

पावर सिस्टम ऑपरेशन कॉर्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

POWER SYSTEM OPERATION CORPORATION LIMITED

(A Govt. of India Enterprise)



पंजीकृत एवं केन्द्रीय कार्यालय : प्रथम तल, बी-9, कुतुब इंस्टीट्यूशनल एरिया, कट्वारिया सराय, नई दिल्ली-110016
Registered & Corporate Office : 1st Floor, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi -110016
CIN : U40105DL2009GOI188682, Website : www.posoco.in, E-mail : posococc@posoco.in, Tel.: 011- 41035696, Fax : 011- 26536901

संदर्भ संख्या : - POSOCO/NLDC/MR/

दिनांक : 23.03.2020

सेवा में,

वितरण सूची के अनुसार

विषय:- निष्पादन रिपोर्ट - **फरवरी-2020**

महोदय,

आई०ई०जी०सी०-2010 के प्रावधान के अनुसार, **फरवरी -2020** माह की आखिल भारतीय प्रणाली की निष्पादन रिपोर्ट संलग्न है।

धन्यवाद

भवदीय

यौ. ए. कमला 23/3/2020
(एन नल्लारसन)

मुख्य महाप्रबंधक
(रा०भा०प्र०क०)

संलग्न : मासिक प्रणाली रिपोर्ट

वितरण सूची

Distribution List

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



POWER SYSTEM OPERATION CORPORATION LIMITED

पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

NATIONAL LOAD DESPATCH CENTRE –राष्ट्रीय भार प्रेषण केन्द्र

मासिक ऑपरेशन रिपोर्ट

Monthly
Operation Report



फरवरी
2020

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

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



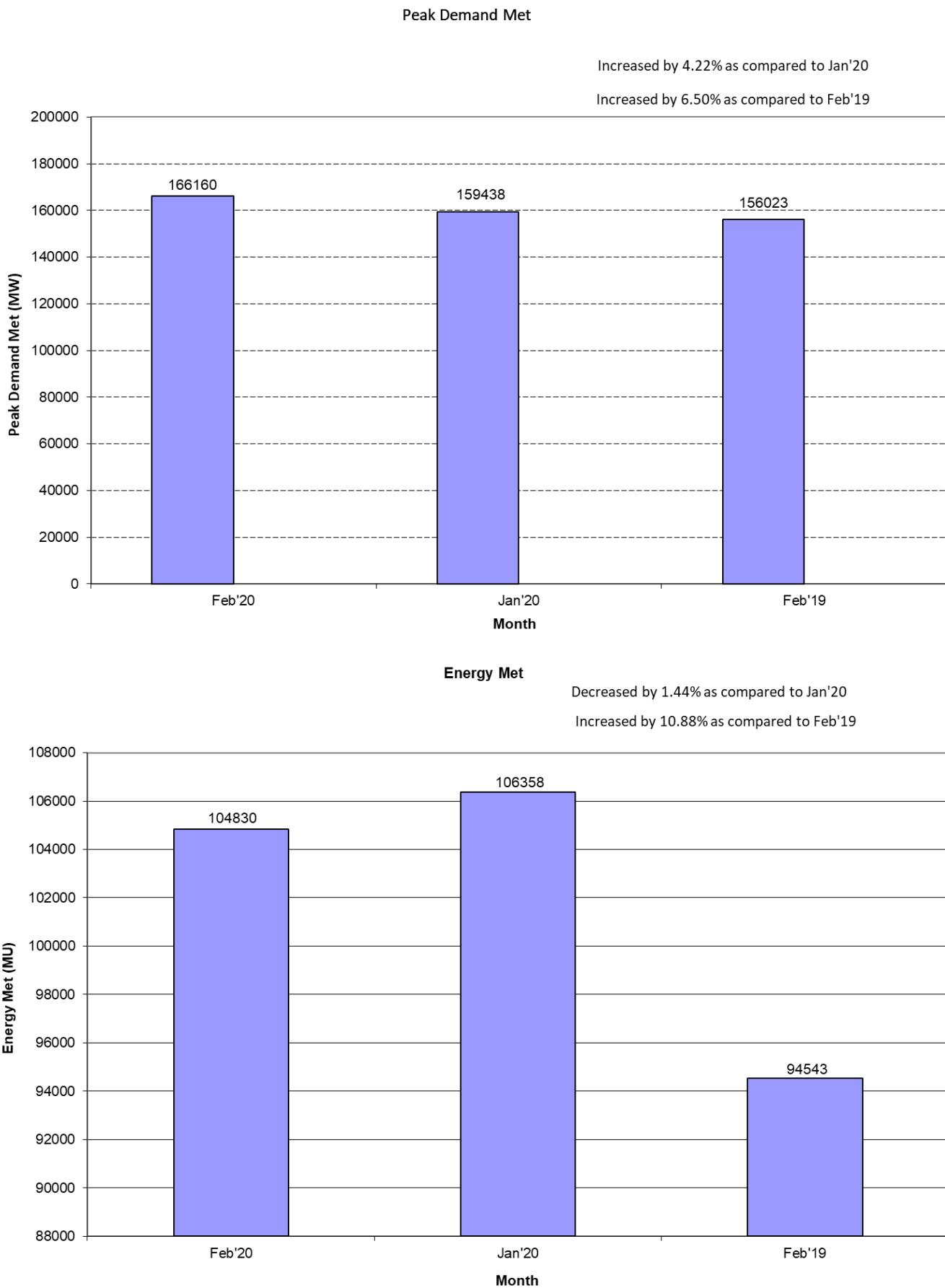
माह फरवरी-2020 के लिए प्रचालन निष्पादन रिपोर्ट
OPERATIONAL PERFORMANCE REPORT FOR THE
MONTH OF FEBRUARY-2020

पृष्ठसूची CONTENTS

1	माह फरवरी-2020 की सारांश रिपोर्ट	1-5
	Summary of report for the month of FEBRUARY-2020	
2	क्षेत्रवार स्थापित विद्युत क्षमता	6
	Region wise Installed Capacity	
3	राष्ट्रीय स्तर पर सांध्यकालीन शिखर मांगपूर्ति	7-8
	Peak demand met at National level	
4	राष्ट्रीय स्तर पर विद्युत ऊर्जा खपत	9-10
	Energy consumption at National level	
5	फ्रेक्वेंसी रूपरेखा	11-12
	Frequency profile	
6	राष्ट्रीय स्तर पर जल विद्युत ऊर्जा उत्पादन	13-14
	Hydro generation at National level	
7	राष्ट्रीय स्तर पर पवन ऊर्जा उत्पादन	15
	Wind generation at National level	
8	राष्ट्रीय स्तर पर सौर ऊर्जा उत्पादन	16
	Solar generation at National level	
9	राष्ट्रीय स्तर पर दैनिक अधिकतम विद्युत मांग पूर्ति	17
	Daily maximum demand met at National level	
10	18-फरवरी के माँग एवं उत्पादन प्लॉट (अधिकतम मांग पूर्ति) व माँग का डाटा (15 मिनट अंतराल)	18-22
	Demand and generation plots for 18-FEBRUARY (Max Demand Met) and Demand data (15-minute)	
11	ऊर्जा आपूर्ति की वास्तविक स्थिति	23
	Actual power supply position	
12	ऊर्जा आवश्यकता एवं आपूर्ति की पिछले वर्ष माह फरवरी -2019 से तुलना	24
	Energy requirement and met comparison with FEBRUARY-2019	
13	शिखर मांग आवश्यकता एवं आपूर्ति की पिछले वर्ष माह फरवरी -2019 से तुलना	25
	Peak demand requirement and met comparison with FEBRUARY-2019	
14	क्षेत्रीय स्तर पर शिड्यूल एवं ड्रावल	26
	Schedule & drawal at regional level	

15	अंतर क्षेत्रीय विनिमय Inter-regional exchanges	27-34
16	अंतर राष्ट्रीय विद्युत विनिमय Inter-national exchanges	35-37
17	एसटीओए (द्विपक्षीय एवं सामूहिक) एवं यूआई का ब्यौरा Bilateral and collective short-term open access & UI details	38
18	पावर मार्केट की सूचना Power market information	39-41
19	अक्षय ऊर्जा प्रमाण पत्र प्रक्रिया Renewable energy certificate mechanism	42-44
20	मुख्य घटनाएँ एवं डिस्टर्बेंस Important events/disturbances	45-50
21	नए कमीशंड पारेषण तत्व New elements commissioned	51
22	विभव रूपरेखा Voltage profile	52
23	फरवरी-2020 के दौरान रा.भा.प्रे.के.द्वारा निगरानी में तत्वों के आउटेज की सूची List of outage of elements monitored by NLDC for the month of FEBRUARY-2020	53-64
24	फरवरी-2020 के लिए सिस्टम रिलाइबिलिटी सूचकांक System Reliability Indices for FEBRUARY-2020	65

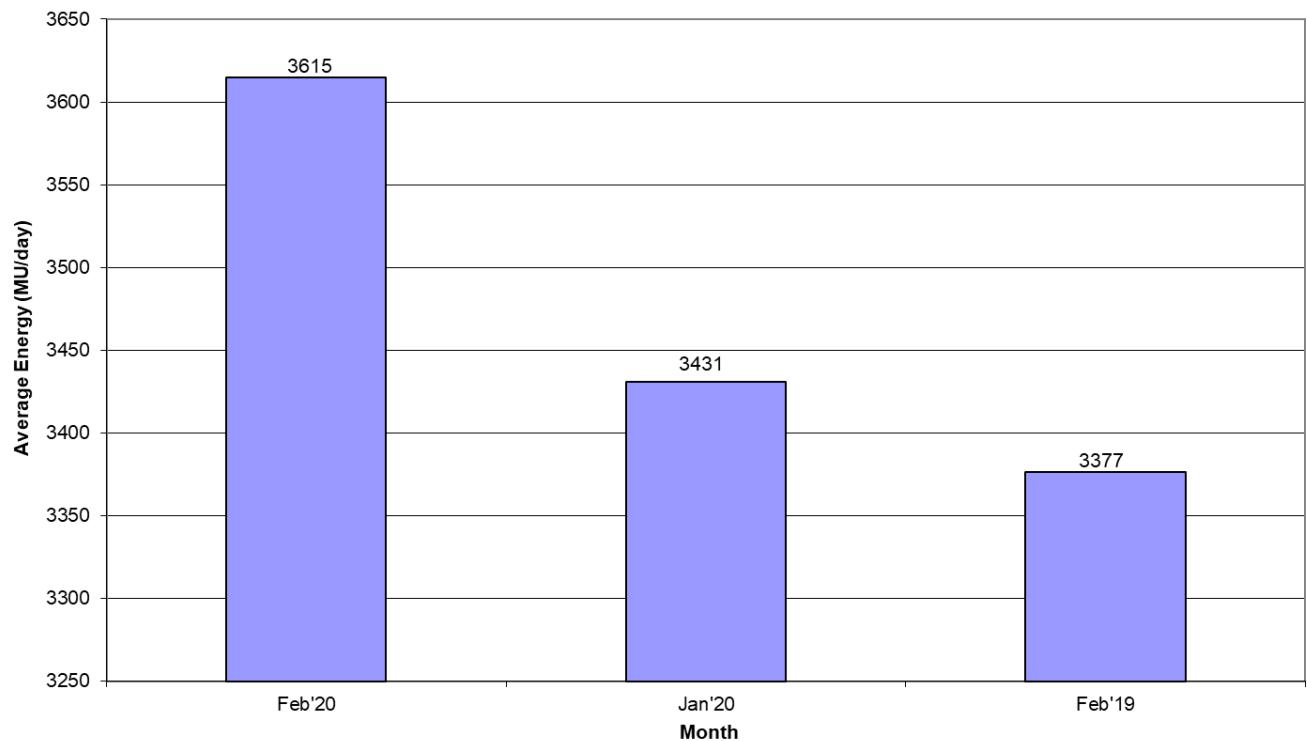
1. SUMMARY OF REPORT FOR THE MONTH OF FEBRUARY 2020



Average Energy (MU/day)

Increased by 5.36% as compared to Jan'20

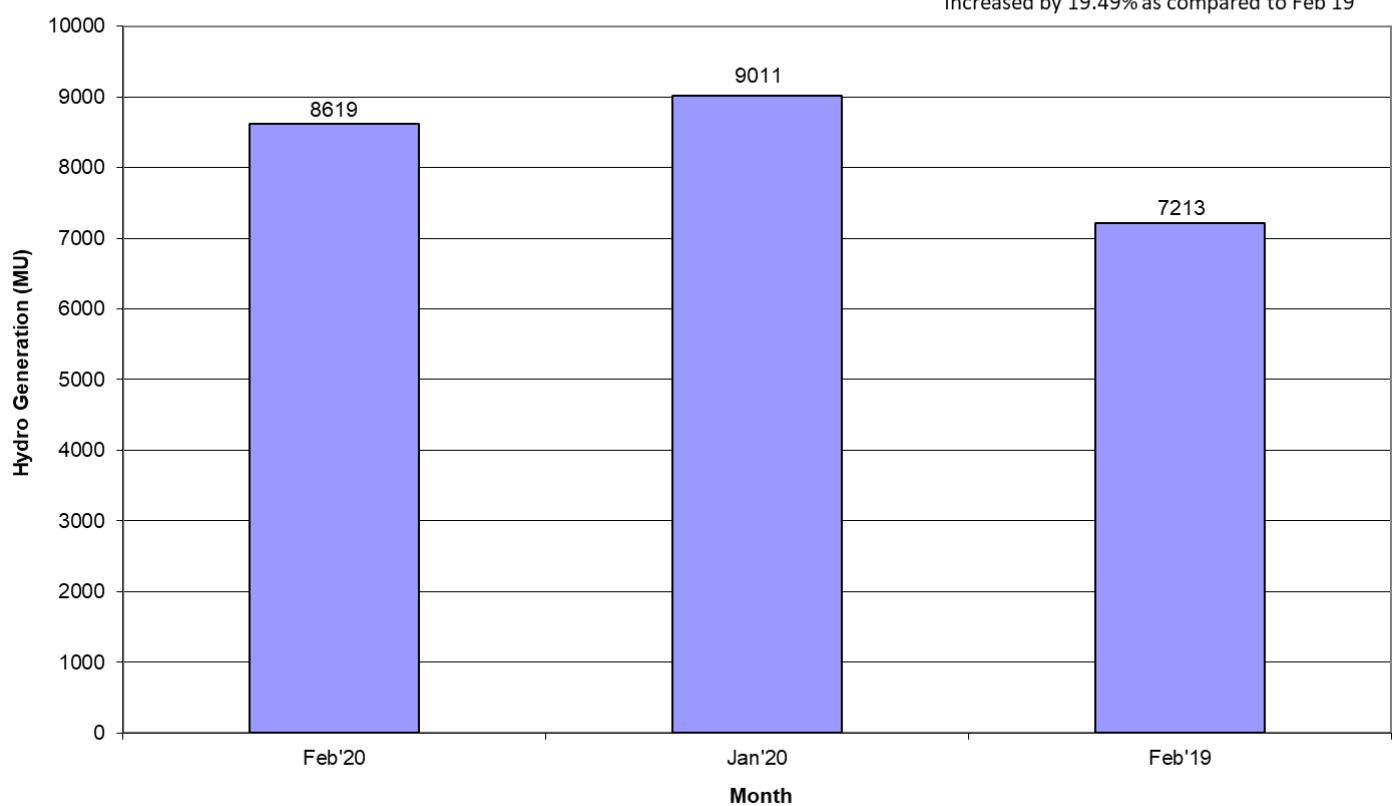
Increased by 7.06% as compared to Feb'19

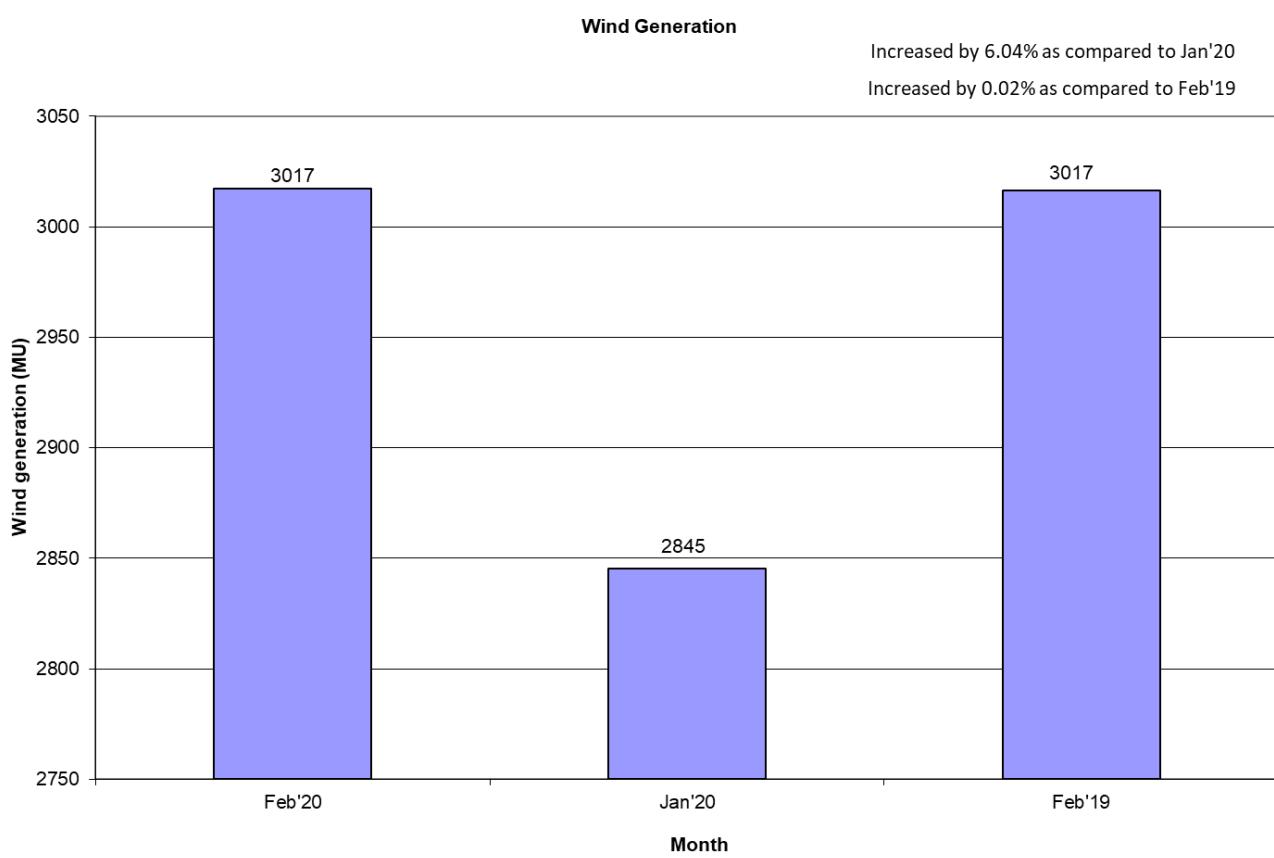
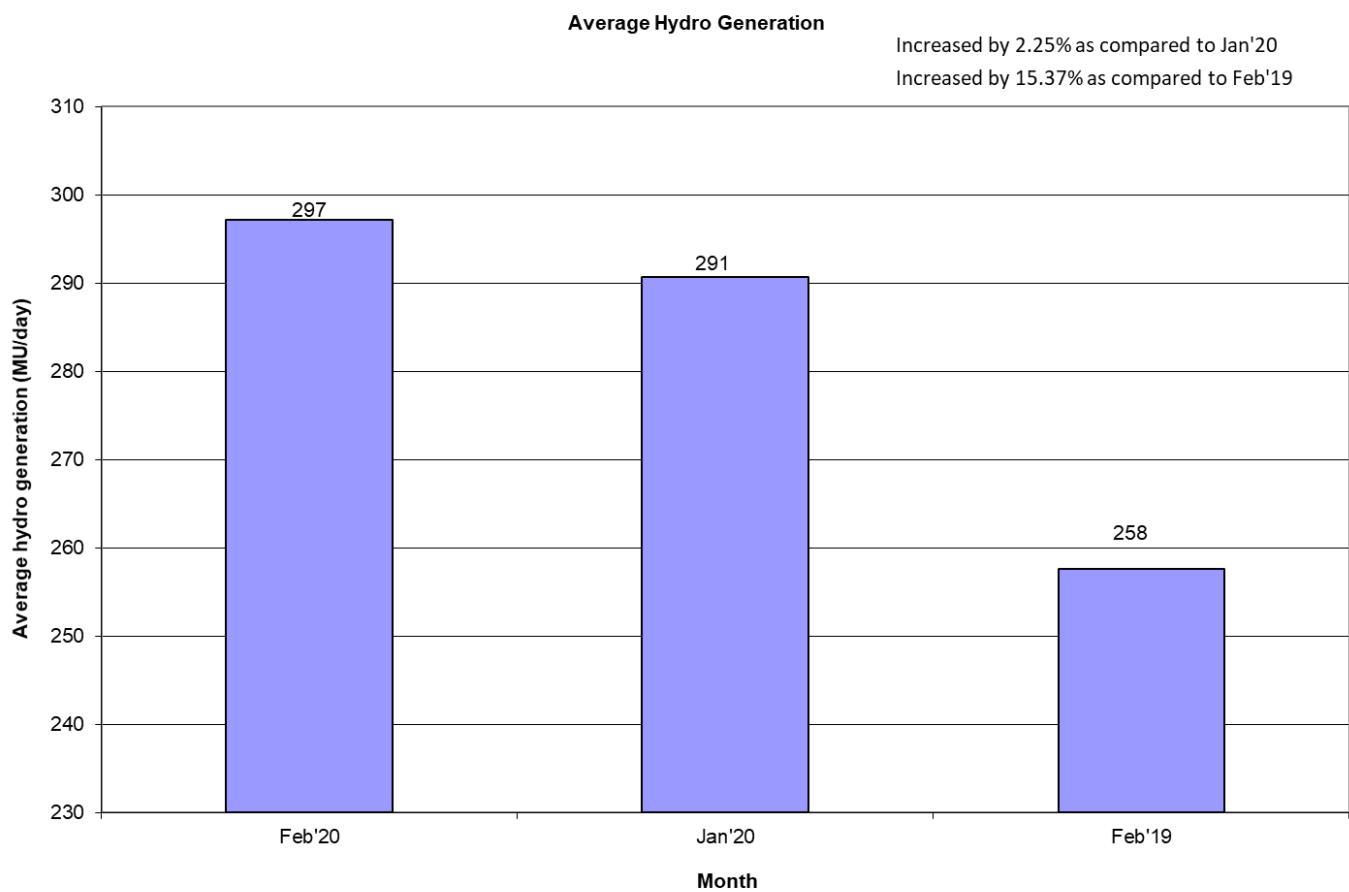


Hydro generation

Decreased by 4.35% as compared to Jan'20

Increased by 19.49% as compared to Feb'19

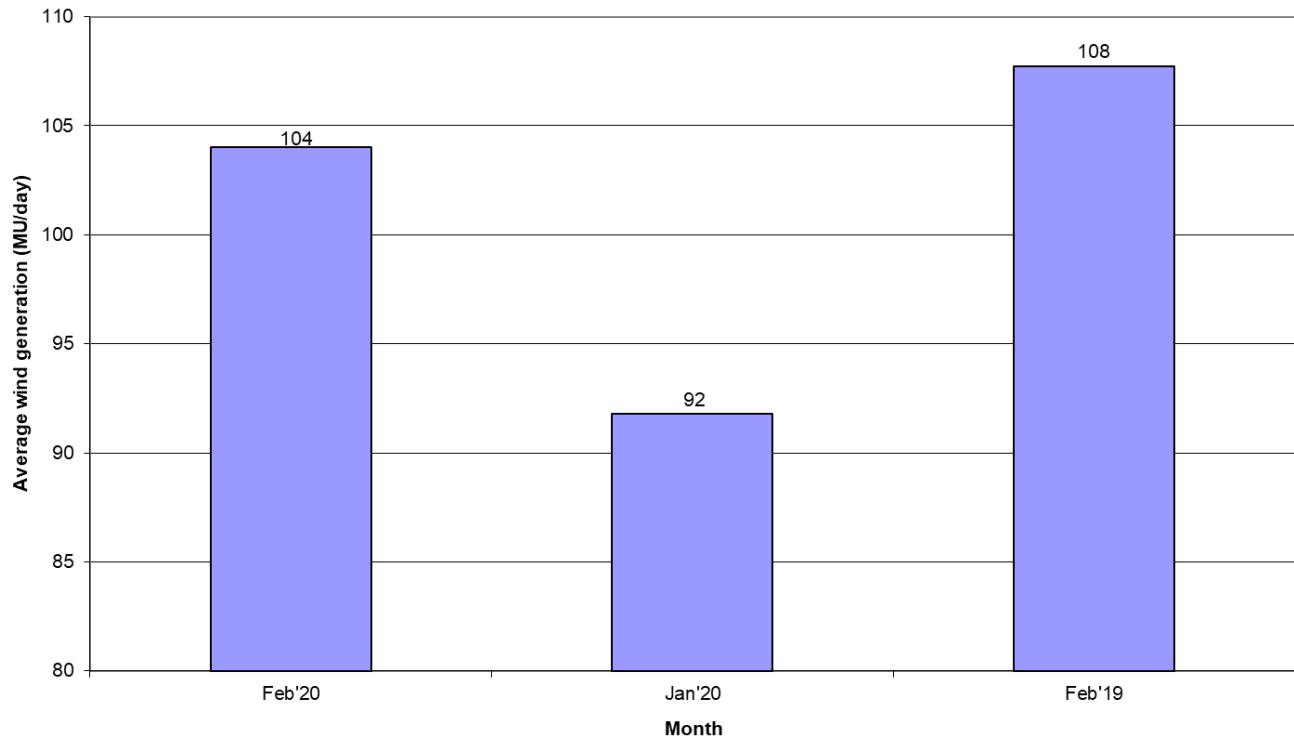




Average wind generation (MU/day)

Increased by 13.36% as compared to Jan'20

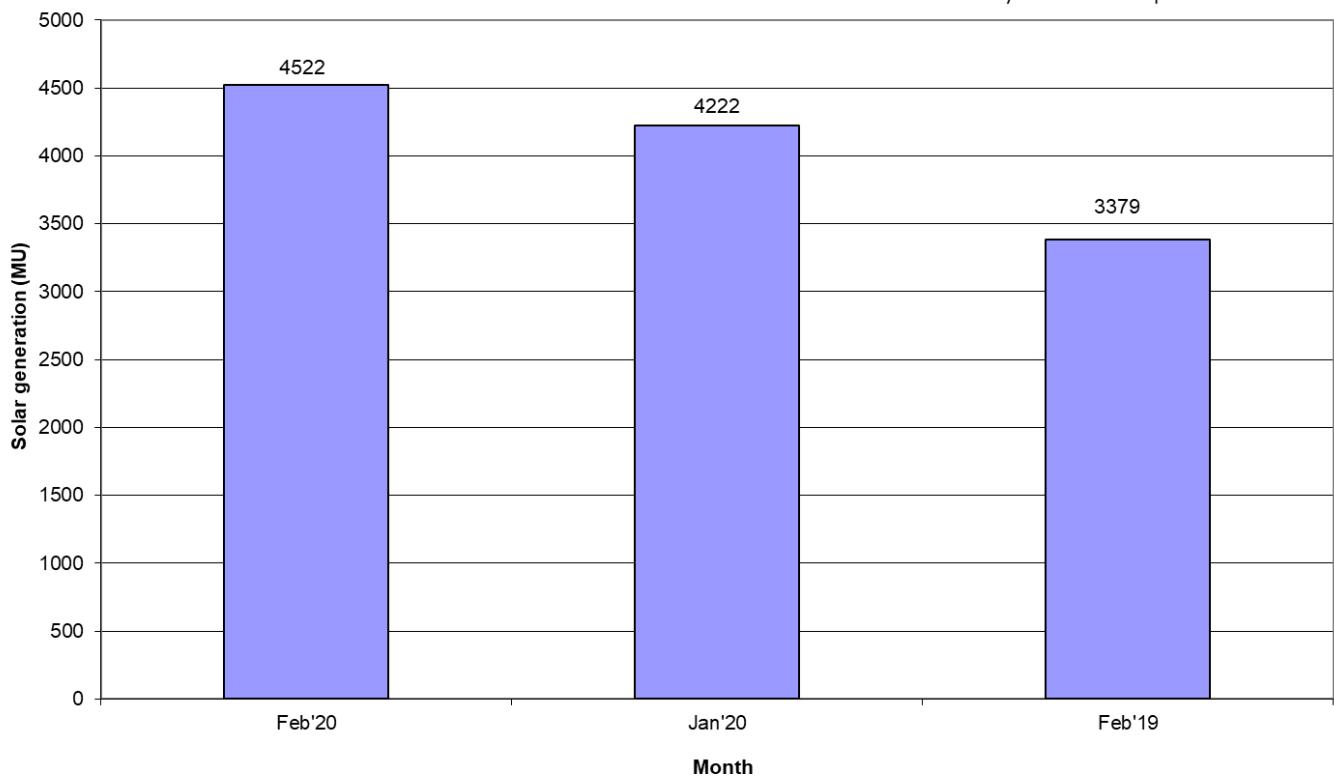
Decreased by 3.43% as compared to Feb'19

