

पावर सिस्टम ऑपरेशन कॉरपोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

POWER SYSTEM OPERATION CORPORATION LIMITED

(A wholly owned subsidiary of POWERGRID)



पंजीकृत एवं केन्द्रीय कार्यालय: बी-9, प्रथम तल, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110 016
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संदर्भ संख्या:-POSOCO/NLDC/GM/

दिनांक: 21.10.2016

सेवा में,

वितरण सूची के अनुसार

विषय:- निष्पादन रिपोर्ट - सितंबर 2016

महोदय,

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

धन्यवाद

भवदीय

(एन. नल्लारसन)

उप महाप्रबंधक

(रा०भा०प्रे०के०)

संलग्नक: मासिक प्रणाली रिपोर्ट

वितरण सूची Distribution List

- 1 सचिव, के.वि.नि.आ. तीसरा एवं चौथा तल, चंद्रलोक भवन, 36, जनपथ, नई दिल्ली-110001
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Member Secretary, NRPC, 18/A, SJSS Marg, Katwaria Sarai, New Delhi-110016
- 4 सदस्य सचिव, प. क्षे. वि. स., एफ-3, एम आई डी सी क्षेत्र, अंधेरी(पूर्व), मुंबई - 400093
Member Secretary, WRPC, F-3, MIDC Area, Andheri (East), Mumbai-400093
- 5 सदस्य सचिव, द. क्षे. वि. स., 29, रेस कोर्स क्रॉस रोड, बंगलूरु - 560009
Member Secretary, SRPC, 29, Race Course Cross Road, Bangalore-560009
- 6 सदस्य सचिव, पू. क्षे. वि. स., 14, गोल्फ क्लब रोड, कोलकाता - 700033
Member Secretary, ERPC, 14, Golf Club Road, Kolkata-700033
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- 8 महाप्रबंधक, पू. क्षे. भा. प्रे. के., 14, गोल्फ क्लब रोड, कोलकाता - 700033
General Manager, ERLDC, 14, Golf Club Road, Kolkata-700033
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General Manager, NRLDC, 18/A, SJSS Marg, Katwaria Sarai, New Delhi-110016
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General Manager, SRLDC, 29, Race Course Cross Road, Bangalore-560009
- 12 महाप्रबंधक, पू. क्षे. भा. प्रे. के., डॉंगतिह, लोअर नॉग्रह, लापलंग, शिलोंग - 793006
General Manager, NERLDC, Dongtiah, Lower Nongrah, Laplang, Shillong-793006



POWER SYSTEM OPERATION CORPORATION LIMITED

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पावर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

NATIONAL LOAD DESPATCH CENTRE –राष्ट्रीय भार प्रेषण केन्द्र

मासिक ऑपरेशन रिपोर्ट

Monthly
Operation Report



सितंबर 2016

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

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



माह सितंबर 2016 के लिए प्रचालन निष्पादन रिपोर्ट
OPERATIONAL PERFORMANCE REPORT FOR THE
MONTH OF SEPTEMBER 2016

पृष्ठसूची CONTENTS

1	माह सितंबर 2016 की सारांश रिपोर्ट Summary of report for the month of September 2016	1-4
2	क्षेत्रवार स्थापित विद्युत क्षमता Region wise Installed Capacity	5
3	राष्ट्रीय स्तर पर सांध्यकालीन शिखर मांगपूर्ति Peak demand met at National level	6-8
4	राष्ट्रीय स्तर पर विद्युत ऊर्जा खपत Energy consumption at National level	9-10
5	फ्रिक्वेंसी रूपरेखा Frequency profile	11-13
6	राष्ट्रीय स्तर पर जल विद्युत ऊर्जा उत्पादन Hydro generation at National level	14-15
7	राष्ट्रीय स्तर पर पवन विद्युत ऊर्जा उत्पादन Wind generation at National level	16
8	ऊर्जा आपूर्ति की वास्तविक स्थिति Actual power supply position	17
9	ऊर्जा आवश्यकता एवं आपूर्ति की पिछले वर्ष माह सितंबर से तुलना Energy requirement and met comparison with September 2015	18
10	शिखर मांग आवश्यकता एवं आपूर्ति की पिछले वर्ष माह सितंबर से तुलना Peak demand requirement and met comparison with September 2015	19
11	क्षेत्रीय स्तर पर शिड्यूल एवं ड्रावल Schedule & drawal at regional level	20
12	अंतर क्षेत्रीय विनिमय Inter-regional exchanges	21-26
13	अंतर राष्ट्रीय विद्युत विनिमय Inter-national exchanges	27
14	एसटीओए (द्विपक्षीय एवं सामूहिक) एवं यू आइ का ब्यौरा Bilateral and collective short-term open access & UI details	28
15	पावर मार्केट की सूचना Power market information	29-31

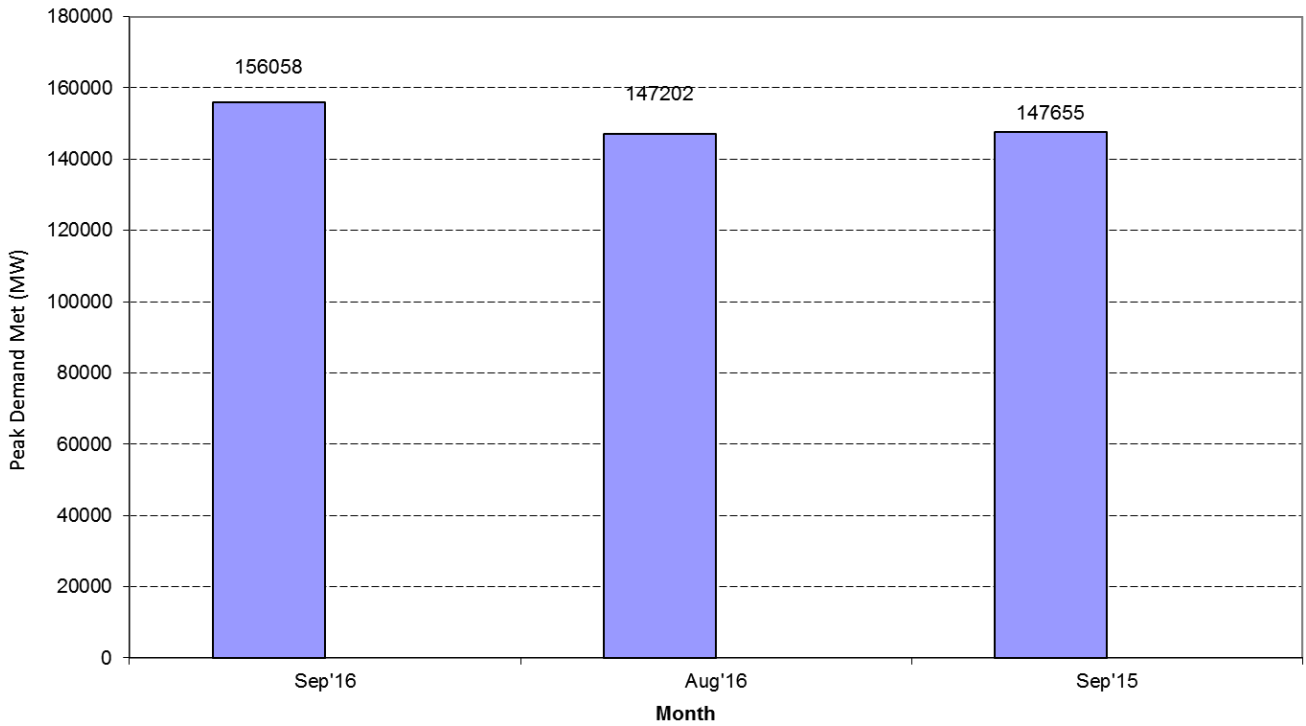
16	अक्षय ऊर्जा प्रमाण पत्र प्रक्रिया Renewable energy certificate mechanism	32-34
17	मुख्य घटनाएँ एवं दिसटरबेनसेज़ Important events/disturbances	35-45
18	नए कमीशंड पारेषण तत्व New elements commissioned	46
19	विभव रूपरेखा Voltage profile	47
20	सितंबर 2016 के दौरान रा.भा.प्रे.के. द्वारा निगरानी में तत्वों की ट्रिपिंग की सूची List of tripping of elements monitored by NLDC for the month of September 2016	48-61
21	सितंबर 2016 के लिए सिस्टम रिलाइबिलिटी सूचकांक System Reliability Indices for September 2016	62

1. SUMMARY OF REPORT FOR THE MONTH OF SEPTEMBER 2016

Peak Demand Met

Increased by 6.02% as compared to Aug 2016

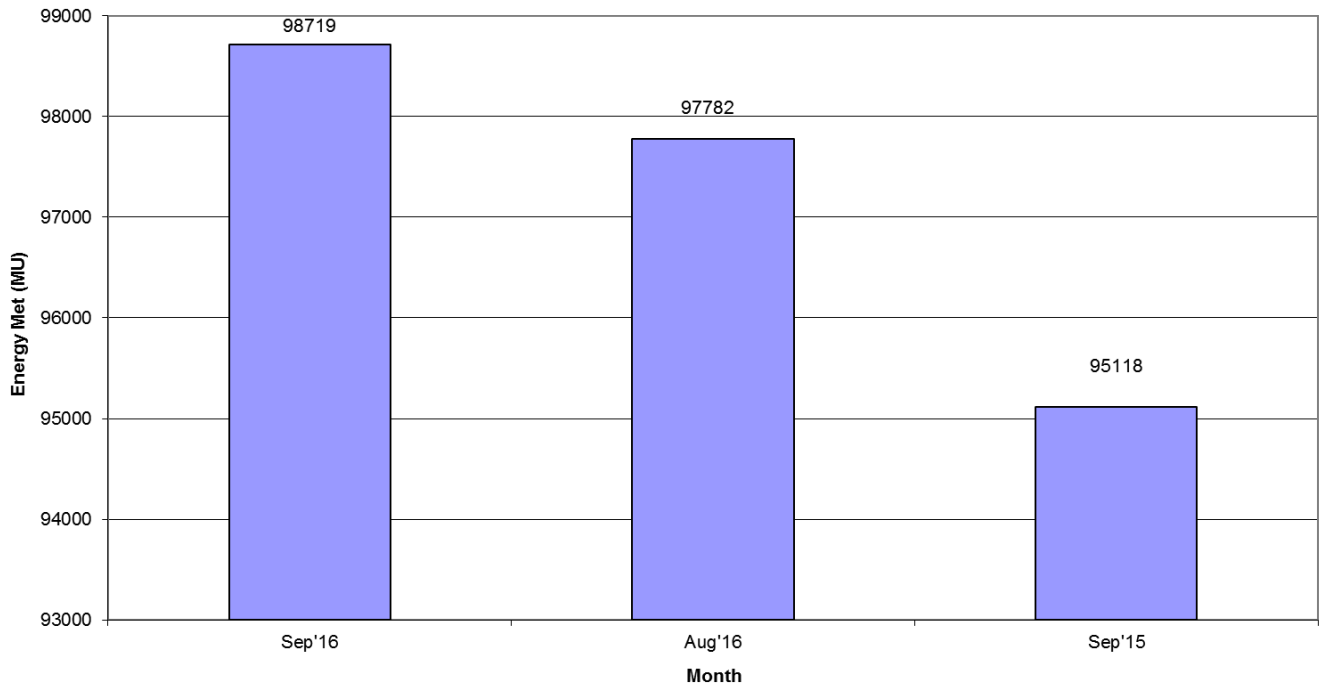
Increased by 5.69% as compared to Sep 2015



Energy Met

Increased by 0.96% as compared to Aug 2016

Increased by 3.79% as compared to Sep 2015

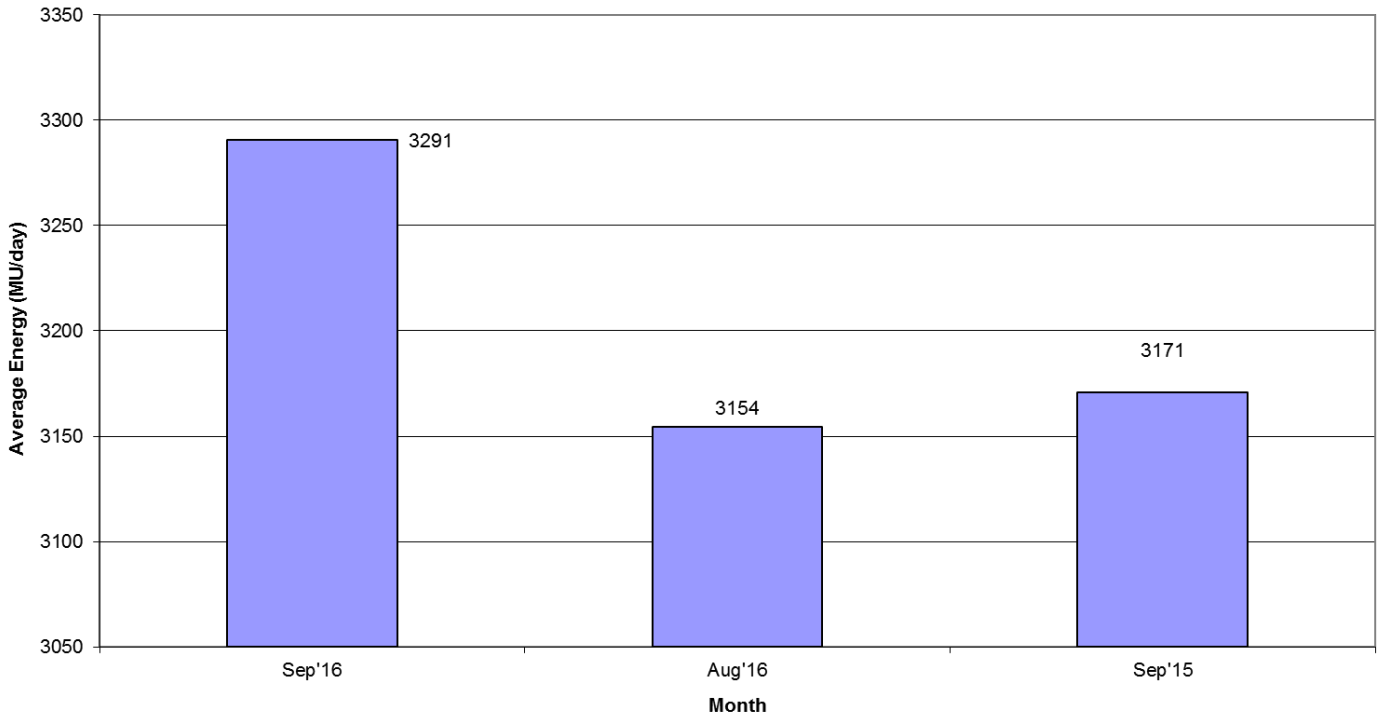


1. SUMMARY OF REPORT FOR THE MONTH OF SEPTEMBER 2016

Average Energy (MU/day)

Increased by 4.32% as compared to Aug 2016

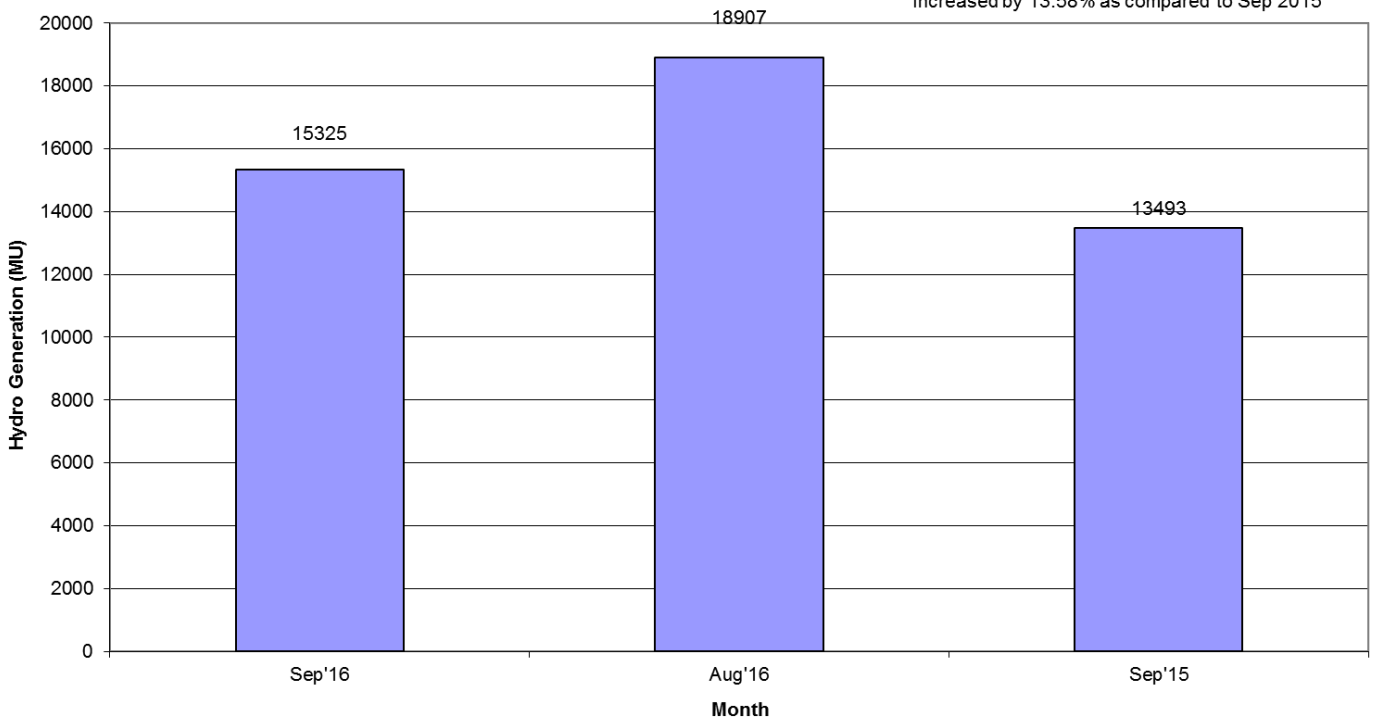
Increased by 3.79% as compared to Sep 2015



Hydro generation

Decreased by 18.94% as compared to Aug 2016

Increased by 13.58% as compared to Sep 2015

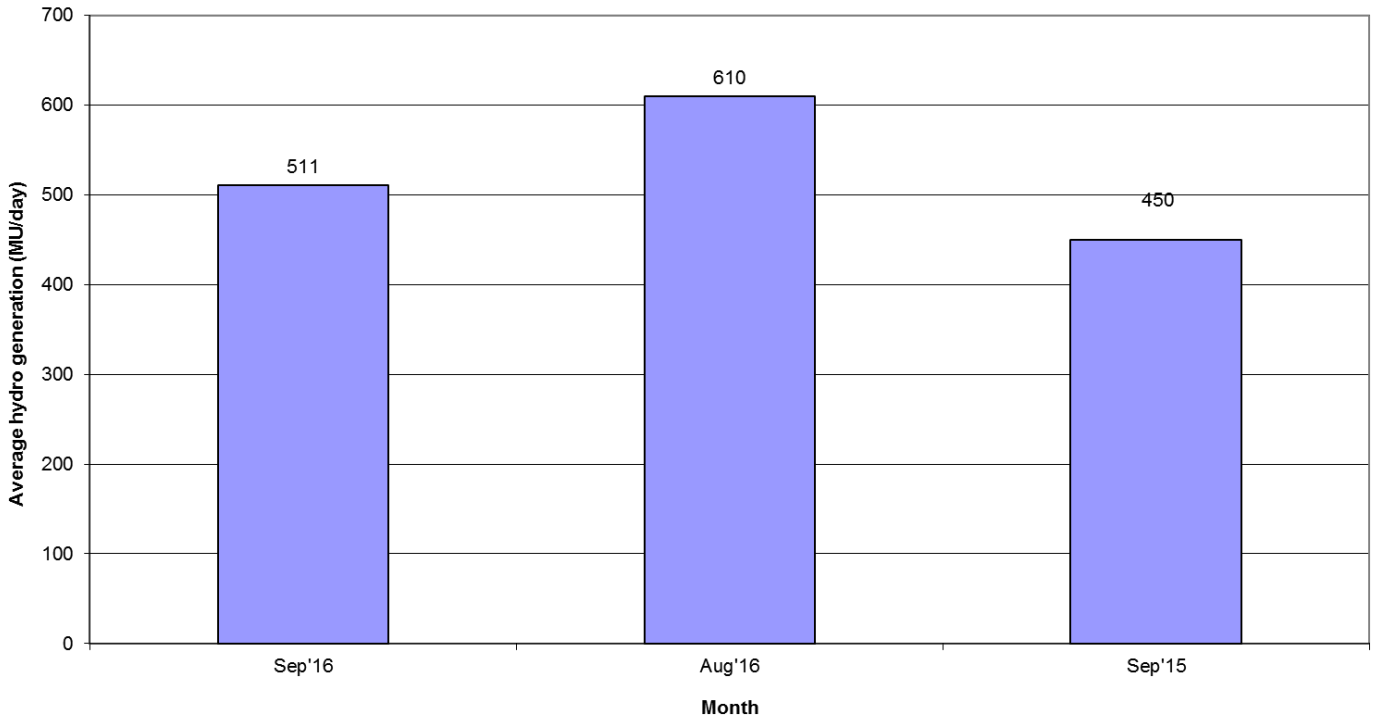


1. SUMMARY OF REPORT FOR THE MONTH OF SEPTEMBER 2016

Average Hydro Generation

Decreased by 16.24% as compared to Aug 2016

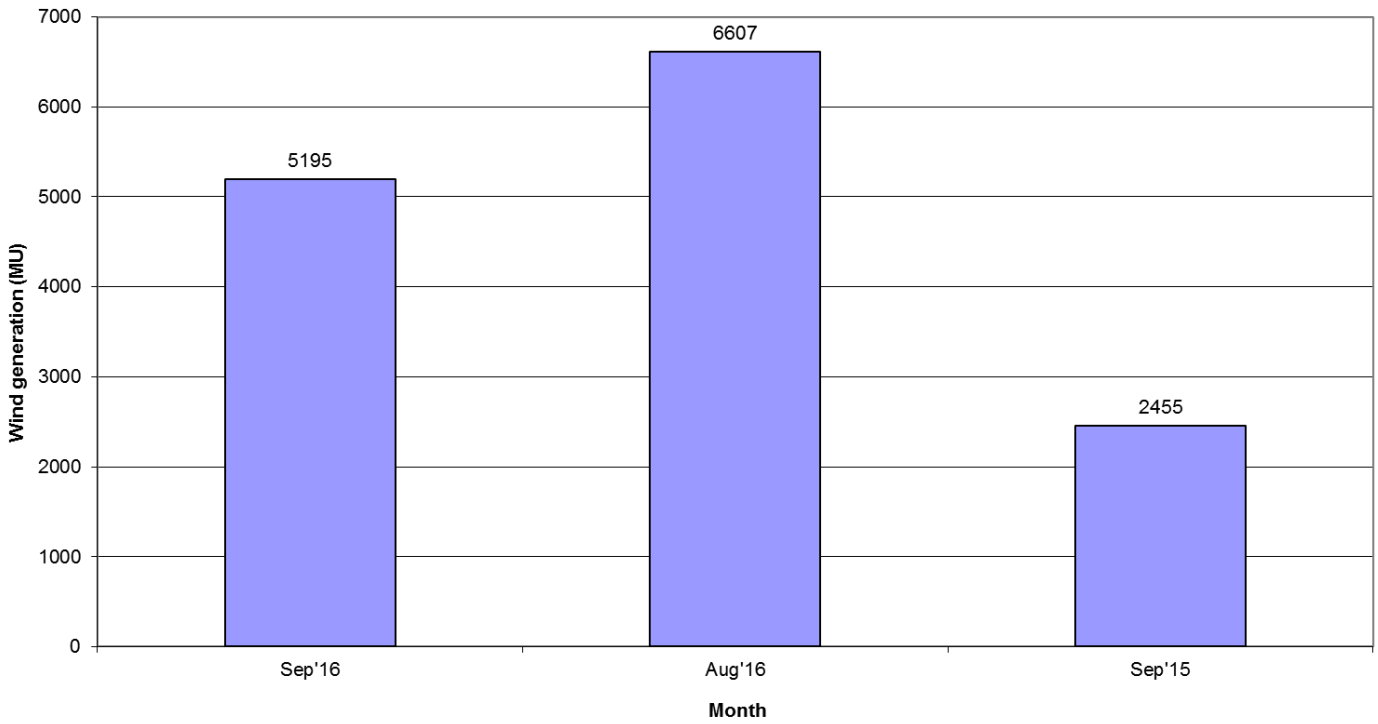
Increased by 13.58% as compared to Sep 2015



Wind Generation

Decreased by 21.37% as compared to Aug 2016

Increased by 111.60% as compared to Sep 2015

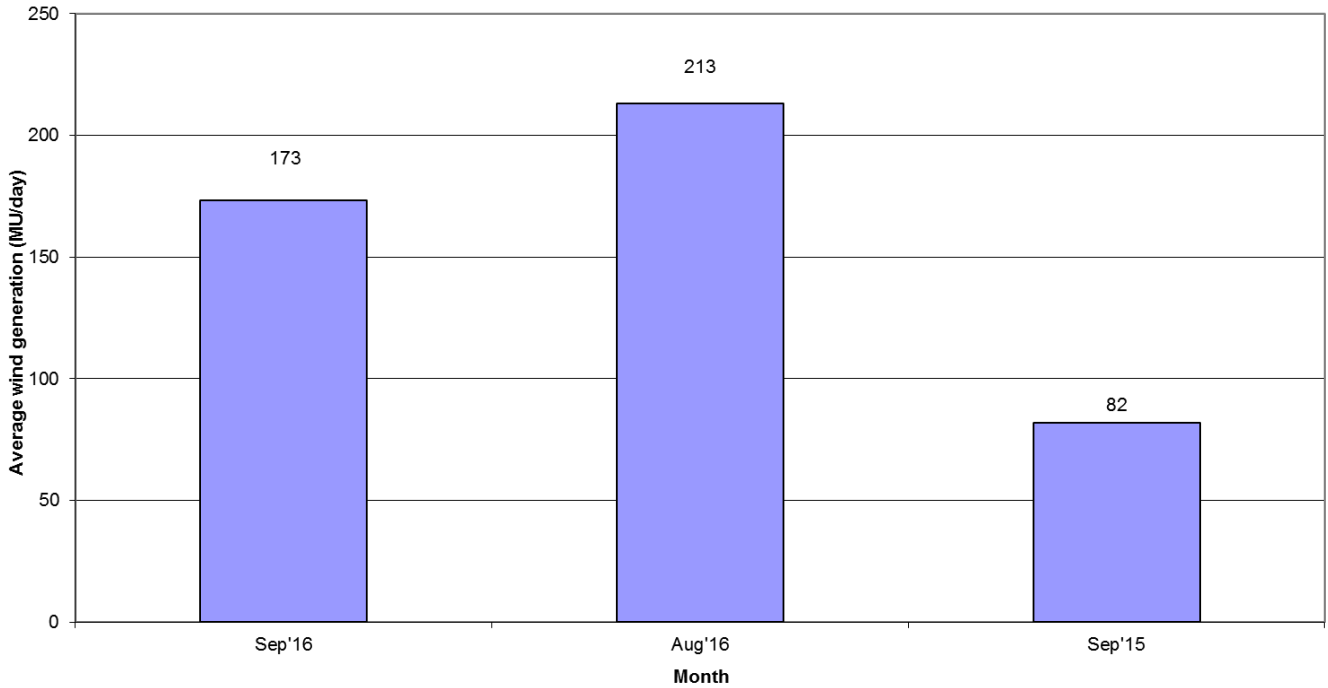


1. SUMMARY OF REPORT FOR THE MONTH OF SEPTEMBER 2016

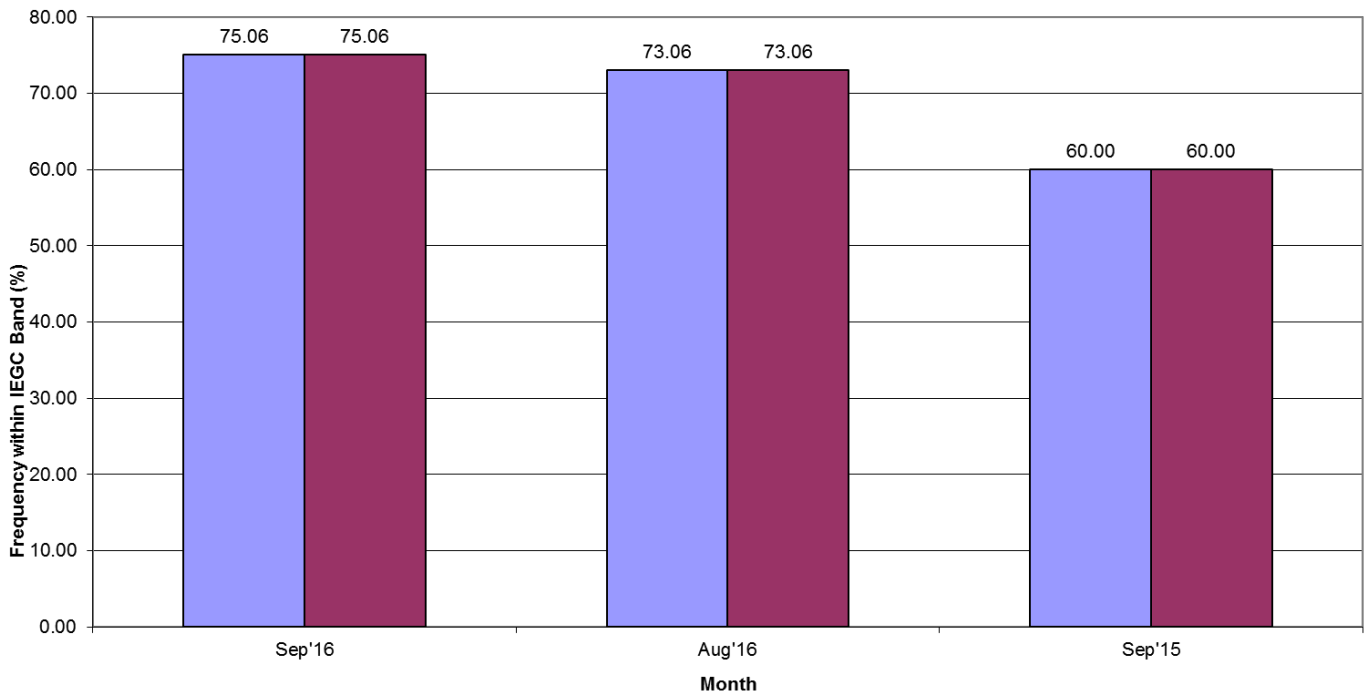
Average wind generation (MU/day)

