EXCHANGES THROUGH POWER EXCHANGES - July 2015

क्र. स. S. No.	क्षेत्रीय ईकाई Regional Entity	क्षेत्र Region	पावर एक्स्चेंज के माध्यम से ( मि.यु. मे) Through Power Exchange in MU	
			विक्रय Sale	क्रय Purchase
53	आंध्र प्रदेश Andhra Pradesh	दक्षिणी क्षेत्र SR	12.99	257.42
54	कर्नाटक Karnataka		125.98	112.91
55	केरल Kerala		3.27	60.16
56	तमिलनाडु Tamilnadu		0.00	42.81
57	पॉण्डिचेरी Pondicherry		0.00	0.00
58	गोवा Goa		0.00	0.00
59	लान्को कॉन्डापल्ली LANCO KONDPLY		0.00	0.00
60	सिमापुरी SIMHAPURI		108.26	0.00
61	मीनाक्षी MINAXI		68.24	0.00
62	तेलंगाना TELANGANA		39.16	83.87
63	थर्मल पावर टेक Thermal Power Tech		70.17	0.00
64	पश्चिम बंगाल West Bengal	पूर्वी क्षेत्र ER	52.37	57.94
65	उडिशा Odisha		24.58	12.26
66	बिहार Bihar		0.00	50.24
67	झारखंड Jharkhand		0.00	0.99
68	सिक्किम Sikkim		57.56	0.00
69	दामोदर घाटी परियोजना DVC		2.99	0.00
70	स्टरलाइट STERLITE		0.00	0.00
71	मैथन पावर लिमिटेड Maithon P. Ltd		51.68	0.00
72	आधुनिक पा. लिमिटेड Adhunik P.Ltd		0.10	0.00
73	चुजाचन Chuzachen HEP		77.37	0.00
74	रंगित Rangit HEP		0.00	0.00
75	तीस्ता Teesta HEP		0.00	0.00
76	जीएमआर कमलंगा GMR Kamalanga		10.53	0.00
77	जिंदल आई पी टी एल JIPTL		228.63	0.00
78	अरुणाचल प्रदेश Arunachal Pradesh	पूर्वोत्तर क्षेत्र NER	14.14	0.00
79	असम Assam		11.00	16.59
80	मणिपुर Manipur		26.93	0.00
81	मेघालय Meghalaya		36.52	15.85
82	मिजोरम Mizoram		19.43	0.00
83	नागालैंड Nagaland		6.91	0.00
84	त्रिपुरा Tripura		76.10	0.00
85	अगरतला जीटीपीपी Agartala GTPP_AGO		0.00	0.00
86	कोपिली KOPIIJ_KP1		0.00	0.00
87	असम जीबीपीपी Assam GBPP_KTO		0.00	0.00
88	लोकटक LOKTAK		8.77	0.00
89	रंगानदी Ranganadi		0.00	0.00
90	दोयांग Doyang		0.00	0.00
91	पलाताना Palatana	0.00	0.00	
	कुल Total		2535.31	2535.31

**16. RENEWABLE ENERGY CERTIFICATE MECHANISM****MONTH:-JULY 2015****RE Source & Unit wise break up (JULY 15)**

Sr.No	Source Wise	Accreditation		Registration	
		Capacity (MW)	Unit	Capacity (MW)	Unit
1	Wind	0	0	0	0
2	Urban or Municipal Waste	0	0	0	0
3	Solar Thermal	0	0	0	0
4	Solar PV	5	3	2	2
5	Small Hydro	0	0	0	0
6	Others	0	0	0	0
7	Geothermal	0	0	0	0
8	Biomass	0	0	3	1
9	Bio-fuel cogeneration	4.67	1	0	0
	<b>Total</b>	9.67	4	5	3

**RECs Issued (July 15)**

Sr.No.	Non Solar	Solar	Total
1	648016	214237	862253

**Redemption of REC (July 15)**

Sr.No.	Non Solar	Solar	Total
1	157047	17952	174999

**16. RENEWABLE ENERGY CERTIFICATE MECHANISM****MONTH:-JULY 2015****RE Source & Unit wise break up (Apr-15- Jul-15)**

Sr.No	Source Wise	Accreditation		Registration	
		Capacity (MW)	Unit	Capacity (MW)	Unit
1	Wind	0.85	1	1.9	2
2	Urban or Municipal Waste	0	0	0	0
3	Solar Thermal	0	0	0	0
4	Solar PV	17.38	15	18.88	21
5	Small Hydro	0	0	0	0
6	Others	0	0	0	0
7	Geothermal	0	0	0	0
8	Biomass	3	1	5	2
9	Bio-fuel cogeneration	21.25	3	26.95	4
	<b>Total</b>	<b>42.48</b>	<b>20</b>	<b>52.73</b>	<b>29</b>

**RECs Issued (April15-July 15)**

Sr.No.	Non Solar	Solar	Total
1	2933003	981702	3914705

**Redemption of REC (April 15 - July 15)**

Sr.No.	Non Solar	Solar	Total
1	687918	133545	821463

## **16. RENEWABLE ENERGY CERTIFICATE MECHANISM**

**MONTH:-JULY 2015**

### **RE Source & Unit wise break up Since Inception to July 15**

Sr.No	Source Wise	Accreditation		Registration	
		Capacity (MW)	Unit	Capacity (MW)	Unit
1	Wind	2461.69	623	2311.65	594
2	Urban or Municipal Waste	8	1	0	0
3	Solar Thermal	3	1	0	0
4	Solar PV	598.43	299	584.43	288
5	Small Hydro	318.69	36	291.19	32
6	Others	1.67	1	1.67	1
7	Geothermal	0	0	0	0
8	Biomass	696.66	74	698.66	74
9	Bio-fuel cogeneration	928.62	105	914.98	102
	<b>Total</b>	<b>5016.76</b>	<b>1140</b>	<b>4802.58</b>	<b>1091</b>

### **RECs Issued since Inception to July 15**

Sr.No.	Non Solar	Solar	Total
1	22930795	2825493	25756288

### **Redemption of REC since Inception to July 15**

Sr.No.	Non Solar	Solar	Total
1	10108085	377738	10485823

### **REC Closing balance as on 31.07.2015**

Sr.No.	Non Solar	Solar	Total
1	12822710	2447755	15270465

Major Grid Events for July, 2015_NR**												
S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time	Time				
1	NR	1) 220kV Tanakpur-CB Ganj 2) 220kV Tanakpur-Sitarganj 3) Unit #2& #3 at Tanakpur HEP	NHPC/UP/ POWERGRID	03.07.15	8:56	03.07.15	9:49	0:53	All lines connected to 220kV Tanakpur HEP(NHPC) tripped along with running generation. Incident again happened at 10:50hrs.	100	Nil	GD-1
2	NR	1) 220kV Wagoora(PG)-Zainakote(J&K) both ckt 2) 220kV Wagoora(PG)-Pampore(J&K)	POWERGRID/ J&K	04.07.15	14:52	04.07.15	15:14	2:13	220kV Wagoora(PG)-Zainakote(J&K) both ckt tripped on R-phase to ground fault. At 17:14hrs 220kV Wagoora(PG)-Pampore(J&K) tripped.	Nil	300	GD-1
3	NR	1) 500kV HVDC Balia-Bhiwadi bipole	POWERGRID	05.07.15	6:54	05.07.15	7:26	0:32	External relay mal operated resulted in tripping of 500kV HVDC Balia-Bhiwadi bipole	Nil	Nil	GI-2
4	NR	1) 400kV Makhu-Nakodar ckt-1 2) 400/220kV, 315MVA ICT #1 & #2 at 400kV Makhu	Punjab	06.07.15	4:46	06.07.15	5:28	0:42	400kV Makhu-Nakodar ckt-1, 400/220kV, 315MVA ICT #1 & #2 tripped due to	Nil	Nil	GI-2
5	NR	1) Unit#2 of 660MW at Kawai 2) Unit #3&4 of 250MW each at Chhabra 3) Unit#1&2 of 600MW each at Kalisindh 4) 765/400kV ICT-2 at Phagi S/s 5) 400kV Chhabra-Hindaun 6) 400kV Chhabra-Bhilwara	Rajasthan/ Adani	10.07.15	16:26	10.07.15	18:50	2:24	765/400kV ICT #1 at Phagi already under shutdown. ICT#2 tripped. Running generation of Kawai(1x660MW), Kalisindh(2x600) & Chhabra(2x250) also tripped.	1800	300	GD-1
6	NR	1) 400kV Kashipur-Bareilly both ckt 2) 400/220kV 315MVA ICT-1&2 at Kashipur	PTCUL/ POWERGRID	12.07.15	7:11	12.07.15	8:20	1:09	400kV Kashipur-Moradabad line already tripped at 06:38hrs. At 07:11hrs, 400kV Kashipur-Bareilly D/C, 400/220kV 315MVA ICT-1&2 at Kashipur reportedly tripped on bus bar protection.	Nil	150	GD-1
7	NR	1) 400kV Muzaffarnagar-Roorkee 2) 400kV Muzaffarnagar-Muradnagar 3) 400kV Meerut-Muzaffarnagar	POWERGRID/ UP	12.07.15	8:45	12.07.15	9:34	0:49	400kV Muzaffarnagar-Roorkee, Muzaffarnagar-Muradnagar & Meerut-Muzaffarnagar tripped at the same time during fault in 400kV Muzaffarnagar-Roorkee line.	Nil	Nil	GI-2
8	NR	1) 220kV CB Ganj-Sitarganj-Tanakpur 2) CB Ganj-Tanakpur 3) 132kV Tanakpur-Mahendernagar(Nepal)	UP/ POWERGRID/ NHPC	13.07.15	11:33	13.07.15	15:06	3:33	220kV CB Ganj-Sitarganj-Tanakpur, CB Ganj-Tanakpur & 132kV Tanakpur-Mahendernagar tripped. All the running unit of Tanakpur also tripped. Radial load loss in Nepal also.	90	150	GD-1
9	NR	1) 400kV G.Noida-Dadri 2) 400kV G.Noida-Nawada	UP	13.07.15	7:14	13.07.15	8:00	0:46	Bus Fault at Bus-B of 400kV G. Noida Station. 400kV G.Noida-Dadri & G.Noida-Nawada tripped from G. Noida end in reverse zone (Zone-4) due to 160ms time setting in reverse zone. It is alternate arrangement in case of non-availability of bus bar protection.	Nil	650	GD-1
10	NR	1) Unit #1, #3 & #4 at 400kV Koldam HEP(NTPC)	NTPC/NHPC/ POWERGRID	13.07.15	15:15	13.07.15	16:08	0:53	All three running units viz. Unit #1, #3 & #4 (200MW each) of 400kV Koldam HEP(NTPC) tripped	800	Nil	GD-1
11	NR	1) 100 MVA&160 MVA, 200/132 KV ICTs at Unnao 2) 220 kV Lucknow-Unnao-I 3) 315 MVA, 400/220 kV ICT-1 & II at Unnao	UP	21.07.15	17:59	21.07.15	18:54	0:55	160 MVA LA of 220 KV side corona ring broke. 100 MVA&160 MVA, 200/132 KV ICTs, 220 kV Lucknow-Unnao-I, 315 MVA, 400/220 kV ICT-1 & II at Unnao	Nil	Nil	GI-2
12	NR	1) 220kV Azamgarh-Jaunpur 2) 400/220kV, 240MVA & 315MVA ICTs at Azamgarh	UP	26.07.15	9:13	26.07.15	10:34	1:21	220kV Azamgarh-Jaunpur tripped on B-phase to ground fault. Both 400/220kV	Nil	200	GD-1
13	NR	1) 400kV Dhanonda-Daulatabad ckt-1 2) 400/220kV, 315MVA ICT #1, #2 & #3 at Dhanonda 3) HVDC Mundra-Mohinderghar bipole	Haryana/Adani	26.07.15	22:26	26.07.15	23:00	0:34	Bus bar protection operated at 400kV Dhanonda(HVPLN) resulting in tripping of all three 400/220kV, 315MVA ICTs along with 400kV Dhanonda-Daulatabad ckt-1. At the same time, the inter-regional link, ±500kV HVDC Mundra-Mohinderghar bipole tripped. The flow on 765kV Agra-Gwalior D/C inter regional line also surpassed 2800MW mark resulting in its SPS	SPS operation (Gen. loss in WR)	SPS operation (Load loss in NR)	GD-1
14	NR	1) 400kV Rajwest-Barmer 2) 7x135MW units at Rajwest TPS 3) 400/220kV ICTs at Akal & Barmer 4) 220/132kV ICTs & 132/33kV ICT at Dhorimanna 5) 220kV Barmer-Dhorimanna 6) 220kV Akal-Barmer 7) 220kV Barmer-Rajwest both ckt 8) 220kV Giral-Barmer all three ckt 9) 220kV Barmer-Balotra ckt 10) 220kV GT-1&2, ST-1 at Ramgarh	Rajwest/Rajasthan	28.07.15	9:58	28.07.15	13:15	3:17	7 Units of Rajwest TPS(135x8 MW) generating —75 MW each tripped along with wind gen. in Rajasthan due to tripping of multiple 400/220kV lines from Rajwest, Akal, Amarsagar & Barmer.	525	100	GD-1