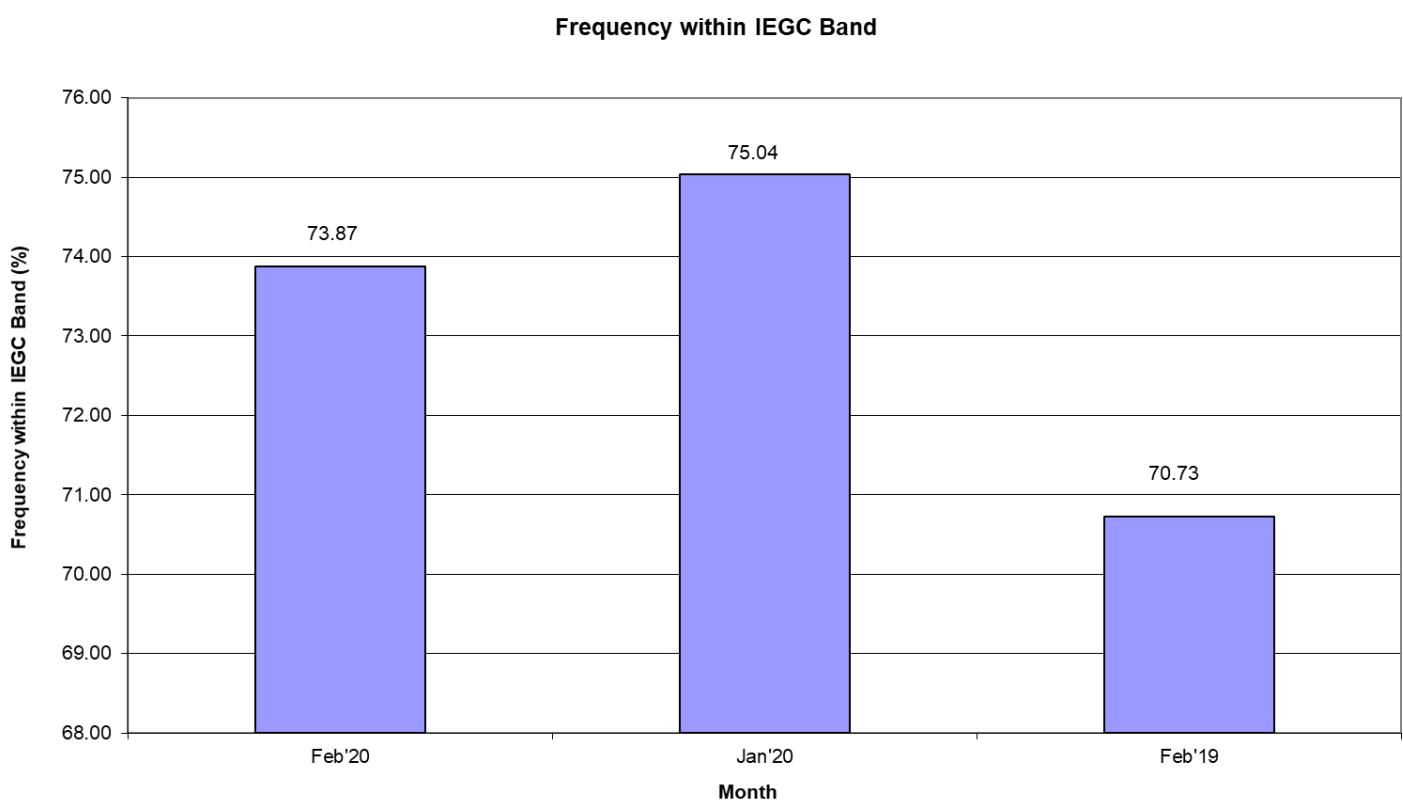
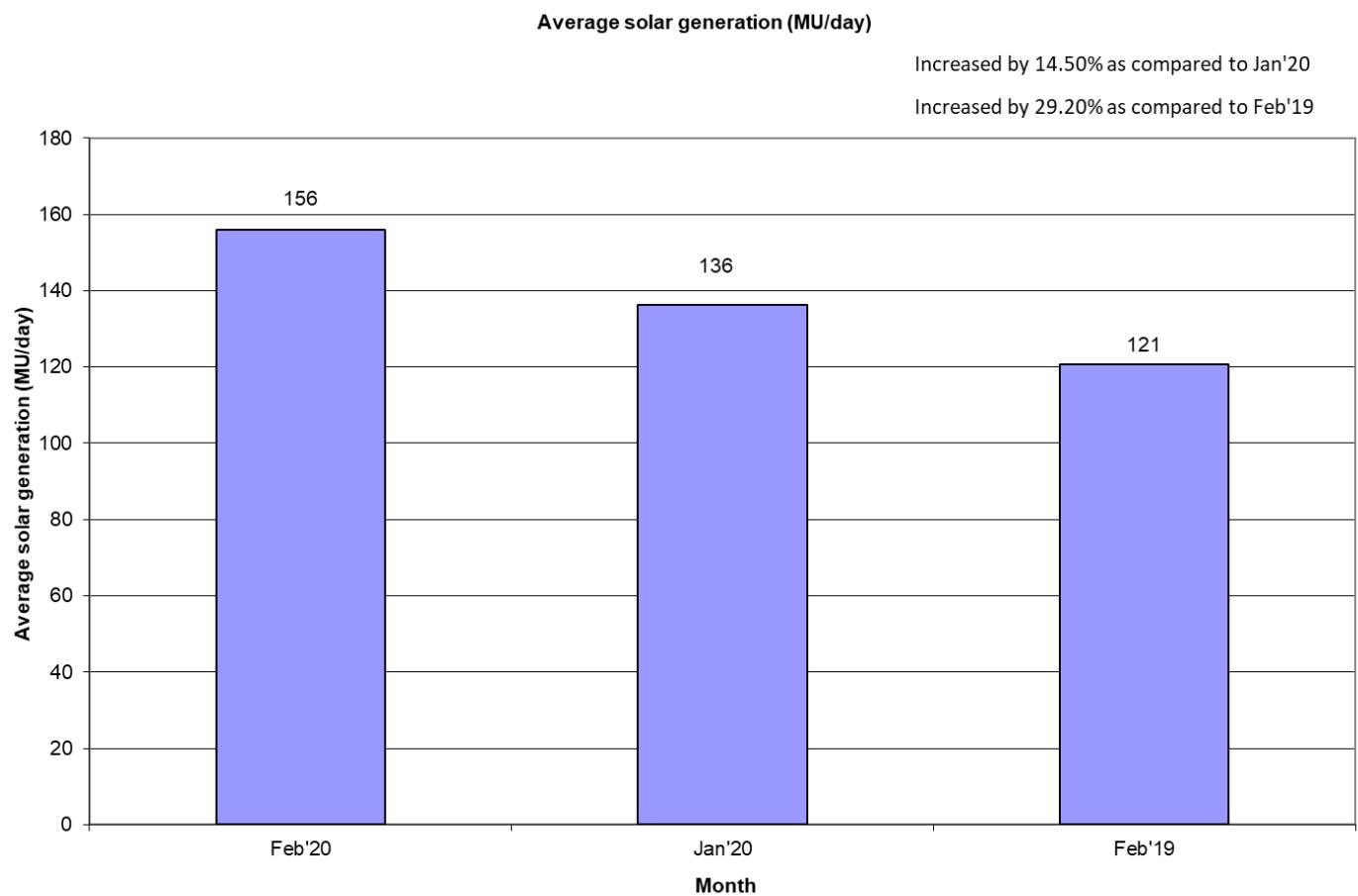


Solar Generation

Increased by 7.11% as compared to Jan'20

Increased by 33.81% as compared to Feb'19





2. ALL INDIA REGIONWISE INSTALLED CAPACITY

As on 29.02.2020
(All figures are in MW)

S No	Region	THERMAL					NUCLEAR	HYDRO	RES @ MNRE	GRAND TOTAL
		COAL	LIGNITE	GAS	DIESEL	TOTAL				
1	NR	52990	1580	5781	0	60351	1620	20086	16753	98810
2	WR	72275	1540	10806	0	84622	1840	7623	25526	119610
3	SR	44515	3640	6492	434	55080	3320	11775	42163	112338
4	ER	27415	0	100	0	27515	0	4639	1497	33651
5	NER	770	0	1776	36	2582	0	1577	364	4523
6	ISLANDS	0	0	0	40	40	0	0	18	58
	ALL INDIA	197965	6760	24955	510	230190	6780	45699	86321	368989

Remarks: Data from CEA website

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

माह: फरवरी 2020 MONTH:- FEBRUARY 2020

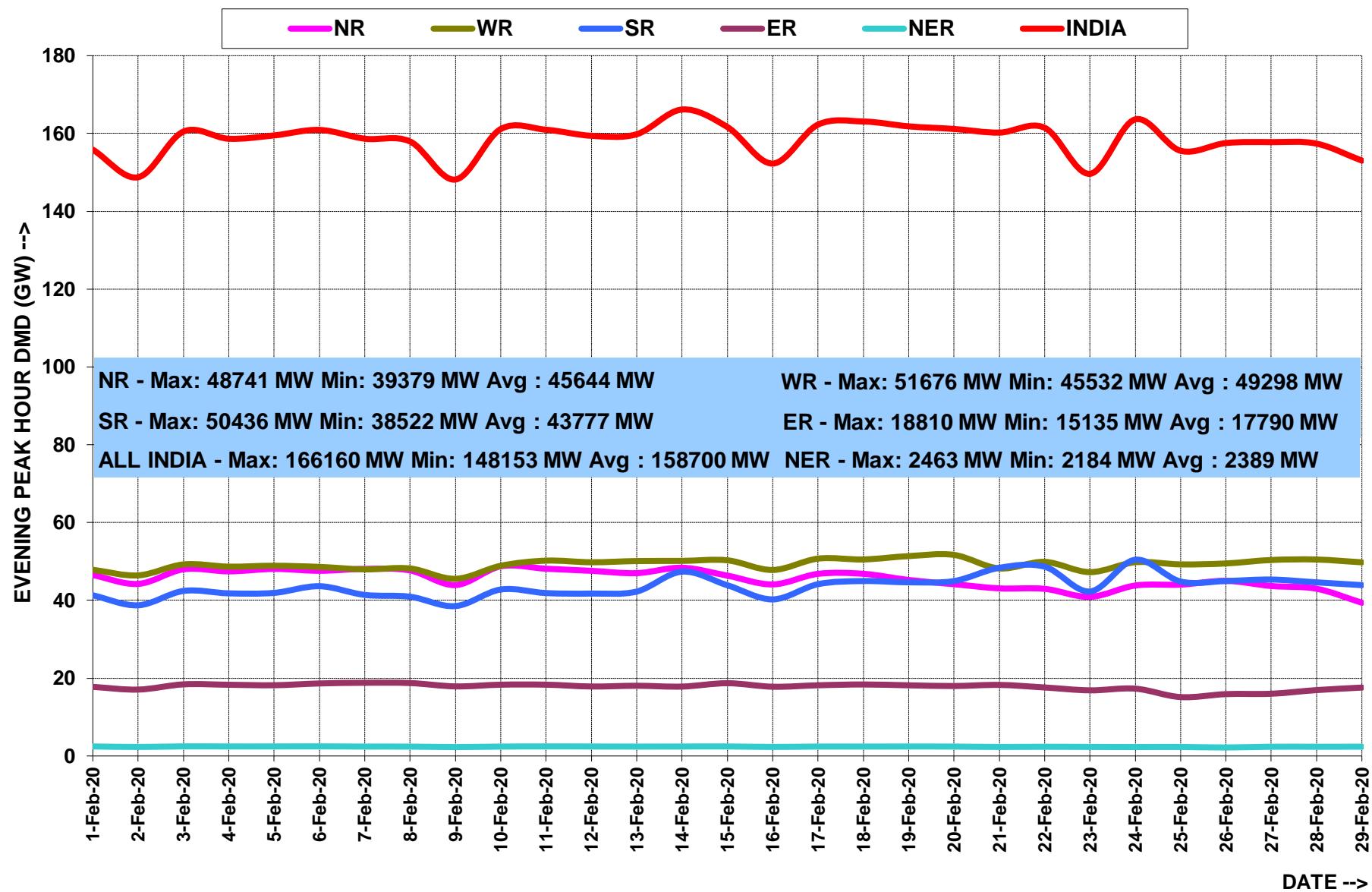
सभी आंकड़े मेगावाट में All figures in MW

दिनांक Date	उत्तरी क्षे. NR	पश्चिमी क्षे. WR	दक्षिणी क्षे. SR	पूर्वी क्षे. ER	पूर्वोत्तर क्षे. NER	कुल TOTAL
1-Feb-20	46495	47849	41290	17755	2445	155834
2-Feb-20	44228	46417	38725	17062	2320	148752
3-Feb-20	47975	49234	42415	18407	2463	160494
4-Feb-20	47447	48660	41794	18300	2438	158639
5-Feb-20	48072	48888	41918	18179	2443	159500
6-Feb-20	47595	48590	43633	18638	2458	160914
7-Feb-20	48077	47958	41389	18810	2413	158647
8-Feb-20	47681	48184	40929	18738	2406	157938
9-Feb-20	43924	45532	38522	17884	2291	148153
10-Feb-20	48741	48880	42783	18321	2410	161135
11-Feb-20	48122	50202	41866	18321	2450	160961
12-Feb-20	47583	49786	41743	17856	2435	159403
13-Feb-20	46992	50099	42259	18042	2411	159803
14-Feb-20	48381	50139	47376	17836	2428	166160
15-Feb-20	46348	50289	43879	18697	2443	161656
16-Feb-20	44094	47805	40248	17798	2323	152268
17-Feb-20	46808	50724	44155	18168	2422	162277
18-Feb-20	46817	50508	44958	18377	2419	163079
19-Feb-20	45229	51366	44640	18160	2434	161829
20-Feb-20	44148	51676	44950	17977	2411	161162
21-Feb-20	43079	48202	48365	18259	2317	160222
22-Feb-20	42953	49887	48656	17605	2366	161467
23-Feb-20	40900	47257	42281	16869	2326	149633
24-Feb-20	43810	49793	50436	17297	2295	163631
25-Feb-20	44033	49238	44829	15135	2319	155554
26-Feb-20	45004	49481	44973	15896	2184	157538
27-Feb-20	43687	50372	45339	15995	2378	157771
28-Feb-20	42979	50488	44622	16927	2369	157385
29-Feb-20	39379	49770	43905	17579	2389	153022
उच्चतम MAXIMUM	48741	51676	50436	18810	2463	166160
निम्नतम MINIMUM	39379	45532	38522	15135	2184	148153
औसत AVERAGE	45537	49216	43548	17755	2386	158442
अब तक का उच्चतम All Time Max.	62627	54589	50436	23016	2944	176381
दिनांक Date	03.07.19	15.10.18	24.02.20	31.08.19	29.08.19	29.05.19

नोट : सभी आंकड़े 1900 बजे की मांगपूर्ति पर आधारित हैं।

Note: The above figures correspond to value at 1900 Hrs

EVENING PEAK HOUR DEMAND MET DURING THE MONTH OF FEBRUARY '2020



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

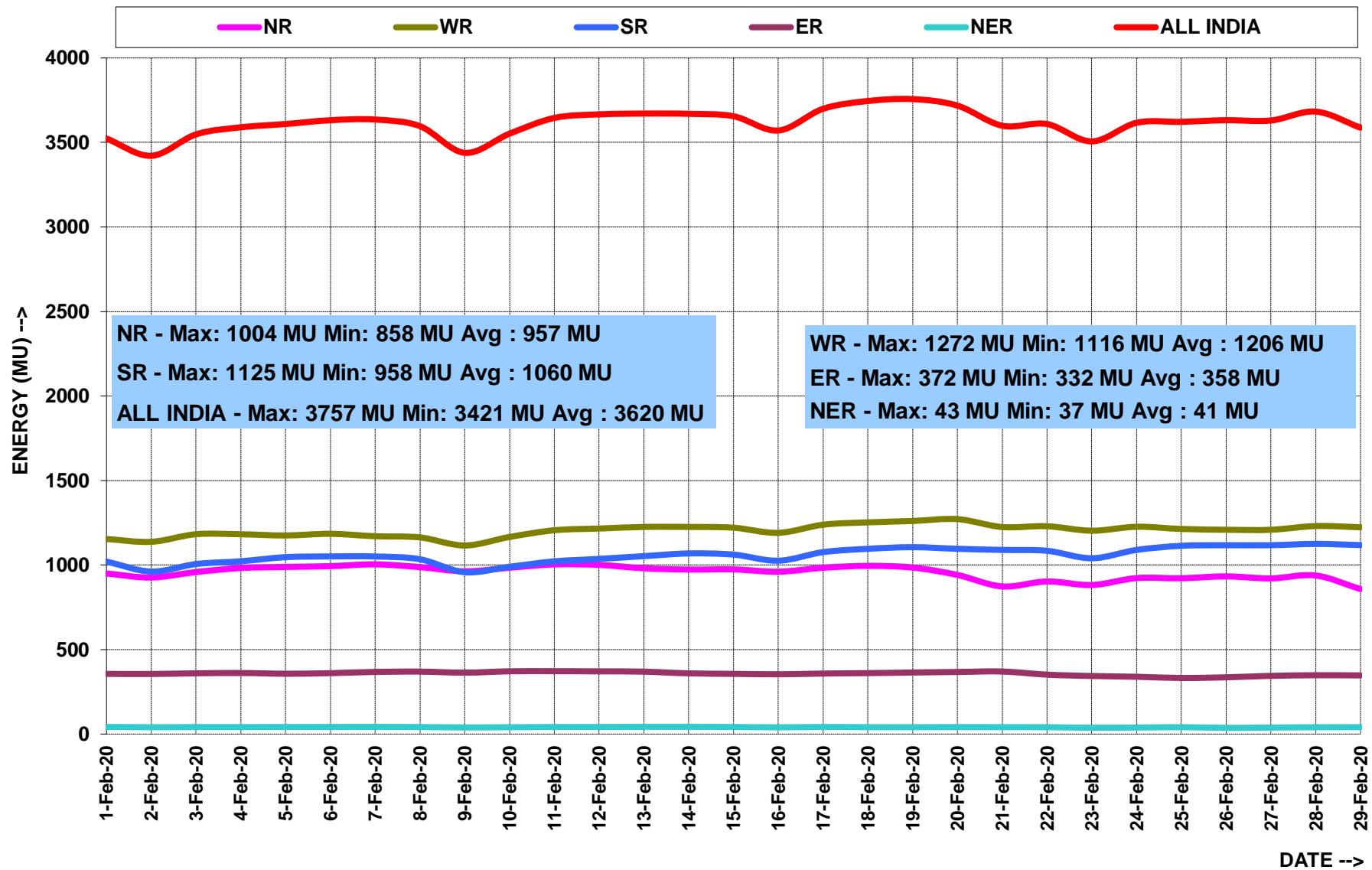
माह: फरवरी 2020

MONTH:- FEBRUARY 2020

सभी आंकड़े मिलियन यूनिट में All figures in MU

दिनांक Date	ऊतरी क्षे. NR	पश्चिमी क्षे. WR	दक्षिणी क्षे. SR	पूर्वी क्षे. ER	पूर्वोत्तर क्षे. NER	कुल TOTAL
01-Feb-20	950	1154	1021	356	42	3524
02-Feb-20	926	1138	962	356	41	3421
03-Feb-20	959	1183	1006	359	41	3548
04-Feb-20	983	1182	1023	361	41	3590
05-Feb-20	989	1175	1047	357	42	3609
06-Feb-20	993	1185	1051	360	42	3632
07-Feb-20	1004	1171	1051	368	42	3636
08-Feb-20	988	1164	1034	370	42	3596
09-Feb-20	963	1116	958	363	39	3439
10-Feb-20	984	1166	990	371	41	3552
11-Feb-20	1004	1206	1022	372	42	3645
12-Feb-20	1001	1216	1037	371	42	3666
13-Feb-20	981	1226	1053	369	43	3671
14-Feb-20	973	1225	1069	359	43	3669
15-Feb-20	974	1221	1062	356	42	3655
16-Feb-20	961	1191	1026	354	40	3571
17-Feb-20	984	1239	1076	358	42	3699
18-Feb-20	995	1253	1096	361	41	3745
19-Feb-20	985	1261	1106	364	41	3757
20-Feb-20	942	1272	1096	368	41	3718
21-Feb-20	873	1225	1089	370	41	3599
22-Feb-20	903	1230	1084	352	41	3609
23-Feb-20	882	1203	1040	344	38	3506
24-Feb-20	923	1227	1090	339	39	3617
25-Feb-20	922	1214	1114	332	41	3622
26-Feb-20	933	1209	1117	336	37	3632
27-Feb-20	921	1209	1117	344	39	3630
28-Feb-20	938	1231	1125	348	40	3683
29-Feb-20	858	1224	1118	347	41	3587
कुल TOTAL	27691	34910	30678	10366	1184	104830
उच्चतम MAXIMUM	1004	1272	1125	372	43	3757
निम्नतम MINIMUM	858	1116	958	332	37	3421
औसत AVERAGE	955	1204	1058	357	41	3615
संचयी 2019-20 Cumulative 2019-20	363316	369647	313870	136115	15130	1198077
अब तक का उच्चतम All Time Max.	1493	1293	1137	496	58	4145
दिनांक Date	01.07.19	16.10.18	26.03.19	25.06.19	22.08.19	30.05.19

ENERGY MET DURING THE MONTH OF FEBRUARY' 2020



5. वर्ष 2019-20 के लिए आवृति रूपरेखा FREQUENCY PROFILE FOR YEAR 2019-20

राष्ट्रीय ग्रिड NATIONAL GRID								
	फ्रिक्वेंसी रूपरेखा (Hz)		<49.9	49.9-50.05	>50.05	उच्चतम फ्रिक्वेंसी	निम्नतम फ्रिक्वेंसी	औसत फ्रिक्वेंसी
% समय	Apr-19	All India Grid	7.33	73.11	19.56	50.32	49.65	50.00
	May-19	All India Grid	9.39	72.70	17.91	50.33	49.65	49.99
	Jun-19	All India Grid	9.49	70.01	20.51	50.31	49.63	50.00
	Jul-19	All India Grid	7.09	68.27	24.64	50.32	49.64	50.01
	Aug-19	All India Grid	7.28	72.68	20.04	50.32	49.55	50.00
	Sep-19	All India Grid	4.59	75.27	20.14	50.27	49.62	50.01
	Oct-19	All India Grid	3.19	77.04	19.77	50.31	49.67	50.01
	Nov-19	All India Grid	4.14	74.02	21.84	50.26	49.65	50.01
	Dec-19	All India Grid	6.48	71.67	21.85	50.34	49.65	50.00
	Jan-20	All India Grid	6.47	75.04	18.49	50.27	49.69	50.00
	Feb-20	All India Grid	7.23	73.87	18.90	50.33	49.68	50.00
	2019-20 (upto Feb)	All India Grid	6.61	73.06	20.33	50.34	49.55	50.00

5.1 फरवरी 2020 के लिए आवृति रूपरेखा FREQUENCY PROFILE FOR FEBRUARY 2020

फ्रिक्वेंसी रूपरेखा (Hz)		<49.9	49.9-50.05	>50.05	उच्चतम फ्रिक्वेंसी	निम्नतम फ्रिक्वेंसी	औसत फ्रिक्वेंसी	एफ.वी.आई.
% समय	01-Feb-20	3.41	75.29	21.30	50.22	49.81	50.01	0.03
	02-Feb-20	5.07	69.40	25.53	50.31	49.80	50.01	0.04
	03-Feb-20	17.26	72.71	10.03	50.28	49.71	49.97	0.07
	04-Feb-20	15.80	73.40	10.80	50.26	49.68	49.97	0.06
	05-Feb-20	6.12	74.46	19.42	50.24	49.69	50.00	0.04
	06-Feb-20	6.52	75.76	17.72	50.24	49.82	50.00	0.04
	07-Feb-20	7.03	72.92	20.06	50.22	49.73	50.00	0.04
	08-Feb-20	7.44	72.69	19.87	50.20	49.76	50.00	0.04
	09-Feb-20	4.57	71.03	24.40	50.30	49.77	50.01	0.04
	10-Feb-20	2.65	67.74	29.61	50.22	49.79	50.02	0.04
	11-Feb-20	6.41	70.56	23.03	50.25	49.81	50.01	0.04
	12-Feb-20	7.38	74.34	18.28	50.18	49.75	50.00	0.04
	13-Feb-20	10.58	76.00	13.43	50.18	49.71	49.98	0.05
	14-Feb-20	7.16	75.87	16.97	50.20	49.70	50.00	0.04
	15-Feb-20	6.38	76.40	17.22	50.21	49.82	50.00	0.03
	16-Feb-20	3.22	75.08	21.70	50.25	49.75	50.01	0.04
	17-Feb-20	3.82	77.73	18.45	50.27	49.72	50.01	0.03
	18-Feb-20	8.60	78.31	13.09	50.23	49.74	49.99	0.04
	19-Feb-20	6.08	73.74	20.19	50.27	49.72	50.00	0.04
	20-Feb-20	6.28	69.13	24.58	50.21	49.81	50.01	0.04
	21-Feb-20	7.42	76.23	16.35	50.33	49.70	49.99	0.04
	22-Feb-20	7.13	71.72	21.15	50.21	49.79	50.00	0.04
	23-Feb-20	9.83	73.96	16.22	50.19	49.77	49.99	0.05
	24-Feb-20	10.02	72.75	17.22	50.22	49.71	49.99	0.05
	25-Feb-20	10.02	72.75	17.22	50.22	49.71	49.99	0.05
	26-Feb-20	7.81	71.35	20.83	50.23	49.71	50.00	0.04
	27-Feb-20	4.51	77.33	18.16	50.24	49.75	50.00	0.03
	28-Feb-20	5.38	76.83	17.79	50.24	49.76	50.00	0.03
	29-Feb-20	5.74	76.81	17.45	50.19	49.75	50.00	0.04

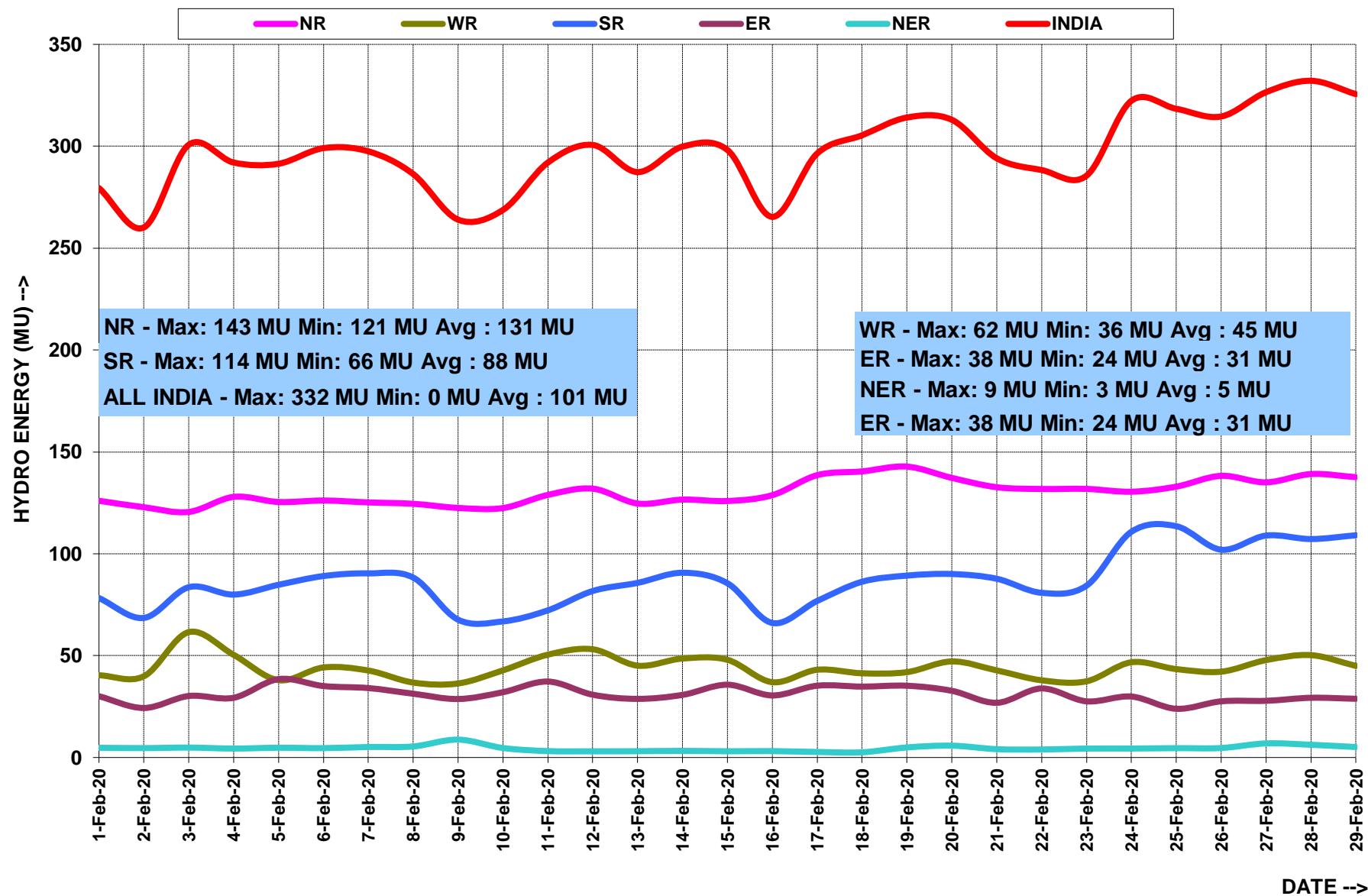
6. राष्ट्रीय स्तर पर जल विद्युत उत्पादन
HYDRO GENERATION AT NATIONAL LEVEL

माह: फरवरी 2020 MONTH:- FEBRUARY 2020

सभी आंकड़े मिलियन यूनिट में All figures in MU

दिनांक Date	ऊतरी क्षे. NR	पश्चिमी क्षे. WR	दक्षिणी क्षे. SR	पूर्वी क्षे. ER	पूर्वोत्तर क्षे. NER	कुल TOTAL
01-Feb-20	126	40	78	30	5	279
02-Feb-20	123	40	69	24	5	260
03-Feb-20	121	62	84	30	5	301
04-Feb-20	128	50	80	29	4	292
05-Feb-20	125	38	85	38	5	291
06-Feb-20	126	44	89	35	5	299
07-Feb-20	125	43	90	34	5	298
08-Feb-20	125	37	88	31	5	286
09-Feb-20	123	36	68	29	9	264
10-Feb-20	122	43	67	32	5	269
11-Feb-20	129	50	72	37	3	292
12-Feb-20	132	53	82	31	3	301
13-Feb-20	125	45	86	29	3	287
14-Feb-20	127	49	91	31	3	300
15-Feb-20	126	48	86	36	3	298
16-Feb-20	129	37	66	30	3	265
17-Feb-20	139	43	77	35	3	296
18-Feb-20	140	41	86	35	3	305
19-Feb-20	143	42	89	35	5	314
20-Feb-20	137	47	90	33	6	313
21-Feb-20	133	43	88	27	4	294
22-Feb-20	132	38	81	34	4	288
23-Feb-20	132	37	84	28	4	286
24-Feb-20	130	47	111	30	4	322
25-Feb-20	133	43	114	24	5	318
26-Feb-20	138	42	102	28	5	315
27-Feb-20	135	48	109	28	7	327
28-Feb-20	139	50	107	29	6	332
29-Feb-20	138	45	109	29	5	326
कुल TOTAL	3779	1282	2526	901	131	8619
उच्चतम MAXIMUM	143	62	114	38	9	332
निम्नतम MINIMUM	121	36	66	24	3	260
औसत AVERAGE	130	44	87	31	5	297
संचयी 2019-20 Cumulative 2019-20	76525	16890	30167	25823	4954	154360
अब तक का उच्चतम All Time Max.	389	167	208	145	37	816
दिनांक Date	18.08.15	18.12.14	31.08.18	15.09.19	03.07.19	09.09.19

HYDRO ENERGY DURING THE MONTH OF FEBRUARY' 2020



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

माह: फरवरी 2020 MONTH:- FEBRUARY 2020

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-Feb-20	6.4	60.4	33.6	-----	-----	100
02-Feb-20	16.7	88.0	43.3	-----	-----	148
03-Feb-20	7.9	51.3	33.0	-----	-----	92
04-Feb-20	12.7	33.1	34.3	-----	-----	80
05-Feb-20	24.1	33.2	28.8	-----	-----	86
06-Feb-20	3.1	56.9	25.6	-----	-----	86
07-Feb-20	11.1	47.5	28.0	-----	-----	87
08-Feb-20	20.1	85.7	20.3	-----	-----	126
09-Feb-20	12.9	86.7	27.3	-----	-----	127
10-Feb-20	9.5	73.7	59.3	-----	-----	142
11-Feb-20	18.3	65.0	72.5	-----	-----	156
12-Feb-20	21.3	54.1	69.7	-----	-----	145
13-Feb-20	16.7	26.2	40.8	-----	-----	84
14-Feb-20	8.2	31.5	19.2	-----	-----	59
15-Feb-20	1.4	17.2	12.6	-----	-----	31
16-Feb-20	2.1	34.6	44.6	-----	-----	81
17-Feb-20	3.1	51.5	51.7	-----	-----	106
18-Feb-20	5.1	25.3	40.3	-----	-----	71
19-Feb-20	21.2	19.0	46.2	-----	-----	86
20-Feb-20	39.2	32.5	76.5	-----	-----	148
21-Feb-20	20.5	58.6	68.8	-----	-----	148
22-Feb-20	21.6	64.2	73.3	-----	-----	159
23-Feb-20	14.6	50.3	67.7	-----	-----	133
24-Feb-20	5.4	38.8	48.7	-----	-----	93
25-Feb-20	2.4	29.4	30.4	-----	-----	62
26-Feb-20	2.0	31.0	41.5	-----	-----	75
27-Feb-20	18.1	24.8	44.3	-----	-----	87
28-Feb-20	29.4	27.9	57.2	-----	-----	115
29-Feb-20	20.2	37.6	46.3	-----	-----	104
कुल TOTAL	395.3	1336.0	1285.8	-----	-----	3017.1
उच्चतम MAXIMUM	39.2	88.0	76.5	-----	-----	159
निम्नतम MINIMUM	1.4	17.2	12.6	-----	-----	31
औसत AVERAGE	13.6	46.1	44.3	-----	-----	104
संचयी 2019-20 Cumulative 2019-20	5909.1	22265.9	26640.6	-----	-----	54816
अब तक का उच्चतम All Time Max.	71.3	199.3	245.5	467
दिनांक Date	14.07.19	27.07.19	20.07.18	12.06.18

***Source:** As reported by SLDCs. Limited visibility of embedded wind generator data.

८. राष्ट्रीय स्तर पर सौर ऊर्जा उत्पादन
SOLAR GENERATION AT NATIONAL LEVEL

माह: फरवरी 2020 MONTH:- FEBRUARY 2020

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-Feb-20	37	27	90	2	0.0	156
02-Feb-20	39	26	77	2	0.0	144
03-Feb-20	39	24	86	2	0.1	151
04-Feb-20	32	25	86	1	0.0	144
05-Feb-20	36	26	85	1	0.0	148
06-Feb-20	40	26	92	2	0.1	159
07-Feb-20	39	25	86	1	0.0	151
08-Feb-20	40	26	70	1	0.0	136
09-Feb-20	38	28	76	1	0.0	144
10-Feb-20	38	26	73	2	0.0	139
11-Feb-20	38	24	76	2	0.0	140
12-Feb-20	37	25	79	2	0.0	142
13-Feb-20	38	26	89	1	0.0	154
14-Feb-20	41	27	102	2	0.0	172
15-Feb-20	42	27	101	2	0.0	171
16-Feb-20	43	27	102	2	0.0	174
17-Feb-20	42	29	104	2	0.0	176
18-Feb-20	42	29	103	1	0.0	175
19-Feb-20	35	26	103	2	0.0	165
20-Feb-20	34	27	102	1	0.0	164
21-Feb-20	35	26	96	1	0.0	158
22-Feb-20	37	27	96	1	0.0	161
23-Feb-20	36	27	101	1	0.0	164
24-Feb-20	35	26	90	2	0.0	153
25-Feb-20	38	28	85	1	0.0	152
26-Feb-20	37	29	93	1	0.0	160
27-Feb-20	35	27	92	1	0.0	155
28-Feb-20	38	24	93	2	0.0	157
29-Feb-20	35	25	91	1	0.1	153
कुल TOTAL	1096	764	2620	42	0.9	4522
उच्चतम MAXIMUM	43	29	104	2	0.05	176
निम्नतम MINIMUM	32	24	70	1	0.01	136
औसत AVERAGE	38	26	90	1	0.03	156
संचयी 2019-20 Cumulative 2019-20	9082	6880	24697	603	12.2	41275
अब तक का उच्चतम All Time Max.	43	29	104	3	0.24	176
दिनांक Date	16.02.20	17.02.19	17.02.20	05.08.19	22.11.19	17.02.20

*Source: RLDCs for solar connected to ISTS; SLDCs for embedded solar. Limited visibility of embedded solar data.

