

पावर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड
(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)
POWER SYSTEM OPERATION CORPORATION LIMITED
(A wholly owned subsidiary of POWERGRID)



राष्ट्रीय भार प्रेषण केन्द्र : बी - 9, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली - 110016
National Load Despatch Centre : B - 9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110016
Website : www.nldc.in, www.nldcindia.in, Tel. : 011-26536832, 26524522, Fax : 011-26524525, 26536901

संदर्भ संख्या:-POSOCO/NLDC/GM/

दिनांक: 23.05.2016

सेवा में,

वितरण सूची के अनुसार

विषय:- निष्पादन रिपोर्ट - अप्रैल 2016

महोदय,

आई०ई०जी०सी०-2010 के प्रावधान के अनुसार, अप्रैल 2016 माह की अखिल भारतीय प्रणाली की निष्पादन रिपोर्ट संलग्न है।

धन्यवाद

भवदीय

एस. आर. नरसिम्हन

(एस. आर. नरसिम्हन)

अपर 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
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Member Secretary, NRPC, 18/A, SJSS Marg, Katwaria Sarai, New Delhi-110016
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- 7 सदस्य सचिव, उ. पू. क्षे. वि. स., मेघालय राज्य आवासीय वित्त सहकारी समिति लिमिटेड भवन, नॉग्रिम हिल्स, शिलोंग - 793003
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- 8 महाप्रबंधक, पू. क्षे. भा. प्रे. के., 14, गोल्फ क्लब रोड, कोलकाता - 700033
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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, बंगलूरु - 560009
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General Manager, NERLDC, Dongtiah, 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



अप्रैल 2016

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

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



माह अप्रैल 2016 के लिए प्रचालन निष्पादन रिपोर्ट
OPERATIONAL PERFORMANCE REPORT FOR THE
MONTH OF APRIL 2016

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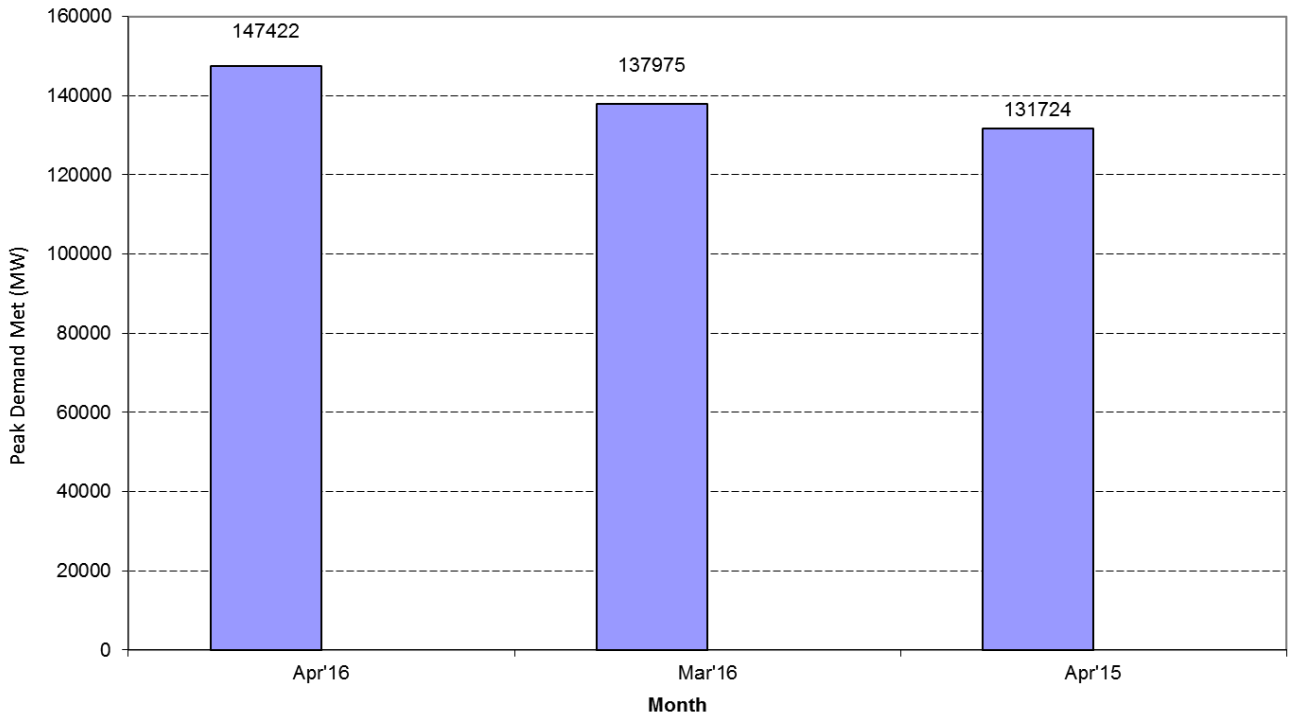
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1. SUMMARY OF REPORT FOR THE MONTH OF APRIL 2016

Peak Demand Met

Increased by 6.85% as compared to Mar 2016

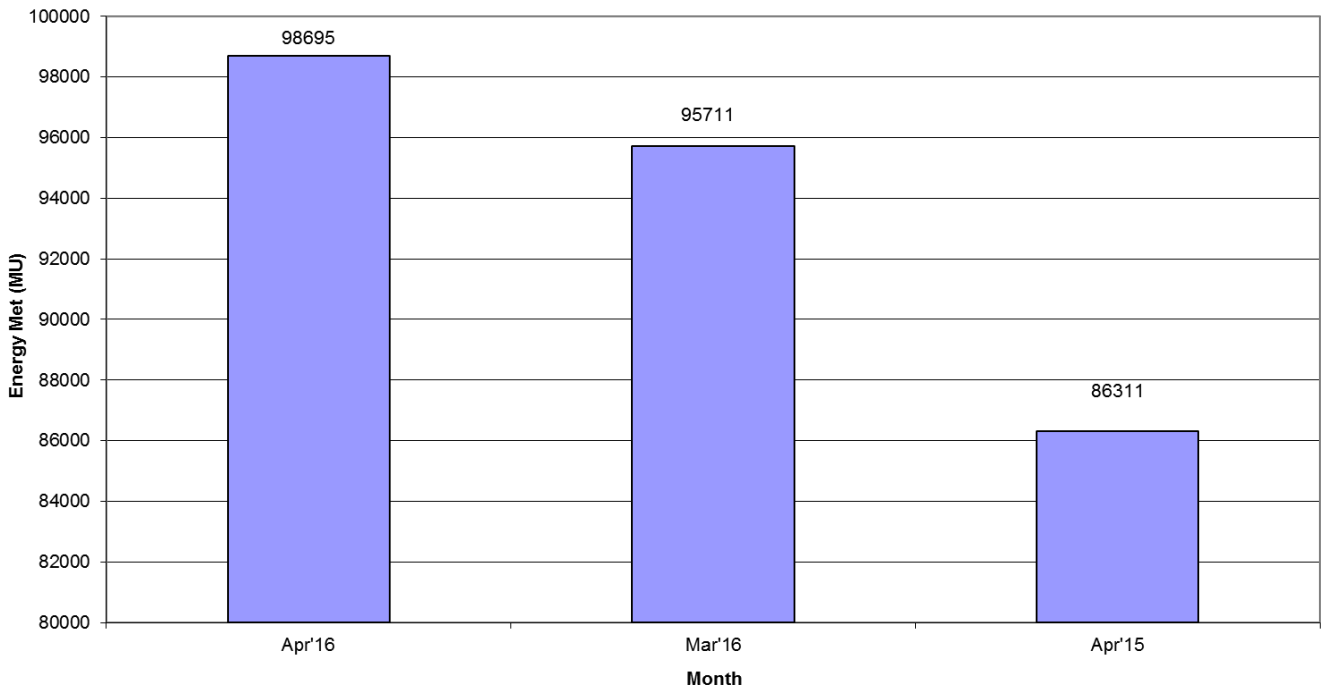
Increased by 11.92% as compared to Apr 2015



Energy Met

Increased by 3.12% as compared to Mar 2016

Increased by 14.35% as compared to Apr 2015

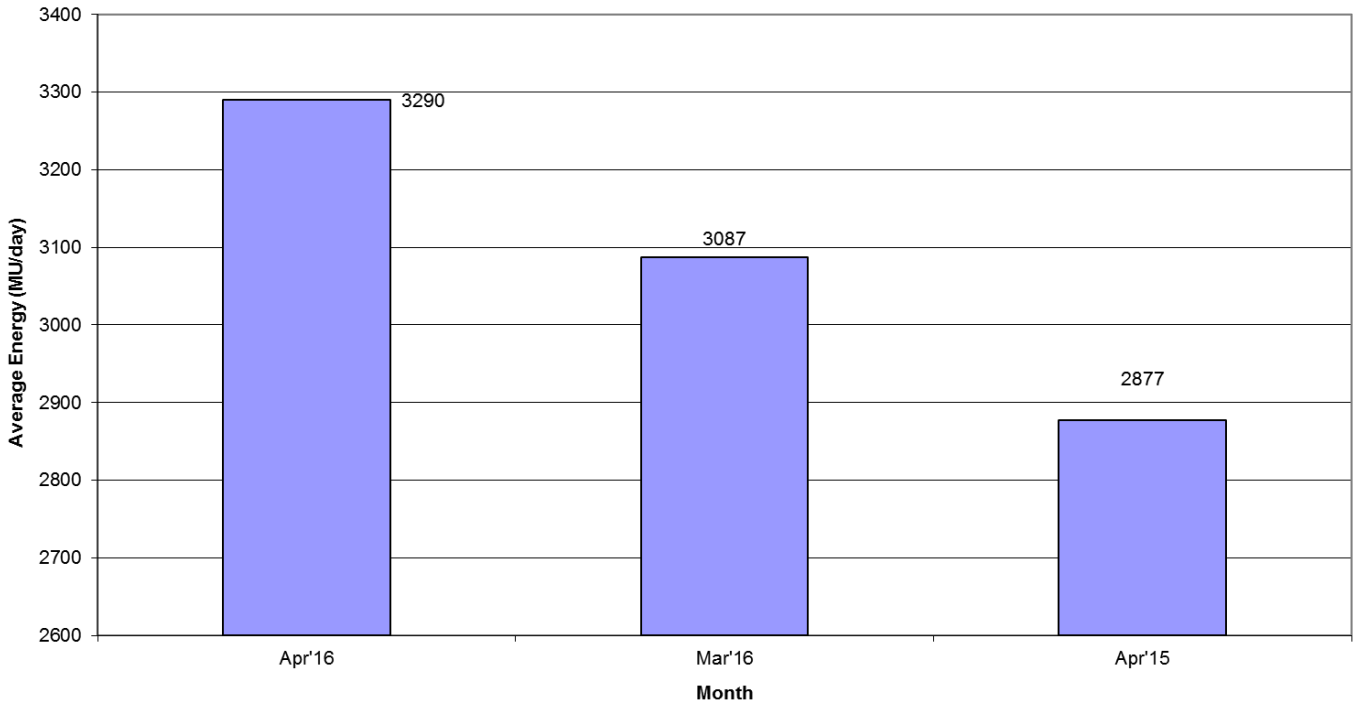


1. SUMMARY OF REPORT FOR THE MONTH OF APRIL 2016

Average Energy (MU/day)

Increased by 6.55% as compared to Mar 2016

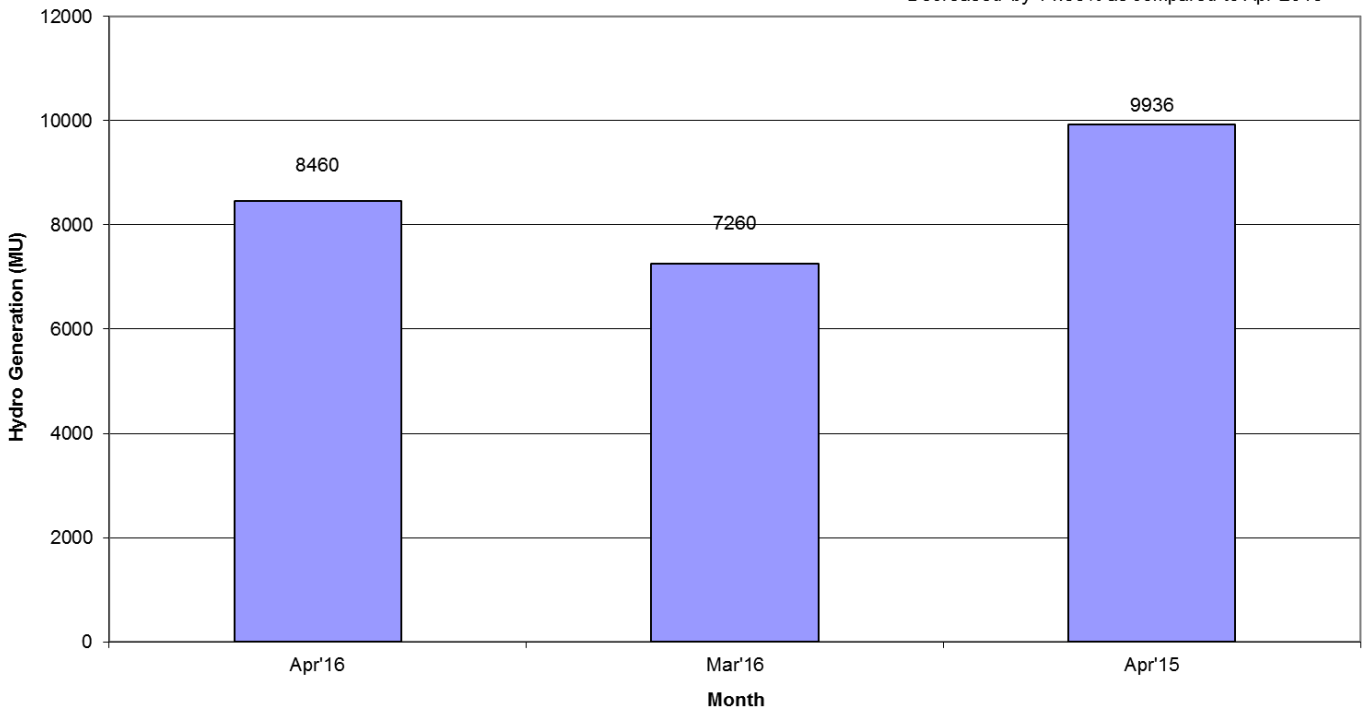
Increased by 14.35% as compared to Apr 2015



Hydro generation

Increased by 16.53% as compared to Mar 2016

Decreased by 14.85% as compared to Apr 2015

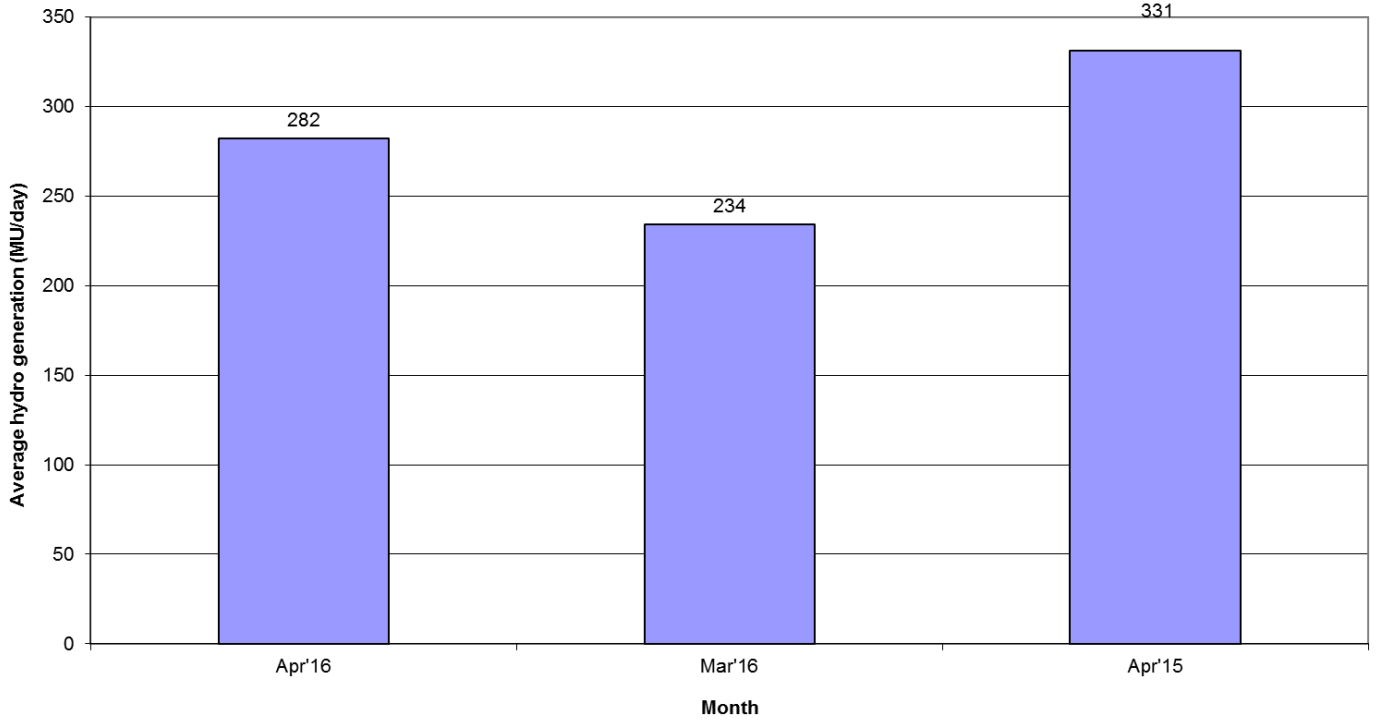


1. SUMMARY OF REPORT FOR THE MONTH OF APRIL 2016

Average Hydro Generation

Increased by 20.42% as compared to Mar 2016

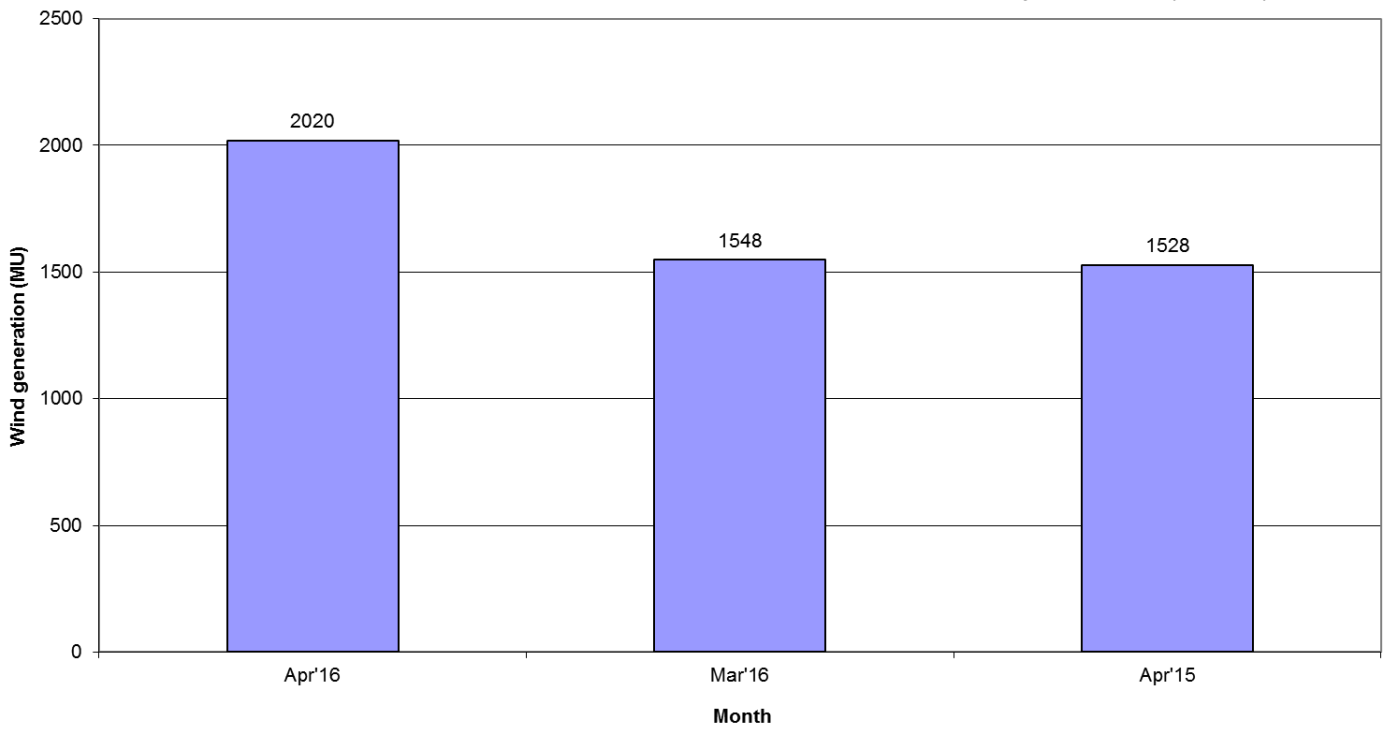
Decreased by 14.85% as compared to Apr 2015



Wind Generation

Increased by 30.42% as compared to Mar 2016

Increased by 32.17% as compared to Apr 2015

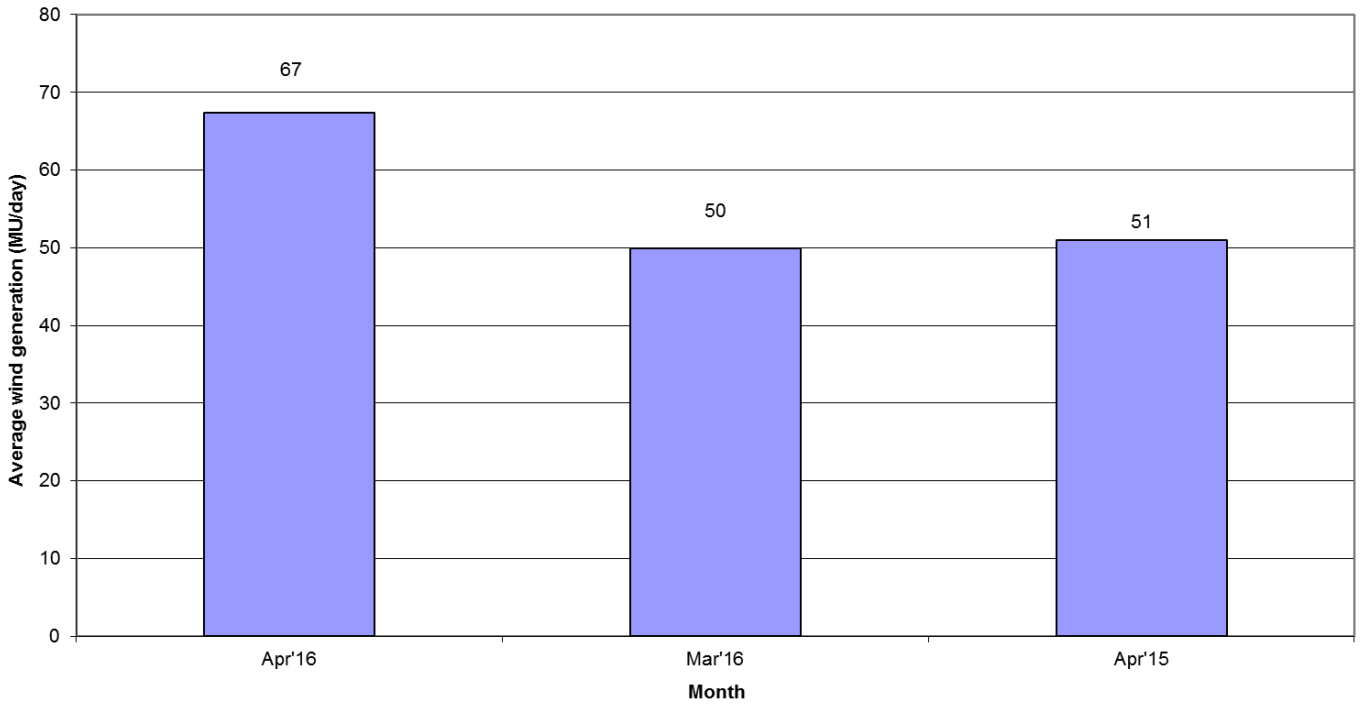


1. SUMMARY OF REPORT FOR THE MONTH OF APRIL 2016

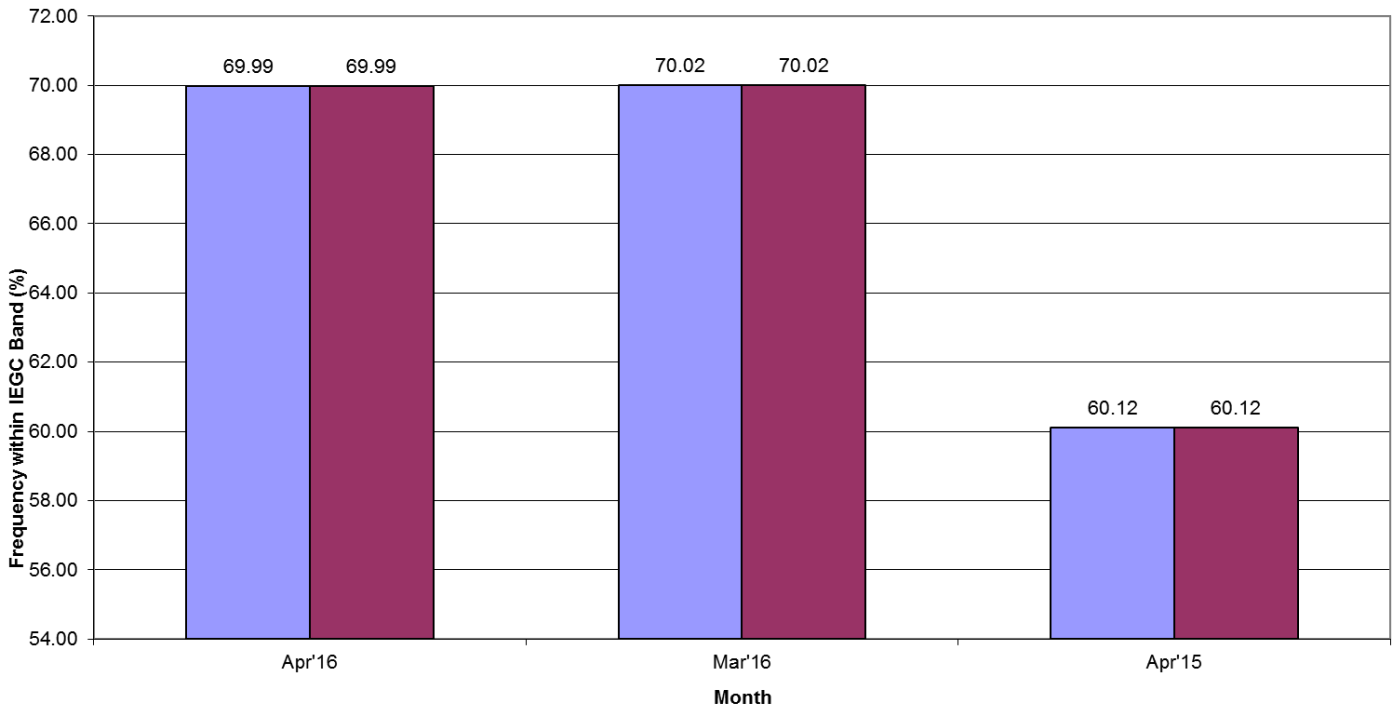
Average wind generation (MU/day)

Increased by 34.77% as compared to Mar 2016

Increased by 32.17% as compared to Apr 2015



Frequency within IEGC Band



- W.e.f 17th 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 30.04.2016
(All figures are in MW)

S No	Region	THERMAL				NUCLEAR	HYDRO	RES @ MNRE	GRAND TOTAL
		COAL	GAS	DIESEL	TOTAL				
1	NR	45865	5331	0	51196	1620	18247	8630	79693
2	WR	72153	10815	0	82968	1840	7448	15315	107571
3	SR	37043	6474	843	44359	2320	11558	18154	76391
4	ER	30623	190	0	30813	0	4289	475	35577
5	NER	310	1698	36	2044	0	1242	264	3550
6	ISLANDS	0	0	40	40	0	0	11	51
		185993	24509	919	211420	5780	42783	42849	302833