\*\* Details are provisional



Major Grid Events for July, 2015_WR**												
S.No.	Region	Name of Elements	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time	Time				
1	WR	220/132kV, 160 MVA ICT II CGL , 220/132kV, 160 MVA ICT I BHEL , 220/132kV, 160 MVA ICT III CGL,220 kV Shujalpur – Shujalpur PGCL Ckt – I, 220 kV Shujalpur – Shujalpur PGCL Ckt – II , 220 kV Sujalpur Bus 1 & 2	MPPTCL	2-7-15	16:15	2-7-15	16:25	0:10	At 16:15 Hrs., while testing & checking of control panel of 220/132 kV, 160 MVA ICT II at 220 kV Shujalpur S/s, the LBB contact of 220/132 kV, 160 MVA ICT III was suspected to be shorted due to defective contact, resulting in mal-operation of LBB protection of 220/132 kV, 160 MVA ICT III which initiated the operation of 220 kV Bus Bar Protection at 220 kV Shujalpur S/s and resulted in tripping of following feeders and transformers:- 1. 220/132 kV, 160 MVA ICT III & I at 220 kV Sujalpur S/s. 2. 220 kV Shujalpur – Bhopal Ckt – I & II tripped from 220 kV S/s Sujalpur end. Due to above tripping there was no interruption as supply was managed through 132 kV system.	-	-	GI-1
2	WR	220KV Akrimota-Nakhatrana, 220KV Akrimota-Panandhro, 220KV Akrimota-Jamanwada , 220 kV ALTPS Unit 1& 2, 220 kV Bus 1 & 2 ALTPS	GSECL	6-7-15	11:26	6-7-15	12:24	0:58	At 11:16 hrs 220KV Akrimota-Nakhatrana, 220KV Akrimota-Panandhro and 220KV Akrimota-Jamanwada line tripped on bus bar protection operation and Akrimota Bus-1 & 2 both became dead .	250	100	GD-1
3	WR	765 kV Bus 2 @ Dharamjaigad , 765 kV Dharamjaigad-Jhasurguda 2	PGCIL	6-7-15	17:27	6-7-15	18:26	0:59	During testing of 765 kV Dharamjaigad-Bilaspur bay equipment i.e timing of CB , the 765 kV Bus –II side Isolator at Dharamjaigad operated from OFF to ON condition inspite of Earth Switch in close position, due to malfunction of the same. This is may be due to continuous rain & DC fault. The Mechanical interlock of same also Isolator also got failed. This has resulted in bus bar protection operation for 765 kV Bus 2. Also 765 kV Dharamjaigad-Jhasurguda –II tie CB was kept in OFF condition due to tesing & CEA inspection of 765 kV Ranchi-I line which is on same dia. As a result Jhasurguda –II line tripped due to Bus-II Fault.	-	-	GI-2
4	WR	220/22 kV, 50 MVA Talegaon ICT 1,220 kV Talegaon-Pune I, 220kV Urse- I line,220 kV Talegaon-GM motors,220kV Bus coupler, 220 kV Bus 1 @Talegaon	MSETCL	10-7-15	11:30	10-7-15	12:05	0:35	At 11:30 hrs, Bus bar protection for 220 kV Bus 1 has operated at 220/22 kV Talegaon Sub-station resulting in tripping of all elements connected to 220 kV Bus 1. There was no fault in the system during the operation of Bus bar protection. After analysis it was found that bay indication wires of 220 kV Pune (PG) - Talegaon 1 line was found in burnt condition and has caused shorting of the DC resulting in Bus bar protection. After rectifying the same, elements were taken back in service.	-	-	GI-1

S.No.	Region	Name of Elements	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time	Time				
5	WR	220 kv Parli Unit 2,220 kv ST 1,220 kv Parli-Parli, 220 kv Parli-Beed 2, 220 kv Parli-Nanded 1,220 kv Bus 1	MSETCL	10-7-15	13:05	07-10-15	13:06	0:01	During the TBC trial of GT 2, Bus bar protection has maloperated causing tripping of 220 kv bus 1 , Auxiliary Bus and associated 220 kv elements	-	-	GI-1
6	WR	220 kv Rajgarh-Rajgarh(PG) 1 & 2, 220 kv Rajgarh-Pithampur 1 & 2, 220 kv Rajgarh (MP) Bus 1 & 2, 132 kv ghodabillod-Dhar, 132 kv Dhar-Kuksi,	MPPTCL	18/7/15	18:55	18/7/15	19:05	0:10	As the 220 kv Rajgarh-Rajgarh(PG) 1 & 2, 220 kv Rajgarh-Pithampur 1 & 2 were faulty and the incoming feeder to 220/132 kv Rajgarh, 132 kv Dhar, 132 kv Petlawad i.e. 132 kv Kuksi-Dhar tripped causing blackout at these sub-station	-	10	GD-1
7	WR	400/220 kv ICT 2 & 3, 220 kv Bina-Bina PG , 220 kv Bina-Mahalgaon 1, 220 kv Bina-Guna 2, 220 kv Bina-Sagar 2, 220 kv Bina-Bina I/C	MPPTCL	20/7/15	13:05	20/7/15	13:25	0:20	Due to Lightening, 220 kv Bina-Bina I/C II Lightening arrester damaged causing E/F. During this 220 kv Bina Bus 2 tripped along with feeders.	-	-	GI-1
8	WR	All elements from Dahej Sub-station	GETCO	22/07/15	3:15	22/07/15	11:28	8:13	220 kv Bus fault at Dahej Sub-station at 03:15 Hrs. All elements got tripped. Y phase flyover Bus conductor of 220/100 kv ICT 1 from 220 kv side broken.	NA	NA	GD-1
9	WR	400 kv Kosamba-Ukai 2, 400 kv Kosamba-Choronia 1 , 400 kv Bus 2 @Kosamba	GETCO	22/07/15	3:23	22/07/15	3:38	0:15	400 kv Bus 2 fault at Kosamba	-	-	GI-2
10	WR	220 kv Mokha –tappar, 220 kv Mokha OPG, 220/66 KV ICT 2 tripped, 220 kv Mokha Bus 2	GETCO	22/07/15	4:12	22/07/15	4:55	0:43	220 kv Mokha Bus 2 B/B protection operated at 04:12 Hrs : 220 kv Mokha –tappar, 220 kv Mokha OPG, 220/66 KV ICT 2 tripped	NA	NA	GI-1
11	WR	220 kv Mokha –tappar, 220 kv Mokha OPG, 220/66 KV ICT 2 tripped, 220 kv Mokha Bus 2	GETCO	22/07/15	5:26	22/07/15	7:10	1:44	Again after restoration, 220 kv Mokha Bus 2 B/B protection operated at 05:26 Hrs : 220 kv Mokha –tappar, 220 kv Mokha OPG, 220/66 KV ICT 2 tripped	NA	NA	GI-1
12	WR	400 kv Amreli Bus 1 & 2, 400 kv Amreli-Choronia, 400 kv Amreli-Jetpur 2, 400/220 kv ICT 1,2,& 3	GETCO	22/07/15	6:21	22/07/15	7:27	1:06	Bus fault on 400 kv Bus 1 & 2 at Amreli	NA	NA	GD-1
13	WR	220 kv Badod-Sakatpur, 220 kv Badod-Ujjain	MPPTCL	23/7/15	18:02	24-07-15	1:02	7:00	R Phase Bus PT of 220 kv Bus 1 has bursted at Badod resulting in Bus bar protection operation and tripping of 220 kv bus 1 and associated element	-	-	GI-1
14	WR	Itarsi 125 MVAR Bus Reactor, 400 kv Itarsi Bus 1, 400 kv Jabalpur -Itarsi 1, 50 MVAR Bus Reactor	PGCIL	25/7/15	11:05	25-07-15	11:47	0:42	During outage of 400kv Bus Reactor 1 Main Bay for NTAMC work, 400 kv Bus 1 at Itarsi has tripped . The reason for tripping is not known.	-	-	GI-2
15	WR	HVDC mundra-Mohindergarh Pole 1 & 2, APL Unit 8 & 9	APL/ATIL	26/7/15	22:26	26-07-15	23:01	0:35	HVDC Mundra-Mohindergarh both poles have tripped at 22:26 Hrs on 26th July 2015 due to tripping of 12/24 A type filter banks at Mohindergarh end. With the tripping of HVDC bipoles, Generation reduction SPS at Mundra has acted causing tripping of Unit 8 & 9 and runback of Unit 7. While in Northern region, SPS has led to loss of load for this contingency. However along with HVDC Mundra –Mohindergarh SPS, 765 kv Gwalior-Agra SPS for line loading crossing 1400 MW on each circuit has also operated.	1090	Around 1200 MW in NR	GI-2
16	WR	220 kv Kawas-Vav 2, 220 kv KAPS-Vav 1, 220 kv Bus 1 @ Vav	GETCO	27/7/15	21:25	17-07-15	21:53	0:28	220 kv Bus 1 fault at 220 kv Vav sub-station resulting in tripping of all elements from the Bus	NA	NA	GI-1
17	WR	765 kv Solapur-Raichur 1 & 2	PGCIL/RSTCL	28/7/15	11:51	28-07-15	12:52	1:01	765 kv Solapur-Raichur 2 tripped on protection ma-operation from Solapur end after Outage of 765 kv Solapur Bus 1 . This led to SPS-7 operation at Solapur causing tripping of circuit 1 and thus isolating NEW and SR Grid	-	-	<b>36</b> GI-2