9. राष्ट्रीय स्तर पर दैनिक अधिकतम विद्युत मांग पूर्ति
DAILY MAXIMUM DEMAND MET AT NATIONAL LEVEL

माह: फरवरी 2020 MONTH:- FEBRUARY 2020

सभी आंकड़े मेगावाट में All figures in MW

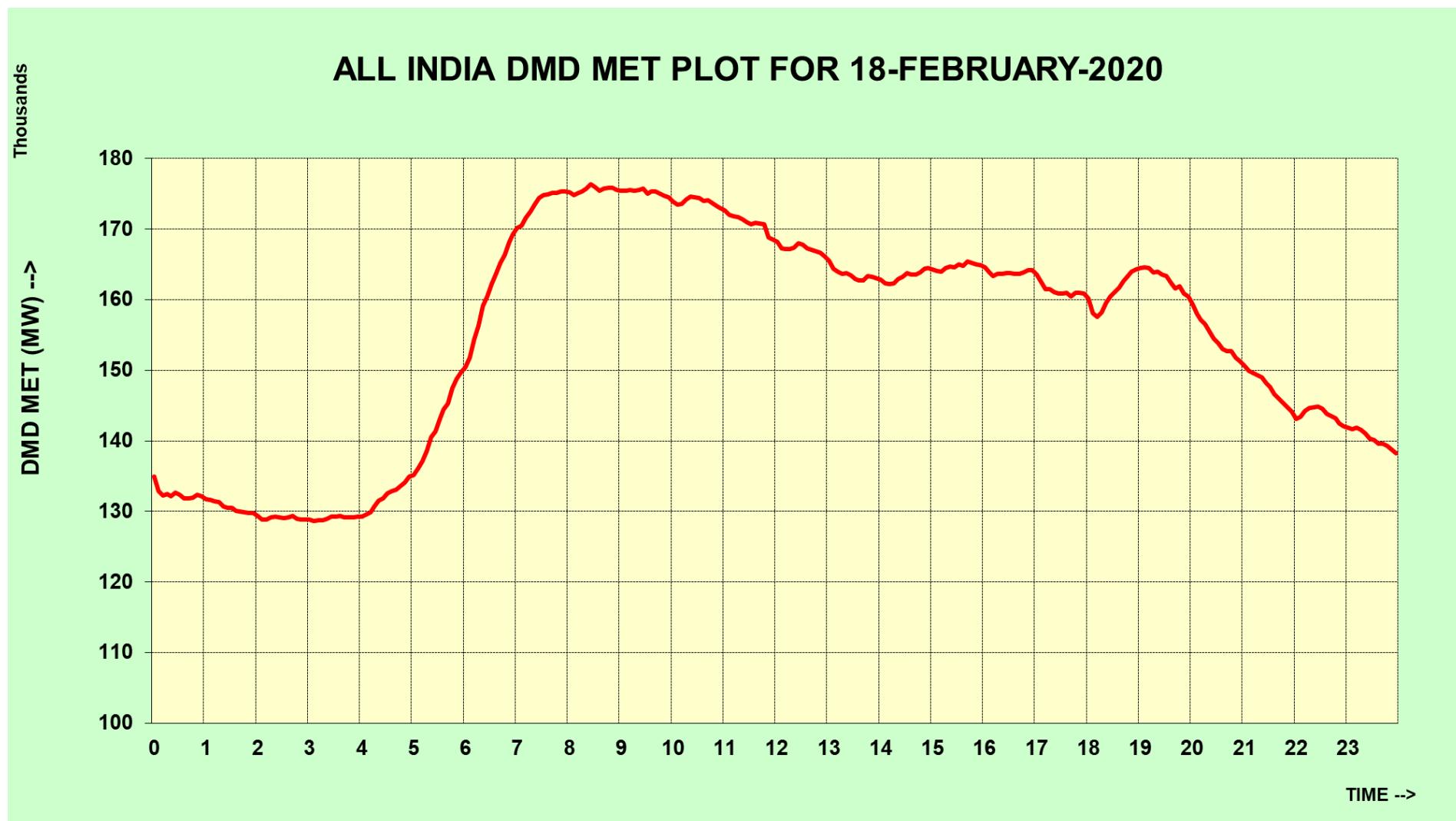
दिनांक Date	ऊतरी क्षे. NR	पश्चिमी क्षे. WR	दक्षिणी क्षे. SR	पूर्वी क्षे. ER	पूर्वोत्तर क्षे. NER	कुल TOTAL	विभिन्नता फैक्टर Diversity Factor*
01-Feb-20	47885	55810	48717	18177	2447	168671	1.026
02-Feb-20	46400	55382	45711	17636	2420	163998	1.022
03-Feb-20	49115	57364	47649	18581	2529	170517	1.028
04-Feb-20	49484	56543	47649	18327	2519	171085	1.020
05-Feb-20	50068	55781	49705	18687	2533	171230	1.032
06-Feb-20	50391	56159	49085	18577	2477	174096	1.015
07-Feb-20	50955	55427	49931	18699	2487	174661	1.016
08-Feb-20	49646	55546	49742	18929	2450	173217	1.018
09-Feb-20	49206	53171	44591	18518	2328	165209	1.016
10-Feb-20	49805	55695	47862	19200	2473	171206	1.022
11-Feb-20	50413	57529	48407	19023	2534	172750	1.030
12-Feb-20	50781	56707	49077	19057	2457	173369	1.027
13-Feb-20	49689	57485	49421	19241	2337	173972	1.024
14-Feb-20	49453	56978	49260	18538	2523	172970	1.022
15-Feb-20	48387	57644	49006	18728	2484	171150	1.030
16-Feb-20	48915	56013	46107	18450	2439	168236	1.022
17-Feb-20	49577	58186	48913	18880	2471	173763	1.025
18-Feb-20	51053	58133	51186	18975	2457	176579	1.030
19-Feb-20	51218	58699	50932	18833	2498	176054	1.035
20-Feb-20	49113	59071	51036	18804	2452	174986	1.031
21-Feb-20	45658	59385	51878	18588	2377	174553	1.019
22-Feb-20	45686	58403	50708	18587	2409	171379	1.026
23-Feb-20	44649	57425	49232	17685	2339	166950	1.026
24-Feb-20	47015	58824	51259	18298	2427	173816	1.023
25-Feb-20	46500	57369	52565	16259	2380	172409	1.015
26-Feb-20	46248	57153	51755	17565	2238	171063	1.023
27-Feb-20	46604	57867	52586	17619	2401	173004	1.024
28-Feb-20	47862	58215	52999	17955	2405	174625	1.028
29-Feb-20	44714	57699	52405	18076	2443	171322	1.023
उच्चतम MAXIMUM	51218	59385	52999	19241	2534	176579	1.035
निम्नतम MINIMUM	44649	53171	44591	16259	2238	163998	1.015
औसत AVERAGE	48500	57092	49634	18431	2439	171960	1.024
अब तक का उच्चतम All Time Max.	66687	59385	52999	23783	3145	182610	
दिनांक Date	03.07.19	21.02.20	28.02.20	14.06.19	07.09.19	30.05.19	

* Diversity factor = (Sum of regional max demands) / All India max demand

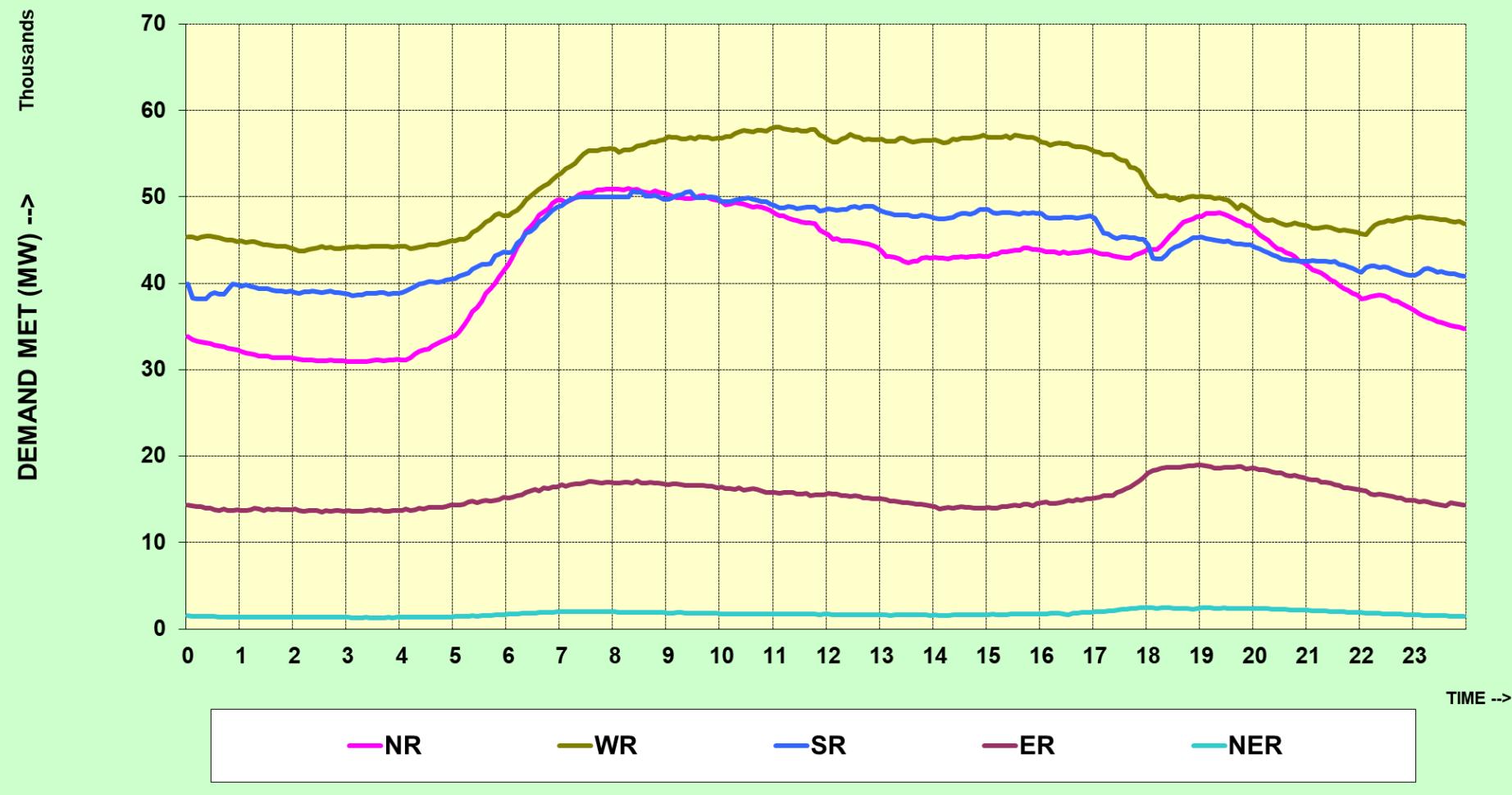
नोट : यह आंकड़े एनएलडीरी स्काडा प्रणाली में दर्ज दैनिक अधिकतम मांगपूर्ति दर्शाते हैं।

Note: The above figures denote daily maximum demand met recorded in NLDC SCADA.

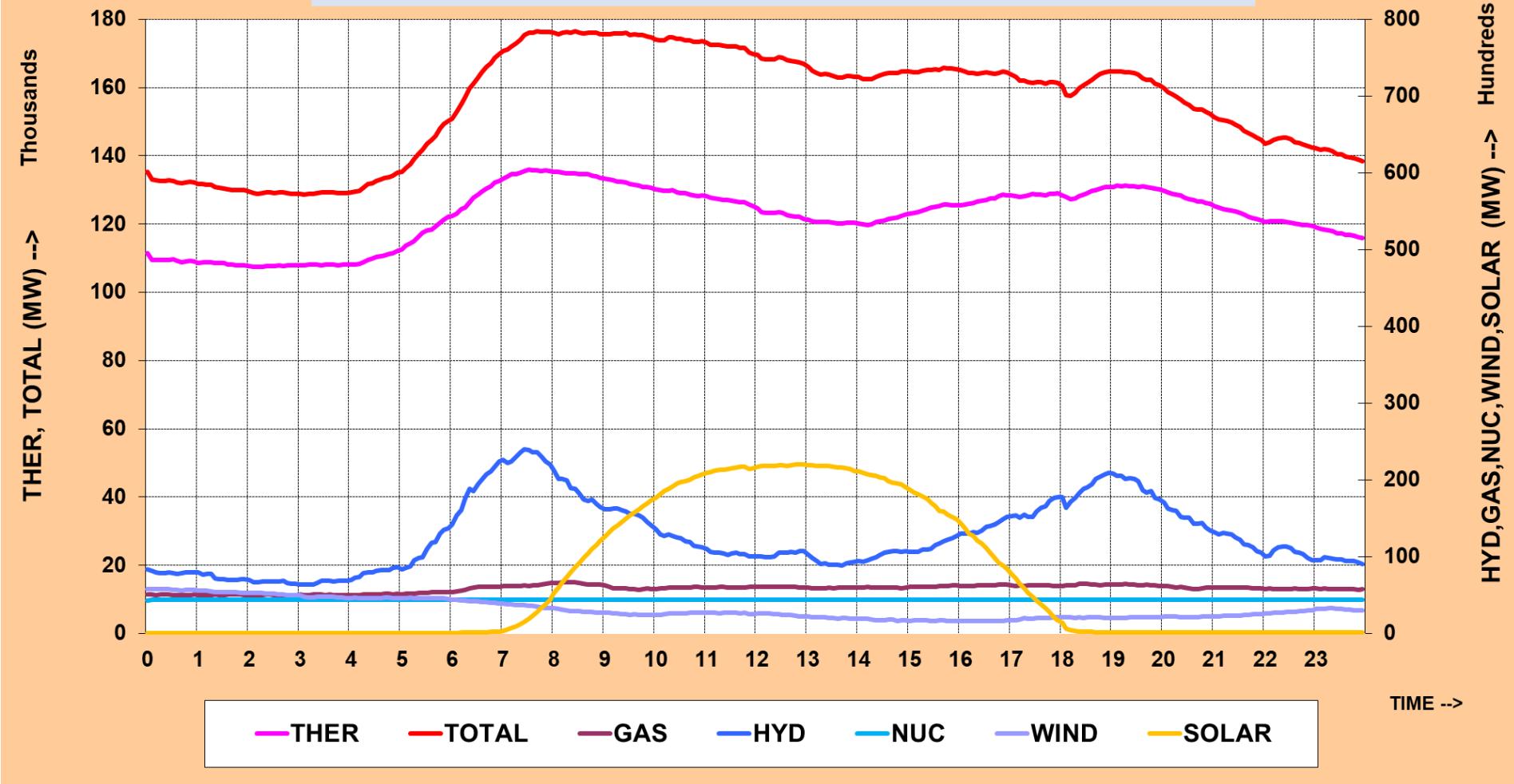
10. DEMAND AND GENERATION PLOTS FOR 18-FEBRUARY (MAXIMUM DEMAND MET)

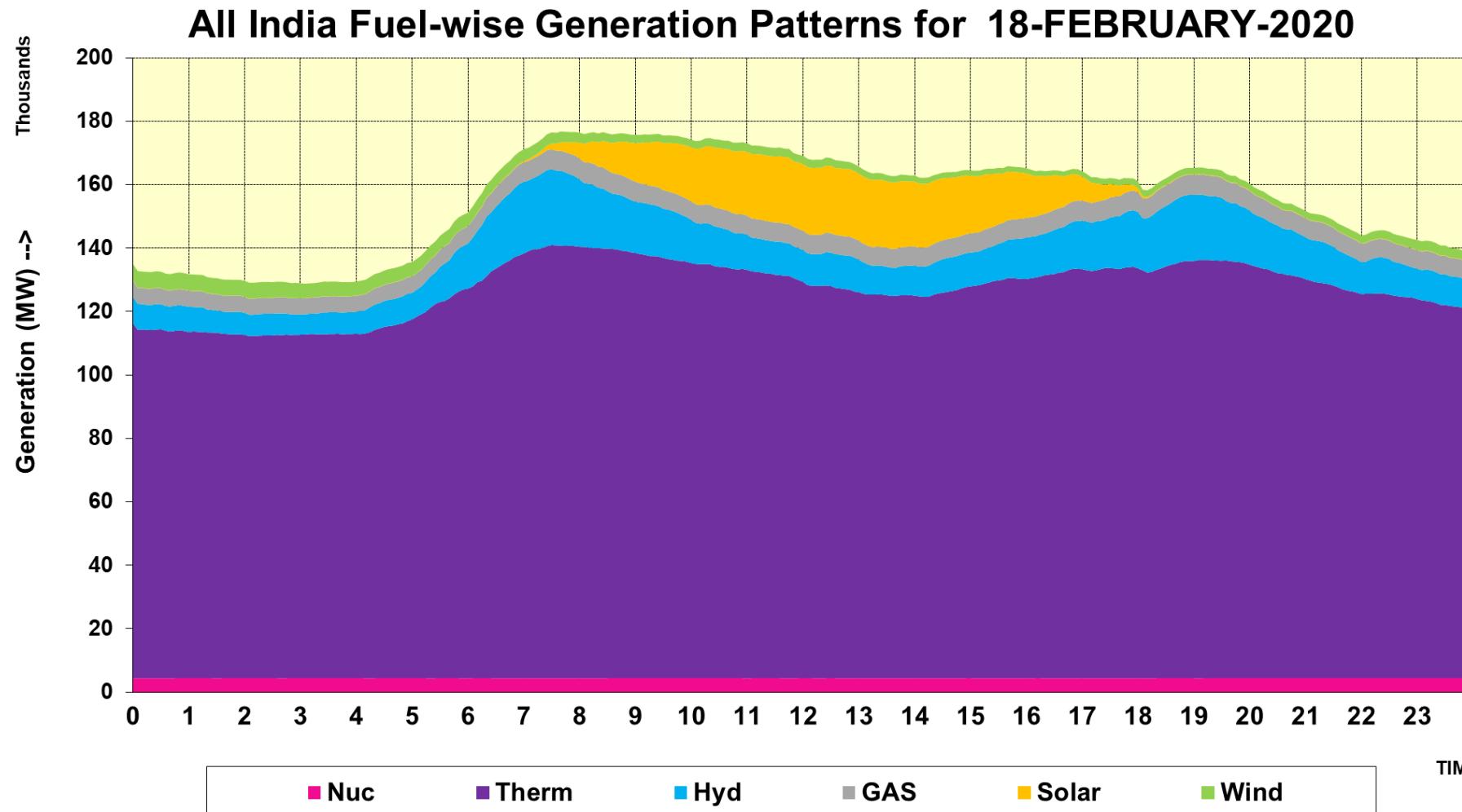


REGIONAL DMD MET PLOT FOR 18-FEBRUARY-2020



ALL INDIA GENERATION PLOT FOR 18-FEBRUARY-2020





18 फरवरी 2020 (अधिकतम माँग) की आल इंडिया माँग आपूर्ति
ALL INDIA DEMAND MET FOR 18 FEBRUARY-2020 (MAXIMUM DEMAND*)

Time Block	All India Demand (MW)		Time Block	All India Demand (MW)
1	132873		49	167293
2	132141		50	167402
3	131826		51	167281
4	132398		52	166660
5	131618		53	164357
6	130718		54	163791
7	130128		55	162782
8	129829		56	163215
9	128845		57	162362
10	129238		58	162910
11	129129		59	163580
12	128859		60	164380
13	128626		61	164108
14	128958		62	164681
15	129360		63	164785
16	129125		64	165013
17	129614		65	163908
18	131522		66	163702
19	132850		67	163665
20	134143		68	164215
21	136051		69	162514
22	140518		70	161083
23	144480		71	160999
24	148811		72	161027
25	151839		73	158082
26	159141		74	159577
27	163712		75	161697
28	168074		76	164004
29	170512		77	164567
30	173456		78	164008
31	174915		79	162429
32	175359		80	160873
33	174804		81	157987
34	175785		82	155493
35	175412		83	153064
36	175850		84	151789
37	175472		85	149931
38	175593		86	149040
39	175361		87	146595
40	174737		88	144783
41	173451		89	143456
42	174574		90	144778
43	174030		91	143824
44	173269		92	142527
45	172039		93	141663
46	171386		94	141004
47	170882		95	139634
48	168884		96	138811

* 15 minute interval SCADA DATA

11. ACTUAL POWER SUPPLY POSITION - FEBRUARY 2020

REGION	STATE	Requirement/Availability in MU/DAY			Requirement/Availability in MU				Peak Demand/Peak Met in MW			
		Requirement	Energy met	Surplus(+)/Deficit(-)	Requirement	Energy met	Surplus(+)/Deficit(-)	% Shortage	Requirement	Peak Demand Met	Surplus(+)/Deficit(-)	% Shortage
NR	Chandigarh	4	4	0.0	106	106	0	0.0	269	269	0	0.0
	Delhi	66	66	0.0	1900	1900	0	0.0	4447	4447	0	0.0
	Haryana	127	127	0.0	3696	3695	0	0.0	7520	7520	0	0.0
	Himachal Pradesh	28	28	0.0	821	820	-1	-0.1	1742	1742	0	0.0
	J&K	61	49	-11.2	1756	1430	-325	-18.5	3158	2526	-632	-20.0
	Punjab	121	121	0.0	3518	3518	0	0.0	7169	7169	0	0.0
	Rajasthan	246	246	0.0	7143	7143	0	0.0	14277	14277	0	0.0
	Uttar Pradesh	277	276	-0.7	8025	8005	-19	-0.2	16777	16627	-150	-0.9
	Uttarakhand	37	37	0.0	1065	1065	0	0.0	2233	2233	0	0.0
	NFF/Railway	2	2	0.0	66	66	0	0.0	119	119	0	0.0
	TOTAL	969	957	-11.9	28096	27750	-346	-1.2	51107	50519	-588	-1.2
WR	Gujarat	344	344	0.0	9974	9974	0	0.0	16538	16538	0	0.0
	Madhya Pradesh	262	262	-0.1	7587	7584	-3	0.0	14882	14855	-27	-0.2
	Chhattisgarh	80	80	0.0	2322	2322	0	0.0	4033	4026	-7	-0.2
	Maharashtra	474	474	0.0	13739	13739	0	0.0	24550	24550	0	0.0
	Goa	10	10	0.0	300	300	0	0.0	609	609	0	0.0
	D&D	7	7	0.0	207	207	0	0.0	345	345	0	0.0
	DNH	18	18	0.0	533	533	0	0.0	815	815	0	0.0
	ESIL	8	8	0.0	231	231	0	0.0	819	819	0	0.0
	TOTAL	1203	1203	-0.1	34892	34890	-3	0.0	59416	59416	0	0.0
SR	Andhra Pradesh	191	191	0.0	5535	5535	0	0.0	9963	9954	-9	-0.1
	Telangana	233	233	0.1	6757	6759	2	0.0	13184	13168	-16	-0.1
	Karnataka	239	239	0.1	6919	6921	2	0.0	13001	13001	0	0.0
	Kerala	76	76	0.0	2191	2192	1	0.0	3967	3964	-3	-0.1
	Tamil Nadu	312	312	0.1	9052	9054	3	0.0	15128	15128	0	0.0
	Pondicherry	7	7	0.0	217	217	0	0.0	390	390	0	0.0
	TOTAL	1058	1058	0.2	30672	30678	7	0.0	53007	52993	-14	0.0
ER	Bihar	74	74	-0.3	2156	2149	-7	-0.3	4537	4309	-228	-5.0
	Jharkhand	25	25	-0.6	739	723	-16	-2.2	1460	1358	-102	-7.0
	DVC	70	70	0.0	2026	2026	0	0.0	2914	2914	0	0.0
	Odisha	72	72	0.0	2101	2101	0	0.0	4095	4095	0	0.0
	West Bengal	129	129	-0.1	3741	3739	-2	-0.1	6724	6719	-5	-0.1
	Sikkim	2	2	0.0	51	51	0	0.0	157	157	0	0.0
	TOTAL	373	372	-0.9	10813	10788	-26	-0.2	19239	19239	0	0.0
NER	Arunachal Pradesh	1	1	0.0	19	18	0	-1.5	158	130	-28	-17.6
	Assam	8	8	-0.5	232	218	-13	-5.7	1381	1370	-11	-0.8
	Manipur	1	1	0.0	21	21	-1	-2.4	226	216	-10	-4.4
	Meghalaya	3	3	-0.2	101	94	-7	-6.6	370	370	0	0.0
	Mizoram	1	1	0.0	22	21	0	-1.4	132	132	0	0.0
	Nagaland	1	1	0.0	19	18	-1	-2.7	165	150	-15	-9.1
	Tripura	4	4	0.0	125	125	0	0.0	222	222	0	0.0
	TOTAL	19	18	-0.7	538	516	-21	-4.0	2655	2592	-63	-2.4
	ALL INDIA	3621	3608	-13.4	105011	104622	-389	-0.4	185425	184759	-666	-0.4

12. ENERGY COMPARISON OF FEBRUARY 2020 vs FEBRUARY 2019

REGION	STATE	Energy Requirement (MU)					Energy Met (MU)				
		Feb-19	Feb-20	Difference	% Change	Average MU/day for Feb-20	Feb-19	Feb-20	Difference	% Change	Average MU/day for Feb-20
NR	Chandigarh	97	106	10	10	4	97	106	10	10	4
	Delhi	1846	1900	54	3	66	1846	1900	54	3	66
	Haryana	3328	3696	368	11	127	3325	3695	370	11	127
	Himachal Pradesh	804	821	17	2	28	798	820	23	3	28
	J&K	1604	1756	152	9	61	1317	1430	113	9	49
	Punjab	2853	3518	665	23	121	2853	3518	665	23	121
	Rajasthan	6480	7143	664	10	246	6480	7143	664	10	246
	Uttar Pradesh	7174	8025	850	12	277	7166	8005	839	12	276
	Uttarakhand	1035	1065	30	3	37	1034	1065	30	3	37
	NFF/Railway	72	66	-6	-8	2	72	66	-6	-8	2
	TOTAL	25292	28096	2804	11	969	24988	27750	2762	11	957
WR	Gujarat	9020	9974	954	11	344	9020	9974	954	11	344
	Madhya Pradesh	6425	7587	1162	18	262	6422	7584	1163	18	262
	Chhattisgarh	2382	2322	-61	-3	80	2382	2322	-61	-3	80
	Maharashtra	11727	13739	2012	17	474	11727	13739	2012	17	474
	Goa	329	300	-28	-9	10	328	300	-28	-9	10
	D&D	198	207	9	5	7	198	207	9	5	7
	DNH	507	533	25	5	18	507	533	25	5	18
	ESIL	336	231	-105	-31	8	336	231	-105	-31	8
	TOTAL	30924	34892	3969	13	1203	30920	34890	3970	13	1203
SR	Andhra Pradesh	5011	5535	524	10	191	5011	5535	524	10	191
	Telangana	5453	6757	1304	24	233	5453	6759	1305	24	233
	Karnataka	6232	6919	688	11	239	6232	6921	689	11	239
	Kerala	2059	2191	132	6	76	2058	2192	134	7	76
	Tamil Nadu	8746	9052	306	3	312	8747	9054	308	4	312
	Pondicherry	207	217	10	5	7	207	217	10	5	7
	TOTAL	27708	30672	2963	11	1058	27708	30678	2970	11	1058
ER	Bihar	1958	2156	198	10	74	1952	2149	196	10	74
	Jharkhand	659	739	80	12	25	649	723	74	11	25
	DVC	1923	2026	103	5	70	1923	2026	103	5	70
	Odisha	2111	2101	-10	0	72	2111	2101	-10	0	72
	West Bengal	3681	3741	60	2	129	3670	3739	69	2	129
	Sikkim	45	51	6	14	2	45	51	6	14	2
	TOTAL	10376	10813	437	4	373	10350	10788	438	4	372
NER	Arunachal Pradesh	77	19	-59	-76	1	68	18	-49	-73	1
	Assam	635	232	-403	-64	8	618	218	-400	-65	8
	Manipur	95	21	-74	-78	1	75	21	-54	-72	1
	Meghalaya	188	101	-88	-47	3	174	94	-80	-46	3
	Mizoram	71	22	-49	-70	1	46	21	-25	-54	1
	Nagaland	86	19	-67	-78	1	60	18	-41	-69	1
	Tripura	148	125	-23	-16	4	145	125	-20	-14	4
	TOTAL	1301	538	-763	-59	19	1185	516	-669	-56	18
ALL INDIA		95600	105011	9411	10	3621	95150	104622	9471	10	3608