Decreased by 18.75 % as compared to Aug 2016

Increased by 111.60 % as compared to Sep 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 30.09.2016
(All figures are in MW)

S No	Region	THERMAL				NUCLEAR	HYDRO	RES @ MNRE	GRAND TOTAL
		COAL	GAS	DIESEL	TOTAL				
1	NR	46524	5556	0	52080	1620	18377	8785	80862
2	WR	72753	11203	0	83956	1840	7448	15613	108857
3	SR	37043	6474	843	44359	2320	11668	19045	77392
4	ER	30623	100	0	30723	0	4378	519	35620
5	NER	310	1724	36	2070	0	1242	264	3576
6	ISLANDS	0	0	40	40	0	0	11	51
		187252	25057	919	213228	5780	43112	44237	306358

Remarks: Data from CEA website

3. राष्ट्रीय स्तर पर संध्याकालीन शिखर विद्युत मांग पूर्ति

PEAK DEMAND MET AT NATIONAL LEVEL

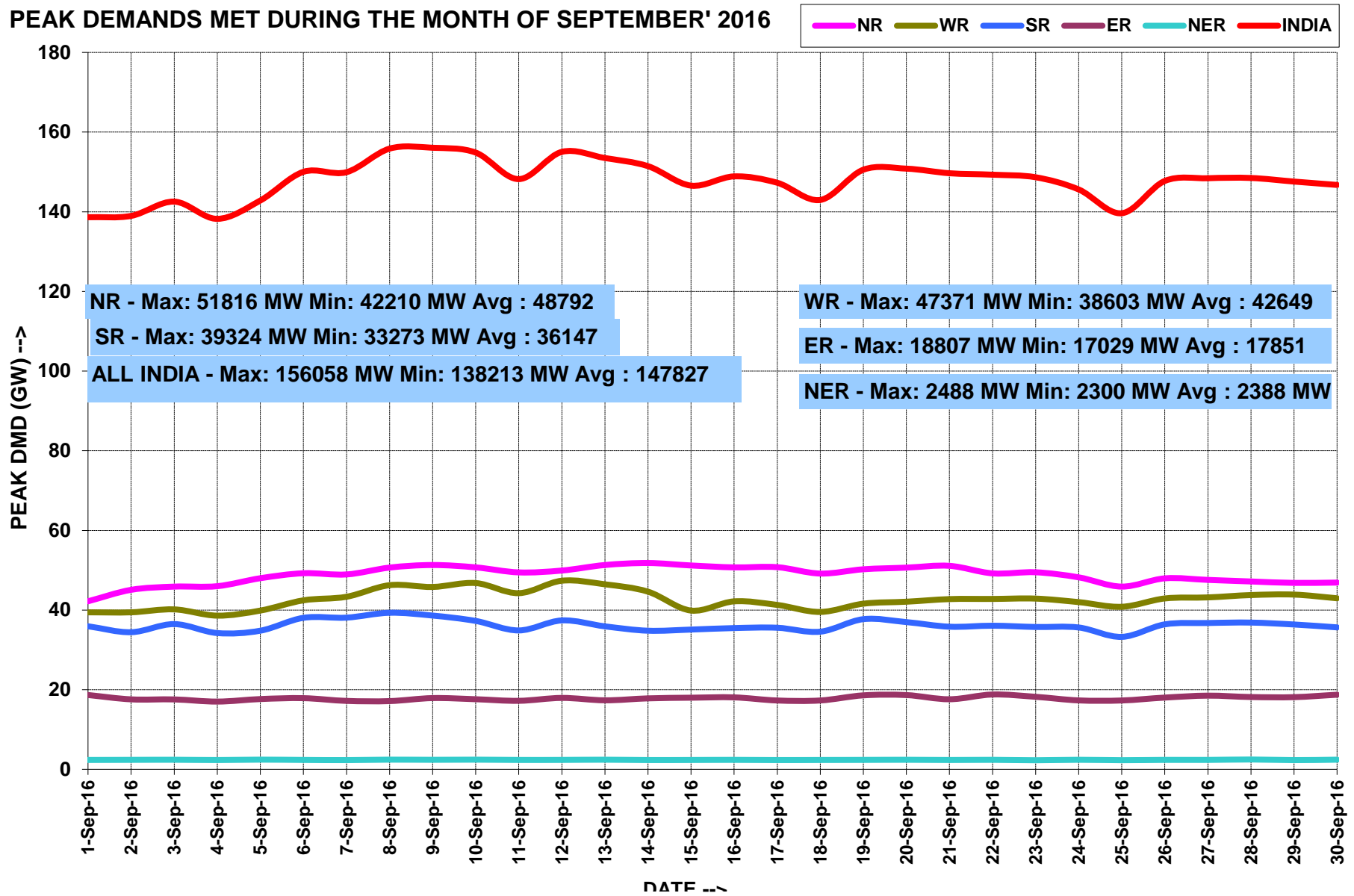
माह:-सितंबर 2016 MONTH:- September 2016

सभी आंकड़े मेगावाट मे All figures in MW

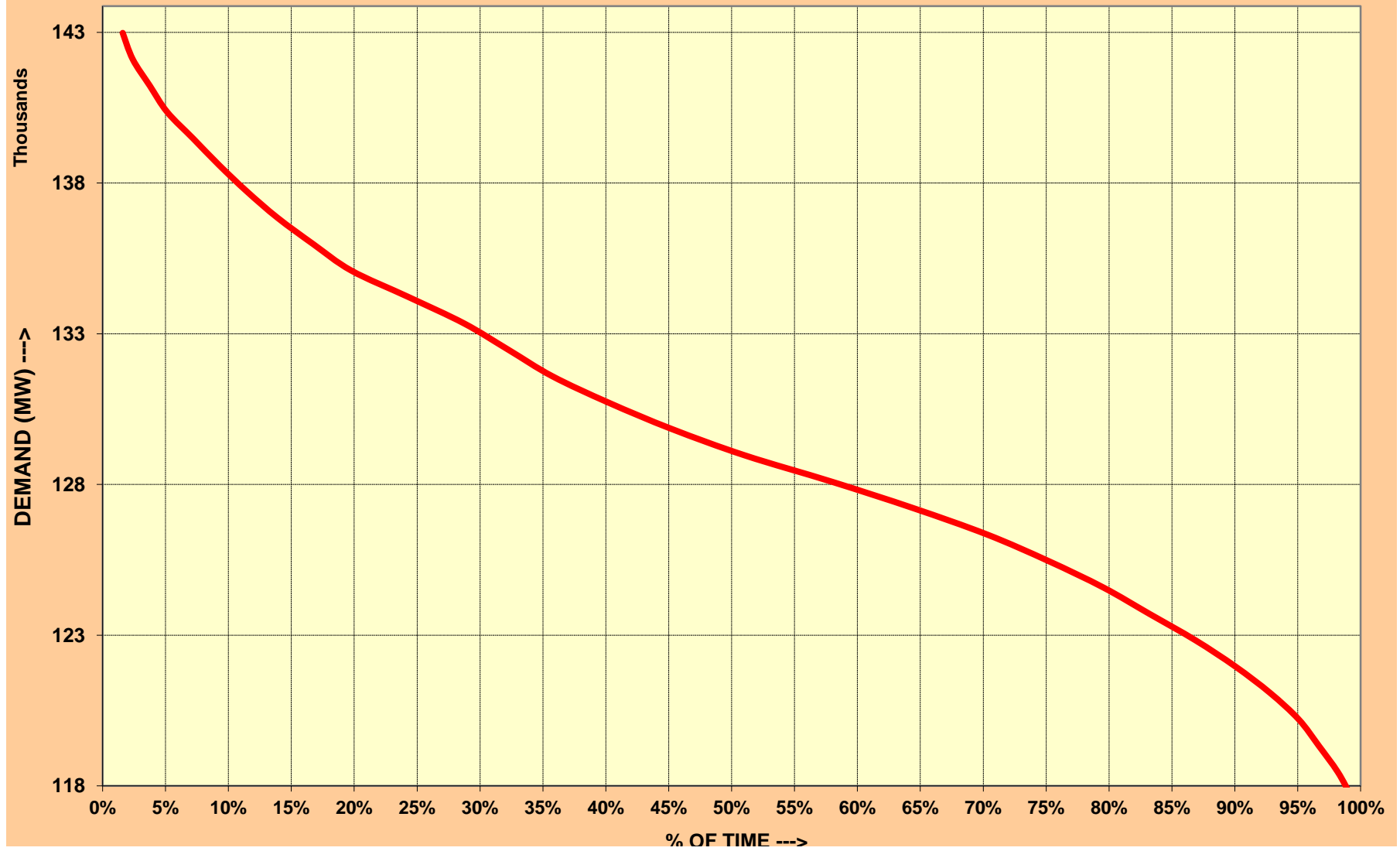
दिनांक Date	उत्तरी क्षे. NR	पश्चिमी क्षे. WR	दक्षिणी क्षे. SR	पूर्वी क्षे. ER	पूर्वोत्तर क्षे. NER	कुल TOTAL
01-Sep-16	42210	39435	35934	18676	2371	138626
02-Sep-16	45085	39439	34448	17589	2397	138958
03-Sep-16	45889	40173	36484	17574	2423	142543
04-Sep-16	46000	38603	34231	17029	2351	138213
05-Sep-16	48001	39879	34826	17663	2452	142821
06-Sep-16	49249	42450	38057	17887	2376	150020
07-Sep-16	48948	43343	38105	17199	2333	149928
08-Sep-16	50668	46251	39324	17149	2449	155841
09-Sep-16	51312	45808	38622	17907	2409	156058
10-Sep-16	50725	46783	37277	17622	2446	154853
11-Sep-16	49459	44246	34892	17221	2373	148191
12-Sep-16	49927	47371	37404	17948	2384	155034
13-Sep-16	51314	46470	35914	17350	2435	153483
14-Sep-16	51816	44621	34820	17837	2348	151441
15-Sep-16	51197	39880	35109	18003	2366	146555
16-Sep-16	50720	42189	35484	18086	2395	148874
17-Sep-16	50771	41296	35566	17303	2344	147280
18-Sep-16	49171	39533	34579	17309	2366	142958
19-Sep-16	50243	41607	37720	18595	2386	150551
20-Sep-16	50657	42101	36980	18662	2417	150817
21-Sep-16	51107	42754	35826	17615	2361	149664
22-Sep-16	49219	42795	36075	18807	2403	149299
23-Sep-16	49491	42880	35758	18227	2300	148656
24-Sep-16	48217	42003	35633	17325	2414	145592
25-Sep-16	45897	40831	33273	17309	2313	139623
26-Sep-16	47969	42921	36416	18035	2392	147733
27-Sep-16	47576	43181	36752	18518	2385	148412
28-Sep-16	47180	43773	36859	18173	2488	148473
29-Sep-16	46826	43888	36382	18145	2333	147574
30-Sep-16	46907	42968	35660	18753	2442	146730
उच्चतम MAXIMUM	51816	47371	39324	18807	2488	156058
निम्नतम MINIMUM	42210	38603	33273	17029	2300	138213
औसत AVERAGE	48792	42649	36147	17851	2388	147827
अब तक का उच्चतम All Time Max.	51816	47617	39363	18948	2492	156058
दिनांक Date	14.09.16	20.10.15	23.08.16	24.06.16	13.07.16	09.09.16

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

PEAK DEMANDS MET DURING THE MONTH OF SEPTEMBER' 2016



ALL INDIA LOAD DURATION CURVE FOR SEPTEMBER' 2016



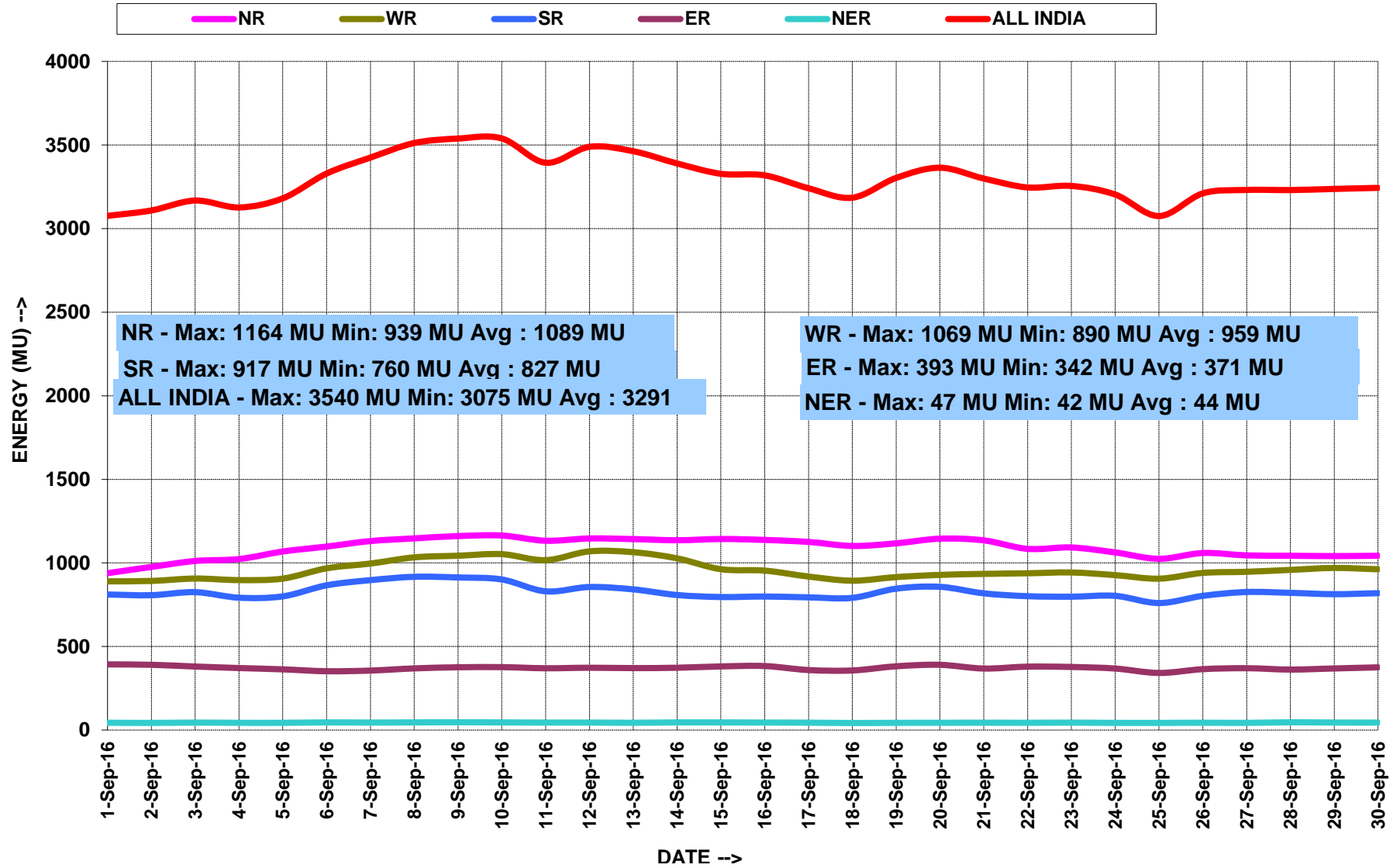
4. राष्ट्रीय स्तर पर विद्युत ऊर्जा आपूर्ति ENERGY MET AT NATIONAL LEVEL

माह:-सितंबर 2016 MONTH:- September 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-Sep-16	939	890	811	393	44	3076
02-Sep-16	976	892	807	391	43	3109
03-Sep-16	1012	907	825	380	45	3168
04-Sep-16	1023	897	792	371	43	3127
05-Sep-16	1068	906	800	363	43	3181
06-Sep-16	1098	968	866	352	46	3329
07-Sep-16	1131	996	897	356	45	3425
08-Sep-16	1147	1033	917	369	46	3512
09-Sep-16	1161	1043	913	376	47	3539
10-Sep-16	1164	1052	901	376	46	3540
11-Sep-16	1133	1017	830	370	45	3394
12-Sep-16	1146	1069	856	373	45	3490
13-Sep-16	1143	1064	842	371	44	3463
14-Sep-16	1136	1027	808	373	46	3390
15-Sep-16	1143	962	796	381	46	3328
16-Sep-16	1138	954	799	383	45	3319
17-Sep-16	1126	919	794	359	44	3242
18-Sep-16	1102	894	791	357	42	3185
19-Sep-16	1117	915	846	382	43	3303
20-Sep-16	1145	928	857	390	44	3364
21-Sep-16	1135	934	818	368	44	3300
22-Sep-16	1084	938	801	379	44	3246
23-Sep-16	1093	943	798	378	45	3255
24-Sep-16	1063	927	803	368	43	3204
25-Sep-16	1025	906	760	342	43	3075
26-Sep-16	1059	940	803	364	44	3211
27-Sep-16	1045	947	826	370	43	3231
28-Sep-16	1043	958	821	362	47	3231
29-Sep-16	1041	970	813	369	45	3238
30-Sep-16	1043	962	819	375	45	3244
कुल TOTAL	32676	28760	24810	11141	1332	98719
उच्चतम MAXIMUM	1164	1069	917	393	47	3540
निम्नतम MINIMUM	939	890	760	342	42	3075
औसत AVERAGE	1089	959	827	371	44	3291
अब तक का उच्चतम All Time Max.	1208	1131	945	409	50	3540
दिनांक Date	30.06.16	20.10.15	28.04.16	20.04.16	24.08.16	10.09.16

ENERGY MET DURING THE MONTH OF SEPTEMBER' 2016



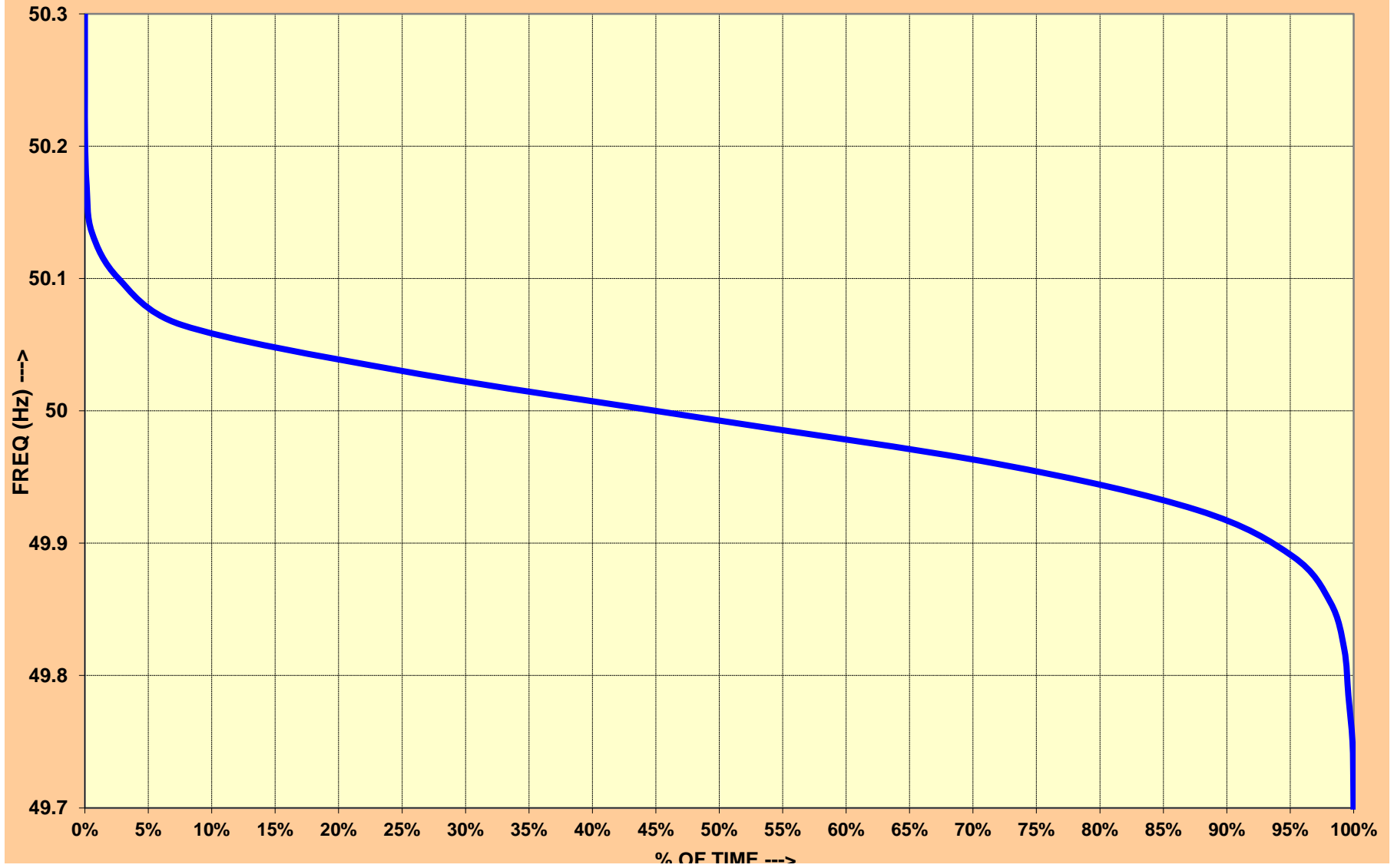
5.वर्ष 2016-17 के लिए आवृत्ति रूपरेखा FREQUENCY PROFILE FOR YEAR 2016-17

राष्ट्रीय गिड NATIONAL GRID									
फ्रिक्वेंसी रूपरेखा (Hz)			49.0-49.9	<49.9	49.9-50.05	>50.05	उच्चतम फ्रिक्वेंसी	निम्नतम फ्रिक्वेंसी	औसत फ्रिक्वेंसी
% समय	Sep-16	All India Grid	6.17	6.17	75.06	18.76	50.24	49.67	50.00
	Aug-16		5.93	5.93	73.06	21.00	50.35	49.65	50.00
	Jul-16		3.94	3.94	72.34	23.72	50.35	49.69	50.01
	Jun-16		7.66	7.66	74.07	18.26	50.37	49.65	49.99
	May-16		6.69	6.69	69.80	23.52	50.44	49.56	50.00
	Apr-16		12.87	12.87	69.99	17.14	50.32	49.64	49.98

5.2 सितंबर 2016 के लिए आवृत्ति रूपरेखा FREQUENCY PROFILE FOR SEPTEMBER 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-Sep-16	0.00	3.38	3.38	61.68	34.94	50.16	49.76	50.03
	02-Sep-16	0.00	1.61	1.61	72.38	26.01	50.24	49.81	50.02
	03-Sep-16	0.00	2.31	2.31	79.34	18.34	50.18	49.78	50.00
	04-Sep-16	0.00	2.19	2.19	78.22	19.59	50.21	49.80	50.01
	05-Sep-16	0.00	4.88	4.88	80.38	14.73	50.24	49.82	49.99
	06-Sep-16	0.00	11.32	11.32	78.36	10.32	50.17	49.78	49.98
	07-Sep-16	0.00	24.93	24.93	69.75	5.32	50.16	49.69	49.95
	08-Sep-16	0.00	9.73	9.73	78.63	11.63	50.14	49.78	49.98
	09-Sep-16	0.00	2.84	2.84	76.31	20.86	50.17	49.83	50.00
	10-Sep-16	0.00	0.58	0.58	71.78	27.64	50.19	49.87	50.02
	11-Sep-16	0.00	0.72	0.72	74.27	25.01	50.21	49.85	50.02
	12-Sep-16	0.00	2.91	2.91	72.22	24.87	50.20	49.80	50.01
	13-Sep-16	0.00	3.25	3.25	80.60	16.15	50.19	49.82	49.99
	14-Sep-16	0.00	2.71	2.71	77.69	19.61	50.17	49.83	50.00
	15-Sep-16	0.00	0.42	0.42	73.41	26.17	50.22	49.87	50.02
	16-Sep-16	0.00	3.10	3.10	79.00	17.89	50.16	49.80	50.00
	17-Sep-16	0.00	2.67	2.67	75.22	22.11	50.22	49.83	50.01
	18-Sep-16	0.00	2.91	2.91	80.13	16.97	50.17	49.82	50.00
	19-Sep-16	0.00	17.27	17.27	73.17	9.56	50.13	49.67	49.96
	20-Sep-16	0.00	17.27	17.27	73.17	9.56	50.13	49.67	49.96
	21-Sep-16	0.00	1.91	1.91	77.23	20.86	50.20	49.85	50.01
	22-Sep-16	0.00	0.88	0.88	67.34	31.78	50.19	49.86	50.02
	23-Sep-16	0.00	1.79	1.79	78.69	19.51	50.16	49.85	50.00
	24-Sep-16	0.00	1.30	1.30	72.27	26.44	50.22	49.78	50.02
	25-Sep-16	0.00	1.22	1.22	73.18	25.60	50.22	49.85	50.02
	26-Sep-16	0.00	11.37	11.37	79.12	9.51	50.16	49.70	49.97
	27-Sep-16	0.00	18.03	18.03	75.10	6.86	50.14	49.74	49.96
	28-Sep-16	0.00	20.57	20.57	71.59	7.85	50.15	49.73	49.96
	29-Sep-16	0.00	3.54	3.54	73.95	22.51	50.21	49.81	50.01
	30-Sep-16	0.00	7.63	7.63	77.71	14.66	50.14	49.80	49.98