S.No.	Region	Name of Elements	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time	Time				

\*\* Details are provisional

Major Grid Events for July, 2015_SR**												
Sl. No.	Region	Name of Element	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time	Time				
1	SR	1) HVDC Bhadrawati Pole-II	POWERGRID	06-Jul-15	2:15	06-Jul-15	3:05	50 min	VALVE COOLING HIGH ALARM ACTIVATED. RAW water pump was found to be running dry,due to level swith problem	-	-	GI-II
2	SR	1) HVDC Bhadrawati Pole-I	POWERGRID	14-Jul-15	11:01	14-Jul-15	11:16	15 min	Auxilliary supply failure	-	-	GI-II
3	SR	1) HVDC Bhadrawati Pole-II	POWERGRID	14-Jul-15	11:01	14-Jul-15	11:30	29 min	Auxilliary supply failure	-	-	GI-II
4	SR	1) 765 kV Solapur-Raichur-I & II	POWERGRID	28-Jul-15	11:52	28-Jul-15	12:52	1 hr	Line-2 got tripped at Solapur while isolating 765kV Bus-1 at Solapur and direct trip was received at Raichur. Line-1 tripped on operation of SPS-7. SR and NEW grid got separated due to tripping of 765kV Raichur-Solapur lines.	-	-	GI-II

\*\* Details are provisional

**Major Grid Events for July, 2015\_ER\*\***

Sl. No.	Region	Name of Element	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time					
1	ER/WR	1) 220 kV Budhipadar-IBTPS-Q/c 2) 220 kV Budhipadar-Vedanta-D/c 3) 220 kV Budhipadar-Katapalli-D/c 4) 220 kV Budhipadar-Tarkera-D/c 5) 220 kV Budhipadar-Korba-D/c 6) 220 kV Budhipadar-Adityapur(Birla)-D/c 7) 220 kV Budhipadar-Concast-D/c 8)220 kV Budhipadar-Bhushan-D/c 9) 160 MVA ICT-I & II at Budhipadar 10) IB Valley Generation 11) Vedanta Generation	Odisha	03.07.15	22:27	03.07.15	23:49	01:22:00	Due to Y-Phase CT burst of 220 kv Budhipadar-raigarh line at Budhipadar(line idle charged from Budhipadar) resulting in Bus fault at Budhipadar and all 220 kV elements tripped from Budhipadar end. This resulted in load loss and generation loss at mentioned stations.	670	412	GD-I
2	ER	1)220kV Budhipatar- Tarkera-I 2)220kV Budhipatar- Tarkera-II 3)220kV Rourkela- Tarkera-II 4)220/132kV, 100 MVA ATR-I, II,III & IV at Tarkera	GRIDCO/PG	06.07.15	09:54	06.07.15	10:05	00:11:00	Due to B-N fault in 220kV Budhipatar-Tarkera -II , all the elements connected to 220kV Tarkera S/S along with 4X 100 MVA ATR tripped except 220kV Tarkera- Barkot & Tarkera-Chandiposh(as both the line were radially being fed from Rengali). 220 KV Rourkela- Tarkera- I was under shutdown prior to the incident.		200	GD-I
3	ER	1)220kV Budhipatar- Tarkera-I 2)220kV Budhipatar- Tarkera-II 3)220kV Rourkela- Tarkera-II 4)220/132kV, 100 MVA ATR-I, II,III & IV at Tarkera 5) 220kV Tarkera- Barkot S/C	GRIDCO/PG	06.07.16	10:58	06.07.16	11:11	00:13:00	Due to B-N fault in 220kV Budhipatar-Tarkera -II , all the elements connected to 220kV Tarkera S/S along with 4X 100 MVA ATR tripped . 220 KV Rourkela- Tarkera- I was under shutdown prior to the incident.		200	GD-I
4	ER/Bhutan	220 kV Chukha - Birpara - 1 220 kV Chukha - Birpara - 2 Chukha Unit 1,2,3,4	NHPC	18.07.15	18:43	18.07.15	20:00	01:17:00	All lines emanating from Chukha tripped	270	0	GD-1
5	ER	1)220 KV Maithon-Dhanbad D/C 2) 220 KV Maithon-Kalyaneswari D/C 3) 400/220 KV,315MVA ICT I & II at Maithon	DVC	21.07.15	22:44	22.07.15	02:04	03:20	220 KV BUS-II tripped on Bus bar protection at Maithon s/s/. This resulted to tripping of 315MVA ,400/220 KV ICT I & II and all emanating 220 kv feeders ie . 220 KV Maithon-Dhanbad D/C and 220 KV Maithon-Kalyaneswari D/C . However there was no power interruption as Dhanbad was being fed from Chandrapura TPS A&B and Kalyaneswari was fed from Maithon TPS.	0	0	GE

6	ER	1)220kV Chandil-Ranchi 2)220kV Chandil-Santildih 3)220kV Chandil Ramchandrapur 4)400/220kV ICT-II at Jamshedpur 5)132 kV Chandil Rajkswan 6)132kV Chandil Adityapur 7)132kV Chandil Golmuri D/C, 8)132kV Chandil Hatia	Jharkhand	29/07/2015	16:53	29/07/2015	17:51	00:58:00	From PMU plots a fault in r-phase is observed which was cleared after 120ms. Traction was affected at Manique, Golmuri, Kendposi, Goelkera and Rajkswan	Nil	250	GD-I		
7	ER/Bhutan	1)220 kV Chukha-Birpara-I 2)220kV Chukha-Birpara-II 3)220kV Chukha-Malbase 4)CHPC Unit 1,2,3,& 4,	POWERGRID/ CHPC	2-Aug-15	23:44	3-Aug-15	2:18	02:34:00	220kV Chukha-Birpara-I tripped on K-Y-B-N fault in zone-2 at Birpara end, 220kV Chukha-Birpara-II tripped on R-N fault, Zone-II at Birpara, 220 kV Chukha-Malbase tripped on overloading. Consequently all units of CHPC tripped due to loss of excitation.	300	Nil	GD-I		

\*\* Details are provisional

**Major Grid Events for July, 2015\_NER\*\***

Sl. No.	Region	Name of Element	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time					
1	NER	132 kV Ningthoukong - Imphal(PG) 132 kV Loktak - Ningthoukong	MSPCL/ POWERGRID	2-Jul-15	14:47	2-Jul-15	15:16	00:29:00	Ningthoukong area of Manipur was connected with rest of NER Grid through 132 kV Loktak-Ningthoukong line & 132 kV Imphal(PG)-Ningthoukong line (132 kV Kakching-Kongba line kept open for system constraint). At 14:47 Hr on 02/07/15, 132 kV Loktak-Ningthoukong line & 132 kV Imphal(PG)-Ningthoukong lines tripped. Due to tripping of these elements, Ningthoukong area separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	25	GD-I
2	NER	132 kV Ranganadi - Lekhi	POWERGRID/ DoP AP	2-Jul-15	18:40	2-Jul-15	18:53	00:13:00	Lekhi area & Capital area of Arunachal Pradesh & Gohpur area of Assam were connected with rest of NER Grid through 132 kV Ranganadi-Lekhi line (132 kV Balipara-Gohpur line & Bus Coupler CB of Gohpur kept open for system requirement). At 18:40 Hr on 02/07/15, 132 kV Ranganadi-Lekhi line tripped. Due to tripping of this element, Lekhi & Capital areas and Gohpur area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	95	GD-I
3	NER	132 kV Dimapur (PG) - Kohima	POWERGRID / DoP Nagaland	4-Jul-15	8:15	4-Jul-15	13:39	05:24:00	Capital area of Nagaland was connected with rest of NER Grid through 132 kV Dimapur(PG)-Kohima line (132 kV Imphal-Karong line & 66 kV Tuensang-Likimro line kept open for system requirement). At 08:15 Hr on 04/07/15, 132 kV Dimapur(PG)-Kohima line tripped. Due to tripping of this element, Capital area separated from rest of NER Grid and subsequently collapsed due to no source in this area	0	28	GD-I
4	NER	220 kV Misa - Dimapur I, 132 kV Dimapur (PG) - Dimapur (NA) I & II, 132 kV Dimapur (PG) - Kohima, 132 kV Dimapur - Doyang I & II, 132 kV Doyang - Mokokchung(NA), 132 kV Dimapur - Bokajan, 132 kV Dimapur - Imphal, Doyang Unit 1	POWERGRID / DoP Nagaland/ NEEPCO/ AEGCL	7-Jul-15	13:38	7-Jul-15	14:08	00:30:00	Nagaland System was connected with rest of NER Grid through 220 kV Misa - Dimapur I & II lines, 132 kV Dimapur- Imphal & 132 kV Doyang - Mokokchung line. At 13:38 Hr on 07/07/2015, 220 kV Misa-Dimapur -I line tripped (220 kV Misa-Dimapur-II was under shutdown). All the outgoing feeders from Dimapur(PG) also tripped. Due to tripping of these elements, Nagaland System was separated from rest of NER Grid and subsequently collapsed.	17	87	GD-I
5	NER	132 kV Aizwal - Zuangtui	POWERGRID	8-Jul-15	16:35	8-Jul-15	16:48	00:13:00	Zuangtui area of Mizoram was connected with rest of NER Grid through 132 kV Aizawl- Zuangtui line. At 16:35 Hrs on 08/07/2015, 132 kV Aizawl- Zuangtui line tripped. Due to tripping of this element, Zuangtui area separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	21	GD-I
6	NER	132 kV Ranganadi - Lekhi	POWERGRID & DoP AP	8-Jul-15	11:50	8-Jul-15	12:04	00:14:00	Lekhi area & Capital area of Arunachal Pradesh and Gohpur Area of Assam were connected with rest of NER Grid through 132 kV Ranganadi- Lekhi line (132 kV Balipara-Gohpur line & Bus Coupler CB of Gohpur kept open for system requirement). At 12:04 Hr on 08/07/2015, 132 kV Ranganadi-Lekhi line tripped. Due to tripping of this element, Lekhi & Capital area and Gohpur area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	90	GD-I