Remarks: Data from CEA website

3. राष्ट्रीय स्तर पर संध्याकालीन शिखर विद्युत मांग पूर्ति

PEAK DEMAND MET AT NATIONAL LEVEL

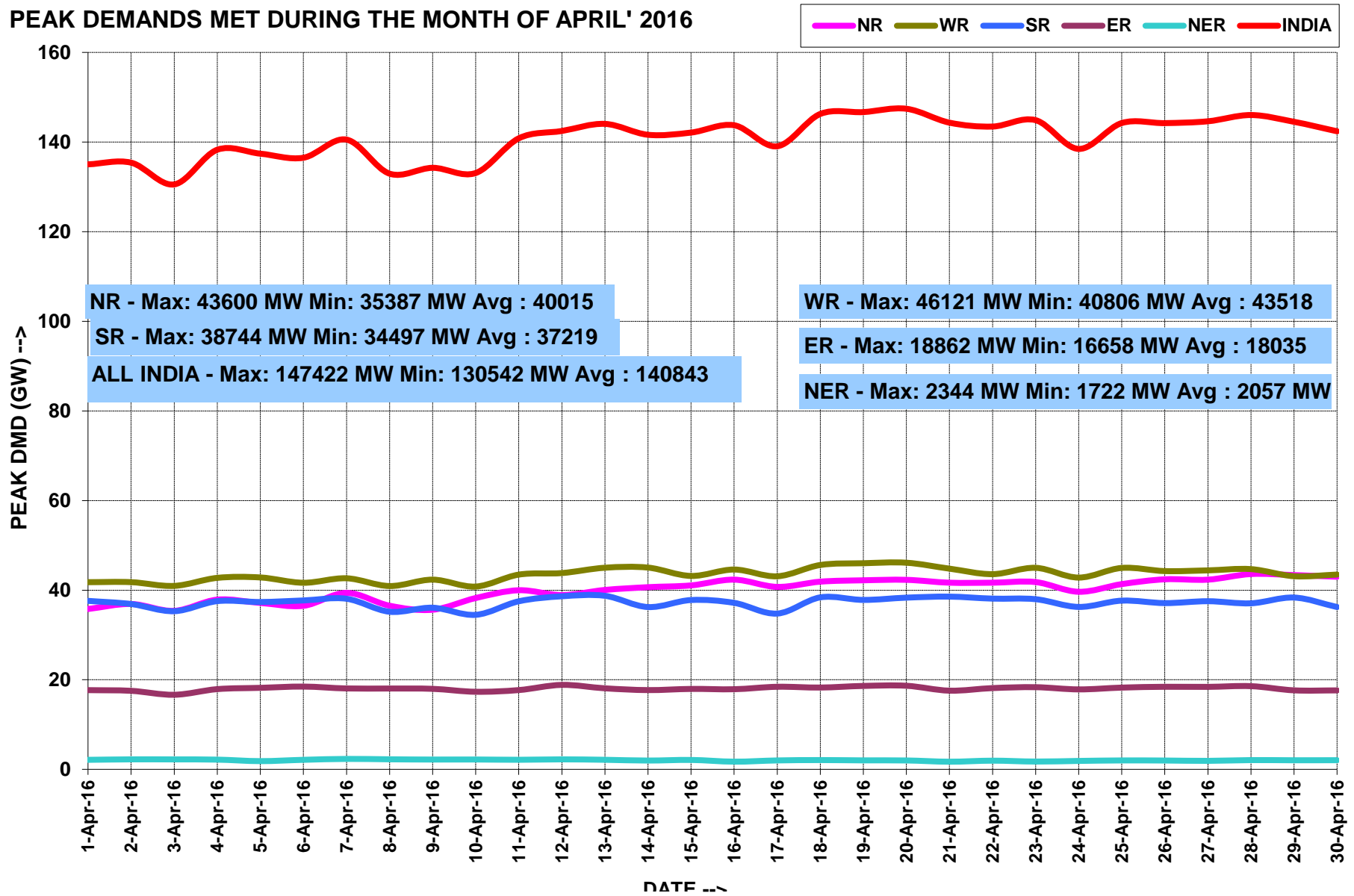
माह:- अप्रैल 2016 MONTH:- April 2016

सभी आंकड़े मेगावाट में All figures in MW

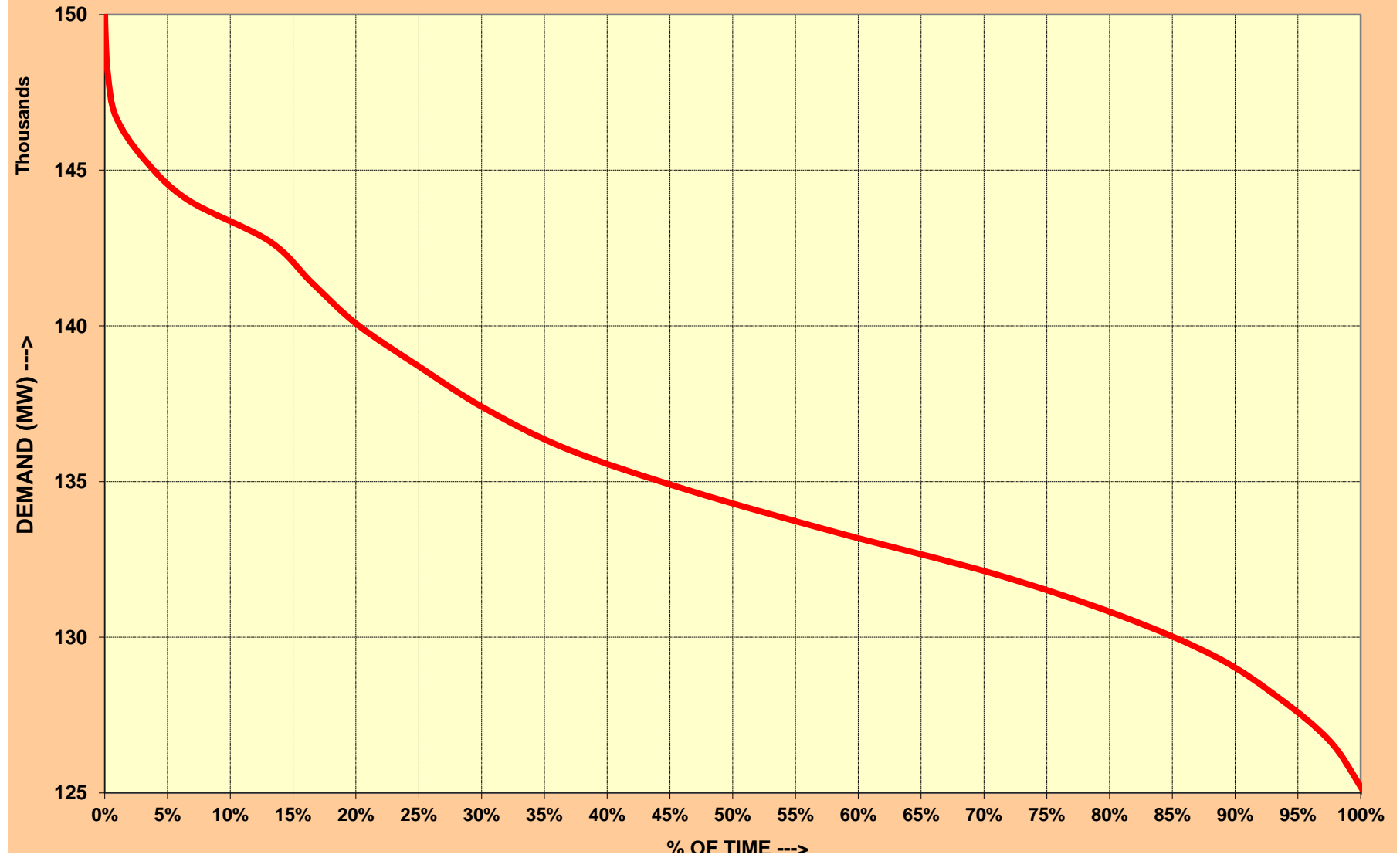
दिनांक Date	उत्तरी क्षे. NR	पश्चिमी क्षे. WR	दक्षिणी क्षे. SR	पूर्वी क्षे. ER	पूर्वोत्तर क्षे. NER	कुल TOTAL
01-Apr-16	35798	41783	37609	17691	2142	135024
02-Apr-16	36919	41787	36905	17538	2243	135392
03-Apr-16	35387	40955	35308	16658	2234	130542
04-Apr-16	37885	42744	37551	17917	2184	138281
05-Apr-16	37153	42837	37355	18204	1851	137400
06-Apr-16	36507	41653	37706	18485	2143	136494
07-Apr-16	39398	42651	38085	18067	2344	140545
08-Apr-16	36529	40921	35183	18054	2256	132943
09-Apr-16	35633	42347	36083	17980	2202	134245
10-Apr-16	38243	40806	34497	17327	2213	133086
11-Apr-16	39981	43471	37516	17705	2152	140825
12-Apr-16	38912	43815	38632	18862	2244	142465
13-Apr-16	40051	45008	38744	18097	2149	144049
14-Apr-16	40667	45039	36232	17700	1980	141618
15-Apr-16	41062	43173	37798	17963	2114	142110
16-Apr-16	42345	44602	37168	17895	1732	143743
17-Apr-16	40731	43098	34776	18441	2006	139051
18-Apr-16	41897	45615	38394	18269	2088	146263
19-Apr-16	42200	46007	37824	18631	2019	146681
20-Apr-16	42303	46121	38332	18667	1999	147422
21-Apr-16	41668	44799	38558	17573	1722	144321
22-Apr-16	41668	43574	38112	18149	1951	143454
23-Apr-16	41806	44985	37984	18349	1754	144878
24-Apr-16	39640	42809	36259	17858	1895	138461
25-Apr-16	41352	44962	37660	18257	2006	144237
26-Apr-16	42423	44259	37114	18439	1985	144220
27-Apr-16	42346	44416	37534	18420	1911	144627
28-Apr-16	43600	44695	37070	18579	2080	146024
29-Apr-16	43358	43113	38351	17645	2043	144510
30-Apr-16	42993	43479	36230	17634	2059	142395
उच्चतम MAXIMUM	43600	46121	38744	18862	2344	147422
निम्नतम MINIMUM	35387	40806	34497	16658	1722	130542
औसत AVERAGE	40015	43518	37219	18035	2057	140843
अब तक का उच्चतम All Time Max.	50354	47617	38744	18862	2356	147655
दिनांक Date	11.09.15	20.10.15	13.04.16	12.04.16	30.03.16	11.09.15

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

PEAK DEMANDS MET DURING THE MONTH OF APRIL' 2016



ALL INDIA LOAD DURATION CURVE FOR APRIL' 2016

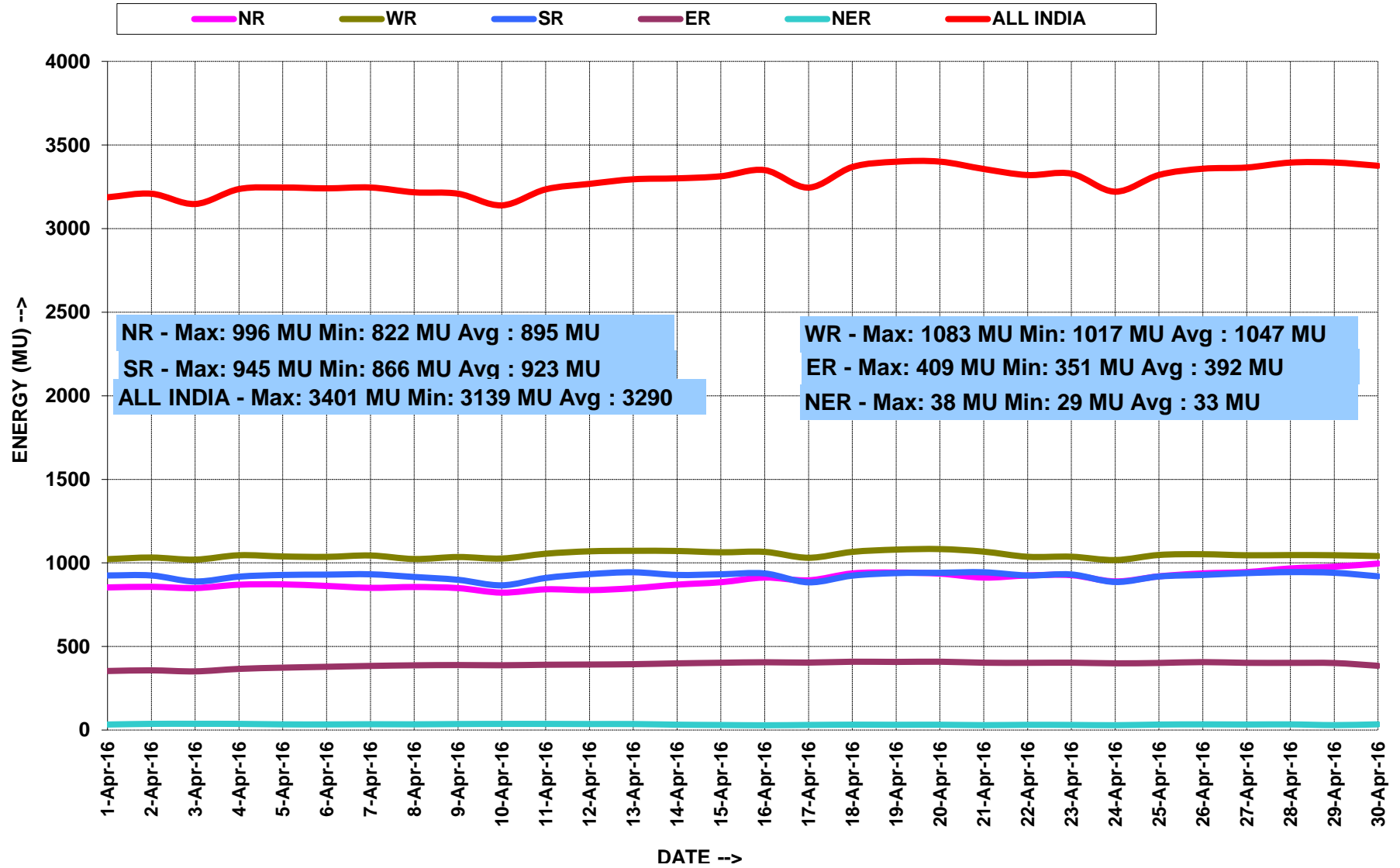


4. राष्ट्रीय स्तर पर विद्युत ऊर्जा आपूर्ति ENERGY MET AT NATIONAL LEVEL

माह:- अप्रैल 2016 MONTH:- April 2016
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-Apr-16	853	1023	925	353	33	3188
02-Apr-16	857	1032	925	357	37	3209
03-Apr-16	850	1020	889	351	38	3147
04-Apr-16	870	1046	918	366	37	3237
05-Apr-16	872	1039	928	373	34	3246
06-Apr-16	862	1036	930	379	34	3241
07-Apr-16	851	1045	932	384	35	3246
08-Apr-16	856	1023	916	387	34	3217
09-Apr-16	849	1035	899	389	36	3209
10-Apr-16	822	1026	866	388	37	3139
11-Apr-16	842	1055	910	391	37	3235
12-Apr-16	837	1070	933	392	36	3268
13-Apr-16	849	1073	944	394	36	3295
14-Apr-16	870	1071	928	399	32	3301
15-Apr-16	885	1064	932	403	30	3313
16-Apr-16	912	1066	937	406	29	3350
17-Apr-16	896	1031	884	404	31	3245
18-Apr-16	937	1066	924	409	32	3369
19-Apr-16	942	1080	939	408	32	3400
20-Apr-16	936	1083	941	409	32	3401
21-Apr-16	913	1068	944	403	30	3357
22-Apr-16	925	1037	925	402	32	3321
23-Apr-16	927	1037	931	403	31	3329
24-Apr-16	889	1017	886	399	29	3221
25-Apr-16	920	1048	919	402	33	3321
26-Apr-16	938	1052	928	407	34	3358
27-Apr-16	945	1046	939	402	33	3366
28-Apr-16	967	1047	945	402	34	3395
29-Apr-16	978	1046	941	401	30	3395
30-Apr-16	996	1041	920	385	34	3376
कुल TOTAL	26846	31421	27678	11748	1001	98695
उच्चतम MAXIMUM	996	1083	945	409	38	3401
निम्नतम MINIMUM	822	1017	866	351	29	3139
औसत AVERAGE	895	1047	923	392	33	3290
अब तक का उच्चतम All Time Max.	1147	1131	945	409	44	3401
दिनांक Date	11.09.15	20.10.15	28.04.16	20.04.16	18.09.15	20.04.16

ENERGY MET DURING THE MONTH OF APRIL' 2016



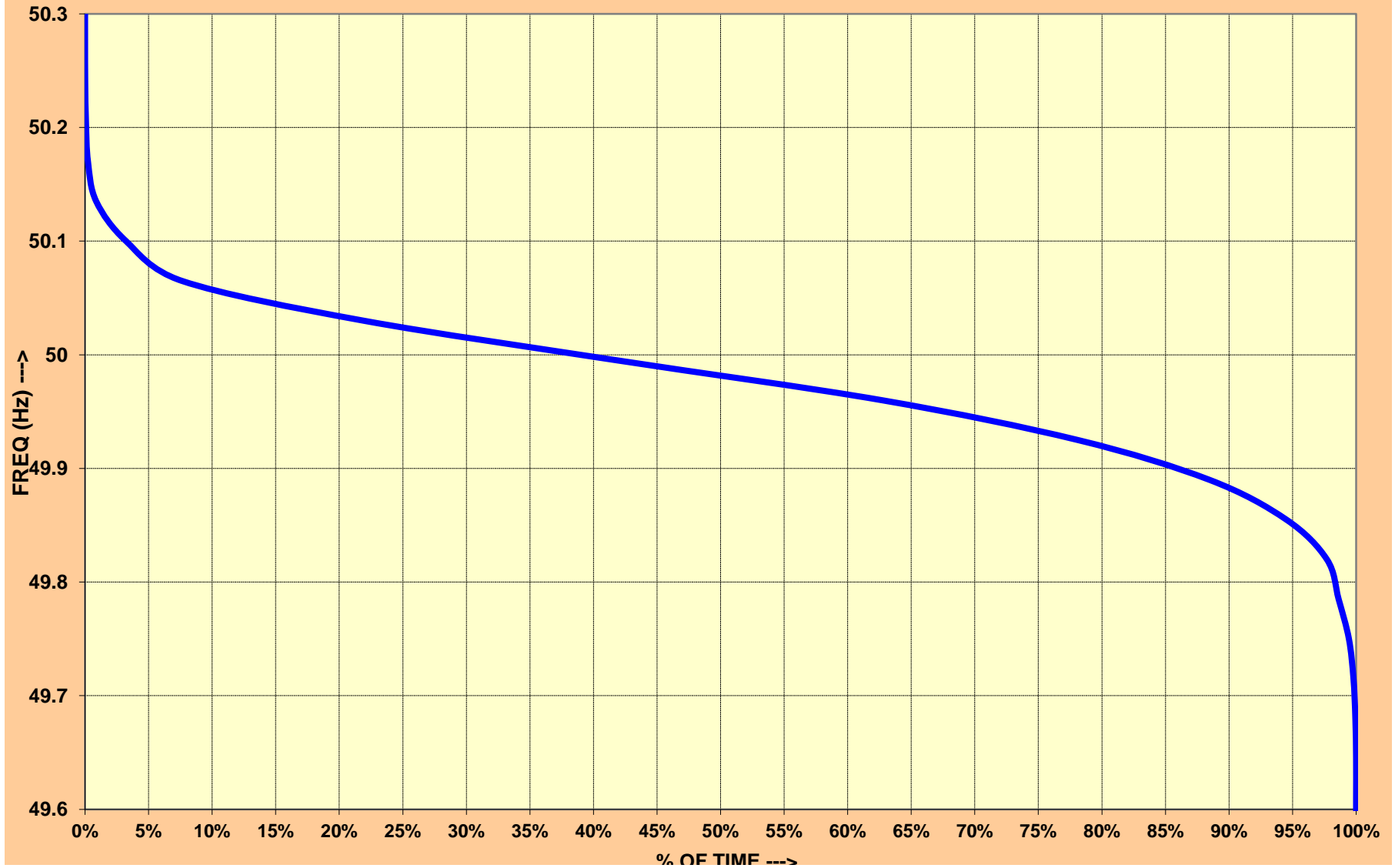
5.वर्ष 2016-17 के लिए आवृत्ति रूपरेखा FREQUENCY PROFILE FOR YEAR 2016-17

राष्ट्रीय गिड NATIONAL GRID									
फ़िक्वेन्सी रूपरेखा (Hz)			49.0-49.9	<49.9	49.9-50.05	>50.05	उच्चतम फ़िक्वेन्सी	निम्नतम फ़िक्वेन्सी	औसत फ़िक्वेन्सी
% समय	Apr-16	All India Grid	12.87	12.87	69.99	17.14	50.32	49.64	49.98

5.2 अप्रैल 2016 के लिए आवृत्ति रूपरेखा FREQUENCY PROFILE FOR APRIL 2016

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-Apr-16	0.00	14.10	14.10	72.07	13.83	50.32	49.72	49.98
	02-Apr-16	0.00	18.01	18.01	70.38	11.61	50.15	49.65	49.97
	03-Apr-16	0.00	4.91	4.91	73.23	21.86	50.20	49.67	50.01
	04-Apr-16	0.00	25.13	25.13	65.75	9.12	50.19	49.66	49.95
	05-Apr-16	0.00	5.82	5.82	72.08	22.09	50.20	49.76	50.00
	06-Apr-16	0.00	11.50	11.50	65.69	22.80	50.22	49.69	49.99
	07-Apr-16	0.00	13.61	13.61	74.25	12.14	50.19	49.78	49.97
	08-Apr-16	0.00	7.65	7.65	75.69	16.66	50.22	49.82	49.99
	09-Apr-16	0.00	9.70	9.70	73.13	17.18	50.16	49.76	49.99
	10-Apr-16	0.00	12.28	12.28	72.53	15.19	50.18	49.79	49.98
	11-Apr-16	0.00	18.29	18.29	73.08	8.63	50.23	49.68	49.96
	12-Apr-16	0.00	7.31	7.31	69.42	23.26	50.20	49.76	50.00
	13-Apr-16	0.00	7.11	7.11	69.97	22.93	50.25	49.75	50.00
	14-Apr-16	0.00	21.20	21.20	66.09	12.71	50.19	49.68	49.96
	15-Apr-16	0.00	15.97	15.97	69.77	14.26	50.24	49.73	49.98
	16-Apr-16	0.00	17.78	17.78	66.59	15.64	50.20	49.77	49.98
	17-Apr-16	0.00	2.78	2.78	69.24	27.99	50.18	49.74	50.02
	18-Apr-16	0.00	3.11	3.11	68.08	28.81	50.21	49.82	50.02
	19-Apr-16	0.00	7.56	7.56	75.65	16.79	50.20	49.71	49.99
	20-Apr-16	0.00	11.48	11.48	77.82	10.69	50.15	49.72	49.97
	21-Apr-16	0.00	6.22	6.22	69.61	24.18	50.22	49.79	50.00
	22-Apr-16	0.00	3.28	3.28	75.72	21.01	50.23	49.81	50.00
	23-Apr-16	0.00	8.23	8.23	72.91	18.87	50.21	49.75	49.99
	24-Apr-16	0.00	12.14	12.14	72.29	15.57	50.27	49.66	49.98
	25-Apr-16	0.00	23.82	23.82	68.37	7.81	50.15	49.66	49.95
	26-Apr-16	0.00	40.20	40.20	55.42	4.39	50.21	49.64	49.92
	27-Apr-16	0.00	35.01	35.01	55.47	9.51	50.20	49.71	49.94
	28-Apr-16	0.00	11.86	11.86	65.15	22.99	50.24	49.71	49.99
	29-Apr-16	0.00	5.44	5.44	75.88	18.68	50.29	49.75	50.00
	30-Apr-16	0.00	4.73	4.73	68.38	26.89	50.28	49.73	50.01

ALL INDIA FREQUENCY DURATION CURVE FOR APRIL' 2016



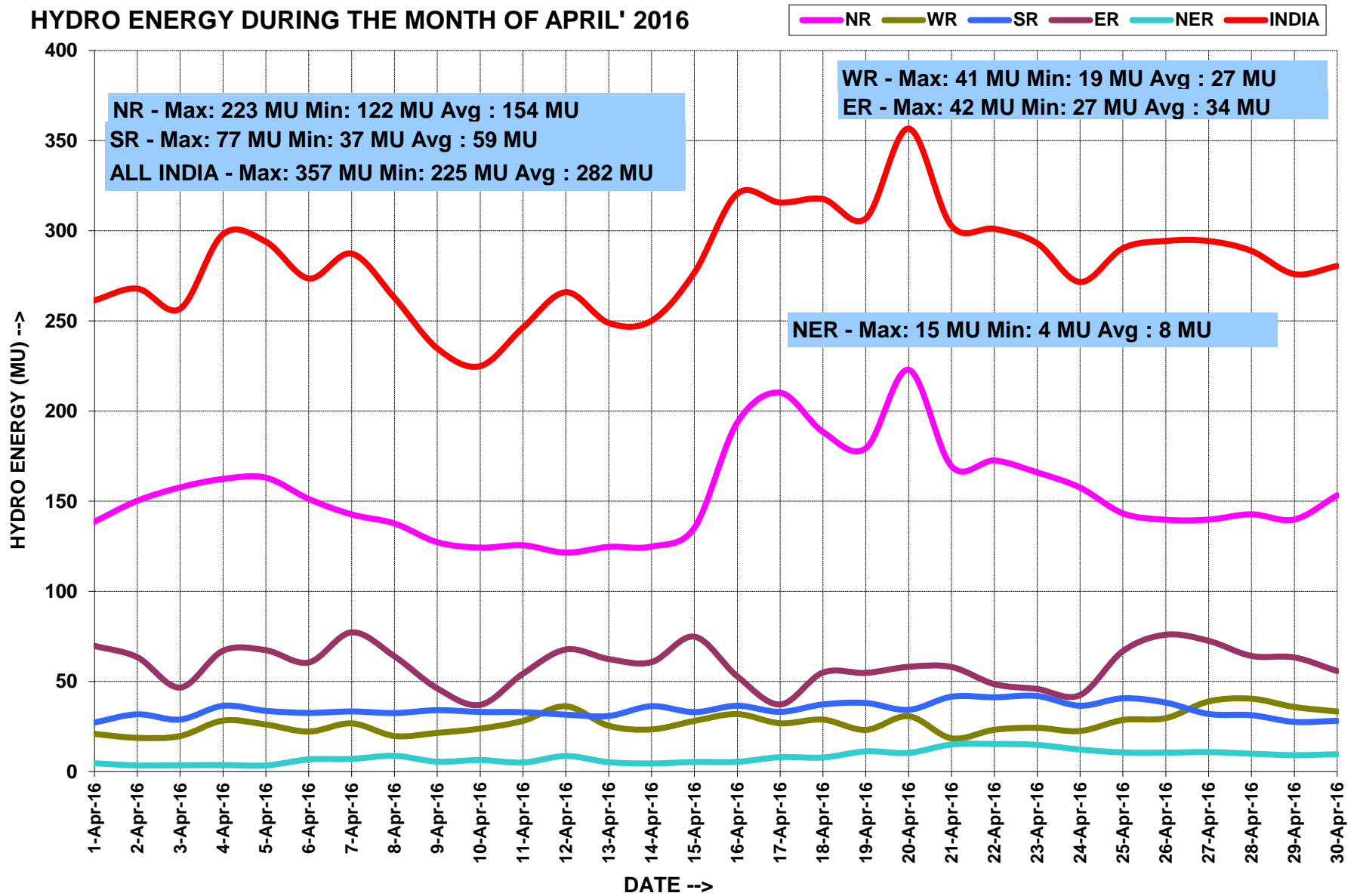
**6.राष्ट्रीय स्तर पर जल विद्युत उत्पादन
HYDRO GENERATION AT NATIONAL LEVEL**

माह:- अप्रैल 2016 MONTH:- April 2016

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-Apr-16	139	21	70	27	5	261
02-Apr-16	150	19	64	32	4	268
03-Apr-16	158	20	47	29	4	257
04-Apr-16	162	28	67	37	4	298
05-Apr-16	163	26	67	34	4	294
06-Apr-16	151	22	61	33	7	274
07-Apr-16	143	27	77	33	7	287
08-Apr-16	138	20	64	33	9	263
09-Apr-16	127	22	46	34	6	235
10-Apr-16	124	24	37	33	7	225
11-Apr-16	126	28	54	33	5	246
12-Apr-16	122	36	68	32	9	266
13-Apr-16	125	26	63	31	5	249
14-Apr-16	125	23	61	36	5	250
15-Apr-16	135	28	75	33	5	277
16-Apr-16	194	32	53	37	6	321
17-Apr-16	210	27	37	33	8	316
18-Apr-16	189	29	55	37	8	318
19-Apr-16	179	23	55	38	11	307
20-Apr-16	223	31	58	34	11	357
21-Apr-16	169	19	58	42	15	303
22-Apr-16	173	23	49	41	15	301
23-Apr-16	166	24	46	42	15	293
24-Apr-16	158	23	43	37	12	272
25-Apr-16	143	29	67	41	11	290
26-Apr-16	140	30	76	38	11	294
27-Apr-16	140	39	73	32	11	294
28-Apr-16	143	41	64	31	10	289
29-Apr-16	140	36	63	28	9	276
30-Apr-16	153	33	56	28	10	280
कुल TOTAL	4607	808	1772	1029	245	8460
उच्चतम MAXIMUM	223	41	77	42	15	357
निम्नतम MINIMUM	122	19	37	27	4	225
औसत AVERAGE	154	27	59	34	8	282
अब तक का उच्चतम All Time Max.	389	167	202	94	29	712
दिनांक Date	18.08.15	18.12.14	09.08.13	09.09.14	27.08.15	27.08.13