ALL INDIA FREQUENCY DURATION CURVE FOR SEPTEMBER' 2016



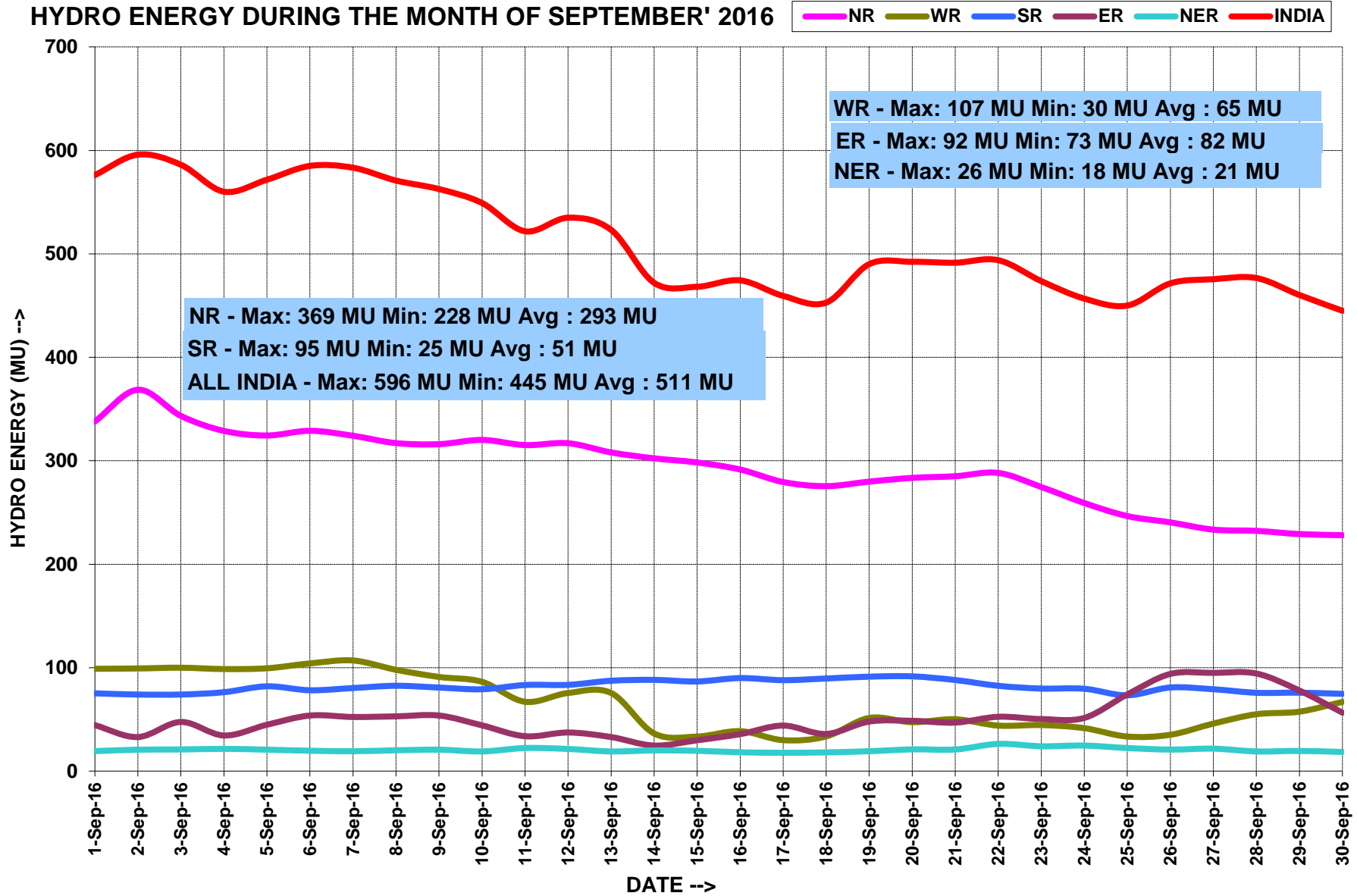
**6.राष्ट्रीय स्तर पर जल विद्युत उत्पादन
HYDRO GENERATION AT NATIONAL LEVEL**

माह:-सितंबर 2016 MONTH:- September 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-Sep-16	338	99	45	75	19	576
02-Sep-16	369	99	33	74	21	596
03-Sep-16	343	100	48	74	21	586
04-Sep-16	329	99	35	76	22	560
05-Sep-16	324	99	45	82	21	572
06-Sep-16	329	104	54	78	20	585
07-Sep-16	324	107	52	80	19	583
08-Sep-16	317	98	53	83	20	571
09-Sep-16	316	91	54	81	21	563
10-Sep-16	320	86	44	79	19	549
11-Sep-16	315	67	34	83	22	522
12-Sep-16	317	76	37	83	22	535
13-Sep-16	308	76	33	87	19	523
14-Sep-16	302	36	25	88	20	472
15-Sep-16	298	34	30	87	20	468
16-Sep-16	292	39	36	90	18	474
17-Sep-16	280	30	44	88	18	459
18-Sep-16	276	34	36	90	18	453
19-Sep-16	280	51	48	91	19	490
20-Sep-16	284	47	49	92	21	492
21-Sep-16	285	50	47	88	21	491
22-Sep-16	288	44	53	83	26	494
23-Sep-16	275	45	50	80	24	474
24-Sep-16	259	42	52	80	25	457
25-Sep-16	247	34	74	73	22	450
26-Sep-16	241	35	94	81	21	471
27-Sep-16	234	46	95	79	22	476
28-Sep-16	232	55	94	76	19	477
29-Sep-16	229	58	78	76	20	460
30-Sep-16	228	67	57	75	19	445
कुल TOTAL	8779	1947	1527	2453	619	15325
उच्चतम MAXIMUM	369	107	95	92	26	596
निम्नतम MINIMUM	228	30	25	73	18	445
औसत AVERAGE	293	65	51	82	21	511
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 SEPTEMBER' 2016



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

माह:-सितंबर 2016

MONTH:- September 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-Sep-16	6	42	94	-----	-----	142
02-Sep-16	12	50	105	-----	-----	167
03-Sep-16	30	61	102	-----	-----	193
04-Sep-16	41	83	106	-----	-----	230
05-Sep-16	41	86	92	-----	-----	219
06-Sep-16	36	75	105	-----	-----	216
07-Sep-16	34	58	92	-----	-----	184
08-Sep-16	28	40	96	-----	-----	164
09-Sep-16	24	39	71	-----	-----	134
10-Sep-16	34	50	94	-----	-----	178
11-Sep-16	34	41	86	-----	-----	161
12-Sep-16	20	23	94	-----	-----	138
13-Sep-16	10	17	93	-----	-----	121
14-Sep-16	5	20	94	-----	-----	119
15-Sep-16	5	33	115	-----	-----	154
16-Sep-16	5	34	127	-----	-----	166
17-Sep-16	5	61	124	-----	-----	191
18-Sep-16	5	67	132	-----	-----	205
19-Sep-16	5	65	118	-----	-----	188
20-Sep-16	15	70	125	-----	-----	210
21-Sep-16	20	46	128	-----	-----	195
22-Sep-16	10	36	130	-----	-----	177
23-Sep-16	6	37	135	-----	-----	179
24-Sep-16	26	49	142	-----	-----	217
25-Sep-16	10	33	126	-----	-----	170
26-Sep-16	13	41	107	-----	-----	161
27-Sep-16	23	46	87	-----	-----	156
28-Sep-16	18	53	77	-----	-----	147
29-Sep-16	10	54	91	-----	-----	155
30-Sep-16	8	42	111	-----	-----	162
कुल TOTAL	542	1453	3200	-----	-----	5195
उच्चतम MAXIMUM	41	86	142	-----	-----	230
निम्नतम MINIMUM	5	17	71	-----	-----	119
औसत AVERAGE	18	48	107	-----	-----	173
अब तक का उच्चतम All Time Max.	41	140	155	310
दिनांक Date	06.07.16	15.06.16	11.07.16	15.06.16

8. ACTUAL POWER SUPPLY POSITION - Sep 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	5.5	5.5	0.0	163.8	163.8	0.0	0.0	313	313	0	0.0
	Delhi	101.9	101.9	0.0	3058.1	3056.9	-1.2	0.0	5305	5301	-4	-0.1
	Haryana	169.0	168.6	-0.4	5068.8	5057.5	-11.2	-0.2	9109	9109	0	0.0
	H.P.	26.6	26.5	-0.1	797.3	794.7	-2.5	-0.3	1329	1329	0	0.0
	J&K	45.1	36.1	-9.0	1352.5	1083.2	-269.3	-19.9	2469	1975	-494	-20.0
	Punjab	203.6	203.6	0.0	6108.1	6108.1	0.0	0.0	10596	10596	0	0.0
	Rajasthan	200.8	197.7	-3.1	6024.0	5930.3	-93.8	-1.6	9816	9816	0	0.0
	U.P.	320.4	312.3	-8.1	9613.3	9369.7	-243.7	-2.5	15956	15456	-500	-3.1
	Uttarakhand	38.3	38.3	0.0	1150.4	1149.0	-1.5	-0.1	1942	1942	0	0.0
NFF/Railway	2.1	2.1	0.0	63.9	63.9	0.0	0.0	97	97	0	0.0	
TOTAL	1113.3	1092.6	-20.8	33400.2	32776.9	-623.2	-1.9	52772	51816	-956	-1.8	
WR	Gujarat	303.5	303.5	0.0	9105.4	9105.4	0.0	0.0	15002	15002	0	0.0
	Madhya Pradesh	161.1	161.1	-0.1	4833.7	4831.8	-1.9	0.0	8111	8094	-17	-0.2
	Chhattisgarh	77.6	77.5	-0.1	2328.2	2324.2	-4.0	-0.2	3641	3673	32	0.9
	Maharashtra	379.1	379.1	0.0	11371.6	11371.6	0.0	0.0	20721	20714	-7	0.0
	Goa	8.3	8.3	0.0	250.0	249.3	-0.7	-0.3	468	468	0	0.0
	D&D	6.9	6.9	0.0	207.5	207.5	0.0	0.0	328	328	0	0.0
	DNH	17.1	17.1	0.0	513.9	513.9	0.0	0.0	773	773	0	0.0
	ESIL	10.8	10.8	0.0	324.3	324.3	0.0	0.0	759	759	0	0.0
TOTAL	964.5	964.3	-0.2	28934.6	28928.1	-6.5	0.0	47781	47681	-100	-0.2	
SR	Andhra Pradesh	151.0	151.0	0.0	4530.1	4529.7	-0.4	0.0	7733	7714	-19	-0.2
	Telangana	142.9	142.9	0.0	4286.1	4285.7	-0.4	0.0	8220	8220	0	0.0
	KPTCL	186.0	186.0	0.0	5579.3	5578.8	-0.5	0.0	9500	9497	-3	0.0
	KSEB	64.9	64.9	0.0	1947.2	1947.0	-0.2	0.0	3514	3513	-1	0.0
	TNEB	302.2	302.2	0.0	9067.2	9066.5	-0.7	0.0	14597	14568	-29	-0.2
	PONDICHERY	7.0	7.0	0.0	208.6	208.6	0.0	0.0	342	341	-1	-0.2
TOTAL	853.9	853.9	-0.1	25618.5	25616.4	-2.1	0.0	41259	41259	0	0.0	
ER	Bihar	72.2	68.3	-3.9	2165.0	2048.8	-116.2	-5.4	3700	3636	-64	-1.7
	JSEB	25.0	21.3	-3.7	750.0	637.8	-112.2	-15.0	1200	1173	-27	-2.3
	DVC	56.0	61.9	5.9	1680.0	1856.2	176.2	10.5	2800	2793	-7	-0.3
	Odisha	84.3	76.5	-7.8	2530.0	2296.3	-233.7	-9.2	4250	4037	-213	-5.0
	West Bengal	161.9	156.6	-5.3	4856.0	4697.0	-159.0	-3.3	8300	8369	69	0.8
	Sikkim	1.1	1.1	0.0	34.0	33.2	-0.8	-2.4	85	84	-1	-1.2
TOTAL	400.5	385.6	-14.9	12015.0	11569.3	-445.7	-3.7	19743	19168	-575	-2.9	
NER	Arunachal Pradesh	2.1	2.1	0.0	63.0	62.7	-0.3	-0.5	143	136	-7	-4.9
	Assam	29.6	27.4	-2.2	888.1	821.4	-66.7	-7.5	1616	1576	-40	-2.5
	Manipur	2.0	2.0	0.0	60.9	60.8	-0.1	-0.2	151	148	-3	-2.0
	MeSEB	4.6	4.6	0.0	138.7	138.7	0.0	0.0	298	298	0	0.0
	Mizoram	1.3	1.3	0.0	38.1	38.1	0.0	-0.1	92	91	-1	-1.1
	Nagaland	2.3	2.2	-0.1	68.1	66.2	-1.9	-2.7	123	121	-2	-1.6
	Tripura	4.0	3.9	-0.1	119.7	116.8	-3.0	-2.5	277	277	0	0.0
TOTAL	45.9	43.5	-2.4	1377	1305	-72.0	-5.2	2701	2648	-53	-2.0	
ALL INDIA		3378.2	3339.8	-38.3	101344.9	100195.4	-1149.5	-1.1	164256	162572	-1684	-1.0

9. ENERGY COMPARISON OF SEPTEMBER 2016 vs SEPTEMBER 2015

REGION	STATE	Energy Requirement (MU)					Energy Met (MU)				
		Sep-15	Sep-16	Difference	% Change	Average MU/day for Sep-16	Sep-15	Sep-16	Difference	% Change	Average for MU/day for Sep-16
NR	Chandigarh	158	164	6	4	5	158	164	6	4	5
	Delhi	3025	3058	33	1	102	3023	3057	33	1	102
	Haryana	4904	5069	165	3	169	4903	5058	155	3	169
	H.P.	750	797	48	6	27	741	795	54	7	26
	J&K	1279	1353	74	6	45	1088	1083	-5	0	36
	Punjab	5424	6108	684	13	204	5424	6108	684	13	204
	Rajasthan	6390	6024	-366	-6	201	6347	5930	-417	-7	198
	U.P.	10157	9613	-544	-5	320	8477	9370	893	11	312
	Uttarakhand	1134	1150	17	1	38	1091	1149	58	5	38
	NFF/Railway	70	64	-6	-8	2	70	64	-6	-8	2
TOTAL	33290	33400	110	0	1113	31322	32777	1455	5	1093	
WR	Gujarat	8842	9105	263	3	304	8824	9105	282	3	304
	Madhya Pradesh	5289	4834	-455	-9	161	5283	4832	-451	-9	161
	Chhattisgarh	2452	2328	-124	-5	78	2397	2324	-73	-3	77
	Maharashtra	11554	11372	-182	-2	379	11521	11372	-149	-1	379
	Goa	260	250	-10	-4	8	260	249	-10	-4	8
	D&D	194	207	13	7	7	194	207	13	7	7
	DNH	469	514	45	10	17	482	514	32	7	17
	ESIL	141	324	183	129	11	141	324	183	130	11
TOTAL	29201	28935	-266	-1	964	29102	28928	-173	-1	964	
SR	Andhra Pradesh	3929	4530	601	15	151	3899	4530	630	16	151
	Telangana	4179	4286	107	3	143	4170	4286	116	3	143
	KPTCL	5043	5579	536	11	186	4411	5579	1168	26	186
	KSEB	1854	1947	93	5	65	1837	1947	110	6	65
	TNEB	8498	9067	569	7	302	8373	9067	694	8	302
	PONDY	204	209	4	2	7	201	209	8	4	7
TOTAL	23708	25618	1910	8	854	22890	25616	2726	12	854	
ER	Bihar	2081	2165	84	4	72	2004	2049	44	2	68
	JSEB	690	750	60	9	25	667	638	-29	-4	21
	DVC	1803	1680	-123	-7	56	1799	1856	58	3	62
	Odisha	2335	2530	195	8	84	2317	2296	-20	-1	77
	West Bengal	4588	4856	268	6	162	4571	4697	126	3	157
	Sikkim	24	34	10	40	1	24	33	9	37	1
TOTAL	11521	12015	494	4	401	11382	11569	187	2	386	
NER	Arunachal Pradesh	65	63	-2	-3	2	62	63	1	1	2
	Assam	806	888	82	10	30	739	821	82	11	27
	Manipur	67	61	-6	-9	2	66	61	-5	-8	2
	MeSEB	153	139	-14	-9	5	146	139	-8	-5	5
	Mizoram	39	38	-1	-1	1	38	38	0	1	1
	Nagaland	65	68	3	5	2	65	66	2	3	2
	Tripura	106	120	14	13	4	104	117	13	13	4
TOTAL	1299	1377	77	6	46	1220	1305	85	7	43	
ALL INDIA	99020	101345	2325	2	3378	95915	100195	4280	4	3340	

10. DEMAND COMPARISON OF SEPTEMBER 2016 vs SEPTEMBER 2015

REGION	STATE	Peak Requirement (MW)				Peak Met (MW)			
		Sep-15	Sep-16	Difference	% Change	Sep-15	Sep-16	Difference	% Change
NR	Chandigarh	319	313	-6	-1.9	319	313	-6	-1.9
	Delhi	5463	5305	-158	-2.9	5457	5301	-156	-2.9
	Haryana	8994	9109	115	1.3	8994	9109	115	1.3
	H.P.	1300	1329	29	2.2	1300	1329	29	2.2
	J&K	2388	2469	81	3.4	2026	1975	-51	-2.5
	Punjab	10502	10596	94	0.9	10502	10596	94	0.9
	Rajasthan	10961	9816	-1145	-10.4	10961	9816	-1145	-10.4
	U.P.	15493	15956	463	3.0	13493	15456	1963	14.5
	Uttarakhand	1948	1942	-6	-0.3	1948	1942	-6	-0.3
	NFF/Railway	105	97	-8	-7.6	105	97	-8	-7.6
WR	Gujarat	15029	15002	-27	0	14982	15002	20	0.1
	Madhya Pradesh	8733	8111	-622	-7	8751	8094	-657	-7.5
	Chhattisgarh	4085	3641	-444	-11	3837	3673	-164	-4.3
	Maharashtra	19736	20721	985	5	19473	20714	1241	6.4
	Goa	456	468	12	3	435	468	33	7.6
	D&D	304	328	24	7.9	304	328	24	7.9
	DNH	723	773	50	6.9	723	773	50	6.9
	ESIL	463	759	296	63.9	463	759	296	63.9
SR	Andhra Pradesh	6346	7733	1386	21.8	6336	7714	1378	21.7
	Telangana	6590	8220	1630	24.7	6586	8220	1634	24.8
	KPTCL	7923	9500	1576	19.9	7303	9497	2194	30.0
	KSEB	3572	3514	-58	-1.6	3499	3513	13	0.4
	TNEB	13833	14597	764	5.5	13754	14568	814	5.9
	PONDY	376	342	-35	-9.2	332	341	9	2.7
ER	Bihar	3416	3700	284	8.3	3416	3636	220	6.4
	JSEB	1156	1200	44	3.8	1110	1173	63	5.7
	DVC	2855	2800	-55	-1.9	2721	2793	72	2.6
	Odisha	3942	4250	308	7.8	3942	4037	96	2.4
	West Bengal	7853	8300	447	5.7	7803	8369	565	7.2
	Sikkim	86	85	-1	-1.2	86	84	-2	-2.3
NER	Arunachal Pradesh	122	143	21	17.2	122	136	14	11.5
	Assam	1437	1616	180	12.5	1325	1576	251	19.0
	Manipur	147	151	4	2.7	146	148	2	1.3
	MeSEB	286	298	12	4.2	283	298	15	5.3
	Mizoram	90	92	2	2.5	89	91	2	2.6
	Nagaland	121	123	2	2.0	120	121	1	1.2
	Tripura	269	277	8	3.0	268	277	9	3.4

11. SCHEDULE AND DRAWAL OF CONSTITUENTS - September 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	168.68	183.24	14.56	8.63	5.62	6.11	0.49
	Delhi	2444.97	2462.96	17.98	0.74	81.50	82.10	0.60
	Haryana	3940.21	3874.00	-66.21	-1.68	131.34	129.13	-2.21
	H.P.	115.01	138.44	23.43	20.37	3.83	4.61	0.78
	J&K	520.29	545.61	25.32	4.87	17.34	18.19	0.84
	Punjab	3224.14	3225.43	1.29	0.04	107.47	107.51	0.04
	Rajasthan	2004.85	1997.59	-7.26	-0.36	66.83	66.59	-0.24
	U.P.	4071.01	4143.29	72.28	1.78	135.70	138.11	2.41
	Uttarakhand	437.60	469.69	32.09	7.33	14.59	15.66	1.07
	NFF/Railway	55.40	64.10	8.70	15.70	1.85	2.14	0.29
WR	Gujarat	2303.14	2247.94	-55.20	-2.40	76.77	74.93	-1.84
	Madhya Pradesh	2500.29	2450.29	-50.00	-2.00	83.34	81.68	-1.67
	Maharashtra	3364.42	3428.01	63.59	1.89	112.15	114.27	2.12
	Chhattisgarh	851.42	885.57	34.16	4.01	28.38	29.52	1.14
	Goa	233.69	233.41	-0.28	-0.12	7.79	7.78	-0.01
	D&D	200.08	207.49	7.41	3.71	6.67	6.92	0.25
	D&NH	522.13	513.93	-8.20	-1.57	17.40	17.13	-0.27
	ESIL	315.23	324.31	9.08	2.88	10.51	10.81	0.30
SR	Andhra Pradesh	422.84	478.90	56.06	13.26	14.09	15.96	1.87
	Telangana	2449.33	2490.49	41.16	1.68	81.64	83.02	1.37
	KPTCL	2059.77	2114.76	54.99	2.67	68.66	70.49	1.83
	KSEB	1395.55	1425.91	30.36	2.18	46.52	47.53	1.01
	TNEB	3584.98	3556.31	-28.67	-0.80	119.50	118.54	-0.96
	PONDICHERRY	212.22	201.85	-10.37	-4.89	7.07	6.73	-0.35
ER	Bihar	1990.03	2006.57	16.54	0.83	66.33	66.89	0.55
	JSEB	466.97	453.48	-13.48	-2.89	15.57	15.12	-0.45
	DVC	-806.34	-781.51	24.83	-3.08	-26.88	-26.05	0.83
	GRIDCO	605.30	607.38	2.08	0.34	20.18	20.25	0.07
	WBSEB	1226.50	1280.78	54.27	4.42	40.88	42.69	1.81
	Sikkim	39.21	33.17	-6.04	-15.40	1.31	1.11	-0.20
NER	Arunachal Pradesh	64.22	62.66	-1.56	-2.42	2.14	2.09	-0.05
	Assam	609.79	662.06	52.27	8.57	20.33	22.07	1.74
	Manipur	66.86	60.77	-6.09	-9.11	2.23	2.03	-0.20
	MeSEB	27.17	39.25	12.07	44.42	0.91	1.31	0.40
	Mizoram	33.99	36.73	2.74	8.06	1.13	1.22	0.09
	Nagaland	52.46	52.48	0.02	0.03	1.75	1.75	0.00
	Tripura	102.60	129.26	26.66	25.99	3.42	4.31	0.89

12. INTER REGIONAL EXCHANGES 2016-17

	April'16	May'16	June'16	July'16	Aug'16	Sep'16	Fin. Year 2016-17 (till Sep 2016)
Name of Line							
Import of NR from WR (WR-NR)							
WR - NR 765 kV Gwalior - Agra D/C	1910.35	1673.93	1757.18	1552.71	1581.52	1715.13	10190.83
WR-NR 765 kV Gwalior - Phagi D/C	564.39	335.59	543.16	683.11	661.63	712.93	3500.81
WR - NR HVDC Vindhyachal	127.02	46.28	68.61	16.50	12.08	60.50	330.99
WR - NR 400 kV Zerda Kankroli	0.00	0.00	0.00	6.94	41.01	17.62	65.57
WR - NR 400 kV Zerda Bhinmal	0.53	0.00	0.00	14.67	48.89	37.07	101.16
WR - NR 220 kV Badod - Kota/ Modak	5.71	18.99	8.96	66.48	85.18	50.51	235.84
WR - NR 220 kV Auraiya - Malanpur/Mehgaon	3.00	1.33	9.69	1.27	4.04	0.00	19.33
WR - NR 400 kV Vindhyachal-Rihand	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WR - NR HVDC Mundra - Mohindergarh	1712.21	1621.73	1598.96	1489.68	1402.69	1536.12	9361.39
Total WR - NR	4323.20	3697.86	3986.55	3831.36	3837.04	4129.89	23805.91
Import of NR from ER (ER-NR)							
ER - NR 765 kV Sasaram - Fatehpur	0.23	2.45	0.00	41.96	37.84	13.38	95.86
ER - NR 765 kV Gaya - Varanasi 2*S/C	155.61	69.65	92.50	300.77	346.88	369.90	1335.31
ER - WR 765 kV Gaya - Balia	94.45	61.38	82.88	86.22	116.28	101.40	542.61
ER-NR 400 kV Patna - Balia 2xD/C	232.02	347.01	425.62	522.22	350.10	298.05	2175.03
ER - NR 400 kV Muzaffarpur - Gorakhpur D/C	52.88	106.93	226.36	318.70	264.26	305.21	1274.34
ER - NR 400 kV Biharshariff - Balia D/C	94.07	53.79	90.69	113.13	132.89	99.09	583.67
ER - NR 400 kV Barh - G'pur D/C	210.89	277.55	310.57	338.52	292.75	226.71	1657.00
ER - NR 400 kV Biharshariff - Varanasi D/C	9.30	6.55	2.75	45.93	73.45	39.81	177.78
ER - NR HVDC Sasaram (Bypass)	128.99	190.08	146.20	87.40	68.26	139.16	760.10
ER - NR 220 kV Pusauli - Sahupuri	106.82	116.07	134.41	140.71	118.33	46.06	662.40
ER - NR 132 kV Sahupuri - Karamnasa	14.40	7.14	5.61	0.00	0.00	0.00	27.15
ER - NR 132 kV Rihand - Son Nagar	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total ER-NR	1099.66	1238.60	1517.58	1995.57	1801.05	1638.78	9291.24
Import of NR from NER (NER-NR)							
NER-NR HVDC Biswanath Chariali - Agra	317.02	284.77	119.29	341.91	437.06	504.86	2004.91
Total NER - NR	317.02	284.77	119.29	341.91	437.06	504.86	2004.91
Export of NR to WR (NR-WR)							
NR - WR 765 kV Gwalior - Agra D/C	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR - WR 765 kV Gwalior - Phagi D/C	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR - WR HVDC Vindhyachal	12.39	85.56	66.01	157.74	233.59	100.55	655.83
NR - WR 400 kV Zerda Kankroli	137.71	140.87	159.62	58.91	3.86	27.51	528.48
NR - WR 400 kV Zerda Bhinmal	91.55	100.42	119.36	43.86	2.26	21.67	379.13
NR - WR 220 kV Badod - Kota/ Modak	12.38	9.08	11.04	3.30	0.00	0.00	35.80
NR - WR 220 kV Auraiya - Malanpur/Mehgaon	17.40	16.03	3.76	19.45	11.32	23.82	91.78
NR-WR 400 kV Rihand-Vindhyachal	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR - WR HVDC Mundra - Mohindergarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total NR - WR	271.43	351.95	359.79	283.25	251.02	173.56	1691.01
Export of NR to ER (NR-ER)							
NR - ER 765 kV Sasaram - Fatehpur	96.68	101.63	98.39	42.19	62.60	85.72	487.20
NR - ER 765 kV Gaya - Varanasi 2*S/C	2.36	9.16	18.94	0.00	0.00	0.00	30.45
NR - ER 765 kV Gaya - Balia	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR - ER 400 kV Patna - Balia 2xD/C	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR - ER 400 kV Muzaffarpur - Gorakhpur D/C	12.38	4.33	0.00	0.00	0.00	0.00	16.70
NR - ER 400 kV Biharshariff - Balia D/C	0.00	1.25	0.41	0.00	0.00	0.00	1.66
ER - NR 400 kV Barh - G'pur D/C	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR - ER 400 kV Biharshariff - Varanasi D/C	157.78	64.28	26.62	0.00	6.07	3.07	257.82
NR - ER HVDC Sasaram (Bypass)	3.72	13.23	4.62	79.53	56.55	4.86	162.51
NR - ER 220 kV Pusauli - Sahupuri	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR - ER 132 kV Sahupuri - Karamnasa	0.00	1.26	21.99	25.35	15.28	21.18	85.07
NR - ER 132 kV Rihand - Son Nagar	16.28	17.82	15.35	13.86	15.69	15.63	94.63
Total NR - ER	289.20	212.96	186.31	160.93	156.19	130.46	1136.04
Export of NR to NER (NER-NR)							
NR-NER HVDC Biswanath Chariali - Agra	0.00	0.00	1.25	0.00	0.00	0.00	1.25
Total NR - NER	0.00	0.00	1.25	0.00	0.00	0.00	1.25