13. DEMAND COMPARISON OF FEBRUARY 2020 vs FEBRUARY 2019

REGION	STATE	Peak Requirement (MW)				Peak Met (MW)			
		Feb-19	Feb-20	Difference	% Change	Feb-19	Feb-20	Difference	% Change
NR	Chandigarh	260	269	9	3.5	260	269	9	3.5
	Delhi	4398	4447	49	1.1	4386	4447	61	1.4
	Haryana	6946	7520	574	8.3	6946	7520	574	8.3
	Himachal Pradesh	1679	1742	63	3.8	1679	1742	63	3.8
	J&K	3020	3158	138	4.6	2416	2526	110	4.6
	Punjab	5716	7169	1453	25.4	5716	7169	1453	25.4
	Rajasthan	12921	14277	1356	10.5	12650	14277	1627	12.9
	Uttar Pradesh	14908	16777	1869	12.5	14908	16627	1719	11.5
	Uttarakhand	2182	2233	51	2.3	2182	2233	51	2.3
	NFF/Railway	119	119	0	0.1	119	119	0	0.1
WR	Gujarat	15409	16538	1129	7	15409	16538	1129	7.3
	Madhya Pradesh	13375	14882	1507	11	13375	14855	1480	11.1
	Chhattisgarh	4090	4033	-57	-1	4090	4026	-64	-1.6
	Maharashtra	21079	24550	3471	16	21020	24550	3530	16.8
	Goa	595	609	14	2	594	609	15	2.5
	D&D	331	345	14	4.2	331	345	14	4.2
	DNH	799	815	16	2.0	799	815	16	2.0
	ESIL	895	819	-76	-8.5	895	819	-76	-8.5
	Andhra Pradesh	9439	9963	524	5.6	9416	9954	538	5.7
SR	Telangana	10829	13184	2355	21.7	10818	13168	2350	21.7
	Karnataka	12012	13001	989	8.2	12012	13001	989	8.2
	Kerala	3845	3967	122	3.2	3845	3964	119	3.1
	Tamil Nadu	15562	15128	-434	-2.8	15562	15128	-434	-2.8
	Pondicherry	399	390	-9	-2.3	399	390	-9	-2.3
	Bihar	4322	4537	215	5.0	4165	4309	144	3.5
ER	Jharkhand	1493	1460	-33	-2.2	1297	1358	61	4.7
	DVC	3080	2914	-166	-5.4	3080	2914	-166	-5.4
	Odisha	4234	4095	-139	-3.3	4234	4095	-139	-3.3
	West Bengal	6950	6724	-226	-3.3	6889	6719	-170	-2.5
	Sikkim	109	157	48	44.0	109	157	48	44.0
	Arunachal Pradesh	150	158	8	5.5	148	130	-18	-11.9
NER	Assam	1420	1381	-39	-2.8	1440	1370	-70	-4.9
	Manipur	192	226	34	17.9	194	216	22	11.6
	Meghalaya	356	370	14	3.9	356	370	14	3.9
	Mizoram	102	132	30	29.9	109	132	23	21.5
	Nagaland	130	165	35	26.9	132	150	18	13.6
	Tripura	231	222	-9	-3.8	231	222	-9	-3.8

14. SCHEDULE AND DRAWAL OF CONSTITUENTS - FEBRUARY 2020

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	104.45	109.09	4.64	4.44	3.60	3.76	0.16
	Delhi	1437.89	1409.72	-28.17	-1.96	49.58	48.61	-0.97
	Haryana	2507.11	2526.93	19.82	0.79	86.45	87.14	0.68
	Himachal Pradesh	624.19	618.36	-5.82	-0.93	21.52	21.32	-0.20
	J&K	1262.50	1233.47	-29.03	-2.30	43.53	42.53	-1.00
	Punjab	2137.33	2076.67	-60.67	-2.84	73.70	71.61	-2.09
	Rajasthan	2167.58	2177.46	9.88	0.46	74.74	75.08	0.34
	Uttar Pradesh	3391.49	3435.64	44.15	1.30	116.95	118.47	1.52
	Uttarakhand	532.77	532.71	-0.06	-0.01	18.37	18.37	0.00
	NFF/Railway	68.47	69.84	1.37	2.01	2.36	2.41	0.05
WR	Gujarat	2690.28	2785.59	95.31	3.54	92.77	96.05	3.29
	Madhya Pradesh	3796.19	3712.57	-83.62	-2.20	130.90	128.02	-2.88
	Maharashtra	4253.24	4216.63	-36.61	-0.86	146.66	145.40	-1.26
	Chhattisgarh	984.50	952.25	-32.25	-3.28	33.95	32.84	-1.11
	Goa	291.93	285.91	-6.02	-2.06	10.07	9.86	-0.21
	D&D	194.94	207.31	12.37	6.35	6.72	7.15	0.43
	D&NH	532.35	532.57	0.22	0.04	18.36	18.36	0.01
	ESIL	237.07	230.62	-6.45	-2.72	8.17	7.95	-0.22
SR	Andhra Pradesh	2002.70	2011.69	8.99	0.45	69.06	69.37	0.31
	Telangana	3605.24	3638.49	33.25	0.92	124.32	125.47	1.15
	Karnataka	2297.64	2282.89	-14.75	-0.64	79.23	78.72	-0.51
	Kerala	1721.29	1761.25	39.96	2.32	59.35	60.73	1.38
	Tamil Nadu	4679.70	4695.59	15.89	0.34	161.37	161.92	0.55
	Pondicherry	224.10	216.86	-7.24	-3.23	7.73	7.48	-0.25
	Goa (SR)	41.07	41.84	0.77	1.87	1.42	1.44	0.03
ER	Bihar	2072.41	2077.19	4.78	0.23	71.46	71.63	0.16
	Jharkhand	528.94	539.81	10.87	2.05	18.24	18.61	0.37
	DVC	-1083.84	-1085.09	-1.25	0.12	-37.37	-37.42	-0.04
	Odisha	120.69	97.52	-23.17	-19.20	4.16	3.36	-0.80
	West Bengal	860.68	856.72	-3.96	-0.46	29.68	29.54	-0.14
	Sikkim	49.99	50.99	1.00	2.00	1.72	1.76	0.03
NER	Arunachal Pradesh	15.59	15.42	-0.17	-1.11	0.54	0.53	-0.01
	Assam	141.42	143.19	1.78	1.26	4.88	4.94	0.06
	Manipur	21.28	20.96	-0.31	-1.47	0.73	0.72	-0.01
	Meghalaya	39.05	38.43	-0.62	-1.59	1.35	1.33	-0.02
	Mizoram	11.55	11.91	0.36	3.08	0.40	0.41	0.01
	Nagaland	14.61	14.92	0.32	2.17	0.50	0.51	0.01
	Tripura	12.23	11.10	-1.13	-9.24	0.42	0.38	-0.04

15. INTER REGIONAL EXCHANGES 2019-20

(All figures in MU)

	Apr'19	May'19	June'19	July'19	Aug'19	Sep'19	Oct'19	Nov'19	Dec'19	Jan'20	Feb'20	Fin. Year 2019-20
Name of Line												
Import of NR from WR (WR-NR)												
WR - NR 765 kV Gwalior - Agra 2x5/C												
WR-NR 765 kV Gwalior - Phagi 2x5/C	1152.39	1244.91	1416.19	1297.61	1447.53	1311.86	1211.67	1090.46	1333.15	1350.43	1280.71	14136.91
WR-NR 765 kV Gwalior - Jabalpur-D/C	470.99	631.50	646.70	611.93	537.61	678.68	597.27	605.94	649.85	622.97	707.66	6761.10
WR-NR 765 kV Jabalpur-Orai D/C	656.16	897.10	1027.49	1072.40	1063.24	975.66	850.73	783.33	856.46	921.07	933.15	10036.79
WR-NR 765 kV Satna-Orai	815.18	906.34	895.23	862.62	866.64	892.99	891.91	813.80	889.42	875.54	833.21	9542.88
WR-NR 765 kV Gwalior-Orai	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WR - NR HVDC Champa - Kurukshetra	569.10	815.03	1194.11	1055.41	1242.77	1017.24	600.32	570.13	819.77	1006.59	398.06	9288.53
WR - NR HVDC VindhyaChal	1.11	2.86	13.95	42.93	1.76	48.23	0.00	0.00	41.17	37.68	47.08	236.77
WR - NR 400 kV Zerda Kankroli	0.00	5.02	3.73	6.80	44.58	33.60	18.49	3.08	4.44	1.46	4.60	125.80
WR - NR 400 kV Zerda Bhinmal	5.65	16.43	5.33	11.37	50.94	69.01	74.84	31.47	54.25	60.20	50.46	429.95
WR - NR 400 kV RAPP C - Shujalpur D/C	59.58	41.48	91.68	100.54	105.67	147.75	79.35	13.79	29.46	27.46	72.92	769.68
WR - NR 220 kV Bhanpura - Ranpur	17.93	18.97	25.29	48.34	33.57	21.32	23.80	3.60	1.78	1.97	10.38	206.95
WR - NR 220 kV Bhanpura - Modak	34.44	39.16	47.10	62.86	44.21	39.69	36.58	10.66	38.31	26.71	34.62	414.34
WR - NR 220 kV Auraiya - Malanpur/Mehgaon	0.00	5.00	4.62	4.53	3.92	5.17	3.72	0.00	0.00	0.00	0.00	26.96
WR - NR 400 kV VindhyaChal-Rihand D/C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WR - NR HVDC Mundra - Mohindergarh	925.79	1040.00	1160.33	1077.14	925.72	986.15	938.90	915.72	993.83	1234.61	1102.00	11300.19
WR-NR 765 kV Banasakata-Chittorgarh D/C	13.09	156.24	107.36	197.65	455.80	396.61	287.41	163.68	192.70	136.49	213.03	2320.06
Total WR - NR	4721.41	5820.04	6639.11	6452.13	6823.96	6623.96	5614.99	5005.66	5904.59	6303.18	5887.88	65596.91
Export of NR to WR (NR-WR)												
NR - WR 765 kV Gwalior - Agra 2x5/C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR - WR 765 kV Gwalior - Phagi 2x5/C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR - WR 765 kV Jabalpur-Orai D/C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR - WR 765 kV Satna-Orai	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
NR - WR 765 kV Gwalior-Orai	280.55	254.42	262.28	238.53	217.80	187.37	223.43	299.41	320.93	336.23	331.68	2952.63
NR - WR HVDC Champa - Kurukshetra	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR - WR HVDC VindhyaChal	173.15	215.47	300.88	193.16	267.98	196.37	307.93	271.11	227.86	242.96	188.50	2585.37
NR - WR 400 kV Zerda Kankroli	78.46	33.35	31.33	25.34	1.63	0.00	1.81	16.48	16.92	17.90	7.43	230.65
NR - WR 400 kV Zerda Bhinmal	19.25	13.28	55.90	81.72	11.56	1.37	0.74	8.20	1.71	0.15	4.22	198.10
NR - WR 400 kV RAPP C - Shujalpur D/C	4.59	7.94	3.53	0.02	0.12	0.00	0.00	14.87	0.71	2.45	0.00	34.23
NR - WR 220 kV Bhanpura - Ranpur	1.29	4.19	0.24	0.00	0.00	0.00	0.00	18.62	11.79	4.15	5.21	45.49
NR - WR 220 kV Bhanpura - Modak	1.33	0.26	0.26	0.00	0.00	0.00	0.00	0.88	0.48	1.50	0.00	4.71
NR - WR 220 kV Auraiya - Malanpur/Mehgaon	17.97	6.03	7.48	19.88	18.09	15.39	15.41	46.21	39.96	44.51	57.31	288.24
NR-WR 400 kV Rihand-VindhyaChal D/C	664.93	617.60	676.01	694.67	658.13	679.01	681.32	683.68	695.74	679.92	670.31	7401.32
NR - WR HVDC Mundra - Mohindergarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR - WR 765 kV Banasakata-Chittorgarh D/C	55.96	10.95	23.17	12.01	12.01	0.00	0.00	0.86	0.00	0.16	0.00	115.12
Total NR - WR	1297.48	1164.49	1361.08	1265.33	1187.32	1079.51	1230.64	1360.32	1316.10	1329.93	1264.66	13856.86
Import of NR from ER (ER-NR)												
ER - NR 765 kV Sasaram - Fatehpur	96.69	43.72	16.45	9.45	1.57	20.21	17.63	159.05	176.90	100.46	62.33	704.46
ER - NR 765 kV Gaya - Varanasi 2*5/C	173.75	63.31	139.42	147.90	32.23	173.58	119.93	302.64	386.85	300.82	264.08	2104.51
ER - NR 765 kV Gaya - Balia	134.05	128.29	243.21	211.82	168.52	183.08	162.52	200.17	212.15	207.62	186.82	2038.25
ER - NR HVDC Alipurdur - Agra	0.00	428.84	387.93	1109.50	799.07	802.30	472.84	44.92	26.14	112.72	8.65	4192.91
ER-NR 400 kV Patna - Balia 2xD/C	421.79	418.86	504.99	385.02	316.11	500.32	475.40	565.22	529.00	436.19	303.54	4856.44
ER - NR 400 kV Muzaffarpur - Gorakhpur D/C	335.11	345.54	273.69	254.56	222.87	381.38	291.54	388.41	386.12	239.37	65.60	3184.19
ER - NR 400 kV Biharsariff - Balia D/C	167.78	210.21	199.78	149.39	115.15	143.46	105.23	152.15	217.50	153.20	128.67	1742.52
ER - NR 400 kV Motihari - Gorakhpur D/C	154.73	177.28	99.63	106.95	52.72	7.47	0.00	0.00	0.00	1.90	223.69	824.37
ER - NR 400 kV Biharsariff - Varanasi D/C	7.75	31.63	19.22	16.22	3.26	30.27	6.64	85.75	131.47	51.46	18.39	402.06
ER - NR 400 kV Sasaram - Varanasi	45.60	53.96	144.07	163.55	162.58	131.51	131.90	118.49	109.92	171.49	178.33	1411.40
ER - NR 400 kV Sasaram - Allahabad	6.42	3.89	40.33	49.67	21.80	38.36	31.59	51.52	74.79	75.12	72.61	466.10
ER - NR 220 kV Pusauli - Sahupuri	85.65	115.19	103.22	97.06	100.60	91.35	67.94	25.68	37.06	54.37	55.24	833.36
ER - NR 132 kV Sahupuri - Karamnasa	8.16	12.82	10.30	6.72	7.68	13.90	10.02	9.12	7.53	9.12	7.68	103.05
ER - NR 132 kV Rihand - Son Nagar	0.00	0.00	0.00	0.42	0.00	1.74	0.00	0.00	0.63	2.84	4.05	9.68
ER - NR 132 kV Rihand - Garhwa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total ER-NR	1637.48	2033.54	2182.24	2708.23	2004.16	2518.93	1893.18	2103.12	2296.06	1916.68	1579.68	22873.30
Import of NR from NER (NER-NR)												
NER-NR HVDC Biswanath Chariali - Agra	0.00	234.57	355.35	589.31	476.16	417.67	356.57	44.21	0.00	11.83	11.83	2497.50
Total NER - NR	0.00	234.57	355.35	589.31	476.16	417.67	356.57	44.21	0.00	11.83	11.83	2497.50
Export of NR to ER (NR-ER)												
NR - ER 765 kV Sasaram - Fatehpur	0.00	7.18	55.51	75.74	111.33	34.47	18.68	0.00	0.00	0.00	-0.04	302.87
NR - ER 765 kV Gaya - Varanasi 2*5/C	0.00	4.02	4.02	6.52	40.29	0.33	4.93	0.00	0.00	0.00	0.00	60.11
NR - ER 765 kV Gaya - Balia	0.00	0.00	0.00	0.00	0.00	3.15	4.92	0.00	0.00	0.00	0.00	8.07
NR - ER HVDC Alipurdur - Agra	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00
NR - ER 400 kV Muzaffarpur - Gorakhpur D/C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.86
NR - ER 400 kV Biharsariff - Balia D/C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR - ER 400 kV Motihari - Gorakhpur D/C	0.00	0.00	72.74	43.89	43.89	0.00	0.00	0.00	0.84	0.00	0.00	161.36
NR - ER 400 kV Biharsariff - Varanasi D/C	0.00	1.36	28.47	32.53	99.92	10.41	36.80	7.80	0.00	2.29	6.67	226.25
NR - ER 400 kV Sasaram - Varanasi	0.00	0.00	0.00	0.00	0.00	0.00	2.71	0.00	0.00	0.00	0.00	2.71
NR - ER 400 kV Sasaram - Allahabad	2.24	9.70	6.91	0.01	1.47	0.00	0.00	0.00	0.00	0.00	0.00	20.33
NR - ER 220 kV Pusauli - Sahupuri	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
NR - ER 132 kV Sahupuri - Karamnasa	1.49	1.92	5.55	2.88	3.84	5.26	1.44	0.48	0.48	0.48	2.88	26.70
NR - ER 132 kV Rihand - Son Nagar	12.23	9.10	9.87	9.25	9.09	8.29	6.98	7.53	6.16	9.25	6.27	94.02
Total NR - ER	18.90	36.83	186.47	175.57	311.34	63.44	79.66	20.38	11.58	18.77	<b	

	Apr'19	May'19	June'19	July'19	Aug'19	Sep'19	Oct'19	Nov'19	Dec'19	Jan'20	Feb'20	Fin. Year 2019-20
Name of Line												
Export of WR to ER (WR-ER)												
WR - ER 765 kV Ranchi - Dharamjaygarh 2x5/C	143.47	414.49	531.34	620.37	693.60	430.36	351.97	113.62	96.73	161.63	267.53	3825.10
WR - ER 765 kV Dharamjaygarh - Jharsuguda 2xD/C	1109.79	917.88	710.31	855.54	1006.25	630.39	751.20	469.00	369.09	586.38	767.38	8173.21
WR - ER 765 kV Durg - Jharsuguda D/C	33.81	63.62	92.00	150.48	197.41	113.80	64.77	4.54	5.43	21.70	31.88	779.44
WR - ER 400 kV Sipat - Ranchi D/C	62.33	135.52	194.02	236.74	244.30	149.20	124.22	45.62	45.29	64.58	88.38	1390.21
WR - ER 400 kV Raigarh - Jharsuguda 2xD/C	44.08	128.90	265.46	220.92	227.94	99.10	52.04	46.86	70.87	41.10	13.23	1210.49
WR - ER 220 kV Korba - Budhipadar D/C	85.09	75.06	95.91	115.29	109.13	50.22	52.66	33.05	63.27	79.31	38.37	797.36
WR - ER 220 kV Raigarh - Budhipadar	0.00	0.44	3.75	2.71	0.88	0.01	0.04	0.05	0.05	0.08	0.01	8.03
Total WR - ER	1478.57	1735.90	1892.80	2202.04	2479.51	1473.08	1396.91	712.73	650.73	954.77	1206.79	16183.84
Import of WR from ER (ER - WR)												
ER - WR 765 kV Ranchi - Dharamjaygarh 2x5/C	15.17	0.45	0.01	0.65	0.00	0.76	2.68	45.32	69.87	20.42	1.98	157.30
ER - WR 765 kV Dharamjaygarh - Jharsuguda 2xD/C	0.00	0.00	0.01	0.24	0.00	0.01	0.00	3.26	20.88	3.59	0.00	28.00
ER - WR 765 kV Durg - Jharsuguda D/C	4.46	5.95	3.64	0.61	0.00	0.16	2.25	58.20	77.84	49.04	19.78	221.94
ER - WR 400 kV Sipat - Ranchi D/C	3.13	0.48	0.02	0.04	0.00	0.37	1.60	11.79	17.15	6.18	0.54	41.28
ER - WR 400 kV Raigarh - Jharsuguda 2xD/C	12.99	15.50	0.00	5.28	0.26	4.82	15.09	43.60	20.88	49.67	90.92	259.02
ER - WR 220 kV Korba - Budhipadar D/C	0.00	0.00	0.00	0.00	0.00	0.12	0.17	2.22	0.12	0.09	0.13	2.86
ER - WR 220 kV Raigarh - Budhipadar	54.42	33.65	12.73	17.60	25.25	45.65	20.76	37.55	46.50	36.47	4.94	335.51
Total ER - WR	90.17	56.03	16.40	24.42	25.51	51.90	42.55	201.94	253.23	165.46	118.28	1045.90
Export of ER to NER (ER - NER)												
ER - NER 400 kV Binaguri - Bongaigaon D/C	6.80	87.81	224.88	281.34	341.86	275.77	188.51	24.70	4.15	40.26	198.52	1674.62
ER - NER 400 kV Alipurduar - Bongaigaon D/C	3.63	2.09	52.15	6.83	129.06	107.81	114.35	15.63	0.77	9.70	289.31	731.33
ER - NER 220 kV Birpara - Salakati D/C	1.77	5.44	32.81	30.61	66.47	56.29	45.90	7.86	1.06	6.45	50.95	305.61
Total ER - NER	12.20	95.34	309.84	318.79	537.39	439.87	348.76	48.20	5.97	56.40	538.79	2711.56
Import of ER from NER (NER - ER)												
NER - ER 400 kV Binaguri - Bongaigaon D/C	151.73	36.29	0.00	0.00	0.00	0.15	0.93	101.48	114.73	39.32	11.40	456.02
NER - ER 400 kV Alipurduar - Bongaigaon D/C	185.50	187.26	18.21	140.88	16.67	24.71	13.63	103.79	133.88	77.55	17.71	919.80
NER - ER 220 kV Birpara - Salakati D/C	32.54	12.53	0.05	0.67	0.00	0.04	0.03	14.25	20.63	9.98	3.42	94.14
Total NER - ER	369.77	236.08	18.26	141.55	16.67	24.90	14.59	219.53	269.24	126.85	32.52	1469.96
Export of ER to SR (ER - SR)												
ER - SR HVDC Gauhati	438.03	420.15	332.54	286.92	48.45	0.00	298.60	376.35	390.42	433.67	406.99	3432.12
ER - SR HVDC Talchar - Kolar	1496.40	1275.81	947.36	1041.06	539.22	602.97	876.30	1164.91	1313.11	1223.73	1297.03	11777.90
ER - SR 765 kV Angul- Srikakulam D/C	1104.20	920.55	726.76	628.85	743.92	708.97	873.24	1024.74	1120.66	1306.09	1501.57	10659.56
Total ER - SR	3038.63	2616.51	2006.67	1956.83	1331.59	1311.94	2048.14	2566.00	2824.20	2963.50	3205.59	25869.58
Import of ER from SR (SR - ER)												
SR - ER HVDC Gauhati	0.00	0.00	0.00	0.00	213.51	224.91	33.60	0.00	0.00	0.00	0.00	472.01
SR - ER HVDC Talchar - Kolar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SR - ER 765 kV Angul- Srikakulam D/C	0.00	0.00	0.00	0.00	0.00	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	213.51	224.91	33.60	0.00	0.00	0.00	0.00	472.01
Export of WR to SR (WR-SR)												
WR - SR HVDC Bhadravati	413.36	633.02	337.28	286.71	182.70	97.17	240.81	417.28	412.44	515.96	540.06	4076.80
WR - SR 765 kV Sholapur - Raichur 2x5/C	1242.88	696.61	196.70	247.43	78.48	120.46	323.88	480.43	739.23	827.73	828.37	5782.21
WR - SR 765 kV Wardha - Nizamabad D/C	1289.23	780.77	569.34	714.79	649.70	611.80	837.74	980.86	1254.52	1202.34	1325.92	10217.00
WR - SR 400KV Kolhapur-Kudgi D/C	5.33	5.79	1.85	4.73	0.00	0.00	0	0.37	0.05	4.91	0.49	23.53
Total WR - SR	2950.79	2116.19	1105.16	1253.67	910.88	829.43	1402.42	1878.95	2406.24	2550.94	2694.85	20099.53
Import of WR from SR (SR - WR)												
SR - WR HVDC Bhadravati	0.00	0.00	4.73	22.84	42.73	85.34	15.10	0.00	0.00	0.00	0.00	170.75
SR - WR 765 kV Raichur - Sholapur 2x5/C	0.39	6.50	136.76	137.07	315.69	209.29	62.06	55.52	15.89	18.04	18.59	975.79
SR - WR 765 kV Wardha - Nizamabad D/C	0.00	0.07	22.12	5.20	0.55	0.20	0.00	0.19	0.00	0.00	0.00	28.32
SR - WR 400KV Kolhapur-Kudgi D/C	159.61	241.80	364.59	387.21	531.75	425.94	328.62	312.32	322.13	208.96	329.34	3612.27
Total SR - WR	160.00	248.37	528.20	552.31	890.71	720.78	405.79	368.03	338.02	227.00	347.93	4787.13
TOTAL ALL INDIA	16234	16427	16602	17640	17209	15780	14868	14711	16583	16861	16949	179864

Date	15.1 Import-Export of NR with WR during February 2020																
	Import of NR from WR (WR-NR)																
	WR - NR 765 kV Gwalior - Agra 2xS/C	WR-NR 765 kV Gwalior-Phagi 2xS/C	WR-NR 765 kV Jabalpur- Orai D/C	WR-NR 765 kV Satna- Orai	WR-NR 765 kV Gwalior-Orai	WR - NR HVDC Champa-Kurukshtera	WR - NR HVDC VindhyaChal	WR - NR 400 kV Zerda-Kankroli	WR - NR 400 kV Zerda-Bhinmal	WR-NR 400 kV RAPP C - Shujalpur D/C	WR - NR 220 kV Bhanpura - Ranpur	WR - NR 220 kV Bhanpura - Modak	WR - NR 220 kV Auraiya - Malanpur / Mehtaon	WR-NR 400 kV Rihand VindhyaChal D/C	WR - NR HVDC Mundra - M'garh	NR - WR 765 kV Banaskata - Chittorgarh D/C	Total WR - NR
1-Feb-20	47.67	21.29	32.09	30.42	0.00	38.99	0.00	0.62	3.35	2.27	0.46	1.42	0.00	0.00	41.57	10.94	231.09
2-Feb-20	43.66	17.56	29.68	28.70	0.00	44.97	0.00	0.03	1.57	1.36	0.56	1.43	0.00	0.00	43.93	8.47	221.92
3-Feb-20	47.34	22.62	33.94	29.31	0.00	32.25	0.00	0.00	2.81		0.71	1.57	0.00	0.00	39.74	7.17	217.46
4-Feb-20	43.76	28.03	32.42	29.49	0.00	39.61	0.00	0.00	2.70	1.20	0.36	1.35	0.00	0.00	45.42	6.42	230.76
5-Feb-20	42.03	28.76	33.58	28.84	0.00	38.02	0.00	0.00	0.84	4.38	0.00	0.90	0.00	0.00	38.71	5.36	221.42
6-Feb-20	45.16	23.92	34.10	27.56	0.00	22.87	0.00	0.07		3.73	0.00	0.90	0.00	0.00	43.61	5.91	207.83
7-Feb-20	43.65	22.49	31.88	28.59	0.00	25.98	2.24	0.00	2.20	2.37	0.00	0.79	0.00	0.00	41.09	3.43	204.71
8-Feb-20	47.50	21.72	33.09	30.65	0.00	17.29	1.12	0.00	1.31	2.51	0.00	0.90	0.00	0.00	30.82	9.08	195.99
9-Feb-20	47.12	24.36	32.82	30.27	0.00	16.51	0.00	0.00	2.05	3.49	0.00	0.97	0.00	0.00	33.93	8.93	200.45
10-Feb-20	48.50	24.18	35.39	29.79	0.00	26.93	0.22	0.00	1.73	3.65	0.00	0.77	0.00	0.00	43.66	7.20	222.02
11-Feb-20	43.52	23.09	32.28	28.82	0.00	32.56	5.66	0.00	0.00		0.00	0.49	0.00	0.00	45.23	8.80	220.45
12-Feb-20	46.41	24.52	32.95	29.50	0.00	26.52	0.00	0.00	0.00	2.00	0.00	0.34	0.00	0.00	43.87	5.98	212.09
13-Feb-20	42.58	27.91	33.00	29.75	0.00	20.75	0.00	0.00	0.61	3.81	0.00	0.52	0.00	0.00	40.91	6.60	206.44
14-Feb-20	40.62	29.70	31.32	28.24	0.00	7.17	1.57	0.00	2.18	3.51	0.00	0.39	0.00	0.00	44.21	6.17	195.08
15-Feb-20	43.63	27.26	35.01	27.90	0.00		2.20	0.01	4.40	4.06	0.00	0.70	0.00	0.00	43.58	6.24	194.99
16-Feb-20	47.44	27.49	34.69	29.65	0.00	0.00	0.46	0.01	4.81	3.96	0.10	1.09	0.00	0.00	36.31	9.19	195.20
17-Feb-20	45.34	25.50	34.18	28.60	0.00	0.00	6.90	0.72	3.53	3.41	0.09	1.13	0.00	0.00	36.35	9.09	194.84
18-Feb-20	42.28	24.64	32.78	27.68	0.00		8.13	0.53	2.37	3.41	0.04	1.07	0.00	0.00	35.98	5.16	184.07
19-Feb-20	47.49	27.35	35.79	29.69	0.00		2.63	0.00	0.60	2.00	0.57	1.47	0.00	0.00	33.75	9.15	190.49
20-Feb-20	45.05	22.31	32.95	29.66	0.00		1.92	0.19	0.00	2.03	0.75	1.66	0.00	0.00	38.73	7.35	182.60
21-Feb-20	41.40	18.25	27.76	25.82	0.00		0.00	0.00	0.58	0.45	0.62	1.55	0.00	0.00	31.47	10.29	158.19
22-Feb-20	43.30	20.42	31.15	27.70	0.00		2.97	0.26	0.64	1.32	1.03	1.75	0.00	0.00	40.72	10.13	181.39
23-Feb-20	39.83	22.68	29.83	26.15	0.00		6.01	0.22	0.69	1.45	0.91	1.74	0.00	0.00	43.99	5.30	178.80
24-Feb-20	44.79	25.59	29.83	29.92	0.00		2.73	0.00	2.97	2.87	1.01	1.84	0.00	0.00	29.56	8.69	179.80
25-Feb-20	42.82	26.43	31.08	28.39	0.00		2.04	0.19	2.80	2.97	0.54	1.56	0.00	0.00	28.77	8.49	176.08
26-Feb-20	43.59	28.21	31.71	28.52	0.00		0.00	0.48	2.49	3.22	0.71	1.58	0.00	0.00	30.10	6.85	177.46
27-Feb-20	42.79	27.03	32.68	28.49	0.00		0.00	0.27	1.29	3.22	0.75	1.67	0.00	0.00	28.34	8.44	174.97
28-Feb-20	41.87	24.34	29.33	29.07	0.00	1.63	0.00	1.00	1.94	3.22	0.71	1.65	0.00	0.00	36.30	4.55	175.61
29-Feb-20	39.57	20.01	25.84	26.04	0.00	6.01	0.28	0.00	0.00	1.05	0.46	1.42	0.00	0.00	31.35	3.65	155.68
Total	1280.71	707.66	933.15	833.21	0.00	398.06	47.08	4.60	50.46	72.92	10.38	34.62	0.00	0.00	1102.00	213.03	5687.88