HYDRO ENERGY DURING THE MONTH OF APRIL' 2016



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

माह:- अप्रैल 2016 MONTH:- April 2016

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-Apr-16	6	34	10	-----	-----	51
02-Apr-16	21	30	12	-----	-----	62
03-Apr-16	29	41	14	-----	-----	84
04-Apr-16	6	30	13	-----	-----	48
05-Apr-16	9	26	20	-----	-----	56
06-Apr-16	8	32	20	-----	-----	60
07-Apr-16	4	28	10	-----	-----	43
08-Apr-16	6	32	12	-----	-----	50
09-Apr-16	14	30	18	-----	-----	62
10-Apr-16	12	29	16	-----	-----	57
11-Apr-16	7	38	18	-----	-----	63
12-Apr-16	5	33	29	-----	-----	67
13-Apr-16	7	35	41	-----	-----	83
14-Apr-16	21	37	23	-----	-----	81
15-Apr-16	13	39	17	-----	-----	68
16-Apr-16	21	46	20	-----	-----	87
17-Apr-16	19	53	21	-----	-----	92
18-Apr-16	9	31	14	-----	-----	55
19-Apr-16	8	19	14	-----	-----	42
20-Apr-16	4	28	18	-----	-----	50
21-Apr-16	8	51	30	-----	-----	89
22-Apr-16	15	75	51	-----	-----	141
23-Apr-16	5	53	58	-----	-----	115
24-Apr-16	5	43	35	-----	-----	83
25-Apr-16	8	35	25	-----	-----	68
26-Apr-16	7	26	15	-----	-----	47
27-Apr-16	6	35	14	-----	-----	55
28-Apr-16	4	28	16	-----	-----	49
29-Apr-16	4	31	16	-----	-----	52
30-Apr-16	8	36	18	-----	-----	61
कुल TOTAL	299	1085	636	-----	-----	2020
उच्चतम MAXIMUM	29	75	58	-----	-----	141
निम्नतम MINIMUM	4	19	10	-----	-----	42
औसत AVERAGE	10	36	21	-----	-----	67
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 - Apr 2016

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	4.4	4.4	0.0	131.3	131.3	0.0	0.0	263	263	0	0.0
	Delhi	84.9	84.9	0.0	2547.1	2545.9	-1.2	0.0	4799	4797	-2	0.0
	Haryana	120.2	120.2	0.0	3607.0	3606.5	-0.5	0.0	7477	7477	0	0.0
	H.P.	23.8	23.5	-0.2	712.5	705.9	-6.6	-0.9	1272	1272	0	0.0
	J&K	47.7	40.9	-6.9	1432.2	1225.8	-206.4	-14.4	2412	2046	-366	-15.2
	Punjab	111.6	111.6	0.0	3348.7	3348.7	0.0	0.0	6058	6058	0	0.0
	Rajasthan	186.1	185.9	-0.3	5584.3	5576.0	-8.3	-0.1	9027	9027	0	0.0
	U.P.	305.4	285.7	-19.6	9160.8	8571.8	-589.0	-6.4	14197	14197	0	0.0
	Uttarakhand	36.4	36.1	-0.3	1091.9	1083.1	-8.7	-0.8	1911	1911	0	0.0
NFF/Railway	2.2	2.2	0.0	67.2	67.2	0.0	0.0	100	100	0	0.0	
TOTAL	922.8	895.4	-27.4	27683.0	26862.3	-820.7	-3.0	47520	44934	-2586	-5.4	
WR	Gujarat	306.5	306.2	-0.2	9193.9	9187.5	-6.4	-0.1	14074	14054	-20	-0.1
	Madhya Pradesh	185.0	184.9	-0.1	5551.1	5547.1	-3.9	-0.1	8382	8348	-34	-0.4
	Chhattisgarh	87.5	87.3	-0.2	2625.3	2619.4	-5.8	-0.2	4082	4073	-9	-0.2
	Maharashtra	431.1	431.0	-0.1	12932.8	12928.8	-4.0	0.0	20558	20522	-36	-0.2
	Goa	9.6	9.6	0.0	288.0	287.7	-0.2	-0.1	529	489	-40	-7.6
	D&D	6.7	6.7	0.0	201.8	201.8	0.0	0.0	308	308	0	0.0
	DNH	16.4	16.4	0.0	492.5	491.8	-0.7	-0.1	757	757	0	0.0
	ESIL	11.3	11.3	0.0	339.6	339.1	-0.4	-0.1	752	752	0	0.0
TOTAL	1054.2	1053.4	-0.7	31624.8	31603.4	-21.4	-0.1	46935	46853	-82	-0.2	
SR	Andhra Pradesh	158.2	158.1	-0.1	4746.3	4743.7	-2.6	-0.1	7370	7355	-15	-0.2
	Telangana	147.2	147.1	-0.1	4414.8	4412.0	-2.8	-0.1	6894	6894	0	0.0
	KPTCL	215.3	205.7	-9.6	6458.0	6171.4	-286.6	-4.4	9551	9551	0	0.0
	KSEB	76.5	76.2	-0.3	2296.0	2285.7	-10.3	-0.5	4016	4004	-12	-0.3
	TNEB	328.2	328.1	-0.2	9847.4	9842.3	-5.1	-0.1	15107	15107	0	0.0
	PONDICHERRY	7.4	7.3	0.0	220.6	220.5	-0.1	-0.1	360	360	0	0.0
TOTAL	932.8	922.5	-10.3	27983.2	27675.6	-307.6	-1.1	41632	41607	-25	-0.1	
ER	Bihar	72.3	66.3	-6.0	2168.2	1989.2	-179.0	-8.3	3569	3548	-21	-0.6
	JSEB	24.3	24.1	-0.2	728.3	723.6	-4.6	-0.6	1248	1248	0	0.0
	DVC	65.1	64.7	-0.3	1951.8	1941.4	-10.5	-0.5	2877	2877	0	0.0
	Odisha	77.9	77.9	0.0	2338.1	2338.1	0.0	0.0	4190	4190	0	0.0
	West Bengal	171.1	170.5	-0.6	5131.7	5114.0	-17.7	-0.3	8083	8044	-39	-0.5
	Sikkim	1.1	1.1	0.0	33.0	33.0	0.0	0.0	88	88	0	0.0
TOTAL	411.7	404.6	-7.1	12351.2	12139.4	-211.8	-1.7	19178	19112	-66	-0.3	
NER	Arunachal Pradesh	2.3	2.2	0.0	68.1	67.2	-0.9	-1.4	141	139	-2	-1.4
	Assam	21.1	18.4	-2.7	634.1	552.8	-81.3	-12.8	1448	1356	-92	-6.4
	Manipur	1.8	1.7	-0.1	54.0	51.8	-2.2	-4.0	146	146	0	0.0
	MeSEB	3.7	3.7	0.0	111.0	111.0	0.0	0.0	295	295	0	0.0
	Mizoram	1.4	1.3	0.0	41.3	39.8	-1.5	-3.6	83	82	-1	-1.2
	Nagaland	1.8	1.7	-0.1	52.9	50.4	-2.5	-4.6	110	110	0	0.0
	Tripura	5.1	5.0	-0.1	154.0	150.7	-3.3	-2.1	272	264	-8	-2.9
TOTAL	37.2	34.1	-3.1	1115	1024	-91.6	-8.2	2495	2392	-103	-4.1	
ALL INDIA	3358.6	3310.1	-48.4	100757.5	99304.3	-1453.2	-1.4	157760	154898	-2862	-1.8	

9. ENERGY COMPARISON OF APRIL 2016 vs APRIL 2015

REGION	STATE	Energy Requirement (MU)					Energy Met (MU)				
		Apr-15	Apr-16	Difference	% Change	Average MU/day for Apr-16	Apr-15	Apr-16	Difference	% Change	Average for MU/day for Apr-16
NR	Chandigarh	118	131	13	11	4	118	131	13	11	4
	Delhi	2232	2547	315	14	85	2231	2546	315	14	85
	Haryana	3003	3607	604	20	120	3002	3607	605	20	120
	H.P.	726	713	-13	-2	24	724	706	-18	-3	24
	J&K	1350	1432	82	6	48	1095	1226	131	12	41
	Punjab	2907	3349	442	15	112	2905	3349	443	15	112
	Rajasthan	4847	5584	737	15	186	4847	5576	729	15	186
	U.P.	7831	9161	1330	17	305	6930	8572	1641	24	286
	Uttarakhand	1016	1092	76	7	36	988	1083	95	10	36
	NFF/Railway	68	67	0	0	2	68	67	0	0	2
	TOTAL	24097	27683	3586	15	923	22908	26862	3954	17	895
WR	Gujarat	8777	9194	417	5	306	8775	9187	412	5	306
	Madhya Pradesh	4289	5551	1262	29	185	4289	5547	1258	29	185
	Chhattisgarh	2443	2625	182	7	88	2415	2619	205	8	87
	Maharashtra	12271	12933	662	5	431	12223	12929	706	6	431
	Goa	276	288	11	4	10	276	288	11	4	10
	D&D	189	202	13	7	7	189	202	13	7	7
	DNH	490	492	2	0	16	490	492	2	0	16
	ESIL	290	340	50	17	11	289	339	50	17	11
	TOTAL	29026	31625	2599	9	1054	28946	31603	2658	9	1053
SR	Andhra Pradesh	4216	4746	530	13	158	4215	4744	529	13	158
	Telangana	4088	4415	327	8	147	3987	4412	425	11	147
	KPTCL	5516	6458	942	17	215	5377	6171	794	15	206
	KSEB	1886	2296	410	22	77	1871	2286	414	22	76
	TNEB	8361	9847	1486	18	328	8112	9842	1731	21	328
	PONDY	206	221	15	7	7	206	220	15	7	7
	TOTAL	24273	27983	3710	15	933	23767	27676	3908	16	923
ER	Bihar	1940	2168	229	12	72	1512	1989	478	32	66
	JSEB	623	728	106	17	24	620	724	104	17	24
	DVC	1670	1952	282	17	65	1670	1941	272	16	65
	Odisha	2222	2338	116	5	78	2222	2338	116	5	78
	West Bengal	4120	5132	1012	25	171	4093	5114	1021	25	170
	Sikkim	31	33	2	6	1	31	33	2	6	1
	TOTAL	10605	12351	1746	16	412	10148	12139	1991	20	405
NER	Arunachal Pradesh	56	68	12	22	2	55	67	12	22	2
	Assam	746	634	-112	-15	21	544	553	9	2	18
	Manipur	64	54	-10	-16	2	50	52	2	3	2
	MeSEB	156	111	-45	-29	4	143	111	-32	-22	4
	Mizoram	37	41	4	12	1	33	40	6	19	1
	Nagaland	53	53	0	0	2	52	50	-2	-4	2
	Tripura	100	154	54	55	5	81	151	69	85	5
	TOTAL	1212	1115	-96	-8	37	960	1024	64	7	34
	ALL INDIA	89212	100758	11545	13	3359	86728	99304	12576	15	3310

10. DEMAND COMPARISON OF APRIL 2016 vs APRIL 2015

REGION	STATE	Peak Requirement (MW)				Peak Met (MW)			
		Apr-15	Apr-16	Difference	% Change	Apr-15	Apr-16	Difference	% Change
NR	Chandigarh	241	263	22	9.1	241	263	22	9.1
	Delhi	4442	4799	357	8.0	4442	4797	355	8.0
	Haryana	6370	7477	1107	17.4	6370	7477	1107	17.4
	H.P.	1379	1272	-107	-7.8	1379	1272	-107	-7.8
	J&K	2291	2412	121	5.3	1909	2046	137	7.2
	Punjab	5858	6058	200	3.4	5858	6058	200	3.4
	Rajasthan	7798	9027	1229	15.8	7798	9027	1229	15.8
	U.P.	12967	14197	1230	9.5	12347	14197	1850	15.0
	Uttarakhand	1837	1911	74	4.0	1762	1911	149	8.5
	NFF/Railway	105	100	-5	-4.8	105	100	-5	-4.8
WR	Gujarat	13906	14074	168	1	13877	14054	177	1.3
	Madhya Pradesh	7397	8382	985	13	7406	8348	942	12.7
	Chhattisgarh	3943	4082	139	4	3832	4073	241	6.3
	Maharashtra	20204	20558	354	2	19985	20522	537	2.7
	Goa	507	529	22	4	477	489	12	2.5
	D&D	303	308	5	1.7	303	308	5	1.7
	DNH	745	757	12	1.6	745	757	12	1.6
	ESIL	597	752.28	155	26.0	597	752.28	155	26.0
SR	Andhra Pradesh	6789	7370	581	8.6	6789	7355	566	8.3
	Telangana	6852	6894	42	0.6	6661	6894	233	3.5
	KPTCL	9344	9551	207	2.2	9335	9551	216	2.3
	KSEB	3077	4016	939	30.5	3072	4004	932	30.3
	TNEB	12969	15107	2138	16.5	12727	15107	2380	18.7
	PONDY	316	360	44	14.0	314	360	46	14.6
ER	Bihar	3000	3569	569	19.0	2848	3548	700	24.6
	JSEB	1054	1248	194	18.4	1054	1248	194	18.4
	DVC	2657	2877	220	8.3	2657	2877	220	8.3
	Odisha	3953	4190	237	6.0	3953	4190	237	6.0
	West Bengal	7283	8083	800	11.0	7258	8044	786	10.8
	Sikkim	86	88	2	2.3	86	88	2	2.3
NER	Arunachal Pradesh	138	141	3	2.2	114	139	25	21.9
	Assam	1396	1448	52	3.7	1282	1356	74	5.8
	Manipur	150	146	-4	-2.5	148	146	-2	-1.4
	MeSEB	400	295	-105	-26.2	312	295	-17	-5.4
	Mizoram	85	83	-2	-2.5	80	82	2	2.5
	Nagaland	120	110	-10	-8.2	112	110	-2	-1.8
	Tripura	264	272	8	2.9	238	264	26	10.9

11. SCHEDULE AND DRAWAL OF CONSTITUENTS - Apr 2016

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	130.72	146.39	15.67	11.99	4.36	4.88	0.52
	Delhi	2123.11	2125.48	2.38	0.11	70.77	70.85	0.08
	Haryana	2568.17	2511.00	-57.17	-2.23	85.61	83.70	-1.91
	H.P.	395.53	435.78	40.25	10.18	13.18	14.53	1.34
	J&K	749.22	739.78	-9.45	-1.26	24.97	24.66	-0.31
	Punjab	1700.07	1671.98	-28.08	-1.65	56.67	55.73	-0.94
	Rajasthan	1497.49	1492.38	-5.11	-0.34	49.92	49.75	-0.17
	U.P.	3341.77	3328.85	-12.93	-0.39	111.39	110.96	-0.43
	Uttarakhand	770.49	765.92	-4.57	-0.59	25.68	25.53	-0.15
	NFF/Railway	56.76	67.20	10.44	18.40	1.89	2.24	0.35
WR	Gujarat	2114.59	2138.43	23.85	1.13	70.49	71.28	0.79
	Madhya Pradesh	3116.80	3056.27	-60.53	-1.94	103.89	101.88	-2.02
	Maharashtra	3979.90	3993.08	13.18	0.33	132.66	133.10	0.44
	Chhattisgarh	863.18	852.52	-10.66	-1.24	28.77	28.42	-0.36
	Goa	254.70	278.25	23.55	9.25	8.49	9.27	0.78
	D&D	189.51	193.34	3.83	2.02	6.32	6.44	0.13
	D&NH	487.50	478.32	-9.18	-1.88	16.25	15.94	-0.31
	ESIL	318.42	318.31	-0.11	-0.03	10.61	10.61	0.00
SR	Andhra Pradesh	789.67	863.63	73.96	9.37	26.32	28.79	2.47
	Telangana	2697.29	2695.46	-1.83	-0.07	89.91	89.85	-0.06
	KPTCL	1765.94	1823.24	57.30	3.24	58.86	60.77	1.91
	KSEB	1593.63	1650.23	56.60	3.55	53.12	55.01	1.89
	TNEB	4474.60	4521.62	47.02	1.05	149.15	150.72	1.57
	PONDICHERRY	230.22	220.47	-9.75	-4.24	7.67	7.35	-0.33
ER	Bihar	1817.13	1877.38	60.25	3.32	60.57	62.58	2.01
	JSEB	418.98	489.18	70.20	16.75	13.97	16.31	2.34
	DVC	-1115.49	-1143.72	-28.23	2.53	-37.18	-38.12	-0.94
	GRIDCO	714.37	741.56	27.19	3.81	23.81	24.72	0.91
	WBSEB	1339.99	1354.20	14.22	1.06	44.67	45.14	0.47
	Sikkim	38.00	33.00	-4.99	-13.14	1.27	1.10	-0.17
NER	Arunachal Pradesh	58.35	67.16	8.82	15.11	1.94	2.24	0.29
	Assam	430.96	437.71	6.75	1.57	14.37	14.59	0.23
	Manipur	59.34	51.79	-7.55	-12.72	1.98	1.73	-0.25
	MeSEB	51.52	49.62	-1.90	-3.70	1.72	1.65	-0.06
	Mizoram	34.41	35.51	1.10	3.20	1.15	1.18	0.04
	Nagaland	49.78	49.50	-0.28	-0.55	1.66	1.65	-0.01
	Tripura	75.72	89.48	13.76	18.17	2.52	2.98	0.46

12. INTER REGIONAL EXCHANGES 2016-17		
	April'16	Fin. Year 2016-17 (till Apr 2016)
Name of Line		
Import of NR from WR (WR-NR)		
WR - NR 765 kV Gwalior - Agra D/C	1910.35	1910.35
WR-NR 765 kV Gwalior - Phagi D/C	564.39	564.39
WR - NR HVDC Vindhyachal	127.02	127.02
WR - NR 400 kV Zerda Kankroli	0.00	0.00
WR - NR 400 kV Zerda Bhinmal	0.53	0.53
WR - NR 220 kV Badod - Kota/ Modak	5.71	5.71
WR - NR 220 kV Auraiya - Malanpur/Mehgaon	3.00	3.00
WR - NR 400 kV Vindhyachal-Rihand	0.00	0.00
WR - NR HVDC Mundra - Mohinderghar	1712.21	1712.21
Total WR - NR	4323.20	4323.20
Import of NR from ER (ER-NR)		
ER - NR 765 kV Sasaram - Fatehpur	0.23	0.23
ER - NR 765 kV Gaya - Varanasi 2*S/C	155.61	155.61
ER - WR 765 kV Gaya - Balia	94.45	94.45
ER-NR 400 kV Patna - Balia 2xD/C	232.02	232.02
ER - NR 400 kV Muzaffarpur - Gorakhpur D/C	52.88	52.88
ER - NR 400 kV Biharshariff - Balia D/C	94.07	94.07
ER - NR 400 kV Barh - G'pur D/C	210.89	210.89
ER - NR 400 kV Biharshariff - Varanasi D/C	9.30	9.30
ER - NR HVDC Sasaram (Bypass)	128.99	128.99
ER - NR 220 kV Pusauli - Sahupuri	106.82	106.82
ER - NR 132 kV Sahupuri - Karamnasa	14.40	14.40
ER - NR 132 kV Rihand - Son Nagar	0.00	0.00
Total ER-NR	1099.66	1099.66
Import of NR from NER (NER-NR)		
NER-NR HVDC Biswanath Chariali - Agra	317.02	317.02
Total NER - NR	317.02	317.02
Export of NR to WR (NR-WR)		
NR - WR 765 kV Gwalior - Agra D/C	0.00	0.00
NR - WR 765 kV Gwalior - Phagi D/C	0.00	0.00
NR - WR HVDC Vindhyachal	12.39	12.39
NR - WR 400 kV Zerda Kankroli	137.71	137.71
NR - WR 400 kV Zerda Bhinmal	91.55	91.55
NR - WR 220 kV Badod - Kota/ Modak	12.38	12.38
NR - WR 220 kV Auraiya - Malanpur/Mehgaon	17.40	17.40
NR-WR 400 kV Rihand-Vindhyachal	0.00	0.00
NR - WR HVDC Mundra - Mohinderghar	0.00	0.00
Total NR - WR	271.43	271.43
Export of NR to ER (NR-ER)		
NR - ER 765 kV Sasaram - Fatehpur	96.68	96.68
NR - ER 765 kV Gaya - Varanasi 2*S/C	2.36	2.36
NR - ER 765 kV Gaya - Balia	0.00	0.00
NR - ER 400 kV Patna - Balia 2xD/C	0.00	0.00
NR - ER 400 kV Muzaffarpur - Gorakhpur D/C	12.38	12.38
NR - ER 400 kV Biharshariff - Balia D/C	0.00	0.00
ER - NR 400 kV Barh - G'pur D/C	0.00	0.00
NR - ER 400 kV Biharshariff - Varanasi D/C	157.78	157.78
NR - ER HVDC Sasaram (Bypass)	3.72	3.72
NR - ER 220 kV Pusauli - Sahupuri	0.00	0.00
NR - ER 132 kV Sahupuri - Karamnasa	0.00	0.00
NR - ER 132 kV Rihand - Son Nagar	16.28	16.28
Total NR - ER	289.20	289.20
Export of NR to NER (NER-NR)		
NR-NER HVDC Biswanath Chariali - Agra	0.00	0.00
Total NR - NER	0.00	0.00

Export of WR to ER (WR-ER)		
WR - ER 765 kV Ranchi - Dharamjaygarh	58.51	58.51
WR - ER 765 kV Dharamjaygarh - Jharsuguda D/C	0.00	0.00
WR - ER 400 kV Sipat - Ranchi D/C	163.93	163.93
WR - ER 400 kV Raigarh - Sterlite	14.64	14.64
WR - ER 400 kV Raigarh-Ind Bharat	54.26	54.26
WR - ER 400 kV Raigarh-Rourkela	55.15	55.15
WR - ER 400 kV Raigarh - Jharsuguda	77.26	77.26
WR - ER 220 kV Korba - Budhipadar D/C	77.56	77.56
WR - ER 220 kV Raigarh - Budhipadar	5.19	5.19
Total WR - ER	506.50	506.50
Import of WR from ER (ER - WR)		
ER - WR 765 kV Ranchi - Dharamjaygarh	7.12	7.12
ER - WR 765 kV Dharamjaygarh - Jharsuguda D/C	476.40	476.40
ER - WR 400 kV Sipat - Ranchi D/C	0.00	0.00
ER - WR 400 kV Raigarh - Sterlite	71.10	71.10
ER - WR 400 kV Raigarh-Ind Bharat	1.90	1.90
ER - WR 400 kV Raigarh-Rourkela	0.12	0.12
ER - WR 400 kV Raigarh - Jharsuguda	2.83	2.83
ER - WR 220 kV Korba - Budhipadar D/C	0.00	0.00
ER - WR 220 kV Raigarh - Budhipadar	9.20	9.20
Total ER - WR	568.67	568.67
Export of ER to NER (ER - NER)		
ER - NER 400 kV Binaguri - Bongaigaon 2xD/C	351.64	351.64
ER - NER 220 kV Birpara - Salakati D/C	37.77	37.77
Total ER - NER	389.41	389.41
Import of ER from NER (NER - ER)		
NER - ER 400 kV Binaguri - Bongaigaon 2xD/C	0.00	0.00
NER - ER 220 kV Birpara - Salakati D/C	0.00	0.00
Total NER - ER	0.00	0.00
Export of ER to SR (ER - SR)		
ER - SR HVDC Gazuwaka	302.43	302.43
ER - SR HVDC Talchar - Kolar	1309.89	1309.89
Total ER - SR	1612.32	1612.32
Import of ER from SR (SR - ER)		
SR - ER HVDC Gazuwaka	0.00	0.00
SR - ER HVDC Talchar - Kolar	0.00	0.00
Total SR - ER	0.00	0.00
Export of WR to SR (WR-SR)		
WR - SR HVDC Bhadravati	713.62	713.62
WR - SR 765 kV Sholapur - Raichur	1345.88	1345.88
WR - SR 400KV Kolhapur-Kudgi D/C	41.69	41.69
Total WR - SR	2101.18	2101.18
Import of WR from SR (SR - WR)		
SR - WR HVDC Bhadravati	0.00	0.00
SR - WR 765 kV Raichur - Sholapur	0.00	0.00
SR - WR 400KV Kolhapur-Kudgi D/C	14.56	14.56
Total SR - WR	14.56	14.56
TOTAL ALL INDIA	11176	11176

12.1 Import of NR from WR, ER & NER during Apr 2016																									
Date	Import of NR from WR (WR-NR)										Import of NR from ER (ER-NR)											Import of NR from NER (NER-NR)			
	WR - NR 765 kv Gwalior - Agra D/C	WR-NR 765 kv Gwalior-Phagi D/C	WR - NR HVDC V'chal	WR - NR 400 kv Zerde-Kankroli	WR - NR 400 kv Zerde-Bhinmal	WR - NR 220 kv Badod - Kota / Modak	WR - NR 220 kv Auraiya - Matanpur / Mehgaon	WR-NR 400 kv Rihand Vindhyachal	WR - NR HVDC Mundra - M'garh	Total WR - NR	ER - NR 765 kv Sasaram - Fatehpur	ER - NR 765 kv Gaya - Varanasi 2½/C	ER - WR 765 kv Gaya Ballia	ER-NR 400 kv Patna - Ballia 2x/D/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 400 kv B'shariff - Varanasi 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 ER - NR	NER-NR HVDC Biswanath Chariali - Agra	Total NER-NR
1-Apr-16	70.00	21.36	6.01	0.00	0.00	0.00	0.90	0.00	60.74	159.02	0.00	1.85	3.85	9.41	4.79	5.78	6.68	0.00	6.02	3.54	0.00	0.00	41.93	0.15	0.15
2-Apr-16	65.38	18.33	6.04	0.00	0.00	0.13	0.38	0.00	60.44	150.70	0.00	1.11	3.31	7.84	0.00	3.47	6.60	0.00	6.17	0.00	0.00	0.00	28.49	11.63	11.63
3-Apr-16	68.71	20.43	5.32	0.00	0.00	0.00	0.39	0.00	60.44	155.29	0.00	1.03	3.49	2.30	0.00	3.52	4.33	0.00	5.96	1.48	0.00	0.00	22.10	11.50	11.50
4-Apr-16	69.14	19.63	6.03	0.00	0.00	0.31	0.00	0.00	60.45	155.55	0.00	1.06	3.37	2.28	0.00	3.10	3.83	0.00	6.17	3.88	0.48	0.00	24.16	11.63	11.63
5-Apr-16	63.21	16.64	3.37	0.00	0.00	0.00	0.25	0.00	60.45	143.91	0.00	0.00	2.40	4.84	0.00	1.69	6.25	0.00	6.04	3.85	0.96	0.00	26.04	11.57	11.57
6-Apr-16	59.66	16.63	1.47	0.00	0.00	0.00	0.00	0.00	60.45	138.20	0.00	0.85	2.68	3.56	0.00	1.44	3.02	0.00	5.08	4.03	0.96	0.00	21.61	11.58	11.58
7-Apr-16	61.71	16.62	2.21	0.00	0.00	0.00	0.00	0.00	60.45	140.98	0.00	0.00	3.21	5.96	0.88	2.12	4.05	0.00	4.04	4.00	0.00	0.00	24.25	9.24	9.24
8-Apr-16	62.99	18.47	3.25	0.00	0.00	0.07	0.00	0.00	60.45	145.23	0.00	0.15	3.43	6.69	1.82	3.01	4.32	0.00	1.55	3.88	0.00	0.00	24.85	11.65	11.65
9-Apr-16	63.00	21.54	3.04	0.00	0.00	0.00	0.00	0.00	53.82	141.40	0.00	2.91	3.35	6.86	2.44	2.63	4.38	0.00	4.14	3.91	0.00	0.00	30.61	11.70	11.70
10-Apr-16	60.91	17.37	1.36	0.00	0.00	0.00	0.00	0.00	59.36	139.00	0.00	2.91	3.34	3.77	2.11	2.83	3.75	0.00	4.84	4.00	0.48	0.00	28.03	11.48	11.48
11-Apr-16	61.70	18.44	6.03	0.00	0.00	0.10	0.00	0.00	59.95	137.22	0.00	2.00	3.84	1.89	3.25	3.69	3.00	0.00	4.81	4.19	0.96	0.00	27.61	11.63	11.63
12-Apr-16	59.16	21.47	3.92	0.00	0.00	0.00	0.00	0.00	53.20	137.75	0.00	6.96	3.71	6.44	4.47	4.11	3.90	0.00	4.84	3.77	0.96	0.00	39.16	11.64	11.64
13-Apr-16	57.88	19.91	2.08	0.00	0.00	0.00	0.00	0.00	53.20	133.07	0.00	7.82	3.77	8.88	3.27	3.66	6.86	0.00	4.84	3.76	0.96	0.00	43.80	10.07	10.07
14-Apr-16	61.71	18.23	4.00	0.00	0.00	0.00	0.00	0.00	60.01	143.95	0.00	5.39	3.76	8.48	2.39	4.61	8.50	0.00	1.59	3.92	0.00	0.00	38.64	11.81	11.81
15-Apr-16	62.38	19.44	6.03	0.00	0.00	0.00	0.00	0.00	60.45	148.29	0.00	4.58	3.94	8.77	2.26	4.85	8.31	0.00	0.50	4.42	0.00	0.00	37.63	11.79	11.79
16-Apr-16	59.60	20.47	6.03	0.00	0.00	0.00	0.00	0.00	60.45	146.55	0.00	9.88	3.43	6.56	0.00	3.13	8.23	0.00	7.14	4.35	0.96	0.00	43.67	5.87	5.87
17-Apr-16	54.73	20.92	2.54	0.00	0.00	0.00	0.00	0.00	55.69	133.87	0.00	61.96	3.00	10.19	3.58	3.35	9.27	0.00	7.27	4.07	0.96	0.00	103.64	1.57	1.57
18-Apr-16	54.90	24.10	1.20	0.00	0.00	0.00	0.00	0.00	60.02	140.22	0.00	6.25	2.74	10.98	3.40	2.57	10.81	0.00	5.20	4.00	0.96	0.00	46.92	11.83	11.83
19-Apr-16	59.18	18.52	1.35	0.00	0.00	0.00	0.00	0.00	60.46	139.50	0.00	6.22	2.73	12.56	3.81	2.71	10.43	6.34	1.10	4.09	0.00	0.00	49.98	11.09	11.09
20-Apr-16	57.08	17.31	6.00	0.00	0.00	0.00	0.00	0.00	60.45	140.84	0.00	4.68	2.17	12.08	1.84	1.75	10.47	0.00	1.29	4.00	0.00	0.00	38.29	11.31	11.31
21-Apr-16	56.52	18.14	6.04	0.00	0.00	0.35	0.00	0.00	48.89	129.94	0.23	5.65	2.37	9.57	4.54	3.09	9.00	0.00	1.96	3.85	0.00	0.00	40.26	10.00	10.00
22-Apr-16	61.69	16.83	3.37	0.00	0.00	0.49	0.00	0.00	56.69	139.08	0.00	5.65	2.25	9.19	2.90	2.65	8.43	0.00	2.42	3.82	0.96	0.00	38.29	11.59	11.59
23-Apr-16	63.63	16.74	2.23	0.00	0.00	0.55	0.00	0.00	54.64	137.78	0.00	0.99	2.12	10.02	2.36	1.13	10.37	0.00	2.43	4.07	1.44	0.00	34.93	11.63	11.63
24-Apr-16	62.54	16.03	2.23	0.00	0.00	0.50	0.00	0.00	54.55	135.85	0.00	0.99	2.08	10.22	2.36	1.58	10.37	0.00	2.44	3.97	1.44	0.00	35.46	11.63	11.63
25-Apr-16	64.29	17.80	6.04	0.00	0.00	0.00	0.00	0.00	60.45	148.59	0.00	1.00	2.89	14.09	0.41	3.23	10.77	0.00	2.44	3.90	0.00	0.00	38.72	11.99	11.99
26-Apr-16	71.69	16.53	6.03	0.00	0.00	0.00	0.26	0.00	60.45	154.96	0.00	0.77	3.64	11.14	0.00	4.43	8.49	0.00	2.48	3.71	0.00	0.00	34.65	11.51	11.51
27-Apr-16	74.46	18.43	6.06	0.00	0.00	0.31	0.35	0.00	50.86	150.46	0.00	2.28	4.04	8.63	0.00	5.29	6.97	0.00	3.15	1.81	0.00	0.00	32.16	11.61	11.61
28-Apr-16	77.79	22.23	6.04	0.00	0.53	1.21	0.42	0.00	35.02	143.24	0.00	0.00	3.85	7.96	0.00	4.27	6.90	2.96	7.19	0.57	0.48	0.00	34.17	11.69	11.69
29-Apr-16	72.56	18.49	6.03	0.00	0.00	1.23	0.05	0.00	58.31	156.67	0.00	10.70	2.44	4.33	0.00	0.96	6.66	0.00	7.39	4.04	0.48	0.00	37.00	11.69	11.69
30-Apr-16	72.14	17.36	5.69	0.00	0.00	0.47	0.00	0.00	60.44	156.10	0.00	0.00	3.25	6.55	0.00	3.46	5.95	0.00	8.52	3.96	0.96	0.00	32.65	12.97	12.97
Total	1910.35	564.39	127.02	0.00	0.53	5.71	3.00	0.00	1712.21	4323.20	0.23	155.61	94.45	232.02	52.88	94.07	210.89	9.30	128.99	106.82	14.40	0.00	1099.66	317.02	317.02