Export of WR to ER (WR-ER)							
WR - ER 765 kV Ranchi - Dharamjaygarh 2x5/C	58.51	18.86	2.14	94.41	285.38	244.39	703.68
WR - ER 765 kV Dharamjaygarh - Jharsuguda D/C	0.00	0.00	0.00	0.86	4.01	0.46	5.34
WR - ER 400 kV Sipat - Ranchi D/C	163.93	99.07	74.53	33.78	156.36	159.93	687.60
WR - ER 400 kV Raigarh - Sterlite	14.64	19.53	6.38	33.03	18.19	69.43	161.21
WR - ER 400 kV Raigarh-Ind Bharat	54.26	13.84	28.20	28.57	53.55	70.16	248.58
WR - ER 400 kV Raigarh-Rourkela	55.15	20.19	24.15	37.03	74.80	87.61	298.93
WR - ER 400 kV Raigarh - Jharsuguda	77.26	19.59	44.54	44.96	73.04	104.51	363.90
WR - ER 220 kV Korba - Budhipadar D/C	77.56	74.65	5.19	7.28	10.37	42.85	217.89
WR - ER 220 kV Raigarh - Budhipadar	5.19	11.58	0.00	0.10	0.00	0.03	16.90
Total WR - ER	506.50	277.32	185.13	280.02	675.69	779.36	2704.02
Import of WR from ER (ER - WR)							
ER - WR 765 kV Ranchi - Dharamjaygarh 2x5/C	7.12	28.02	51.27	36.78	1.23	2.00	126.43
ER - WR 765 kV Dharamjaygarh - Jharsuguda D/C	476.40	392.09	364.14	344.16	220.45	368.97	2166.21
ER - WR 400 kV Sipat - Ranchi D/C	0.00	0.00	0.06	1.37	0.12	0.12	1.68
ER - WR 400 kV Raigarh - Sterlite	71.10	4.96	55.60	1.39	31.02	0.67	164.75
ER - WR 400 kV Raigarh-Ind Bharat	1.90	5.62	0.26	12.37	0.28	0.04	20.47
ER - WR 400 kV Raigarh-Rourkela	0.12	3.58	0.45	2.62	0.24	0.26	7.26
ER - WR 400 kV Raigarh - Jharsuguda	2.83	8.89	0.41	1.16	0.47	0.06	13.81
ER - WR 220 kV Korba - Budhipadar D/C	0.00	0.00	5.02	20.33	12.72	0.43	38.50
ER - WR 220 kV Raigarh - Budhipadar	9.20	7.63	62.93	70.86	77.57	47.53	275.71
Total ER - WR	568.67	450.79	540.15	491.05	344.10	420.08	2814.83
Export of ER to NER (ER - NER)							
ER - NER 400 kV Binaguri - Bongaigaon 2xD/C	351.64	206.60	56.22	90.77	350.95	393.71	1449.89
ER - NER 220 kV Birpara - Salakati D/C	37.77	28.43	29.34	53.94	87.32	87.09	323.90
Total ER - NER	389.41	235.03	85.56	144.71	438.27	480.80	1773.79
Import of ER from NER (NER - ER)							
NER - ER 400 kV Binaguri - Bongaigaon 2xD/C	0.00	7.07	82.30	108.30	5.60	3.67	206.94
NER - ER 220 kV Birpara - Salakati D/C	0.00	0.26	0.00	0.11	0.01	0.00	0.37
Total NER - ER	0.00	7.33	82.30	108.41	5.60	3.67	207.31
Export of ER to SR (ER - SR)							
ER - SR HVDC Gazuwaka	302.43	355.83	358.74	384.11	408.09	348.69	2157.89
ER - SR HVDC Talchar - Kolar	1309.89	1296.20	1101.36	1159.40	1206.35	992.13	7065.34
Total ER - SR	1612.32	1652.03	1460.10	1543.51	1614.44	1340.83	9223.23
Import of ER from SR (SR - ER)							
SR - ER HVDC Gazuwaka	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SR - ER HVDC Talchar - Kolar	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total SR - ER	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Export of WR to SR (WR-SR)							
WR - SR HVDC Bhadravati	713.62	640.84	515.94	622.35	640.38	538.00	3671.12
WR - SR 765 kV Sholapur - Raichur	1345.88	1165.09	1006.32	1205.46	1227.59	1096.06	7046.40
WR - SR 400KV Kolhapur-Kudgi D/C	41.69	50.95	23.80	58.51	106.98	119.77	401.70
Total WR - SR	2101.18	1856.88	1546.05	1886.32	1974.95	1753.84	11119.22
Import of WR from SR (SR - WR)							
SR - WR HVDC Bhadravati	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SR - WR 765 kV Raichur - Sholapur	0.00	4.47	4.47	0.03	0.03	0.07	9.06
SR - WR 400KV Kolhapur-Kudgi D/C	14.56	11.09	10.61	12.89	5.84	3.22	58.21
Total SR - WR	14.56	15.56	15.08	12.92	5.87	3.29	67.27
TOTAL ALL INDIA	11176	9996	9965	10738	11104	11359	64339

Date	12.1 Import of NR from WR, ER & NER during September 2016																								
	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 Zerda-Kankroli	WR - NR 400 kV Zerda-Bhinmal	WR - NR 220 kV Badod - Kota / Modak	WR - NR 220 kV Auraiya - Malanpur / 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 2 ¹ /5/C	ER - WR 765 kV Gaya Ballia	ER-NR 400 kV Patna - Ballia 2x2/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 (Byepass)	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 Chariall - Agra	Total NER-NR
1-Sep-16	50.22	21.95	0.00	0.22	0.72	1.78	0.00	0.00	45.51	120.39	0.00	8.90	1.10	6.86	13.11	2.32	5.70	0.00	6.09	4.51	0.00	0.00	48.59	0.38	0.38
2-Sep-16	50.22	23.18	0.00	0.40	0.50	2.16	0.00	0.00	42.99	119.43	0.00	8.90	2.94	6.63	7.82	1.61	7.21	0.00	6.09	4.51	0.00	0.00	45.70	15.87	15.87
3-Sep-16	53.56	20.68	0.00	0.00	0.00	2.26	0.00	0.00	48.71	125.21	0.00	8.64	2.12	7.20	7.95	1.64	7.45	0.00	6.12	4.71	0.00	0.00	45.83	15.99	15.99
4-Sep-16	54.02	23.95	0.00	0.00	0.00	2.86	0.00	0.00	54.13	134.95	0.00	9.77	3.46	7.73	10.75	2.89	7.56	0.00	6.05	4.51	0.00	0.00	52.73	16.04	16.04
5-Sep-16	59.36	27.37	0.73	0.00	0.00	3.95	0.00	0.00	60.46	151.86	0.00	11.37	3.69	6.04	11.30	3.93	6.52	0.73	6.02	4.30	0.00	0.00	53.90	16.12	16.12
6-Sep-16	57.88	23.36	1.63	0.00	0.00	3.37	0.00	0.00	60.46	146.70	0.00	10.38	3.91	3.25	10.51	3.62	5.32	0.00	6.10	4.35	0.00	0.00	47.45	16.14	16.14
7-Sep-16	57.26	23.73	6.45	0.00	0.00	2.65	0.00	0.00	60.46	150.55	0.00	12.08	3.97	4.22	10.60	4.74	5.54	0.61	6.03	3.99	0.00	0.00	51.79	15.89	15.89
8-Sep-16	57.12	24.82	3.91	0.00	0.00	1.74	0.00	0.00	60.46	148.05	0.00	13.04	3.91	6.17	11.11	4.53	6.70	1.43	6.10	0.83	0.00	0.00	53.81	16.11	16.11
9-Sep-16	57.81	23.43	2.79	0.00	0.00	1.16	0.00	0.00	60.46	145.66	0.00	6.14	3.32	11.27	10.00	2.90	8.66	0.40	6.13	2.72	0.00	0.00	51.53	16.13	16.13
10-Sep-16	62.04	22.47	1.90	0.00	0.00	1.06	0.00	0.00	59.94	147.41	0.00	11.72	3.40	10.66	9.49	2.73	8.18	0.76	6.13	2.72	0.00	0.00	55.79	16.08	16.08
11-Sep-16	54.01	22.97	0.94	0.00	0.00	0.60	0.00	0.00	60.46	138.99	0.00	10.44	3.16	10.49	11.20	2.42	8.14	0.29	6.07	0.00	0.00	0.00	52.21	15.93	15.93
12-Sep-16	54.01	26.56	6.74	0.00	0.00	0.39	0.00	0.00	49.07	136.77	0.00	12.14	3.30	10.65	11.76	2.72	8.47	0.47	6.07	0.00	0.00	0.00	55.58	16.27	16.27
13-Sep-16	61.34	26.73	8.20	0.00	0.47	0.51	0.00	0.00	50.09	147.33	0.00	14.83	3.62	12.23	11.03	3.29	8.62	0.61	6.08	0.00	0.00	0.00	60.31	15.48	15.48
14-Sep-16	59.29	26.22	9.12	0.72	2.20	0.91	0.00	0.00	41.06	139.52	0.00	14.83	3.78	14.01	9.44	3.12	8.91	0.61	6.08	8.91	0.00	0.00	69.70	16.08	16.08
15-Sep-16	64.83	29.24	0.88	1.29	2.79	2.13	0.00	0.00	47.86	149.01	0.00	13.68	4.02	13.76	10.06	3.35	8.94	1.23	6.04	0.00	0.00	0.00	61.08	15.94	15.94
16-Sep-16	63.87	28.70	0.21	1.14	2.79	1.55	0.00	0.00	48.98	147.25	0.00	14.87	2.98	12.48	10.52	3.18	8.53	0.99	6.07	0.00	0.00	0.00	59.61	15.94	15.94
17-Sep-16	64.83	29.15	0.03	1.02	2.66	1.47	0.00	0.00	49.55	148.70	0.00	13.64	3.97	12.94	10.94	3.79	8.47	1.77	6.02	0.00	0.00	0.00	61.53	17.21	17.21
18-Sep-16	64.59	29.46	0.10	2.57	4.51	1.90	0.00	0.00	49.48	152.61	0.00	13.77	4.05	12.88	11.62	3.99	7.93	1.55	6.09	0.00	0.00	0.00	61.89	15.97	15.97
19-Sep-16	58.52	26.62	0.00	2.81	4.33	1.83	0.00	0.00	55.04	149.14	0.00	12.15	3.62	12.53	9.33	2.48	8.05	0.84	7.72	0.00	0.00	0.00	56.71	19.48	19.48
20-Sep-16	61.30	23.58	0.01	0.14	1.73	1.68	0.00	0.00	56.93	145.37	0.00	9.70	3.26	12.43	7.94	3.41	8.16	0.00	9.17	0.00	0.00	0.00	54.06	22.65	22.65
21-Sep-16	64.52	25.98	0.00	0.31	1.60	1.42	0.00	0.00	51.57	145.38	0.00	12.03	3.40	12.33	10.98	2.24	7.78	0.47	9.07	0.00	0.00	0.00	58.29	17.88	17.88
22-Sep-16	49.43	22.87	0.00	0.09	1.51	0.07	0.00	0.00	53.21	127.17	0.00	9.10	2.49	8.81	10.36	1.89	6.64	0.78	3.86	0.00	0.00	0.00	43.92	16.23	16.23
23-Sep-16	57.28	24.01	0.00	1.32	2.53	4.91	0.00	0.00	45.85	135.89	0.50	11.30	2.97	7.66	11.08	3.66	6.29	2.15	0.00	0.00	0.00	0.00	45.62	15.80	15.80
24-Sep-16	58.09	25.93	1.69	1.32	1.04	1.20	0.00	0.00	50.83	140.11	0.50	11.30	2.90	7.68	11.08	2.78	6.29	2.15	0.00	0.00	0.00	0.00	44.68	20.56	20.56
25-Sep-16	46.39	22.12	0.03	1.47	3.04	1.05	0.00	0.00	18.64	92.74	1.04	12.60	3.04	9.39	9.21	3.99	7.15	3.07	0.00	0.00	0.00	0.00	49.49	22.90	22.90
26-Sep-16	46.39	23.34	0.03	1.47	1.31	0.92	0.00	0.00	46.34	119.80	0.83	14.23	2.28	9.52	9.55	3.99	7.23	2.94	0.00	0.00	0.00	0.00	50.56	22.14	22.14
27-Sep-16	56.16	21.58	0.56	0.00	0.00	0.56	0.00	0.00	48.38	127.24	1.53	16.60	3.70	11.71	7.64	3.59	8.10	3.54	0.00	0.00	0.00	0.00	56.41	22.76	22.76
28-Sep-16	56.97	9.17	3.87	0.00	0.10	0.70	0.00	0.00	52.73	123.54	2.14	14.18	4.19	11.46	7.30	4.37	7.27	2.89	0.00	0.00	0.00	0.00	53.81	21.19	21.19
29-Sep-16	59.20	9.68	4.94	0.36	1.29	1.54	0.00	0.00	55.63	132.65	3.14	17.90	4.36	7.45	10.30	4.60	7.59	4.28	0.00	0.00	0.00	0.00	59.61	16.29	16.29
30-Sep-16	54.64	24.09	5.74	0.98	1.96	2.19	0.00	0.00	50.89	140.49	3.71	19.66	4.49	17.62	11.22	5.35	9.31	5.25	0.00	0.00	0.00	0.00	76.61	13.40	13.40
Total	1715.13	712.93	60.50	17.62	37.07	50.51	0.00	0.00	1536.12	4129.89	13.38	369.90	101.40	298.05	305.21	99.09	226.71	39.81	139.16	46.06	0.00	0.00	1638.78	504.86	504.86

12.2 Export of NR to WR, ER & NER during September 2016																									
Date	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 Zerda- Kankrol	WR - NR 400 KV Zerda- Bhnimal	WR - NR 220 KV Badod - Kota / Modak	WR - NR 220 KV Auraliya - Malalpur / Mehgaon	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 Ballia	ER-NR 400 KV Patna - Ballia 2x0/C	ER - NR 400 KV Muzaffarpur - G'pur D/C	ER - NR 400 KV B'shariff Balla 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 NR - ER	NER-NR HVDC Biswanath Chariali - Agra	Total NR-NER
1-Sep-16	0.00	0.00	6.80	0.00	0.00	0.00	0.47	0.00	0.00	7.27	5.65	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.00	0.00	0.52	0.60	7.32	0.00	0.00
2-Sep-16	0.00	0.00	6.80	0.00	0.00	0.00	0.50	0.00	0.00	7.30	5.65	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.00	0.00	0.67	0.56	7.43	0.00	0.00
3-Sep-16	0.00	0.00	5.64	0.94	1.41	0.00	0.24	0.00	0.00	8.23	6.00	0.00	0.00	0.00	0.00	0.00	1.52	0.00	0.00	0.62	0.56	8.70	0.00	0.00	
4-Sep-16	0.00	0.00	6.55	2.10	2.59	0.00	0.37	0.00	0.00	11.61	5.20	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.64	0.60	6.67	0.00	0.00	
5-Sep-16	0.00	0.00	2.02	1.18	1.55	0.00	0.25	0.00	0.00	5.00	4.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.55	5.28	0.00	0.00	
6-Sep-16	0.00	0.00	0.68	2.32	2.32	0.00	0.37	0.00	0.00	5.70	4.78	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.53	0.56	6.11	0.00	0.00	
7-Sep-16	0.00	0.00	0.00	2.26	2.18	0.00	1.23	0.00	0.00	5.67	3.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.36	4.15	0.00	0.00	
8-Sep-16	0.00	0.00	0.00	3.30	2.70	0.00	1.54	0.00	0.00	7.53	1.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.48	2.55	0.00	0.00	
9-Sep-16	0.00	0.00	1.20	3.04	2.18	0.00	1.30	0.00	0.00	7.71	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.64	4.87	0.00	0.00	
10-Sep-16	0.00	0.00	2.51	3.04	2.08	0.00	0.98	0.00	0.00	8.61	3.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.64	4.96	0.00	0.00	
11-Sep-16	0.00	0.00	5.17	4.59	3.54	0.00	1.56	0.00	0.00	14.87	4.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.57	5.28	0.00	0.00	
12-Sep-16	0.00	0.00	0.25	2.27	1.00	0.00	1.27	0.00	0.00	4.79	2.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.32	3.79	0.00	0.00	
13-Sep-16	0.00	0.00	0.00	1.14	0.00	0.00	1.00	0.00	0.00	2.14	2.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.24	3.67	0.00	0.00	
14-Sep-16	0.00	0.00	0.63	0.00	0.00	0.00	1.06	0.00	0.00	1.69	2.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.77	4.14	0.00	0.00	
15-Sep-16	0.00	0.00	2.04	0.00	0.00	0.00	0.42	0.00	0.00	2.45	3.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.84	4.96	0.00	0.00	
16-Sep-16	0.00	0.00	3.71	0.00	0.00	0.00	0.11	0.00	0.00	3.82	3.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	1.00	5.14	0.00	0.00	
17-Sep-16	0.00	0.00	1.77	0.00	0.00	0.00	0.07	0.00	0.00	1.85	2.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.76	4.07	0.00	0.00	
18-Sep-16	0.00	0.00	4.24	0.00	0.00	0.00	0.34	0.00	0.00	4.58	2.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.53	4.03	0.00	0.00	
19-Sep-16	0.00	0.00	4.98	0.00	0.00	0.00	0.45	0.00	0.00	5.43	4.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.51	5.46	0.00	0.00	
20-Sep-16	0.00	0.00	7.16	0.00	0.00	0.00	0.46	0.00	0.00	7.62	5.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.56	6.81	0.00	0.00	
21-Sep-16	0.00	0.00	4.81	0.00	0.00	0.00	0.43	0.00	0.00	5.24	4.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.19	0.65	11.32	0.00	0.00	
22-Sep-16	0.00	0.00	4.92	0.00	0.00	0.00	1.00	0.00	0.00	5.91	1.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.64	3.20	0.00	0.00	
23-Sep-16	0.00	0.00	9.39	0.00	0.00	0.00	0.66	0.00	0.00	10.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.69	1.35	0.00	0.00	
24-Sep-16	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.00	0.00	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.52	1.01	0.00	0.00	
25-Sep-16	0.00	0.00	7.29	0.00	0.00	0.00	1.60	0.00	0.00	8.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.42	0.91	0.00	0.00	
26-Sep-16	0.00	0.00	7.29	0.00	0.00	0.00	1.33	0.00	0.00	8.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.47	-0.44	-0.91	0.00	0.00	
27-Sep-16	0.00	0.00	3.83	0.87	0.11	0.00	1.04	0.00	0.00	5.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.48	0.33	1.18	0.00	0.00	
28-Sep-16	0.00	0.00	0.88	0.46	0.00	0.00	1.05	0.00	0.00	2.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.23	0.00	0.41	0.31	2.95	0.00	0.00	
29-Sep-16	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28	0.00	0.43	0.37	2.08	0.00	0.00	
30-Sep-16	0.00	0.00	0.00	0.00	0.00	0.00	1.08	0.00	0.00	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.00	0.55	0.48	2.02	0.00	0.00	
Total	0.00	0.00	100.55	27.51	21.67	0.00	23.82	0.00	0.00	173.56	85.72	0.00	0.00	0.00	0.00	0.00	0.00	3.07	4.86	0.00	21.18	15.63	130.46	0.00	0.00

Date	12.3 Import - Export of ER with WR & NER during September 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 Dharamajygarh - Ranchi 2x5/C	WR - ER 765 kV Dharamajygarh - Jharsuguda D/C	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 Dharamajygarh - Ranchi 2x5/C	ER_WR 765 kV Dharamajygarh - Jharsuguda D/C	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 Geyleggphus - Salakati	ER - NER 132 kV Motanga - Rangia	ER - NER 400 kV Binaguri - Bongai - aon 2x0/C	ER - NER 220 kV Birpara - Salakati D/C	Total ER - NER	ER - NER 132 kV Geyleggphus - Salakati	ER - NER 132 kV Motanga - Rangia	NER - ER 400 kV Binaguri - Bongai - aon 2x0/C	NER - ER 220 kV Birpara - Salakati D/C	Total NER - ER							
1-Sep-16	8.90	0.18	5.80	0.37	3.24	4.15	4.56	0.07	0.00	27.27	0.00	5.78	0.00	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	3.27	9.90	1.05	0.64	0.60	1.15	3.45	0.00	0.00	3.29	0.00	3.29
2-Sep-16	10.97	0.28	6.82	3.69	3.42	4.44	4.86	1.11	0.00	35.60	0.00	4.55	0.00	0.00	0.00	0.00	0.00	0.09	2.40	7.03	1.30	0.66	10.89	2.33	15.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
3-Sep-16	9.71	0.00	6.33	2.50	2.98	3.99	4.21	0.76	0.00	30.49	0.00	8.54	0.00	0.00	0.00	0.00	0.00	0.00	2.21	10.75	1.57	0.64	12.90	2.69	17.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
4-Sep-16	8.33	0.00	5.28	2.24	2.09	2.75	2.97	1.07	0.00	24.73	0.00	10.37	0.00	0.00	0.00	0.00	0.00	0.02	1.38	11.76	1.45	0.55	11.57	2.82	16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
5-Sep-16	9.67	0.00	5.98	2.92	2.43	3.37	3.44	1.62	0.00	29.44	0.00	9.74	0.00	0.00	0.00	0.00	0.00	0.00	1.11	10.85	1.41	0.57	11.35	2.80	16.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
6-Sep-16	10.66	0.00	6.25	3.03	2.43	3.50	3.44	1.38	0.00	30.68	0.00	11.12	0.00	0.00	0.00	0.00	0.00	0.00	1.50	12.62	1.00	0.29	13.70	3.10	18.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
7-Sep-16	7.57	0.00	4.42	2.21	1.79	2.37	2.54	0.86	0.00	21.76	0.00	15.79	0.00	0.00	0.00	0.00	0.00	0.00	1.85	17.65	1.07	0.90	14.13	2.87	18.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
8-Sep-16	6.16	0.00	3.92	2.00	1.72	2.21	2.44	1.12	0.00	19.57	0.07	14.07	0.00	0.00	0.00	0.00	0.00	0.00	1.72	15.86	1.24	0.92	13.83	3.13	19.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
9-Sep-16	6.68	0.00	4.58	1.38	2.24	2.85	3.14	1.70	0.00	22.56	0.00	8.76	0.00	0.00	0.00	0.00	0.00	0.00	1.24	10.00	1.52	0.58	13.31	3.26	18.67	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.12	0.00			
10-Sep-16	10.66	0.00	6.21	3.11	2.73	3.69	3.87	1.80	0.00	32.05	0.00	5.86	0.00	0.00	0.00	0.00	0.00	0.00	0.84	6.69	1.37	0.77	14.32	3.30	19.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
11-Sep-16	8.74	0.00	5.29	2.31	2.03	2.68	2.88	1.63	0.00	25.56	0.00	8.92	0.00	0.00	0.00	0.00	0.00	0.00	1.11	10.02	1.48	0.57	10.02	3.08	15.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
12-Sep-16	6.98	0.00	4.62	1.44	1.22	1.54	1.73	1.63	0.00	19.15	0.00	12.29	0.00	0.00	0.00	0.00	0.00	0.00	1.19	13.49	1.38	0.58	11.24	2.91	16.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
13-Sep-16	6.40	0.00	4.41	1.14	1.06	1.26	1.59	0.68	0.00	16.53	0.00	15.50	0.00	0.06	0.04	0.12	0.06	0.01	2.25	18.05	1.44	0.52	12.32	3.25	17.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
14-Sep-16	7.18	0.00	5.01	2.20	2.38	2.59	3.37	1.12	0.00	23.86	0.00	13.33	0.00	0.00	0.00	0.00	0.00	0.00	1.83	15.16	1.32	0.61	14.03	3.32	19.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
15-Sep-16	10.44	0.00	6.30	2.99	3.01	3.59	4.27	1.40	0.00	31.99	0.00	11.63	0.00	0.00	0.00	0.00	0.00	0.00	1.63	13.25	1.49	0.64	15.19	2.57	19.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
16-Sep-16	8.79	0.00	5.84	2.58	2.55	3.05	3.63	1.80	0.00	28.23	0.00	12.45	0.00	0.00	0.00	0.00	0.00	0.00	1.99	14.44	1.41	0.61	15.41	3.20	20.64	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00			
17-Sep-16	9.87	0.00	5.99	2.36	3.04	3.44	4.32	1.97	0.00	30.99	0.00	14.30	0.00	0.00	0.00	0.00	0.00	0.00	2.37	16.67	0.97	1.05	15.30	3.10	20.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
18-Sep-16	10.16	0.00	6.12	2.43	2.46	2.88	3.50	1.72	0.00	29.27	0.00	15.19	0.00	0.00	0.00	0.00	0.00	0.00	2.84	18.03	1.69	0.99	10.85	2.79	16.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
19-Sep-16	10.75	0.00	6.48	3.11	2.88	3.75	4.08	2.09	0.00	33.14	0.00	12.07	0.00	0.00	0.00	0.00	0.00	0.00	1.68	13.75	1.45	1.00	15.53	3.04	21.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
20-Sep-16	11.03	0.00	6.80	3.28	2.99	3.91	4.26	2.36	0.00	34.62	0.00	9.92	0.00	0.00	0.00	0.00	0.00	0.00	0.92	10.84	1.25	0.99	18.33	3.29	23.86	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00			
21-Sep-16	8.21	0.00	5.85	2.70	2.66	3.22	3.77	0.92	0.00	27.34	0.00	13.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.49	0.99	1.06	13.51	2.93	18.50	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00			
22-Sep-16	6.11	0.00	5.17	2.33	2.25	2.71	3.20	1.07	0.00	22.84	0.00	11.86	0.00	0.00	0.00	0.00	0.00	0.00	0.27	12.13	0.88	1.03	7.50	2.03	11.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
23-Sep-16	8.31	0.00	5.58	2.23	2.11	2.63	2.99	1.34	0.00	25.20	0.00	12.72	0.00	0.00	0.00	0.00	0.00	0.00	1.53	14.25	0.96	1.06	8.85	2.40	13.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
24-Sep-16	8.61	0.00	5.78	2.47	2.22	2.93	3.14	1.81	0.00	26.94	0.00	12.47	0.00	0.00	0.00	0.00	0.00	0.00	1.33	13.80	0.97	1.02	13.24	2.59	17.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
25-Sep-16	2.76	0.00	1.98	0.76	1.07	0.82	1.52	1.75	0.00	10.66	1.82	13.89	0.12	0.07	0.00	0.13	0.00	0.00	2.16	18.18	1.07	1.01	16.66	3.07	21.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
26-Sep-16	5.42	0.00	4.36	2.25	2.52	2.59	3.59	1.83	0.00	22.56	0.00	12.89	0.00	0.00	0.00	0.00	0.00	0.00	1.81	14.70	1.10	1.00	15.73	3.18	21.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
27-Sep-16	5.15	0.00	4.40	2.17	1.55	2.49	3.97	1.89	0.02	21.64	0.01	15.05	0.00	0.00	0.00	0.00	0.00	0.00	1.43	16.49	0.90	1.15	17.97	3.38	23.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
28-Sep-16	6.49	0.00	4.67	2.43	0.90	2.66	4.38	1.15	0.00	22.69	0.00	15.70	0.00	0.00	0.00	0.00	0.00	0.00	1.37	17.07	0.82	1.19	19.76	3.62	25.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
29-Sep-16	6.83	0.00	5.00	2.39	2.91	2.76	4.14	1.63	0.01	25.67	0.00	17.43	0.00	0.00	0.00	0.00	0.00	0.00	1.12	18.56	0.79	1.13	13.20	3.28	18.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
30-Sep-16	6.85	0.00	4.69	2.42	3.30	2.80	4.70	1.54	0.00	26.31	0.10	23.29	0.00	0.00	0.00	0.00	0.00	0.00	1.19	24.58	0.68	1.12	12.43	2.61	16.84	0.00	0.00	0.38	0.00	0.00	0.38	0.00	0.38				
Total	244.39	0.46	159.93	69.43	70.16	87.61	104.51	42.85	0.03	779.36	2.00	368.97	0.12	0.67	0.04	0.26	0.06	0.43	47.53	420.08	36.05	24.82	393.71	87.09	541.67	0.07	0.12	3.67	0.00	0.00	3.86	0.00	3.86				