Sl. No.	Region	Name of Element	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time					
7	NER	132 kV Lekhi - Nirjuli	DoP AP & POWERGRID	14-Jul-15	9:00	14-Jul-15	9:47	00:47:00	Nirjuli area of Arunachal Pradesh & Gohpur area of Assam were connected with rest of NER Grid through 132 kV Lekhi-Nirjuli line (132 kV Balipara-Gohpur line & Bus Coupler CB of Gohpur kept open for system requirement) . At 09:00 Hr on 14-07-15,132 kV Lekhi-Nirjuli line tripped. Due to tripping of this element, Nirjuli area & Gohpur area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	42	GD-I
8	NER	132 kV Ranganadi - Lekhi	POWERGRID & DoP AP	15-Jul-15	5:23	15-Jul-15	5:36	00:13:00	Lekhi area & Capital area of Arunachal Pradesh and Gohpur Area of Assam were connected with rest of NER Grid through 132 kV Ranganadi-Lekhi line (132 kV Balipara-Gohpur line & Bus Coupler CB of Gohpur kept open for system requirement). At 05:23 Hr on 15-07-15,132 kV Ranganadi-Lekhi line tripped. Due to tripping of this element, Lekhi, Capital area and Gohpur area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	32	GD-I
9	NER	132 kV Loktak - Imphal (PG), 132 kV Loktak - Jiribam(PG), 132 kV Loktak - Ningthoukhong, Loktak Unit 1,2 & 3	NHPC/ POWERGRID/ MSPCL	22-Jul-15	2:02	22-Jul-15	2:24	00:22:00	Loktak HEP, NHPC was connected with rest of NER Grid through 132 kV Loktak-Jiribam(PG), 132 kV Loktak-Imphal (PG) & 132 kV Loktak-Ningthoukhong lines. At 02:02 Hr on 22.07.15, all outgoing feeder from Loktak S/S tripped. 132 kV Loktak-Rengpang was open since 12:05 Hrs of 21.07.15 . Loktak Unit 1,2 & 3 also tripped.	100	0	GD-I
10	NER	132 kV Balipara - Khupi	POWERGRID/ NEEPCO	23-Jul-15	8:32	23-Jul-15	10:58	02:26:00	Khupi area of Arunachal Pradesh was connected with rest of NER Grid through 132 kV Balipara- Khupi line. At 08:32 Hr on 23/07/2015, 132 kV Balipara- Khupi line tripped. Due to tripping of this element, Khupi area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	17	GD-I
11	NER	132 kV AGTPP - Agartala I & II, 132 kV Agartala- Rokhia I & II, 132 kV Palatana - Surajmani Nagar, 132 kV Jirania – Barmura, 132 kV Kamalpur – Dhalabil, Rokhia Unit 1, 2 & 3, AGTPP Unit 1, 3 & 4	TSECL/ POWERGRID/ NEEPCO	24-Jul-15	12:33	24-Jul-15	12:56	00:23:00	Agartala area of Tripura was connected with rest of NER Grid through 132 kV Agartala- AGTPP I & II, 132 kV Rokhia- Agartala I & II, 132 kV Surjamaninagar-Palatana I, 132 kV Jirania - Barmura & 132 kV Dhalabil - Kamalpur lines. At 12:33 Hr on 24/07/2015 ,132 kV Agartala- AGTPP I & II & 132 kV Rokhia- Agartala I & II lines tripped along with 132 kV Surjamaninagar-Palatana I, 132 kV Jirania - Barmura & 132 kV Dhalabil - Kamalpur. Due to tripping of these element, Agartala area was separated from rest of NER Grid and subsequently collapsed due to no source in this area. All the running units of Rokhia and AGTPP Unit 3 also tripped.	121	40	GD-I
12	NER	132 kV Ranganadi - Lekhi	POWERGRID & DoP AP	24-Jul-15	19:35	24-Jul-15	21:30	01:55:00	Lekhi area & Capital area of Arunachal Pradesh and Gohpur Area of Assam were connected with rest of NER Grid through 132 kV Ranganadi-Lekhi line (132 kV Balipara-Gohpur line & Bus Coupler CB of Gohpur kept open for system requirement). At 19:35 Hr on 24/07/2015,132 kV Ranganadi-Lekhi line tripped. Due to tripping of this element, Lekhi & Capital area and Gohpur area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	60	GD-I



Sl. No.	Region	Name of Element	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time	Time				
13	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II	POWERGRID/ MePTCL	26-Jul-15	13:32	26-Jul-15	13:38	00:06:00	Khliehriat area of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines. (132 kV Panchgram-Lumnsong, 132 kV Umiam -Umiam Stg-I & 132 kV NEHU- Mawlai lines was kept open for system requirement). At 13:32 Hrs on 26/07/2015,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines tripped. Due to tripping of these elements, Khliehriat area separated from rest of NER Grid and subsequent collapsed due to load generation mismatch.	122	68	GD-I
14	NER	132 kV Dimapur (PG) - Kohima	POWERGRID & DoP Nagaland	26-Jul-15	23:25	26-Jul-15	23:50	00:25:00	Capital area of Nagaland was connected with rest of NER Grid through 132 kV Dimapur(PG)-Kohima line (132 kV Imphal-Karong line & 66 kV Tuensang-Likimro line kept open for system requirement). At 23:25 Hr on 26/07/2015,132 kV Dimapur(PG)-Kohima line tripped. Due to tripping of this element, Capital area separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	27	GD-I
15	NER	132 kV Dimapur (PG) - Kohima	POWERGRID & DoP Nagaland	27-Jul-15	0:42	27-Jul-15	0:45	00:03:00	Capital area of Nagaland was connected with rest of NER Grid through 132 kV Dimapur(PG)-Kohima line (132 kV Imphal-Karong line & 66 kV Tuensang-Likimro line kept open for system requirement). At 00:42 Hr on 27/07/2015,132 kV Dimapur(PG)-Kohima line tripped. Due to tripping of this element, Capital area separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	22	GD-I
16	NER	132 kV Dimapur (PG) - Kohima	POWERGRID & DoP Nagaland	27-Jul-15	10:15	27-Jul-15	10:37	00:22:00	Capital area of Nagaland was connected with rest of NER Grid through 132 kV Dimapur(PG)-Kohima line (132 kV Imphal-Karong line & 66 kV Tuensang-Likimro line kept open for system requirement). At 10:15 Hr on 27/07/2015 ,132 kV Dimapur(PG)-Kohima line tripped. Due to tripping of this element, Capital area separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	20	GD-I
17	NER	132 kV Ranganadi - Lekhi	POWERGRID/ DoP AP	27-Jul-15	18:30	27-Jul-15	18:40	00:10:00	Lekhi area & Capital area of Arunachal Pradesh and Gohpur Area of Assam were connected with rest of NER Grid through 132 kV Ranganadi-Lekhi line (132 kV Balipara-Gohpur line & Bus Coupler CB of Gohpur kept open for system requirement). At 18:30 Hr on 27/07/2015,132 kV Ranganadi-Lekhi line tripped. Due to tripping of this element, Lekhi area & Capital area & Gohpur area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	95	GD-I
18	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II 132 kV Khandong- Khliehriat (PG) I	POWERGRID/ MePTCL	28-Jul-15	11:39	28-Jul-15	11:43	00:04:00	Khliehriat area of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines. (132 kV Panchgram-Lumnsong, 132 kV Umiam -Umiam Stg-I & 132 kV NEHU- Mawlai lines was kept open for system requirement). At 11:39 Hrs on 28/07/2015 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines tripped. Due to tripping of these elements, Khliehriat area separated from rest of NER Grid and subsequent collapsed due to load generation mismatch.	80	47	GD-I

Sl. No.	Region	Name of Element	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time					
19	NER	132 kV Dimapur (PG) - Kohima	POWERGRID & DoP Nagaland	29-Jul-15	9:45	29-Jul-15	9:52	00:07:00	Capital area of Nagaland was connected with rest of NER Grid through 132 kV Dimapur(PG)-Kohima line (132 kV Kohima-Karong line & 66 kV Tuensang-Likimro line kept open for system requirement). At 09:45 Hr on 29/07/2015 ,132 kV Dimapur(PG)-Kohima line tripped. Due to tripping of this element, Capital area separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	22	GD-I
20	NER	132 kV Jiribam - Aizawl 132 kV Aizawl - Kumarghat 132 kV Aizawl - Kolasib	POWERGRID	28-Jul-15	23:29	28-Jul-15	23:50	00:21:00	Aizawl area of Mizoram was connected with rest of NER Grid through 132 kV Kolasib-Aizawl, 132 kV Aizawl-Jiribam & 132 kV Aizawl-Kumarghat lines. At 23:29 Hr on 28/07/2015,132 kV Aizawl-Jiribam & 132 kV Aizawl-Kumarghat lines tripped & at 23:38 Hr 132 kV Kolasib-Aizawl line tripped. Due to tripping of these elements, Aizawl area separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	45	GD-I
21	NER	132 kV Loktak - Imphal (PG) 132 kV Loktak - Jiribam(PG) 132 kV Loktak - Ningthoukhong Loktak Unit 1,2 & 3	NHPC/ POWERGRID/ MSPCL	30-Jul-15	3:40	30-Jul-15	4:11	00:31:00	Loktak HEP, NHPC was connected with rest of NER Grid through 132 kV Loktak-Jiribam(PG), 132 kV Loktak-Imphal (PG) & 132 kV Loktak-Ningthoukhong lines. At 03:40 Hr on 30.07.15, all outgoing feeder from Loktak tripped. 132 kV Loktak-Rengpang was open since 16:40 Hrs of 27.07.15 . Loktak Unit 1,2 & 3 tripped.	106	0	GD-I
22	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II	POWERGRID/ MePTCL	30-Jul-15	18:12	30-Jul-15	18:17	00:05:00	Khliehriat area of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines. (132 kV Panchgram-Lumnsnong line, 132 kV NEHU-Khliehriat & 132 kV NEIGRIMS- Khliehriat line was kept open for system requirement). At 1755 Hrs on 30/07/15, 132 kV Khliehriat (PG)-Khliehriat (MePTCL) II line tripped and at 18:12 Hrs 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I was hand tripped due to fire on control pannel. Due to tripping of these elements, Khliehriat area separated from rest of NER Grid and subsequent collapsed due to load generation mismatch.	82	15	GD-I
23	NER	132 kV Ranganadi - Lekhi	POWERGRID & DoP AP	30-Jul-15	19:30	30-Jul-15	20:12	00:42:00	Lekhi area & Capital area of Arunachal Pradesh and Gohpur Area of Assam were connected with rest of NER Grid through 132 kV Ranganadi-Lekhi line (132 kV Balipara-Gohpur line was under E/S/D & Bus Coupler CB of Gohpur kept open for system requirement). At 19:30 Hr on 30/07/15,132 kV Ranganadi-Lekhi line tripped. Due to tripping of this element, Lekhi area & Capital area & Gohpur area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	90	GD-I

**18. NEW ELEMENTS COMMISSIONED in JULY-2015**

**COMMISSIONING OF NEW GENERATING UNITS**

REGION	SL. NO.	CONSTITUENT	UNIT NAME	UNIT NO	CAPACITY (MW)	DATE	TIME
NIL							

**COMMISSIONING OF NEW ICT's**

REGION	SL. NO.	CONSTITUENT	VOLTAGE LEVEL	SUB-STATION	ICT NO	CAPACITY	DATE	TIME
NR	1	LPGL	765/220	Lalitpur	II	315	31-07-15	----
WR	2	POWERGRID	765/400	Vindhayachal PS	I	1500	30-06-15	----
ER	3	POWERGRID	400/220	New Purnea	I	500	10-07-15	----

**COMMISSIONING OF NEW TRANSMISSION LINES**

REGION	SL. NO.	CONSTITUENT	LINE NAME	CKT NO	KV	DATE	TIME
SR	1	APTRANSCO	Krishnapattnam-Chitoor	II	400	22-07-15	----
	2	APTRANSCO	Krishnapattnam-Nellore	I	400	22-07-15	----
ER	3	DVC	Maithon-Dumka I&II	D/C	400	20-07-15	----
NER	4	POWERGRID	Biswanath Chariali-Balipara-IV	IV	400	11-07-15	----
	5	POWERGRID	Silchar-PK Bari(Charged at 132 kV)	S/C	400	29-07-15	----