Date	12.2 Export of NR to WR, ER & NER during Apr 2016																								
	Export of NR to WR (NR- WR)										Export of NR to ER (NR- ER)													Export of NR to NER (NR- NER)	
	WR - NR 765 kV Gwalior - Agra D/C	WR-NR 765 kV Gwalior-Phagi D/C	WR - NR HVDC V'chal	WR - NR 400 kV Zerde-Kankroll	WR - NR 400 kV Zerde-Bhinmal	WR - NR 220 kV Badod - Kota / Modak	WR - NR 220 kV Auraiya - Malanpur / Mehaon	WR-NR 400 kV Rihand-Vindhyachal	WR - NR HVDC Mundra - M'garh	Total NR - WR	ER - NR 765 kV Sasaram - Fatehpur	ER - NR 765 kV Gaya - Varanasi 2'S/C	ER - NR 765 kV Gaya Balla	ER-NR 400 kV Patna - Balla 2x0/C	ER - NR 400 kV Muzaffarpur - G'pur D/C	ER - NR 400 kV B'harh - G'pur D/C	ER - NR 400 kV B'shariff - Varanasi D/C	ER - NR HVDC Sasaram (Bypass)	ER - NR 220 kV Pusaui - Sahupuri	ER - NR 132 kV Sahupuri - K'nasa	ER - NR 132 kV Rihand - Son Nagar	Total NR - ER	NER-NR HVDC Biswanath Chariali - Agra	Total NR-NER	
1-Apr-16	0.00	0.00	0.00	1.92	0.43	0.56	0.00	0.00	0.00	2.91	2.09	0.00	0.00	0.00	0.00	0.00	2.01	0.00	0.00	0.00	0.59	4.69	0.00	0.00	
2-Apr-16	0.00	0.00	0.00	5.58	2.96	0.00	0.00	0.00	0.00	8.54	4.78	0.00	0.00	0.00	0.67	0.00	0.00	4.19	0.00	0.00	0.50	10.14	0.00	0.00	
3-Apr-16	0.00	0.00	0.14	3.96	3.21	0.34	0.00	0.00	0.00	7.66	6.16	0.00	0.00	0.00	0.35	0.00	0.00	4.28	0.00	0.00	0.46	11.25	0.00	0.00	
4-Apr-16	0.00	0.00	0.00	2.26	0.94	0.00	0.11	0.00	0.00	3.31	6.77	0.00	0.00	0.00	0.64	0.00	0.00	6.11	0.00	0.00	0.51	14.03	0.00	0.00	
5-Apr-16	0.00	0.00	0.00	3.57	2.31	0.26	0.00	0.00	0.00	6.14	6.00	0.00	0.00	0.00	1.06	0.00	0.00	4.95	0.00	0.00	0.57	12.57	0.00	0.00	
6-Apr-16	0.00	0.00	3.65	4.10	2.66	0.77	0.89	0.00	0.00	12.07	2.84	0.00	0.00	0.00	0.57	0.00	0.00	4.95	0.00	0.00	0.56	8.93	0.00	0.00	
7-Apr-16	0.00	0.00	0.21	3.22	1.76	0.55	1.00	0.00	0.00	6.74	3.68	0.00	0.00	0.00	0.00	0.00	4.85	0.00	0.00	0.61	9.14	0.00	0.00		
8-Apr-16	0.00	0.00	0.00	2.46	0.76	0.00	1.56	0.00	0.00	4.79	0.01	0.00	0.00	0.00	0.00	0.00	2.44	3.72	0.00	0.00	0.59	6.76	0.00	0.00	
9-Apr-16	0.00	0.00	0.00	2.21	3.51	0.43	1.54	0.00	0.00	7.68	2.21	0.00	0.00	0.00	0.00	0.00	3.13	0.00	0.00	0.68	6.01	0.00	0.00		
10-Apr-16	0.00	0.00	4.24	5.40	3.85	0.46	1.09	0.00	0.00	15.05	4.23	0.00	0.00	0.00	0.00	0.00	5.01	0.00	0.00	0.56	9.80	0.00	0.00		
11-Apr-16	0.00	0.00	0.00	3.87	2.34	0.00	0.19	0.00	0.00	6.40	3.50	0.00	0.00	0.00	0.00	0.00	3.50	0.00	0.00	0.55	7.55	0.00	0.00		
12-Apr-16	0.00	0.00	0.00	3.42	1.68	0.11	0.12	0.00	0.00	5.33	1.70	0.00	0.00	0.00	0.00	0.00	1.72	0.00	0.00	0.56	3.98	0.00	0.00		
13-Apr-16	0.00	0.00	0.00	4.61	3.03	0.69	1.09	0.00	0.00	9.41	1.57	0.00	0.00	0.00	0.00	0.00	1.83	0.00	0.00	0.50	3.90	0.00	0.00		
14-Apr-16	0.00	0.00	0.00	5.81	4.51	1.31	1.11	0.00	0.00	12.73	1.62	0.00	0.00	0.00	0.00	0.00	2.45	0.00	0.00	0.54	4.61	0.00	0.00		
15-Apr-16	0.00	0.00	0.00	5.83	4.43	0.81	0.56	0.00	0.00	11.62	1.78	0.00	0.00	0.00	0.00	0.00	2.56	0.00	0.00	0.39	4.73	0.00	0.00		
16-Apr-16	0.00	0.00	0.00	7.22	5.95	1.30	1.24	0.00	0.00	15.71	4.04	0.00	0.00	0.00	2.33	0.00	0.00	2.69	0.00	0.00	0.51	9.58	0.00	0.00	
17-Apr-16	0.00	0.00	1.66	7.41	5.96	1.57	1.19	0.00	0.00	17.79	3.39	0.00	0.00	0.00	0.00	0.00	63.47	0.00	0.00	0.54	67.40	0.00	0.00		
18-Apr-16	0.00	0.00	0.00	7.95	6.05	1.39	1.26	0.00	0.00	16.65	2.71	0.00	0.00	0.00	0.00	0.00	6.37	0.00	0.00	0.54	9.63	0.00	0.00		
19-Apr-16	0.00	0.00	1.65	6.77	4.90	0.56	1.07	0.00	0.00	14.96	1.12	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.53	1.65	0.00	0.00		
20-Apr-16	0.00	0.00	0.00	6.52	4.41	0.76	1.32	0.00	0.00	13.01	0.27	0.00	0.00	0.00	0.00	0.00	1.56	0.00	0.00	0.49	2.32	0.00	0.00		
21-Apr-16	0.00	0.00	0.00	4.86	3.00	0.00	0.64	0.00	0.00	8.49	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.54	0.88	0.00	0.00		
22-Apr-16	0.00	0.00	0.48	5.61	4.01	0.00	0.33	0.00	0.00	10.43	2.66	1.09	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.60	4.69	0.00	0.00		
23-Apr-16	0.00	0.00	0.18	4.58	2.61	0.00	0.28	0.00	0.00	7.65	2.20	0.00	0.00	0.00	0.00	0.00	3.24	0.00	0.00	0.56	6.00	0.00	0.00		
24-Apr-16	0.00	0.00	0.18	3.91	1.94	0.00	0.14	0.00	0.00	6.17	2.20	0.00	0.00	0.00	0.00	0.00	3.24	0.00	0.00	0.59	6.03	0.00	0.00		
25-Apr-16	0.00	0.00	0.00	6.02	4.20	0.12	0.13	0.00	0.00	10.47	2.78	0.00	0.00	0.00	0.00	0.00	3.41	0.00	0.00	0.53	6.73	0.00	0.00		
26-Apr-16	0.00	0.00	0.00	5.45	3.73	0.40	0.00	0.00	0.00	9.58	3.68	0.00	0.00	0.18	0.00	0.00	3.32	0.00	0.00	0.54	7.71	0.00	0.00		
27-Apr-16	0.00	0.00	0.00	4.00	2.41	0.00	0.35	0.00	0.00	6.75	3.27	0.00	0.00	0.00	0.47	0.00	0.00	3.21	0.00	0.00	0.56	7.51	0.00	0.00	
28-Apr-16	0.00	0.00	0.00	1.31	0.00	0.00	0.00	0.00	0.00	1.31	5.29	0.93	0.00	0.00	1.06	0.00	0.00	0.00	0.00	0.52	7.80	0.00	0.00		
29-Apr-16	0.00	0.00	0.00	3.44	1.54	0.00	0.00	0.00	0.00	4.97	6.34	0.00	0.00	0.00	2.39	0.00	0.00	6.38	0.00	0.00	0.55	15.66	0.00	0.00	
30-Apr-16	0.00	0.00	0.00	4.43	2.49	0.00	0.19	0.00	0.00	7.12	7.81	0.33	0.00	0.00	2.67	0.00	0.00	6.25	0.00	0.00	0.49	17.55	0.00	0.00	
Total	0.00	0.00	12.39	137.71	91.55	12.38	17.40	0.00	0.00	271.43	96.68	2.36	0.00	0.00	12.38	0.00	0.00	157.78	3.72	0.00	16.28	289.20	0.00	0.00	

Date	12.3 Import - Export of ER with WR & NER during Apr 2016																														
	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 765 kV Dharamjygarh - Jharsuguda	WR - ER 400 kV Sipat - Ranchi D/C	WR - ER 400 kV Raigarh - Sterlite	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 765 kV Dharamjygarh - Jharsuguda	ER - WR 400 kV Sipat - Ranchi D/C	ER - WR 400 kV Raigarh - Sterlite	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 Geyegghu - Salakati	ER - NER 132 kV Deothan - g-Rangia	ER - NER 400 kV Binaguri - Bongaigaon 2x2D/C	ER - NER 220 kV Birpara - Salakati D/C	Total ER - NER	ER - NER 132 kV Geyegghu - Salakati	ER - NER 132 kV Deothan - g-Rangia	NER - ER 400 kV Binaguri - Bongaigaon 2x2D/C	NER - ER 220 kV Birpara - Salakati D/C	Total NER - ER	
1-Apr-16	0.8	0.0	4.6	0.2	0.0	0.0	0.0	3.3	0.00	8.91	0.0	10.8	0.0	0.0	1.0	0.1	1.4	0.0	0.5	13.71	0.00	0.00	3.40	0.20	3.60	0.22	0.00	0.00	0.00	0.00	0.22
2-Apr-16	4.5	0.0	6.8	0.8	0.0	0.7	0.0	3.2	0.00	15.95	0.0	7.0	0.0	0.0	0.6	0.0	0.9	0.0	0.7	9.16	0.00	0.00	16.44	1.98	18.42	0.03	0.00	0.00	0.00	0.00	0.03
3-Apr-16	6.0	0.0	7.6	1.0	0.0	1.1	0.0	3.2	0.00	19.00	0.0	8.0	0.0	0.0	0.3	0.0	0.5	0.0	0.5	9.35	0.17	0.00	17.18	2.03	19.39	0.00	0.00	0.00	0.00	0.00	0.00
4-Apr-16	5.5	0.0	7.6	1.5	0.4	1.6	0.5	1.5	0.00	18.61	0.0	11.4	0.0	0.0	0.0	0.0	0.0	0.0	1.8	13.16	0.15	0.14	16.96	1.66	18.90	0.00	0.00	0.00	0.00	0.00	0.00
5-Apr-16	5.6	0.0	8.5	2.6	1.9	2.8	2.7	1.6	0.00	25.67	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	9.17	0.02	0.48	12.81	1.34	14.66	0.00	0.00	0.00	0.00	0.00	0.00
6-Apr-16	4.1	0.0	6.5	3.3	3.2	3.6	4.5	2.9	0.49	28.54	0.0	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.95	0.00	0.25	10.49	1.21	11.95	0.19	0.00	0.00	0.00	0.00	0.19
7-Apr-16	1.3	0.0	5.4	0.0	3.7	3.6	5.2	2.8	0.12	22.12	0.0	13.7	0.0	1.8	0.0	0.0	0.0	0.0	0.0	15.51	0.00	0.18	9.41	0.99	10.58	0.40	0.00	0.00	0.00	0.00	0.40
8-Apr-16	2.1	0.0	6.7	0.0	3.2	3.1	4.5	2.6	0.00	22.27	0.0	13.5	0.0	3.2	0.0	0.0	0.0	0.0	0.0	16.73	0.00	0.30	9.25	0.97	10.52	0.42	0.00	0.00	0.00	0.00	0.42
9-Apr-16	1.9	0.0	5.6	0.0	1.8	1.6	2.4	2.1	0.00	15.30	0.0	23.1	0.0	4.5	0.0	0.0	0.0	0.0	0.5	28.08	0.00	0.22	13.36	1.51	15.09	0.51	0.00	0.00	0.00	0.00	0.51
10-Apr-16	1.4	0.0	4.7	0.0	1.6	1.3	2.1	1.8	0.00	12.87	0.0	21.9	0.0	4.5	0.0	0.0	0.0	0.0	0.7	27.08	0.00	0.38	13.40	1.33	15.12	0.41	0.00	0.00	0.00	0.00	0.41
11-Apr-16	0.5	0.0	5.1	0.0	2.5	2.0	3.4	1.6	0.00	15.01	0.0	23.3	0.0	4.2	0.0	0.0	0.0	0.0	0.7	28.14	0.00	0.39	15.14	1.47	17.00	0.27	0.00	0.00	0.00	0.00	0.27
12-Apr-16	0.0	0.0	3.7	0.0	2.7	2.0	3.8	2.1	0.00	14.23	1.8	21.5	0.0	4.1	0.0	0.0	0.0	0.0	0.0	27.38	0.00	0.46	12.61	1.29	14.36	0.33	0.00	0.00	0.00	0.00	0.33
13-Apr-16	0.0	0.0	3.9	0.0	2.3	1.5	3.2	2.2	0.00	13.19	1.9	22.2	0.0	4.4	0.0	0.0	0.0	0.0	0.3	28.77	0.00	0.45	12.88	1.54	14.86	0.23	0.00	0.00	0.00	0.00	0.23
14-Apr-16	0.3	0.0	2.6	0.0	2.3	1.7	3.2	2.1	0.00	12.16	0.0	22.6	0.0	4.3	0.0	0.0	0.0	0.0	0.4	27.27	0.00	0.24	12.31	1.33	13.88	0.24	0.00	0.00	0.00	0.00	0.24
15-Apr-16	0.0	0.0	4.5	0.0	1.8	1.3	2.4	2.2	0.00	12.12	0.1	22.8	0.0	4.7	0.0	0.0	0.0	0.0	0.4	27.98	0.00	0.32	10.28	0.96	11.57	0.00	0.00	0.00	0.00	0.00	0.00
16-Apr-16	0.0	0.0	4.5	0.0	2.0	1.5	2.7	2.6	0.00	13.28	0.2	20.7	0.0	4.5	0.0	0.0	0.0	0.0	0.0	25.45	0.07	0.30	9.68	0.93	10.98	0.00	0.00	0.00	0.00	0.00	0.00
17-Apr-16	0.0	0.0	4.0	0.0	2.1	1.7	2.9	2.9	0.04	13.63	0.6	17.9	0.0	3.6	0.0	0.0	0.0	0.0	0.0	22.12	0.01	0.33	4.62	0.61	5.56	0.00	0.00	0.00	0.00	0.00	0.00
18-Apr-16	0.0	0.0	4.3	0.0	2.6	2.1	3.6	2.6	0.28	15.57	0.3	18.9	0.0	3.8	0.0	0.0	0.0	0.0	0.0	22.98	0.00	0.37	12.24	1.42	14.03	0.03	0.00	0.00	0.00	0.00	0.03
19-Apr-16	0.0	0.0	4.0	0.0	2.2	1.5	3.0	4.0	1.09	15.82	0.5	20.9	0.0	4.3	0.0	0.0	0.0	0.0	0.0	25.75	0.08	0.46	7.25	0.90	8.69	0.00	0.00	0.00	0.00	0.00	0.00
20-Apr-16	0.0	0.0	3.6	0.0	2.1	1.6	2.9	3.3	0.26	13.69	1.1	20.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23.29	0.04	0.44	9.26	1.03	10.77	0.00	0.00	0.00	0.00	0.00	0.00
21-Apr-16	0.0	0.0	3.6	0.0	2.3	2.0	3.1	4.4	1.82	17.18	0.6	12.9	0.0	1.9	0.0	0.0	0.0	0.0	0.0	15.36	0.07	0.58	2.09	0.35	3.09	0.00	0.00	0.00	0.00	0.00	0.00
22-Apr-16	1.4	0.0	5.1	0.0	1.3	1.6	2.0	3.0	0.43	14.78	0.0	12.2	0.0	2.2	0.0	0.0	0.0	0.0	0.0	14.41	0.09	0.51	3.15	0.57	4.32	0.00	0.00	0.00	0.00	0.00	0.00
23-Apr-16	1.1	0.0	5.7	0.0	0.4	1.2	1.6	2.3	0.00	12.30	0.0	14.8	0.0	2.4	0.0	0.0	0.0	0.0	0.4	17.56	0.15	0.74	9.06	1.14	11.09	0.00	0.00	0.00	0.00	0.00	0.00
24-Apr-16	0.8	0.0	5.0	0.0	0.5	0.8	1.0	2.4	0.00	10.48	0.0	14.5	0.0	2.1	0.0	0.0	0.0	0.0	0.7	17.33	0.14	0.49	11.64	1.58	13.84	0.00	0.00	0.00	0.00	0.00	0.00
25-Apr-16	1.1	0.0	5.8	0.0	1.4	1.3	1.9	2.7	0.02	14.21	0.0	11.9	0.0	2.7	0.0	0.0	0.0	0.0	0.0	14.64	0.15	0.55	14.00	1.75	16.44	0.00	0.00	0.00	0.00	0.00	0.00
26-Apr-16	2.6	0.0	6.6	0.0	1.9	2.0	2.7	2.3	0.32	18.44	0.0	12.2	0.0	1.7	0.0	0.0	0.0	0.0	0.0	13.84	0.00	0.46	15.25	1.31	17.01	0.00	0.00	0.00	0.00	0.00	0.00
27-Apr-16	3.6	0.0	6.1	0.0	1.4	1.6	2.0	2.0	0.00	16.72	0.0	17.7	0.0	2.2	0.0	0.0	0.0	0.0	0.3	20.29	0.00	0.41	15.82	1.16	17.39	0.04	0.00	0.00	0.00	0.00	0.04
28-Apr-16	4.5	0.0	7.0	0.0	2.6	2.7	3.6	2.3	0.00	22.70	0.0	17.1	0.0	1.9	0.0	0.0	0.0	0.0	0.1	19.09	0.00	0.46	17.61	1.63	19.70	0.00	0.00	0.00	0.00	0.00	0.00
29-Apr-16	4.1	0.0	6.6	2.5	2.2	2.7	3.1	2.9	0.21	24.29	0.0	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.80	0.05	0.44	15.78	1.62	17.89	0.00	0.00	0.00	0.00	0.00	0.00
30-Apr-16	5.3	0.0	8.4	2.7	2.2	3.0	3.1	2.6	0.12	27.46	0.0	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.33	0.11	0.47	18.25	1.98	20.82	0.00	0.00	0.00	0.00	0.00	0.00
Total	58.51	0.00	163.93	14.64	54.26	55.15	77.26	77.56	5.19	506.50	7.12	476.40	0.00	71.10	1.90	0.12	2.83	0.00	9.20	568.67	1.31	10.82	351.64	37.77	401.54	3.32	0.00	0.00	0.00	0.00	3.32

Date	12.4 Import and Export of SR with ER & WR during Apr 2016													
	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	WR-SR 400KV Kolhapur-Kudgi D/C	Total WR - SR	SR - WR HVDC Bhadrawati	SR - WR 765 kV Raichur - Sholapur	SR-WR 400KV Kolhapur-Kudgi D/C	Total SR - WR
1-Apr-16	9.9	43.5	53.42	0.00	0.00	0.00	23.85	45.80	1.47	71.12	0.00	0.00	1.27	1.27
2-Apr-16	12.3	43.2	55.47	0.00	0.00	0.00	23.88	37.63	0.79	62.30	0.00	0.00	1.81	1.81
3-Apr-16	10.5	40.2	50.72	0.00	0.00	0.00	23.92	40.66	0.75	65.33	0.00	0.00	0.30	0.30
4-Apr-16	10.2	44.6	54.79	0.00	0.00	0.00	23.89	42.67	0.52	67.08	0.00	0.00	0.92	0.92
5-Apr-16	14.0	48.0	62.07	0.00	0.00	0.00	23.64	48.18	0.28	72.11	0.00	0.00	0.88	0.88
6-Apr-16	13.2	47.3	60.49	0.00	0.00	0.00	23.80	45.33	0.03	69.16	0.00	0.00	1.62	1.62
7-Apr-16	12.2	47.1	59.37	0.00	0.00	0.00	23.89	47.33	0.04	71.26	0.00	0.00	1.72	1.72
8-Apr-16	12.2	46.5	58.72	0.00	0.00	0.00	23.93	41.07	0.51	65.51	0.00	0.00	0.60	0.60
9-Apr-16	12.2	39.5	51.70	0.00	0.00	0.00	23.02	39.69	0.97	63.69	0.00	0.00	0.22	0.22
10-Apr-16	11.1	39.4	50.53	0.00	0.00	0.00	23.11	43.17	1.53	67.81	0.00	0.00	0.01	0.01
11-Apr-16	7.9	47.2	55.05	0.00	0.00	0.00	23.88	50.57	0.99	75.44	0.00	0.00	0.22	0.22
12-Apr-16	13.0	49.4	62.46	0.00	0.00	0.00	23.89	50.89	2.31	77.09	0.00	0.00	0.06	0.06
13-Apr-16	13.6	48.8	62.41	0.00	0.00	0.00	23.87	50.24	1.34	75.44	0.00	0.00	0.14	0.14
14-Apr-16	14.1	39.5	53.64	0.00	0.00	0.00	23.89	51.52	2.15	77.56	0.00	0.00	0.23	0.23
15-Apr-16	12.4	40.7	53.07	0.00	0.00	0.00	23.89	50.19	1.52	75.60	0.00	0.00	0.12	0.12
16-Apr-16	12.9	43.1	56.01	0.00	0.00	0.00	23.88	50.27	3.13	77.28	0.00	0.00	0.01	0.01
17-Apr-16	13.9	46.4	60.33	0.00	0.00	0.00	23.91	43.14	2.07	69.12	0.00	0.00	0.05	0.05
18-Apr-16	12.4	47.6	59.97	0.00	0.00	0.00	23.84	42.96	1.74	68.53	0.00	0.00	0.05	0.05
19-Apr-16	12.5	42.6	55.11	0.00	0.00	0.00	23.84	46.13	2.63	72.60	0.00	0.00	0.01	0.01
20-Apr-16	13.6	45.3	58.94	0.00	0.00	0.00	23.83	54.14	3.22	81.20	0.00	0.00	0.04	0.04
21-Apr-16	16.0	47.6	63.65	0.00	0.00	0.00	23.90	49.91	2.06	75.87	0.00	0.00	0.04	0.04
22-Apr-16	13.3	47.4	60.75	0.00	0.00	0.00	23.91	50.18	2.08	76.16	0.00	0.00	0.00	0.00
23-Apr-16	3.0	47.1	50.13	0.00	0.00	0.00	23.91	50.91	1.76	76.58	0.00	0.00	0.10	0.10
24-Apr-16	3.6	45.4	49.02	0.00	0.00	0.00	23.91	49.59	3.11	76.61	0.00	0.00	0.01	0.01
25-Apr-16	3.1	42.1	45.14	0.00	0.00	0.00	23.40	37.18	0.62	61.21	0.00	0.00	0.37	0.37
26-Apr-16	1.6	39.0	40.55	0.00	0.00	0.00	23.90	37.29	0.99	62.19	0.00	0.00	0.82	0.82
27-Apr-16	0.0	32.9	32.95	0.00	0.00	0.00	23.90	39.12	0.61	63.63	0.00	0.00	0.79	0.79
28-Apr-16	0.8	39.5	40.32	0.00	0.00	0.00	23.91	42.64	1.41	67.95	0.00	0.00	0.48	0.48
29-Apr-16	8.8	41.7	50.51	0.00	0.00	0.00	23.90	31.41	0.25	55.56	0.00	0.00	1.17	1.17
30-Apr-16	7.9	37.1	45.05	0.00	0.00	0.00	23.35	36.06	0.77	60.18	0.00	0.00	0.51	0.51
Total	302.43	1309.89	1612.32	0.00	0.00	0.00	713.62	1345.88	41.69	2059.50	0.00	0.00	14.56	14.56

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

अप्रैल 2016 से मार्च 2017 April 2016 to March 2017

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 2016 APR'16	150.05	-196.98	-361.40
कुल Total	150.05	-196.98	-361.40

14. एसटीओए (द्विपक्षीय एवं सामूहिक) एवं डी एस एम बिलिंग का ब्योरा – माह अप्रैल 2016
STOA (BILATERAL AND COLLECTIVE) & DSM BILLING DETAILS- APR 2016

द्विपक्षीय एसटीओए BILATERAL SHORT TERM OPEN ACCESS

अप्रैल 2016 Apr 2016			April'16	
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	486	840	486	840
प.क्षे. WR	641	1008	641	1008
द.क्षे. SR	288	1183	288	1183
पू.क्षे. ER	207	1420	207	1420
पूर्वोत्तर क्षे. NER	53	122	53	122
कुल TOTAL	1675	4573	1675	4573