Date	12.4 Import and Export of SR with ER & WR during September 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-Sep-16	15.02	37.09	52.12	0.00	0.00	0.00	19.67	34.39	3.57	57.63	0.00	0.00	0.04	0.04
2-Sep-16	16.01	37.28	53.29	0.00	0.00	0.00	13.98	31.24	3.37	48.58	0.00	0.00	0.00	0.00
3-Sep-16	13.76	31.73	45.49	0.00	0.00	0.00	16.76	33.92	3.76	54.44	0.00	0.00	0.02	0.02
4-Sep-16	12.32	34.61	46.93	0.00	0.00	0.00	16.30	33.79	4.33	54.43	0.00	0.00	0.00	0.00
5-Sep-16	12.27	31.26	43.54	0.00	0.00	0.00	17.73	37.99	4.81	60.52	0.00	0.00	0.01	0.01
6-Sep-16	12.25	41.65	53.90	0.00	0.00	0.00	22.48	36.74	3.64	62.86	0.00	0.00	0.01	0.01
7-Sep-16	12.30	43.36	55.66	0.00	0.00	0.00	23.64	40.48	3.74	67.87	0.00	0.00	0.00	0.00
8-Sep-16	13.86	44.15	58.01	0.00	0.00	0.00	23.67	38.50	3.50	65.67	0.00	0.00	0.01	0.01
9-Sep-16	13.76	45.81	59.57	0.00	0.00	0.00	23.17	42.46	4.12	69.75	0.00	0.00	0.00	0.00
10-Sep-16	13.56	45.47	59.03	0.00	0.00	0.00	20.49	39.00	3.66	63.15	0.00	0.00	0.03	0.03
11-Sep-16	14.90	35.58	50.48	0.00	0.00	0.00	20.63	36.91	4.99	62.53	0.00	0.00	0.00	0.00
12-Sep-16	13.32	28.13	41.45	0.00	0.00	0.00	18.93	34.34	5.40	58.68	0.00	0.00	0.00	0.00
13-Sep-16	9.79	27.89	37.69	0.00	0.00	0.00	19.47	34.80	5.00	59.27	0.00	0.00	0.03	0.03
14-Sep-16	9.80	33.11	42.91	0.00	0.00	0.00	18.34	27.02	1.59	46.94	0.00	0.02	0.31	0.33
15-Sep-16	9.80	28.70	38.50	0.00	0.00	0.00	11.85	25.97	0.30	38.12	0.00	0.00	0.86	0.86
16-Sep-16	11.59	24.85	36.44	0.00	0.00	0.00	13.93	32.55	1.11	47.59	0.00	0.00	1.14	1.14
17-Sep-16	7.71	25.44	33.16	0.00	0.00	0.00	16.80	30.37	1.97	49.14	0.00	0.04	0.26	0.30
18-Sep-16	7.43	20.19	27.61	0.00	0.00	0.00	12.09	41.18	4.62	57.90	0.00	0.00	0.00	0.00
19-Sep-16	9.82	32.19	42.01	0.00	0.00	0.00	18.92	40.32	3.66	62.90	0.00	0.00	0.01	0.01
20-Sep-16	9.86	30.31	40.18	0.00	0.00	0.00	9.32	40.50	3.87	53.68	0.00	0.00	0.02	0.02
21-Sep-16	9.88	31.17	41.04	0.00	0.00	0.00	11.48	38.77	3.86	54.11	0.00	0.00	0.01	0.01
22-Sep-16	9.91	30.78	40.68	0.00	0.00	0.00	18.75	30.29	4.12	53.16	0.00	0.00	0.09	0.09
23-Sep-16	10.04	29.55	39.59	0.00	0.00	0.00	17.36	34.51	3.85	55.72	0.00	0.00	0.03	0.03
24-Sep-16	9.94	28.56	38.50	0.00	0.00	0.00	15.74	34.68	2.24	52.66	0.00	0.00	0.26	0.26
25-Sep-16	10.61	24.35	34.97	0.00	0.00	0.00	17.81	43.41	4.99	66.21	0.00	0.00	0.08	0.08
26-Sep-16	11.09	41.37	52.46	0.00	0.00	0.00	20.99	39.49	6.47	66.96	0.00	0.00	0.00	0.00
27-Sep-16	12.69	39.71	52.40	0.00	0.00	0.00	19.97	41.76	4.88	66.61	0.00	0.00	0.00	0.00
28-Sep-16	13.48	32.42	45.90	0.00	0.00	0.00	20.30	41.23	4.76	66.29	0.00	0.00	0.00	0.00
29-Sep-16	9.49	32.20	41.69	0.00	0.00	0.00	18.97	39.98	6.50	65.45	0.00	0.00	0.00	0.00
30-Sep-16	12.43	23.20	35.63	0.00	0.00	0.00	18.46	39.48	7.09	65.03	0.00	0.00	0.00	0.00
Total	348.69	992.13	1340.83	0.00	0.00	0.00	538.00	1096.06	119.77	1753.84	0.00	0.07	3.22	3.29

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

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	म्यान्मार MYANMAR
	Energy Exchange (In MU)	Energy Exchange (In MU)	Energy Exchange (In MU)	Energy Exchange (In MU)
अप्रैल 2016 APR'16	150.05	-196.98	-361.40	-0.09
मई 2016 MAY'16	255.38	-171.18	-373.86	-0.23
जून 2016 JUN'16	549.81	-158.47	-375.91	-0.27
जुलाई 2016 JUL'16	1020.49	-151.41	-367.92	-0.29
अगस्त 2016 AUG'16	1032.45	-161.34	-386.58	-0.29
सितंबर 2016 SEP'16	1005.75	-129.20	-379.94	-0.36
कुल Total	4013.92	-968.57	-2245.63	-1.54

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

द्विपक्षीय एसटीओए BILATERAL SHORT TERM OPEN ACCESS

सितंबर 2016 Sep 16			April-Sep'16	
क्षे.भा.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	828	2761	4123	15005
प.क्षे. WR	1132	1423	4215	6866
द.क्षे. SR	194	1112	1494	5825
पू.क्षे. ER	280	944	1304	5875
पूर्वोत्तर क्षे. NER	32	60	185	506
कुल TOTAL	2466	6301	11321	34077

एसटीओए SHORT TERM OPEN ACCESS

माह MONTH	सामूहिक एसटीओए Collective STOA		द्विपक्षीय एसटीओए Bilateral STOA	
	क्र्रेताओं / विक्रेताओं की सं. NO. of Buyers/Sellers	अनुमोदित ऊर्जा (मि.यु.) Approved Energy (MU)	क्र्रेताओं / विक्रेताओं की सं. NO. of Buyers/Sellers	अनुमोदित ऊर्जा (मि.यु.) Approved Energy (MU)
अप्रैल 2016 Apr'16	2923	3501	1675	4573
मई 2016 May'16	2822	2936	1460	5339
जून 2016 Jun'16	3003	3146	1568	5231
जुलाई 2016 Jul'16	3142	3594	2074	5868
अगस्त 2016 Aug'16	2960	3463	2078	6765
सितंबर 2016 Sep'16	2944	3652	2466	6301
कुल TOTAL	17794	20292	11321	34076

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

अनंतिम आकडे
Provisional data
subject to change

करोड़ रु. में (RS. IN CRORES)

क्षेत्र REGION	उत्तरी क्षेत्र NORTH	पश्चिमी क्षेत्र WEST	दक्षिणी क्षेत्र SOUTH	पूर्वी क्षेत्र EAST	पूर्वोत्तर क्षेत्र NORTH EAST
29.08.16 to 04.09.16	32.98	27.41	13.78	30.49	15.43
05.09.16 to 11.09.16	66.17	40.46	21.98	62.03	31.21
12.09.16 to 18.09.16	52.71	35.16	24.13	52.86	25.05
19.09.16 to 25.09.16	53.30	35.79	23.36	53.82	29.46

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 सितंबर 2016

EXCHANGES THROUGH POWER EXCHANGES - September 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	2.68	237.82
2	हरियाणा Haryana		123.00	242.73
3	राजस्थान Rajasthan		31.17	425.10
4	दिल्ली Delhi		148.73	49.76
5	उत्तर प्रदेश Uttar Pradesh		14.18	149.09
6	उत्तराखंड Uttarakhand		5.94	131.89
7	हिमाचल प्रदेश Himachal Pradesh		327.27	24.70
8	जम्मू और कश्मीर J & K		33.35	53.03
9	केंद्र शासित चंडीगढ़ UT Chandigarh		2.22	2.38
10	ए डी हाइड्रो AD Hydro		37.23	0.00
11	करचम वांगतू KW		228.27	0.00
12	श्री सीमेंट Shree Cement		15.60	0.00
13	नाथपा झाकरी Nathpa Jhakri		21.92	0.00
14	बैरासूल Baira Siul HEP(BS0)		0.00	0.00
15	चमेरा -1 Chamera-I HEP(CM1)		0.00	0.00
16	चमेरा -2 Chamera-II HEP(CM2)		0.00	0.00
17	धौलीगंगा Dhauliganga HEP(DG0)		0.00	0.00
18	दुलहस्ती Dulahasti HEP(DU0)		0.00	0.00
19	सलाल Salal HEP(SL0)		0.00	0.00
20	सेवा -2 Sewa-II NHPC(SW2)		0.00	0.00
21	टनकपुर Tanakpur HEP(TP0)		0.00	0.00
22	उरी Uri HEP(UR0)		0.00	0.00
23	लांको बुधिल LANCO Budhil		4.43	0.00
24	चमेरा-3 chamera 3		0.00	0.00
25	अदानी एचवीडीसी ADANI HVDC(NORGU0)		0.00	0.00
26	मलाना MALANA		5.65	0.00
27	उरी-II Uri-II HEP(UR2)		0.00	0.00
28	पार्वति-III Parbati-II		0.00	0.00
29	सिंगरौली Singrauli		0.32	0.00
30	दादरी-I Dadri stage-I		2.55	0.00
31	दादरी-II Dadri stage-II		5.02	0.00
32	ऊंचाहार-I Unchahar-I TPS		0.13	0.00
33	ऊंचाहार-II Unchahar-II TPS		0.27	0.00
34	ऊंचाहार-III Unchahar-III TPS		0.10	0.00
35	रिहंद-I Rihand STPS-I		0.31	0.00
36	रिहंद-II Rihand STPS-II		0.41	0.00
37	रिहंद-III Rihand STPS-III		0.39	0.00

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 सितंबर 2016

EXCHANGES THROUGH POWER EXCHANGES - September 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
38	मध्य प्रदेश MP	पश्चिमी क्षेत्र WR	418.77	39.87
39	महाराष्ट्र Maharashtra		82.15	45.55
40	गुजरात Gujarat		23.25	451.23
41	छत्तीसगढ़ Chattisgarh		23.39	36.56
42	गोवा Goa		2.40	12.23
43	दमन और दीव Daman and Diu		0.00	42.10
44	दादरा और नगर हवेली Dadra & Nagar Haveli		0.00	229.18
45	जिंदल JD		211.32	0.00
46	लांको अमरकंटक LANCO AMK		0.00	0.00
47	आर्यन कोल ACB India Limited		18.31	0.00
48	जिंदल स्टील एंड पावर Jindal Steel and Power Ltd		21.05	0.00
49	बालको -2 Balco-II		3.24	12.24
50	स्टरलाइट Sterlite(w3rse0)		4.59	0.00
51	एमको EMCO		2.77	0.00
52	वन्दना विद्युत VANDANA VIDYUT		0.00	0.00
53	एस्सार पावर ESSAR POWER		0.04	0.00
54	एस्सार स्टील ESSAR STEEL		0.00	153.83
55	के एस के महानदी KSK Mahanadi		0.00	0.00
56	जिंदल स्टेज -II Jindal Stg-II		0.71	0.00
57	कोरबा (प.) Korba(W) Comp. Ltd.		99.75	0.00
58	डी बी पावर D B Power		127.66	0.00
59	धारीवाल Dhariwal		38.83	0.00
60	जे पी निग्री Jaypee Nigire		73.54	0.00
61	जी एम आर छत्तीसगढ़ GMR Chhattisgarh		0.00	0.00
62	डी जीईएन मेगा पावर DGEN Mega Power		0.00	0.00
63	एम बी मेगा पावर MB Power		0.00	0.00
64	एपीएल मुंद्रा स्टेज-I APL Mundra Stg-I		25.53	0.00
65	एपीएल मुंद्रा स्टेज-II APL Mundra Stg-II		105.61	0.00
66	एपीएल मुंद्रा स्टेज-III APL Mundra Stg-III		91.93	0.00
67	टोरेंट सुगेन Torrent Sugen		0.00	0.00
68	मारुति कोल Maruti Coal		111.86	0.00
69	स्पेक्ट्रम Spectrum		8.87	0.00
70	झाबुआ पावर Jhabua Power		0.00	0.00
71	विंध्याचल-I Vindhyachal Stg-I		0.03	0.00
72	विंध्याचल-II Vindhyachal Stg-II		0.04	0.00
73	विंध्याचल-III Vindhyachal Stg-III		0.04	0.00
74	विंध्याचल-IV Vindhyachal Stg-IV		0.00	0.00
75	विंध्याचल-V Vindhyachal Stg-V		0.00	0.00
76	मौदा-I Mouda STPS Stg-I		0.00	0.00
77	सीपत-I Sipat Stg-I		0.00	0.00
78	सीपत-II Sipat Stg-II		0.08	0.00
79	सासन Sasan UMPP		0.00	0.00
80	एनएसपीसीएल NSPCL	11.50	0.00	
81	कोरबा-III Korba-III	35.78	0.00	
82	टीआरएन इनर्जी TRN Energy	38.84	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 सितंबर 2016
EXCHANGES THROUGH POWER EXCHANGES - September 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
83	आंध्र प्रदेश Andhra Pradesh	दक्षिणी क्षेत्र SR	13.67	128.65
84	कर्नाटक Karnataka		33.88	223.84
85	केरल Kerala		3.54	46.73
86	तमिलनाडु Tamilnadu		45.01	16.44
87	पोण्डिचेरी Pondicherry		0.00	6.77
88	गोवा Goa		0.00	0.00
89	लांको कोंडापल्ली LANCO_KONDPLY		0.00	0.00
90	सिमापुरी SIMHAPURI		65.24	0.00
91	मीनाक्षी MINAXI		63.01	0.00
92	तेलंगाना TELANGANA		53.56	289.80
93	थर्मल पावर टेक Thermal Power Tech		27.86	0.00
94	कोस्टल इनरजेन Coastal Energen		7.67	0.00
95	आइ एल & एफ एस IL&FS		0.47	0.00
96	सिम्हाद्री-II Simhadri Stg-II		0.54	0.00
97	एनएलसी-I विस्तार NLC TPS-I (Exp)		6.17	0.00
98	एनएलसी-II स्टेज-I NLC TPS-II Stg-I		10.05	0.00
99	एनएलसी-II स्टेज-II NLC TPS-II Stg-II		3.61	0.00
100	लांको कोंडापल्ली स्टेज-III LANCO_KONDPLY STG III		0.11	0.00
101	रामागुण्डम-I Ramagundam Stg-I		0.52	0.00
102	तालचर-II Talcher Stg-II		0.79	0.00
103	रामागुण्डम-III Ramagundam Stg-III	0.11	0.00	
104	पश्चिम बंगाल West Bengal	पूर्वी क्षेत्र ER	21.25	209.73
105	उड़ीशा Odisha		29.47	22.18
106	बिहार Bihar		0.00	291.24
107	झारखंड Jharkhand		0.00	0.00
108	सिक्किम Sikkim		50.78	0.00
109	दामोदर घाटी परियोजना DVC		15.52	7.54
110	स्टरलाइट STERLITE		0.00	0.00
111	मैथन पावर लिमिटेड Maithon P. Ltd		0.00	0.00
112	आधुनिक पा. लिमिटेड Adhunik P.Ltd		11.76	0.00
113	चुजाचेन Chuzachen HEP		75.25	0.00
114	रंगित Rangit HEP		0.00	0.00
115	तीस्ता Teesta HEP		0.00	0.00
116	जीएमआर कमलंगा GMR Kamalanga		2.21	0.00
117	जिदल आई पी टी एल JIPTL		269.26	0.00
118	जोरथांग Jorethang		71.51	0.00
119	फरक्का-III Farakka-III	1.18	0.00	
120	अरुणाचल प्रदेश Arunachal Pradesh	पूर्वोत्तर क्षेत्र NER	3.91	0.00
121	असम Assam		36.48	52.70
122	मणिपुर Manipur		17.08	0.39
123	मेघालय Meghalaya		1.00	13.94
124	मिज़ोरम Mizoram		21.30	0.00
125	नागालैंड Nagaland		7.91	0.05
126	त्रिपुरा Tripura		33.03	2.64
127	अगरतला जीटीपीपी Agartala GTPP_AGO		7.91	0.00
128	कोपिली KOPILI_KP1		15.28	0.00
129	असम जीबीपीपी Assam GBPP_KT0		7.72	0.00
130	लोकटक LOKTAK		0.00	0.00
131	रंगानदी Ranganadi		14.85	0.00
132	दोयांग Doyang		5.76	0.00
133	पलाताना Palatana		0.00	0.00
134	कोपिली-II Kopili-II		0.72	0.00
135	खंडोंग Khandong	1.90	0.00	
कुल Total			3651.91	3651.91

16. RENEWABLE ENERGY CERTIFICATE MECHANISM**MONTH:-September 2016****RE Source & Unit wise break up (01.09.2016-30.09.2016)**

Sr.No	Source Wise	Accreditation		Registration	
		Capacity (MW)	Unit	Capacity (MW)	Unit
1	Wind	80.8	25	56.3	2
2	Urban or Municipal Waste	0	0	0	0
3	Solar Thermal	0	0	0	0
4	Solar PV	2.6	2	0	0
5	Small Hydro	10	1	5	1
6	Others	0	0	0	0
7	Geothermal	0	0	0	0
8	Biomass	0	0	0	0
9	Bio-fuel cogeneration	6.57	1	0	0
	Total	99.97	29	61.3	3

RECs Issued (01.09.2016-30.09.2016)

Sr.No.	Non Solar	Solar	Total
1	497148	137615	634763

Redemption of REC (01.09.2016-30.09.2016)

Sr.No.	Non Solar	Solar	Total
1	182094	32218	214312

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

Sr.No	Source Wise	Accreditation		Registration	
		Capacity (MW)	Unit	Capacity (MW)	Unit
1	Wind	466.48	73	359.73	38
2	Urban or Municipal Waste	0	0	0	0
3	Solar Thermal	0	0	0	0
4	Solar PV	90.93	39	89.72	36
5	Small Hydro	36	5	33	8
6	Others	0	0	0	0
7	Geothermal	0	0	0	0
8	Biomass	109.5	9	42	4
9	Bio-fuel cogeneration	121.42	16	116.55	15
	Total	824	142	641	101

RECs Issued (Apr-Sep 16)

Sr.No.	Non Solar	Solar	Total
1	1938000	484973	2422973

Redemption of REC (Apr-Sep 16)

Sr.No.	Non Solar	Solar	Total
1	1637986	216792	1854778

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

Sr.No	Source Wise	Accreditation		Registration	
		Capacity (MW)	Unit	Capacity (MW)	Unit
1	Wind	2480.79	616	2335	595
2	Urban or Municipal Waste	8	1	0	0
3	Solar Thermal	3	1	0	0
4	Solar PV	721.91	354	703.41	340
5	Small Hydro	303.69	38	243.19	31
6	Others	1.67	1	1.67	1
7	Geothermal	0	0	0	0
8	Biomass	735.42	78	682.42	75
9	Bio-fuel cogeneration	1075.2	124	1004.5	117
	Total	5329.68	1213	4970.19	1159

RECs Issued since Inception to Sep 16

Sr.No.	Non Solar	Solar	Total
1	29294189	4704207	33998396

Redemption of REC since Inception to Sep 16

Sr.No.	Non Solar	Solar	Total
1	15713169	1125064	16838233

REC Closing balance as on 30.09.2016

Sr.No.	Non Solar	Solar	Total
1	13581020	3579143	17160163

17. Major Grid events for September 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	Time				
1	ER	NJP (WBSETCL)	WB	01-09-2016	09:41	01-09-2016	12:31	02:50	Due to non-opening of HV side CB of 220/132 kV ICT I & II at NJP (WBSETCL) S/S, LBB operated for Bus I & II at 09:41 hrs. Following elements tripped due to LBB operation: 220 kV B/C, 220/132 kV ICT I & II at NJP (WBSETCL), 220kV NJP (PG) - NJP (WBSETCL) from NJP (PG) (Breaker is available only at NJP (PG) end)		170	GD-I
2	NER	220 kV Agia - Boko line & 220 kV Boko -Azara line	AEGCL	01-09-2016	13:02	01-09-2016	13:35	00:33	Boko area of Assam was connected with rest of NER Grid through 220 kV Agia - Boko line & 220 kV Boko -Azara line. At 13:02 Hrs on 01.09.16,220 kV Agia - Boko line & 220 kV Boko -Azara line tripped. Due to tripping of these elements, Boko area was separated from rest of NER Grid and subsequently collapsed due to no source in this area		17	GD-I
3	NR	1)400kV Jodhpur II-Rajwest ckt-2 2)400kV Rajwest TPS unit #3 3)400kV Rajwest TPS unit #5 4)400kV Rajwest TPS unit #6 5)400kV Rajwest TPS unit #7 6)400kV Rajwest TPS unit #8	Rajasthan	01-09-2016	19:19	01-09-2016	21:07	01:48	400kV Jodhpur II-Rajwest 2 tripped. During synchronization of this line, all running units of Rajwest TPS (#3, #5, #6, #7 & #8) tripped.	600		GD-I
4	WR	Tripping of 1. 400 kV JP Nigrie-Satna-1 2. 400 kV JP Nigrie-Satna-2 due to Y-Ph-E Fault.	JP Nigrie	02-09-2016	16:03	02-09-2016	16:03	00:00	Tripping of Both Units of JP Nigrie D/C during faults on Lines	1051		GI-II
5	ER	Tenughat, Patratu, Biharshariff	PG/JHARKHAND	02-09-2016	19:32	02-09-2016	20:00	00:28	After tripping of Tenughat #2 (Unit # I was not in service) & Patratu # 10 (Only one unit was in service), 400/220 kV ICT I, II, III at Biharshariff got overloaded (270 MW/ICT) and tripped. So load at Biharshariff, Fatuah, Darbhanga and its surrounded area were being supplied through 220kV Ranchi- Hatia D/c and the line got overloaded. To reduce the loading of this line 220kV Tenughat- Biharshariff S/c was manually opened and power failure occurred at Biharshariff, Fatuah, Darbhanga		690	GD-I
6	NR	1)400kV Muradnagar-Aligarh ckt-1 2)400kV Panki-Aligarh	UP	03-09-2016	13:26	03-09-2016	14:18	00:52	400kV Aligarh-Muradnagar ckt-1 and 400kV Aligarh-Panki tripped. R-phase toearth fault is reported.			GI-II
7	NER	132 kV EPIP II - Byrnihat I&II lines,132 kV EPIP II - Umtru I line and Umiam Stg IV Unit 2	MePTCL & MePGCL	03-09-2016	14:09	03-09-2016	14:27	00:18	Byrnihat area (EPIP I,EPIP II,Umiam Stage III,Umiam Stage IV & Umtru Stations) of Meghalaya was connected with rest of NER Grid throug 132 kV EPIP II-Byrnihat I & II lines (132 kV Kahilipara-Umtru I & II lines, 132 kV Sarusajai-Umtru I & II lines & 132 kV Umium Stage I - Umium Stage III 1&2 lines kept open for System requirement). At 14:09 Hrs on 03.09.16, 132 kV EPIP II-Byrnihat I & II lines tripped. Due to tripping of these elements, Byrnihat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	24	43	GD-I
8	WR	Tripping of 1. 400 kV Amerli-Chorna S/C 2. 400 kV Amerli-Jetpur-2 3. 400/220 kV ICT-3 4. 400 kV Bus-I due to Bus Bar protection operation at Amerli	Amerli, GETCO	05-09-2016	09:22	05-09-2016	09:58	00:36	400 kV Bus Bar protection for Bus 1 operated due to Bus fault causing associated element tripping.			GI-II