क्र.स. Sl. No.	क्षेत्र REGION	उपकेंद्र SUBSTATION	VOLTAGE < V(lower)* (V=122,380,728 kV)	V(lower) < VOLTAGE < V(upper)*	VOLTAGE > V(upper)* (V=145,420,800 kV)	उच्चतम (कि.वो.) Maximum(kV)	निम्नतम(कि.वो.) Minimum(kV)	औसत (कि.वो.) Average(kV)
1	पूर्वी क्षेत्र ER	फरक्का FARAKKA	1%	88%	11%	424	411	417
2		कहलगाँव KAHALGAON	0%	100%	0%	400	400	400
3		तालचर TALCHER	0%	100%	0%	408	396	403
4		पुर्णिया PURNEA	0%	99%	1%	425	401	411
5		मुजफ्फरपुर MUZAFFARPUR	0%	100%	0%	418	388	402
6		जमशेदपुर JAMSHEDPUR	0%	25%	75%	428	413	421
7		रेंगाली RENGALI	0%	100%	0%	404	394	400
8		जेयपुर JEYPORE	0%	100%	0%	420	383	405
1	उत्तरी क्षेत्र NR	नल्लागढ़ NALLAGARH	0%	98%	2%	427	367	403
2		भिवाड़ी BHIWADI	0%	80%	20%	436	397	414
3		बल्लभगढ़ BALLABGARH	0%	92%	8%	431	392	411
4		इलाहाबाद ALLAHABAD	0%	94%	6%	426	398	411
5		हिसार HISSAR	0%	99%	1%	422	386	404
6		बवाना BAWANA	0%	96%	4%	428	393	408
7		कानपुर KANPUR	0%	100%	0%	423	394	407
8		बस्सी BASSI	0%	78%	22%	431	395	415
9		लखनऊ पावरग्रिड LUCKNOW PG 76	0%	100%	0%	789	727	754
10		मोगा MOGA	0%	100%	0%	420	386	402
11		रतनगढ़ RATANGARH	0%	98%	2%	425	387	411
1	पश्चिमी क्षेत्र WR	आसोज ASOJ	0%	98%	2%	426	395	410
2		इटारसी ITARSI	0%	100%	0%	420	394	409
3		जेलपुर JETPUR	0%	100%	0%	418	384	404
4		कासोर KASOR	0%	96%	4%	425	401	414
5		कोल्हापुर KOLHAPUR	0%	68%	32%	434	392	416
6		बीना BINA	0%	100%	0%	424	364	410
7		ग्वालियर GWALIOR	0%	100%	0%	412	383	398
8		रायपुर RAIPUR	0%	51%	49%	444	409	423
9		जबलपुर JABALPUR	0%	99%	1%	423	396	411
10		धुले DHULE	0%	63%	37%	438	384	417
1	दक्षिणी क्षेत्र SR	श्रीपेरंपुडूर SRIPERPUDUR	0%	100%	0%	418	388	403
2		नेवेली NEVELI	0%	100%	0%	418	395	408
3		सेलम SALEM	0%	100%	0%	418	384	402
4		बंगलूरु BANGALORE	0%	100%	0%	419	380	398
5		रामामुंडम RAMAGUNDAM	0%	100%	0%	424	408	415
6		विजयवाड़ा VIJAYAWADA	0%	100%	0%	428	407	421
7		त्रिवेन्द्रम TRIVANDRUM	0%	100%	0%	423	378	408
8		हैदराबाद HYDERABAD	0%	100%	0%	425	403	414
1	पूर्वोत्तर क्षेत्र NER	मिसा MISA	0%	100%	0%	422	382	409
2		बलिपारा BALIPARA	0%	100%	0%	418	388	405
3		बोंगईगाँव BONGAIGAON	0%	100%	0%	416	392	403
4		हाफ्लोंग HAFLONG 132 kV	0%	100%	0%	137	129	133
5		आइज़ोल AIZWAL 132 kV	1%	99%	0%	137	109	130
6		कुमारघाट KUMARGHAT 132 kV	0%	100%	0%	135	124	131
7		इम्फाल IMPHAL 132 kV	0%	100%	0%	139	124	133
8		खलेरियट Khlieriat_PG 132 kV	0%	100%	0%	137	129	133

\*Percentage is calculated w.r.t. Time of one month.

## 20. List of Tripping of Elements monitored by NLDC for the month of July 2015

S. No.	Name of Transmission Element Tripped	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration
<b>HVDC - IR</b>								
1	Bhadrawati Pole-I	HVDC	WR/SR	MO	05-07-15 7:29	Outage of Bhadrawati - Ramagundam	06-07-15 1:05	17:36:00
2	Bhadrawati Pole-I	HVDC	WR/SR	TS	14-07-15 11:01	AUXILARY SUPPLY FAILURE PROBLEM	14-07-15 11:30	0:29:00
3	Bhadrawati Pole-II	HVDC	WR/SR	MO	05-07-15 7:29	Outage of Bhadrawati - Ramagundam	06-07-15 1:27	17:58:00
4	Bhadrawati Pole-II	HVDC	WR/SR	SE	10-07-15 15:33	Oil leakage in Bushing on WR side	10-07-15 20:28	4:55:00
5	Bhadrawati Pole-II	HVDC	WR/SR	TS	14-07-15 11:01	AUXILARY SUPPLY FAILURE PROBLEM	14-07-15 11:16	0:15:00
6	Mundra-Mahendragarh Pole-II	HVDC	WR/NR	SO	10-07-15 13:06	Checking & maintenance of line fault locator.	10-07-15 16:46	3:40:00
7	Mundra-Mahendragarh Pole-II	HVDC	WR/NR	TS	26-07-15 22:26	Short circuit protection of filter bank operated	26-07-15 23:00	0:34:00
8	Mundra-Mahendragarh-Pole-I	HVDC	WR/NR	TS	08-07-15 8:46	Cooling control valve problem at Mahendergarh end.	08-07-15 11:54	3:08:00
9	Mundra-Mahendragarh-Pole-I	HVDC	WR/NR	TS	08-07-15 14:13	Leakage in cooling control valve at Mahendergarh	08-07-15 18:02	3:49:00
10	Mundra-Mahendragarh-Pole-I	HVDC	WR/NR	TS	08-07-15 23:40	Severe water leakage problem in valve cooling system at Mahendergarh.	09-07-15 2:43	3:03:00
11	Mundra-Mahendragarh-Pole-I	HVDC	WR/NR	SO	23-07-15 15:59	For replacement of broken insulator string	23-07-15 20:18	4:19:00
12	Mundra-Mahendragarh-Pole-I	HVDC	WR/NR	TS	26-07-15 22:26	Short circuit protection of filter bank operated	26-07-15 23:00	0:34:00
13	Pusauli	HVDC	ER/NR	SO	24-07-15 16:03	System failure alarm	24-07-15 17:42	1:39:00
<b>HVDC - Internal</b>								
14	Balia-Bhiwadi Pole-I	HVDC	NR	MP	05-07-15 6:54	External relay maloperated	05-07-15 7:26	0:32:00
15	Balia-Bhiwadi Pole-I	HVDC	NR	SC	06-07-15 8:11	For stringing (powerline crossing) of 765kv Kanpur-Jhatikara line	06-07-15 18:53	10:42:00
16	Balia-Bhiwadi Pole-I	HVDC	NR	SC	07-07-15 9:19	For stringing (powerline crossing) of 765kv Kanpur-Jhatikara line	07-07-15 23:04	13:45:00
17	Balia-Bhiwadi Pole-I	HVDC	NR	TS	16-07-15 4:25	Auxillary supply Failure	16-07-15 7:08	2:43:00
18	Balia-Bhiwadi Pole-II	HVDC	NR	MP	05-07-15 6:54	External relay maloperated	05-07-15 7:26	0:32:00
19	Balia-Bhiwadi Pole-II	HVDC	NR	SC	06-07-15 8:11	For stringing (powerline crossing) of 765kv Kanpur-Jhatikara line	06-07-15 18:53	10:42:00

S. No.	Name of Transmission Element Tripped	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration
20	Balia-Bhiwadi Pole-II	HVDC	NR	SC	07-07-15 9:19	For stringing (powerline crossing) of 765kv Kanpur-Jhatikara line	07-07-15 20:29	11:10:00
21	Balia-Bhiwadi Pole-II	HVDC	NR	TS	16-07-15 4:25	Auxillary supply Failure	16-07-15 7:31	3:06:00
22	Rihand-Dadri Pole-II	HVDC	NR	SO	04-07-15 7:36	For replacement of faulty valve capacitors in Valve hall at Rihand	04-07-15 13:36	6:00:00
23	Rihand-Dadri Pole-II	HVDC	NR	SO	27-07-15 8:29	To attend level-1 alarm	27-07-15 16:38	8:09:00
<b>765 kV - IR</b>								
24	765 kV Gaya-Balia	Line	ER/NR	SO	02-07-15 9:13	For replacement of insulators damaged by miscreants.	02-07-15 20:18	11:05:00
25	765 kV Gaya-Balia	Line	ER/NR	SO	03-07-15 8:01	Replacement of damaged insulator strings	03-07-15 19:19	11:18:00
26	765 kV Gaya-Balia	Line	ER/NR	SO	04-07-15 8:38	Damaged Insulator replacement	04-07-15 19:24	10:46:00
27	765 kV Jharsuguda-Dharmjaygarh-II	Line	ER/WR	TS	06-07-15 17:27	DC EARTH FAULT	06-07-15 20:09	2:42:00
28	765 kV Jharsuguda-Dharmjaygarh-II	Line	ER/WR	SO	28-07-15 13:11	Maintenance Work	29-07-15 19:21	30:10:00
29	765 kV Sasaram-Fatehpur	Line	ER/NR	MP	07-07-15 17:15	PRV of LR operated at Fatehpur end	07-07-15 18:04	0:49:00
30	765 kV Sasaram-Fatehpur	Line	ER/NR	MP	15-07-15 16:17	Tripped due to malfunction of PRV of line reactor	15-07-15 16:54	0:37:00
31	765 kV Sasaram-Fatehpur	Line	ER/NR	MP	15-07-15 7:04	Tripped due to malfunction of PRV of line reactor	15-07-15 8:39	1:35:00
32	765 kV Solapur-Raichur-I	Line	WR/SR	TS	28-07-15 11:52	Bus Fault at Sholapur	28-07-15 12:52	1:00:00
33	765 kV Solapur-Raichur-II	Line	WR/SR	SO	11-07-15 9:07	For modification of common Bus pipe CVT and LA	11-07-15 21:03	11:56:00
34	765 kV Solapur-Raichur-II	Line	WR/SR	TS	28-07-15 11:52	Bus Fault at Sholapur	28-07-15 13:09	1:17:00
<b>765 kV Internal</b>								
35	765 kV Durg-Champa-I	Line	WR	SC	01-07-15 0:00	Crossing of 800kV HVDC Champa-Kurukshetra	01-07-15 10:13	10:13:00
36	765 kV Durg-Champa-I	Line	WR	TL	14-07-15 13:23	R-Y-B FAULT	14-07-15 17:23	4:00:00
37	765 kV Kotra-Champa-I	Line	WR	TV	01-07-15 0:00	TRIPPED ON O/V	01-07-15 13:15	13:15:00
38	765 kV Kotra-Champa-I	Line	WR	MO	16-07-15 11:18	To facilitate S/D of Durg-Champa	16-07-15 23:12	11:54:00
39	765 kV Moga-Meerut	Line	NR	MO	10-07-15 6:40	Opened manually due to High Voltage	13-07-15 13:59	79:19:00