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 2016 Apr'16	2923	3501	1675	4573
कुल TOTAL	2923	3501	1675	4573

मासिक डी एस एम बिलिंग का ब्योरा 2016-17
 MONTHLY DSM BILLING DETAILS 2016-17

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
28.03.16 to 03.04.16	48.07	37.62	10.20	26.07	9.97
04.04.16 to 10.04.16	45.17	35.57	15.88	46.21	20.28
11.04.16 to 17.04.16	32.60	20.20	12.18	26.84	18.55
18.04.16 to 24.04.16	32.17	24.71	8.58	31.45	17.65
25.04.16 to 01.05.16	50.29	36.54	22.37	45.46	25.28

15. पावर मार्केट की सूचना (स्रोत : आई.ई.एक्स. एवं पी.एक्स.आई.एल.)
POWER MARKET INFORMATION (Source IEX & PXIL)
पावर एक्सचेंज के माध्यम से विनिमय - माह अप्रैल 2016
EXCHANGES THROUGH POWER EXCHANGES - April 2016

क्र. स. S. No.	क्षेत्रीय इकाई Regional Entity	क्षेत्र Region	पावर एक्सचेंज के माध्यम से (मि.यु. मे) Through Power Exchange in MU	
			विक्रय Sale	क्रय Purchase
1	पंजाब Punjab	उत्तरी क्षेत्र NR	91.24	171.91
2	हरियाणा Haryana		150.94	216.29
3	राजस्थान Rajasthan		128.81	388.28
4	दिल्ली Delhi		55.63	80.52
5	उत्तर प्रदेश Uttar Pradesh		0.00	166.05
6	उत्तराखण्ड Uttarakhand		0.00	209.17
7	हिमाचल प्रदेश Himachal Pradesh		90.36	65.97
8	जम्मू और कश्मीर J & K		13.84	37.34
9	केंद्र शासित चंडीगढ़ UT Chandigarh		2.00	9.27
10	ए डी हाइड्रो AD Hydro		24.19	0.00
11	करचम वांगतू KW		57.24	0.00
12	श्री सीमेंट Shree Cement		46.43	0.00
13	नाथपा झाकरी Nathpa Jhakri		13.66	0.00
14	बैरासूल Baira Siul HEP(BS0)		2.23	0.00
15	चमेरा -1 Chamera-I HEP(CM1)		3.34	0.00
16	चमेरा -2 Chamera-II HEP(CM2)		2.68	0.00
17	धौलीगंगा Dhauliganga HEP(DG0)		1.10	0.00
18	दुलहस्ती Dulahasti HEP(DU0)		5.82	0.00
19	सलाल Salal HEP(SL0)		7.95	0.00
20	सेवा -2 Sewa-II NHP(SW2)		1.79	0.00
21	टनकपुर Tanakpur HEP(TP0)		0.12	0.00
22	उरी Uri HEP(UR0)		9.44	0.00
23	लांको बुधिल LANCO Budhil		1.47	0.00
24	चमेरा-3 chamera 3		1.76	0.00
25	अदानी एचवीडीसी ADANI HVDC(NORGUO)		0.00	0.00
26	मलाना MALANA		1.60	0.00
27	उरी-II Uri-II HEP(UR2)		5.28	0.00
28	पार्वती-III Parbati-II		0.71	0.00
29	मध्य प्रदेश MP	पश्चिमी क्षेत्र WR	323.99	13.89
30	महाराष्ट्र Maharashtra		81.21	176.70
31	गुजरात Gujarat		98.04	395.12
32	छत्तीसगढ़ Chattisgarh		55.22	18.69
33	गोवा Goa		3.47	8.65
34	दमन और दीव Daman and Diu		0.00	38.57
35	दादरा और नगर हवेली Dadra & Nagar Haveli		0.00	0.00
36	जिंदल JD		182.32	0.00
37	लांको अमरकंटक LANCO AMIK		0.00	0.00
38	आर्यन कोल ACB India Limited		42.77	0.00
39	जिंदल स्टील एंड पावर Jindal Steel and Power Ltd		83.03	0.00
40	बालको -2 Balco-II		89.53	0.00
41	स्टरलाइट Sterlite(w3rse0)		148.45	0.00
42	एमको EMCO		0.00	0.00
43	वन्दना विद्युत VANDANA VIDYUT		0.00	0.00
44	एस्सार पावर ESSAR POWER		0.00	0.00
45	एस्सार स्टील ESSAR STEEL		0.00	309.66
46	के एस के महानदी KSK Mahanadi		0.00	0.00
47	जिंदल स्टेज -II Jindal Stg-II		32.13	0.00
48	कोरबा (प.) Korba(W) Comp. Ltd.		114.91	0.00
49	डी बी पावर D B Power		99.19	0.00
50	धारीवाल Dhariwal		40.55	0.00
51	जे पी निगी Jaypee Nigire		112.54	0.00
52	जी एम आर छत्तीसगढ़ GMR Chhattisgarh		46.72	0.00
53	डी जीईएन मेगा पावर DGEN Mega Power		0.00	0.00
54	एम बी मेगा पावर MB Power		15.81	0.00
55	एपीएल मुंद्रा स्टेज-I APL Mundra Stg-I		0.99	0.00
56	एपीएल मुंद्रा स्टेज-II APL Mundra Stg-II		33.45	0.00
57	एपीएल मुंद्रा स्टेज-III APL Mundra Stg-III		58.49	0.00
58	टोरेंट सुगेन Torrent Sugem		0.00	0.00
59	मारुति कोल Maruti Coal		0.00	0.00
60	स्पेक्ट्रम Spectrum		28.37	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 अप्रैल 2016

EXCHANGES THROUGH POWER EXCHANGES - April 2016

क्र. स. S. No.	क्षेत्रीय इकाई Regional Entity	क्षेत्र Region	पावर एक्स्चेंज के माध्यम से (मि.यु. मे) Through Power Exchange in MU	
			विक्रय Sale	क्रय Purchase
61	आंध्र प्रदेश Andhra Pradesh	दक्षिणी क्षेत्र SR	7.51	237.93
62	कर्नाटक Karnataka		0.00	103.49
63	केरल Kerala		3.80	51.06
64	तमिलनाडु Tamilnadu		0.00	19.06
65	पॉण्डिचेरी Pondicherry		0.00	0.00
66	गोवा Goa		0.00	0.00
67	लाको कॉडापल्ली LANCO KONDPLY		0.00	0.00
68	सिमापुरी SIMHAPURI		25.26	0.00
69	मीनाक्षी MINAXI		125.44	0.00
70	तेलंगाना TELANGANA		22.29	114.80
71	थर्मल पावर टेक Thermal Power Tech		0.99	0.00
72	कोस्टल इनर्जन Coastal Energen		17.10	0.00
73	आइ एल & एफ एस IL&FS		4.15	0.00
74	पश्चिम बंगाल West Bengal		55.42	128.88
75	उड़ीशा Odisha	65.35	11.32	
76	बिहार Bihar	0.00	437.56	
77	झारखंड Jharkhand	0.00	29.15	
78	सिक्किम Sikkim	6.38	0.00	
79	दामोदर घाटी परियोजना DVC	129.40	0.00	
80	स्टरलाइट STERLITE	0.00	0.00	
81	मैथन पावर लिमिटेड Maithon P. Ltd	3.79	0.00	
82	आधुनिक पा. लिमिटेड Adhunik P.Ltd	30.74	0.00	
83	चुजाचैन Chuzachen HEP	25.41	0.00	
84	रंगित Rangit HEP	0.00	0.00	
85	तीस्ता Teesta HEP	0.00	0.00	
86	जीएमआर कमलंगा GMR Kamalanga	19.00	0.00	
87	जिदल आई पी टी एल JIPTL	380.40	0.00	
88	जोरथांग Jorethang	13.43	0.00	
89	अरुणाचल प्रदेश Arunachal Pradesh	0.60	6.11	
90	असम Assam	71.99	32.12	
91	मणिपुर Manipur	11.54	1.71	
92	मेघालय Meghalaya	7.91	6.07	
93	मिजोरम Mizoram	8.46	0.00	
94	नागालैंड Nagaland	0.00	8.27	
95	त्रिपुरा Tripura	23.40	7.14	
96	अगरतला जीटीपीपी Agartala GTPP AGO	6.92	0.00	
97	कोपिली KOPILI KP1	0.01	0.00	
98	असम जीबीपीपी Assam GBPP_KTO	13.50	0.00	
99	लोकटक LOKTAK	0.00	0.00	
100	रंगानदी Ranganadi	8.11	0.00	
101	दोयांग Doyang	0.18	0.00	
102	पलाताना Palatana	0.00	0.00	
103	कोपिली-II Kopili-II	0.61	0.00	
104	खंडोंग Khandong	0.89	0.00	
	कुल Total		3500.78	3500.78

16. RENEWABLE ENERGY CERTIFICATE MECHANISM**MONTH:-April 2016****RE Source & Unit wise break up (01.04.2016-30.04.2016)**

Sr.No	Source Wise	Accreditation		Registration	
		Capacity (MW)	Unit	Capacity (MW)	Unit
1	Wind	28	3	0	0
2	Urban or Municipal Waste	0	0	0	0
3	Solar Thermal	0	0	0	0
4	Solar PV	26	10	12	5
5	Small Hydro	0	0	0	0
6	Others	0	0	0	0
7	Geothermal	0	0	0	0
8	Biomass	0	0	0	0
9	Bio-fuel cogeneration	12	2	4	1
	Total	66	15	16	6

RECs Issued (01.04.2016-30.04.2016)

Sr.No.	Non Solar	Solar	Total
1	180909	134242	315151

Redemption of REC (01.04.2016-30.04.2016)

Sr.No.	Non Solar	Solar	Total
1	224536	31497	256033

16. RENEWABLE ENERGY CERTIFICATE MECHANISM**MONTH:-April 2016****RE Source & Unit wise break up (Apr-16)**

Sr.No	Source Wise	Accreditation		Registration	
		Capacity (MW)	Unit	Capacity (MW)	Unit
1	Wind	28	3	0	0
2	Urban or Municipal Waste	0	0	0	0
3	Solar Thermal	0	0	0	0
4	Solar PV	26	10	12	5
5	Small Hydro	0	0	0	0
6	Others	0	0	0	0
7	Geothermal	0	0	0	0
8	Biomass	0	0	0	0
9	Bio-fuel cogeneration	12	2	4	1
	Total	66.0	15	16	6

RECs Issued (Apr-16)

Sr.No.	Non Solar	Solar	Total
1	180909	134242	315151

Redemption of REC (Apr-16)

Sr.No.	Non Solar	Solar	Total
1	224536	31497	256033

16. RENEWABLE ENERGY CERTIFICATE MECHANISM**MONTH:-April 2016****RE Source & Unit wise break up Since Inception to Apr 16**

Sr.No	Source Wise	Accreditation		Registration	
		Capacity (MW)	Unit	Capacity (MW)	Unit
1	Wind	2457	623	2274	595
2	Urban or Municipal Waste	8	1	0	0
3	Solar Thermal	3	1	0	0
4	Solar PV	674	332	636	314
5	Small Hydro	323	38	300	35
6	Others	2	1	2	1
7	Geothermal	0	0	0	0
8	Biomass	708	75	699	74
9	Bio-fuel cogeneration	965	110	894	104
	Total	5140	1181	4805	1123

RECs Issued since Inception to Apr 16

Sr.No.	Non Solar	Solar	Total
1	27589070	4353476	31942546

Redemption of REC since Inception to Apr 16

Sr.No.	Non Solar	Solar	Total
1	14412020	939769	15351789

REC Closing balance as on 30.04.2016

Sr.No.	Non Solar	Solar	Total
1	13177050	3413707	16590757

17. Major Grid Events for April, 2016

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time					
1	ER	1) 400 kV Meramundali -Mendhasal 2) 400 kV Mendhasal -New Dubri 3) 400 kV Mendhasal - Baripada 4) 2*400/220 ICT flow was zero. 5) 220 kV Meramundali- Bhanjnagar II	OPTCL	01-04-2016	17:15	01-04-2016	18:01	00:46	400 kV Meramundali -Mendhasal tripped due to R-N fault and at the same time 400 kV Mendhasal -New Dubri tripped due to Over voltage protection operated at Mendhasal end.400 kV Mendhasal - Baripada also tripped from Mendhasal end only.As there was no inter-connection left from Mendhasal ,so 2*400/220 ICT flow was zero.220 kV Meramundali- Bhanjnagar II also tripped at the same time due to overload.(220 kV Meramundali- Bhanjnagar I was under S/D).Load loss was at Chandaka, Mendhasal, Meramundali.Rest of the load was getting fed from 220 kV Jeypore- Jeynagar-Theruvalli-Narendrapur-Mendhasal path.	200		GD-I
2	NR	1) 400kV Akal-Jodhpur 2) 400kV Barmer-Akal 3) 220kV Amarsagar-Akal 4) 220kV Giral-Akal Line 5) 220kV Mada-Akal Line 6) 900MW wind generation in Rajasthan	Rajasthan	02-04-2016	13:47	02-04-2016	14:04	00:17	400kV Akal-Jodhpur tripped on phase to phase fault and 400kV Barmer-Akal Line, 220kV Barmer-Akal Line, 220kV Amarsagar-Akal Line, 220kV Giral-Akal Line & 220kV Mada-Akal Line tripped on overloading. Due to outage of these lines Wind generation of ~ 900MW tripped.	900		GD-I
3	SR	Complete outage of 230kV S.P.Koil station	TN	02-04-2016	17:08	02-04-2016	17:58	00:50	Complete outage of 230kV S.P.Koil station due to B-phase CT failure in 230kV S.P.Koil-MAPS line-1. All 230kV elements got tripped as bus coupler breaker is not healthy at 230kV S.P.Koil substation.			GD-I
4	ER	1)132 kV Purnea -Kishanganj 2)132 kV Purnea -Forbisganj 3)132 kV Kataiya , Supoul I 4)132 kV Kataiya - Duhabi	BSPTCL	03-04-2016	02:31	03-04-2016	02:50	00:19	Due to fault in 132 kV Forbisganj - Kishanganj , and as there is no braker in Kishanganj so fault was cleared from Purnea end in zone -2 by opening 132 kV Purnea - Kishanganj.After that Forbisganj, Kataiya, some of Nepal load started flowing through 132 kV Purnea -Forbisganj so 132 kV Purnea -Forbisganj tripped on overload.Now the Forbisganj, Kataiya, Nepal load started flowing through 132 kV Kataiya-Supoul d/c at the same time when 132 kV Kataiya-Supoul I tripped on overload (IDMT relay) ,132 kV Kataiya - Duhabi also tripped(Reason yet awaited) so via 132 kV Kataiya-Supoul II Forbisganj load ,Kataiya local load was getting feeded.	100		GD-I
5	NR	1) 400/220kV 315MVA ICT 1, 2&3 at Agra 2) 220 kV Agra-Gokul 3) 220kV Agra-Hathras 4) 220kV Agra-Shamsabad 5) 220kV Agra-Agra 1 & 3	UP	03-04-2016	14:40	03-04-2016	15:12	00:32	400/220kV 315MVA ICT 2 at Agra(UP) tripped on differential protection operation due to blast in R-phase CT. 315MVA ICT 3 and 500MVA ICT1 tripped on overcurrent earth fault. At same time multiple 220kV feeders from Agra(UP) tripped.	500		GD-I
6	ER	1) 220 kV Rengali(OPTCL)-Chandiposh-Tarkera 2) 220 kV Rengali (OPTCL)-Barkot-Tarkera. 3)220 kV Rengali(OPTCL)-Rengali(PH) D/C 4)220 kV Rengali(OPTCL)-Rengali(PG) D/C 5) 400/220 kV ICT-I and II at Rengali(PG) 6) 400/220 kV ICTs Rengali	OPTCL	03-04-2016	17:58	03-04-2016	18:31	00:33	Due to B-phase CT burst of 220kV Tarkera-Chandiposh-Rengali (S/Y, OPTCL) line at Rengali (S/Y, OPTCL), causing all 220 kV lines emanating from Rengali (S/Y OPTCL) tripped.	20		GD-I
7	NER	132 kV Aizwal - Kumarghat line & 132 kV Jiribam - Aizwal line	POWERGRID & P&ED Mizoram	04-04-2016	07:14	04-04-2016	07:55	00:41	Mizoram system was connected with rest of NER Grid through 132 kV Aizwal - Kumarghat line & 132 kV Jiribam - Aizwal line (132 kV Aizwal - Kolasib line was not restored after tripping). At 07:14 Hrs on 04.04.16 , 132 kV Aizwal - Kumarghat line & 132 kV Jiribam - Aizwal line tripped. Due to tripping of these elements, Mizoram system was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	57		GD-I
8	NR	1) 500kV HVDC Balia-Bhiwadi pole 1&2	POWERGRID	04-04-2016	13:03	04-04-2016	13:40	00:37	500kV HVDC Balia-Bhiwadi pole 1&2 tripped due to problem in reactive power control unit at Bhiwadi end.			GI2
9	NER	132 kV Imphal(PG)- Imphal (MA) I & II	MSPCL/ POWERGRID	04-04-2016	13:59	04-04-2016	14:06	00:07	Capital area of Manipur was connected with rest of NER Grid through 132 kV Imphal-Imphal I & II lines (132 kV Kakching-Kongba line & 132 kV Karong-Imphal(MSPCL) line kept open for system requirement). At 13:59 Hrs on 04.04.16,132 kV Imphal-Imphal I & II lines tripped. Due to tripping of these elements, Capital area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	14		GD-I
10	NER	132 kV Silchar - Dullavcherra	POWERGRID & AEGCL	04-04-2016	19:57	04-04-2016	21:10	01:13	Dullavcherra area of Assam was connected with rest of NER Grid through 132 kV Silchar- Dullavcherra line(132 kV Dullavcherra-Dharmanagar line kept open for system requirement). At 19:57 Hrs on 04.04.16 ,132 kV Silchar- Dullavcherra line tripped. Due to tripping of this element, Dullavcherra area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	17		GD-I

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration Time	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time					
11	NER	132 kV Surjamaninagar-Palatana I line, 132 kV Agartala - Bodhjungle line, 132 kV Surjamaninagar-Agarthala I & II lines, 132 kV Agartala - Rokhia I&II lines, 132 kV AGTTP - Agartala I & II lines	TSECL,OTPC & POWERGRID	04-04-2016	21:06	04-04-2016	21:20	00:14	Agarthala area of Tripura and Comilla area of Bangladesh system were connected with rest of NER Grid through 132 kV Surjamaninagar-Palatana I line, 132 kV Agartala - Bodhjungle line, 132 kV Surjamaninagar-Agarthala I & II lines, 132 kV Agartala - Rokhia I&II lines, 132 kV AGTTP - Agartala I & II lines (132 kV Udaipur-Monarchak line was not restored after tripping). At 21:06 Hrs on 04.04.16, 132 kV Surjamaninagar-Palatana I line, 132 kV Agartala - Bodhjungle line, 132 kV Surjamaninagar-Agarthala I & II lines, 132 kV Agartala - Rokhia I&II lines, 132 kV AGTTP - Agartala I & II lines tripped. Due to tripping of these elements, Agarthala area of Tripura and Comilla area of Bangladesh system were separated from rest of NER Grid and subsequently collapsed due to no source in this area.		76	GD-I
12	NER	132 kV Aizwal - Zuangtui	POWERGRID	05-04-2016	20:27	05-04-2016	20:43	00:16	Zuangtui area of Mizoram was connected with rest of NER Grid through 132 kV Aizawl-Zuangtui line. At 20:27 Hrs on 05.04.16, 132 kV Aizawl- Zuangtui line tripped. Due to tripping of this element, Zuangtui area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.		34	GD-I
13	NER	132 kV Aizwal - Zuangtui	POWERGRID	05-04-2016	21:24	05-04-2016	22:03	00:39	Zuangtui area of Mizoram was connected with rest of NER Grid through 132 kV Aizawl-Zuangtui line. At 21:24 Hrs on 05.04.16, 132 kV Aizawl- Zuangtui line tripped. Due to tripping of this element, Zuangtui area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.		24	GD-I
14	NER	132 kV Aizwal - Zuangtui	POWERGRID	05-04-2016	22:26	05-04-2016	23:02	00:36	Zuangtui area of Mizoram was connected with rest of NER Grid through 132 kV Aizawl-Zuangtui line. At 22:26 Hrs on 05.04.16, 132 kV Aizawl- Zuangtui line tripped. Due to tripping of this element, Zuangtui area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.		13	GD-I
15	NR	1) 400kV Singrauli (NTPC)-Anpara 2) 400kV Singrauli (NTPC)- Allahabad(PG) 3) Singrauli 210MW unit#3	POWERGRID/ NTPC	06-04-2016	10:37	06-04-2016	11:45	01:08	400kV Anpara-Sarnath already tripped at 10:29hrs. B-phase LA blast at Anpara end of 400kV Singrauli-Anpara line. Other elements also tripped simultaneously.	200	Nil	GD-I
16	WR	1) 400 kV Satpura- Seoni 2) 400 kV Satpura –ISP 3) 400 kV Satpura – Ashta- I 4) 400 kV Satpura B/R- I 5) 400 kV Satpura BUS Coupler	MP	06-04-2016	21:00	06-04-2016	22:31	01:31	Main Bus –I LBB operated at Satpura resulting in tripping of feeders connected to Bus-I at Satpura.			GI-II
17	NER	132 kV Loktak - Ningthoukhong	MSPCL	07-04-2016	10:13	07-04-2016	10:54	00:41	Ningthoukhong area of Manipur was connected with rest of NER Grid through 132 kV Loktak-Ningthoukhong line (132 kV Imphal(PG)-Ningthoukhong line & 132 kV Kakching-Kongba line kept open for system constraint). At 10:13 Hrs on 07.04.16, 132 kV Loktak-Ningthoukhong line tripped. Due to tripping of this element, Ningthoukhong area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.		25	GD-I
18	SR	Complete outage of 220kV Kalamassery Substation	Kerala	07-04-2016	12:37	07-04-2016	12:46	00:09	Tripping of 220kV Idukki-Kalamashery line-1&2 led to complete outage of 220kV Kalamassery Substation. The tripping resulted in the outage of 110kV bus and downstream radially feeding substations, 66kV bus and its downstream substations		400	GD-I
19	WR	1) 132 kV Malanpur-Mehgaon 2) 132 kV Malanpur-Banmore-I & II 3) 132 kV Malanpur-Ambah 4) 132 kV Malanpur-Badagaon 5) 132 kV Malanpur-Morar 6) 220/132 kV ICT-I & II at Malanpur	MP	07-04-2016	22:30	06-04-2016	23:00	00:30	R-phase CT of 220 kV Bus Coupler -II failed at 220 kV Malanpur station and BusBar protection operated.		179	GD-I
20	NR	1)400kV Bareilly(UP)-Bareilly(PG) 2 2)400kV Bareilly(UP)-Unnao(UP) 1 3)400/220kV Bareilly 315 MVA ICT 1&2	POWERGRID/ UP	07-04-2016	22:30	07-04-2016	22:35	00:05	400/220kV Bareilly 315 MVA ICT 1 tripped on Y-ph to earth fault due to fire in Y-phase CT of ICT-I at Bareilly(UP) end. At the same time 400/220kV Bareilly 315 MVA ICT 2, 400kV Bareilly(PG)-Bareilly(UP)-2 and 400kV Bareilly-Unnao-1 tripped.	Nil	Nil	GI2

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time					
21	NER	132 kV Imphal(PG)- Imphal (MA) I & II	MSPCL/ POWERGRID	08-04-2016	02:43	08-04-2016	03:00	00:17	Capital area & Karong area of Manipur were connected with rest of NER Grid through 132 kV Imphal-Imphal I & II lines (132 kV Kakching-Kongba line & 132 kV Karong-Kohima line kept open for system requirement). At 02:43 Hrs on 08.04.16, 132 kV Imphal-Imphal I & II lines tripped. Due to tripping of these elements, Capital area & Karong area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.		40	GD-I
22	SR	Tripping of 110kV bus at 230/110 kV Ingur substation	TN	08-04-2016	15:36	08-04-2016	16:10	00:34	110kV Bus-1&2 got tripped Y & B phase of BUS I PT got failed at Ingur substation. Due to absence of Bus bar protection in 110kV Bus, 230/110kV ICT- 1,2, & 3 tripped on operation of Back up over current protection and all 110 kV tie feeders tripped from remote ends on Z2 operation		335	GI-I
23	NER	132 kV Imphal(PG)- Imphal (MA) I & II	MSPCL/ POWERGRID	09-04-2016	09:37	09-04-2016	10:07	00:30	Capital area & Karong area of Manipur were connected with rest of NER Grid through 132 kV Imphal-Imphal I & II lines (132 kV Kakching-Kongba line & 132 kV Karong-Kohima line kept open for system requirement). At 09:37 Hrs on 09.04.16, 132 kV Imphal-Imphal I & II lines tripped. Due to tripping of these elements, Capital area & Karong area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.		53	GD-I
24	NER	132 kV Imphal(PG)- Imphal (MA) I & II	MSPCL/ POWERGRID	09-04-2016	10:59	09-04-2016	11:20	00:21	Capital area & Karong area of Manipur were connected with rest of NER Grid through 132 kV Imphal-Imphal I & II lines (132 kV Kakching-Kongba line & 132 kV Karong-Kohima line kept open for system requirement). At 10:59 Hrs on 09.04.16, 132 kV Imphal-Imphal I & II lines tripped. Due to tripping of these elements, Capital area & Karong area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.		41	GD-I
25	NER	132 kV Imphal(PG)- Imphal (MA) I & II	MSPCL/ POWERGRID	10-04-2016	11:30	10-04-2016	11:41	00:11	Capital area & Karong area of Manipur were connected with rest of NER Grid through 132 kV Imphal-Imphal I & II lines (132 kV Kakching-Kongba line & 132 kV Karong-Kohima line kept open for system requirement). At 11:30 Hrs on 10.04.16, 132 kV Imphal-Imphal I & II lines tripped. Due to tripping of these elements, Capital area & Karong area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.		49	GD-I
26	NER	132 kV Imphal(PG)- Imphal (MA) I & II	MSPCL/ POWERGRID	10-04-2016	12:04	10-04-2016	12:20	00:16	Capital area & Karong area of Manipur were connected with rest of NER Grid through 132 kV Imphal-Imphal I & II lines (132 kV Kakching-Kongba line & 132 kV Karong-Kohima line kept open for system requirement). At 12:04 Hrs on 10.04.16, 132 kV Imphal-Imphal I & II lines tripped. Due to tripping of these elements, Capital area & Karong area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.		48	GD-I
27	NER	132 kV Imphal(PG)- Imphal (MA) I	MSPCL/ POWERGRID	10-04-2016	12:31	10-04-2016	12:57	00:26	Capital area & Karong area of Manipur were connected with rest of NER Grid through 132 kV Imphal-Imphal I line (132 kV Imphal-Imphal II line was not restored after tripping, 132 kV Kakching-Kongba line & 132 kV Karong-Kohima line kept open for system requirement). At 12:31 Hrs on 10.04.16, 132 kV Imphal-Imphal I line tripped. Due to tripping of this element, Capital area & Karong area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.		24	GD-I
28	NER	132 kV Loktak - Ningthoukhong	MSPCL	12-04-2016	11:57	12-04-2016	11:59	00:02	Ningthoukhong area of Manipur was connected with rest of NER Grid through 132 kV Loktak-Ningthoukhong line (132 kV kakching-Kongba line& 132 kV Imphal(PG)-Ningthoukhong line kept open for system constraint). At 11:57 Hrs on 12.04.16, 132 kV Loktak-Ningthoukhong line tripped. Due to tripping of this element, Ningthoukhong area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.		14	GD-I
29	ER	1) 400 kV Mendhasal-Baripada 2) 400 kV Mendhasal-New Dhubri 3) 400 kV Mendhasal-Meramundali	OPTCL	12-04-2016	12:41	12-04-2016	13:16	00:35	Due to fault at Mendhasal station, elements listed tripped.			GI-II
30	NER	132 kV Aizawl - Zuangtui	POWERGRID	12-04-2016	21:54	12-04-2016	22:17	00:23	Zuangtui area of Mizoram was connected with rest of NER Grid through 132 kV Aizawl-Zuangtui line. At 21:54 Hrs on 12.04.16, 132 kV Aizawl- Zuangtui line tripped. Due to tripping of this element, Zuangtui area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.		16	GD-I
31	NER	132 kV Balipara - Khupi	NEEPCO	13-04-2016	10:24	13-04-2016	10:56	00:32	Khupi area of Arunachal Pradesh was connected with rest of NER Grid through 132 kV Balipara- Khupi line. At 10:24 Hrs on 13.04.16, 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.		21	GD-I