Date	15.1 Import-Export of NR with WR during February 2020																
	Export of NR to WR (NR- WR)																
	NR - WR 765 kV Gwalior - Agra 2xS/C	NR-WR 765 kV Gwalior-Phagi 2xS/C	NR-WR 765 kV Jabalpur- Orai D/C	NR-WR 765 kV Satna- Orai	NR-WR 765 kV Gwalior-Orai	NR - WR HVDC Champa- Kurukshetra	NR - WR HVDC VindhyaChal	NR - WR 400 kV Zerda- Kankroli	NR - WR 400 kV Zerda- Bhinmal	NR-WR 400 kV RAPP C - Shujalpur D/C	WR - NR 220 kV Bhanpura - Ranpur	WR - NR 220 kV Bhanpura - Modak	NR - WR 220 kV Auraiya - Malanpur / Mehtaon	NR-WR 400 kV Rihand- VindhyaChal D/C	NR - WR HVDC Mundra - M'garh	NR - WR 765 kV Banaskata - Chittorgarh D/C	Total NR - WR
1-Feb-20	0.00	0.00	0.00	0.00	10.73	0.00	9.11	0.00	0.00	0.00	0.00	0.00	1.17	22.90	0.00	0.00	43.91
2-Feb-20	0.00	0.00	0.00	0.00	10.29	0.00	8.82	0.00	0.00	0.00	0.00	0.00	1.81	22.80	0.00	0.00	43.72
3-Feb-20	0.00	0.00	0.00	0.00	12.02	0.00	12.09	0.03	0.00		0.00	0.00	1.80	23.07	0.00	0.00	49.01
4-Feb-20	0.00	0.00	0.00	0.00	13.50	0.00	12.07	0.00	0.00	0.00	0.00	0.00	2.41	23.04	0.00	0.00	51.02
5-Feb-20	0.00	0.00	0.00	0.00	13.51	0.00	6.45	0.66	0.00	0.00	0.18	0.00	2.56	22.75	0.00	0.00	46.11
6-Feb-20	0.00	0.00	0.00	0.00	11.81	0.00	9.71	0.00		0.00	0.20	0.00	2.37	23.48	0.00	0.00	47.57
7-Feb-20	0.00	0.00	0.00	0.00	11.57	0.00	2.01	0.86	0.00	0.00	0.39	0.00	2.40	23.47	0.00	0.00	40.70
8-Feb-20	0.00	0.00	0.00	0.00	10.56	0.00	6.80	0.17	0.00	0.00	0.11	0.00	1.94	23.01	0.00	0.00	42.59
9-Feb-20	0.00	0.00	0.00	0.00	11.00	0.00	8.18	0.05	0.00	0.00	0.08	0.00	2.01	24.30	0.00	0.00	45.62
10-Feb-20	0.00	0.00	0.00	0.00	11.51	0.00	5.03	0.31	0.00	0.00	0.30	0.00	1.93	22.69	0.00	0.00	41.77
11-Feb-20	0.00	0.00	0.00	0.00	11.49	0.00	2.48	0.87	0.05		0.68	0.00	2.20	22.89	0.00	0.00	40.66
12-Feb-20	0.00	0.00	0.00	0.00	11.17	0.00	4.58	0.94	1.19	0.00	0.98	0.00	2.32	22.96	0.00	0.00	44.14
13-Feb-20	0.00	0.00	0.00	0.00	12.45	0.00	10.31	0.60	0.00	0.00	0.98	0.00	2.58	23.17	0.00	0.00	50.09
14-Feb-20	0.00	0.00	0.00	0.00	12.23	0.00	4.25	0.21	0.00	0.00	0.88	0.00	2.67	23.15	0.00	0.00	43.39
15-Feb-20	0.00	0.00	0.00	0.00	12.25		0.59	0.00	0.00	0.00	0.43	0.00	2.57	23.01	0.00	0.00	38.85
16-Feb-20	0.00	0.00	0.00	0.00	11.36	0.00	9.24	0.00	0.00	0.00	0.00	0.00	2.07	24.12	0.00	0.00	46.79
17-Feb-20	0.00	0.00	0.00	0.00	11.58	0.00	5.02	0.00	0.00	0.00	0.00	0.00	1.88	22.95	0.00	0.00	41.43
18-Feb-20	0.00	0.00	0.00	0.00	11.88		0.00	0.00	0.00	0.00	0.00	0.00	1.72	23.05	0.00	0.00	36.65
19-Feb-20	0.00	0.00	0.00	0.00	11.59		3.74	0.18	0.00	0.00	0.00	0.00	1.88	23.04	0.00	0.00	40.43
20-Feb-20	0.00	0.00	0.00	0.00	11.05		4.15	0.00	2.89	0.00	0.00	0.00	1.94	23.18	0.00	0.00	43.21
21-Feb-20	0.00	0.00	0.00	0.00	10.22		12.09	0.75	0.00	0.00	0.00	0.00	1.95	23.15	0.00	0.00	48.16
22-Feb-20	0.00	0.00	0.00	0.00	10.28		5.60	0.00	0.00	0.00	0.00	0.00	1.91	23.37	0.00	0.00	41.16
23-Feb-20	0.00	0.00	0.00	0.00	10.58		1.73	0.00	0.00	0.00	0.00	0.00	2.05	23.15	0.00	0.00	37.51
24-Feb-20	0.00	0.00	0.00	0.00	11.71		5.31	0.84	0.00	0.00	0.00	0.00	1.40	22.54	0.00	0.00	41.80
25-Feb-20	0.00	0.00	0.00	0.00	12.11		3.99	0.00	0.00	0.00	0.00	0.00	1.44	22.90	0.00	0.00	40.44
26-Feb-20	0.00	0.00	0.00	0.00	12.13		9.31	0.00	0.00	0.00	0.00	0.00	1.53	23.03	0.00	0.00	46.00
27-Feb-20	0.00	0.00	0.00	0.00	10.91		8.43	0.00	0.00	0.00	0.00	0.00	1.79	23.02	0.00	0.00	44.15
28-Feb-20	0.00	0.00	0.00	0.00	10.78	0.00	8.84	0.00	0.00	0.00	0.00	0.00	1.66	23.13	0.00	0.00	44.41
29-Feb-20	0.00	0.00	0.00	0.00	9.41	0.00	8.57	0.96	0.09	0.00	0.00	0.00	1.35	22.99	0.00	0.00	43.37
Total	0.00	0.00	0.00	0.00	331.68	0.00	188.50	7.43	4.22	0.00	5.21	0.00	57.31	670.31	0.00	0.00	1264.66

Date	15.2 Import-Export of NR with ER & NER during February 2020																	
	Import of NR from ER (ER-NR)														Import of NR from NER (NER-NR)			
	ER - NR 765 kV Sasaram - Fatehpur	ER - NR 765 kV Gaya - Varanasi 2*S/C	ER - NR 765 kV Gaya Balia	ER - NR HVDC Alipurduar - Agra	ER-NR 400 kV Patna - Balia 2xD/C	ER - NR 400 kV Muzaffarpur - Gorakhpur D/C	ER - NR 400 kV Biharshariff - Balia D/C	ER - NR 400 kV Mothiari - Gorakhpur D/C	ER - NR 400 kV Biharshariff - Varanasi D/C	ER-NR 400 kV Sasaram - Varanasi	ER-NR 400 kV Sasaram - Allahabad	ER - NR 220 kV Pusauli - Sahupuri	ER - NR 132 kV Sahupuri - Karamnasa	ER - NR 132 kV Rihand - Son Nagar	NR - ER Rihand - Garhwa	Total ER - NR	NER-NR HVDC Biswanath Chariali - Agra	Total NER-NR
1-Feb-20	2.87	7.44	7.23		8.95	6.44	6.72	3.47	0.54	5.06	2.01	0.00				50.73	0.00	0.00
2-Feb-20	1.78	4.57	5.33		5.51	4.43	4.45	3.17	0.00	5.25	1.89	0.03				36.41	0.00	0.00
3-Feb-20	3.69	9.34	7.06		9.11	4.93	5.77	3.95	1.60	6.52	2.38	0.36				54.71	0.00	0.00
4-Feb-20	5.47	14.01	7.42		14.07	6.15	5.42	5.61	3.41	3.92	2.84	0.77				69.09	0.00	0.00
5-Feb-20	4.85	10.49	8.31		14.62	5.14	5.38	5.58	3.06	4.42	2.75	1.58				66.18	0.00	0.00
6-Feb-20	3.50	9.59	8.97		13.08	2.49	5.65	9.49	2.16	4.40	2.70	1.33				63.36	1.50	1.50
7-Feb-20	2.25	7.75	8.74		13.96	0.93	4.93	8.78	0.81	6.73	2.44	1.03				58.35	12.15	12.15
8-Feb-20	0.17	6.34	8.01		12.13	0.00	3.93	8.31	0.00	9.73	2.30	0.98	0.96	0.71		53.57	15.37	15.37
9-Feb-20	0.85	6.93	7.24		9.97	0.76	3.42	8.19	0.00	9.10	2.96	0.32				49.74	11.19	11.19
10-Feb-20	0.53	6.20	7.00		8.74	0.07	2.95	8.21	0.00	8.64	2.97	0.75	0.00	0.00		46.06	10.44	10.44
11-Feb-20	0.00	6.23	7.34		11.00	0.80	3.82	8.64	0.00	5.75	2.98	2.79	0.00	0.00		49.35	9.89	9.89
12-Feb-20	0.27	6.76	8.20		12.15	1.01	4.52	8.59	0.00	5.96	3.13	2.82	0.00	0.00		53.41	10.36	10.36
13-Feb-20	0.90	8.99	7.71		12.49	1.26	4.50	8.83	0.20	8.18	3.21	2.70	0.48	0.00		59.45	11.68	11.68
14-Feb-20	0.17	9.58	8.23	5.70	13.66	1.06	5.12	8.62	0.04	8.79	3.20	3.07	0.96	0.00		68.20	11.66	11.66
15-Feb-20	1.03	9.72	3.33		10.51	1.69	4.86	8.78	0.00	9.36	3.01		0.48	0.00		52.77	11.38	11.38
16-Feb-20	1.17	9.80	3.57		10.38	2.61	6.19	8.27	0.14	9.02	2.94	2.98				57.07	11.28	11.28
17-Feb-20	1.57	12.04	3.92		11.35	2.94	5.60	8.78	0.73	8.57	3.05	2.78				61.33	11.82	11.82
18-Feb-20	2.25	12.50	3.92		11.32	2.69	5.16	8.58	0.36	5.76	2.92	3.03				58.49	11.55	11.55
19-Feb-20	2.59	12.50	3.91		10.96	2.69	5.44	9.24	0.99	5.09	2.54		0.96	0.71		57.62	9.09	9.09
20-Feb-20	1.33	9.71	3.13		8.63	0.54	4.11	8.17	0.00	6.85	2.05	2.97	0.96	0.00	0.00	48.45	10.70	10.70
21-Feb-20	0.87	7.16	2.39		6.67	0.00	2.91	7.26	0.00	4.32	1.58	2.85	0.48	0.71		37.20	10.48	10.48
22-Feb-20	2.33	8.86	6.87		7.53	0.00	3.18	8.01	0.00	4.12	1.78	2.71				45.39	11.75	11.75
23-Feb-20	0.88	7.37	6.68		7.05	0.00	2.66	8.78	0.00	6.31	1.53	3.29				44.55	10.77	10.77
24-Feb-20	2.62	10.80	7.77	0.00	10.52	6.54	3.24	2.74	0.61	5.97	1.93	3.24				55.98	10.44	10.44
25-Feb-20	4.88	12.37	7.20		9.62	3.06	4.24	8.47	1.69	3.85	1.89	2.40	0.48	0.00		60.15	11.90	11.90
26-Feb-20	4.02	11.06	8.60	2.22	11.87	3.60	5.43	8.88	1.46	1.78	4.15	2.63	0.96	0.00		66.66	9.47	9.47
27-Feb-20	4.18	10.13	6.89	0.73	11.93	1.95	3.16	9.55	0.59	3.88	2.26	2.68	0.48	0.96		59.37	11.40	11.40
28-Feb-20	3.37	9.75	6.45		8.62	0.88	2.89	9.02	0.00	6.21	1.66	2.42	0.48	0.96		52.71	11.66	11.66
29-Feb-20	1.94	6.09	5.40		7.14	0.94	3.02	9.72	0.00	4.79	1.56	2.73				43.33	11.48	11.48
Total	62.33	264.08	186.82	8.65	303.54	65.60	128.67	223.69	18.39	178.33	72.61	55.24	7.68	4.05	0.00	1579.68	259.41	259.41

Date	15.2 Import-Export of NR with ER & NER during February 2020																			
	Export of NR to ER (NR- ER)													Export of NR to NER (NR-NER)						
	NR - ER 765 kV Sasaram - Fatehpur	NR - ER 765 kV Gaya - Varanasi 2*S/C	NR - ER 765 kV Gaya Balia	NR - ER HVDC Alipurduar - Agra	NR-ER 400 kV Patna - Balia 2xD/C	NR - ER 400 kV Muzaffarpur - Gorakhpur D/C	NR - ER 400 kV Biharshariff - Balia D/C	NR - ER 400 kV Motihari - Gorakhpur D/C	NR - ER 400 kV Biharshariff - Varanasi D/C	NR-ER 400 kV Sasaram - Varanasi	NR-ER 400 kV Sasaram - Allahabad	NR-ER 220 kV Pusauli - Sahupuri	NR - ER 132 kV Sahupuri - Karamnasa	NR - ER 132 kV Rihand - Son Nagar	NR - ER 132 kV Rihand - Garhwa	Total NR-ER	NR-NER HVDC Biswanath Chariali - Agra	Total NR-NER		
1-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.14				0.14	9.64	9.64			
2-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00			0.42	12.24	12.24			
3-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	11.50	11.50			
4-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.73	0.73	11.76	11.76		
5-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.74	0.74	11.46	11.46		
6-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.00	0.00	0.00		
7-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.72	0.72	0.00	0.00		
8-Feb-20	0.00	0.00	0.00		0.00	0.67	0.00	0.00	1.46	0.00	0.00	0.00			0.48	0.00	2.61	0.00	0.00	
9-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00				0.72	1.13	0.00	0.00	
10-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00			0.48	0.75	1.65	0.00		
11-Feb-20	-0.04	0.00	0.00		0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00				0.96	0.73	2.08	0.00	
12-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00			0.48	0.73	1.49	0.00	0.00	
13-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.71	0.71	0.00	0.00	
14-Feb-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.50	0.50	0.00	0.00	
15-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.27	0.00	0.00				0.00	0.36	0.63	0.00	0.00	
16-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00					0.40	0.40	0.00	0.00	
17-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00					0.38		0.00	0.00	
18-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00					0.58	0.58	0.00	0.00	
19-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00					0.48	0.00	0.48	0.00	0.00
20-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.37	0.00	0.00	0.00			0.00	0.71	0.66	1.74	0.00	0.00
21-Feb-20	0.00	0.00	0.00		0.00	1.22	0.00	0.00	1.13	0.00	0.00	0.00			0.00	0.00	0.00	2.35	0.00	0.00
22-Feb-20	0.00	0.00	0.00		0.00	0.39	0.00	0.00	0.07	0.00	0.00	0.00			0.00	0.42	0.88	0.00	0.00	
23-Feb-20	0.00	0.00	0.00		0.00	0.58	0.00	0.00	0.48	0.00	0.00	0.00			0.00	0.37	1.43	0.00	0.00	
24-Feb-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.26	0.26	0.00	0.00	
25-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.34	0.34	0.00	0.00	
26-Feb-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.39	0.39	0.00	0.00	
27-Feb-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.00	0.00	0.00	0.00	
28-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00			0.00	0.00	0.42	0.45	0.00	0.00
29-Feb-20	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.00			0.00	0.38	1.28	0.00	0.00	
Total	-0.04	0.00	0.00	0.00	2.86	0.00	0.00	6.67	0.00	0.00	0.14	2.88	6.27	5.73	24.13	56.60	56.60			

Date	15.3 Import and Export of ER with WR & NER during February 2020																									
	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 Dharamjaya arh - Ranchi 2xS/C	WR - ER 765 kV Dharamjaya rh - Jharsuguda Q/C	WR - ER 765 kV Durg - Jharsuguda D/C	WR - ER 400 kV Sipat - Ranchi D/C	WR - ER 220 kV Korba - Budhipadar D/C	WR - ER 220 kV Raigarh - Jharsuguda 2xD/C	Total WR - ER	ER - WR 765 kV Dharamjaya arh - Ranchi 2xS/C	ER-WR 765 kV Durg - Jharsuguda D/C	ER - WR 400 kV Raigarh - Jharsuguda D/C	ER - WR 220 kV Korba - Budhipadar D/C	ER - WR 220 kV Raigarh - Jharsuguda 2xD/C	Total ER - WR	ER - NER 400 kV Binaguri - Bongaigaon D/C	ER - NER 400 kV Alipurduar - Bongaigaon D/C	ER - NER 220 kV Birpara - Salakati D/C	Total ER - NER	NER - ER 400 kV Binaguri - Bongaigaon D/C	NER - ER 400 kV Alipurduar - Bongaigaon 2xD/C	NER - ER 220 kV Birpara - Salakati D/C	Total NER - ER					
1-Feb-20	8.2	22.4	1.3	2.8	0.1	1.3	0.0	36.02	0.0	0.0	0.0	0.0	3.7	0.0	0.6	4.27	0.76	0.81	0.16	1.73	1.09	1.59	0.34	3.03		
2-Feb-20	7.0	19.5	1.0	2.7	0.2	0.7	0.0	31.11	0.2	0.0	0.8	0.0	3.6	0.0	0.0	4.59	0.06	0.05	0.01	0.12	2.05	3.20	0.63	5.88		
3-Feb-20	6.6	18.5	1.0	2.7	0.0	0.6	0.0	29.30	0.0	0.0	0.6	0.0	5.5	0.0	0.0	6.07	0.32	0.35	0.07	0.73	2.58	4.05	0.80	7.43		
4-Feb-20	2.2	14.2	0.0	1.6	0.0	0.6	0.0	18.76	1.0	0.0	3.9	0.1	4.9	0.0	0.0	9.93	0.23	0.25	0.05	0.53	2.83	4.37	0.80	8.00		
5-Feb-20	2.6	19.3	0.7	1.4	0.7	1.0	0.0	25.77	0.6	0.0	1.4	0.1	1.3	0.0	0.0	3.40	0.10	0.07	0.02	0.20	1.93	3.12	0.59	5.63		
6-Feb-20	6.1	25.9	2.8	2.6	0.4	1.3	0.0	39.11	0.0	0.0	0.0	0.0	2.3	0.0	0.0	2.32	4.35	5.88	1.06	11.30	0.93	1.37	0.26	2.56		
7-Feb-20	7.8	26.8	2.9	2.9	0.4	0.9	0.0	41.75	0.0	0.0	0.0	0.0	1.5	0.0	0.0	1.52	6.76	9.30	1.66	17.71	0.00	0.00	0.00	0.00		
8-Feb-20	11.2	31.2	4.1	4.4	2.4	1.9	0.0	55.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	8.52	11.75	2.05	22.32	0.00	0.00	0.00	0.00		
9-Feb-20	10.9	29.4	3.6	4.5	1.7	1.8	0.0	51.78	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.43	6.37	8.72	1.53	16.62	0.00	0.00	0.00	0.00		
10-Feb-20	12.3	22.8	2.5	4.6	1.8	1.4	0.0	45.35	0.0	0.0	0.2	0.0	0.5	0.0	0.0	0.69	7.79	10.74	1.84	20.37	0.00	0.00	0.00	0.00		
11-Feb-20	9.1	21.3	0.3	3.6	1.7	1.1	0.0	37.24	0.0	0.0	0.8	0.0	1.0	0.0	0.0	1.87	7.05	11.55	2.03	20.63	0.00	0.00	0.00	0.00		
12-Feb-20	11.8	21.9	0.3	4.2	1.4	1.0	0.0	40.69	0.0	0.0	0.9	0.0	1.2	0.0	0.0	2.06	7.69	10.63	1.68	20.00	0.00	0.00	0.00	0.00		
13-Feb-20	10.4	22.6	0.2	3.4	0.1	0.9	0.0	37.52	0.0	0.0	1.1	0.0	2.6	0.0	0.0	3.77	8.00	11.18	1.69	20.87	0.00	0.00	0.00	0.00		
14-Feb-20	9.5	24.9	0.1	2.7	0.0	1.1	0.0	38.25	0.0	0.0	1.4	0.0	3.7	0.0	0.0	5.08	8.62	9.65	1.99	20.26	0.00	0.00	0.00	0.00		
15-Feb-20	10.6	24.1	0.1	2.9	0.0	1.0	0.0	38.79	0.0	0.0	1.2	0.0	5.2	0.0	0.0	6.38	8.12	11.12	2.04	21.28	0.00	0.00	0.00	0.00		
16-Feb-20	12.6	20.3	0.1	3.4	0.0	0.6	0.0	37.09	0.0	0.0	1.1	0.0	6.2	0.0	0.0	7.37	8.13	11.24	2.00	21.36	0.00	0.00	0.00	0.00		
17-Feb-20	9.9	22.2	0.5	2.3	0.0	0.8	0.0	35.77	0.0	0.0	1.1	0.1	6.5	0.0	0.0	7.68	8.45	11.77	2.13	22.35	0.00	0.00	0.00	0.00		
18-Feb-20	8.9	23.8	0.4	1.6	0.0	1.0	0.0	35.66	0.0	0.0	0.7	0.1	6.5	0.0	0.0	7.30	7.71	11.57	1.96	21.24	0.00	0.00	0.00	0.00		
19-Feb-20	10.2	24.4	0.4	2.4	0.0	1.1	0.0	38.54	0.0	0.0	0.6	0.0	4.9	0.0	0.0	5.48	8.53	13.23	2.27	24.03	0.00	0.00	0.00	0.00		
20-Feb-20	14.4	27.1	0.9	4.6	0.0	1.2	0.0	48.15	0.0	0.0	0.2	0.0	4.9	0.0	0.0	5.11	9.78	15.15	2.68	27.60	0.00	0.00	0.00	0.00		
21-Feb-20	14.3	32.9	1.2	4.6	0.1	1.2	0.0	54.31	0.0	0.0	0.1	0.0	4.5	0.0	0.0	4.63	9.68	14.96	2.63	27.27	0.00	0.00	0.00	0.00		
22-Feb-20	10.9	34.6	1.6	3.5	0.1	1.2	0.0	51.88	0.0	0.0	0.1	0.0	4.3	0.0	0.0	4.38	10.15	15.29	2.75	28.19	0.00	0.00	0.00	0.00		
23-Feb-20	8.8	35.5	1.6	2.8	0.3	1.2	0.0	50.05	0.0	0.0	0.0	0.0	3.8	0.0	0.0	3.84	9.11	13.76	2.43	25.29	0.00	0.00	0.00	0.00		
24-Feb-20	9.3	32.6	1.5	3.2	0.9	1.7	0.0	49.11	0.0	0.0	0.2	0.0	1.3	0.0	0.0	1.49	9.29	14.42	2.55	26.26	0.00	0.00	0.00	0.00		
25-Feb-20	7.8	35.5	0.8	2.3	0.3	1.3	0.0	47.93	0.0	0.0	0.7	0.1	1.9	0.0	0.0	2.68	9.55	14.81	2.68	27.04	0.00	0.00	0.00	0.00		
26-Feb-20	8.2	32.9	0.2	2.7	0.3	2.6	0.0	46.90	0.0	0.0	1.4	0.0	0.9	0.0	0.0	3.48	7.33	10.70	1.92	19.96	0.00	0.00	0.00	0.00		
27-Feb-20	9.1	31.3	0.7	3.1	0.1	2.7	0.0	47.12	0.0	0.0	0.3	0.0	0.8	0.0	0.0	2.11	7.95	12.24	2.17	22.36	0.00	0.00	0.00	0.00		
28-Feb-20	8.8	35.5	0.8	2.7	0.4	2.5	0.0	50.69	0.0	0.0	0.1	0.0	2.3	0.0	0.0	3.57	9.21	14.26	2.48	25.94	0.00	0.00	0.00	0.00		
29-Feb-20	8.1	33.6	0.3	2.3	0.0	2.7	0.0	47.01	0.1	0.0	1.0	0.1	4.5	0.0	0.0	6.69	8.92	13.86	2.42	25.20	0.00	0.00	0.00	0.00		
Total	267.53	767.38	31.88	88.38	13.23	38.37	0.01	1206.79	1.98	0.00	19.78	0.54	90.92	0.13	4.94	118.28	198.52	289.31	50.95	538.79	11.40	17.71	3.42	32.52		

Date	15.4 Import and Export of SR with ER & WR during February 2020																	
	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	ER-SR 765 kV Angul- Srikakulam D/C	Total ER - SR	SR - ER HVDC Gazuwaka	SR - ER HVDC Talchar -	SR-ER 765 kV Angul- Srikakulam D/C	Total SR - ER	WR - SR HVDC Bhadravati	WR - SR 765 kV Sholapur - Raichur 2xS/C	WR-SR 765 kV Wardha - Nizamabad D/C	WR-SR 400KV Kolhapur-Kudgi D/C	Total WR - SR	SR - WR HVDC Bhadravati	SR - WR 765 kV Raichur - Sholapur 2xS/C	SR-WR 765 kV Wardha - Nizamabad D/C	SR-WR 400KV Kolhapur-Kudgi D/C	Total SR - WR
1-Feb-20	12.32	43.76	48.71	104.78	0.00	0.00	0.00	0.00	19.29	24.87	39.54	0.02	83.71	0.00	0.88	0.00	8.05	8.92
2-Feb-20	12.30	38.01	48.24	98.55	0.00	0.00	0.00	0.00	14.47	24.13	40.52	0.07	79.20	0.00	1.45	0.00	8.65	10.10
3-Feb-20	12.31	32.75	44.69	89.74	0.00	0.00	0.00	0.00	14.48	20.73	36.45	0.00	71.66	0.00	0.24	0.00	7.08	7.32
4-Feb-20	12.32	35.67	43.13	91.11	0.00	0.00	0.00	0.00	20.95	20.82	36.53	0.00	78.30	0.00	0.69	0.00	8.08	8.77
5-Feb-20	12.68	45.74	43.89	102.31	0.00	0.00	0.00	0.00	22.27	22.80	39.52	0.00	84.59	0.00	0.82	0.00	11.48	12.30
6-Feb-20	12.95	44.36	50.58	107.89	0.00	0.00	0.00	0.00	23.05	28.82	43.72	0.00	95.60	0.00	0.00	0.00	8.19	8.19
7-Feb-20	12.89	48.38	52.77	114.04	0.00	0.00	0.00	0.00	23.80	33.15	45.46	0.00	102.42	0.00	0.00	0.00	6.69	6.69
8-Feb-20	10.62	48.91	55.48	115.00	0.00	0.00	0.00	0.00	21.97	36.93	48.84	0.23	107.98	0.00	0.00	0.00	6.72	6.72
9-Feb-20	12.32	37.37	48.57	98.26	0.00	0.00	0.00	0.00	19.64	29.17	41.99	0.17	90.97	0.00	0.13	0.00	7.93	8.06
10-Feb-20	12.30	37.62	43.22	93.14	0.00	0.00	0.00	0.00	19.33	21.69	36.75	0.00	77.77	0.00	0.96	0.00	12.11	13.07
11-Feb-20	12.30	35.47	45.41	93.18	0.00	0.00	0.00	0.00	19.88	23.52	40.76	0.00	84.16	0.00	1.41	0.00	13.97	15.38
12-Feb-20	12.30	46.94	44.64	103.88	0.00	0.00	0.00	0.00	22.15	19.20	36.40	0.00	77.75	0.00	1.10	0.00	16.01	17.12
13-Feb-20	12.37	48.78	48.50	109.65	0.00	0.00	0.00	0.00	23.58	24.31	38.54	0.00	86.44	0.00	2.16	0.00	14.78	16.94
14-Feb-20	15.42	49.69	51.03	116.14	0.00	0.00	0.00	0.00	23.56	26.26	40.87	0.00	90.69	0.00	0.01	0.00	11.12	11.13
15-Feb-20	14.35	42.56	51.55	108.46	0.00	0.00	0.00	0.00	23.56	26.07	43.79	0.00	93.42	0.00	1.08	0.00	10.48	11.56
16-Feb-20	11.12	38.37	51.06	100.54	0.00	0.00	0.00	0.00	23.53	24.46	40.83	0.00	88.83	0.00	2.66	0.00	12.30	14.95
17-Feb-20	12.41	39.01	54.07	105.50	0.00	0.00	0.00	0.00	23.57	25.60	47.38	0.00	96.55	0.00	0.52	0.00	12.95	13.48
18-Feb-20	16.24	48.53	52.52	117.29	0.00	0.00	0.00	0.00	20.70	27.23	49.04	0.00	96.97	0.00	1.23	0.00	13.74	14.97
19-Feb-20	16.24	48.82	52.36	117.42	0.00	0.00	0.00	0.00	23.47	25.57	46.89	0.00	95.94	0.00	0.53	0.00	14.38	14.92
20-Feb-20	16.24	42.83	51.88	110.96	0.00	0.00	0.00	0.00	18.36	23.63	46.40	0.00	88.40	0.00	1.01	0.00	16.78	17.79
21-Feb-20	16.24	50.22	53.86	120.32	0.00	0.00	0.00	0.00	23.39	30.38	49.87	0.00	103.64	0.00	0.00	0.00	13.94	13.94
22-Feb-20	16.24	50.20	48.96	115.40	0.00	0.00	0.00	0.00	23.25	25.86	45.84	0.00	94.95	0.00	1.01	0.00	16.27	17.29
23-Feb-20	16.24	51.86	50.90	119.00	0.00	0.00	0.00	0.00	4.83	27.30	51.58	0.00	83.71	0.00	0.70	0.00	13.99	14.69
24-Feb-20	16.24	50.18	58.14	124.57	0.00	0.00	0.00	0.00	7.70	34.48	56.02	0.00	98.20	0.00	0.00	0.00	10.78	10.78
25-Feb-20	15.21	52.93	62.55	130.68	0.00	0.00	0.00	0.00	11.88	39.96	57.64	0.00	109.48	0.00	0.00	0.00	9.40	9.40
26-Feb-20	16.21	50.85	61.01	128.07	0.00	0.00	0.00	0.00	11.57	37.17	56.02	0.00	104.76	0.00	0.00	0.00	10.89	10.89
27-Feb-20	16.21	49.76	60.29	126.26	0.00	0.00	0.00	0.00	11.82	39.25	58.20	0.00	109.27	0.00	0.00	0.00	11.29	11.29
28-Feb-20	16.20	52.12	61.05	129.38	0.00	0.00	0.00	0.00	11.99	40.01	50.21	0.00	102.21	0.00	0.00	0.00	11.53	11.53
29-Feb-20	16.21	35.36	62.50	114.06	0.00	0.00	0.00	0.00	12.04	44.96	60.30	0.00	117.30	0.00	0.00	0.00	9.74	9.74
TOTAL	406.99	1297.03	1501.57	3205.59	0.00	0.00	0.00	0.00	540.06	828.37	1325.92	0.49	2694.85	0.00	18.59	0.00	329.34	347.93