S. No.	Name of Transmission Element Tripped	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration
40	765 kV Moga-Meerut	Line	NR	SO	27-07-15 9:29	Rectification of construction defect in the line like installation of CC ring, tightening of rigid spaces,	27-07-15 22:23	12:54:00
41	765 kV Moga-Meerut	Line	NR	SO	28-07-15 9:06	Rectification of construction defect in the line like installation of CC ring, tightening of rigid spaces,	28-07-15 21:06	12:00:00
42	765 kV Moga-Meerut	Line	NR	SO	29-07-15 10:09	Rectification of construction defect in the line like installation of CC ring, tightening of rigid spaces,	30-07-15 0:56	14:47:00
43	765 kV Moga-Meerut	Line	NR	SO	30-07-15 9:03	Rectification of construction defect in the line like installation of CC ring, tightening of rigid spaces,	30-07-15 20:15	11:12:00
44	765kV Agra-Jhatikara	Line	NR	SE	13-07-15 12:52	To attend hotspot	13-07-15 16:40	3:48:00
45	765kV Agra-Meerut	Line	NR	MO	12-07-15 12:07	Opened manually due to High Voltage	12-07-15 12:45	0:38:00
46	765kV Agra-Meerut	Line	NR	SO	21-07-15 16:30	To attend wave trap jumper tightning work	21-07-15 21:39	5:09:00
47	765kV Angul-Jharsuguda-II	Line	ER	SC	12-07-15 8:35	OPGW work	12-07-15 19:10	10:35:00
48	765kV Angul-Jharsuguda-II	Line	ER	SC	13-07-15 8:50	OPGW work	13-07-15 18:54	10:04:00
49	765kV Angul-Jharsuguda-II	Line	ER	SC	14-07-15 8:10	OPGW work	14-07-15 18:21	10:11:00
50	765kV Angul-Jharsuguda-II	Line	ER	SC	15-07-15 8:37	OPGW work	15-07-15 19:28	10:51:00
51	765kV Angul-Jharsuguda-II	Line	ER	SC	16-07-15 8:00	OPGW work	16-07-15 19:49	11:49:00
52	765kV Angul-Jharsuguda-II	Line	ER	SC	17-07-15 8:25	OPGW work	17-07-15 19:52	11:27:00
53	765kV Angul-Jharsuguda-II	Line	ER	SC	18-07-15 8:30	OPGW work	18-07-15 18:47	10:17:00
54	765kV Angul-Jharsuguda-II	Line	ER	SC	19-07-15 8:03	OPGW work	19-07-15 18:39	10:36:00
55	765kV Angul-Jharsuguda-II	Line	ER	SO	20-07-15 8:10	OPGW work	20-07-15 20:24	12:14:00
56	765kV Angul-Jharsuguda-II	Line	ER	SC	21-07-15 8:39	OPGW work	21-07-15 18:38	9:59:00
57	765kV Angul-Jharsuguda-II	Line	ER	SC	22-07-15 8:34	OPGW work	22-07-15 20:28	11:54:00
58	765kV Angul-Jharsuguda-II	Line	ER	SC	23-07-15 8:04	OPGW work	23-07-15 19:36	11:32:00
59	765kV Angul-Jharsuguda-II	Line	ER	SC	24-07-15 8:21	OPGW work	24-07-15 18:52	10:31:00
60	765kV Angul-Jharsuguda-II	Line	ER	SC	25-07-15 8:03	OPGW work	25-07-15 18:35	10:32:00
61	765kV Angul-Jharsuguda-II	Line	ER	SC	26-07-15 8:01	OPGW work	26-07-15 18:38	10:37:00

S. No.	Name of Transmission Element Tripped	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration
62	765kV Angul-Jharsuguda-II	Line	ER	SC	29-07-15 8:05	OPGW work	29-07-15 18:55	10:50:00
63	765kV Angul-Jharsuguda-II	Line	ER	SC	30-07-15 8:07	OPGW work	30-07-15 18:27	10:20:00
64	765kV Angul-Jharsuguda-II	Line	ER	SC	31-07-15 8:11	OPGW work	31-07-15 19:07	10:56:00
65	765kV Anpara C-Anpara D	Line	NR	SO	14-07-15 11:51	Cable change of LA	14-07-15 17:31	5:40:00
66	765kV Antah-Phagi-I	Line	NR	TL	11-07-15 8:50	Phase to earth fault	11-07-15 16:21	7:31:00
67	765kV Antah-Phagi-I	Line	NR	MO	10-07-15 16:40	Manually opened after tripping of 1500MVA ICT-2 at Phagi	10-07-15 18:54	7:31:00
68	765kV Antah-Phagi-I	Line	NR	SO	20-07-15 15:38	To replenish the SF6 gas in Pole column of Y- Phase of 800kV SF6 CB	20-07-15 17:46	2:08:00
69	765kV Antah-Phagi-II	Line	NR	TS	10-07-15 17:40	Tripped due to phase to earth fault on ICT	11-07-15 9:19	15:39:00
70	765kV Bilaspur-Dharamjaigarh	Line	WR	SC	06-07-15 8:45	Stringing work	07-07-15 16:20	31:35:00
71	765kV Bina-Gwalior-III	Line	WR	TL	01-07-15 16:22	Y-Phase fault	01-07-15 16:54	0:32:00
72	765kV Bina-Indore	Line	WR	TL	18-07-15 6:59	R- B FAULT	18-07-15 17:02	10:03:00
73	765kV Dhule-Vadodara	Line	WR	TV	20-07-15 20:19	TRIPPED DUE TO HIGH VOLTAGE	20-07-15 21:34	1:15:00
74	765kV Dhule-Vadodara	Line	WR	MO	28-07-15 0:04	Opened manually due to High Voltage	28-07-15 9:12	9:08:00
75	765kV Durg-Wardha-II	Line	WR	SO	27-07-15 9:26	JUMPER TIGHTENING	27-07-15 21:05	11:39:00
76	765kV Indore-Bhopal	Line	WR	MP	23-07-15 15:59	D/T RECEIVED	23-07-15 17:27	1:28:00
77	765kV Indore-Vadodara	Line	WR	TL	08-07-15 2:17	R-B PH FAULT	08-07-15 16:16	13:59:00
78	765kV Indore-Vadodara	Line	WR	TL	14-07-15 14:14	Y-B PH FAULT	15-07-15 6:29	16:15:00
79	765kV Indore-Vadodara	Line	WR	SE	16-07-15 14:12	To attend hot spot	16-07-15 19:30	5:18:00
80	765kV Indore-Vadodara	Line	WR	TL	18-07-15 12:28	Three phase FAULT	19-07-15 13:27	24:59:00
81	765kV Indore-Vadodara	Line	WR	TL	20-07-15 20:19	R-PH FAULT	21-07-15 12:59	16:40:00
82	765kV Indore-Vadodara	Line	WR	SO	29-07-15 12:33	INSULATOR REPLACEMENT	29-07-15 20:46	8:13:00
83	765kV Indore-Vadodara	Line	WR	SO	30-07-15 8:39	Replacement of disc insulator strings with composite polymer insulators	30-07-15 20:52	12:13:00



S. No.	Name of Transmission Element Tripped	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration
84	765kV Jhatikara-Bhiwani(PG)	Line	NR	SC	08-07-15 8:19	For stringing (powerline crossing) of 765kv Kanpur-Jhatikara line	08-07-15 20:25	12:06:00
85	765kV Jhatikara-Bhiwani(PG)	Line	NR	SC	09-07-15 8:34	For stringing (powerline crossing) of 765kv Kanpur-Jhatikara line	09-07-15 20:08	11:34:00
86	765kV Kurnool-Nellore(PS)-I	Line	SR	TV	01-07-15 0:00	Tripped on Over Voltage	06-07-15 16:44	136:44:00
87	765kV Kurnool-Nellore(PS)-I	Line	SR	TV	19-07-15 22:36	Tripped on Over Voltage	01-08-15 0:00	289:24:00
88	765kV Kurnool-Nellore(PS)-II	Line	SR	MO	06-07-15 16:40	Voltage Regulation	22-07-15 20:00	387:20:00
89	765kV Kurnool-Nellore(PS)-II	Line	SR	SC	29-07-15 15:50	COMMISSIONING WORKS	29-07-15 20:33	4:43:00
90	765kV Kurnool-Thiruvalem-II	Line	SR	TV	01-07-15 0:00	Tripped on Over Voltage	29-07-15 15:40	687:40:00
91	765kV Lucknow(PG)-Bareilly(PG)-I	Line	NR	SO	01-07-15 9:06	Major maintenance works like line jumper tightening	01-07-15 20:26	11:20:00
92	765kV Lucknow(PG)-Bareilly(PG)-I	Line	NR	SO	02-07-15 8:53	Major maintenance works like line jumper tightening	02-07-15 21:57	13:04:00
93	765kV Lucknow(PG)-Bareilly(PG)-I	Line	NR	SC	03-07-15 15:34	To facilitate stability and primary injection for Bus Reactor Bay to be charged.	03-07-15 21:59	6:25:00
94	765kV Meerut-Bhiwani(PG)	Line	NR	MO	11-07-15 2:27	Opened manually due to High Voltage	13-07-15 12:15	57:48:00
95	765kV Moga-Bhiwani(PG)	Line	NR	SC	16-07-15 7:43	For stringing(power line crossing) of 765kvPhagi(Jaipur)-Bhiwani D/C	17-07-15 19:32	35:49:00
96	765kV Pune-Sholapur	Line	WR	SO	14-07-15 7:48	Maintenance Work	17-07-15 11:26	75:38:00
97	765kV Raichur-Kurnool	Line	SR	SO	17-07-15 10:13	STRINGING WORKS	17-07-15 20:42	10:29:00
98	765kV Raigarh-PS(Kotra)-Raipur-PS(Durg)-I	Line	WR	MO	01-07-15 0:00	Opened manually due to High Voltage	01-08-15 0:00	744:00:00
99	765kV Sasan - Vindhyachal PS	Line	WR	SE	28-07-15 14:26	HOT SPOT	28-07-15 21:30	7:04:00
100	765kV Sasan-Satna-I	Line	WR	SO	19-07-15 11:02	Commissioning of CSD relay	19-07-15 19:42	8:40:00
101	765kV Sasan-Satna-II	Line	WR	SO	18-07-15 13:50	CSD RELAY COMMISSIONING	18-07-15 20:33	6:43:00
102	765kV Satna-Gwalior-I	Line	WR	SO	14-07-15 9:48	Main CB CSD, Panel wiring dressing	14-07-15 21:19	11:31:00
103	765kV Satna-Gwalior-II	Line	WR	SO	01-07-15 14:52	PLCC testing work	01-07-15 23:17	8:25:00
104	765kV Satna-Gwalior-II	Line	WR	SO	02-07-15 9:22	PLCC COMMISSIONING WORKS	03-07-15 12:35	27:13:00
105	765kV Seoni-Wardha-I	Line	WR	MO	03-07-15 9:45	Opened manually due to High Voltage	03-07-15 20:00	10:15:00