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time					
32	NER	132 kV Dimapur (PG) - Kohima	POWERGRID & DoP Nagaland	13-04-2016	13:31	13-04-2016	13:42	00:11	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 13:31 Hrs on 13.04.16, 132 kV Dimapur(PG)-Kohima line tripped. Due to tripping of this element, Capital area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.		10	GD-I
33	SR	Compete outage of 220 kV Nagjheripower station	Karnataka	14-04-2016	12:29	14-04-2016	12:54	00:25	220 kV Nagjheri - Bidnal line tripped on Y-B fault at 12:28 Hrs. At the same time five running generators (units-1,2,3,4 & 6) at Nagjheri tripped on operation of generator transformer backup over current and earth fault protection	600		GD-I
34	WR	1) 400kV JP Nigrie – Satna 1 & 2 2) JP Nigrie Unit-I & II	JP	14-04-2016	13:29	14-04-2016	14:03	00:34	400kV JP Nigrie – Satna 1 & 2 Tripped due to fault, following which JPN U-1 (660MW) & 2 (660MW) tripped on loss of evacuation.		1089	GD-I
35	SR	Tripping of HVDC GAZUWAKA POLE 1	Powergrid	14-04-2016	18:33	14-04-2016	19:35	01:02	BLOCKED DURING FILTER CUT OFF			GI-2
36	SR	Tripping of HVDC TALCHER - KOLAR POLE 1	Powergrid	14-04-2016	18:43	14-04-2016	23:00	04:17	Pole tripped due to Emergency switch command from Talcher due to problem in Valve cooling system			GI-2
37	SR	Tripping of HVDC TALCHER - KOLAR POLE 2	Powergrid	14-04-2016	19:44	14-04-2016	21:41	01:57	BLOCKED DUE TO FIRE IN VALVE COOLING IN UPS SYSTEM			GI-2
38	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I&II , Leshka U II & III	MePTCL/ POWERGRID & MePGCL	14-04-2016	20:16	14-04-2016	20:44	00:28	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 line, 132 kV NEHU-Umiam line & 132 kV NEHU-Mawlai line were kept open for system requirement). At 20:16 Hrs on 14.04.16 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	84	40	GD-I
39	NER	132 kV Silchar - Dullavcherra	POWERGRID & AEGCL	15-04-2016	02:23	15-04-2016	02:40	00:17	Dullavcherra area of Assam was connected with rest of NER Grid through 132 kV Silchar- Dullavcherra line(132 kV Dullavcherra-Dharmanagar line kept open for system requirement). At 02:23 Hrs on 15.04.16 , 132 kV Silchar- Dullavcherra line tripped. Due to tripping of this element, Dullavcherra area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.		18	GD-I
40	ER	1) 400 kV Sterlite-Meramundali 2) 400 kV Sterlite-Meramundali 3) Unit-II & IV at Sterlite(600 MW each)	SEL	15-04-2016	09:30	15-04-2016	10:01	00:31	R-Phase CVT of 400 kV Sterlite-Meramundali burst at Meramundali end, causing the tripping of lines and generating units on loss of evacuation path.	800		GD-I
41	ER/SR	1) 400 kV Jeypore-Bolangir 2) 400 kV Jeypore-Gazuwaka-I & II 3) 400 kV Indravati(PG)-Indravati(OPTCL) 4) 315 MVA ICT-I & II Jeypore 5) 400 kV Rengali-Indravati 6) Balimela and U.Kolab Units 7) Gazuwaka B/B HVDC	PG/OPTCL	15-04-2016	12:19	15-04-2016	13:22	01:03	400 kV Rengali-Indravati tripped on B-N fault and following that lines given in column C tripped on Overvoltage from Jeypore end.	200	400	GD-I
42	SR	Tripping of HVDC GAZUWAKA POLE-1&2	Powergrid	15-04-2016	12:23	15-04-2016	14:20	01:57	HVDC Gazuwaka pole-1&2 tripped due to loss of East bus voltage			GI-2
43	SR	Tripping of 220kV elements and Units1,2,3&4 at Raichur TPS	Karnataka	15-04-2016	15:36	15-04-2016	17:00	01:24	During testing of retrofitted distance protection in 400kV Raichur-2 feeder and LBB protection trip DC got extended to Bus trip. This resulted in tripping of 220kV bus at RTPS and subsequently tripping of all connected 220kV elements	760		GI-2
44	NER	132 kV Aizawl - Zuangtui	POWERGRID	16-04-2016	05:28	16-04-2016	05:38	00:10	Zuangtui area of Mizoram was connected with rest of NER Grid through 132 kV Aizawl-Zuangtui line. At 05:28 Hrs on 16.04.16, 132 kV Aizawl- Zuangtui line tripped. Due to tripping of this element, Zuangtui area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.		25	GD-I
45	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I&II , Leshka U II & III	MePTCL/ POWERGRID & MePGCL	16-04-2016	07:51	16-04-2016	07:53	00:02	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 line, 132 kV NEHU-Umiam line & 132 kV NEHU-Mawlai line were kept open for system requirement). At 07:51 Hrs on 16.04.16 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	84	44	GD-I
46	ER	1) 220 kV Meramundali-Bhanjanagar-II 2) 315 MVA ICT-I & II at Mendhasal	OPTCL	16-04-2016	09:55	16-04-2016	10:15	00:20	220kV Meramundali-Bhanjanagar-II tripped on B-ph, E/F, Z-1, If=2.4kA, 20KM from Bhanjanagar. At the same time,315MVA 400/220 ICT- I & II at Mendasal tripped on O/c relay operation. This resulted in load loss of 450 MW in Chandaka, Bhubaneswar, Nimapara.		470	GD-I

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time					
47	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I&II , Leshka U I & II	MePTCL/ POWERGRID & MePGCL	16-04-2016	09:59	16-04-2016	10:18	00:19	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 line, 132 kV NEHU-Umiam line & 132 kV NEHU-Mawlai line were kept open for system requirement). At 09:59 Hrs on 16.04.16 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	70	20	GD-I
48	SR	Tripping of HVDC GAZUWAKA POLE 1	Powergrid	16-04-2016	10:18	16-04-2016	14:31	04:13	tap position of "Y" Phase transformer remained stuck at position 15, "R" and "Y" tap position are at 13. It was found that the AC MCB of OLTC Motor of Y-phase got tripped in OLTC cubicle			GI-2
49	NER	400kV Bongaigaon - New Siliguri I, II, III & IV lines,+/- 800 kV HVDC Biswanath Chariali-Agra pole-I,400kV Bongaigaon-BgTPP line I&II lines,400 kV Bongaigaon - Azara ,400/220 kV 315MVA ICT at Bongaigaon,400 kV Balipara - Bongaigaon I,II&IV	POWERGRID, ENICL,NETC& AEGCL	16-04-2016	12:03	16-04-2016	12:25	00:22	NER end was in synchronism with ER end through 220 kV Bipara - Bongaigaon line, 400kV Bongaigaon - New Siliguri I, II, III & IV lines and was connected with NR Grid through +/- 800 kV HVDC Biswanath Chariali-Agra pole-I. At around 12:00:35.739 Hrs, 400kV Bongaigaon-BgTPP line I tripped from Bongaigaon end on B-phase Zone II. At 12:01:03.001 Hrs, 400kV Bongaigaon-Balipara line IV tripped on B phase Zone II and fault cleared from Balipara end(fault cleared in 325msec from DR data). Around 12:03:07.272 Hrs, 400kV Bongaigaon-New Siliguri III line tripped on Zone-IV at Bongaigaon. 400 kV Bongaigaon-NTPC line II tripped from both ends at 12:03:30.091 Hrs and 400 kV Bongaigaon-Azara line tripped at 12:03:30.464 Hrs on B-phase zone II at Azara end. After that, 400/220kV 315MVA ICT at Bongaigaon tripped on Back Up Over Current Protection on HV Side at around 12:03:36.784 Hrs. 400kV Bongaigaon-New Siliguri I line tripped at 12:03:36.827 Hrs and 400kV Bongaigaon-New Siliguri II line tripped at 12:03:37.964 Hrs from Bongaigaon end on over voltage. Due to these trippings, NER grid separated from ER grid and at 12:03:40.960 Hrs AGTPP along with part of Tripura system separated from isolated NER grid(from PMU). Sarusajai bus blacked out at 12:03:43.360 Hrs and at 12:03:45 Hrs +/- HVDC BNC Agra pole -I blocked. Subsequently major part NER grid collapsed due to load generation mismatch. 220kV Salakati S/S remained connected with Birpara and Gelephu S/S. AGBPP, LTPS and NTPS stations survived with generation of 150MW, 90MW and 60 MW respectively with upper Assam load due to successful operation of Islanding scheme at around 12:05 Hrs(information taken from SLDC). The island was synchronized with main grid at Misa at 1406 hrs. Tripura system initially survived along with AGTPP generation with demand of around 60MW. Subsequently this island collapsed at due to load generation mismatch.	1125	973	GD-V
50	NR	1)400/220kV Rishikesh ICT 1&2	Uttarakhand	16-04-2016	12:36	16-04-2016	12:53	00:17	400/220kV Rishikesh ICT 1&2 tripped on overloading.	Nil	300	GD-I
51	WR	1) 400 kV Karad- Kolhapur -I 2) 400 kV Karad BUS COUPLER 3) 400 kV Karad - New Koyna- II 4) 400 kV Karad - Jaigad- II 5) 400/220 kV 315 MVA ICT-I at Karad	MSEB	16-04-2016	16:38	16-04-2016	17:12	00:34	During hand tripping of 400 kV Karad- Kolhapur -I for over voltage, R phase pole of ABB make circuit breaker blasted. All the feeders connected to 400 kV BUS-I at Karad S/S along with Bus Coupler tripped.			GI-II
52	NER	132 kV Silchar - Dullavcherra	POWERGRID & AEGCL	16-04-2016	19:38	16-04-2016	20:16	00:38	Dullavcherra area of Assam was connected with rest of NER Grid through 132 kV Silchar- Dullavcherra line(132 kV Dullavcherra-Dharmanagar line kept open for system requirement). At 19:38 Hrs on 16.04.16 , 132 kV Silchar- Dullavcherra line tripped. Due to tripping of this element, Dullavcherra area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.		16	GD-I
53	SR	Complete outage of NTPL and Coastal energen power station	NTPL/CEPL	17-04-2016	01:09	17-04-2016	01:46	00:37	Unit-1 &2 at NTPL and Unit-2 Coastal tripped due to tripping of 400kV Coastal-Tuticorin PS and 400kV NTPL-Tuticorin PS lines.	1900		GD-I
54	NR	1)220kV Panipat(BBMB)-Panipat(HS) ckt 1, 2 & 3 2)220kV Panipat(BBMB)-Narela(BBMB) ckt 1, 2 & 3 3) 220kV Panipat(BBMB)-Dhulkote-1 4)220kV Panipat(BBMB)-Pipli	BBMB/Haryana	17-04-2016	18:25	17-04-2016	19:36	01:11	Multiple 220kV elements tripped at Panipat (BBMB) due to failure of Y-phase CT.			GI2

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration Time	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time					
55	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I&II , Leshka U I & II	MePTCL/ POWERGRID & MePGCL	17-04-2016	20:55	17-04-2016	21:04	00:09	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-Umiam line & 132 kV NEHU-Mawlai line were kept open for system requirement). At 20:55 Hrs on 17.04.16 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	84	24	GD-I
56	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I&II , Leshka U I & II	MePTCL/ POWERGRID & MePGCL	17-04-2016	20:55	17-04-2016	21:04	00:09	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-Umiam line & 132 kV NEHU-Mawlai line were kept open for system requirement). At 20:55 Hrs on 17.04.16 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	84	24	GD-I
57	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I&II , Leshka U I,II& III	MePTCL/ POWERGRID & MePGCL	18-04-2016	18:40	18-04-2016	18:45	00:05	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- NEIGRIHMS line & 132 kV NEHU-Mustem line were kept open for system requirement). At 18:40 Hrs on 18.04.16, 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation	105	47	GD-I
58	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I&II , Leshka U I,II& III	MePTCL/ POWERGRID & MePGCL	19-04-2016	03:42	19-04-2016	03:44	00:02	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-Umiam line & 132 kV NEHU-Mawlai line kept open for system requirement). At 03:42 Hrs on 19.04.16 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	126	59	GD-I
59	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I&II , Leshka U II	MePTCL/ POWERGRID & MePGCL	19-04-2016	08:47	19-04-2016	08:49	00:02	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 Umiam-Umiam Stage-I line & 132 kV NEHU-Mawlai line were kept open for system requirement). At 08:47 Hrs on 19.04.16, 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation	42	20	GD-I
60	ER	1) 220 kV Tarkera- Rourkela D/C 2) 220kV Tarkera- Budhipadar D/C 3) 220kV Tarkera- RSP D/C 4) 220/132kV, 100 MVA ATR-I, II & III at Tarkera 5) 400/220kV, 315 MVA ICT-II at Rourkela	OPTCL	19-04-2016	09:16	19-04-2016	10:30	01:14	R-phase CT burst of 220kV Tarkera- Rourkela ckt-I at Tarkera end. At the same time all the 220kV lines emanating from 220kV Tarkera S/s along with ATRs at Tarkera tripped. 400/220kV, 315 MVA ICT-II at Rourkela also tripped due to actuation of back up O/c protection from Rourkela end.		150	GD-I
61	ER	1) 220 kV Ranchi-Hatia 2) 220 kV Ranchi- Chandil 3) 220 kV Hatia-Patratu 4) Tenughat Unit-2 5) Patratu unit 10	JSEB	20-04-2016	14:57	20-04-2016	15:22	00:25	220 kV Hatia-Ranchi D/c and 220 kV Ranchi-Chandil tripped(B-N fault in 220 kV Hatia-Ranchi section).Subsequently at 15:05 hrs 220 Hatia-Patratu D/c tripped on over current causing total power failure at Hatia. Tenughat unit #2 and Patratu unit #10 also tripped at 15:05 hrs .Traction load of 10 MW at Namkum,Hatia,Kamdara also lost.	125	336	GD-I
62	NR	1)400kV Muzaffarnagar-Vishnuprayag-1 2)400kV Alaknanda HEP - Muzaffarnagar-2, 3)400kV Meerut(PG)-Muzaffarnagar(UP) 4) 400kV Muradnagar-Muzaffarnagar 5) 400/220kV Muzaffarnagar 315MVA ICT 1, 2 &3	UP	21-04-2016	12:13	21-04-2016	13:31	01:18	Multiple elements at 400/220kV Muzaffarnagar (UP) tripped on busbar protection operation due to bird hitting busbar.	103	328	GD-I
63	WR	1) 400 kV NSPCL-BSP-I & II 2) 400/220 kV ICT-I & II at NSPCL	NSPCL	21-04-2016	20:15	21-04-2016	22:09	01:54	Due to Busbar protection operation at 220 kV NSPCL the elements given in column C tripped.			GI-I
64	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I&II , Leshka U I,II & III	MePTCL/ POWERGRID & MePGCL	21-04-2016	22:01	21-04-2016	22:18	00:17	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 kept open for system requirement). At 22:01 Hrs on 21.04.16 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	124	31	GD-I

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time					
65	SR	Complete outage of 230kV Mywadi Substation of TANTRANSCO	TN	21-04-2016	23:47	22-04-2016	00:47	01:00	R-phase to earth fault had occurred in 230kV Mywadi-Othakalmadappam feeder. Due to delayed opening of feeder breaker, LBB got initiated and tripped all 230kV elements. 230kV Mywadi S/s is on a single bus operation			GD-I
66	NR	1)400kV Allahabad Rewa Road(400)-Obra 2)400kV Allahabad-Panki 3)400kV Anpara-Obra	UP	22-04-2016	12:47	22-04-2016	13:50	01:03	400kV Allahabad Rewa Road(400)-Obra, 400kV Allahabad-Panki and 400kV Anpara-Obra tripped.Phase to phase fault reported.			GI2
67	ER/SR	1) HVDC B/B Gazuwaka 2) 400 kV Jeypore-Gazuwaka-I & II	PG	22-04-2016	18:04	22-04-2016	20:20	02:16	400kV Jeypore-Bolangir tripped at 1804 hrs due to overvoltage. After that Jeypore-Gazuwaka-I tripped at 1816 hrs due to overvoltage but due to non-opening of breaker of above said line at Gazuwaka, LBB operated at Gazuwaka and Jeypore-Gazuwaka-II and both pole of Gazuwaka tripped.			GI-II
68	NER	132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV NEIGRIHMS - Khliehriat (ME) line, 132 kV Mustem-Khliehriat line & 132 kV Mustem-NEHU line, Leshka U II	MePTCL/ POWERGRID & MePGCL	23-04-2016	10:07	23-04-2016	10:11	00:04	Khliehriat area of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines and 2 x 160 MVA, 220/132 kV ICT I&II at Byrnihat (132 kV Panchgram-Lumnsong line kept open for system requirement). At 10:07 Hrs on 23.04.16 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV NEIGRIHMS - Khliehriat (ME) line, 132 kV Mustem-Khliehriat line & 132 kV Mustem-NEHU line tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	42	32	GD-I
69	SR	Complete outage of 230kV Mywadi Substation of TANTRANSCO	TN	23-04-2016	11:02	23-04-2016	11:19	00:17	R-Y phase fault occurred in 230 kV Mywadi-Pugalur feeder due to snapping of jumper of wave trap. Line protection got operated and tripped the line breaker at Mywadi. Bus-bar protection at 230kV Mywadi mal-operated for the through fault and resulted in tripping of all 230kV elements at Mywadi. 230kV Mywadi S/s is on a single bus operation.			GD-I
70	NER	132 kV Imphal(PG)- Imphal (MA) I & II	MSPCL/ POWERGRID	23-04-2016	11:05	23-04-2016	11:35	00:30	Capital area & Karong area of Manipur were connected with rest of NER Grid through 132 kV Imphal-Imphal I & II lines (132 kV Kakching-Kongba line & 132 kV Karong-Kohima line kept open for system requirement). At 11:05 Hrs on 23.04.16 ,132 kV Imphal-Imphal I & II lines tripped. Due to tripping of these elements, Capital area & Karong area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.		38	GD-I
71	NER	132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV NEHU - NEIGRIHMS & 132 kV Mustem-NEHU line & Leshka U II	MePTCL/ POWERGRID & MePGCL	23-04-2016	15:03	23-04-2016	15:16	00:13	Khliehriat area of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines and 2 x 160 MVA, 220/132 kV ICT I&II at Byrnihat (132 kV Panchgram-Lumnsong line kept open for system requirement). At 15:03 Hrs on 23.04.16 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV NEHU - NEIGRIHMS & 132 kV Mustem-NEHU line tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	42	23	GD-I
72	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I&II , Leshka U II & III	MePTCL/ POWERGRID & MePGCL	23-04-2016	22:05	23-04-2016	22:07	00:02	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 line, 132 kV NEHU- NEIGRIHMS line & 132 kV NEHU-Mustem line kept open for system requirement). At 22:05 Hrs on 23.04.16, 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	84	20	GD-I
73	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I&II , Leshka U II	MePTCL/ POWERGRID & MePGCL	24-04-2016	00:07	24-04-2016	00:12	00:05	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 line, 132 kV NEHU- NEIGRIHMS line & 132 kV NEHU-Mustem line kept open for system requirement). At 00:07 Hrs on 24.04.16, 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	42	22	GD-I
74	SR	Multiple tripping at 400kV Kalpakka Station	AP	24-04-2016	03:26	24-04-2016	04:40	01:14	Bus bar protection got operated at 400kV Kalpakka. 400kV Kalpakka station has a double Main and transfer bus scheme. ICT-1 at Kalpakka, 400kV Kalpakka-Vemagiri-2, 400kV Kalpakka-Simhadiri-3 and 400kV Kalpakka-Hinduja line got tripped.			GI-2
75	SR	Tripping of HVDC GAZUWAKA POLE 1	Powergrid	24-04-2016	03:36	24-04-2016	17:08	13:32	HVDC Gazuwaka pole-1 tripped at 3:36 hrs due to loss of south side filter. Filters tripped on operation of inter-zone protection.		40	GI-2

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time					
76	SR	Complete outage of 400/220 kV Gazuwaka Station. Tripping of HVDC Gazuwaka Pole-1&2.	Powergrid	24-04-2016	03:44	24-04-2016	06:23	02:39	Complete outage of 400/220 kV Gazuwaka Station, 400/220 kV Kalpakka Station, 220kV Vizag switching station. Tripping of HVDC Gazuwaka Pole-1&2. Trippings occurred due to tracking of insulators in switchyard and in transmission line. Both 400 kV Buses at Gazuwaka got tripped on bus faults due to tracking of insulators in switchyard			GD-I
77	SR	Complete outage of 220kV Vizag switching station and 220kV Kalpakka.	AP	24-04-2016	05:05	24-04-2016	07:26	02:21	Complete outage of 220kV Vizag switching station and 220kV Kalpakka. conductor snapping along with CVT damage had occurred at 3:55 hrs in 220kV Kalpakka-VSS feeder at Kalpakka station. Line protection at both ends operated and fault was isolated. However a 2nd fault had occurred due to melting of pipe conductor connecting breker to line isolator of 220kV Dairy farm feeder. This resulted in a 220kV bus-2 fault at Kalpakka and tripping of 220kV feeders. At 220kV Vizag switching station, BUS-I Busbar protection got operated and gave the trip signal to theBUS-I connected feeders and ICT's. . Traction loads got affected.		600	GD-I
78	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I&II , Leshka U II & III	MePTCL/ POWERGRID & MePGCL	24-04-2016	17:23	24-04-2016	17:27	00:04	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 line, 132 kV NEHU- NEIGRIHMS line & 132 kV NEHU-Mustem line kept open for system requirement). At 17:23 Hrs on 24.04.16, 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	84	59	GD-I
79	NER	132 kV Silchar - Dullavcherra	POWERGRID & AEGCL	24-04-2016	18:16	24-04-2016	18:58	00:42	Dullavcherra area of Assam was connected with rest of NER Grid through 132 kV Silchar- Dullavcherra line(132 kV Dullavcherra-Dharmanagar line kept open for system requirement). At 18:16 Hrs on 24.04.16, 132 kV Silchar- Dullavcherra line tripped. Due to tripping of this element, Dullavcherra area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.		10	GD-I
80	NER	132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV NEHU - NEIGRIHMS & 132 kV Mustem-NEHU line , Leshka U I & II	MePTCL/ POWERGRID & MePGCL	25-04-2016	02:31	25-04-2016	02:40	00:09	Khliehriat area of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines and 2 x 160 MVA, 220/132 kV ICT I&II at Byrnihat (132 kV Panchgram-Lumnsong line kept open for system requirement). At 02:31 Hrs on 25.04.16 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV NEHU - NEIGRIHMS & 132 kV Mustem-NEHU line tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	48	11	GD-I
81	SR	Tripping of HVDC GAZUWAKA POLE 1. and 400 kV Jeypore-Gazuwaka 1&2	Powergrid	25-04-2016	03:14	25-04-2016	17:52	14:38	HVDC Gazuwaka Pole -1 blocked due to South filter inter zone protection operation.			GI-2
82	SR	Complete outage of 400/220 kV Gazuwaka Station	Powergrid	25-04-2016	03:35	25-04-2016	07:17	03:42	Complete outage of 400/220 kV Gazuwaka Station, 220kV Vizag switching station. Tripping of HVDC Gazuwaka Pole-1. Trippings occurred due to tracking of insulators in switchyard and in transmission line. Both 400 kV Buses at Gazuwaka got tripped on bus faults due to tracking of insulators in switchyard			GD-I
83	SR	Complete outage of 220kV Vizag switching station	AP	25-04-2016	02:13	25-04-2016	05:10	02:57	Complete outage of 220kV Vizag switching station occurred due to tripping of 220kV elements		250	GD-I
84	NER	132 kV Aizawl - Zuangtui	POWERGRID	25-04-2016	12:21	25-04-2016	12:32	00:11	Zuangtui area of Mizoram was connected with rest of NER Grid through 132 kV Aizawl- Zuangtui line. At 12:21 Hrs on 25.04.16, 132 kV Aizawl- Zuangtui line tripped. Due to tripping of this element, Zuangtui area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.		20	GD-I
85	NR	1) 400kV Moradabad(UP)-Muradnagar(UP) 2) 400kV Kashipur(UTT)-Moradabad(UP)	UP/Uttarakha nd	25-04-2016	12:52	25-04-2016	14:34	01:42	Multiple elements at 400kV Moradabad (UP) tripped. Phase to phase fault reported.			GI2
86	NER	132 kV Loktak-Imphal(PG) line,132 kV Loktak - Jiribam , 132 kV Loktak - Ningthoukhong , Loktak U I,II&III	POWERGRID, MSPCL & NHPC	25-04-2016	15:37	25-04-2016	15:55	00:18	Loktak Power Station was connected with rest of NER Grid through 132 kV Loktak-Imphal(PG) line, 132 kV Loktak-Jiribam line & 132 Loktak-Ningthoukhong line(132 kV Rengpang - Jiribam(MA) is under long outage & 132 kV Imphal - Ningthoukhong line	103	14	GD-I
87	NR	1)400kV Alaknanda HEP-Muzaffarnagar-2 2)400kV Alaknanda HEP-Vishnuprayag-2 3)Alaknanda unit generating 100MW	UP	25-04-2016	16:03	25-04-2016	17:28	01:25	Multiple elements at 400kV Alaknanda HEP tripped due to distance protection operation.	100		GD-I
88	NR	1) 400kV Mainpuri(PG)-Paricha(UPPTCL) D/C	POWERGRID	25-04-2016	20:30	25-04-2016	21:36	01:06	400kV Mainpuri(PG)-Paricha(UPPTCL) ckt 1 and 2 tripped. Phase to phase fault			GI2

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration Time	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time					
89	SR	Complete outage of 400/220 kV Gazuwaka Station. Tripping of HVDC Gazuwaka Pole-1 & 400kV Jeypore-Gazuwaka 1 & 2	Powergrid	26-04-2016	04:57	26-04-2016	22:00	17:03	Complete outage of 400/220 kV Gazuwaka Station. Tripping of HVDC Gazuwaka Pole-1. Trippings occurred due to tracking of insulators in switchyard and in transmission line. 400 kV Bus-1 at Gazuwaka got tripped on bus fault due to tracking of insulators in switchyard			GD-I
90	ER	1) 400kV Mendhasal-Meramandali 2) 315 MVA 400/220 ICT- I & II at Mendhasal 3) 220kV Bhanjnar-Nayagarh-Mendhasal 4) 220kV Bhanjnar-Mendhasal	OPTCL	26-04-2017	14:48	26-04-2017	15:18	00:30	At 14:48 hrs, 315 MVA 400/220 ICT- I & II at Mendhasal tripped on O/C relay operation, causing tripping of 400kV Mendhasal-Meramandali line as 400kV Mendhasal-Meramandali was connected through Tie bay of 315MVA ICT-I (400kV Main bay of 400kV Mendhasal-Meramandali at Meramandali under S/D). 220kV Bhanjnar-Nayagarh-Mendhasal was open at Bhanjnar and 220kV Bhanjnar-Mendhasal was open at Mendhasal by OPTCL to avoid O/L. This resulted load loss of 400 MW in Chandaka, Bhubaneswar, Nimapara. .	400		GD-I
91	NER	132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV NEHU - NEIGRIHMS & 132 kV Mustem-NEHU line , Leshka U II	MePTCL/ POWERGRID & MePGCL	27-04-2016	08:24	27-04-2016	08:31	00:07	Khliehriat area of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines and 2 x 160 MVA, 220/132 kV ICT I&II at Byrnihat (132 kV Panchgram-Lumnsong line kept open for system requirement). At 08:24 Hrs on 27.04.16 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV NEHU - NEIGRIHMS & 132 kV Mustem-NEHU line tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	42	21	GD-I
92	NER	132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV NEHU - NEIGRIHMS line, 132 kV Umiam St I – Umiam St II line & 132 kV Mustem-NEHU line, Leshka U II , Umiam Stg I U III, Umiam Stg I U IV, Umiam Stg II U I & Umiam Stg II U II	MePTCL/ POWERGRID & MePGCL	27-04-2016	21:06	27-04-2016	21:12	00:06	Khliehriat area of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines and 2 x 160 MVA, 220/132 kV ICT I&II at Byrnihat (132 kV Panchgram-Lumnsong line kept open for system requirement).Umiam Stage II Power Station was connected with rest of NER Grid through 132 kV Umiam St I – Umiam St II line. At 21:06 Hrs on 27.04.16 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV NEHU - NEIGRIHMS line, 132 kV Umiam St I – Umiam St II line & 132 kV Mustem-NEHU line tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.Due to evacuation problem, Umiam Stage II Power Station was blacked out	98	69	GD-I
93	NER	132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV NEHU - NEIGRIHMS & 132 kV Mustem-NEHU line , Leshka U II	MePTCL/ POWERGRID & MePGCL	28-04-2016	00:02	28-04-2016	00:06	00:04	Khliehriat area of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines and 2 x 160 MVA, 220/132 kV ICT I&II at Byrnihat (132 kV Panchgram-Lumnsong line kept open for system requirement). At 00:02 Hrs on 28.04.16 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV NEHU - NEIGRIHMS & 132 kV Mustem-NEHU line tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	42	38	GD-I
94	NR	1)220kV Unit-1,2,3,4,5,6 2)220kV Salal-Jammu-1&2 3) 220kV Salal-Kishenpur-1, 3&4	POWERGRID/ NHPC	28-04-2016	11:59	29-04-2016	01:55	01:56	At 11:59hrs, Unit-1,3,5,6 & Salal-Jammu-2, Salal-Kishenpur-3 tripped. At 01:17hrs, Unit-2,4, & Sala-Jammu-1,Salal-Kishenpur-1&4 tripped.			GD-I
95	WR	Following feeders from 220 kV Padghe s/s tripped : 1) 220kV Bus-Coupler 2) 315MVA, 400/220/33kV ICT-3 3)315MVA, 400/220/33kV ICT-1 4)200 MVA 220/100kV ICT-3 5)200 MVA 220/100kV ICT-2 6)50 MVA, 220/22kV BHEL T/F 7)220kV Jambhul-2 8)220kV Nashik-2 9)220kV Temghar-2 10)220kV Wada 11) 220kV Nalasopara 12) HVDC Chandrapur-Pdghe Pole-I & II	MSEB	28-04-2016	15:57	28-04-2016	16:41	00:44	50 MVA 220/22kV BHEL T/F, Y-ph, stub bus suspension string decapped (i.e. CT to line Isolator jumper). As 50 MVA BHEL T/F is on B-Bus; 220kV B-bus fault occurred which resulted in tripping of all the 220kV B-Bus lines and ICTs.	336		GD-I
96	ER/Bhutan	1) 220 kV Chukha-Birpara 2) 220 kV Malbase-Birpara 3) Chukha Generation	PG/NHPC	28-04-2016	17:00	28-04-2016	21:00	04:00	Due to Y-N fault, Zone-1, 29 kms from Birapara; the given elements tripped.	300		GD-I