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	Time				
9	NR	1)220kV Rewa Road-Allahabad ckt-I 2)220kV Rewa Road-Allahabad ckt-II 3)400kV Bara TPS-Allahabad Rewa Road ckt-1 4)400kV Bara TPS-Allahabad Rewa Road ckt-2 5)400kV Panki-Allahabad Rewa Road 6)Bara TPS 660MW unit #1 7)Bara TPS 660MW unit #2 8)400 KV Rewaroad - Obra line 9)220 KV Rewa Road - Mirzapur 10)220 KV Rewa Road - Obra ckt-1 11)220 KV Rewa Road - Obra ckt-2	UP	05-09-2016	17:11	05-09-2016	18:48	01:37	Phase to earth fault occurred in 220kV Rewa Road-Allahabad ckt-II but fault could not be cleared at Rewa Road stations. LBB also not operated so all 220kV feeders at Rewa road tripped from remote end. 400kV Bara TPS-Allahabad Rewa Road ckt-1 tripped in zone-3 and ckt-2 tripped on power swing. 400kV Panki-Allahabad Rewa Road also tripped on power swing. Bara TPS unit #1 & #2 of 660MW tripped due to loss of evacuation lines.	1000	400	GD-I
10	NER	132 kV Dimapur (PG) - Kohima line	POWERGRID & DoP,Nagaland	06-09-2016	14:30	06-09-2016	14:56	00:26	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 14:30 Hrs on 06.09.16, 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 load generation mismatch.	24	20	GD-I
11	SR	Complete outage of Kadra power station of KPCL .	KPCL	06-09-2016	14:40	06-09-2016	15:16	00:36	Complete outage of Kadra power station of KPCL . LBB of 220kV Kodalali breaker at Kadra end got operated which resulted in tripping of Bus at Kadra and in turn led to tripping of all elements	30		GD-I
12	SR	Multiple tripping at Kalpakka Station of APTRANSCO	APTRANSCO	06-09-2016	16:43	06-09-2016	16:57	00:14	Y-Pole breaker of Bus reactor-3 got failed during its charging. This resulted in a bus fault in 400kV bus-1 resulting in tripping of 400kV elements connected to Bus-1 i.e. ICT-1, Hinduja-1, Vemagiri-1 & Simhadiri-3. 400kV Kalpakka Station has four 400kV buses with two bus sectionalizer and two bus coupler. 400kV Kalpakka-Gazuwaka line-1&2, 400kV Simhadiri-Kalpakka line-1,2&4, 400kV Vijayawada-Gazuwaka line, ICT-1 at Gazuwaka, HNPCL U#2 also got tripped during the incident.	350		GI-II
13	WR	Tripping of 1. 400 kV Satpura-Itarsi-1 2. 400 kV Satpura-Koradi 3. 400 kV Bus-2 due to Bus Bar protection operation at Satpura	Satpura, MPPGCL	06-09-2016	16:59	06-09-2016	19:15	02:16	400 kV Bus bar protection for Bus 2 operated at Satpura causing associated element tripping.			GI-II
14	NR	1)400/220kV Ballabgarh 500 MVA ICT-1 2)400/220kV Ballabgarh 500 MVA ICT-3 3)400/220kV Ballabgarh 315 MVA ICT-2 4)400kV Ballabgarh-Bamnauli 5)400kV Ballabgarh-Maharanibagh 6)400kV Dadri-G.Noida 7)Faridabad GPS unit #1 8)Faridabad GPS unit #2 9)Faridabad GPS unit #3 10)Multiple 220kV feeders at Samaypur	Haryana/Delhi /BBMB/POWERGRID/NTPC	06-09-2016	19:44	06-09-2016	19:57	00:13	Multiple 220kV feeders at Samaypur along with 400/220kV Ballabgarh 500 MVA ICT-1 & 315MVA ICT-3, 400kV Ballabgarh-Bamnauli, 400kV Ballabgarh-Maharanibagh & 400kV Dadri-G.Noida tripped due to bus-2 fault at 220kV Samaypur. Faridabad GPS unit #1, #2 & #3 also tripped.	350	600	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	Time				
15	WR	Tripping of 1. 220 kV Shivpuri-Sabalgah-1 & 2 2. 220 kV Shivpuri-Bina(PG) 3. 220 kV Shivpuri-Bina(MP) 4. Seopur Kalan-Sawai Madhopur(Khandar)-S/C 5. Seopur Kalan(MP)-Sabalgah(MP)-2 due to Bus Bar protection operation and Blackout at Shivpuri	Shivpuri, MPPTCL	06-09-2016	21:17	06-09-2016	21:27	00:10	Bus bar protection operation at 220 kV Shivpuri substation and its blackout.		228	GD-I
16	ER	Begusarai, Biharshariff (BSPTCL)	BSPTCL	07-09-2016	03:57	07-09-2016	04:15	00:18	At 03:57 hrs, 220 KV Biharshariff – Begusarai – II tripped along with 132 kV Biharshariff – Samastipur, 400/220 kV ICT – II, III and 220/132 kV ATR - I at Biharshariff. On investigation, it was found that R phase jumper of 220 KV Biharshariff – Begusarai – II was snapped at tower location 154 (7km from Biharshariff).		300	GD-I
17	NR	1)400kV Dehar (BBMB)-Rajpura(PSEB) 2)400/220kV Dehar 250 MVA ICT 3)165MW Dehar unit #3 4)165MW Dehar unit #4 2) 400/220kV Moradabad 315MVA ICT-2	BBMB/Punjab	07-09-2016	18:55	07-09-2016	19:56	01:01	400kV Dehar (BBMB)-Rajpura(PSEB), 400/220kV Dehar 250 MVA ICT and 165MW Dehar unit #3 & #4 tripped.	320	120	GD-I
18	NR	1)400/220kV Ratangarh 315 MVA ICT #1 2)400/220kV Ratangarh 315 MVA ICT #2 3)400/220kV Ratangarh 315 MVA ICT #3	Rajasthan	08-09-2016	10:51	08-09-2016	11:30	00:39	400/220kV Ratangarh 315 MVA ICT #1, #2, & 3 tripped during opening of 400kV Ratangarh-Suratgarh ckt-2.		250	GD-I
19	NER	132 kV Nirjuli-Lekhi line	POWERGRID & DoP,AP	08-09-2016	19:50	08-09-2016	20:17	00:27	Nirjuli area of Arunachal Pradesh and Gohpur Area(Gohpur load) of Assam were connected with rest of NER Grid through 132 kV Nirjuli-Lekhi line (Bus Coupler CB of Gohpur kept open for system requirement). At 19:50 Hrs on 08.09.16, 132 kV Ranganadi-Lekhi line tripped. Due to tripping of this element, Nirjuli area & Gohpur area were separated from rest of NER Grid and subsequently collapsed due to no source in these areas.		33	GD-I
20	SR	Complete outage at 220kV Chittoor substation.	KPCL	09-09-2016	10:40	09-09-2016	10:55	00:15	Complete outage at 220kV Chittoor substation. 220kV Bus sectionalizer B-Ph Bus jumper towards Kalikiri feeder got snapped creating a bus fault at 220kV Chittoor substation		150	GD-I
21	SR	Complete outage at Sharavathy Tail Race hydro power Station .	KPCL	09-09-2016	11:19	09-09-2016	11:49	00:30	Complete outage at Sharavathy Tail Race hydro power Station . Spurious operation of LBB protection of line feeder had led to tripping of 220kV bus at Sharavathy tail race power station.	106		GD-I
22	NER	132 kV Balipara- Khupi line	NEEPCO	11-09-2016	00:21	11-09-2016	00:34	00:13	Khupi area of Arunachal Pradesh was connected with rest of NER Grid through 132 kV Balipara- Khupi line. At 00:21 Hrs on 11.09.16, 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.		17	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	Time				
23	NER	32 kV Doyang - Mokokchung(NA) line & 220 kV Mariani(PG)-Mokokchung (PG) I line	POWERGRID & DoP,Nagaland	11-09-2016	11:30	11-09-2016	12:02	00:32	Mokokchung area of Nagaland was connected with rest of NER Grid through 132 kV Doyang-Mokokchung (NA)and 220 kV Mariani(PG)-Mokokchung (PG) I line. (132 kV Mokokchung(NA)-Marianai(AS) is under long outage, 220 kV Mariani(PG)-Mokokchung (PG) II line is out of service since 12.07.16 & 66 kV Tuangsang-Likimro line kept open for system requirement). At 11:30 Hrs on 11.09.16, 132 kV Doyang-Mokokchung (NA)and 220 kV Mariani(PG)-Mokokchung (PG) I line tripped. Due to tripping of these elements, Mokokchung area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.		15	GD-I
24	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I&II lines,132 kV NEHU - NEIGRIHMS line & 132 kV NEHU - Mustem line and Leshka Unit 1 & 2	POWERGRID, MePTCL & MePGCL	12-09-2016	14:42	12-09-2016	14:46	00:04	Khliehriat area (Khliehriat, NEIGRIHMS, Mustem and Leshka stations) of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV Mustem-NEHU line and 132 kV NEHU - NEIGRIHMS line (132 kV Khliehriat-Lumshnong line,132 kV Sarusajai-Umtru I&II lines and 132 kV Kahlipara-Umtru I&II lines kept open for system requirement). At 14:42 Hrs on 12.09.16,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV Mustem-NEHU line and 132 kV NEHU - NEIGRIHMS line tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation		31	GD-I
25	SR	Partial disturbance occurred in central Kerala grid	KSEB	12-09-2016	14:47	12-09-2016	14:59	00:12	Partial disturbance occurred in central Kerala grid due to overloading and tripping of 220kV lines. Loss of infeed to 220kV Kalamashery, 220kV Bramapuram, 220KV Ambalamugal, 220 Pallom & 220kV Kochi. Generation at Neriamangalam, Panniar, Chengulam and Pallivasal also got affected during the incident	300	690	GD-I
26	NER	132 kV Lumshnong - Panchgram line	MePTCL & AEGCL	12-09-2016	19:45	13-09-2016	15:25	19:40	Lumshnong area of Meghalaya was connected with rest of NER Grid through 132 kV Lumshnong - Panchgram line. (132 kV Khliehriat-Lumshnong line was kept open for system requirement). At 19:45 Hrs on 12.09.16 ,132 kV Lumshnong - Panchgram line tripped. Due to tripping of this element, Lumshnong area was separated from rest of NER Grid and subsequently collapsed due to no source in		30	GD-I
27	ER	Purnea, Madhepura (PG & BSPTCL) & Nepal	PG/BSPTCL	12-09-2016	22:40	12-09-2016	22:54	00:14	At 22:40 Hrs, 132 kV Purnea (PG) – Purnea (BSPTCL) – III tripped due to snapping of Y phase jumper near gantry at BSPTCL s/s. At same time, 132 kV Purnea (PG) – Kishangunj – Forbisgunj and 132 kV Purnea (PG) – Purnea (BSPTCL) – I & II tripped from Purnea (PG) end on O/C (as per BSPTCL report). After tripping of above lines, load at adjacent area and Nepal was catered through 220 KV Purnea-Madhepura – I & II which tripped from Purnea end on O/C.		380	GD-I
28	NER	132 kV Aizawl- Zuangtui line	POWERGRID	13-09-2016	15:40	13-09-2016	15:56	00:16	Zuangtui area of Mizoram was connected with rest of NER Grid through 132 kV Aizawl- Zuangtui line. At 15:40 Hrs on 13.09.16 , 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.		36	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	Time				
29	NER	132 kV Dimapur (PG) - Kohima line	POWERGRID & DoP,Nagaland	13-09-2016	15:55	13-09-2016	18:00	02:05	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 15:55 Hrs on 13.09.16, 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		28	GD-I
30	NER	132 kV Imphal-Imphal I & II lines	POWERGRID, MSPCL	14-09-2016	10:55	14-09-2016	11:24	00:29	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 10:55 Hrs on 14.09.16, 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.		44	GD-I
31	SR	Multiple tripping at 230kV Alamathy substation of TANTRANSCO	TANTRANSCO	14-09-2016	11:13	14-09-2016	11:32	00:19	230kV Feeders connected in BUS – B at 230kV Alamathy got tripped due to actuation of 230kV Bus Bar Protection (Zone2) during R-phase to earth fault in 230kV Alamathy-Korattur feeder. Suspected mal-operation of bus bar protection during through fault.			GI-I
32	WR	Tripping of 1. 220 kV Mehgaon-Malanpur-1 2. 220 kV Mehgaon-Auriya due to Bus Bar protection operation at Mehgaon	Mehgaon, MPPTCL	14-09-2016	16:56	14-09-2016	17:53	00:57	Bus bar protection operation at 220 kV Mehgaon substation and its blackout.			GD-I
33	NER	132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines, 132 kV Mustem-Khliehriat line, 132 kV Mustem-NEHU line and Leshka unit 1,2&3	POWERGRID, MePTCL & MePGCL	15-09-2016	13:56	15-09-2016	13:58	00:02	Khliehriat area (Khliehriat, NEHU,NEIGRIHMS,Mustem, Leshka & Umiam stations) 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 Umiam-Umiam Stg I line & 132 kV NEHU-Mawlai line were kept open for system requirement). At 13:56 Hrs on 15.09.16, 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines, 132 kV Mustem-Khliehriat line and 132 kV Mustem-NEHU line tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently	70	49	GD-I
34	SR	Complete outage at Varahi hydro Power Station.	KPCL	15-09-2016	14:06	15-09-2016	15:16	01:10	Complete outage at Varahi hydro Power Station. LBB protection operated and caused bus shut down at Varahi.	240		GD-I
35	NR	1)400/220kV Gorakhpur 315 MVA ICT-1 2)400/220kV Gorakhpur 315 MVA ICT-2	UP	15-09-2016	17:35	15-09-2016	18:39	01:04	400/220kV Gorakhpur 315 MVA ICT-1 and 2 tripped on busbar protection operation.		200	GD-I
36	SR	Multiple tripping at 230kV Alamathy substation of TANTRANSCO	TANTRANSCO	15-09-2016	22:14	15-09-2016	23:10	00:56	230kV Feeders connected in BUS – A at 230kV Alamathy got tripped due to actuation of 230kV Bus Bar Protection (Zone1) during R-phase to earth fault in 230kV Alamathy-OPG feeder. Suspected mal-operation of bus bar protection during through fault.			GI-I
37	NR	1)400kV Ballabgarh(PG)-Bamnauli(DTL) ckt-1 2)400kV Ballabgarh(PG)-Bamnauli(DTL) ckt-2	POWERGRID/ Delhi	16-09-2016	04:52	16-09-2016	05:07	00:15	400kV Ballabgarh(PG)-Bamnauli(DTL) D/C tripped reportedly on phase to earth fault.		650	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	Time				
38	NER	220 kV BTPS - Salakati I line and 132 kV Salakati - Gelephu line	POWERGRID	16-09-2016	18:00	16-09-2016	18:47	00:47	Salakati station was connected with rest of NER Grid through 400/220 kV 315 MVA ICT at Bongaigaon, 220 kV Birpara-Salakati I & II lines, 220 kV BTPS - Salakati I & II lines and 132 kV Salakati - Gelephu line. At 18:00 Hrs on 16.09.16, 400/220 kV 315 MVA ICT at Bongaigaon, 220 kV Birpara-Salakati I & II lines, 220 kV BTPS - Salakati I & II lines and 132 kV Salakati - Gelephu line tripped. Due to tripping of these elements, Salakati station was separated from rest of NER Grid and blacked out. Part of Eastern Bhutan was connected with Indian Grid through 132 kV Salakati - Gelephu line (some of the internal lines of Bhutan kept open for system requirement). At 18:00 Hrs on 16.09.16, 132 kV Salakati - Gelephu line tripped. Due to tripping of this element, Eastern Bhutan was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	32(Bhutan)	GD-I	
39	NER	220 kV BTPS - Salakati I line and 132 kV Salakati - Gelephu line	POWERGRID	16-09-2016	21:07	16-09-2016	21:46	00:39	Dhaligaon area of Assam was connected with rest of NER Grid through 220 kV BTPS - Salakati I line (220 kV BTPS - Salakati I line was not restored after tripping at 18:00 Hrs on 16.09.16 & 220 kV BTPS - Agia I & II lines handtripped at 19:10 Hrs on 16.09.16 to reduce the loading of 220 kV BTPS-salakati I line). At 21:07 Hrs on 16.09.16, 220 kV BTPS - Salakati I line tripped. Due to tripping of this element, Dhaligaon area was separated from rest of NER Grid and collapsed due to no source in this area. Part of Eastern Bhutan was connected with Indian Grid through 132 kV Salakati - Gelephu line (some of the internal lines of Bhutan kept open for system requirement). At 21:07 Hrs on 16.09.16, 132 kV Salakati - Gelephu line tripped. Due to tripping of this element, Eastern Bhutan was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	204	GD-I	
40	NER	132 kV Aizawl- Zuangtui line	POWERGRID	16-09-2016	23:36	16-09-2016	23:47	00:11	Zuangtui area of Mizoram was connected with rest of NER Grid through 132 kV Aizawl- Zuangtui line. At 23:36 Hrs on 16.09.16, 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.	14	GD-I	
41	WR	Tripping of 1. 400 kV Kholapur-Mapusa-1 2. 400 kV Kholapur-Khudgi-1 & 2 3. 400 kV Kholapur-Khoalpur (GIS)-1 & 2 4. 400 kV Kholapur-Karad-I 5. 400/220 kV Kholapur ICT-1, 2 & 3 6. 400/220 kV Mapusa ICT-1,2 & 3 7. 220 kV Mapusa-Amona S/C 8. 220 kV Mapusa-Tivim-1 & 2 9. 220 kV Mapusa-Ponda-I 10. 220 kV Mahalaxmi-Amona-I 11. 220 kV Tillari-Amona due to Bus Bar protection operation at Kholapur	MSETCL, Goa, PGCIL	17-09-2016	03:43	17-09-2016	06:47	03:04	Bus fault at Kolhapur MSETCL causing blackout of Kolhapur and near by station along with Goa system.	16.8	216	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	Time				
42	SR	Complete outage at 400kV Kudgi (PG) and 400kV Kudgi (NTPC)	PG/NTPC	17-09-2016	04:00	17-09-2016	04:21	00:21	400kV Kudgi-Narendra ckt-2 tripped from Narendra end due to operation of DEF protection at Narendra as there was uncleared fault at Kohlapur. 400kV Kudgi-Narendra ckt-1 was out of service. Kudgi-Kolhapur Line -2 tripped due to OV Protection optd at Kudgi end. Kudgi Kolhapur-1 Line tripped due to OV Protection optd at Kolhapur end at 04:00 Hrs			GD-I
43	NER	132 kV Doyang-Mokokchung (NA) line and 220 kV Mariani(PG)-Mokokchung (PG) I line	POWERGRID, DoP Nagaland	17-09-2016	14:24	17-09-2016	15:12	00:48	Mokokchung area of Nagaland was connected with rest of NER Grid through 132 kV Doyang-Mokokchung (NA) line and 220 kV Mariani(PG)-Mokokchung (PG) I line. (132 kV Mokokchung(NA)-Marianai(AS) line is under long outage, 220 kV Mariani(PG)-Mokokchung (PG) II line is out of service since 12.07.16 & 66 kV Tuensang-Likimro line kept open for system requirement). At 14:24 Hrs on 17.09.16, 132 kV Doyang-Mokokchung (NA)and 220 kV Mariani(PG)-Mokokchung (PG) I line tripped. Due to tripping of these elements, Mokokchung area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.		16	GD-I
44	NR	1)400 kV Bamnauli-Ballabgarh ckt 1 2)400 kV Bamnauli-Ballabgarh ckt 2 3)220kV Mehrauli-BTPS ckt-2	POWERGRID/ Delhi	17-09-2016	18:12	17-09-2016	18:23	00:11	400 kV Bamnauli-Ballabgarh D/C tripped due to B-ph LA damage at Bamnauli. Around the same time Jumper of 220kV Mehrauli-BTPS-2 snapped. Load of Naraina, DAIL and 3 feeders of Dwarka were lost.		600	GD-I
45	NER	132 kV Dimapur (PG) - Kohima line	POWERGRID & DoP, Nagaland	17-09-2016	21:14	17-09-2016	21:23	00:09	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 21:14 Hrs on 17.09.16, 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 load generation mismatch.	21	24	GD-I
46	WR	Tripping of 1. 400 kV CGPL-Jetpur-1 2. 400 kV Jetpur-Amerli-1 3. 400/220 kV ICT-1 & 4 4. 400 kV Bus-1 due to Bus Bar protection operation at Jetpur	Jetpur, GETCO	18-09-2016	03:04	18-09-2016	04:25	01:21	Bus fault at Jetpur causing tripping of 400 kV Bus 1 along with associated elements.			GI-II
47	ER	Begusarai, Biharshariff (BSPTCL)	BSPTCL	18-09-2016	09:28	18-09-2016	09:40	00:12	At 09:28 hrs, 220 KV Biharshariff - Begusarai D/C tripped on Y-B-N fault causing power failure at Begusarai and Darbhanga. Darbhanga was radially supplied from Begusarai with the help of transfer bus of Muzaffarpur (BSPTCL).		130	GD-I
48	NER	132 kV Loktak-Ningthoukhong line	MSPCL	18-09-2016	13:21	18-09-2016	13:29	00:08	Ningthoukhong area of Manipur was connected with rest of NER Grid through 132 kV Loktak-Ningthoukhong line (132 kV Kakching-Kongba line kept open for system constraint & 132 kV Imphal(PG)-Ningthoukhong line was in open condition). At 13:21 Hrs on 18.09.16, 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		15	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	Time				
49	NER	132 kV Loktak-Ningthoukhong line	MSPCL	18-09-2016	14:12	18-09-2016	14:15	00:03	Ningthoukhong area of Manipur was connected with rest of NER Grid through 132 kV Loktak-Ningthoukhong line (132 kV kakching-Kongba line kept open for system constraint & 132 kV Imphal(PG)-Ningthoukhong line was in open condition). At 14:12 Hrs on 18.09.16, 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		13	GD-I
50	NER	132 kV Dimapur (PG) - Kohima line	POWERGRID & DoP,Nagaland	19-09-2016	17:17	19-09-2016	18:10	00:53	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 17:17 Hrs on 19.09.16, 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 load generation mismatch.	24	30	GD-I
51	NER	132 kV Dimapur (PG)-Dimapur (NA) I line	DoP,Nagaland	19-09-2016	17:48	19-09-2016	18:15	00:27	Dimapur area of Nagaland was connected with rest of NER Grid through 132 kV Dimapur (PG)-Dimapur (NA) I line(132 kV Dimapur (PG)-Dimapur (NA) II line is out since 18.04.16). At 17:48 Hrs on 19.09.16,132 kV Dimapur (PG)-Dimapur (NA) I line tripped. Due to tripping of this element, Dimapur area was separated from rest of NER Grid and subsequently collapsed due to no source in this		52	GD-I
52	NR	1)765kV Kanpur New-Jhatkara 2)Kanpur New 765 kV Bus 2	POWERGRID	20-09-2016	11:08	20-09-2016	20:19	09:11	765kV Kanpur New-Jhatkara line and Kanpur New 765 kV Bus 2 tripped. SF6 gas leakage observed in density monitor No. 712 GP1 (Jhatikara Line Main Bay) of Bus II section).			GI-II
53	NER	132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines ,132 kV EPIP II - Killing(Byrnihat) I&II lines and Leshka Unit 2	POWERGRID, MePTCL & MePGCL	20-09-2016	13:39	20-09-2016	13:59	00:20	Khliehriat (NEIGRIHMS, NEHU and Mustem) area and Byrnihat area of Meghalaya were connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines and 132 kV EPIP II - Killing(Byrnihat) I&II lines (132 kV Khliehriat-Lumnsnong line, 132 kV Sarusajai-Umtru I&II lines ,132 kV Kahilipara-Umtru I&II lines and Nangalbibra-Nongstoin line kept open for system requirement). At 13:39 Hrs on 20.09.16, 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines and 132 kV EPIP II - Killing(Byrnihat) I&II lines tripped. Due to tripping of these elements, Khliehriat area and Byrnihat area were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	70	56	GD-I
54	ER	Fatuha (BSPTCL)	BSPTCL	20-09-2016	15:44	20-09-2016	15:54	00:10	At 15:44 hrs, R-Ph CT of 220kV Patna- Fatuua S/c (idle charged from Fatuua end) bursted at Fatuua end. However, the relay at Fatuua end of said line did not operate and 220kV Biharshariff - Fatuua D/c sensed the fault in Z-II and tripped from Biharshariff end resulting total power failure at Fatuua.		210	GD-I
55	SR	Multiple tripping at 220kV Ghanapur substation of TSTRANSCO	TSTRANSCO	21-09-2016	19:10	21-09-2016	22:55	03:45	220kV feeders connected to Bus-1 at 220kV Ghanapur Station tripped on operation of Bus-bar protection during fault in 220kV Ghanapur-Chandrayangutta line-1&2. 400/220kV ICT-1&3 at 400kV Ghanapur also got tripped as they were connected to 220kV Bus-1. Suspected mal-operation of bus bar protection during through fault.			GI-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	Time				
56	ER	Tarkhera (OPTCL)	OPTCL	22-09-2016	15:38	22-09-2016	16:04	00:26	At 15:38 hrs, all the feeders connected to Bus – II i.e. 220 kV Tarkera – Rourkela II, 220 kV Tarkera – Budhipadar –II, 220 kV Tarkera - Rengali II, 220 kV Tarkera - RSP – II, 220/132 kV ATR – I, II, III and IV at Tarkera along with B/C tripped due to operation of bus bar protection.		120	GD-I
57	NER	132 kV Loktak-Ningthoukhong line	MSPCL	22-09-2016	16:46	22-09-2016	16:50	00:04	Ningthoukhong area of Manipur was connected with rest of NER Grid through 132 kV Loktak-Ningthoukhong line (132 kV Kakching-Kongba line kept open for system constraint & 132 kV Imphal(PG)-Ningthoukhong line was in open condition). At 16:46 Hrs on 22.09.16, 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		38	GD-I
58	NER	132 kV Balipara- Khupi line	NEEPCO	22-09-2016	23:33	25-09-2016	14:04	14:31	Khupi area of Arunachal Pradesh was connected with rest of NER Grid through 132 kV Balipara- Khupi line. At 23:33 Hrs on 22.09.16, 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.		23	GD-I
59	NER	132 kV Ranganadi-Lekhi line	POWERGRID & DoP AP	23-09-2016	04:01	23-09-2016	04:22	00:21	Lekhi area & Capital area of Arunachal Pradesh and Gohpur area of Assam were connected with rest of NER Grid through 132 kV Ranganadi-Lekhi line (Bus Coupler CB of Gohpur kept open for system requirement). At 04:01 Hrs on 23.09.16, 132 kV Ranganadi-Lekhi line tripped. Due to tripping of this element, Lekhi area & Capital area & Gohpur area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.		40	GD-I
60	WR	Tripping of 1. 220 kV Kakrapar-Haldarwa-1 & 2 2. 220 kV Haldarwa-Jhanor-2 3. 220 kV Haldarwa-Jagdiya-1 4. 220 kV Haldarwa-Wagara-1 5. 220 kV Kawas-Haldarwa-1 6. 220/132 kV ICT-2 & 3 7. 220 kV Bus-2 due to Bus Bar protection operation at Haldarwa	Haldarwa, GETCO	24-09-2016	06:22	21-09-2016	07:22	01:00	Bus fault at Haldarwa causing 220 kV Bus 2 along with associated elements tripping.			GI-I
61	NR	1)400kV Balia-Biharsharif ckt-1 3)400kV Balia-Biharsharif ckt-2 2)Kanpur New 765 kV Bus 2	POWERGRID/ UP	24-09-2016	11:50	24-09-2016	12:19	00:29	400kV Balia(PG)-Mau(UP) ckt-1 tripped on R phase to earth fault. 400kV Balia-Biharsharif ckt-1 & 2 also tripped after this on over voltage stage II protection operation			GI-II
62	SR	Tripping of HVDC GAJUWAKA POLE 1	POWERGRID	25-09-2016	19:12	25-09-2016	20:22	01:10	INTERZONE PROTECTION OPERATED DUE TO FAILURE OF TIE CT			GI-II
63	NR	1)220kV Wagoora-Pampore ckt-1 2)220kV Wagoora-Pampore ckt-2	POWERGRID/P DD J&K	26-09-2016	10:28	26-09-2016	11:12	00:44	220kV Wagoora-Pampore D/C tripped reportedly on phase to earth fault.		350	GD-I
64	NR	1)250MW Parichha TPS unit# 2)250MW Parichha TPS unit# 3)210MW Parichha TPS unit# 4)210MW Parichha TPS unit# 5)660MW Lalitpur TPS unit#	UP	27-09-2016	13:25	27-09-2016	17:45	04:20	All running units of Parichha TPS and one unit of Lalitpur TPS tripped due to evacuation problem after tripping of 220kV Orai-Kanpur line.	800	300	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	Time				
65	NER	132 kV Loktak-Ningthoukhong line	MSPCL	27-09-2016	15:39	27-09-2016	15:52	00:13	Ningthoukhong area of Manipur was connected with rest of NER Grid through 132 kV Loktak-Ningthoukhong line (132 kV Kakching-Kongba line kept open for system constraint & 132 kV Imphal(PG)-Ningthoukhong line was in open condition). At 15:39 Hrs on 27.09.16, 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		23	GD-I
66	ER	IBEUL	IBEUL	27-09-2016	15:45	27-09-2016	16:36	00:51	400 kV Jharsuguda - IBEUL tripped due to fault in 400 kV IBEUL Raigarh resulting bus dead at IBEUL. While charging 400 kV IBEUL - Raigarh, fault persisted and 400 kV Jharsuguda - IBEUL tripped again at 18:41 hrs resulting bus dead at IBEUL			GI-II
67	NER	132 kV Dimapur (PG) - Kohima line	POWERGRID & DoP,Nagaland	27-09-2016	16:09	27-09-2016	16:34	00:25	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 16:09 Hrs on 27.09.16, 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 load generation mismatch.	24	26	GD-I
68	ER	Purnea, Madhepura (PG & BSPTCL) & Nepal	PG/BSPTCL	27-09-2016	19:00	27-09-2016			Charging attempt of 132 kV Purnea - Forbisgunj resulted tripping of 132 kV Purnea - Kishangunj & 220 / 132 kV ICT at Madhepura		260	GD-I
69	ER	Kahalgaoon	NTPC	28-09-2016	06:50	28-09-2016	08:27	01:37	Due to B-Phase CT burst of 400 kV KhSTPP - Farakka - II at KhSTPP end, Bus - I along with 400 KV KhSTPP - Farakka - III & IV, 400KV KhSTPP - Barh, 400 KV KhSTPP - Maithon			GD-I
70	ER	Baripada	POWERGRID	28-09-2016	10:08	28-09-2016	10:58	00:50	Due to maloperation of GIS bus duct SF6 gas at 400kV Baripada S/s, all feeders connected to Baripada S/S tripped due to operation of bus bar protection of Bus II(Bus I was under shut down)			GI-II
71	NER	132 kV Balipara- Khupi line	NEEPCO	28-09-2016	10:17	28-09-2016	10:44	00:27	Khupi area of Arunachal Pradesh was connected with rest of NER Grid through 132 kV Balipara- Khupi line. At 10:17 Hrs on 28.09.16, 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
72	NER	132 kV Dimapur (PG) - Kohima line	POWERGRID & DoP,Nagaland	28-09-2016	14:30	28-09-2016	14:40	00:10	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 14:30 Hrs on 28.09.16, 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 load generation mismatch.	21	20	GD-I
73	SR	Multiple tripping at 220kV Chekanoorani substaiton of TANTRANSCO	TANTRANSCO	28-09-2016	20:25	28-09-2016	20:45	00:20	In 230KV PASUMALAI # 1 during Line fault (C-N fault, Zone-1), Distance protection operated and LBB protection also operated, resulting the 230KV Bus Supply Failure.			GI-I
74	SR	Multiple tripping at 220kV Vizag switching substation of APTRANSCO	APTRANSCO	28-09-2016	23:05	28-09-2016	23:32	00:27	220kV Bus-1 connected feeders and ICTs were got tripped on operation of the 220kV Bus bar protection due to the blast of 220kV Gangavaram feeder BPH CT at 220kV Vizag Switching Station.			GI-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	Time				
75	NER	132 kV Lumshnong - Panchgram line	MePTCL, AEGCL	28-09-2016	23:55	29-09-2016	00:32	00:37	Lumshnong area of Meghalaya was connected with rest of NER Grid through 132 kV Lumshnong - Panchgram line. (132 kV Khliehriat-Lumshnong line was kept open for system requirement). At 23:55 Hrs on 28.09.16, 132 kV Lumshnong - Panchgram line tripped. Due to tripping of this element, Lumshnong area was separated from rest of NER Grid and subsequently collapsed due to no source in		15	GD-I
76	NER	132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines, 132 kV NEHU - NEIGRIHMS line & 132 kV Mustem-NEHU line and Leshka Unit 1	POWERGRID, MePTCL & MePGCL	29-09-2016	01:54	29-09-2016	01:58	00:04	Khliehriat area (NEIGRIHMS, Mustem, Leshka and Khliehriat substations) of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines, 132 kV NEHU - NEIGRIHMS line & 132 kV Mustem-NEHU line. (132 kV Khliehriat - Lumshnong line kept open for system requirement). At 01:54 Hrs on 29.09.16, 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines, 132 kV NEHU - NEIGRIHMS 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	22	GD-I
77	NR	1)800kV HVDC Agra-BNC pole 1 2)800kV HVDC Agra-BNC pole 2	POWERGRID	30-09-2016	11:00	30-09-2016	14:06	03:06	Due to mal-operation of Smoke detection system, 800kV HVDC Agra-BNC bipole tripped.			GI-II
78	NER	132 kV Dimapur (PG) - Kohima line	POWERGRID & DoP, Nagaland	30-09-2016	11:20	30-09-2016	11:30	00:10	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 11:20 Hrs on 30.09.16, 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 load generation mismatch.	24	16	GD-I
79	NER	132 kV Lumshnong - Panchgram line	MePTCL, AEGCL	30-09-2016	14:45	30-09-2016	15:25	00:40	Lumshnong area of Meghalaya was connected with rest of NER Grid through 132 kV Lumshnong - Panchgram line. (132 kV Khliehriat-Lumshnong line was kept open for system requirement). At 14:45 Hrs on 30.09.16, 132 kV Lumshnong - Panchgram line tripped. Due to tripping of this element, Lumshnong area was separated from rest of NER Grid and subsequently collapsed due to no source in		15	GD-I
80	WR	Tripping of 1. 400 kV Padghe-Nagothane-2 2. 400 kV Dhabol-Nagothane-1 3. 400 kV Bus-2 due to Bus Bar protection operation at Nagothane	Nagothane, MSETCL	30-09-2016	18:03	30-09-2016	18:40	00:37	Bus bar protection operation at Nagothane for 400 kV bus 2 along with associated element tripping.			GI-II