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

अप्रैल 2019 से मार्च 2020 April 2019 to March 2020

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 2019 APR'19	251.97	-245.98	-653.05	-0.55
मई 2019 MAY'19	359.06	-290.40	-773.73	-0.80
जून 2019 JUN'19	344.77	-268.05	-708.18	-0.77
जुलाई 2019 JUL'19	1133.10	-154.16	-770.87	-0.81
अगस्त 2019 AUG'19	1254.50	-182.20	-749.10	-0.82
सितंबर 2019 SEP'19	1271.03	-146.51	-750.18	-0.77
अक्टूबर 2019 OCT'19	896.60	-30.16	-725.53	-0.72
नवंबर 2019 NOV'19	345.26	-37.27	-469.52	-0.66
दिसम्बर 2019 DEC'19	185.79	-194.65	-275.21	-0.73
जनवरी 2020 JAN'20	123.70	-289.87	-292.78	-0.70
फरवरी 2020 FEB'20	56.96	-297.73	-355.30	-0.64
कुल Total	6222.74	-2136.98	-6523.44	-7.97

* Based on daily operational data

Date	16.1 Import from neighbouring countries during February 2020 (All figures in MU)												
	Import from Bhutan							Import from Bangladesh		Import from Nepal			
	400 kV Tala-Binaguri I,II & IV	400 kV Binaguri-Malbase	220 kV Birpara-Chuka D/C	220 kV Birpara-Malbase	400 kV Jigmeling-Alipurduwar D/C	132 kV Rangia-Motanga	132 kV Salakati-Gelephu	400 kV Behrampur-Bheramara D/C	132 kV Surjyamaninagar-Comilla D/C	132 kV Tanakpur-Mahendranagar	220 kV Muzaffarpur-Dhalkebar	From BIHAR Source	11 kV Moreh-Tamu
1-Feb-20	1.10	0.68	0.00	0.00	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2-Feb-20	0.97	0.58	0.00	0.00	2.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3-Feb-20	0.92	0.52	0.00	0.00	1.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4-Feb-20	0.96	0.55	0.00	0.00	2.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5-Feb-20	0.88	0.47	0.00	0.00	2.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6-Feb-20	0.90	0.44	0.00	0.00	2.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7-Feb-20	0.67	0.22	0.00	0.00	2.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Feb-20	0.65	0.18	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-Feb-20	0.63	0.19	0.00	0.00	2.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10-Feb-20	0.65	0.20	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11-Feb-20	0.79	0.34	0.00	0.00	2.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12-Feb-20	0.68	0.23	0.00	0.00	2.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13-Feb-20	0.76	0.32	0.00	0.00	2.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14-Feb-20	0.75	0.28	0.00	0.00	2.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15-Feb-20	0.77	0.33	0.00	0.00	1.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16-Feb-20	0.72	0.29	0.00	0.00	2.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17-Feb-20	0.81	0.38	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18-Feb-20	0.66	0.22	0.00	0.00	2.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19-Feb-20	0.62	0.16	0.00	0.00	2.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20-Feb-20	0.60	0.15	0.00	0.00	2.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21-Feb-20	0.59	0.14	0.00	0.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22-Feb-20	0.58	0.12	0.00	0.00	2.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23-Feb-20	0.74	0.30	0.00	0.00	2.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24-Feb-20	0.77	0.33	0.00	0.00	2.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25-Feb-20	0.69	0.24	0.00	0.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26-Feb-20	1.06	0.63	0.00	0.00	2.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27-Feb-20	0.92	0.49	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28-Feb-20	0.75	0.31	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29-Feb-20	0.69	0.26	0.00	0.00	2.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	22.28	9.55	0.00	0.00	61.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*Based on SEM/Energy meter data for links where available

16.2 Export to neighbouring countries during February 2020

(All figures in MU)

Date	Export to neighbouring countries during February 2020												
	Export to Bhutan							Export to Bangladesh		Export to Nepal			
	400 kV Tala-Binaguri I,II & IV	400 kV Binaguri-Malbase	220 kV Birpara-Chuka D/C	220 kV Birpara-Malbase	400 kV JigmeLing-Alipurduwar D/C	132 kV Rangia-Motanga	132 kV Salakati-Gelephu	400 kV Behrampur-Bheramara D/C	132 kV Surjyamaninagar-Comilla D/C	132 kV Tanakpur-Mahendranagar	220 kV Muzaffarpur-Dhalkebar	From BIHAR Source	11 kV Moreh-Tamu
1-Feb-20	0.00	0.00	0.19	0.90	0.00	0.02	0.36	7.69	1.99	1.25	6.06	1.63	0.02
2-Feb-20	0.00	0.00	0.23	1.01	0.00	0.08	0.38	9.53	2.08	1.28	6.06	2.48	0.02
3-Feb-20	0.00	0.00	0.31	1.10	0.00	0.36	0.47	9.32	2.05	1.30	6.15	3.11	0.03
4-Feb-20	0.00	0.00	0.33	1.09	0.00	0.51	0.51	8.68	2.21	1.27	5.84	3.48	0.02
5-Feb-20	0.00	0.00	0.35	1.08	0.00	0.43	0.53	8.84	2.05	1.27	5.88	3.80	0.02
6-Feb-20	0.00	0.00	0.30	0.88	0.00	0.46	0.39	9.46	2.13	1.30	6.04	3.83	0.02
7-Feb-20	0.00	0.00	0.34	0.92	0.00	0.42	0.27	5.48	1.95	1.28	6.09	3.79	0.02
8-Feb-20	0.00	0.00	0.39	0.92	0.00	0.20	0.26	9.08	1.92	1.30	6.07	2.70	0.02
9-Feb-20	0.00	0.00	0.35	0.93	0.00	0.13	0.27	10.78	2.18	1.26	6.12	2.80	0.02
10-Feb-20	0.00	0.00	0.34	0.85	0.00	0.09	0.23	10.79	2.10	1.30	6.10	3.41	0.02
11-Feb-20	0.00	0.00	0.29	0.81	0.00	0.14	0.29	10.60	2.08	1.35	6.22	3.64	0.02
12-Feb-20	0.00	0.00	0.40	0.98	0.00	0.13	0.28	10.42	2.12	1.33	6.04	3.77	0.02
13-Feb-20	0.00	0.00	0.29	0.85	0.00	0.24	0.21	10.33	2.12	1.34	6.07	3.77	0.02
14-Feb-20	0.00	0.00	0.28	0.82	0.00	0.26	0.28	5.05	1.80	1.27	5.60	3.72	0.02
15-Feb-20	0.00	0.00	0.23	0.81	0.00	0.45	0.08	11.07	2.06	1.20	5.58	2.82	0.02
16-Feb-20	0.00	0.00	0.23	0.78	0.00	0.23	0.08	11.19	2.13	1.23	5.89	3.25	0.02
17-Feb-20	0.00	0.00	0.18	0.62	0.00	0.05	0.18	11.22	2.04	1.20	6.05	2.91	0.02
18-Feb-20	0.00	0.00	0.30	0.87	0.00	0.11	0.36	11.08	2.18	1.25	6.09	3.39	0.02
19-Feb-20	0.00	0.00	0.37	0.97	0.00	0.27	0.18	11.16	2.14	1.27	6.00	3.40	0.02
20-Feb-20	0.00	0.00	0.32	0.78	0.00	0.18	0.19	11.05	2.17	1.23	5.83	3.35	0.02
21-Feb-20	0.00	0.00	0.38	0.76	0.00	0.02	0.20	5.98	2.04	1.16	5.96	3.25	0.02
22-Feb-20	0.00	0.00	0.37	0.70	0.00	0.24	0.18	12.26	2.12	1.13	5.94	2.42	0.02
23-Feb-20	0.00	0.00	0.32	0.75	0.00	0.28	0.20	12.33	2.19	1.19	6.06	3.29	0.02
24-Feb-20	0.00	0.00	0.29	0.76	0.00	0.28	0.16	12.38	2.18	1.21	5.79	3.22	0.02
25-Feb-20	0.00	0.00	0.33	0.95	0.00	0.28	0.19	12.41	2.20	1.12	5.33	2.51	0.02
26-Feb-20	0.00	0.00	0.23	0.93	0.00	0.16	0.13	12.28	2.04	1.12	5.66	1.66	0.02
27-Feb-20	0.00	0.00	0.19	0.81	0.00	0.00	0.15	12.53	2.12	0.86	5.96	2.69	0.02
28-Feb-20	0.00	0.00	0.27	0.89	0.00	0.09	0.07	7.46	2.05	1.20	5.92	2.88	0.00
29-Feb-20	0.00	0.00	0.28	0.89	0.00	0.03	0.07	13.65	2.09	1.17	6.01	3.24	0.02
Total	0.00	0.00	8.65	25.39	0.00	6.14	7.15	294.09	60.54	35.64	172.41	90.17	0.64

*Based on SEM/Energy meter data for links where available

17. एसटीओए (द्विपक्षीय एवं सामूहिक) एवं डी ईस एम बिलिंग का व्योरा – माह फरवरी 2020
STOA (BILATERAL AND COLLECTIVE) & DSM BILLING DETAILS -FEBRUARY 2020

द्विपक्षीय एसटीओए BILATERAL SHORT TERM OPEN ACCESS

फरवरी 2020 FEBRUARY '2020			Apr-Mar'20	
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	500	1036	10894	24686
प.क्षे. WR	133	671	2355	13489
द.क्षे. SR	164	1026	2049	13162
पू.क्षे. ER	270	646	2767	11825
पूर्वोत्तर क्षे. NER	101	263	388	1003
कुल TOTAL	1168	3642	18453	64166

एसटीओए SHORT TERM OPEN ACCESS

	सामूहिक एसटीओए Collective STOA			द्विपक्षीय एसटीओए Bilateral STOA
माह MONTH	क्रेताओं / विक्रेताओं की स. NO. of Buyers/Sellers	अनुमोदित ऊर्जा (मि.यु.) Approved Energy (MU)	क्रेताओं / विक्रेताओं की स. NO. of Buyers/Sellers	अनुमोदित ऊर्जा (मि.यु.) Approved Energy (MU)
अप्रैल 2019 Apr'19	2777	4037	1415	6401
मई 2019 May'19	2961	3774	1614	5827
जून 2019 Jun'19	2892	4207	1724	5941
जुलाई 2019 Jul'19	2907	4801	2797	7781
अगस्त 2019 Aug'19	2838	4675	2336	8486
सितंबर 2019 Sep'19	2768	3489	2282	8028
अक्टूबर 2019 Oct'19	2791	3401	1623	4749
नवंबर 2019 Nov'19	2705	3389	1236	4587
दिसम्बर 2019 Dec'19	3052	4334	1129	4505
जनवरी 2020 Jan'20	3063	4792	1129	4219
फरवरी 2020 Feb'20	2790	4290	1168	3642
कुल TOTAL	31544	45189	18453	64166

मासिक डी ईस एम बिलिंग का व्योरा 2019-20
MONTHLY DSM BILLING DETAILS 2019-20

अनंतिम आँकड़े
Provisional data
subject to change

करोड़ रु. मे (RS. IN CRORES)

क्षेत्र REGION	उत्तरी क्षेत्र NORTH	पश्चिमी क्षेत्र WEST	दक्षिणी क्षेत्र SOUTH	पूर्वी क्षेत्र EAST	पूर्वोत्तर क्षेत्र NORTH EAST
27.01.20 to 02.02.20	64.37	47.44	15.31	39.61	23.67
03.02.20 to 09.02.20	44.29	48.12	14.87	25.53	8.42
10.02.20 to 16.02.20	54.83	26.03	15.61	46.54	24.97
17.02.20 to 23.02.20	46.71	37.40	9.30	33.08	24.64
24.02.20 to 01.03.20	47.65	69.38	23.92	---	---

18. पावर मार्केट की सूचना (स्रोत : आई.ई.एम्स. एवं पी.एम्स.आई.एल.)
 POWER MARKET INFORMATION (Source IEX & PXIL)
 पावर एक्सचेज के माध्यम से विनियम - माह फरवरी 2020
 EXCHANGES THROUGH POWER EXCHANGES - FEBRUARY 2020

क्र. स. S. No.	क्षेत्रीय इकाई Regional Entity	क्षेत्र Region	पावर एक्सचेज के माध्यम से (मि.गु. मे)	
			विक्रय Sale	क्रय Purchase
1	पंजाब Punjab	उत्तरी क्षेत्र NR	0.00	169.70
2	हरियाणा Haryana		42.84	164.73
3	राजस्थान Rajasthan		140.71	204.01
4	दिल्ली Delhi		97.96	173.60
5	उत्तर प्रदेश Uttar Pradesh		186.98	105.06
6	उत्तराखण्ड Uttarakhand		30.80	48.03
7	हिमाचल प्रदेश Himachal Pradesh		147.43	20.95
8	जम्मू और कश्मीर J & K		0.45	347.70
9	केंद्र शासित चंडीगढ़ UT Chandigarh		15.78	2.77
10	ए डी हाइड्रो AD Hydro		11.46	0.00
11	कर्चम वांगटू KW		11.86	0.00
12	श्री सीमेट Shree Cement		1.62	0.00
13	नाथा झाकरी Nathpa Jhakri		3.02	0.00
14	बैरासूल Baira Siul HEP(BSO)		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(DGO)		0.00	0.00
18	दुलहस्ती Dulahasti HEP(DUO)		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(TPO)		0.00	0.00
22	उरी Uri HEP(URO)		0.00	0.00
23	लांको बुधिल LANCO Budhil		0.57	0.00
24	चमेरा-3 chamera 3		0.00	0.00
25	अदानी एचवीडीसी ADANI HVDC(NORGU0)		0.00	0.00
26	मलाना MALANA		0.00	0.00
27	उरी-II Uri-II HEP(UR2)		0.00	0.00
28	पार्बति-III Parbati-III		0.00	0.00
29	सिंगरौली Singrauli		3.86	0.00
30	दादरी-I Dadri stage-I		0.00	0.00
31	दादरी-II Dadri stage-II		0.00	0.00
32	ऊचाहार-I Unchahar-I TPS		0.00	0.00
33	ऊचाहार-II Unchahar-II TPS		0.00	0.00
34	ऊचाहार-III Unchahar-III TPS		0.00	0.00
35	रिहंद-I Rihand STPS-I		0.12	0.00
36	रिहंद-II Rihand STPS-II		0.00	0.00
37	रिहंद-III Rihand STPS-III		0.00	0.00
38	एपीसीपीएल झज्जर APCPL Jhajjar		0.00	0.00
39	सैंज Sainj HEP		10.32	0.00
40	दादरी गैस Dadri GPP		0.00	0.00
41	ओरिया गैस NTPC Auraiya		0.00	0.00
42	किशनगंगा Kishanganga HEP		0.00	0.00
43	अंता गैस NTPC Anta		0.00	0.00
44	रामपुर एचडीपी RAMPUR HEP		0.00	0.00
45	ऊचाहार-IV UNCHAHAR-IV		0.00	0.00
46	एनटीपीसी कोलडाम NTPC KOLDAM		0.00	0.00
47	कोटेश्वर Koteshwar		0.00	0.00

18. पावर माकेट की सूचना (स्रोत : आई.ई.एक्स. एवं पी.एक्स.आई.एल.)
 POWER MARKET INFORMATION (Source IEX & PXIL)
 पावर एक्सचेज के माध्यम से विनियम - माह फरवरी 2020
 EXCHANGES THROUGH POWER EXCHANGES - FEBRUARY 2020

क्र. स. S. No.	क्षेत्रीय इकाई Regional Entity	क्षेत्र Region	पावर एक्सचेज के माध्यम से (मि.यु.मे) Through Power Exchange in MU	
			विक्रय Sale	क्रय Purchase
48	मध्य प्रदेश MP	पश्चिमी क्षेत्र WR	228.20	6.64
49	महाराष्ट्र Maharashtra		22.49	364.30
50	गुजरात Gujarat		44.89	411.56
51	छत्तीसगढ़ Chhattisgarh		86.29	71.66
52	गोवा Goa		21.95	11.06
53	दमन और दीव Daman and Diu		0.00	40.68
54	दादरा और नगर हवेली Dadra & Nagar Haveli		0.02	38.71
55	जिंदल Jindal		91.50	0.00
56	लांको अमरकंटक LANCO AMK		0.00	0.00
57	आर्यन कोल ACB India Limited		28.57	0.00
58	जिंदल स्टील एंड पावर Jindal Steel and Power Ltd		13.82	0.00
59	बालको -2 Balco-II		0.31	0.00
60	स्टरलाइट Sterlite(w3rse0)		0.00	0.00
61	एमको EMCO		3.46	0.00
62	वन्दना विद्युत VANDANA VIDYUT		0.00	0.00
63	ईस्सार पावर ESSAR POWER		47.00	0.00
64	ईस्सार स्टील ESSAR STEEL		0.00	80.65
65	के एस के महानदी KSK Mahanadi		0.00	0.00
66	जिंदल स्टेज-II Jindal Stg-II		83.17	0.00
67	कोरबा (प.) Korba(W) Comp. Ltd.		81.51	0.00
68	डी बी पावर DB Power		172.62	0.00
69	धारीवाल Dhariwal		0.19	0.00
70	जे पी निग्री Jaypee Nigre		110.51	0.00
71	जी एम आर छत्तीसगढ़ GMR Chhattisgarh		101.92	0.00
72	डी जीईएन मेगा पावर DGEN Mega Power		91.82	0.00
73	एम बी मेगा पावर MB Power		98.58	0.00
74	एपीएल मुंद्रा स्टेज-I APL Mundra Stg-I		0.00	0.00
75	एपीएल मुंद्रा स्टेज-II APL Mundra Stg-II		476.71	0.00
76	एपीएल मुंद्रा स्टेज-III APL Mundra Stg-III		57.50	0.00
77	टोरेंट सुगेन Torrent Sugen		7.70	0.00
78	मारुति कोल Maruti Coal		42.46	0.00
79	स्पेक्ट्रम Spectrum		55.62	0.00
80	झाबुआ पावर Jhabua Power		29.58	0.00
81	विंध्याचल-I VindhyaChal Stg-I		0.00	0.00
82	विंध्याचल-II VindhyaChal Stg-II		0.00	0.00
83	विंध्याचल-III VindhyaChal Stg-III		0.00	0.00
84	विंध्याचल-IV VindhyaChal Stg-IV		0.00	0.00
85	विंध्याचल-V VindhyaChal Stg-V		0.00	0.00
86	मौदा-I Mouda STPS Stg-I		0.00	0.00
87	सीपत- I Sipat Stg-I		0.00	0.00
88	सीपत-II Sipat Stg-II		0.00	0.00
89	सासन Sasan UMPP		0.00	0.00
90	एनएसपीसीएल NSPCL		0.00	0.00
91	कोरबा-III Korba-III		15.92	0.00
92	टीआरएन इनर्जी TRN Energy		0.00	0.00
93	गंधार Gandhar		0.00	0.00
94	कोरबा I &II Korba Stage I & II		3.98	0.00
95	आरकेएस पावरजेन RKM Power Gen		0.00	0.00
96	कवास Kawas		0.00	0.00
97	मौदा-II Mouda STPS Stg-II		0.00	0.00
98	एसकेएस पावरजेन SKS Powergen		84.10	0.00
99	शोलापुर एसटीपीपी Sholapur STPP		0.00	0.00
100	रलागिरी गैस पावर प्राइवेट लिमिटेड RGPLL		0.50	0.00
101	गदरवाड़ा Gadarwara		0.00	0.00
102	लारा-II LARA-II		0.16	0.00

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

POWER MARKET INFORMATION (Source IEX & PXIL)

पावर एक्सचेज के माध्यम से विनियम - माह फरवरी 2020

EXCHANGES THROUGH POWER EXCHANGES - FEBRUARY 2020

क्र. स. S. No.	क्षेत्रीय इकाई Regional Entity	क्षेत्र Region	पावर एक्सचेज के माध्यम से (मि.गु. मे)	
			विक्रय Sale	क्रय Purchase
103	आंध्र प्रदेश Andhra Pradesh	दक्षिणी क्षेत्र SR	13.43	188.55
104	कर्नाटक Karnataka		52.55	96.05
105	केरल Kerala		2.86	43.54
106	तामिळनाडु Tamilnadu		11.02	338.80
107	पौण्डिचेरी Pondicherry		0.00	0.00
108	गोवा Goa		0.00	0.00
109	लांको कॉडापल्ली LANCO_KONDPLY		0.00	0.00
110	सिमापुरी SIMHPURI		0.00	0.00
111	मोनाक्षी MINAXI		0.00	0.00
112	तेलंगाना TELANGANA		15.89	950.33
113	थर्मल पॉवर टेक Thermal Power Tech		97.42	0.00
114	कॉस्टल इंरेजन Coastal Energen		0.00	0.00
115	आई एस & एफ ऐएस IL&FS		14.74	0.00
116	सिंहाद्री-II Simhadri Stg-II		0.00	0.00
117	एनएलसी-I विस्तार NLC TPS-I (Exp)		27.19	0.00
118	एनएलसी-II स्टेज-I NLC TPS-II Stg-I		27.60	0.00
119	एनएलसी-III स्टेज-II NLC TPS-II Stg-II		42.02	0.00
120	लांको कॉडापल्ली स्टेज-III LANCO_KONDPLY STG III		0.00	0.00
121	रामागुण्डम-I Ramagundam Stg-I		9.14	0.00
122	तालचर-II Talcher Stg-II		0.00	0.00
123	रामागुण्डम-III Ramagundam Stg-III		0.00	0.00
124	एसजीपीएल Sembcorp Gayatri Pvt. Ltd.		281.85	0.00
125	एसटीइसेल वल्लूर NTECL Vallur		0.00	0.00
126	कुडगी Kudgi		0.00	0.00
127	सिंहाद्री-I Simhadri Stg-I		0.00	0.00
128	एनएलसी टीपीएस-II एक्स्प्र NLC TPS-II EXP		13.52	0.00
129	एन टी पी एल NTPL		3.40	0.00
130	एस बी जी क्लीनेटेक SBG Cleantech		0.00	0.00
131	पश्चिम बंगाल West Bengal	पूर्वी क्षेत्र ER	26.37	71.57
132	ଓଡିଶା Odisha		238.01	37.83
133	बिहार Bihar		59.54	174.00
134	झारखण्ड Jharkhand		16.86	50.08
135	सिक्किम Sikkim		5.24	0.00
136	दामोदर घाटी पारियोजना DVC		3.65	0.00
137	स्टरलाइट STARLITE		0.00	0.00
138	मैथन पावर लिमिटेड Maithon P. Ltd		0.00	0.00
139	आधुनिक पा. लिमिटेड Adhunik P.Ltd		0.35	0.00
140	चुजाचेन Chuzachen HEP		0.53	0.00
141	रंगीत Rangit HEP		0.00	0.00
142	तीस्ता Teesta HEP		0.00	0.00
143	जोएमआर कमलंगा GMR Kamalanga		3.39	0.00
144	जिल्ड आई पी टी एल JIPTL		204.78	0.00
145	जोरथांग Jorethang		8.80	0.00
146	फरक्का-III Farakka-III		8.96	0.00
147	बाढ़-II Barh Stage-II		0.00	0.00
148	कहलगाँव-II Kahalgao Stage-II		0.00	0.00
149	फरक्का Farakka		0.00	0.00
150	कहलगाँव Kahalgao		0.00	0.00
151	तालचर Talcher		0.00	0.00
152	तीस्ता-III Teesta-III		103.71	0.00
153	दिक्खु Dikchu HEP		4.60	0.00
154	ताशीदिङ Tashiding HEP		8.41	0.00
155	बीआरबीसीएल BRBCL		0.01	0.00
156	केबीयूएनएल KBUNL		0.00	0.00
157	ओपीजीसी यूनिट-IV OPGC UNIT-IV		0.00	0.00
158	अरुणाचल प्रदेश Arunachal Pradesh	पूर्वोत्तर क्षेत्र NER	0.78	0.00
159	असम Assam		100.58	49.94
160	मणिपुर Manipur		29.54	0.00
161	मेघालय Meghalaya		0.00	25.71
162	मिजोरम Mizoram		4.91	0.00
163	नागालैंड Nagaland		0.00	0.00
164	त्रिपुरा Tripura		34.05	1.19
165	अगरतला जोटीपोपी Agartala GTPP_AGO		0.00	0.00
166	कोपिली KOPILI_KP1		0.00	0.00
167	असम जीवीपीपी Assam GBPP_KTO		0.00	0.00
168	लोक्टक LOKTAK		0.00	0.00
169	रंगानदी Ranganadi		0.00	0.00
170	दोयांग Doyang		0.00	0.00
171	पलाताना Palatana		1.19	0.00
172	कोपिली-II Kopili-II		0.00	0.00
173	खड़गंग Khandong		0.00	0.00
174	बोंगाइगाँव Bongaigaon TPP		3.70	0.00
175	पारे PARE		0.00	0.00
कुल Total			4289	4289

19. RENEWABLE ENERGY CERTIFICATE MECHANISM
MONTH : FEBRUARY 2020

RE Source & Unit wise break up (01.02.2020-29.02.2020)

Sr.No	Source Wise	Accreditation		Registration	
		Capacity (MW)	Unit	Capacity (MW)	Unit
1	Wind	6	3	2	2
2	Urban or Municipal Waste	0	0	0	0
3	Solar Thermal	0	0	0	0
4	Solar PV	55	4	52	2
5	Small Hydro	24	1	0	0
6	Others	0	0	0	0
7	Geothermal	0	0	0	0
8	Biomass	0	0	0	0
9	Bio-fuel cogeneration	17	2	50	5
	Total	102	10	104	9

RECs Issued (01.02.2020-29.02.2020)

Sr.No.	Non Solar	Solar	Total
1	6724129	73346	6797475

Redemption of REC (01.02.2020-29.02.2020)

Sr.No.	Non Solar	Solar	Total
1	2100978	66010	2166988

19. RENEWABLE ENERGY CERTIFICATE MECHANISM

MONTH : FEBRUARY 2020

RE Source & Unit wise break up (Apr-Mar'20)

Sr.No	Source Wise	Accreditation		Registration	
		Capacity (MW)	Unit	Capacity (MW)	Unit
1	Wind	574	61	539	64
2	Urban or Municipal Waste	0	0	0	0
3	Solar Thermal	0	0	0	0
4	Solar PV	209	69	211	63
5	Small Hydro	54	4	54	6
6	Others	3	1	3	1
7	Geothermal	0	0	0	0
8	Biomass	28	4	24	3
9	Bio-fuel cogeneration	122	14	119	14
	Total	990	153	950	151

RECs Issued (Apr-Mar'20)

Sr.No.	Non Solar	Solar	Total
1	11378629	819614	12198243

Redemption of REC (Apr- Mar'20)

Sr.No.	Non Solar	Solar	Total
1	7317100	1038797	8355897

19. RENEWABLE ENERGY CERTIFICATE MECHANISM

MONTH : FEBRUARY 2020

RE Source & Unit wise break up Since Inception to February'20

Sr.No	Source Wise	Accreditation		Registration	
		Capacity (MW)	Unit	Capacity (MW)	Unit
1	Wind	2661	474	2613	473
2	Urban or Municipal Waste	0	0	0	0
3	Solar Thermal	0	0	0	0
4	Solar PV	863	382	848	375
5	Small Hydro	274	38	250	37
6	Others	4	2	3	1
7	Geothermal	0	0	0	0
8	Biomass	480	44	416	39
9	Bio-fuel cogeneration	837	92	378	54
	Total	5119	1032	4508	979