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration Time	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time					
97	ER	1) 132 kV Madhepura – Supaul D/c 2) 132 kV Purnea(Bihar) – Purnea(PG) –I 3) 132 kV Purnea(Bihar) – Purnea(PG) –II 4)132 kV Purnea(Bihar) – Purnea(PG) –III 5)132 kV Purnea-Kishanganj	BSEB	28-04-2016	19:23	28-04-2016	19:31	00:08	All 132 kV lines emanating from 132 kV Purnea (BSEB) S/S got tripped due to failure of Y phase CT of 33 kV side of 50 MVA ICT-I(132/33 kV) at Purnea(BSEB). The following lines tripped: 132 kV Purnea(PG)- Purnea(BSEB) -T/C and 132 kV Purnea-Faurbuisganj. Consequently , 132 kV Purnea(PG)-Kishanganj,132 kV Madhepura-Supaul D/c also tripped due to over current protection.		325(150 MW to Nepal)	GD-I
98	NER	132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV Khliehriat (MePTCL) - NEIGRIHMS & 132 kV Mustem-NEHU line , Leshka U II	MePTCL/ POWERGRID & MePGCL	28-04-2016	21:36	28-04-2016	21:40	00:04	Khliehriat area of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines and 2 x 160 MVA, 220/132 kV ICT I&II at Byrnihat (132 kV Panchgram-Lumnsong line kept open for system requirement). At 21:36 Hrs on 28.04.16 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV Khliehriat (MePTCL) - NEIGRIHMS & 132 kV Mustem-NEHU line tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	42	12	GD-I
99	WR	1)400kV Jabalpur-MB Power-1 & 2 2) MB Power Unit-1 & 2	MB Power	30-04-2016	15:04	30-04-2016	16:11	01:07	400 kV MB Power-Jabalpur-1 &2 tripped due to Bus bar differential protection operated on 400kV Bus at MB Power. The fall of 0.14 Hz in frequency was observed due to loss of 1024 MW generation loss.	1024		GD-I
100	ER	1)400 kV Meramundali-Sterlite D/c 2)400 kV Meramundali-Angul D/c 3)400 kV Meramundali-New Duburi D/c 4)400 kV Meramundali-JSPL D/c 5)400 kV Meramundali-Mendhasal 6)400 kV Meramundali-GMR 7)400 kV Meramundali-Talcher 8)400/220 kV 315 MVA ICT I&II at Meramundali 9) Sterlite U#1&4 (Gen : 560 MW),GMR #3 (Gen : 243 MW), JSPL (Gen : 50 MW)	OPTCL	30-04-2016	22:02	30-04-2016	23:09	01:07	All lines emanating from 400kV Meramundali S/s tripped due to failure of Y_ph LA of 400 kV Sterlite-Meramundali I at Meramundali.Sterlite U#1&4 (Gen : 560 MW),GMR #3 (Gen : 243 MW), JSPL (Gen : 50 MW) dedicated to STU network at Meramundali tripped due to loss of evacuation path.	853	120	GD-I
101	NER	132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV Khliehriat (MePTCL) - NEIGRIHMS & 132 kV Mustem-Khliehriat line , Leshka U II	MePTCL/ POWERGRID & MePGCL	30-04-2016	22:07	30-04-2016	22:17	00:10	Khliehriat area of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines and 2 x 160 MVA, 220/132 kV ICT I&II at Byrnihat (132 kV Panchgram-Lumnsong line kept open for system requirement). At 22:07 Hrs on 30.04.16 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV Khliehriat (MePTCL) - NEIGRIHMS & 132 kV Mustem-Khliehriat line tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	42	52	GD-I

18. NEW ELEMENTS COMMISSIONED IN APRIL-2016

COMMISSIONING OF NEW GENERATING UNITS

REGION	SL. NO.	CONSTITUENT	UNIT NAME	UNIT NO	CAPACITY (MW)	DATE	TIME
WR	1	IPP	GMR	II	685	01.04.2016	
	2	IPP	MB Power	II	600	07.04.2016	
SR	3	IPP	IL&FS		600	13.04.2016	

COMMISSIONING OF NEW ICTs

REGION	SL. NO.	CONSTITUENT	VOLTAGE LEVEL	SUB-STATION	ICT NO	CAPACITY	DATE	TIME

COMMISSIONING OF NEW TRANSMISSION LINES

REGION	SL. NO.	CONSTITUENT	LINE NAME	CKT NO	kV	DATE	TIME (Hrs)	
Inter-Regional	1	Powergrid	Gaya-Varanasi	II	765	19.04.2016		
NR	2	Powergrid	Fatehpur-Varanasi	I	765	08.04.2016		
	3	Powergrid	Aurangabad-Pune GIS	I	400	03.04.2016		
4	Aurangabad-Pune GIS		II	400	03.04.2016			
5	Pune GIS-Pune		III	400	01.04.2016			
6	Pune GIS-Pune		IV	400	01.04.2016			
7	Chitegaon-Aurangabad (PG)		I	220	05.04.2016			
8	Chitegaon-Aurangabad (PG)		II	220	05.04.2016			
9	Aurangabad (PG)-Shendra		I	220	05.04.2016			
10	Aurangabad (PG)-Shendra		II	220	05.04.2016			
SR	11		Powergrid	Cudappah-NP Kunta	I	400	25.04.2016	
	12			NP Kunta-Kolar	I	400	25.04.2016	

विद्युत विभव रूपरेखा माह - अप्रैल 2016

VOLTAGE PROFILE - APRIL 2016

क्र.स. Sl. No.	क्षेत्र REGION	उपकेंद्र SUBSTATION	VOLTAGE < V(lower)* (V=380,728 kV)	V(lower) < VOLTAGE < V(upper)*	VOLTAGE > V(upper)* (V=420,800 kV)	Voltage Deviation Index (%age of time voltage is outside range)	उच्चतम (कि.वो.) Maximum(kV)	निम्नतम(कि.वो.) Minimum(kV)	औसत (कि.वो.) Average(kV)
1	पूर्वी क्षेत्र ER	अंगुल ANGUL	0%	100%	0%	0%	786	755	769
2		गया GAYA	0%	100%	0%	0%	789	734	760
3		झारसुगुडा JHARSUGUDA	0%	100%	0%	0%	795	758	779
4		रांची RANCHI	0%	100%	0%	0%	795	760	780
5		सासाराम SASARAM	1%	99%	0%	1%	788	718	757
1	उत्तरी क्षेत्र NR	आगरा AGRA	0%	100%	0%	0%	800	734	771
2		अनपरा सी ANPARA-C	0%	100%	0%	0%	792	746	764
3		बलिया BALLIA	0%	100%	0%	0%	799	735	763
4		भिवानी BHIWANI	0%	98%	2%	2%	809	752	783
5		बरेली BAREILLY	0%	100%	0%	0%	760	741	756
6		फतेहपुर FATEHPUR	0%	100%	0%	0%	787	724	756
7		झाटिकरा JHATIKARA	0%	97%	3%	3%	807	749	785
8		लखनऊ LUCKNOW	0%	100%	0%	0%	760	752	770
9		मेरठ MEERUT	0%	90%	10%	10%	815	750	787
10		मोगा MOGA	0%	99%	1%	1%	806	749	782
11		फागी PHAGI	0%	100%	0%	0%	792	733	765
12		उन्नाव UNNAO	1%	99%	0%	1%	787	722	751
1	पश्चिमी क्षेत्र WR	अकोला AKOLA	0%	100%	0%	0%	788	742	758
2		औरंगाबाद AURANGABAD	0%	100%	0%	0%	807	749	777
3		भोपाल (बीडीटीसीएल) BHOPAL (BDTCL)	0%	100%	0%	0%	789	739	765
4		बिलासपुर BILASPUR	0%	100%	0%	0%	775	750	761
5		बीना BINA	0%	100%	0%	0%	795	749	769
6		चापा CHAMPA	0%	91%	9%	9%	817	773	789
7		धर्मजयगढ़ DHARAMJAIGARH	0%	100%	0%	0%	784	753	768
8		धुले (बीडीटीसीएल) DHULE (BDTCL)	0%	100%	0%	0%	804	748	777
9		ग्वालियर GWALIOR	0%	100%	0%	0%	798	742	772
10		इंदौर INDORE	0%	100%	0%	0%	786	733	761
11		जबलपुर JABALPUR	0%	100%	0%	0%	795	752	772
12		कोरडी KORADI	0%	100%	0%	0%	776	741	754
13		पुणे PUNE	0%	100%	0%	0%	800	741	776
14		रायगढ़ पुलिंग RAIGARH POOLING	0%	95%	5%	5%	809	772	785
15		रायपुर पुलिंग RAIPUR POOLING	0%	96%	4%	4%	804	763	782
16		सासन SASAN	0%	100%	0%	0%	776	755	764
17		सतना SATNA	0%	100%	0%	0%	787	749	766
18		सिवनी SEONI	0%	100%	0%	0%	795	754	773
19		सीपत SIPAT	0%	100%	0%	0%	772	751	761
20		सोलापुर SOLAPUR	0%	93%	7%	7%	818	754	786
21		तामनार TAMNAR	0%	94%	6%	6%	810	773	786
22		तिरोडा TIRORA	0%	100%	0%	0%	765	749	762
23		वडोदरा VADODARA	0%	100%	0%	0%	797	749	775
24		विंध्याचल पुलिंग VINDHYACHAL PS	0%	100%	0%	0%	781	757	767
25		वर्धा WARDHA	0%	99%	1%	1%	806	756	782
1	दक्षिणी क्षेत्र SR	कर्नूल KURNOOL	0%	89%	11%	11%	815	763	791
2		नेल्लूर पुलिंग NELLORE PS	0%	99%	1%	1%	805	768	787
3		रायचूर RAICHUR	0%	92%	8%	8%	815	763	789
4		तिरुवलम THIRUVALEM	0%	68%	32%	32%	817	771	796
1	पूर्वोत्तर क्षेत्र NER	अज़ारा AZARA (400 kV)	0%	100%	0%	0%	416	367	409
2		बालिपारा BALIPARA (400 kV)	0%	100%	0%	0%	426	375	407
3		बिस्वनाथ चरियालि BISWANATH CHARIALI (400 kV)	14%	82%	4%	18%	701	352	401
4		बोंगाईगाव BONGAIGAON (400 kV)	0%	100%	0%	0%	420	383	406
5		मीसा MISA (400 kV)	0%	95%	5%	5%	429	375	411
6		सिलचर SILCHAR (400 kV)	0%	94%	6%	6%	426	388	413

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

20. List of Tripping of Elements monitored by NLDC for the month of April 2016

S. No.	Name of Transmission Element	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration	Number of Cumulative tripping in the month
HVDC - IR									
1	Pusauli	HVDC	ER/NR	TP	07-04-2016 12:13	CCP North Side Main ½ trip operated	07-04-2016 13:27	1:14:00	1
2	Pusauli	HVDC	ER/NR	TP	07-04-2016 18:25	CCP North Side Main ½ trip operated	08-04-2016 13:40	19:15:00	2
3	Pusauli	HVDC	ER/NR	TP	09-04-2016 08:19	CCP North Side Main ½ trip operated	09-04-2016 09:20	1:01:00	3
4	Pusauli	HVDC	ER/NR	TS	18-04-2016 15:46	Bird strike at capacitor bank	18-04-2016 17:46	2:00:00	4
5	Pusauli	HVDC	ER/NR	TS	18-04-2016 23:09	Valve cooling PLC not working	18-04-2016 23:59	0:50:00	5
6	Pusauli	HVDC	ER/NR	TS	19-04-2016 16:27	Bird strike in capacitor bank	19-04-2016 17:38	1:11:00	6
7	Vindhyachal Pole-I	HVDC	WR/NR	TS	01-04-2016 00:00	DC over current protection operated	01-05-2016 00:00	720:00:00	1
8	Mundra-Mahendragarh-Pole-I	HVDC	WR/NR	SE	27-04-2016 05:43	Leakage in valve hall at Mohindragarh	28-04-2016 10:19	28:36:00	0
9	Mundra-Mahendragarh-Pole-I	HVDC	WR/NR	SE	27-04-2016 23:48	Leakage in valve hall at Mohindragarh	28-04-2016 10:19	10:31:00	0
10	Mundra-Mahendragarh-Pole-I	HVDC	WR/NR	SE	28-04-2016 14:34	Cooling water leakage	28-04-2016 22:36	8:02:00	0
11	Gazuwaka Pole-I	HVDC	ER/SR	TS	01-04-2016 00:00	Assymetric fault	01-04-2016 13:19	13:19:00	1
12	Gazuwaka Pole-I	HVDC	ER/SR	TP	14-04-2016 18:33	BLOCKED DURING FILTER CUT OFF	14-04-2016 19:35	1:02:00	2
13	Talcher-Kolar Pole-II	HVDC	ER/SR	TS	14-04-2016 19:44	Valve cooling problem	14-04-2016 21:41	1:57:00	1
14	Talcher-Kolar Pole-I	HVDC	ER/SR	TS	14-04-2016 18:43	BLOCKED DUE TO FIRE IN VALVE COOLING	14-04-2016 23:11	4:28:00	1
15	Gazuwaka Pole-I	HVDC	ER/SR	TS	15-04-2016 12:23	Due to tripping of lines at Gazuwaka	15-04-2016 14:42	2:19:00	3
16	Gazuwaka Pole-II	HVDC	ER/SR	TS	15-04-2016 12:23	Due to tripping of lines at Gazuwaka	15-04-2016 16:41	4:18:00	1
17	Talcher-Kolar Pole-I	HVDC	ER/SR	SO	15-04-2016 22:41	EMERGENCY L/C FOR UPS RELATED WORKS	16-04-2016 00:46	2:05:00	1
18	Gazuwaka Pole-I	HVDC	ER/SR	TS	16-04-2016 10:18	DUE TO DC DIFFERENTIAL PROTECTION ACTED	16-04-2016 14:31	4:13:00	4
19	Gazuwaka Pole-I	HVDC	ER/SR	TS	22-04-2016 18:16	Due to tripping of lines at Gazuwaka	22-04-2016 20:20	2:04:00	5
20	Gazuwaka Pole-II	HVDC	ER/SR	TS	22-04-2016 18:16	Due to tripping of lines at Gazuwaka	22-04-2016 20:42	2:26:00	2

S. No.	Name of Transmission Element	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration	Number of Cumulative tripping in the month
21	Gazuwaka Pole-I	HVDC	ER/SR	TS	22-04-2016 20:44	FILTER SIDE PROTECTION OPERATED	23-04-2016 14:19	17:35:00	6
22	Gazuwaka Pole-I	HVDC	ER/SR	TS	24-04-2016 03:36	TRIPPED DUE TO VOLTAGE FLUCTUATIONS	24-04-2016 17:08	13:32:00	7
23	Gazuwaka Pole-I	HVDC	ER/SR	TS	25-04-2016 03:14	SOUTH SIDE FILTER INTER ZONE PROTECTION.	25-04-2016 17:52	14:38:00	8
24	Gazuwaka Pole-II	HVDC	ER/SR	TS	25-04-2016 19:29	Flashover	01-05-2016 00:00	124:31:00	3
25	Gazuwaka Pole-I	HVDC	ER/SR	TS	26-04-2016 04:57	Bus Bar Protection operated	28-04-2016 21:34	64:37:00	9
26	Biswanath Chariali-Agra Pole-I	HVDC	NER/NR	MO	01-04-2016 11:29	To reverse power flow	01-04-2016 11:54	0:25:00	0
27	Biswanath Chariali-Agra Pole-I	HVDC	NER/NR	SO	07-04-2016 10:01	Inspection of CT of the LFL both at Agra and BNC	07-04-2016 12:31	2:30:00	0
28	Biswanath Chariali-Agra Pole-I	HVDC	NER/NR	TL	07-04-2016 13:20	Distance Protection Operated	07-04-2016 15:10	1:50:00	1
29	Biswanath Chariali-Agra Pole-I	HVDC	NER/NR	TL	07-04-2016 18:43	Distance Protection Operated	07-04-2016 19:17	0:34:00	2
30	Biswanath Chariali-Agra Pole-I	HVDC	NER/NR	SE	13-04-2016 11:05	Hand tripped due to heavy sparking on 400KV isolator at Agra	13-04-2016 14:10	3:05:00	2
31	Biswanath Chariali-Agra Pole-I	HVDC	NER/NR	MO	16-04-2016 12:03	Tripped due to NER partially grid failure	17-04-2016 20:29	32:26:00	2
32	Biswanath Chariali-Agra Pole-I	HVDC	NER/NR	TS	19-04-2016 02:39	Due to problem in valve cooling	19-04-2016 03:39	1:00:00	3
33	Biswanath Chariali-Agra Pole-I	HVDC	NER/NR	TS	21-04-2016 20:14	Tripped on convertor transformer y-phase PRD relay oprated at BNC end	21-04-2016 23:44	3:30:00	4
HVDC - Internal									
34	Balia-Bhiwadi Pole-I	HVDC	NR	TS	04-04-2016 13:03	Problem in reactive power control unit at Bhiwadi end	04-04-2016 13:40	0:37:00	1
35	Balia-Bhiwadi Pole-II	HVDC	NR	TS	04-04-2016 13:03	Problem in reactive power control unit at Bhiwadi end	04-04-2016 13:40	0:37:00	1
36	Rihand-Dadri Pole-I	HVDC	NR	TS	12-04-2016 21:53	Tripped due to Nitrogen pressure system low at Rihand end	12-04-2016 22:43	0:50:00	1
37	Rihand-Dadri Pole-I	HVDC	NR	TS	14-04-2016 02:15	Tripped due to Nitrogen pressure system low at Rihand end	14-04-2016 11:12	8:57:00	2
38	Rihand-Dadri Pole-II	HVDC	NR	SE	19-04-2016 09:01	To attend thyristor failure alarm of valve pole-2 at Rihand end	19-04-2016 18:16	9:15:00	0
39	Rihand-Dadri Pole-I	HVDC	NR	TS	19-04-2016 09:01	To attend Thyristor failure alarm	19-04-2016 18:16	9:15:00	3
40	Balia-Bhiwadi Pole-II	HVDC	NR	SE	28-04-2016 16:41	Hotspot on isolator at Bhiwadi end	29-04-2016 03:37	10:56:00	1
765 kV - IR									

S. No.	Name of Transmission Element	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration	Number of Cumulative tripping in the month
41	765 kV Gaya-Varanasi	Line	ER/NR	SO	26-04-2016 18:12	Replacement of lighting device on brick chimney	27-04-2016 18:27	24:15:00	0
42	765 kV New Ranchi-Dharamjaygarh	Line	ER/WR	SO	22-04-2016 09:00	FOR JUMPER MODIFICATION OF LINE SIDE EQUIPMENT	23-04-2016 02:07	17:07:00	0
43	765 kV New Ranchi-Dharamjaygarh	Line	ER/WR	SO	23-04-2016 09:03	FOR JUMPER MODIFICATION OF LINE SIDE EQUIPMENT	24-04-2016 07:13	22:10:00	0
44	765 kV New Ranchi-Dharamjaygarh	Line	ER/WR	SO	24-04-2016 10:11	FOR JUMPER MODIFICATION OF LINE SIDE EQUIPMENT	24-04-2016 19:37	9:26:00	0
45	765 kV New Ranchi-Dharamjaygarh	Line	ER/WR	SO	25-04-2016 08:31	FOR JUMPER MODIFICATION OF LINE SIDE EQUIPMENT	25-04-2016 19:50	11:19:00	0
46	765 kV Jharsuguda-Dharmjaygarh-II	Line	ER/WR	SC	01-04-2016 00:00	Line reactor bay modified from non switching to switchable	05-04-2016 18:24	114:24:00	0
765 kV Internal									
47	765kV Varanasi-Fatehpur-I	Line	NR	SO	01-04-2016 00:00	Due to damage of tower peak	08-04-2016 16:32	184:32:00	0
48	765kV Varanasi-Fatehpur-I	Line	NR	SE	11-04-2016 14:44	Oil Leakage in Reactor	11-04-2016 19:48	5:04:00	0
49	765kV Varanasi-Fatehpur-I	Line	NR	SO	23-04-2016 11:09	To take line reactor to service at fatehpur end	23-04-2016 13:32	2:23:00	0
50	765kV Meerut-Bhiwani(PG)	Line	NR	MO	03-04-2016 17:42	Opened manually due to High Voltage	03-04-2016 19:39	1:57:00	0
51	765kV Meerut-Bhiwani(PG)	Line	NR	MO	10-04-2016 17:42	Opened manually due to High Voltage	10-04-2016 23:12	5:30:00	0
52	765kV Meerut-Bhiwani(PG)	Line	NR	MO	24-04-2016 18:20	Opened manually due to High Voltage	25-04-2016 08:07	13:47:00	0
53	765kV Meerut-Bhiwani(PG)	Line	NR	MO	26-04-2016 18:16	Opened manually due to High Voltage	27-04-2016 09:23	15:07:00	0
54	765kV Lucknow(PG)-Bareilly(PG)-I	Line	NR	SE	02-04-2016 11:35	To isolate Line reactor due to oil leakage from R & Y phase bushings	02-04-2016 12:10	0:35:00	0
55	765kV Lucknow(PG)-Bareilly(PG)-I	Line	NR	SO	02-04-2016 17:40	To take the line in service alongwith L/R at Bareilly end	02-04-2016 18:13	0:33:00	0
56	765kV Lucknow(PG)-Bareilly(PG)-I	Line	NR	SE	05-04-2016 10:26	To take line reactor Out of service	05-04-2016 10:50	0:24:00	0
57	765kV Lucknow(PG)-Bareilly(PG)-I	Line	NR	SO	05-04-2016 16:24	To take line reactor in service	05-04-2016 17:04	0:40:00	0
58	765kV Lucknow(PG)-Bareilly(PG)-I	Line	NR	SE	21-04-2016 18:26	For tree lopping	21-04-2016 19:35	1:09:00	0
59	765kV Fatehpur-Agra-II	Line	NR	MO	10-04-2016 18:02	Opened manually due to High Voltage	11-04-2016 07:28	13:26:00	0
60	765kV Fatehpur-Agra-II	Line	NR	MO	26-04-2016 18:11	Opened manually due to High Voltage	28-04-2016 12:07	41:56:00	0
61	765kV Fatehpur-Agra-I	Line	NR	SC	11-04-2016 07:56	For stringing (Power line crossing) of 400kv Allahabad - Kanpur (765)D/C lines	11-04-2016 20:54	12:58:00	0

S. No.	Name of Transmission Element	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration	Number of Cumulative tripping in the month
62	765kV Fatehpur-Agra-I	Line	NR	SC	12-04-2016 09:28	For stringing (Power line crossing) of 400kv Allahabad - Kanpur (765)D/C lines	12-04-2016 19:59	10:31:00	0
63	765kV Fatehpur-Agra-I	Line	NR	SE	28-04-2016 11:03	Hand tripped due to abnormal sound coming from Line Reactor at Agra end.	28-04-2016 12:59	1:56:00	0
64	765kV Fatehpur-Agra-I	Line	NR	TS	30-04-2016 13:22	heavy sparking in CT circuit inside protection panel	30-04-2016 17:03	3:41:00	1
65	765kV Antah-Phagi-I	Line	NR	TV	09-04-2016 11:00	Line tripped simultaneously with ICT 1 at Anta	09-04-2016 12:31	1:31:00	1
66	765 kV Moga-Meerut	Line	NR	MO	01-04-2016 00:00	Opened manually due to High Voltage	01-04-2016 09:33	9:33:00	0
67	765 kV Moga-Meerut	Line	NR	TV	01-04-2016 23:37	Tripped due to Over Voltage	04-04-2016 09:33	57:56:00	1
68	765 kV Moga-Meerut	Line	NR	MO	05-04-2016 23:17	Opened manually due to High Voltage	07-04-2016 09:34	34:17:00	1
69	765 kV Moga-Meerut	Line	NR	MO	08-04-2016 02:14	Opened manually due to High Voltage	13-04-2016 22:37	140:23:00	1
70	765 kV Moga-Meerut	Line	NR	MO	17-04-2016 09:18	Opened manually due to High Voltage	19-04-2016 16:14	54:56:00	1
71	765 kV Moga-Meerut	Line	NR	TV	21-04-2016 12:29	Tripped on Over Voltage	22-04-2016 01:15	12:46:00	2
72	765 kV Moga-Meerut	Line	NR	TV	21-04-2016 12:29	Tripped on Over Voltage	22-04-2016 01:15	12:46:00	3
73	765 kV Moga-Meerut	Line	NR	TV	22-04-2016 12:56	Tripped on Over Voltage	22-04-2016 13:32	0:36:00	4
74	765 kV Moga-Meerut	Line	NR	MO	24-04-2016 06:08	Opened manually due to High Voltage	25-04-2016 14:53	32:45:00	4
75	765kV Angul-Jharsuguda-I	Line	ER	TL	05-04-2016 04:48	Distance Protection Operated	05-04-2016 05:22	0:34:00	1
76	765kV Angul-Jharsuguda-I	Line	ER	TL	15-04-2016 17:04	Distance Protection Operated	15-04-2016 17:48	0:44:00	2
77	765kV Angul-Jharsuguda-I	Line	ER	TP	23-04-2016 16:25	Due to maloperation of L/R protection at Jharshuguda end	23-04-2016 18:54	2:29:00	3
78	765kV Wardha-Aurangabad-IV	Line	WR	MO	01-04-2016 00:00	Opened manually due to High Voltage	04-04-2016 06:03	78:03:00	0
79	765kV Wardha-Aurangabad-IV	Line	WR	MO	18-04-2016 17:16	Opened manually due to High Voltage	19-04-2016 09:18	16:02:00	0
80	765kV Wardha-Aurangabad-IV	Line	WR	MO	19-04-2016 17:02	Opened manually due to High Voltage	20-04-2016 09:24	16:22:00	0
81	765kV Wardha-Aurangabad-IV	Line	WR	MO	21-04-2016 17:06	Opened manually due to High Voltage	22-04-2016 11:32	18:26:00	0
82	765kV Wardha-Aurangabad-III	Line	WR	MO	04-04-2016 16:42	Opened manually due to High Voltage	05-04-2016 09:57	17:15:00	0
83	765kV Wardha-Aurangabad-III	Line	WR	MO	08-04-2016 17:19	Opened manually due to High Voltage	11-04-2016 10:19	65:00:00	0