S. No.	Name of Transmission Element Tripped	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration
106	765kV Seoni-Wardha-I	Line	WR	SE	21-07-15 11:24	RECTIFICATION OF JUMPER	21-07-15 16:03	4:39:00
107	765kV Seoni-Wardha-I	Line	WR	MO	25-07-15 2:11	Opened manually due to High Voltage	25-07-15 8:31	6:20:00
108	765kV Seoni-Wardha-II	Line	WR	MO	10-07-15 17:59	Voltage Regulation	11-07-15 8:07	14:08:00
109	765kV Sipat-Bilaspur-I	Line	WR	SO	17-07-15 17:09	Maintenance Work	17-07-15 19:29	2:20:00
110	765kV Sipat-Bilaspur-II	Line	WR	SO	15-07-15 9:04	Maintenance Work	16-07-15 23:58	38:54:00
111	765kV Sipat-Bilaspur-II	Line	WR	MP	29-07-15 15:17	BUS BAR PROTECTION MALOPERATED	29-07-15 16:17	1:00:00
112	765kV Wardha-Aurangabad-I	Line	WR	MO	03-07-15 22:08	To control line loadings of MSEB	08-07-15 10:41	108:33:00
113	765kV Wardha-Aurangabad-IV	Line	WR	SC	01-07-15 0:00	Crossing works of upcoming 1200kV Wardha-Aurangabad line	03-07-15 11:12	59:12:00
114	765kV Wardha-Aurangabad-IV	Line	WR	MO	13-07-15 7:19	TO CONTROL LINE LOADING	23-07-15 9:28	242:09:00
115	765kV Wardha-Aurangabad-IV	Line	WR	MO	23-07-15 23:56	Opened manually due to High Voltage	01-08-15 0:00	192:04:00
<b>765 kV Reactors &amp; ICTs</b>								
116	B/R-I at Akola-II	Bus Reactor	WR	MO	01-07-15 7:59	Voltage Regulation	01-07-15 17:38	9:39:00
117	B/R-I at Akola-II	Bus Reactor	WR	MO	06-07-15 6:47	Voltage Regulation	06-07-15 17:47	11:00:00
118	B/R-I at Aurangabad	Bus Reactor	WR	MO	01-07-15 9:28	Taken out of service due to low voltage	02-07-15 18:33	33:05:00
119	B/R-I at Aurangabad	Bus Reactor	WR	MO	06-07-15 6:39	Voltage Regulation	06-07-15 18:18	11:39:00
120	B/R-I at Aurangabad	Bus Reactor	WR	MO	13-07-15 7:26	To control low voltage	13-07-15 22:39	15:13:00
121	B/R-I at Bilaspur	Bus Reactor	WR	MO	01-07-15 0:00	Voltage Regulation	25-07-15 18:50	594:50:00
122	B/R-I at Dhule	Bus Reactor	WR	SO	02-07-15 7:52	REPLACEMENT OF DEFECTIVE RELAY	02-07-15 19:05	11:13:00
123	B/R-I at Dhule	Bus Reactor	WR	MO	03-07-15 9:58	Voltage Regulation	03-07-15 17:43	7:45:00
124	B/R-I at Gwalior	Bus Reactor	WR	MO	02-07-15 14:37	Voltage Regulation	03-07-15 18:07	27:30:00
125	B/R-I at Gwalior	Bus Reactor	WR	MO	14-07-15 10:06	Voltage Regulation	18-07-15 17:00	102:54:00
126	B/R-I at Indore	Bus Reactor	WR	MO	04-07-15 8:55	Taken out of service due to low voltage	05-07-15 16:42	31:47:00

S. No.	Name of Transmission Element Tripped	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration
127	B/R-I at Indore	Bus Reactor	WR	MO	07-07-15 9:37	Voltage Regulation	07-07-15 18:14	8:37:00
128	B/R-I at Indore	Bus Reactor	WR	SO	08-07-15 10:55	Maintenance Work	08-07-15 16:49	5:54:00
129	B/R-I at Koradi-III	Bus Reactor	WR	MO	07-07-15 9:23	Voltage Regulation	01-08-15 0:00	590:37:00
130	B/R-I at Pune	Bus Reactor	WR	MO	07-07-15 9:26	Voltage Regulation	08-07-15 16:37	31:11:00
131	B/R-I at Pune	Bus Reactor	WR	MO	10-07-15 9:53	Voltage Regulation	10-07-15 18:12	8:19:00
132	B/R-I at Pune	Bus Reactor	WR	MO	13-07-15 10:20	Voltage Regulation	13-07-15 21:15	10:55:00
133	B/R-I at Satna	Bus Reactor	WR	SO	22-07-15 10:03	For taking spare out of service	22-07-15 13:14	3:11:00
134	B/R-II at Satna	Bus Reactor	WR	SO	23-07-15 11:49	Replacement of Faulty Communication card	23-07-15 14:59	3:10:00
135	765/220 kV ICT-I ar Lalitpur	ICT	NR	SO	19-07-15 12:18	Meter calibration work	24-07-15 13:36	121:18:00
136	765/220 kV ICT-I ar Lalitpur	ICT	NR	TL	26-07-15 3:41	Tripped due to fault	26-07-15 5:58	2:17:00
137	765/220 kV ICT-I ar Lalitpur	ICT	NR	ME	26-07-15 15:16	Open due to no evacuation	26-07-15 18:27	3:11:00
138	765/400 kV ICT-I at Anpara D	ICT	NR	SC	14-07-15 11:51	Construction of new bay	14-07-15 18:26	6:35:00
139	765/400 kV ICT-I at Antah	ICT	NR	MP	11-07-15 8:50	Checking & maintenance of PRD	11-07-15 16:09	7:19:00
140	765/400 kV ICT-I at Aurangabad(PG)	ICT	WR	TS	01-07-15 0:00	LV SIDE Y-PH BUSHING FAIL	05-07-15 17:09	113:09:00
141	765/400 kV ICT-I at Aurangabad(PG)	ICT	WR	SO	01-07-15 8:56	OLTC & Fire fighting commisioning works	01-07-15 18:46	9:50:00
142	765/400 kV ICT-I at Champa	ICT	WR	ME	01-07-15 0:00	DURG- CHAMPA LINE OPENED FOR VOLT. CONTROL	01-07-15 14:14	14:14:00
143	765/400 kV ICT-I at Champa	ICT	WR	ME	01-07-15 14:14	DURG- CHAMPA LINE OPENED FOR VOLT. CONTROL	29-07-15 18:59	676:45:00
144	765/400 kV ICT-I at Indore	ICT	WR	SO	13-07-15 9:36	Maintenance Work	13-07-15 17:31	7:55:00
145	765/400 kV ICT-I at Indore	ICT	WR	SE	23-07-15 11:32	OIL LEAKAGE	23-07-15 13:05	1:33:00
146	765/400 kV ICT-I at Kurnool New	ICT	SR	MP	09-07-15 15:52	PRD Maloperation	09-07-15 16:51	0:59:00
147	765/400 kV ICT-I at Moga	ICT	NR	SE	23-07-15 10:18	For URGENT measurement of C & Tan-delta at Variable frequency	23-07-15 14:52	4:34:00
148	765/400 kV ICT-I at Phagi	ICT	NR	SC	06-07-15 11:00	To attend connectivity of spare transformer, Bhiwani bay Tie equipments/protection/loop	10-07-15 18:50	103:50:00

S. No.	Name of Transmission Element Tripped	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration
149	765/400 kV ICT-I at Pune	ICT	WR	SO	20-07-15 11:58	RTCC COMISSIONING WORK	20-07-15 19:48	7:50:00
150	765/400 kV ICT-I at Pune	ICT	WR	SO	21-07-15 12:06	RTCC COMISSIONING WORK	21-07-15 18:55	6:49:00
151	765/400 kV ICT-I at Sasan	ICT	WR	SO	13-07-15 9:30	LA REPLACEMENT	13-07-15 21:42	12:12:00
152	765/400 kV ICT-I at Satna	ICT	WR	SO	11-07-15 11:12	CSD commissioning work	11-07-15 22:54	11:42:00
153	765/400 kV ICT-I at Satna	ICT	WR	SO	24-07-15 10:49	For CSD Commissioning	24-07-15 18:07	7:18:00
154	765/400 kV ICT-I at Thiruvalem	ICT	SR	SO	16-07-15 9:58	Maintenance Work	16-07-15 19:48	9:50:00
155	765/400 kV ICT-I at Vadodara	ICT	WR	SO	28-07-15 11:32	CSD COMMISSIONING	28-07-15 21:49	10:17:00
156	765/400 kV ICT-I at Vadodara	ICT	WR	SO	29-07-15 11:07	CSD COMMISSIONING	29-07-15 12:24	1:17:00
157	765/400 kV ICT-I at Vindhychal PS	ICT	WR	MP	08-07-15 15:41	OLTC PRD operated	08-07-15 19:10	3:29:00
158	765/400 kV ICT-I at Vindhychal PS	ICT	WR	SE	27-07-15 16:03	Oil leakage in 400 KV B phase bushing	27-07-15 21:29	5:26:00
159	765/400 kV ICT-II at Bina	ICT	WR	SO	14-07-15 9:53	Commissioning of CSD relay	14-07-15 21:18	11:25:00
160	765/400 kV ICT-II at Dharamjaigarh	ICT	WR	SC	28-07-15 11:10	FOR CHARGING OF SPARE ICT	28-07-15 18:49	7:39:00
161	765/400 kV ICT-II at Koradi	ICT	WR	MP	01-07-15 0:00	PRD OPERATED	01-07-15 16:02	16:02:00
162	765/400 kV ICT-II at Moga	ICT	NR	SE	24-07-15 10:23	For URGENT measurement of C & Tan-delta at Variable frequency	24-07-15 14:44	4:21:00
163	765/400 kV ICT-II at Nellore	ICT	SR	MP	23-07-15 11:59	BUCCHOLZ RELAY MALOPERATION	23-07-15 13:00	1:01:00
164	765/400 kV ICT-II at Phagi	ICT	NR	TS	10-07-15 16:26	Earth fault	10-07-15 18:50	103:50:00
165	765/400 kV ICT-II at Pune	ICT	WR	SO	22-07-15 14:40	OIL SAMPLE COLLECTION	22-07-15 20:31	5:51:00
166	765/400 kV ICT-II at Pune	ICT	WR	SO	24-07-15 13:53	For oil sampling	24-07-15 20:16	6:23:00
167	765/400 kV ICT-II at Sasan	ICT	WR	SO	07-07-15 8:54	For Yearly Manitenance and equipment testing	07-07-15 18:24	9:30:00
168	765/400 kV ICT-II at Sasan	ICT	WR	SO	08-07-15 9:15	Maintenance Work	08-07-15 18:57	9:42:00
169	765/400 kV ICT-II at Satna	ICT	WR	SO	13-07-15 10:42	CSD COMMISSIONING WORK	13-07-15 21:13	10:31:00
170	765/400 kV ICT-II at Satna	ICT	WR	SO	25-07-15 10:02	CSD COMMISSIONING	25-07-15 14:04	4:02:00