RECs Issued since Inception to February'20

Sr.No.	Non Solar	Solar	Total
1	56521750	9551836	66073586

Redemption of REC since Inception to February'20

Sr.No.	Non Solar	Solar	Total
1	50511148	9512109	60023257

REC Closing balance as on 29.02.2020

Sr.No.	Non Solar	Solar	Total
1	6010602	39727	6050329

20. IMPORTANT GRID EVENTS / DISTURBANCES

Northern Region-Grid Event Report for February 2020

S.No.	Region	Name of Elements (Tripped/Manually opened)	Affected Area	Owner/ Agency	Outage		Revival		Duration	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards	Energy Unserved (in MU)
					Date	Time	Date	Time						
1	NR	1) 400 KV CLP Jhajjar(CLP)-Dhanoda(HV) (HVPNL) Ckt-1 2) 660 MW Jhajjar(CLP) - UNIT 1	HARYANA	HVPNL	1-Feb-20	07:04	1-Feb-20	11:24	04:20	400 KV CLP Jhajjar(CLP)-Dhanoda(HV) (HVPNL) Ckt-1 tripped on B-N fault. At the same time, 660 MW Jhajjar(CLP) - UNIT 1 also tripped. As per PMU, B-N fault is observed in the system. In antecedent conditions, 400 KV CLP Jhajjar(CLP)-Dhanoda(HV) (HVPNL) Ckt-1 carrying 324MW and 660 MW Jhajjar(CLP) - UNIT 1 generating 375MW.	375	0	GD-1	0.00
2	NR	1) 400 KV Anpara-Sarnath (UP) Ckt-1 2) 400/220 KV 315 MVA ICT 1 at Sarnath(UP)	UTTAR PRADESH	UPPTCL	2-Feb-20	10:47	2-Feb-20	12:27	0.07	400 KV Anpara-Sarnath (UP) Ckt-1 tripped on R-B fault. At the same time, 315 MVA ICT 1 at 400/220KV Sarnath(UP) also tripped. As per PMU, R-B fault is observed in the system. In antecedent conditions, 400 KV Anpara-Sarnath (UP) Ckt-1 & 315 MVA ICT 1 at 400/220KV Sarnath(UP) carrying 475MW & 170MW respectively.	0	0	GI-2	0.00
3	NR	1) 132 KV Sewa_2(NH)-Kathua(PDD) (PG) Ckt-1 2) 132 KV Kathua(JK)-Mahanpur(JK) (PG) Ckt-1	J & K	J&K, NHPC & POWERGRID	3-Feb-20	20:42	3-Feb-20	21:36	00:54	132 KV Sewa_2(NH)-Kathua(PDD) (PG) Ckt-1 & 132 KV Kathua(JK)-Mahanpur(JK) (PG) Ckt-1 tripped on R-N fault on zone-3 protection. As per PMU, R-N fault with delayed clearance of 1760ms is observed in the system. In antecedent conditions, 132 KV Sewa_2(NH)-Kathua(PDD) (PG) Ckt-1 carrying 37MW.	0	100	GD-1	0.09
4	NR	1) 400 KV Bawana CCGTB(DTL)-Bahadurgarh(PG) (PG) Ckt-1 2) 400KV Bus 2 at Bawana CCGTB(DTL) 3) STG-1 at Bawana CCGTB(DTL)	DELHI	DTL & POWERGRID	11-Feb-20	14:48	11-Feb-20	16:00	01:12	Y phase CT of Tie CB 405 got blasted and 400kV Bus 2 at Bawana CCGTB(DTL) tripped due to operation of Bus Bar protection. 400 KV Bawana CCGTB(DTL)-Bahadurgarh(PG) (PG) Ckt-1 tripped due to tripping of Main CB (Tie CB already under shutdown) and STG-1 of 400kV Bawana CCGTB(DTL) also tripped. As per PMU, Y-N fault with delayed clearance is observed in the system. In antecedent conditions, 400 KV Bawana CCGTB(DTL)-Bahadurgarh(PG) (PG) carrying 158MW & STG-1 of 400kV Bawana CCGTB(DTL) generating 193MW.	190	0	GD-1	0.00
5	NR	1) 125 MVAR Bus Reactor No 1 at 400KV Koteswar(TH) 2) 400 KV Koteswar(TH)-Koteswar(PG) (PG) Ckt-2 3) 100 MW Koteswar HPS - UNIT 2 4) 100 MW Koteswar HPS - UNIT 4	UTTRAKHAND	POWERGRID, THDC	20-Feb-20	06:09	20-Feb-20	06:45	00:36	Bus bar 2 protection operated at Koteswar hydro during synchronization of Unit 4 at Koteswar. Unit 2-100 MW, 125 MVAR Bus Reactor & 400 KV Koteswar(TH)-Koteswar(PG) (PG) Ckt-2 also tripped. As per PMU, No fault is observed in the system. In antecedent conditions, Unit#2 generating 90MW and 400 KV Koteswar(TH)-Koteswar(PG) (PG) Ckt-2 carrying 135MW.	90	0	GD-1	0.00
6	NR	1) 400 KV Rewa Road-Panki (UP) Ckt-1 2) 400 KV Panki-Aligarh (UP) Ckt-1	UTTAR PRADESH	UPPTCL	20-Feb-20	23:35	21-Feb-20	01:48	02:13	400 KV Panki-Aligarh (UP) tripped from Panki end. At the same time, 400 KV Rewa Road-Panki (UP) also tripped on overvoltage. As per PMU, Y-N fault is observed in the system. In antecedent conditions, 400 KV Panki-Aligarh (UP) & 400 KV Rewa Road-Panki (UP) carrying 65MW & 135MW respectively.	0	0	GI-2	0.00
7	NR	1) 400 KV Gorakhpur(PG)-Motihari(BS) (PG) Ckt-1 2) 400 KV Gorakhpur(PG)-Motihari(BS) (PG) Ckt-2	UTTAR PRADESH	POWERGRID	24-Feb-20	00:52	24-Feb-20	17:35	16:43	400 KV Gorakhpur(PG)-Motihari(BS) (PG) Ckt-1&2 due to Y-N fault. As per PMU, multiple Y-N faults are observed in the system. In antecedent conditions, 400 KV Gorakhpur(PG)-Motihari(BS) (PG) Ckt-1&2 carrying 175MW & 186MW respectively.	0	0	GI-2	0.00
8	NR	1) 400 KV Allahabad(PG)-Meja TPS(MUN) (PG) Ckt-2 2) 400 KV Meja TPS(MUN)-Masoli(UP) (UP) Ckt-1	UTTAR PRADESH	POWERGRID, UPPTCL	24-Feb-20	16:33	24-Feb-20	18:15	01:42	400 KV Meja TPS(MUN)-Masoli(UP) (UP) Ckt-1 tripped because of DT received at MEJA end. 400 KV Allahabad(PG)-Meja TPS(MUN) (PG) Ckt-2 also tripped. As per PMU, No fault observed in the system. In antecedent conditions, 400 KV Meja TPS(MUN)-Masoli(UP) (UP) Ckt-1 carrying 152MW.	0	0	GI-2	0.00
9	NR	1) 500 KV HVDC Rihand-Dadri (PG) Ckt-1 2) 400 KV Rihand(NT)-Allahabad(PG) (PG) Ckt-2	UTTAR PRADESH	POWERGRID	25-Feb-20	14:05	25-Feb-20	14:47	00:42	400 KV Rihand(NT)-Allahabad(PG) (PG) Ckt-2 tripped due to R-N fault. At the same time 500 KV HVDC Rihand-Dadri (PG) Ckt-1 also tripped due to operation of short circuit protection at Rihand end. As per PMU, R-N fault is observed in the system. In antecedent conditions, 400 KV Rihand(NT)-Allahabad(PG) (PG) Ckt-2 carrying 288MW.	0	0	GI-2	0.00
10	NR	1) 400/220 KV 315 MVA ICT 4 at Daulatabad(HV) 2) 400/220 KV 315 MVA ICT 1 at Daulatabad(HV) 3) 400/220 KV 315 MVA ICT 2 at Daulatabad(HV) 4) 400KV Bus 1 at Daulatabad(HV) 5) 400KV Bus 2 at Daulatabad(HV) 6) 400 KV Dhanoda-Daulatabad (HV) Ckt-2 7) 400 KV Gurgaon(PG)-Daulatabad(HV) (HV) Ckt-1 8) 400 KV Dhanoda-Daulatabad (HV) Ckt-1 9) 400 KV Gurgaon(PG)-Daulatabad(HV) (HV) Ckt-2	HARYANA	HVPNL	26-Feb-20	13:26	26-Feb-20	14:48	01:22	400 KV Daulatabad(HV) - Jhajjar (APCL) ckt 1 got tripped due to B-N fault. Consequently, 400 KV Daulatabad(HV) - Jhajjar (APCL) ckt 2 and other elements connected to 400 KV Daulatabad(HV) also got tripped. As per PMU, B-N fault with delayed clearance is observed in the system. In antecedent conditions, 315 MVA ICT 1, 315 MVA ICT 2, 315 MVA ICT 3 & 315 MVA ICT 4 at Daulatabad(HV) carrying 97MW, 88MW, 95MW & 94MW respectively.	0	400	GD-1	0.59
11	NR	1) 400/220 KV 315 MVA ICT 1 at Amargarh(NRSS XXIX) 2) 400/220 KV 315 MVA ICT 2 at Amargarh(NRSS XXIX)	J&K	NRSS29 & J&K	29-Feb-20	11:29	29-Feb-20	14:38	03:09	400/220 KV 315 MVA ICT 1 & 315 MVA ICT 2 at Amargarh(NRSS XXIX) tripped due to s-4 over current operated of Amargarh Ziankot line. As per PMU, R-N fault is observed in the system in antecedent conditions, 400/220 KV 315 MVA ICT 1 & 315 MVA ICT 2 at Amargarh(NRSS XXIX) carrying 177MW each.	0	280	GD-1	0.91

Western Region-Event Report for February 2020

S.No	Region	Name of Elements	Owner/Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA standards	Energy Unserved (MU)
				Date	Time	Date	Time						
1	WR	Tripping of 1.400 kV Ranchodpura Bus 1 2.400 kV Ranchodpura- Dehgam 1&2 3.400 kV Ranchodpura-Bhachau 1 4.400 kV Ranchodpura-Chorania 1&2 5.400 kV Ranchodpura-Veloda 6.400 kV Ranchodpura-Kansari 7.400 kV/ 220 kV Ranchodpura ICTs 2,3&4	GETCO	5-Feb-20	14:32	5-Feb-20	14:49	00:17	400 kV Ranchodpura Bus 2 was under planned outage for AMP work from 10:23 Hrs/05.02.2020. 400 kV Ranchodpura Bus 1 and all connected elements tripped on B/B protection operation due to kite thread which got stuck up on B-Phase of Bus-1.	Nil	Nil	GI-2	Nil
2	WR	Tripping of 1.220 kV Chegaon-Khandwa 2 2.220 kV Chegaon- Nirmani 2 3.220 kV Chegaon- Neepnagar 4.220 kV Chegaon- Omkareshwar 5.400/220 kV Chegaon ICT 1&2 6.400 kV Chegaon-Julwania	MPPTCL	7-Feb-20	06:40	7-Feb-20	07:01	00:21	220kV Khandwa- Chegaon 2 tripped on R-ph fault on Zone 1 DPR operation due to conductor snapping. 220 kV Nirmani 2, Nepanagar and Omkareshwar feeders tripped from remote end on Zone 2 distance protection operation. 400/220 kV Chegaon ICT 1 tripped on Back up E/F protection operation. 400/220 kV Chegaon ICT 2 tripped on Differential protection operation for through fault. 400 kV Chegaon-Julwania also tripped during the event.	Nil	Nil	GI-1	Nil
3	WR	Tripping of 1.220 kV Jetpura-Astha 1&2 2.220 kV Jetpura- Indore 1&2 3.220 kV Jetpura-Indore North Zone(Tap) 4.220 /132 kV Jetpura ICTs 1,2&3	MPPTCL	7-Feb-20	09:25	7-Feb-20	10:23	00:58	As per information received from MP SLDC, 220/132kV 40MVA Jetpura ICT 1 caught fire 19:25 Hrs and all ICTs and feeders emanating from 220kV Jetpura (Indore MP) substation tripped.	Nil	400	GD-1	0.3867
4	WR	Tripping of 1.400 kV Kolhapur(PG) Bus 2 2.400 kV Kolhapur(PG)-Kolhapur 1&2 3.400 kV Kolhapur(PG)-Mapusa 1	PGCIL	7-Feb-20	13:00	7-Feb-20	13:43	00:43	At 400 kV Kolhapur (PG) s/s, CB testing of 404 bay(Kudgi 2 Main bay) was going on. DCRM was completed and timing test was in progress before the event. At 12:59 Hrs, DC source-2 E/F alarm appeared in the SCADA system. At 13:00 Hrs, DC Source-1 E/F appeared and with DC source 2 E/F already present in the system, tripping of the 400 KV Bus 2 occurred alongwith all the connected elements on gas zone detection relay operation. 407(Kolhapur 1) and 410 (Kolhapur 2) Main bays connected to Bus 1 also tripped due to input received from gas zone detection relay.	Nil	Nil	GI-2	Nil
5	WR	Tripping of 1.220kV Tarapur 1&2- Vapi 2.220kV Tarapur 1&2- Boisar(M) 3.220kV Tarapur 1&2- Bhilad 4.220kV Tarapur 1&2- Tarapur 3&4 5.220kV TAPS 1&2 Bus-3. 6.Tarapur Unit-4	NPCIL	8-Feb-20	17:11	8-Feb-20	17:44	00:33	At 17:11 Hrs, B phase fault on 220 kV Tarapur-Bhilad was cleared at Bhilad end but the DPR at TAPS end did not operate and the fault was fed by the other connected elements. 220 kV Tarapur-Boisar tripped on Backup protection from Tap 1&2 end. 220 kV Tarapur-Vapi tripped at Vapi end only on Backup protection. With de-energization of 220 kV Bus 3 (with the opening of bus sectionalizer) at Taps 1&2 and the tripping of 220 kV Bus coupler at TAPS 3&4, 220 kV Bus 1 at TAPS 3&4 de-energised and resulted in tripping of TAPS Unit 4.	540	Nil	GI-1	Nil
6	WR	Tripping of 1.220kV Xeldem-Ambewadi	Goa	10-Feb-20	14:54	10-Feb-20	18:44	03:50	220KV Xeldem-Ponda was under outage for bunching arrangement of 220kV Ambewadi-Ponda (AP-II) line with 220kV PXR-I line from 06:34 Hrs on 10-02-2020. 220kV Xeldem-Ambewadi tripped at 14:54 on Y-B fault resulted in blackout of Xeldem substation.	Nil	80	GD-1	0.0800
7	WR	Tripping of 1.220KV Khadoli-Sayali 2.220KV Khadoli-Vaghchhipa	DNH	10-Feb-20	15:25	10-Feb-20	16:05	00:40	220KV Kala-Khadoli-1 was under forced outage from 06:05 Hrs on 10-02-2020. Emergency outage of 220KV Kala-Khadoli-2 which was on multi circuit tower was facilitated on request of DNH to restore 220KV Kala-Khadoli-1 at 15:24:40 Hrs. At 15:24:56 Hrs, R phase Jumper of 220 kV Khadoli-Vaghchhipa got open at location 59 and created R-Y phase fault causing tripping of 220 khadoli-Vaghchhipa and 220 kV Khadoli-Sayali.	Nil	250	GD-1	0.1667
8	WR	Tripping of 1.400 kV MB Power-Jabalpur 1 2.600 MW MB Power Unit 1	MB Power	22-Feb-20	16:16	22-Feb-20	16:55	00:39	Emergency shutdown on 400 kV MB Power - Jabalpur -2 along with A/R of ckt-1 was availed by Powergrid at 10:14hrs for attending damaged conductor between span 16-17 and at loc no 208. At 16:16hrs 400 kV MB Power -Jabalpur ckt-1 tripped on R-E fault leading to blackout at 400 kV MB Power Station.	540	Nil	GD-1	Nil

Disclaimer : The Above details are based on the preliminary/flash report of the event and may change after finalisation of the detailed report.The quantum of load/generation loss is based on details given by SLDC and utility and may vary later with updated details.

Southern Region-Grid Event Report for February 2020

Sl. 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	Energy Unserved (MU)
				Date	Time (Hrs)	Date	Time (Hrs)						
1	SR	i. 220kV ITPL - Hoody ii. 220kV EPIP-ITPL	KPTCL	20-Feb-20	00:30	20-Feb-20	01:02	32 mins	Complete outage of 220kV EPIP and ITPL stations of KPTCL: Triggering incident was tripping of 220kV ITPL - Hoody line on Y-phase cable termination fault. Tripping of incoming feeder resulted in complete loss of supply at 220kV EPIP and 220kV ITPL stations.	----	125 MW	GD-1	0.07
2	SR	i. 400kV Raichur - Mahboobnagar 400Raichur - BTPS 400kV Raichur - Munirabad	ii. iii. KPCL	10-Feb-20	03:31	10-Feb-20	09:53	6 hrs 22 mins	Tripping of Bus-2 at 400kV Raichur: Bus-2 at 400kV Raichur tripped on operation of bus bar protection due to heavy surface conduction at switchyard. 400kV Raichur-Manbubnagar, 400kV Raichur - BTPS and 400kV raichur - Munirabad lines tripped during th event.	----	----	GI-2	-----

Eastern Region-Grid Event Report for February 2020

Sl. No.	Region	Name of major elements tripped	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA Grid Standards	Loss of Energy(in MU)
				Date	Time	Date	Time						
1	ERLDC	220 KV Bidhannagar Waria D/C 220 KV Bidhannagar DPL D/C 220 KV Bidhannagar Asansol S/C 220 KV Bidhannagar JK Nagar S/C 220 KV Bidhannagar BKTPP D/C 2 x 315MVA 400/220KV ICTs at Bidhannagar 3 x160MVA 220/132kV ICTs at Bidhannagar Unit #7 and #8 at DPL	WBSETCL	1-Feb-20	21:05	1-Feb-20	21:35	00:30	At 21:05 hrs both 220kV buses at Bidhannagar S/S tripped on Bus differential protection due to failure of 220kV Bus Coupler CT resulting into tripping of all 220kV outgoing feeders connected at Bidhannagar, 2 x 315MVA 400/220kV ICTs at Bidhannagar, 3 x 160MVA 220/132kV ICTs at Bidhannagar and two running units (unit #7 & #8) of DPL due to loss of evacuation path. There is a load loss of approx. 300 MW around Bidhannagar, DPL embedded area and Ukhra.	350	300	GD-1	0.1500
2	ERLDC	220 KV Muzaffarpur - Hajipur D/C 220 KV Hajipur - Amnour D/C	BSPTCL	9-Feb-20	12:53	9-Feb-20	13:38	00:45	At 12:53 hrs, 220 KV Muzaffarpur-Hajipur D/C tripped due to bus bar protection operation at Hazipur leading to tripping of all feeders connected to 220 KV Hajipur S/S, causing load loss at Hajipur, Amnour, Siwan, Chhapra, Hathua, New Siwan(Raghunathpur) & Gopalganj (traction load loss ofapprox. 25MW at Hajipur, Siwan, Chhapra)	0	183	GD-1	0.1373
3	ERLDC	220 kV Hajipur - Amnour D/C	BSPTCL	10-Feb-20	17:32	10-Feb-20	17:52	00:20	At 17:32 hrs, 220 KV Hajipur-Amnour D/c tripped leading to load loss of 142 MW at Amnour, Siwan, Chhapra, Hathua, New Siwan(Raghunathpur) & Gopalganj (traction load loss of approx. 15MW at Siwan, Chhapra).	0	142	GD-1	0.0473
4	ERLDC	220 KV Kharagpur-Vidyasagar Park D/c 220 KV Kharagpur-Egra D/c 3 x 315 MVA 400/220 KV ICTs at Kharagpur 2 x 160 MVA 220/132 KV ICTs at Kharagpur	WBSETCL	11-Feb-20	08:33	11-Feb-20	09:19	00:46	220 KV Kharagpur-Midnapur D/c under planned shutdown. At 08:33 Hrs, LBB of 220 KV Kharagpur-Vidyasagar Park I operated due to closing of earth switch at Kharagpur end resulting into tripping of both 220 KV buses at Kharagpur and total power failure at Vidyasagar Park and Egra.	0	43	GD-1	0.0330
5	ERLDC	HVDC Talcher-Kolar Pole-2	ISTS	17-Feb-20	17:38	17-Feb-20	18:32	00:54	On 17th Feb 2020, at 17:38 hrs HVDC Talcher-Kolar Pole-2 tripped due to persistent DC line fault. Before tripping the flow on Bipole was 2000 MW and in post outage, flow on Pole-1 jumped to 1250 MW from 1000 MW. After 30 seconds, it came down to 1000 MW and after 75 seconds, flow through the link was 150 MW as per ground return scheme. Due to generation of SPS -3 signal, generation breakdown of 666 MW occurred at Talcher. At same time, generation reduction occurred at GMR and JITPL also.	836	0	GI-2	0.0000
6	ERLDC	Unit 1 & 2 at MPL	ISTS	20-Feb-20	06:14	20-Feb-20	12:25	06:11	Both the units at MPL was running with 525 MW generation. At 6:14:02 hrs. CW pump 1A,1C and ACW Pump 1A Tripped followed by initiation of Vacuum Very low trip signal at 06:14:54 hrs and subsequently tripping of turbine resulted tripping of unit #1 at MPL on Class – B protection. At 6:14:00 hrs. MFT of unit #2 occurred due to loss of all fuel as all 6.6KV and 415V bus section got Tripped .	1050	0	GI-2	0.0000
7	ERLDC	220 kV Tashiding - New Melli S/C 220 kV Tashiding - Rangpo S/C 220 kV Rangpo - New Melli - S/C	ISTS	25-Feb-20	08:14	25-Feb-20	08:58	00:44	At 08:14 hrs 220 KV Tashiding - New Melli S/C, 220 KV Tashiding - Rangpo S/C, 220 KV Rangpo - New Melli - S/C tripped resulting total power failure at New Melli and Tashiding S/S and tripping of unit #2 at Tashiding due to loss of evacuation path. At the time of the incident, heavy thunderstorm and inclement weather were reported.	48.5	0	GD-1	0.0000

North Eastern Region-Grid Disturbances Report for February 2020

Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Revival	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
1	NER	132 kV Monarchak-Rokhia line	TSECL	20-Feb-20 12:42	20-Feb-20 13:01	0:19:00	Udaipur area of Tripura Power System & Monarchak Power Station were connected with rest of NER Grid through 132 kV Monarchak - Rokhia Line. 132 kV Palatana - Udaipur Line was under Planned S/D w.e.f 07:10 hrs of 18.02.20. At 12:42 Hrs on 20.02.20, 132 kV Monarchak - Rokhia Line tripped. Due to tripping of this element, Udaipur area of Tripura Power System & Monarchak Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	58	26	0.018	0.008	GD 1
2	NER	132 kV Balipara-Tenga Line	DoP, Arunachal Pradesh	24-Feb-20 13:33	24-Feb-20 13:57	0:24:00	Khupi area of Arunachal Pradesh Power System and Dikshi Power Station were connected with rest of NER Grid through 132 kV Balipara - Tenga line. At 13:33 Hrs on 24.02.2020, 132 kV Balipara - Tenga line tripped. Due to tripping of this element, Khupi area of Arunachal Pradesh Power System and Dikshi Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	4	24	0.0016	0.0096	GD 1
3	NER	132 kV Lumshnong - Panchgram line	AEGCL & MePTCL	25-Feb-20 23:56	26-Feb-20 00:17	0:21:00	Lumshnong area of Meghalaya Power System was connected with rest of NER Grid through 132 kV Lumshnong - Panchgram line (132 kV Lumshnong - Khleihriat line was kept open to control over loading of 132 kV Umiam 1 - Umium 3 D/C since 19.02.20). At 23:56 Hrs on 25.02.2020, 132 kV Lumshnong - Panchgram line tripped. Due to tripping of this element, Lumshnong area of Meghalaya Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	21	0	0.0070	GD 1

North Eastern Region-Grid Incidences Report for February 2020

Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Revival	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
1	NER	BgTPP Unit -3	NTPC	03-Feb-20 11:35	03-Feb-20 12:15	0:40:00	BgTPP Unit-3 tripped at 11:35 Hrs on 03-02-20 due to Loss of Fuel. Revision done from Block No.50 on 03-02-20.	240	0	0.160	0	GI 2
2	NER	AGBPP Unit- 2 & 4	NEEPCO	06-Feb-20 01:42	06-Feb-20 02:45	1:03:00	AGBPP Unit-2 & 4 tripped at 01:42 Hrs on 06-02-20 due to Tripping of Gas Compressor. Revision done from Block No.12 on 06-02-20.	56	0	0.060	0	GI 2
3	NER	AGBPP Unit- 6	NEPCO	07-Feb-20 10:28	07-Feb-20 11:15	0:47:00	AGBPP Unit-6 tripped at 10:28 Hrs on 07-02-20 due to Oil Leakage in Retchet Motor. Revision done from Block No.46 on 07-02-20.	29.5	0	0.030	0	GI 2
4	NER	AGBPP Unit- 2	NEEPCO	08-Feb-20 12:32	08-Feb-20 13:30	0:58:00	AGBPP Unit-2 tripped at 12:32 Hrs on 08-02-20 due to due to tripping of Gas Compressor IV. Revision done from Block No.55 on 08-02-20.	30	0	0.030	0	GI 2
5	NER	AGBPP Unit- 6	NEEPCO	17-Feb-20 08:25	17-Feb-20 9:00	0:35:00	AGBPP Unit-6 tripped at 08:25 Hrs on 17-02-20 due to tripping of Air Cooled Condenser Fans. Revision done from Block No.37 on 17-02-20.	20	0	0.010	0	GI 2
6	NER	Palatana Module- 2	OTPC	19-Feb-20 03:41	19-Feb-20 04:30	0:49:00	Palatana Module 2 tripped at 03:41 Hrs on 19-02-20 due to Rotor earth fault in GTG . Revision done from Block No 19 on 19-02-20.	341	0	0.280	0	GI 2
7	NER	AGBPP Unit- 2	NEEPCO	19-Feb-20 13:00	19-Feb-20 13:45	0:45:00	AGBPP Unit-2 tripped at 13:00 Hrs on 19-02-20 due to tripping of Gas compressor . Revision done from Block No.56 on 19-02-20.	28	0	0.050	0	GI 2
8	NER	AGBPP Unit-2	NEEPCO	22-Feb-20 12:45	22-Feb-20 13:30	0:45:00	AGBPP Unit- 2 tripped at 12:45 Hrs on 22-02-20 due to tripping of gas compressor-3. Revision done from Block No 55 on 22-02-20.	26.7	0	0.020	0	GI 2

21. NEW ELEMENTS COMMISSIONED* IN FEBRUARY 2020							
COMMISSIONING OF NEW GENERATING UNITS							
REGION	S.NO.	CONSTITUENT	UNIT NAME / LOCATION		UNIT NO	CAPACITY (MW)	DATE
NR	1	CLEAN SOLAR POWER	Clean Solar Energy Power Ltd. / Bhadla (Rajasthan)			(250+250)*	26.02.2020
WR	1	SECI	GIWEL II(Wind)/Gujarat	1	250**	07-02-2020	
	2	NTPC	Lara/Chhatisgarh	2	800	14-02-2020	
SR		NNTPP_NLCIL	NNTPP_NLCIL	2	500	26-02-2020	
* COD of additional 100MW(each) capacity ** COD of additional (231+19)MW capacity							
COMMISSIONING OF NEW ICTs							
REGION	S.NO.	CONSTITUENT	VOLTAGE LEVEL	SUB-STATION	ICT NO	CAPACITY (MVA)	DATE
WR	1	KTL	765/400	Khandwa-KTL	2	1500	29-02-2020
SR	1	TS	400 / 220	Sundilla	4	315	14-02-2020
ER	1	NTPC	400/132	Kahalgaon	2		10-02-2020
COMMISSIONING OF NEW TRANSMISSION LINES							
REGION	S.NO.	CONSTITUENT	LINE NAME		CKT NO	VOLTAGE (kV)	DATE
NR	1	UPPTCL	400 kV Noida Sec 148-Noida Sec 123		1 & 2	400	11.02.2020
	2	RVUNL	400 kV DC Chabra(CTPS)-CSCTPS		1	400	02.02.2020
WR	1	PGCIL	Champa-Kurukshetra		4	800	21-02-2020
	2	KTL	Khandwa Pool-Indore		1	765	26-02-2020
SR	1	TN	400 kV Manali - Alamaty Line		1	400	12-02-2020
	2	TN	230kV Arasur (400/230kV Power Grid ss) - Thirupur(TN)		1	220	24-02-2020
ER	1	OPTCL	400 kV Meramundai-Mendhasal		2	400	29-02-2020
	2	PGCIL	400kV Talcher Meeramundai 2		2	400	01-02-2020
LILO OF TRANSMISSION LINES							
REGION	SL. NO.	CONSTITUENT	LINE NAME		LILO AT	VOLTAGE (kV)	DATE
COMMISSIONING OF BUS/LINE REACTORS							
REGION	SL. NO.	CONSTITUENT	SUB-STATION		VOLTAGE LEVEL	CAPACITY (MVAR)	DATE
NR	1	Rajasthan	Bikaner-Moga		765	330	24.02.2020
WR	1	KTL	Khnadwa		765	240	27-02-2020
ER	1	PGCIL	Purnea-Kishangang		400	63	15-02-2020
SR	1	AP	Krishnapatnam		400	80	20-02-2020
COMMISSIONING OF FACTS DEVICE/SYSTEM							
REGION	SL. NO.	NAME	SUB-STATION/CONSTITUENT		RATINGS	VOLTAGE (kV)	DATE

*Includes first time charging (FTC) as well

22. Voltage Profile

विद्युत विभव रूपरेखा माह - फरवरी 2020

VOLTAGE PROFILE - February 2020

Date of reporting: 05-Mar-20

क्र.सं. Sl. No.	ज़ेरी 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)	Number of hours voltage was outside IEGC band during month	उच्चतम (कि.वो.) Maximum(kV)	निम्नतम(कि.वो.) Minimum(kV)	औसत (कि.वो.) Average(kV)
1	पूर्वी क्षेत्र ER	अग्रल ANGUL	0%	100%	0%	0%	0	803	748	780
2		गया GAYA	0%	100%	0%	0%	0	793	755	777
3		झारसूडा JHARSUGUDA	0%	92%	8%	8%	58	808	772	792
4		रांची RANCHI	0%	100%	0%	0%	0	795	765	782
5		सासाराम SASARAM	0%	100%	0%	0%	0	779	740	761
1	उत्तरी क्षेत्र NR	आगरा AGRA	0%	100%	0%	0%	0	802	747	781
2		आगरा (फतेहबाद) AGRA (FATEHABAD)	0%	88%	12%	12%	81	811	729	788
3		अनपरा औं ANPARA-C	0%	100%	0%	0%	0	785	758	772
4		अनपरा डॉ ANPARA-D	0%	100%	0%	0%	0	784	760	773
5		अटा ANTA	0%	100%	0%	0%	0	800	756	781
6		बलिया BALLIA	0%	100%	0%	0%	0	797	755	777
7		भिवानी BHIWANI	0%	99%	1%	1%	8	802	750	783
8		बरली BAREILLY	0%	89%	11%	11%	78	810	760	789
9		फतेहपुर FATEHPUR	0%	100%	0%	0%	0	794	740	768
10		ग्रेटर नोएडा GREATER NOIDA	0%	92%	8%	8%	53	807	756	789
11		झाटकरा JHATIKARA	0%	100%	0%	0%	3	805	749	779
12		कानपुर ज़ोआइएस KANPUR GIS	0%	100%	0%	0%	0	798	756	781
13		लखनऊ LUCKNOW	0%	96%	4%	4%	29	805	763	787
14		लालितपुर LALITPUR	1%	99%	0%	1%	6	802	717	774
15		मेरठ MEERUT	0%	99%	1%	1%	5	805	746	782
16		मोगा MOGA	0%	100%	0%	0%	0	804	739	773
17		फागा PHAGI	0%	100%	0%	0%	0	801	746	782
18		वाराणसी VARANASI	0%	100%	0%	0%	1	802	761	783
19		उत्राव UNNAO	0%	100%	0%	0%	0	790	746	771
1	पश्चिमी क्षेत्र WR	अकोला AKOLA	0%	100%	0%	0%	0	796	751	772
2		आरगांवाद AURANGABAD	0%	100%	0%	0%	0	803	750	777
3		भापल (बोडीटोसाएल) BHOPAL (BDTCL)	0%	100%	0%	0%	0	795	746	772
4		बिलासपुर BILASPUR	0%	100%	0%	0%	0	784	760	774
5		बोना BINA	0%	100%	0%	0%	0	797	753	780
6		चापा CHAMPA	0%	100%	0%	0%	0	800	770	787
7		धरमचग्याह DHARAMJAIGARH	0%	100%	0%	0%	0	791	746	776
8		धुले (बोडीटोसाएल) DHULE (BDTCL)	0%	100%	0%	0%	0	800	747	772
9		एकनुंगी EKTUNI	0%	100%	0%	0%	0	794	746	770
10		ग्वालियर GWALIOR	0%	100%	0%	0%	0	801	748	782
11		इंदौर INDORE	0%	100%	0%	0%	0	796	749	770
12		जबलपुर JABALPUR	0%	100%	0%	0%	0	800	759	783
13		कारडी KORADI	0%	100%	0%	0%	0	780	750	766
14		पुणे PUNE	0%	100%	0%	0%	0	800	749	783
15		रायगढ़ प्रॉलिंग RAIGARH POOLING	0%	100%	0%	0%	0	797	769	785
16		रायपुर प्रॉलिंग RAIPUR POOLING	0%	100%	0%	0%	0	797	765	780
17		सासान SASAN	0%	100%	0%	0%	0	779	756	770
18		सतना SATNA	0%	100%	0%	0%	0	788	749	775
19		सिवनी SEONI	0%	100%	0%	0%	0	797	760	780
20		सिपत SIPAT	0%	100%	0%	0%	0	783	760	773
21		सालापुर SOLAPUR	0%	99%	1%	1%	4	809	755	782
22		तामना TAMNAR	0%	100%	0%	0%	0	796	771	785
23		तिराड़ा TIRORA	0%	100%	0%	0%	0	773	750	762
24		वडोदरा VADODARA	0%	100%	0%	0%	0	798	764	780
25		विध्वानर प्रॉलिंग VINDHYACHAL PS	0%	100%	0%	0%	0	781	756	772
26		वर्धा WARDHA	0%	100%	0%	0%	1	806	756	781
1	दक्षिणी क्षेत्र SR	कन्नूर KURNool	0%	100%	0%	0%	0	798	744	777
2		नेल्लूर प्रॉलिंग NELLORE PS	0%	100%	0%	0%	0	798	751	779
3		रायपुर RAICHUR	0%	100%	0%	0%	0	797	750	778
4		निजामाबाद NIZAMABAD	0%	93%	7%	7%	47	823	743	784
5		श्रीकाकुलम SRIKAKULAM	0%	92%	8%	8%	55	823	743	785
6		तिरुवृत्तम THIRUVALEM	0%	100%	0%	0%	0	801	740	776
1	पूर्वोत्तर क्षेत्र NER	अजारा AZARA (400 kV)	0%	100%	0%	0%	0	415	403	409
2		बालिपारा BALIPARA (400 kV)	0%	100%	0%	0%	1	424	390	407
3		बिस्वनाथ चारेओली BISWANATH CHARIALI (400 kV)	0%	100%	0%	0%	0	423	387	406
4		बोंगाइगांव BONGAIGAON (400 kV)	0%	100%	0%	0%	0	417	397	408
5		बोंगाइगांव टीपोलिंग BONGAIGAON TPS (400 kV)	0%	100%	0%	0%	1	420	398	410
6		बानेहाट BYRNTHAT	0%	100%	0%	0%	0	415	403	409
7		पालाताना PALATANA (400 kV)	0%	96%	4%	4%	29	424	384	411
8		रांगनाडी RANGANADI (400 kV)	0%	83%	17%	17%	119	432	395	414
9		मीसा MISA (400 kV)	0%	98%	2%	2%	11	425	393	409
10		सिलचर SILCHAR (400 kV)	3%	92%	5%	8%	56	425	350	407