18. NEW ELEMENTS COMMISSIONED IN SEPTEMBER-2016								
COMMISSIONING OF NEW GENERATING UNITS								
REGION	SL. NO.	CONSTITUENT	UNIT NAME		UNIT NO	CAPACITY (MW)	DATE	TIME
COMMISSIONING OF NEW ICTs								
REGION	SL. NO.	CONSTITUENT	VOLTAGE LEVEL	SUB-STATION	ICT NO	CAPACITY	DATE	TIME
NR	1	POWERGRID	400/220	Ballabhgarh	II	500	14.09.16	
	2	UPPTCL	765/400	Agra (Fatehabad)	I	1500	27.09.16	
	3	RVPNL	765/400	Anta	II	1500	18.09.16	
WR	4	POWERGRID	765/400	Champa	V	1500	28.09.16	
	5		765/400	Champa	VI	1500	29.08.16	
SR	6	POWERGRID	400/220	Mysore	III	500	20.09.16	
	7	TANTRANSCO	400/110	Kamudhi	IV	200	19.09.16	
ER	8	POWERGRID	400/220	Baripada	III	500	29.09.16	
COMMISSIONING OF NEW TRANSMISSION LINES								
REGION	SL. NO.	CONSTITUENT	LINE NAME		CKT NO	kV	DATE	TIME (Hrs)
NR	1	POWERGRID	Phagi-Bhiwani		II	765	29.09.16	
	2		Varanasi-Sasaram		I	400	28.09.16	
	3		RAPP-C Kankroli LILO at Chittorgarh		I	400	30.09.16	
	4	UPPTCL	Anpara D-Anpara B		I	400	07.09.16	
	5		Agra(UP)-Muradnagar(New) LILO at Agra(Fatehabad)		I	400	25.09.16	
SR	6	POWERGRID	Salem-Dharmapuri		I	400	21.09.16	
	7		Salem-Dharmapuri		II	400	21.09.16	
	8		Kudgi-Tumkur		I	400	21.09.16	
	9		Guttur-Madhugiri		I	400	21.09.16	
	10	TANTRANSCO	Kamudhi-Karaikudi		I	400	08.09.16	

विद्युत विभव रूपरेखा माह - सितंबर 2016

VOLTAGE PROFILE - SEPTEMBER 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	753	774
2		गया GAYA	0%	100%	0%	0%	793	746	771
3		झारसुगडा JHARSUGUDA	0%	100%	0%	0%	801	772	785
4		रांची RANCHI	0%	100%	0%	0%	795	758	781
5		सासाराम SASARAM	0%	100%	0%	0%	796	722	760
1	उत्तरी क्षेत्र NR	आगरा AGRA	0%	100%	0%	0%	804	744	774
2		अनपरा सी ANPARA-C	0%	100%	0%	0%	785	755	768
3		बलिया BALLIA	0%	100%	0%	0%	796	744	771
4		भिवानी BHIWANI	0%	97%	3%	3%	809	753	779
5		बरेली BAREILLY	0%	100%	0%	0%	760	737	759
6		फतेहपुर FATEHPUR	0%	100%	0%	0%	794	729	764
7		झाटिकरा JHATIKARA	0%	99%	1%	1%	807	751	777
8		लखनऊ LUCKNOW	0%	100%	0%	0%	800	744	772
9		मेरठ MEERUT	0%	95%	5%	5%	816	751	783
10		मोगा MOGA	0%	96%	4%	4%	811	747	781
11		फागी PHAGI	0%	99%	1%	1%	806	748	775
12		उन्नाव UNNAO	0%	100%	0%	0%	780	730	753
1	पश्चिमी क्षेत्र WR	अकोला AKOLA	0%	100%	0%	0%	785	737	767
2		औरंगाबाद AURANGABAD	0%	99%	1%	1%	803	740	783
3		भोपाल (बीडीटीसीएल) BHOPAL (BDTCL)	0%	100%	0%	0%	794	742	770
4		बिलासपुर BILASPUR	0%	100%	0%	0%	778	756	766
5		बीना BINA	0%	100%	0%	0%	801	755	778
6		चांपा CHAMPA	0%	96%	4%	4%	809	778	792
7		धर्मजयगढ़ DHARAMJAIGARH	0%	100%	0%	0%	787	758	775
8		धुले (बीडीटीसीएल) DHULE (BDTCL)	0%	99%	1%	1%	803	746	783
9		ग्वालियर GWALIOR	0%	99%	1%	1%	806	752	778
10		इंदौर INDORE	0%	100%	0%	0%	797	743	772
11		जबलपुर JABALPUR	0%	100%	0%	0%	801	760	780
12		कोरडी KORADI	0%	100%	0%	0%	771	732	754
13		पुणे PUNE	0%	100%	0%	0%	800	720	770
14		रायगढ़ पुलिग RAIGARH POOLING	0%	99%	1%	1%	803	775	790
15		रायपुर पुलिग RAIPUR POOLING	0%	100%	0%	0%	793	762	782
16		सासन SASAN	0%	100%	0%	0%	787	755	771
17		सतना SATNA	0%	100%	0%	0%	799	753	777
18		सिवनी SEONI	0%	100%	0%	0%	798	758	780
19		सीपत SIPAT	0%	100%	0%	0%	776	756	765
20		सोलापुर SOLAPUR	0%	82%	18%	18%	812	749	791
21		तामनार TAMNAR	0%	100%	0%	0%	802	775	790
22		तिरोडा TIRORA	0%	100%	0%	0%	765	738	758
23		वडोदरा VADODARA	0%	99%	1%	1%	804	755	781
24		विंध्याचल पुलिग VINDHYACHAL PS	0%	100%	0%	0%	789	759	774
25		वर्धा WARDHA	0%	99%	1%	1%	805	750	785
1	दक्षिणी क्षेत्र SR	कर्नूल KURNOOL	0%	96%	4%	4%	806	757	787
2		नेल्लूर पुलिग NELLORE PS	0%	98%	2%	2%	806	766	786
3		रायचूर RAICHUR	0%	93%	7%	7%	808	757	789
4		तिरुवलम THIRUVALEM	0%	64%	36%	36%	816	773	796
1	पूर्वोत्तर क्षेत्र NER	अज़ारा AZARA (400 kV)	0%	100%	0%	0%	411	400	406
2		बालिपारा BALIPARA (400 kV)	0%	98%	2%	2%	425	390	411
3		बोंगाईगांव BONGAIGAON (400 kV)	0%	100%	0%	0%	416	387	404
4		मिसा MISA (400 kV)	0%	96%	4%	4%	426	394	412
5		सिलचर SILCHAR (400 kV)	0%	100%	0%	0%	417	396	408

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

20. List of Tripping of Elements monitored by NLDC for the month of September 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	MO	28-09-2016 01:50	Taken out manually	01-10-2016 00:00	70:10:00	0
2	Vindhyachal Pole-I	HVDC	WR/NR	TS	16-09-2016 10:46	DC voltage protection operated	17-09-2016 20:34	33:48:00	1
3	Vindhyachal Pole-I	HVDC	WR/NR	SE	23-09-2016 20:00	Emergency hand tripped of Block-I at Vindhchl at 2000hrs due to its isolator heavy sparking	24-09-2016 22:19	26:19:00	1
4	Mundra-Mahendragarh-Pole-I	HVDC	WR/NR	SC	25-09-2016 06:39	Construction of new element For stringing	25-09-2016 19:11	12:32:00	0
5	Mundra-Mahendragarh Pole-II	HVDC	WR/NR	SC	25-09-2016 07:08	Construction of new element For stringing	25-09-2016 19:28	12:20:00	0
6	Vindhyachal Pole-I	HVDC	WR/NR	TS	29-09-2016 00:24	DC Overcurrent relay operated	01-10-2016 00:00	47:36:00	2
7	Gazuwaka Pole-I	HVDC	ER/SR	TP	25-09-2016 19:12	INTERZONE PROTECTION OPERATED	25-09-2016 20:22	1:10:00	1
8	Gazuwaka Pole-I	HVDC	ER/SR	SO	28-09-2016 23:27	MAIN BREAKER HYDRAULIC PRESSURE LOW	29-09-2016 03:09	3:42:00	1
9	Bhadrawati Pole-I	HVDC	WR/SR	SO	20-09-2016 09:03	AMP Works	21-09-2016 02:42	17:39:00	0
10	Bhadrawati Pole-I	HVDC	WR/SR	SO	21-09-2016 09:00	AMP Works	21-09-2016 20:09	11:09:00	0
11	Biswanath Chariali-Agra Pole-I	HVDC	NER/NR	SC	01-09-2016 00:00	for diversion works of line by Powergrid due to UPEIDA works of Agra-Lucknow exp.	01-09-2016 22:22	22:22:00	0
12	Biswanath Chariali-Agra Pole-I	HVDC	NER/NR	TP	30-09-2016 11:00	Smoke detection system mall operation	30-09-2016 14:07	3:07:00	1
13	Biswanath Chariali-Agra Pole-II	HVDC	NER/NR	TP	30-09-2016 11:00	Smoke detection system mall operation	30-09-2016 17:03	6:03:00	1
14	Bheramara HVDC	HVDC	Bangladesh	SO	30-09-2016 05:30	For rectification of water leakage of Valve cooling system	30-09-2016 11:37	6:07:00	0
HVDC - Internal									
15	Balia-Bhiwadi Pole-I	HVDC	NR	SE	29-09-2016 01:09	S/D of earth electrode due to fire near it	29-09-2016 03:20	2:11:00	0
16	Balia-Bhiwadi Pole-II	HVDC	NR	TP	29-09-2016 00:08	Tripped from Balia end due to changeover logic problem	29-09-2016 03:20	3:12:00	1
765 kV - IR									
17	765 kV Gaya-Balia	Line	ER/NR	SO	01-09-2016 08:59	For taking up the erection of Bushing, LA and BPI for spare Bus Reactor unit at Balia PG by Powergrid	02-09-2016 00:27	15:28:00	0
18	765 kV Gaya-Balia	Line	ER/NR	SO	03-09-2016 10:19	For taking up the erection of Bushing, LA and BPI for spare Bus Reactor unit at Balia PG by Powergrid	03-09-2016 17:10	6:51:00	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
19	765 kV Gaya-Balia	Line	ER/NR	SE	16-09-2016 11:45	To attend hot spot \01 nos jumper conductor out of 04 has been broken from dead end	16-09-2016 16:27	4:42:00	0
20	765 kV New Ranchi-Dharamjaygarh	Line	ER/WR	SE	16-09-2016 11:21	Emergency shutdown	16-09-2016 20:36	9:15:00	0
21	765 kV New Ranchi-Dharamjaygarh	Line	ER/WR	SO	21-09-2016 09:01	for replacement of insulators damaged by miscreants	21-09-2016 17:29	8:28:00	0
22	765 kV New Ranchi-Dharamjaygarh	Line	ER/WR	SO	22-09-2016 08:45	Replacement of damaged insulator	22-09-2016 21:36	12:51:00	0
23	765 kV New Ranchi-Dharamjaygarh	Line	ER/WR	TP	28-09-2016 11:50	DC Earth fault at D'garh, DT sent to Ranchi	28-09-2016 13:29	1:39:00	1
24	765 kV New Ranchi-Dharamjaygarh	Line	ER/WR	TV	29-09-2016 11:35	Tripped on Over Voltage	29-09-2016 14:14	2:39:00	2
25	765 kV Jharsuguda-Dharmjaygarh-I	Line	ER/WR	TP	22-09-2016 10:21	DT RECEIVED AT JHARSUGUDA END	22-09-2016 12:01	1:40:00	1
26	765 kV Gwalior-Phagi-II	Line	WR/NR	SO	23-09-2016 08:23	CSD commissioning	23-09-2016 22:36	14:13:00	0
27	765 kV Gwalior-Phagi-II	Line	WR/NR	TP	24-09-2016 11:00	DT received at Gwalior	24-09-2016 12:07	1:07:00	1
28	765 kV Gwalior-Phagi-I	Line	WR/NR	TP	10-09-2016 13:24	PLCC maloperation	10-09-2016 14:29	1:05:00	1
29	765 kV Gwalior-Phagi-I	Line	WR/NR	TP	10-09-2016 15:01	PLCC Maloperation	10-09-2016 16:20	1:19:00	2
30	765 kV Gwalior-Phagi-I	Line	WR/NR	SO	22-09-2016 09:02	CSD commissioning	22-09-2016 20:54	11:52:00	2
31	765 kV Gwalior-Agra-II	Line	WR/NR	SE	19-09-2016 12:04	For rectification of Bus connector at Gwalior end	19-09-2016 15:58	3:54:00	0
32	765 kV Gwalior-Agra-I	Line	WR/NR	SO	20-09-2016 10:13	Rectification of damaged conductor strand in B-phase connector	20-09-2016 13:47	3:34:00	0
33	765 kV Solapur-Raichur-I	Line	WR/SR	TP	14-09-2016 15:43	DC EARTH LEAKAGE IN TIE CB	14-09-2016 17:28	1:45:00	1
765 kV Internal									
34	765kV Varanasi-Fatehpur-I	Line	NR	TL	05-09-2016 16:23	Distance Protection Operated	05-09-2016 16:53	0:30:00	1
35	765kV Phagi-Bhiwani-I	Line	NR	SC	28-09-2016 08:21	Construction of new element --For facilitating the final jumpering and commissioning work of ckt-2	29-09-2016 17:37	33:16:00	0
36	765kV Moga-Bhiwani(PG)	Line	NR	TP	03-09-2016 22:11	Tripped during testing work at Bhiwani	03-09-2016 22:31	0:20:00	1
37	765kV Meerut-Bhiwani(PG)	Line	NR	MO	02-09-2016 06:32	Opened manually due to High Voltage	05-09-2016 14:16	79:44:00	0
38	765kV Lucknow(PG)-Bareilly(PG)-I	Line	NR	SE	24-09-2016 11:14	Sparking line reactor NGR.	24-09-2016 11:47	0:33:00	0
39	765kV Lucknow(PG)-Bareilly(PG)-I	Line	NR	SO	24-09-2016 18:05	Facilitating Charging of L/R	24-09-2016 18:40	0:35:00	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
40	765kV Kanpur-Varanasi-II	Line	NR	TL	01-09-2016 15:35	Distance Protection Operated	01-09-2016 19:52	4:17:00	1
41	765kV Kanpur-Varanasi-II	Line	NR	SO	12-09-2016 11:17	CSD commissioning	12-09-2016 19:18	8:01:00	1
42	765kV Kanpur-Varanasi-I	Line	NR	SO	15-09-2016 12:28	CSD commissioning	15-09-2016 18:03	5:35:00	0
43	765kV Kanpur-Jhatikara	Line	NR	SO	14-09-2016 10:22	CSD commissioning	14-09-2016 21:06	10:44:00	0
44	765kV Kanpur-Jhatikara	Line	NR	SE	20-09-2016 11:10	SF6 gas leakage observed in density monitor No. 712	20-09-2016 20:19	9:09:00	0
45	765kV Kanpur-Jhatikara	Line	NR	SE	30-09-2016 10:14	hand tripped due to heavy chattering was observed in Main II Relay of Jhatikara line	30-09-2016 11:28	1:14:00	0
46	765kV Fatehpur-Agra-II	Line	NR	MO	01-09-2016 00:00	Opened manually due to High Voltage	01-09-2016 11:36	11:36:00	0
47	765kV Fatehpur-Agra-II	Line	NR	MO	05-09-2016 07:13	Opened manually due to High Voltage	05-09-2016 11:44	4:31:00	0
48	765kV Fatehpur-Agra-II	Line	NR	MO	18-09-2016 17:10	Opened manually due to High Voltage	19-09-2016 09:56	16:46:00	0
49	765kV Fatehpur-Agra-I	Line	NR	MO	02-09-2016 04:05	Opened manually due to High Voltage	02-09-2016 10:34	6:29:00	0
50	765kV Fatehpur-Agra-I	Line	NR	MO	03-09-2016 06:21	Opened manually due to High Voltage	04-09-2016 22:41	40:20:00	0
51	765kV Fatehpur-Agra-I	Line	NR	MO	24-09-2016 18:05	Opened manually due to High Voltage	26-09-2016 12:14	42:09:00	0
52	765kV Fatehpur-Agra-I	Line	NR	MO	28-09-2016 07:11	Opened manually due to High Voltage	28-09-2016 12:21	5:10:00	0
53	765kV Fatehpur-Agra-I	Line	NR	MO	29-09-2016 04:00	Opened manually due to High Voltage	29-09-2016 09:26	5:26:00	0
54	765kV Balia-Lucknow	Line	NR	SO	01-09-2016 08:56	For taking up the erection of Bushing, LA and BPI for spare Bus Reactor unit at Balia PG by Powergrid	02-09-2016 01:08	16:12:00	0
55	765kV Balia-Lucknow	Line	NR	SO	03-09-2016 10:27	For taking up the erection of Bushing, LA and BPI for spare Bus Reactor unit at Balia PG by Powergrid	03-09-2016 16:43	6:16:00	0
56	765kV Antah-Phagi-I	Line	NR	SO	08-09-2016 10:11	Synchronization of spare reactor with Reactor Bank of 765 KV Anta-Phagi Ckt.I & Replacement of	08-09-2016 20:14	10:03:00	0
57	765kV Agra-G'Noida	Line	NR	SC	19-09-2016 11:00	Construction of new element For stringing in section AP31-AP 32 (Power line crossing) of LILO	19-09-2016 19:58	8:58:00	0
58	765 kV Moga-Meerut	Line	NR	MO	01-09-2016 07:31	Opened manually due to High Voltage	01-09-2016 11:22	3:51:00	0
59	765 kV Moga-Meerut	Line	NR	MO	24-09-2016 06:30	Opened manually due to High Voltage	24-09-2016 11:47	5:17:00	0
60	765kV Angul-Jharsuguda-II	Line	ER	SO	25-09-2016 09:27	Tower erection work at Loc. 50/1	30-09-2016 19:20	129:53:00	0
61	765kV Angul-Jharsuguda-I	Line	ER	TS	30-09-2016 05:30	BACK UP PROTECTION IMPEDENCE PROTECTION OF ANGUL-I LINE REACTOR	30-09-2016 07:19	1:49:00	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
62	765kV Wardha-Aurangabad-IV	Line	WR	MO	07-09-2016 02:13	Opened manually due to High Voltage	08-09-2016 10:20	32:07:00	0
63	765kV Wardha-Aurangabad-IV	Line	WR	MO	14-09-2016 15:33	Opened manually due to High Voltage	15-09-2016 07:15	15:42:00	0
64	765kV Wardha-Aurangabad-IV	Line	WR	MO	23-09-2016 00:44	Opened manually due to High Voltage	25-09-2016 06:57	54:13:00	0
65	765kV Wardha-Aurangabad-IV	Line	WR	MO	30-09-2016 23:44	Opened manually due to High Voltage	01-10-2016 00:00	0:16:00	0
66	765kV Wardha-Aurangabad-III	Line	WR	MO	01-09-2016 00:00	Opened manually due to High Voltage	03-09-2016 07:18	55:18:00	0
67	765kV Wardha-Aurangabad-III	Line	WR	MO	03-09-2016 16:50	Opened manually due to High Voltage	05-09-2016 06:14	37:24:00	0
68	765kV Wardha-Aurangabad-III	Line	WR	MO	05-09-2016 17:11	Opened manually due to High Voltage	06-09-2016 19:32	26:21:00	0
69	765kV Wardha-Aurangabad-III	Line	WR	MO	15-09-2016 21:38	Opened manually due to High Voltage	18-09-2016 08:53	59:15:00	0
70	765kV Wardha-Aurangabad-III	Line	WR	MO	18-09-2016 20:43	Opened manually due to High Voltage	20-09-2016 07:16	34:33:00	0
71	765kV Wardha-Aurangabad-III	Line	WR	MO	20-09-2016 21:53	Opened manually due to High Voltage	22-09-2016 06:36	32:43:00	0
72	765kV Wardha-Aurangabad-III	Line	WR	MO	25-09-2016 23:10	Opened manually due to High Voltage	27-09-2016 07:10	32:00:00	0
73	765kV Wardha-Aurangabad-III	Line	WR	MO	28-09-2016 00:14	Opened manually due to High Voltage	28-09-2016 06:53	6:39:00	0
74	765kV Wardha-Aurangabad-III	Line	WR	MO	28-09-2016 23:04	Opened manually due to High Voltage	30-09-2016 06:26	31:22:00	0
75	765kV Wardha-Aurangabad-III	Line	WR	MO	30-09-2016 01:27	Opened manually due to High Voltage	30-09-2016 06:26	4:59:00	0
76	765kV Wardha-Aurangabad-II	Line	WR	MO	01-09-2016 00:00	Opened manually due to High Voltage	01-09-2016 07:01	7:01:00	0
77	765kV Wardha-Aurangabad-II	Line	WR	TP	23-09-2016 14:48	REF protection operated at Aurangabad due to mal-operation of BCU	23-09-2016 17:07	2:19:00	1
78	765kV Wardha-Aurangabad-II	Line	WR	MO	07-09-2016 22:23	Opened manually due to High Voltage	08-09-2016 06:31	8:08:00	1
79	765kV Wardha-Aurangabad-II	Line	WR	MO	09-09-2016 17:17	Opened manually due to High Voltage	10-09-2016 09:26	16:09:00	1
80	765kV Wardha-Aurangabad-II	Line	WR	MO	11-09-2016 16:39	Opened manually due to High Voltage	12-09-2016 07:32	14:53:00	1
81	765kV Wardha-Aurangabad-II	Line	WR	MO	13-09-2016 17:51	Opened manually due to High Voltage	14-09-2016 11:07	17:16:00	1
82	765kV Wardha-Aurangabad-I	Line	WR	MO	01-09-2016 16:49	Opened manually due to High Voltage	04-09-2016 09:30	64:41:00	0
83	765kV Wardha-Aurangabad-I	Line	WR	TV	04-09-2016 17:03	Tripped on Over Voltage	06-09-2016 06:06	37:03:00	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
84	765kV Wardha-Aurangabad-I	Line	WR	MO	06-09-2016 12:28	Opened manually due to High Voltage	07-09-2016 06:22	17:54:00	1
85	765kV Wardha-Aurangabad-I	Line	WR	MO	08-09-2016 17:06	Opened manually due to High Voltage	09-09-2016 09:19	16:13:00	1
86	765kV Wardha-Aurangabad-I	Line	WR	MO	10-09-2016 20:20	Opened manually due to High Voltage	11-09-2016 07:12	10:52:00	1
87	765kV Wardha-Aurangabad-I	Line	WR	MO	12-09-2016 21:20	Opened manually due to High Voltage	13-09-2016 06:55	9:35:00	1
88	765kV Wardha-Aurangabad-I	Line	WR	MO	15-09-2016 00:02	Opened manually due to High Voltage	16-09-2016 07:52	31:50:00	1
89	765kV Wardha-Aurangabad-I	Line	WR	MO	16-09-2016 12:24	Opened manually due to High Voltage	19-09-2016 10:53	70:29:00	1
90	765kV Wardha-Aurangabad-I	Line	WR	MO	16-09-2016 00:02	Opened manually due to High Voltage	16-09-2016 07:52	7:50:00	1
91	765kV Wardha-Aurangabad-I	Line	WR	MO	19-09-2016 22:51	Opened manually due to High Voltage	21-09-2016 05:50	30:59:00	1
92	765kV Wardha-Aurangabad-I	Line	WR	MO	21-09-2016 16:29	Opened manually due to High Voltage	23-09-2016 06:36	38:07:00	1
93	765kV Wardha-Aurangabad-I	Line	WR	MO	23-09-2016 21:57	Opened manually due to High Voltage	24-09-2016 07:04	9:07:00	1
94	765kV Wardha-Aurangabad-I	Line	WR	MO	24-09-2016 22:34	Opened manually due to High Voltage	26-09-2016 05:52	31:18:00	1
95	765kV Wardha-Aurangabad-I	Line	WR	MO	26-09-2016 22:23	Opened manually due to High Voltage	29-09-2016 06:26	56:03:00	1
96	765kV Vindhyachal-Satna-II	Line	WR	SO	01-09-2016 12:34	Fine tuning of CSD relay by M/s alstom	01-09-2016 19:37	7:03:00	0
97	765kV Vindhyachal-Satna-I	Line	WR	SC	03-09-2016 15:24	Outage required for diamond formation through 400kV Sasan Vindhyachal pooling ckt-1 and 765kV	03-09-2016 17:49	2:25:00	0
98	765kV Satna-Gwalior-II	Line	WR	SO	01-09-2016 09:56	Switching of Y-Ph to spare-Ph for RTV Coating in Y-Ph Reactor	01-09-2016 11:28	1:32:00	0
99	765kV Satna-Gwalior-II	Line	WR	SO	03-09-2016 14:42	Switching of B-Ph to spare-Ph for RTV Coating in B-Ph Reactor	03-09-2016 15:55	1:13:00	0
100	765kV Satna-Gwalior-II	Line	WR	SO	04-09-2016 11:31	To take B-Ph LR unit into service after taking out Spare unit at Gwalior	04-09-2016 12:22	0:51:00	0
101	765kV Satna-Gwalior-I	Line	WR	SE	20-09-2016 15:22	To attend Y Ph jumper of L/R isolator at Gwalior	20-09-2016 17:12	1:50:00	0
102	765kV Raigarh-PS(Kotra)-Tamnar-II	Line	WR	SO	14-09-2016 12:38	For CT wiring of PMU at Tamnar S/s.	14-09-2016 13:59	1:21:00	0
103	765kV Raigarh-PS(Kotra)-Tamnar-I	Line	WR	SO	14-09-2016 11:28	For CT wiring of PMU at Tamnar S/s.	14-09-2016 12:19	0:51:00	0
104	765kV Raigarh-PS(Kotra)-Raipur-PS(Durg)-II	Line	WR	MO	07-09-2016 10:30	Opened manually due to High Voltage	12-09-2016 08:11	117:41:00	0
105	765kV Raigarh-PS(Kotra)-Raipur-PS(Durg)-I	Line	WR	MO	01-09-2016 00:00	Opened manually due to High Voltage	06-09-2016 10:45	130:45:00	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
106	765kV Raigarh-PS(Kotra)-Raipur-PS(Durg)-I	Line	WR	MO	06-09-2016 15:08	Opened manually due to High Voltage	07-09-2016 10:03	18:55:00	0
107	765kV Raigarh-PS(Kotra)-Raipur-PS(Durg)-I	Line	WR	TS	12-09-2016 02:32	LA problem at Durg end	01-10-2016 00:00	453:28:00	1
108	765kV Pune-Sholapur	Line	WR	MO	01-09-2016 00:00	Opened manually due to High Voltage	01-09-2016 08:56	8:56:00	0
109	765kV Pune-Sholapur	Line	WR	MO	01-09-2016 17:17	Opened manually due to High Voltage	02-09-2016 09:55	16:38:00	0
110	765kV Pune-Sholapur	Line	WR	MO	02-09-2016 22:19	Opened manually due to High Voltage	03-09-2016 09:30	11:11:00	0
111	765kV Pune-Sholapur	Line	WR	MO	03-09-2016 22:01	Opened manually due to High Voltage	05-09-2016 07:42	33:41:00	0
112	765kV Pune-Sholapur	Line	WR	MO	05-09-2016 13:07	Opened manually due to High Voltage	06-09-2016 10:25	21:18:00	0
113	765kV Pune-Sholapur	Line	WR	MO	15-09-2016 01:28	Opened manually due to High Voltage	15-09-2016 06:44	5:16:00	0
114	765kV Pune-Sholapur	Line	WR	MO	15-09-2016 15:18	Opened manually due to High Voltage	23-09-2016 06:25	183:07:00	0
115	765kV Pune-Sholapur	Line	WR	MO	23-09-2016 17:35	Opened manually due to High Voltage	27-09-2016 10:06	88:31:00	0
116	765kV Pune-Sholapur	Line	WR	MO	27-09-2016 22:06	Opened manually due to High Voltage	28-09-2016 09:58	11:52:00	0
117	765kV Pune-Sholapur	Line	WR	MO	28-09-2016 14:20	Opened manually due to High Voltage	30-05-2016 07:12	#####	0
118	765kV Pune-Sholapur	Line	WR	MO	30-09-2016 21:12	Opened manually due to High Voltage	01-10-2016 00:00	2:48:00	0
119	765kV Jabalpur-Dharamjaigarh-III	Line	WR	MO	17-09-2016 15:35	Opened manually due to High Voltage	01-10-2016 00:00	320:25:00	0
120	765kV Jabalpur-Dharamjaigarh-III	Line	WR	SE	17-09-2016 13:35	To attend oil leakage in B-phase CVT	17-09-2016 15:35	2:00:00	0
121	765kV Jabalpur-Dharamjaigarh-II	Line	WR	SE	02-09-2016 14:27	Hot spot in wave trap at Jabalpur	02-09-2016 16:30	2:03:00	0
122	765kV Jabalpur-Dharamjaigarh-II	Line	WR	MO	03-09-2016 15:27	Opened manually due to High Voltage	17-09-2016 14:41	335:14:00	0
123	765kV Jabalpur-Dharamjaigarh-I	Line	WR	MO	01-09-2016 00:00	Opened manually due to High Voltage	03-09-2016 17:21	65:21:00	0
124	765kV Jabalpur-Bhopal	Line	WR	SO	03-09-2016 10:27	RTV Coating on 765kV Bushing to minimize the chances of flash over.	03-09-2016 18:20	7:53:00	0
125	765kV Jabalpur-Bhopal	Line	WR	SO	08-09-2016 14:36	RTV Coating on 765kV Bushing to minimize the chances of flash over	08-09-2016 21:16	6:40:00	0
126	765kV Jabalpur-Bhopal	Line	WR	SO	12-09-2016 13:50	RTV Coating on 765kV Bushing to minimize the chances of flash over.	12-09-2016 19:22	5:32:00	0
127	765kV Indore-Vadodara	Line	WR	SO	27-09-2016 09:26	AMP Works	27-09-2016 19:18	9:52:00	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
128	765kV Indore-Vadodara	Line	WR	SO	28-09-2016 10:26	AMP Works	28-09-2016 18:53	8:27:00	0
129	765kV Indore-Vadodara	Line	WR	SO	29-09-2016 10:11	AMP Works	29-09-2016 21:30	11:19:00	0
130	765kV Durg-Wardha-II	Line	WR	TL	29-09-2016 13:16	Distance Protection Operated	30-09-2016 18:34	29:18:00	1
131	765kV Durg-Wardha-I	Line	WR	MO	16-09-2016 00:55	Opened manually due to High Voltage	16-09-2016 06:43	5:48:00	0
132	765kV Dhule-Vadodara	Line	WR	MO	01-09-2016 03:20	Opened manually due to High Voltage	01-09-2016 08:28	5:08:00	0
133	765kV Dhule-Vadodara	Line	WR	MO	02-09-2016 03:19	Opened manually due to High Voltage	02-09-2016 09:39	6:20:00	0
134	765kV Dhule-Vadodara	Line	WR	MO	04-09-2016 17:04	Opened manually due to High Voltage	05-09-2016 06:35	13:31:00	0
135	765kV Dhule-Vadodara	Line	WR	MO	17-09-2016 01:38	Opened manually due to High Voltage	17-09-2016 12:33	10:55:00	0
136	765kV Dhule-Vadodara	Line	WR	MO	18-09-2016 02:35	Opened manually due to High Voltage	18-09-2016 06:09	3:34:00	0
137	765kV Dhule-Vadodara	Line	WR	MO	21-09-2016 02:46	Opened manually due to High Voltage	21-09-2016 06:49	4:03:00	0
138	765kV Dhule-Vadodara	Line	WR	MO	22-09-2016 00:16	Opened manually due to High Voltage	22-09-2016 06:53	6:37:00	0
139	765kV Dhule-Vadodara	Line	WR	MO	23-09-2016 02:57	Opened manually due to High Voltage	23-09-2016 05:55	2:58:00	0
140	765kV Dhule-Vadodara	Line	WR	MO	24-09-2016 01:15	Opened manually due to High Voltage	24-09-2016 06:35	5:20:00	0
141	765kV Dhule-Vadodara	Line	WR	MO	25-09-2016 01:54	Opened manually due to High Voltage	25-09-2016 09:06	7:12:00	0
142	765kV Dhule-Vadodara	Line	WR	MO	25-09-2016 23:09	Opened manually due to High Voltage	26-09-2016 06:55	7:46:00	0
143	765kV Dhule-Vadodara	Line	WR	SE	29-09-2016 07:39	Conductor jumper hanging at Dhule.	29-09-2016 10:00	2:21:00	0
144	765kV Bina-Jabalpur-III	Line	WR	SO	07-09-2016 10:47	RTV Coating on 765kV Bushing to minimize the chances of flash over	07-09-2016 17:54	7:07:00	0
145	765kV Bina-Jabalpur-I	Line	WR	MO	05-09-2016 18:08	Opened manually due to High Voltage	07-09-2016 10:30	40:22:00	0
146	765kV Bina-Gwalior-III	Line	WR	SE	05-09-2016 12:06	To make spare reactor free for attending the above oil leakage	05-09-2016 13:52	1:46:00	0
147	765kV Raichur-Kurnool-II	Line	SR	MO	04-09-2016 17:30	Opened manually due to High Voltage	05-09-2016 09:20	15:50:00	0
148	765kV Raichur-Kurnool-II	Line	SR	MO	10-09-2016 23:14	Opened manually due to High Voltage	11-09-2016 06:57	7:43:00	0
149	765kV Raichur-Kurnool-II	Line	SR	MO	11-09-2016 21:47	Opened manually due to High Voltage	12-09-2016 07:16	9:29:00	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
150	765kV Raichur-Kurnool-II	Line	SR	MO	15-09-2016 23:13	Opened manually due to High Voltage	16-09-2016 07:33	8:20:00	0
151	765kV Raichur-Kurnool-II	Line	SR	MO	16-09-2016 22:41	Opened manually due to High Voltage	17-09-2016 07:01	8:20:00	0
152	765kV Raichur-Kurnool-II	Line	SR	MO	18-09-2016 01:16	Opened manually due to High Voltage	18-09-2016 06:59	5:43:00	0
153	765kV Raichur-Kurnool-II	Line	SR	MO	22-09-2016 23:40	Opened manually due to High Voltage	23-09-2016 05:50	6:10:00	0
154	765kV Raichur-Kurnool-II	Line	SR	MO	24-09-2016 00:18	Opened manually due to High Voltage	24-09-2016 07:06	6:48:00	0
155	765kV Raichur-Kurnool-II	Line	SR	MO	26-09-2016 00:13	Opened manually due to High Voltage	26-09-2016 06:55	6:42:00	0
156	765kV Kurnool-Thiruvalem-II	Line	SR	MO	01-09-2016 00:00	Opened manually due to High Voltage	02-09-2016 21:56	45:56:00	0
157	765kV Kurnool-Thiruvalem-II	Line	SR	TV	02-09-2016 21:56	Tripped on Over Voltage	01-10-2016 00:00	674:04:00	1
158	765kV Kurnool-Thiruvalem-I	Line	SR	TV	02-09-2016 21:56	Tripped on Over Voltage	03-09-2016 10:40	12:44:00	1
159	765kV Kurnool-Nellore(PS)-I	Line	SR	MO	01-09-2016 00:00	Opened manually due to High Voltage	01-10-2016 00:00	720:00:00	0
400kV - IR									
160	400 kV Zerda-Kankaroli	Line	WR/NR	SE	10-09-2016 15:05	To take line reactor Out of service.	10-09-2016 15:39	0:34:00	0
161	400 kV Zerda-Kankaroli	Line	WR/NR	SO	10-09-2016 19:11	To take line reactor In service.	10-09-2016 19:28	0:17:00	0
162	400 kV Zerda-Bhinmal	Line	WR/NR	SO	01-09-2016 00:00	Distance Protection Operated	01-09-2016 01:02	1:02:00	0
163	400 kV Zerda-Bhinmal	Line	WR/NR	SE	05-09-2016 20:45	To take line reactor Out of service.	05-09-2016 20:58	0:13:00	0
164	400 kV Varanasi-Biharshariff-II	Line	ER/NR	SO	06-09-2016 12:42	To attend oil leakage in Line reactor at Varanasi end.	06-09-2016 14:03	1:21:00	0
165	400 kV Tala - Binaguri - IV	Line	Bhutan	TL	19-09-2016 22:40	Distance Protection Operated	19-09-2016 23:21	0:41:00	1
166	400 kV Tala - Binaguri - IV	Line	Bhutan	TL	25-09-2016 00:36	Distance Protection Operated	25-09-2016 00:58	0:22:00	2
167	400 kV Sterlite-Raigarh	Line	ER/WR	SE	03-09-2016 12:49	Rectification of broken jumper	03-09-2016 19:05	6:16:00	0
168	400 kV Sterlite-Raigarh	Line	ER/WR	MO	17-09-2016 13:24	To facilitate s/d on Rourkela- Sterlite-II	17-09-2016 18:31	5:07:00	0
169	400 kV Siliguri-Bongaigaon-IV	Line	ER/NER	SO	04-09-2016 10:38	To attend hot spot	04-09-2016 14:59	4:21:00	0
170	400 kV Siliguri-Bongaigaon-III	Line	ER/NER	SO	03-09-2016 10:50	To attend hot spot	03-09-2016 15:35	4:45:00	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 Siliguri-Bongaigaon-III	Line	ER/NER	TL	28-09-2016 17:27	Distance Protection Operated	29-09-2016 15:25	21:58:00	1
172	400 kV Siliguri-Bongaigaon-II	Line	ER/NER	TL	24-09-2016 23:30	Distance Protection Operated	24-09-2016 23:57	0:27:00	1
173	400 kV Siliguri-Bongaigaon-I	Line	ER/NER	TL	24-09-2016 23:30	Distance Protection Operated	25-09-2016 00:03	0:33:00	1
174	400 kV Shujalpur-RAPP-II	Line	WR/NR	SC	14-09-2016 10:16	For dismantling old reactor(BHEL) and erection with new reactor(CGL) under RAPP#7&8	01-10-2016 00:00	397:44:00	0
175	400 kV Shujalpur-RAPP-I	Line	WR/NR	SC	01-09-2016 00:00	for dismantling old reactor(BHEL) and erection with new reactor(CGL)	01-10-2016 00:00	720:00:00	0
176	400 kV Sasaram-Sarnath	Line	ER/NR	SC	22-09-2016 09:33	For dejumping /jumping at loc. 192 D/C tower for facilitating the disconnecting the two lines at	28-09-2016 01:52	136:19:00	0
177	400 kV Sasaram-Allahabad	Line	ER/NR	SC	22-09-2016 09:36	For dejumping /jumping at loc. 192 D/C tower for facilitating the disconnecting the two lines at	22-09-2016 20:49	11:13:00	0
178	400 kV Sasaram-Allahabad	Line	ER/NR	SC	23-09-2016 09:14	For dejumping /jumping at loc. 192 D/C tower for facilitating the disconnecting the two lines at	23-09-2016 22:07	12:53:00	0
179	400 kV Sasaram-Allahabad	Line	ER/NR	SC	27-09-2016 12:48	To facilitate the top conductor sag adjustment and re-splicing of OPGW under diamond formation	27-09-2016 21:59	9:11:00	0
180	400 kV Malbase - Binaguri - I	Line	Bhutan	TL	19-09-2016 22:40	Distance Protection Operated	19-09-2016 22:52	0:12:00	1
181	400 kV Kolhapur-Kudgi-II	Line	WR/SR	TV	17-09-2016 03:43	Tripped on Over Voltage	17-09-2016 05:13	1:30:00	1
182	400 kV Kolhapur-Kudgi-II	Line	WR/SR	SO	28-09-2016 10:28	Warranty Tests and Line AMP Works	28-09-2016 20:09	9:41:00	1
183	400 kV Kolhapur-Kudgi-I	Line	WR/SR	TP	14-09-2016 19:36	DT RECEIVED AT KUDGI	14-09-2016 20:20	0:44:00	1
184	400 kV Kolhapur-Kudgi-I	Line	WR/SR	TV	17-09-2016 03:43	Tripped on Over Voltage	17-09-2016 10:44	7:01:00	2
185	400 kV Kolhapur-Kudgi-I	Line	WR/SR	SC	27-09-2016 10:45	Tower Construction	27-09-2016 20:25	9:40:00	2
186	400 kV Jeypore-Gazuwaka-I	Line	ER/SR	TL	25-09-2016 19:12	INTERZONE PROTECTION OPERATED	25-09-2016 20:39	1:27:00	1
187	400 kV IBEUL-Raigarh-I	Line	ER/WR	SE	13-09-2016 01:22	Emergency H/T by Indbharat due to CT blasting of ST-I at Indbharat	13-09-2016 02:38	1:16:00	0
188	400 kV IBEUL-Raigarh-I	Line	ER/WR	TL	27-09-2016 15:45	Distance Protection Operated	28-09-2016 17:05	25:20:00	1
189	400 kV Biharshariff-Balia-II	Line	ER/NR	TS	19-09-2016 15:51	Y-phase CT blast at Balia end	20-09-2016 19:28	27:37:00	1
190	400 kV Biharshariff-Balia-II	Line	ER/NR	TP	24-09-2016 11:50	DT received at Biharshariff end, O/V relay operation at Balia end	24-09-2016 12:29	0:39:00	2
191	400 kV Biharshariff-Balia-I	Line	ER/NR	TP	24-09-2016 11:50	DT received at Biharshariff end, O/V relay operation at Balia end	24-09-2016 12:47	0:57:00	1
192	400 kV Bhadravati-Ramagundam-II	Line	WR/SR	TL	27-09-2016 01:01	Distance Protection Operated	27-09-2016 02:27	1:26:00	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
193	400 kV Bhadrawati-Ramagundam-I	Line	WR/SR	SO	20-09-2016 09:03	MAINTENANCE WORKS FOR A/R SCHEME	20-09-2016 19:32	10:29:00	0
194	400 kV Bhadrawati-Ramagundam-I	Line	WR/SR	SE	21-09-2016 13:02	EMERGENCY LC	21-09-2016 18:37	5:35:00	0
195	400 kV Behramara-Behrampore-II	Line	Bangladesh	SO	30-09-2016 07:06	For replacement of B- ph CVT at Behrampore	30-09-2016 11:28	4:22:00	0
220 kV - IR									
196	220 kV Talangde-Chikkodi	Line	WR/SR	MO	01-09-2016 00:00	Due to no schedule	01-10-2016 00:00	720:00:00	0
197	220 kV Pusauli-Sahupuri	Line	ER/NR	TL	08-09-2016 01:50	Distance Protection Operated	08-09-2016 02:38	0:48:00	1
198	220 kV Pusauli-Sahupuri	Line	ER/NR	SE	08-09-2016 13:03	Emergency shutdown	08-09-2016 20:17	7:14:00	1
199	220 kV Pusauli-Sahupuri	Line	ER/NR	MO	09-09-2016 17:58	Due to load restriction	09-09-2016 20:36	2:38:00	1
200	220 kV Pusauli-Sahupuri	Line	ER/NR	SO	10-09-2016 13:22	CVT Failure at Pusauli	28-09-2016 13:23	432:01:00	1
201	220 kV Mudasangi (Kolhapur)-Chikkodi	Line	WR/SR	MO	01-09-2016 00:00	Due to no schedule	01-10-2016 00:00	720:00:00	0
202	220 kV Mehgaon-Auraiya	Line	WR/NR	SO	01-09-2016 00:00	Bus bar protection operated.	07-09-2016 12:35	156:35:00	0
203	220 kV Mehgaon-Auraiya	Line	WR/NR	TP	14-09-2016 16:56	S/D for Mahgaon locale side CB trip	14-09-2016 19:45	2:49:00	1
204	220 kV Malbase - Birpara	Line	Bhutan	TP	25-09-2016 08:34	tripped from Chukha end only	25-09-2016 10:00	1:26:00	1
205	220 kV Malanpur-Auraiya	Line	WR/NR	TL	13-09-2016 01:35	Distance Protection Operated	13-09-2016 01:57	0:22:00	1
206	220 kV Malanpur-Auraiya	Line	WR/NR	TL	20-09-2016 05:34	Distance Protection Operated	20-09-2016 06:14	0:40:00	2
207	220 kV Malanpur-Auraiya	Line	WR/NR	TL	24-09-2016 00:41	Distance Protection Operated	24-09-2016 01:05	0:24:00	3
208	220 kV Chukha - Birpara - II	Line	Bhutan	TL	05-09-2016 07:31	Distance Protection Operated	05-09-2016 07:59	0:28:00	1
209	220 kV Chukha - Birpara - II	Line	Bhutan	TL	15-09-2016 12:47	Distance Protection Operated	16-09-2016 01:38	12:51:00	2
210	220 kV Chukha - Birpara - II	Line	Bhutan	TL	16-09-2016 12:23	Distance Protection Operated	16-09-2016 12:48	0:25:00	3
211	220 kV Chukha - Birpara - II	Line	Bhutan	TL	19-09-2016 17:10	Distance Protection Operated	19-09-2016 17:31	0:21:00	4
212	220 kV Chukha - Birpara - II	Line	Bhutan	TL	19-09-2016 22:10	Distance Protection Operated	19-09-2016 22:47	0:37:00	5
213	220 kV Chukha - Birpara - II	Line	Bhutan	TP	25-09-2016 08:34	tripped from Chukha end only	25-09-2016 09:18	0:44:00	6