S. No.	Name of Transmission Element Tripped	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration
171	765/400 kV ICT-II at Thiruvalem	ICT	SR	SO	14-07-15 9:42	Warranty Checks	14-07-15 19:31	9:49:00
172	765/400 kV ICT-II at Vadodara	ICT	WR	SO	31-07-15 14:31	CSD COMMISSIONING	31-07-15 20:55	6:24:00
173	765/400 kV ICT-II at Vindhyachal PS	ICT	WR	SE	22-07-15 10:47	HOT SPOT	22-07-15 19:33	8:46:00
174	765/400 kV ICT-III at Antah	ICT	NR	SO	01-07-15 14:39	To carry out the cabling termination , scheme checking , inter-tripping etc for synchronisation of	07-07-15 14:25	143:46:00
<b>400kV - IR</b>								
175	400 kV Barh-Gorakhpur-I	Line	ER/NR	MP	09-07-15 14:08	DT received at Gorakhpur	09-07-15 18:51	4:43:00
176	400 kV Bhadrawati-Ramagundam-I	Line	WR/SR	SC	05-07-15 6:58	Line crossing works	06-07-15 0:58	18:00:00
177	400 kV Bhadrawati-Ramagundam-II	Line	WR/SR	SC	05-07-15 7:29	Line crossing works	06-07-15 1:19	17:50:00
178	400 kV Bhadrawati-Ramagundam-II	Line	WR/SR	TL	13-07-15 5:08	B-PH FAULT	13-07-15 6:20	1:12:00
179	400 kV Biharshariff-Balia-I	Line	ER/NR	SO	13-07-15 8:26	For attending insulators and conductor damaged in the line by Miscreants	13-07-15 21:27	13:01:00
180	400 kV Biharshariff-Balia-I	Line	ER/NR	SO	14-07-15 7:48	For attending insulators and conductor damaged in the line by Miscreants	14-07-15 20:08	12:20:00
181	400 kV Biharshariff-Balia-II	Line	ER/NR	SO	15-07-15 8:06	For attending insulators and conductor damaged in the line by Miscreants	15-07-15 21:51	13:45:00
182	400 kV Biharshariff-Balia-II	Line	ER/NR	SO	16-07-15 8:06	For attending insulators and conductor damaged in the line by Miscreants	16-07-15 20:52	12:46:00
183	400 kV IBEUL-Raigarh-I	Line	ER/WR	TL	10-07-15 3:13	Tripped due to B-N FAULT	10-07-15 5:16	2:03:00
184	400 kV IBEUL-Raigarh-I	Line	ER/WR	TL	24-07-15 17:31	Y-B PH FAULT	27-07-15 16:30	70:59:00
185	400 kV Jharsuguda-Raigarh-I	Line	ER/WR	SO	03-07-15 8:01	JUMPER MODIFICATION WORKS	04-07-15 20:30	36:29:00
186	400 kV Jharsuguda-Raigarh-I	Line	ER/WR	SO	03-07-15 8:01	JUMPER MODIFICATION WORKS	04-07-15 20:30	36:29:00
187	400 kV Malbase - Binaguri - I	Line	Bhutan	TL	18-07-15 19:05	R-B fault	18-07-15 19:44	0:39:00
188	400 kV Patna-Balia-I	Line	ER/NR	SO	24-07-15 11:58	Snapped earth wire	24-07-15 14:47	2:49:00
189	400 kV Ranchi-Sipat-I	Line	ER/WR	SO	08-07-15 9:18	Maintenance Work	09-07-15 19:34	34:16:00
190	400 kV Rourkela-Raigarh	Line	ER/WR	TL	01-07-15 16:32	B-Phase fault	01-07-15 18:00	1:28:00
191	400 kV Siliguri-Bongaigaon-I	Line	ER/NER	SO	25-07-15 12:19	To take, Line reactor at Bongaigaon, out of service	25-07-15 15:52	3:33:00

S. No.	Name of Transmission Element Tripped	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration
192	400 kV Siliguri-Bongaigaon-II	Line	ER/NER	TV	14-07-15 8:01	Tripped due to Overvoltage	14-07-15 9:47	1:46:00
193	400 kV Siliguri-Bongaigaon-II	Line	ER/NER	TL	17-07-15 10:31	B Ph to Earth fault	17-07-15 11:26	75:25:00
194	400 kV Siliguri-Bongaigaon-II	Line	ER/NER	TL	22-07-15 13:35	B-ph fault	22-07-15 15:21	1:46:00
195	400 kV Siliguri-Bongaigaon-II	Line	ER/NER	SO	27-07-15 10:30	For Capacitance and Tan Delta testing of Reactor	27-07-15 12:06	1:36:00
196	400 kV Siliguri-Bongaigaon-II	Line	ER/NER	SO	27-07-15 13:40	For Capacitance and Tan Delta testing of Reactor	27-07-15 13:54	0:14:00
197	400 kV Siliguri-Bongaigaon-III	Line	ER/NER	MO	20-07-15 5:23	Open due to H/V	22-07-15 15:05	57:42:00
198	400 kV Siliguri-Bongaigaon-III	Line	ER/NER	MO	25-07-15 1:00	Kept open due to high voltage	25-07-15 12:04	11:04:00
199	400 kV Siliguri-Bongaigaon-IV	Line	ER/NER	TL	03-07-15 23:52	R-N FAULT	04-07-15 0:38	0:46:00
200	400 kV Sterlite-Raigarh	Line	ER/WR	SO	06-07-15 11:51	JUMPER RECTIFICATION WORK	06-07-15 17:53	6:02:00
201	400 kV Tala - Binaguri - IV	Line	Bhutan	TL	18-07-15 19:05	R-B fault	18-07-15 20:10	1:05:00
202	400 kV Tala - Binaguri - IV	Line	Bhutan	TL	27-07-15 19:16	R-N fault	27-07-15 20:27	1:11:00
203	400 kV Zerda-Kankaroli	Line	WR/NR	MO	28-07-15 1:43	Opened manually due to High Voltage	29-07-15 10:07	32:24:00
<b>220 kV - IR</b>								
204	220 kV Badod-Kota	Line	WR/NR	TL	18-07-15 5:40	Three phase fault at Badod end.	18-07-15 15:40	10:00:00
205	220 kV Badod-Kota	Line	WR/NR	TL	25-07-15 16:47	Phase to earth fault	25-07-15 17:31	0:44:00
206	220 kV Badod-Kota	Line	WR/NR	SO	27-07-15 12:32	Due to Repairing Y phase Broken Disc Insulator String and Conductor	27-07-15 20:20	7:48:00
207	220 kV Badod-Modak	Line	WR/NR	TL	18-07-15 5:55	Three phase fault at Badod end.	18-07-15 16:22	10:27:00
208	220 kV Balimela - U.Sileru	Line	ER/SR	SO	01-07-15 0:00	REPLACEMENT OF C.T.S OF 220KV BALIMELA-JAYANAGAR CKT.-III	03-07-15 13:45	61:45:00
209	220 kV Birpara-Salakati-I	Line	ER/NER	TL	04-07-15 2:31	R-N FAULT	04-07-15 3:34	1:03:00
210	220 kV Birpara-Salakati-I	Line	ER/NER	TL	14-07-15 7:16	Y-N fault	14-07-15 8:13	0:57:00
211	220 kV Birpara-Salakati-I	Line	ER/NER	TL	18-07-15 18:18	Three phase fault	19-07-15 7:54	13:36:00
212	220 kV Birpara-Salakati-II	Line	ER/NER	TL	03-07-15 22:47	B-N FAULT	03-07-15 23:21	0:34:00

S. No.	Name of Transmission Element Tripped	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration
213	220 kV Birpara-Salakati-II	Line	ER/NER	TL	04-07-15 2:31	R-N FAULT	04-07-15 3:34	1:03:00
214	220 kV Birpara-Salakati-II	Line	ER/NER	TL	14-07-15 13:15	Y-N fault	14-07-15 14:00	0:45:00
215	220 kV Birpara-Salakati-II	Line	ER/NER	TL	18-07-15 18:18	Three phase fault	18-07-15 19:06	0:48:00
216	220 kV Birpara-Salakati-II	Line	ER/NER	SE	20-07-15 9:36	Sparking in R & Y ph isolator at Salakati	20-07-15 14:01	4:25:00
217	220 kV Budhipadar-Korba-II	Line	ER/WR	TL	03-07-15 22:27	Y-Phase fault	04-07-15 0:13	1:46:00
218	220 kV Budhipadar-Korba-II	Line	ER/WR	TL	22-07-15 22:00	R PHASE TO EARTH FAULT	22-07-15 22:39	0:39:00
219	220 kV Budhipadar-Korba-III	Line	ER/WR	TL	03-07-15 22:27	Y-Phase fault	04-07-15 0:31	2:04:00
220	220 kV Budhipadar-Raigarh	Line	ER/WR	SO	01-07-15 0:00	BREAKER REPLACEMENT AT RAIGARH	25-07-15 19:53	595:53:00
221	220 kV Chukha - Birpara - I	Line	Bhutan	TL	26-07-15 11:26	Y-B fault	26-07-15 12:25	0:59:00
222	220 kV Chukha - Birpara - II	Line	Bhutan	TL	26-07-15 11:26	Y-B fault	26-07-15 12:11	0:45:00
223	220 kV Mehgaon-Auraiya	Line	WR/NR	TS	25-07-15 18:25	Failure of CTat Mehgaon	27-07-15 21:43	51:18:00
224	220 kV Mudasangi (Kolhapur)-Chikkodi	Line	WR/SR	SE	09-07-15 12:30	To attend hotspot	09-07-15 16:52	4:22:00
225	220 kV Mudasangi (Kolhapur)-Chikkodi	Line	WR/SR	SO	20-07-15 9:51	TESTING WORKS BY MSTCL	20-07-15 21:37	11:46:00
226	220 kV Talangde-Chikkodi	Line	WR/SR	TL	21-07-15 17:15	R-PHASE TO GROUND FAULT	21-07-15 20:16	3:01:00

TL = Tripping due to Line Fault

TS = Tripping due to S/S Fault

MO = Opened due to system constraints

TV = Tripped on Overvoltage

SC = Planned Shutdown for construction activities

SO = Planned Shutdown for O&M activities

SE = Emergency Shutdown

**Total Number of 765 kV lines 76**

**Total Number of 400 kV lines 31**

**Total Number of 220 kV lines 15**

**Total Number of HVDC links 17**

**Total Number of 765 kV ICTs 100**

**Total Number of 765 kV B/R 49**

**Grand Total 288**

S. No.	Name of Transmission Element Tripped	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration
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MP      MP= Protection Maloperation

ME      ME= Miscellanous outage





## **POWER SYSTEM OPERATION CORPORATION LIMITED**

पाँवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

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