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84	765kV Wardha-Aurangabad-III	Line	WR	MO	13-04-2016 17:16	Opened manually due to High Voltage	17-04-2016 19:34	98:18:00	0
85	765kV Wardha-Aurangabad-II	Line	WR	TV	03-04-2016 17:59	Tripped on Over Voltage	03-04-2016 18:24	0:25:00	1
86	765kV Wardha-Aurangabad-II	Line	WR	MO	05-04-2016 17:08	Opened manually due to High Voltage	06-04-2016 09:50	16:42:00	1
87	765kV Wardha-Aurangabad-II	Line	WR	MO	22-04-2016 13:53	Opened manually due to High Voltage	30-04-2016 06:11	184:18:00	1
88	765kV Wardha-Aurangabad-I	Line	WR	TV	01-04-2016 17:59	Tripped on Over Voltage	01-04-2016 19:18	1:19:00	1
89	765kV Wardha-Aurangabad-I	Line	WR	TV	02-04-2016 18:00	Tripped on Over Voltage	02-04-2016 19:19	1:19:00	2
90	765kV Wardha-Aurangabad-I	Line	WR	TV	03-04-2016 17:59	Tripped on Over Voltage	04-04-2016 09:16	15:17:00	3
91	765kV Wardha-Aurangabad-I	Line	WR	MO	06-04-2016 16:59	Opened manually due to High Voltage	09-04-2016 07:15	62:16:00	3
92	765kV Wardha-Aurangabad-I	Line	WR	MO	11-04-2016 16:57	Opened manually due to High Voltage	12-04-2016 08:25	15:28:00	3
93	765kV Wardha-Aurangabad-I	Line	WR	MO	12-04-2016 17:06	Opened manually due to High Voltage	13-04-2016 07:28	14:22:00	3
94	765kV Wardha-Aurangabad-I	Line	WR	TV	17-04-2016 17:44	Tripped on Over Voltage	18-04-2016 09:30	15:46:00	4
95	765kV Wardha-Aurangabad-I	Line	WR	MO	20-04-2016 16:53	Opened manually due to High Voltage	21-04-2016 07:41	14:48:00	4
96	765kV Wardha-Aurangabad-I	Line	WR	TV	24-04-2016 18:00	Tripped on Over Voltage	24-04-2016 19:05	1:05:00	5
97	765kV Seoni-Wardha-II	Line	WR	SE	09-04-2016 20:10	Isolator Hot Spot	09-04-2016 23:55	3:45:00	0
98	765kV Seoni-Wardha-I	Line	WR	SO	05-04-2016 08:20	Replacement of insulator of NH crossing	05-04-2016 19:43	11:23:00	0
99	765kV Seoni-Wardha-I	Line	WR	TL	29-04-2016 01:25	Distance Protection Operated	29-04-2016 01:58	0:33:00	1
100	765kV Seoni-Bilaspur-II	Line	WR	SE	28-04-2016 11:40	Jumper damaged at Seoni	28-04-2016 15:14	3:34:00	0
101	765kV Satna-Gwalior-II	Line	WR	SE	05-04-2016 15:37	Emergency shutdown	05-04-2016 20:08	4:31:00	0
102	765kV Satna-Gwalior-II	Line	WR	TP	25-04-2016 14:38	WTI OF LR AT GWALIOR	25-04-2016 15:51	1:13:00	1
103	765kV Satna-Gwalior-I	Line	WR	TP	25-04-2016 17:34	WTI OF LR AT GWALIOR	25-04-2016 18:23	0:49:00	1
104	765kV Satna-Bina-II	Line	WR	TP	16-04-2016 11:48	Line Reactor PRV Protection Operated at Bina end	16-04-2016 12:23	0:35:00	1
105	765kV Satna-Bina-II	Line	WR	SO	20-04-2016 11:48	For taking L/R at Bina	20-04-2016 12:09	0:21:00	1

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106	765kV Satna-Bina-II	Line	WR	SE	29-04-2016 15:26	Jumper Replacement	29-04-2016 17:39	2:13:00	1
107	765kV Raigarh-PS(Kotra)-Raipur-PS(Durg)-II	Line	WR	TL	28-04-2016 02:01	Distance Protection Operated	28-04-2016 03:49	1:48:00	1
108	765kV Raigarh-PS(Kotra)-Raipur-PS(Durg)-I	Line	WR	MO	05-04-2016 18:17	Opened manually due to High Voltage	29-04-2016 18:19	576:02:00	0
109	765kV Pune-Sholapur	Line	WR	TV	08-04-2016 18:02	Tripped on Over Voltage	09-04-2016 07:38	13:36:00	1
110	765kV Jabalpur-Dharamjaigarh-II	Line	WR	MO	05-04-2016 18:24	Opened manually due to High Voltage	11-04-2016 10:17	135:53:00	0
111	765kV Jabalpur-Dharamjaigarh-II	Line	WR	SO	11-04-2016 10:17	For the measurement of jumper of Transposition tower at AP100C/1 for analyzing of A/R	22-04-2016 16:26	270:09:00	0
112	765kV Jabalpur-Dharamjaigarh-I	Line	WR	MO	22-04-2016 15:42	Opened manually due to High Voltage	27-04-2016 18:31	122:49:00	0
113	765kV Indore-Bhopal	Line	WR	SO	29-04-2016 12:40	For replacement of defective R-phase WTI of Bhopal line reactor at Indore PS	29-04-2016 15:14	2:34:00	0
114	765kV Dhule-Vadodara	Line	WR	MO	03-04-2016 18:20	Opened manually due to High Voltage	04-04-2016 05:41	11:21:00	0
115	765kV Dhule-Vadodara	Line	WR	TL	30-04-2016 16:28	Distance Protection Operated	30-04-2016 17:03	0:35:00	1
116	765kV Dharamjaigarh-Raipur-PS(DURG)	Line	WR	SO	01-04-2016 09:03	Ground clearance rectification work	05-04-2016 19:48	106:45:00	0
117	765kV Dharamjaigarh-Raipur-PS(DURG)	Line	WR	TL	17-04-2016 21:20	Distance Protection Operated	17-04-2016 22:48	1:28:00	1
118	765kV Bina-Jabalpur-I	Line	WR	SO	04-04-2016 10:15	For checking the secondary circuit of Line CVT	04-04-2016 14:35	4:20:00	0
119	765kV Akola-Ektuni-II	Line	WR	SE	02-04-2016 16:42	For stability testing of 765kV ICT-I & Bus-II at Ektuni. charged at 20:44 Hrs but tripped due to	03-04-2016 00:54	8:12:00	0
120	765kV Akola-Ektuni-I	Line	WR	TL	22-04-2016 12:42	Distance Protection Operated	22-04-2016 14:53	2:11:00	1
121	765 kV Durg-Champa-I	Line	WR	MO	29-04-2016 14:29	Opened manually due to High Voltage	01-05-2016 00:00	33:31:00	0
122	765kV Raichur-Kurnool-II	Line	SR	MO	09-04-2016 17:28	Opened manually due to High Voltage	09-04-2016 20:26	2:58:00	0
123	765kV Raichur-Kurnool-II	Line	SR	MO	15-04-2016 17:18	Opened manually due to High Voltage	15-04-2016 18:43	1:25:00	0
124	765kV Raichur-Kurnool-II	Line	SR	SC	25-04-2016 07:50	STRINGING OF 400 KV QMDC LINE FROM 400/220 KV SS VELTOOR TO TUNGABADRA RIVER	26-04-2016 20:48	36:58:00	0
125	765kV Kurnool-Thiruvalem-II	Line	SR	MO	01-04-2016 13:14	Opened manually due to High Voltage	12-04-2016 15:29	266:15:00	0
126	765kV Kurnool-Thiruvalem-II	Line	SR	MO	15-04-2016 17:32	Opened manually due to High Voltage	18-04-2016 09:55	64:23:00	0
127	765kV Kurnool-Thiruvalem-II	Line	SR	MO	21-04-2016 18:19	Opened manually due to High Voltage	01-05-2016 00:00	221:41:00	0

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128	765kV Kurnool-Thiruvalem-I	Line	SR	MO	01-04-2016 00:00	Opened manually due to High Voltage	01-04-2016 11:15	11:15:00	0
129	765kV Kurnool-Thiruvalem-I	Line	SR	MO	12-04-2016 22:06	Opened manually due to High Voltage	13-04-2016 09:46	11:40:00	0
130	765kV Kurnool-Thiruvalem-I	Line	SR	MO	19-04-2016 01:57	Opened manually due to High Voltage	19-04-2016 17:11	15:14:00	0
131	765kV Kurnool-Thiruvalem-I	Line	SR	MO	21-04-2016 03:25	Opened manually due to High Voltage	21-04-2016 10:10	6:45:00	0
132	765kV Kurnool-Nellore(PS)-I	Line	SR	MO	01-04-2016 00:00	Opened manually due to High Voltage	01-05-2016 00:00	720:00:00	0
400kV - IR									
133	400 kV Zerda-Kankaroli	Line	WR/NR	SO	09-04-2016 09:14	Bay maintenance work at Zerda end	09-04-2016 18:35	9:21:00	0
134	400 kV Zerda-Bhinmal	Line	WR/NR	SO	08-04-2016 09:05	Bay maintenance work at Zerda end	08-04-2016 19:25	10:20:00	0
135	400 kV Varanasi-Biharshariff-I	Line	ER/NR	SE	25-04-2016 10:51	Heavy sparking has been observed in B-phase of line isolator of 400KV Biharsharif-Varansi Ckt.-I at	25-04-2016 19:28	8:37:00	0
136	400 kV Sterlite-Raigarh	Line	ER/WR	TP	13-04-2016 13:55	DT received from Raigarh	13-04-2016 14:44	0:49:00	1
137	400 kV Sterlite-Raigarh	Line	ER/WR	SE	24-04-2016 15:30	Hand tripped due to Y-phase isolator problem at Sterlite end	24-04-2016 21:36	6:06:00	1
138	400 kV Siliguri-Bongaigaon-IV	Line	ER/NER	MO	01-04-2016 00:00	Opened manually due to High Voltage	03-04-2016 18:52	66:52:00	0
139	400 kV Siliguri-Bongaigaon-IV	Line	ER/NER	TL	14-04-2016 20:29	Distance Protection Operated	15-04-2016 11:08	14:39:00	1
140	400 kV Siliguri-Bongaigaon-IV	Line	ER/NER	ME	16-04-2016 12:03	GD-V in NER	16-04-2016 12:31	0:28:00	1
141	400 kV Siliguri-Bongaigaon-IV	Line	ER/NER	MO	24-04-2016 04:07	Opened manually due to High Voltage	25-04-2016 08:09	28:02:00	1
142	400 kV Siliguri-Bongaigaon-IV	Line	ER/NER	SO	25-04-2016 08:10	Jumper tightening work	25-04-2016 17:02	8:52:00	1
143	400 kV Siliguri-Bongaigaon-IV	Line	ER/NER	TL	30-04-2016 20:52	Distance Protection Operated	30-04-2016 21:17	0:25:00	2
144	400 kV Siliguri-Bongaigaon-III	Line	ER/NER	TL	14-04-2016 17:20	Distance Protection Operated	14-04-2016 20:59	3:39:00	1
145	400 kV Siliguri-Bongaigaon-III	Line	ER/NER	ME	16-04-2016 12:03	GD-V in NER	16-04-2016 16:40	4:37:00	1
146	400 kV Siliguri-Bongaigaon-III	Line	ER/NER	MO	19-04-2016 03:30	Opened manually due to High Voltage	20-04-2016 07:08	27:38:00	1
147	400 kV Siliguri-Bongaigaon-III	Line	ER/NER	MO	21-04-2016 00:33	Opened manually due to High Voltage	23-04-2016 20:05	67:32:00	1
148	400 kV Siliguri-Bongaigaon-III	Line	ER/NER	TL	29-04-2016 19:08	Distance Protection Operated	30-04-2016 19:01	23:53:00	2

S. No.	Name of Transmission Element	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration	Number of Cumulative tripping in the month
149	400 kV Siliguri-Bongaigaon-II	Line	ER/NER	MO	05-04-2016 13:09	Opened manually due to High Voltage	14-04-2016 17:50	220:41:00	0
150	400 kV Siliguri-Bongaigaon-II	Line	ER/NER	ME	16-04-2016 12:03	GD-V in NER	18-04-2016 18:42	54:39:00	0
151	400 kV Siliguri-Bongaigaon-II	Line	ER/NER	SO	20-04-2016 08:30	Punctured insulator replacement	20-04-2016 19:47	11:17:00	0
152	400 kV Siliguri-Bongaigaon-I	Line	ER/NER	TL	14-04-2016 17:11	Distance Protection Operated	14-04-2016 17:30	0:19:00	1
153	400 kV Siliguri-Bongaigaon-I	Line	ER/NER	ME	16-04-2016 12:03	GD-V in NER	16-04-2016 12:51	0:48:00	1
154	400 kV Ranchi-Sipat-II	Line	ER/WR	SC	14-04-2016 09:00	Diamond formation of Earth wire	14-04-2016 23:05	14:05:00	0
155	400 kV Ranchi-Sipat-I	Line	ER/WR	SO	06-04-2016 08:52	AMP works	06-04-2016 19:38	10:46:00	0
156	400 kV Ranchi-Sipat-I	Line	ER/WR	SO	07-04-2016 11:03	AMP works	07-04-2016 20:06	9:03:00	0
157	400 kV Ranchi-Sipat-I	Line	ER/WR	SC	14-04-2016 09:00	Diamond formation of Earth wire	14-04-2016 22:32	13:32:00	0
158	400 kV Patna-Balia-IV	Line	ER/NR	TL	18-04-2016 21:27	Distance Protection Operated	19-04-2016 22:44	25:17:00	1
159	400 kV Patna-Balia-II	Line	ER/NR	SE	19-04-2016 16:42	Manually tripped due to sparking at R phase isolator at Ballia	19-04-2016 17:54	1:12:00	0
160	400 kV Patna-Balia-II	Line	ER/NR	SE	19-04-2016 08:12	For attending the line defects	19-04-2016 15:42	7:30:00	0
161	400 kV Patna-Balia-I	Line	ER/NR	SO	18-04-2016 08:04	For attending the line defects	18-04-2016 18:48	10:44:00	0
162	400 kV Malbase - Binaguri - I	Line	Bhutan	SO	07-04-2016 09:19	For replacement of flashed/broken insulators	07-04-2016 18:40	9:21:00	0
163	400 kV Malbase - Binaguri - I	Line	Bhutan	SO	08-04-2016 08:30	For replacement of flashed/broken insulators	08-04-2016 18:38	10:08:00	0
164	400 kV Malbase - Binaguri - I	Line	Bhutan	SO	09-04-2016 08:53	For replacement of flashed/broken insulators	09-04-2016 16:30	7:37:00	0
165	400 kV Malbase - Binaguri - I	Line	Bhutan	TL	14-04-2016 20:07	Distance Protection Operated	14-04-2016 21:53	1:46:00	1
166	400 kV Kolhapur-Kudgi-II	Line	WR/SR	SO	18-04-2016 09:30	FOR RECTIFICATION OF SD NATURE DEFECTS	18-04-2016 19:50	10:20:00	0
167	400 kV Kolhapur-Kudgi-II	Line	WR/SR	SO	19-04-2016 08:45	FOR RECTIFICATION OF SD NATURE DEFECTS	19-04-2016 20:19	11:34:00	0
168	400 kV Kolhapur-Kudgi-II	Line	WR/SR	SO	20-04-2016 08:06	FOR RECTIFICATION OF SD NATURE DEFECTS	20-04-2016 19:21	11:15:00	0
169	400 kV Kolhapur-Kudgi-I	Line	WR/SR	SO	16-04-2016 08:53	for rectification of SD nature defects	16-04-2016 21:12	12:19:00	0
170	400 kV Kolhapur-Kudgi-I	Line	WR/SR	SO	17-04-2016 08:56	FOR RECTIFICATION OF SD NATURE DEFECTS	17-04-2016 20:30	11:34:00	0

S. No.	Name of Transmission Element	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration	Number of Cumulative tripping in the month
171	400 kV Jeypore-Gazuwaka-II	Line	ER/SR	TP	15-04-2016 12:23	DT received at Gazuwaka end	15-04-2016 15:14	2:51:00	1
172	400 kV Jeypore-Gazuwaka-II	Line	ER/SR	TV	16-04-2016 14:00	Tripped on Over Voltage	16-04-2016 14:43	0:43:00	2
173	400 kV Jeypore-Gazuwaka-II	Line	ER/SR	TP	22-04-2016 18:16	DT received at Gazuwaka end	23-04-2016 16:56	22:40:00	3
174	400 kV Jeypore-Gazuwaka-II	Line	ER/SR	TV	24-04-2016 03:36	Tripped on Over Voltage	24-04-2016 17:50	14:14:00	4
175	400 kV Jeypore-Gazuwaka-II	Line	ER/SR	TS	25-04-2016 03:56	H/T DUE DISTURBANCE AT GAZUWAKA END	25-04-2016 18:15	14:19:00	5
176	400 kV Jeypore-Gazuwaka-II	Line	ER/SR	TS	26-04-2016 05:32	H/T DUE TO GAJUWAKA S/S DEAD	28-04-2016 21:45	64:13:00	6
177	400 kV Jeypore-Gazuwaka-I	Line	ER/SR	TP	15-04-2016 12:23	DT received at Gazuwaka end	15-04-2016 14:20	1:57:00	1
178	400 kV Jeypore-Gazuwaka-I	Line	ER/SR	TP	22-04-2016 18:16	DT received at Gazuwaka end	22-04-2016 20:04	1:48:00	2
179	400 kV Jeypore-Gazuwaka-I	Line	ER/SR	TP	24-04-2016 04:47	DT received at Gazuwaka end	24-04-2016 16:38	11:51:00	3
180	400 kV Jeypore-Gazuwaka-I	Line	ER/SR	TS	25-04-2016 03:56	H/T DUE DISTURBANCE AT GAZUWAKA END	25-04-2016 17:27	13:31:00	4
181	400 kV Jeypore-Gazuwaka-I	Line	ER/SR	TS	26-04-2016 05:32	H/T DUE TO GAJUWAKA S/S DEAD	28-04-2016 20:33	63:01:00	5
182	400 kV IBEUL-Raigarh-I	Line	ER/WR	TL	22-04-2016 15:30	Distance Protection Operated	22-04-2016 17:47	2:17:00	1
183	400 kV IBEUL-Raigarh-I	Line	ER/WR	TL	23-04-2016 13:57	Distance Protection Operated	24-04-2016 13:19	23:22:00	2
184	400 kV Behramara-Behrampore-I	Line	Bangladesh	TL	05-04-2016 16:15	Distance Protection Operated	05-04-2016 16:41	0:26:00	1
185	400 kV Behramara-Behrampore-I	Line	Bangladesh	SE	12-04-2016 11:06	Hand tripped due to heavy sparking on isolator at Behrampore	12-04-2016 12:19	1:13:00	1
186	400 kV Behramara-Behrampore-I	Line	Bangladesh	SE	13-04-2016 10:58	B phase isolator at BEHRAMPORE	13-04-2016 13:53	2:55:00	1
187	400 kV Barh-Gorakhpur-I	Line	ER/NR	SE	04-04-2016 13:21	To attend hot spot.	04-04-2016 20:07	6:46:00	0
188	400 kV Barh-Gorakhpur-I	Line	ER/NR	MO	06-04-2016 13:47	Opened manually due to High Voltage	13-04-2016 13:20	167:33:00	0
220 kV - IR									
189	220 kV Talangde-Chikkodi	Line	WR/SR	SE	18-04-2016 16:06	Hot spot	18-04-2016 18:57	2:51:00	0
190	220 kV Talangde-Chikkodi	Line	WR/SR	SE	21-04-2016 16:13	To attend hotspot	21-04-2016 16:32	0:19:00	0
191	220 kV Pusauli-Sahupuri	Line	ER/NR	TS	01-04-2016 23:34	R-phase CT burst at Sahupuri	03-04-2016 12:35	37:01:00	1

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192	220 kV Pusauli-Sahupuri	Line	ER/NR	TL	26-04-2016 12:31	Distance Protection Operated	26-04-2016 13:35	1:04:00	2
193	220 kV Pusauli-Sahupuri	Line	ER/NR	TL	27-04-2016 11:05	Distance Protection Operated	27-04-2016 13:01	1:56:00	3
194	220 kV Mehgaon-Auraiya	Line	WR/NR	TS	04-04-2016 01:05	Y-ph CT of 220kV Malanpur-Mehgaon line at Mehgaon burst	04-04-2016 02:26	1:21:00	1
195	220 kV Malbase - Birpara	Line	Bhutan	SO	06-04-2016 11:37	Shutdown	06-04-2016 17:10	5:33:00	0
196	220 kV Malanpur-Auraiya	Line	WR/NR	TL	03-04-2016 12:01	Distance Protection Operated	03-04-2016 12:52	0:51:00	1
197	220 kV Malanpur-Auraiya	Line	WR/NR	TS	07-04-2016 22:29	R ph CT blast of Bus coupler	08-04-2016 02:41	4:12:00	2
198	220 kV Chukha - Birpara - II	Line	Bhutan	TL	14-04-2016 20:07	Distance Protection Operated	14-04-2016 21:00	0:53:00	1
199	220 kV Chukha - Birpara - II	Line	Bhutan	SE	15-04-2016 14:49	Testing at Chukha end	16-04-2016 00:15	9:26:00	1
200	220 kV Budhipadar-Raigarh	Line	ER/WR	MO	20-04-2016 00:44	To facilitate e/s/d of Raigarh-Raigarh(PG)	20-04-2016 04:54	4:10:00	0
201	220 kV Budhipadar-Raigarh	Line	ER/WR	TL	21-04-2016 20:56	Distance Protection Operated	22-04-2016 02:27	5:31:00	1
202	220 kV Budhipadar-Raigarh	Line	ER/WR	TL	22-04-2016 12:21	Distance Protection Operated	22-04-2016 13:32	1:11:00	2
203	220 kV Budhipadar-Korba-II	Line	ER/WR	SE	18-04-2016 10:55	Attend Hotspot	18-04-2016 19:01	8:06:00	0
204	220 kV Budhipadar-Korba-II	Line	ER/WR	TL	26-04-2016 12:48	Distance Protection Operated	26-04-2016 13:26	0:38:00	1
205	220 kV Budhipadar-Korba-II	Line	ER/WR	SO	26-04-2016 15:34	Jumper Replacement	26-04-2016 21:00	5:26:00	1
206	220 kV Birpara-Salakati-II	Line	ER/NER	SO	07-04-2016 11:01	Replacement of disc insulator with CLR	07-04-2016 18:00	6:59:00	0
207	220 kV Birpara-Salakati-II	Line	ER/NER	SO	09-04-2016 06:46	Replacement of disc insulator with CLR	09-04-2016 12:46	6:00:00	0
208	220 kV Birpara-Salakati-II	Line	ER/NER	SO	11-04-2016 07:36	Replacement of disc insulator with CLR	11-04-2016 18:40	11:04:00	0
209	220 kV Birpara-Salakati-II	Line	ER/NER	SO	12-04-2016 07:56	Replacement of disc insulator with CLR	12-04-2016 19:04	11:08:00	0
210	220 kV Birpara-Salakati-I	Line	ER/NER	SO	06-04-2016 08:59	Replacement of disc insulator with CLR	06-04-2016 19:43	10:44:00	0
211	220 kV Birpara-Salakati-I	Line	ER/NER	SO	08-04-2016 09:27	Replacement of disc insulator with CLR	08-04-2016 19:43	10:16:00	0
212	220 kV Birpara-Salakati-I	Line	ER/NER	SO	10-04-2016 07:08	Replacement of disc insulator with CLR	10-04-2016 18:58	11:50:00	0
213	220 kV Badod-Kota	Line	WR/NR	TL	21-04-2016 11:29	Distance Protection Operated	21-04-2016 13:32	2:03:00	1

S. No.	Name of Transmission Element	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration	Number of Cumulative tripping in the month
214	220 kV Badod-Kota	Line	WR/NR	SE	27-04-2016 11:05	Red hot on Y ph line insulator clamp at Kota	27-04-2016 17:03	5:58:00	1
765 kV Reactors & ICTs									
215	B/R-I at G'Noida	Bus Reactor	NR	SE	01-04-2016 00:00	Protection Problem	28-04-2016 13:40	661:40:00	0
216	B/R-I at Phagi	Bus Reactor	NR	SO	25-04-2016 12:30	AMP works	26-04-2016 16:43	28:13:00	0
217	B/R-II at Ranchi New	Bus Reactor	ER	SO	05-04-2016 09:28	AMP works	05-04-2016 18:36	9:08:00	0
218	B/R-I at Sasaram	Bus Reactor	ER	SO	08-04-2016 10:05	AMP works	08-04-2016 18:54	8:49:00	0
219	B/R-I at Angul	Bus Reactor	ER	SO	18-04-2016 11:23	AMP works	18-04-2016 19:36	8:13:00	0
220	B/R-I at Bilaspur	Bus Reactor	WR	SO	04-04-2016 08:58	For HV bushing gasket replacement work of B-Ph	04-04-2016 18:00	9:02:00	0
221	B/R-I at Aurangabad	Bus Reactor	WR	SO	06-04-2016 09:29	for changing of ph combination	06-04-2016 13:49	4:20:00	0
222	B/R-I at Dharmjaigarh	Bus Reactor	WR	SE	18-04-2016 16:00	Emergency Shutdown	18-04-2016 19:37	3:37:00	0
223	765/400 kV ICT-I at Varanasi	ICT	NR	TP	04-04-2016 12:37	PRD operated	04-04-2016 15:45	3:08:00	1
224	765/400 kV ICT-I at Agra	ICT	NR	SO	09-04-2016 10:10	For attending Tan Delta measurement on variable frequency	09-04-2016 18:06	7:56:00	0
225	765/400 kV ICT-I at Antah	ICT	NR	TP	09-04-2016 11:00	PRD operate from Anta end	09-04-2016 12:46	1:46:00	1
226	765/400 kV ICT-II at Agra	ICT	NR	SO	10-04-2016 09:49	For attending Tan Delta measurement on variable frequency	10-04-2016 14:21	4:32:00	0
227	765/220 kV ICT-II at Lalitpur	ICT	NR	SE	19-04-2016 10:18	For performance testing work	20-04-2016 23:47	37:29:00	0
228	765/400 kV ICT-I at Unnao	ICT	NR	TP	29-04-2016 17:09	Relay mal operation.	29-04-2016 17:17	0:08:00	1
229	765/400 kV ICT-I at Jharsuguda	ICT	ER	SC	05-04-2016 09:51	Spare phase ICT commissioning work	07-04-2016 17:14	55:23:00	0
230	765/400 kV ICT-I at Ranchi New	ICT	ER	SO	18-04-2016 09:40	NTAMC Work	18-04-2016 19:26	9:46:00	0
231	765/400 kV ICT-II at Ektuni	ICT	WR	SO	02-04-2016 11:54	checking gas and air accumulation	05-04-2016 01:04	61:10:00	0
232	765/400 kV ICT-I at Champa	ICT	WR	ME	01-04-2016 00:00	Lines open on high voltage	04-04-2016 17:31	89:31:00	0
233	765/400 kV ICT-I at Raigarh-PS(Kotra)	ICT	WR	SO	05-04-2016 09:04	AMP works	05-04-2016 18:51	9:47:00	0
234	765/400 kV ICT-II at Aurangabad(PG)	ICT	WR	SE	06-04-2016 14:40	Emergency shutdown	06-04-2016 18:46	4:06:00	0

S. No.	Name of Transmission Element	Type of the element	Region Involved	Fault Type	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Duration	Number of Cumulative tripping in the month
235	765/400 kV ICT-I at Vadodara	ICT	WR	SO	07-04-2016 15:11	Gas leakage	07-04-2016 16:12	1:01:00	0
236	765/400 kV ICT-II at Bilaspur	ICT	WR	SE	09-04-2016 13:55	Hot spot	09-04-2016 18:40	4:45:00	0
237	765/400 kV ICT-II at Bilaspur	ICT	WR	SO	11-04-2016 13:40	For changeover	11-04-2016 20:00	6:20:00	0
238	765/400 kV ICT-II at Vindhyachal PS	ICT	WR	SO	14-04-2016 09:09	Fine tuning of CSD relay by M/s.Alstom	14-04-2016 19:20	10:11:00	0
239	765/400 kV ICT-I at Gwalior	ICT	WR	TP	14-04-2016 11:59	Buchholz relay operation	14-04-2016 13:43	1:44:00	1
240	765/400 kV ICT at Akola	ICT	WR	SO	20-04-2016 10:32	Faulty Y Phase MCVT Replacement	20-04-2016 15:51	5:19:00	0
241	765/400 kV ICT-II at Gwalior	ICT	WR	SO	20-04-2016 10:41	For Checking OLTC Scheme after modification Done By BTW	20-04-2016 20:25	9:44:00	0
242	765/400 kV ICT-I at Bilaspur	ICT	WR	SO	22-04-2016 09:32	For CSD installation & commissioning at 400 kV side	22-04-2016 12:51	3:19:00	0
243	765/400 kV ICT-II at Jabalpur-PS	ICT	WR	SO	22-04-2016 10:41	ICT Spare Phase Commissioning with ICT # 2	22-04-2016 18:58	8:17:00	0
244	765/400 kV ICT-III at Bilaspur	ICT	WR	SO	22-04-2016 13:09	For changeover of L/R (i.e for taking Yph in service & R Ph out)	22-04-2016 19:08	5:59:00	0
245	765/400 kV ICT-II at Jabalpur-PS	ICT	WR	SO	22-04-2016 10:41	ICT Spare Phase Commissioning with ICT # 2 for Swapping with ICT # 2 R Phase.	22-04-2016 18:58	8:17:00	0
246	765/400 kV ICT-II at Ektuni	ICT	WR	TS	22-04-2016 16:27	Differential Protection Operated due to 400 kV side conductor from IPS tube to BPI snapped.	22-04-2016 22:06	5:39:00	1
247	765/400 kV ICT-I at Gwalior	ICT	WR	SO	23-04-2016 10:17	OLTC CHECK at Gwalior	23-04-2016 18:32	8:15:00	1
248	765/400 kV ICT-I at Kurnool New	ICT	SR	TP	20-04-2016 21:14	RELAY MALOPERATION	20-04-2016 21:51	0:37:00	1

TL TL= Tripping due to Line Fault

TS TS= Tripping due to S/S Fault

MO MO= Opened due to system constraints

TV TV= Tripped on Overvoltage

SC SC= Planned Shutdown for construction activities

SO SO= Planned Shutdown for O&M activities

SE SE= Emergency Shutdown

TP TP= Protection Maloperation

ME ME= Miscellaneous outage

Total Number of 765 kV lines 94

Total Number of 400 kV lines 35

Total Number of 220 kV lines 15

Total Number of HVDC links 18

Total Number of 765 kV ICTs 114

Total Number of 765 kV B/R 60

Grand Total 336



POWER SYSTEM OPERATION CORPORATION LIMITED

पाँवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

NATIONAL LOAD DESPATCH CENTRE – राष्ट्रीय भार प्रेषण केन्द्र

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