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 Chukha - Birpara - I	Line	Bhutan	TL	15-09-2016 12:47	Distance Protection Operated	16-09-2016 13:10	24:23:00	1
215	220 kV Chukha - Birpara - I	Line	Bhutan	TL	19-09-2016 22:10	Distance Protection Operated	19-09-2016 22:40	0:30:00	2
216	220 kV Chukha - Birpara - I	Line	Bhutan	TP	25-09-2016 08:34	tripped from Chukha end only	25-09-2016 09:47	1:13:00	3
217	220 kV Budhipadar-Raigarh	Line	ER/WR	TL	20-09-2016 20:05	Distance Protection Operated	22-09-2016 19:13	47:08:00	1
218	220 kV Budhipadar-Korba-III	Line	ER/WR	TL	21-09-2016 17:28	Distance Protection Operated	21-09-2016 17:52	0:24:00	1
219	220 kV Budhipadar-Korba-II	Line	ER/WR	TL	18-09-2016 11:38	Distance Protection Operated	18-09-2016 11:56	0:18:00	1
220	220 kV Budhipadar-Korba-II	Line	ER/WR	TL	18-09-2016 23:10	Distance Protection Operated	18-09-2016 23:32	0:22:00	2
221	220 kV Budhipadar-Korba-II	Line	ER/WR	TL	20-09-2016 20:03	Distance Protection Operated	20-09-2016 21:15	1:12:00	3
222	220 kV Budhipadar-Korba-II	Line	ER/WR	SE	21-09-2016 12:57	S/D TAKEN BY BUDHIPADAR	21-09-2016 20:04	7:07:00	3
223	220 kV Budhipadar-Korba-II	Line	ER/WR	SO	22-09-2016 11:04	Stringing of earth wire between loc no 25-28 of budhipadar -korba ckt 1&2	22-09-2016 19:24	8:20:00	3
224	220 kV Birpara-Salakati-II	Line	ER/NER	TL	01-09-2016 23:22	Distance Protection Operated	02-09-2016 01:03	1:41:00	1
225	220 kV Birpara-Salakati-II	Line	ER/NER	TS	16-09-2016 18:00	Bus fault at Salakati	17-09-2016 10:35	16:35:00	2
226	220 kV Birpara-Salakati-II	Line	ER/NER	SO	22-09-2016 09:25	For CSD Commissioning	22-09-2016 18:15	8:50:00	2
227	220 kV Birpara-Salakati-I	Line	ER/NER	TL	01-09-2016 23:22	Distance Protection Operated	02-09-2016 00:17	0:55:00	1
228	220 kV Birpara-Salakati-I	Line	ER/NER	SE	03-09-2016 10:35	To attend hot spot at Loc No. 252	03-09-2016 13:43	3:08:00	1
229	220 kV Birpara-Salakati-I	Line	ER/NER	TS	16-09-2016 18:00	Bus fault at Salakati	16-09-2016 21:25	3:25:00	2
230	220 kV Birpara-Salakati-I	Line	ER/NER	TL	19-09-2016 17:23	Distance Protection Operated	19-09-2016 19:46	2:23:00	3
231	220 kV Birpara-Salakati-I	Line	ER/NER	SE	23-09-2016 12:42	To attend melted nuts& bolts at Loc. No. 170	23-09-2016 15:28	2:46:00	3
232	220 kV Badod-Modak	Line	WR/NR	TL	01-09-2016 14:30	Distance Protection Operated	01-09-2016 15:45	1:15:00	1
233	220 kV Badod-Modak	Line	WR/NR	TL	13-09-2016 13:44	Distance Protection Operated	13-09-2016 14:12	0:28:00	2
234	220 kV Badod-Modak	Line	WR/NR	TL	15-09-2016 14:25	Distance Protection Operated	15-09-2016 15:45	1:20:00	3
235	220 kV Badod-Modak	Line	WR/NR	TL	26-09-2016 12:58	Distance Protection Operated	26-09-2016 14:29	1:31:00	4

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
236	220 kV Badod-Modak	Line	WR/NR	TL	27-09-2016 21:09	Distance Protection Operated	27-09-2016 22:35	1:26:00	5
237	220 kV Badod-Modak	Line	WR/NR	SE	29-09-2016 14:05	Relay Testing	29-09-2016 17:41	3:36:00	5
238	220 kV Badod-Kota	Line	WR/NR	SE	22-09-2016 14:00	FOR ATTENDING RED HOT POINT ON D JUMPER OF LINE SIDE AND VERTICAL JUMPER OF 220 KV BUS C	22-09-2016 19:10	5:10:00	0
765 kV Reactors & ICTs									
239	B/R-I at G'Noida	Bus Reactor	NR	SE	01-09-2016 00:00	To attend hot spot	01-10-2016 00:00	720:00:00	0
240	B/R-I at Jharsuguda	Bus Reactor	ER	SO	06-09-2016 11:19	For shifting of spare reactor to B-ph Bus Reactor-1 position	06-09-2016 16:19	5:00:00	0
241	B/R-II at Jharsuguda	Bus Reactor	ER	SO	24-09-2016 10:31	LA problem	24-09-2016 17:15	6:44:00	0
242	B/R-I at Bhopal	Bus Reactor	WR	SE	06-09-2016 12:00	Bus reactor Y-phase oil leakage(Charged with spare phase)	06-09-2016 12:30	0:30:00	0
243	B/R-I at Wardha	Bus Reactor	WR	SE	06-09-2016 12:52	Unusual loud humming noise sound observed from bushing bottom side of 765 KV Bus reactor-1 Y-	06-09-2016 15:08	2:16:00	0
244	B/R-II at Wardha	Bus Reactor	WR	SO	07-09-2016 10:36	Aux Bus erection at Wardha	07-09-2016 18:20	7:44:00	0
245	B/R-I at Vadodara	Bus Reactor	WR	SO	19-09-2016 13:08	OIL SAMPLING OF BUSHING'	19-09-2016 15:15	2:07:00	0
246	765/400 kV ICT-II at Fatehpur	ICT	NR	SO	09-09-2016 14:54	CSD commissioning	09-09-2016 20:18	5:24:00	0
247	765/400 kV ICT-I at Fatehpur	ICT	NR	SO	10-09-2016 15:58	CSD commissioning	10-09-2016 18:32	2:34:00	0
248	765/400 kV ICT-I at Antah	ICT	NR	SO	17-09-2016 09:04	Manually opened due to fire in control panel	01-10-2016 00:00	326:56:00	0
249	765/400 kV ICT-II at Varanasi	ICT	NR	SO	12-09-2016 16:25	B-phase unit DGA abnormal	13-09-2016 20:12	27:47:00	0
250	765/400 kV ICT-I at Balia	ICT	NR	TS	20-09-2016 10:51	Differential protection operation	20-09-2016 18:19	7:28:00	1
251	765/220 kV ICT-I at Lalitpur	ICT	NR	SE	24-09-2016 09:04	Heavy oil leakage	24-09-2016 10:48	1:44:00	0
252	765/400 kV ICT-II at Jharsuguda	ICT	ER	SO	01-09-2016 08:49	To attend LA problem	01-09-2016 19:06	10:17:00	0
253	765/400 kV ICT-II at Jharsuguda	ICT	ER	TP	07-09-2016 16:30	DC Eath Fault	07-09-2016 17:32	1:02:00	1
254	765/400 kV ICT-I at Jharsuguda	ICT	ER	TP	07-09-2016 19:19	DC Eath Fault	07-09-2016 22:29	3:10:00	1
255	765/400 kV ICT-II at Indore	ICT	WR	SO	01-09-2016 11:03	for charging of B phase ICT and making spare ICT free.	01-09-2016 13:29	2:26:00	0
256	765/400 kV ICT-II at Wardha	ICT	WR	SE	03-09-2016 11:44	To attend hot spot on isolator	03-09-2016 15:01	3:17:00	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
257	765/400 kV ICT-I at Indore	ICT	WR	SC	05-09-2016 09:14	For shifting of control cables from old CMB to new RTCC MB	05-09-2016 16:57	7:43:00	0
258	765/400 kV ICT-II at Jabalpur-PS	ICT	WR	SO	05-09-2016 10:27	For RTV Coating on 765kV Bushing to minimize the chances of flash over. Spare unit will be taken into	05-09-2016 15:08	4:41:00	0
259	765/400 kV ICT-I at Indore	ICT	WR	SC	06-09-2016 10:43	For shifting of control cables from old CMB to new RTCC MB	06-09-2016 16:29	5:46:00	0
260	765/400 kV ICT-II at Jabalpur-PS	ICT	WR	SO	06-09-2016 14:13	RTV Coating on 765kV Bushing to minimize the chances of flash over	06-09-2016 17:49	3:36:00	0
261	765/400 kV ICT-I at Vadodara	ICT	WR	SO	09-09-2016 10:53	AMP Works	09-09-2016 13:09	2:16:00	0
262	765/400 kV ICT-II at Jabalpur-PS	ICT	WR	SO	10-09-2016 14:48	RTV Coating on 765kV Bushing	10-09-2016 18:35	3:47:00	0
263	765/400 kV ICT-II at Jabalpur-PS	ICT	WR	SO	12-09-2016 10:54	RTV Coating on 765kV Bushing to minimize the chances of flash over.	12-09-2016 12:48	1:54:00	0
264	765/400 kV ICT-I at Jabalpur-PS	ICT	WR	SO	13-09-2016 10:29	RTV Coating on 765kV Bushing to minimize the chances of flash over.	13-09-2016 13:27	2:58:00	0
265	765/400 kV ICT-I at Jabalpur-PS	ICT	WR	SO	14-09-2016 11:16	RTV Coating on 765kV Bushing to minimize the chances of flash over.	14-09-2016 15:28	4:12:00	0
266	765/400 kV ICT-I at Jabalpur-PS	ICT	WR	SO	15-09-2016 09:50	RTV Coating on 765kV Bushing to minimize the chances of flash over.	15-09-2016 14:25	4:35:00	0
267	765/400 kV ICT-I at Raipur PS(Durg)	ICT	WR	SO	16-09-2016 11:06	Main bay CSD commissioning work at Durg PS	16-09-2016 18:28	7:22:00	0
268	765/400 kV ICT-II at Ektuni	ICT	WR	SO	20-09-2016 15:39	for checking Y-ph fire detection trip/Alarm	20-09-2016 18:23	2:44:00	0
269	765/400 kV ICT-I at Gwalior	ICT	WR	SE	21-09-2016 10:03	To attend oil Leakage in Y phase Tank top	21-09-2016 12:00	1:57:00	0
270	765/400 kV ICT-II at Raigarh-PS(Kotra)	ICT	WR	TS	21-09-2016 09:34	WTI B-Phase tripped	21-09-2016 14:44	5:10:00	1
271	765/400 kV ICT-II at Bilaspur	ICT	WR	SO	22-09-2016 09:17	For taking R phase unit in service after internal inspection	22-09-2016 14:35	5:18:00	0
272	765/400 kV ICT-I at Indore	ICT	WR	SE	24-09-2016 10:58	Oil leakage from R ph bushing	24-09-2016 13:23	2:25:00	0
273	765/400 kV ICT-I at Indore	ICT	WR	SE	26-09-2016 14:00	Emergency shutdown	26-09-2016 15:57	1:57:00	0
274	765/400 kV ICT-II at Raichur	ICT	SR	SE	27-09-2016 16:46	TO ATTEND ISOLATER ARCING	27-09-2016 18:48	2:02:00	0

TL TL= Tripping due to Line Fault

Total Number of 765 kV lines

99

TS TS= Tripping due to S/S Fault

Total Number of 400 kV lines

35

MO MO= Opened due to system constraints

Total Number of 220 kV lines

15

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
TV	TV= Tripped on Overvoltage					Total Number of HVDC links			19
SC	SC= Planned Shutdown for construction activities					Total Number of 765 kV ICTs			117
SO	SO= Planned Shutdown for O&M activities					Total Number of 765 kV B/R			61
SE	SE= Emergency Shutdown					Grand Total			346
TP	TP= Protection Maloperation								
ME	ME= Miscellaneous outage								

**POWER SYSTEM OPERATION CORPORATION LIMITED
NATIONAL LOAD DESPATCH CENTRE
NEW DELHI**

System Reliability Indices Report for the month of September 2016

Date: 21-Oct-2016

Percentage (%) of times ATC was violated

S.No.	Corridor	Number of Blocks Violated	Number of Hours Violated	%Violation
1	WR-NR	672	168.00	23.33
2	ER-NR	3	0.75	0.10
3	Import of NR	515	128.75	17.88
4	NEW-SR	58	14.50	2.01
5	ER-NER	696	174.00	24.17

Percentage(%) of times (N-1) Criteria was violated

S.No.	Corridor	Number of Blocks Violated	Number of Hours Violated	%Violation
1	WR-NR	98	24.50	3.40
2	ER-NR	0	0.00	0.00
3	Import of NR	56	14.00	1.94
4	NEW-SR	0	0.00	0.00
4	ER-NER	586	146.50	20.35

Remarks: Flows crossing Total Transfer Capability (TTC) on interregional corridors has been worked out as a proxy for (N-1) violation.



POWER SYSTEM OPERATION CORPORATION LIMITED

पाँवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

NATIONAL LOAD DESPATCH CENTRE – राष्ट्रीय भार प्रेषण केन्द्र

POWERGRID, B-9, Qutab Institutional Area,

Katwaria Sarai, New Delhi-110016.