All listed stations are 765 kV stations unless otherwise mentioned

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

23. List of Outages of Elements monitored by NLDC for the month of February-2020

S. No.	Name of Transmission Element	Type of the element	Region Involved	Category	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Outage Duration	Number of Cumulative tripping in the month
Inter Regional Elements									
1	132 kV Rihand-Garwah 1	Line	ER/NR	TS	23-02-2020 20:49	Due to Tripping of 132KV Bus Bar at Pipri Sub station in Directional Over current Fault	23-02-2020 23:50	3:01:00	1
2	132 kV Rihand-Sone nagar 1	Line	ER/NR	TS	23-02-2020 20:49	Due to Tripping of 132KV Bus Bar at Pipri Sub station in Directional Over current Fault	24-02-2020 06:44	9:55:00	1
3	132kV Ranapratap Sagar-Gandhi Sagar 2	Line	WR/NR	SE	21-02-2020 13:50	For attending red hot point on wave trap and replacement of damaged wave trap at Gandhi Sager end	21-02-2020 18:03	4:13:00	0
4	220 kV Alipurduar-Salakathi-I	Line	ER/NER	SO	12-02-2020 10:25	For Regular AMP of Bay equipment's.	12-02-2020 16:55	6:30:00	0
5	220 kV Alipurduar-Salakathi-II	Line	ER/NER	SO	13-02-2020 09:56	for Regular AMP of Bay equipment's.	13-02-2020 18:08	8:12:00	0
6	220 kV Balimela - U.Sileru	Line	ER/SR	SC	03-02-2020 18:02	Dismantling of existing isolator and erection of new isolators (line is anti theft charged from upper sileru)	18-02-2020 22:10	364:08:00	0
7	220 kV Budhipadar-Korba-II	Line	ER/WR	SC	01-02-2020 10:10	Diversion of 220 KV Korba Budhipadar D/C for construction of OPGC, MGR line.	26-02-2020 08:24	598:14:00	0
8	220 kV Budhipadar-Korba-III	Line	ER/WR	TS	07-02-2020 02:56	220 KV Budhipadar-Korba Ckt-III CB tripped at Budhipadar end only with 3Phase Master Trip Relay(85 LO Operated) & no other relay indications	07-02-2020 06:38	3:42:00	1
9	220 kV Budhipadar-Raigarh	Line	ER/WR	SC	01-02-2020 10:10	Diversion of 220 KV Korba Budhipadar D/C for construction of OPGC, MGR line.	25-02-2020 23:23	589:13:00	0
10	220 kV Malanpur-Auraiya	Line	WR/NR	SO	11-02-2020 10:04	For line maintenance work	11-02-2020 18:44	8:40:00	0
11	220 kV Mehtaon-Auraiya	Line	WR/NR	SO	17-02-2020 14:58	Line maintenance work	17-02-2020 19:56	4:58:00	0
12	220 kV Mehtaon-Auraiya	Line	WR/NR	SE	18-02-2020 05:38	Spark in Y-ph line side isolator at Auraiya end	18-02-2020 16:05	10:27:00	0
13	220 kV Mudasangti (Kolhapur)-Chikkodi	Line	WR/SR	SO	24-02-2020 09:00	For replacement of earth wire sanctioned under MBR - 1739	25-02-2020 20:32	35:32:00	0
14	220kV Xeldorf-Ambewadi	Line	WR/SR	SO	01-02-2020 13:17	CT replacement work at ambewadi	02-02-2020 15:06	25:49:00	0
15	220kV Xeldorf-Ambewadi	Line	WR/SR	TL	10-02-2020 11:02	Tripped at Xeldorf S/s at on earth fault.	10-02-2020 11:18	0:16:00	1
16	220kV Xeldorf-Ambewadi	Line	WR/SR	SE	11-02-2020 09:40	Manually hand-tripped due to sparking in CB at Ambewadi end.idle charged with new bunching arrangement from Ambewadi end at 17:47 Hrs./ 13.02.2020	14-02-2020 10:44	73:04:00	1
17	220kV Xeldorf-Ambewadi	Line	WR/SR	SE	20-02-2020 16:56	Heavy arcing observed in line GO.	20-02-2020 18:51	1:55:00	1
18	220kV Xeldorf-Ambewadi	Line	WR/SR	SO	29-02-2020 10:13	220kV BUS Shut down Work at Ambewadi	29-02-2020 19:40	9:27:00	1
19	400 kV Barh-Gorakhpur-I	Line	ER/NR	TL	24-02-2020 00:52	Gorakhpur end: Y-N fault, F/C=1.7 KA	24-02-2020 17:35	16:43:00	1
20	400 kV Barh-Gorakhpur-I	Line	ER/NR	TS	25-02-2020 07:41	DT received at Gorakhpur end	25-02-2020 09:55	2:14:00	2
21	400 kV Barh-Gorakhpur-I	Line	ER/NR	TL	26-02-2020 12:30	Tripped on R-N fault. Fault current- 1.13 KA	26-02-2020 17:53	5:23:00	3
22	400 kV Barh-Gorakhpur-I	Line	ER/NR	SO	01-02-2020 00:00	As contingency arrangement stringing works of the tl between location no. 530 to location no. 532 has to be done to make the mentioned ckt.s as 400 kv barh-gorakhpur -1 and 2 bypassing motihari	05-02-2020 18:57	114:57:00	3
23	400 kV Barh-Gorakhpur-II	Line	ER/NR	TL	24-02-2020 00:52	Gorakhpur end: Y-N fault, F/D=230.12 KM. From Barh end: Y-N fault, F/D=97.17 KM, F/C=3.86 KA	24-02-2020 18:50	17:58:00	1
24	400 kV Bhadravati-Ramagundam-I	Line	WR/SR	MO	23-02-2020 09:42	Extension bay Jumpering Works(Clearance between Bus 1 Jack Bus and A1:P38 2 very less	23-02-2020 21:36	11:54:00	0
25	400 kV Bhadravati-Ramagundam-II	Line	WR/SR	MO	23-02-2020 10:20	Extension bay Jumpering Works(Clearance between Bus 1 Jack Bus and A1:P38 2 very less	24-02-2020 09:12	22:52:00	0
26	400 kV Jharsuguda-Raigarh-II	Line	ER/WR	MO	25-02-2020 12:37	Manually opened due to High Voltage.	25-02-2020 13:46	1:09:00	0
27	400 kV Kolhapur-Kudgi-II	Line	WR/SR	SO	07-02-2020 10:04	AMP Works	07-02-2020 19:47	9:43:00	0
28	400 kV Muzaffarpur-Gorakhpur-I	Line	ER/NR	SO	03-02-2020 10:12	For AMP work at Gorakhpur S/s.	03-02-2020 19:22	9:10:00	0
29	400 kV Muzaffarpur-Gorakhpur-II	Line	ER/NR	SO	04-02-2020 10:23	For AMP work at Gorakhpur S/s.	04-02-2020 20:35	10:12:00	0
30	400 kV Patna-Balia-II	Line	ER/NR	TS	19-02-2020 22:09	DT received at Balia	19-02-2020 23:28	1:19:00	1
31	400 kV Patna-Balia-III	Line	ER/NR	SO	05-02-2020 09:34	replacement of insulator at loc no 307	05-02-2020 18:51	9:17:00	0
32	400 kV Patna-Balia-IV	Line	ER/NR	SO	06-02-2020 09:30	replacement of insulator at loc no 342(top ph)	06-02-2020 21:20	11:50:00	0
33	400 kV Sasaram-Varanasi	Line	ER/NR	SO	26-02-2020 10:15	For replacement of insulators at road crossing	27-02-2020 00:01	13:46:00	0
34	400 kV Shujalpur-RAPP-I	Line	WR/NR	SE	25-02-2020 14:28	Hotspot in Line Isolator 41389L B Phase at Shujalpur.	25-02-2020 17:30	3:02:00	0
35	400 kV Shujalpur-RAPP-II	Line	WR/NR	SE	20-02-2020 17:01	For attending hotspot in Line Isolator 41889L R Phase at Shujalpur	20-02-2020 19:28	2:27:00	0
36	400 kV Siliguri-Bongaigaon-II	Line	ER/NER	SO	11-02-2020 10:47	New Travelling wave Fault locator relayretrofitting & commissioning	11-02-2020 17:36	6:49:00	0
37	400 kV Zerda-Bhinmal	Line	WR/NR	SE	26-02-2020 12:13	To attend the hotspot	26-02-2020 18:22	6:09:00	0
38	400 kV Zerda-Kankaroli	Line	WR/NR	SC	27-02-2020 11:10	for foundation and erection work of new bay for it's conversion as a switchable line reactor.	27-02-2020 12:10	1:00:00	0
39	765 kV Gaya-Balia	Line	ER/NR	SO	15-02-2020 09:05	For strengthening of 765 kv line tower	15-02-2020 19:56	10:51:00	0
40	765 kV Gaya-Balia	Line	ER/NR	SO	16-02-2020 09:01	For strengthening of 765 kv line tower	16-02-2020 19:29	10:28:00	0
41	765 kV Gaya-Balia	Line	ER/NR	SO	17-02-2020 09:19	For strengthening of 765 kv line tower	17-02-2020 19:55	10:36:00	0
42	765 kV Gaya-Balia	Line	ER/NR	SO	18-02-2020 09:22	For strengthening of 765 kv line tower	18-02-2020 19:26	10:04:00	0

List of Outages of Elements monitored by NLDC for the month of February-2020

S. No.	Name of Transmission Element	Type of the element	Region Involved	Category	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Outage Duration	Number of Cumulative tripping in the month
43	765 kV Gaya-Balia	Line	ER/NR	SO	19-02-2020 08:51	For strengthening of 765 kv line tower	19-02-2020 19:34	10:43:00	0
44	765 kV Gaya-Balia	Line	ER/NR	SO	20-02-2020 09:02	For strengthening of 765 kv line tower	20-02-2020 20:29	11:27:00	0
45	765 kV Gaya-Balia	Line	ER/NR	SO	21-02-2020 09:28	For strengthening of 765 kv line tower	21-02-2020 19:12	9:44:00	0
46	765 kV Gaya-Varanasi-I	Line	ER/NR	SO	05-02-2020 09:07	For Strengthening of 765 KV Delta Type Suspension Tower	05-02-2020 19:48	10:41:00	0
47	765 kV Gaya-Varanasi-I	Line	ER/NR	SO	06-02-2020 09:40	For Strengthening of 765 KV Delta Type Suspension Tower	06-02-2020 20:08	10:28:00	0
48	765 kV Gaya-Varanasi-I	Line	ER/NR	SO	07-02-2020 09:46	For Strengthening of 765 KV Delta Type Suspension Tower	07-02-2020 19:49	10:03:00	0
49	765 kV Gaya-Varanasi-I	Line	ER/NR	SO	08-02-2020 09:28	For Strengthening of 765 KV Delta Type Suspension Tower	08-02-2020 19:37	10:09:00	0
50	765 kV Gaya-Varanasi-I	Line	ER/NR	SO	09-02-2020 09:52	For Strengthening of 765 KV Delta Type Suspension Tower	09-02-2020 19:05	9:13:00	0
51	765 kV Gaya-Varanasi-I	Line	ER/NR	SO	10-02-2020 10:42	For Strengthening of 765 KV Delta Type Suspension Tower	10-02-2020 19:48	9:06:00	0
52	765 kV Gaya-Varanasi-I	Line	ER/NR	SO	11-02-2020 09:24	For Strengthening of 765 KV Delta Type Suspension Tower	11-02-2020 19:08	9:44:00	0
53	765 kV Gaya-Varanasi-I	Line	ER/NR	SO	12-02-2020 09:44	For Strengthening of 765 KV Delta Type Suspension Tower	12-02-2020 19:24	9:40:00	0
54	765 kV Gwalior-Agra-II	Line	WR/NR	SO	01-02-2020 15:35	Rectification of conductor of Y phase at loc.1 is hanging.	01-02-2020 19:54	4:19:00	0
55	765 kV Jharsuguda-Dharmajaygarh-II	Line	ER/WR	SC	27-02-2020 10:10	Line Jumper Modification from quad to twin for system improvement works and erection of additional BPI at T-point work;	27-02-2020 19:39	9:29:00	0
56	765 kV Solapur-Raichur-II	Line	WR/SR	SO	05-02-2020 08:33	for Repairing Damaged Conductor & Spacers	05-02-2020 21:05	12:32:00	0
57	765 kV Solapur-Raichur-II	Line	WR/SR	SO	06-02-2020 09:13	for Repairing Damaged Conductor & Spacers	06-02-2020 20:00	10:47:00	0
58	765kV Durg-Jharsuguda Ckt-I	Line	WR/ER	MO	19-02-2020 00:29	Manually opened due to High Voltage.	01-03-2020 00:00	263:31:00	0
59	765kV Durg-Jharsuguda Ckt-II	Line	WR/ER	MO	10-02-2020 23:57	Manually opened due to High Voltage.	18-02-2020 11:37	179:40:00	0
60	765kV Wardha-Nizamabad-2	Line	WR/SR	SO	28-02-2020 07:13	One sub conductor (out of 6) of Y-Ph snapped between Location no: 753-754	28-02-2020 20:18	13:05:00	0
61	Bhadrawati Pole-I	HVDC	WR/SR	TS	22-02-2020 23:29	Failure of the Converter transformer at Bhadrawati end.	01-03-2020 00:00	168:31:00	1
62	Bhadrawati Pole-II	HVDC	WR/SR	MO	23-02-2020 09:42	Both 400kV Bhadrawati - Ramagundam 1 & 2 are under the planned shutdown.	23-02-2020 22:36	12:54:00	0
63	Biswanath Chariali-Agra Line-I	HVDC	NER/NR	MO	04-02-2020 19:33	Pole blocked on High Voltage	15-02-2020 07:59	252:26:00	0
64	Biswanath Chariali-Agra Line-I	HVDC	NER/NR	TS	04-02-2020 14:29	Pole tripped	04-02-2020 15:15	0:46:00	1
65	Biswanath Chariali-Agra Line-II	HVDC	NER/NR	MO	01-02-2020 00:00	Pole blocked on system high voltage.	04-02-2020 13:50	85:50:00	0
66	Biswanath Chariali-Agra Line-II	HVDC	NER/NR	TS	12-02-2020 13:52	protection indication received at BNC end.	12-02-2020 14:52	1:00:00	1
67	Biswanath Chariali-Agra Line-II	HVDC	NER/NR	MO	16-02-2020 00:34	Manually opened due to High Voltage.	01-03-2020 00:00	335:26:00	1
68	Champa-Kurushetra pole-I	HVDC	WR/NR	SC	06-02-2020 08:55	Pole-4 Commissioning works and Integration of Bipole-2 (P3 & P4) with Bipole-1 (P1 & P2)	26-02-2020 13:46	484:51:00	0
69	Champa-Kurushetra pole-I	HVDC	WR/NR	SC	26-02-2020 19:41	Blocked after testing	27-02-2020 15:40	19:59:00	0
70	Champa-Kurushetra pole-I	HVDC	WR/NR	SC	27-02-2020 16:54	Blocked while deblocking pole-3.	28-02-2020 16:49	23:55:00	0
71	Champa-Kurushetra pole-I	HVDC	WR/NR	SC	28-02-2020 18:45	Blocked after testing works	29-02-2020 13:54	19:09:00	0
72	Champa-Kurushetra pole-I	HVDC	WR/NR	TS	29-02-2020 17:45	All poles tripped while blocking pole 3 due to control system maloperation.	01-03-2020 0:00	6:15:00	1
73	Champa-Kurushetra pole-II	HVDC	WR/NR	SC	06-02-2020 08:58	Pole-4 Commissioning works and Integration of Bipole-2 (P3 & P4) with Bipole-1 (P1 & P2)	25-02-2020 17:08	464:10:00	0
74	Champa-Kurushetra pole-II	HVDC	WR/NR	SC	25-02-2020 18:33	Onload testing of Bipole-2 (P3 & P4) & Bipole-1 (P1 & P2) in Parallel Operation	26-02-2020 15:42	21:09:00	0
75	Champa-Kurushetra pole-II	HVDC	WR/NR	SC	26-02-2020 19:45	Blocked after testing	27-02-2020 13:57	18:12:00	0
76	Champa-Kurushetra pole-II	HVDC	WR/NR	SC	27-02-2020 18:19	Blocked after testing,	29-02-2020 15:48	45:29:00	0
77	Champa-Kurushetra pole-II	HVDC	WR/NR	TS	29-02-2020 17:45	All poles tripped while blocking pole 3 due to control system maloperation.	01-03-2020 00:00	6:15:00	1
78	Champa-Kurushetra pole-II	HVDC	WR/NR	SC	01-02-2020 00:00	Pole-4 commissioning works	06-02-2020 07:21	127:21:00	1
79	Champa-Kurushetra pole-III	HVDC	WR/NR	SE	07-02-2020 19:37	Due to fluctuation in firing angle at Champa end.	07-02-2020 22:01	2:24:00	0
80	Champa-Kurushetra pole-III	HVDC	WR/NR	TS	10-02-2020 16:17	DMR1 short Circuit protection operated	10-02-2020 17:00	0:43:00	1
81	Champa-Kurushetra pole-III	HVDC	WR/NR	SC	14-02-2020 08:59	Pole - 4 Commisioning Works	26-02-2020 09:19	288:20:00	1
82	Champa-Kurushetra pole-III	HVDC	WR/NR	SC	26-02-2020 12:25	Ramp up/ ramp down test	28-02-2020 15:47	51:22:00	1
83	Champa-Kurushetra pole-III	HVDC	WR/NR	SC	28-02-2020 18:54	Blocked after testing works	29-02-2020 09:39	14:45:00	1
84	Champa-Kurushetra pole-III	HVDC	WR/NR	TS	29-02-2020 17:45	All poles tripped while blocking pole 3 due to control system maloperation.	01-03-2020 0:00	6:15:00	2
85	Gazuwaka Pole-I	HVDC	ER/SR	SE	06-02-2020 09:29	Gazuwaka pole-1 was hand tripped for attending water leakage in Pole-1 Evaporative Cooler of Valve cooling system	07-02-2020 08:14	22:45:00	0
86	HVDC Agra-Alipurduar Line-3	HVDC	NR/ER	MO	01-02-2020 00:00	Pole blocked on system high voltage.	14-02-2020 08:56	320:56:00	0
87	HVDC Agra-Alipurduar Line-3	HVDC	NR/ER	MO	14-02-2020 23:43	Pole blocked on High Voltage	01-03-2020 00:00	360:17:00	0
88	HVDC Agra-Alipurduar Line-4	HVDC	NR/ER	MO	01-02-2020 00:00	Pole 4 blocked at APD & Agra to facilitate power reversal from Agra to BNC	26-02-2020 11:02	611:02:00	0
89	HVDC Agra-Alipurduar Line-4	HVDC	NR/ER	MO	27-02-2020 01:51	Pole blocked on High Voltage	01-03-2020 00:00	70:09:00	0
90	Mundra-Mahendragarh-Pole-I	HVDC	WR/NR	TS	24-02-2020 11:58	Blocked due to fire on smoothing reactor at Mundra end.	27-02-2020 01:46	61:48:00	1
91	Talcher-Kolar Pole-I	HVDC	ER/SR	SO	05-02-2020 23:17	Bipole went into RVO Mode	06-02-2020 08:37	1:52:00	0
92	Talcher-Kolar Pole-I	HVDC	ER/SR	SE	29-02-2020 11:22	To attend oil leakage in Converter transformer(Y-ph) pole-1	01-03-2020 00:00	12:38:00	0
93	Talcher-Kolar Pole-II	HVDC	ER/SR	SO	05-02-2020 23:21	Bipole went into RVO Mode	06-02-2020 08:41	1:52:00	0
94	Talcher-Kolar Pole-II	HVDC	ER/SR	TL	17-02-2020 17:38	Due to Line fault at Talcher end	17-02-2020 18:33	0:55:00	1
95	Talcher-Kolar Pole-II	HVDC	ER/SR	TS	17-02-2020 23:59	Tripped due to converter transformer tap changer out of step fault.	18-02-2020 00:36	0:37:00	2
96	VindhyaChal Pole-II	HVDC	WR/NR	SO	10-02-2020 22:10	Replacement of Thyristor and Snubber ckt.	11-02-2020 02:21	4:11:00	0

List of Outages of Elements monitored by NLDC for the month of February-2020

S. No.	Name of Transmission Element	Type of the element	Region Involved	Category	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Outage Duration	Number of Cumulative tripping in the month
--------	------------------------------	---------------------	-----------------	----------	------------------------	-------------------------------	---------------------------	-----------------	--

Transnational Elements

S. No.	Name of Transmission Element	Type of the element	Region Involved	Category	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Outage Duration	Number of Cumulative tripping in the month
1	132 kV Mahendernagar-Tanakpur	Line	Nepal	SO	27-02-2020 09:25	For conducting ratio and accuracy test on CTs & CVTs.	27-02-2020 14:16	4:51:00	0
2	132 kV Rammagar - Valmikinagar (surajpur)	Line	ER/Nepal	SO	05-02-2020 18:30	S/D availed for maintenace work	06-02-2020 11:45	17:15:00	0
3	132 kV Rammagar - Valmikinagar (surajpur)	Line	ER/Nepal	SO	10-02-2020 08:00	S/D availed for maintenace work	10-02-2020 08:25	0:25:00	0
4	132 kV Salakati-Gelephu	Line	Bhutan	MO	07-02-2020 10:06	Islanding operation at MHEP	07-02-2020 12:07	2:01:00	0
5	132 kV Salakati-Gelephu	Line	Bhutan	SO	18-02-2020 09:08	Annual Maintenance at Gelephu station	18-02-2020 15:27	6:19:00	0
6	132 kV Salakati-Gelephu	Line	Bhutan	TS	25-02-2020 19:30	Tripped on Y-B fault, Zone 1 indication. Fault distance 32 km from Salakati end	25-02-2020 19:55	0:25:00	1
7	132 kV Surajmani Nagar - Comilla - 1	Line	Bangladesh	SO	04-02-2020 08:11	For AMP works	04-02-2020 16:01	7:50:00	0
8	132 kV Surajmani Nagar - Comilla - 1	Line	Bangladesh	SO	05-02-2020 08:15	For AMP works	05-02-2020 16:30	8:15:00	0
9	132 kV Surajmani Nagar - Comilla - 2	Line	Bangladesh	SO	08-02-2020 08:14	For AMP works	08-02-2020 15:01	6:47:00	0
10	132 kV Surajmani Nagar - Comilla - 2	Line	Bangladesh	SO	09-02-2020 08:48	For AMP works	09-02-2020 14:44	5:56:00	0
11	132kV Kataiya-Duhabi	Line	Nepal	SC	01-02-2020 10:45	For erection of CVT & LA	01-02-2020 18:10	7:25:00	0
12	132kV Rangia-Deothang S/C	Line	Bhutan	SO	21-02-2020 10:48	AMP work	21-02-2020 16:58	6:10:00	0
13	132kV Rangia-Deothang S/C	Line	Bhutan	SO	08-02-2020 08:14	AMP	08-02-2020 11:23	3:09:00	0
14	220 kV Chukha - Birpara - I	Line	Bhutan	MO	07-01-2020 22:08	Manually opened due to high voltage.	03-02-2020 17:15	643:07:00	0
15	220 kV Chukha - Birpara - I	Line	Bhutan	MO	24-02-2020 18:26	Manually opened due to High Voltage.	26-02-2020 08:24	37:58:00	0
16	220 kV Chukha - Birpara - I	Line	Bhutan	SO	26-02-2020 08:25	AMP WORK AT CHUKHA END	29-02-2020 19:21	82:56:00	0
17	220 kV Chukha - Birpara - I	Line	Bhutan	TL	03-02-2020 19:58	Tripped on RYB Fault	06-02-2020 18:10	70:12:00	1
18	220 kV Chukha - Birpara - II	Line	Bhutan	MO	03-02-2020 17:39	Manually opened due to High Voltage.	03-02-2020 20:35	2:56:00	0
19	220 kV Chukha - Birpara - II	Line	Bhutan	SO	17-02-2020 10:56	For annual maintenance	20-02-2020 19:38	80:42:00	0
20	220 kV Chukha - Birpara - II	Line	Bhutan	MO	06-02-2020 19:09	Manually opened due to High Voltage.	20-02-2020 00:00	316:51:00	0
21	220 Kv Muzaffarpur-Dhalkebar-I	Line	Nepal	SC	14-02-2020 09:13	For 400kV up-gradation works at Dhalkebar SS	14-02-2020 18:04	8:51:00	0
22	220 Kv Muzaffarpur-Dhalkebar-I	Line	Nepal	TL	20-02-2020 12:29	Tripped on over current and supply to Nepal got interrupted	20-02-2020 13:10	0:41:00	1
23	220 Kv Muzaffarpur-Dhalkebar-II	Line	Nepal	SC	15-02-2020 09:16	For 400kV up-gradation works at Dhalkebar SS	15-02-2020 15:50	6:34:00	0
24	220 Kv Muzaffarpur-Dhalkebar-II	Line	Nepal	TS	20-02-2020 12:29	Tripped on over current and supply to Nepal got interrupted	20-02-2020 13:10	0:41:00	1
25	400 kV Tala - Binaguri - I	Line	Bhutan	SE	06-02-2020 16:37	E/S/D to attend B-Ph CB oil pressure high at Tala (line is anti theft charged since 18:10 10-02-2020) (said ckt availed s/d at 12:43 by Bhutan for maintenance till 17hrs of 18/2/2020)	01-03-2020 00:00	559:23:00	0
26	400 kV Tala - Binaguri - II	Line	Bhutan	SO	01-02-2020 00:00	For maintenance work	01-03-2020 00:00	696:00:00	0
27	400 kV Tala - Binaguri - IV	Line	Bhutan	MO	01-02-2020 00:00	Manually opened due to high voltage	06-02-2020 16:21	136:21:00	0
28	400kV Alipurdaur-Jingmeling-I	Line	ER/BHUTAN	MO	01-02-2020 00:00	Manually opened due to high voltage.	13-02-2020 10:03	298:03:00	0
29	400kV Alipurdaur-Jingmeling-I	Line	ER/BHUTAN	SO	13-02-2020 11:09	due to faulty check meter at Jingmeling	13-02-2020 11:23	0:14:00	0
30	400kV Alipurdaur-Jingmeling-I	Line	ER/BHUTAN	SO	18-02-2020 20:15	Swapped with ckt-2 to check for metering error at Bhutan NLDC request	01-03-2020 00:00	267:45:00	0
31	400kV Alipurdaur-Jingmeling-II	Line	ER/BHUTAN	SE	13-02-2020 12:26	E/S/D for Replacement of Y phase CVT at APD	13-02-2020 20:27	8:01:00	0
32	400kV Alipurdaur-Jingmeling-II	Line	ER/BHUTAN	MO	13-02-2020 20:28	Manually opened due to High Voltage.	18-02-2020 19:43	119:15:00	0
33	HVDC Behramara Pole-I	HVDC	Bangladesh	SO	03-02-2020 09:12	Smoke detected at Valve hall and the same was attended by the maintenance team.	03-02-2020 10:21	1:09:00	0

List of Outages of Elements monitored by NLDC for the month of February-2020

S. No.	Name of Transmission Element	Type of the element	Region Involved	Category	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Outage Duration	Number of Cumulative tripping in the month
--------	------------------------------	---------------------	-----------------	----------	------------------------	-------------------------------	---------------------------	-----------------	--

Northern Region Elements

S. No.	Name of Transmission Element	Type of the element	Region Involved	Category	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Outage Duration	Number of Cumulative tripping in the month
1	B/R -I at Lalitpur	Bus Reactor	NR	TP	22-02-2020 16:55	Tripped due to relay malfunction	22-02-2020 19:56	3:01:00	1
2	HVDC Agra Pole-1	HVDC	NR	MO	04-02-2020 19:33	Pole blocked on High Voltage	15-02-2020 07:59	252:26:00	0
3	HVDC Agra Pole-1	HVDC	NR	TS	04-02-2020 14:29	Pole tripped	04-02-2020 15:15	0:46:00	1
4	HVDC Agra Pole-2	HVDC	NR	MO	01-02-2020 00:00	Pole blocked on system high voltage.	04-02-2020 13:50	85:50:00	0
5	HVDC Agra Pole-2	HVDC	NR	TS	12-02-2020 13:52	protection indication received at BNC end.	12-02-2020 14:52	1:00:00	1
6	HVDC Agra Pole-2	HVDC	NR	MO	16-02-2020 00:34	Manually opened due to High Voltage.	01-03-2020 00:00	335:26:00	1
7	HVDC Agra Pole-3	HVDC	NR	MO	01-02-2020 00:00	Pole blocked on system high voltage.	14-02-2020 08:56	320:56:00	0
8	HVDC Agra Pole-4	HVDC	NR	MO	01-02-2020 00:00	Pole 4 blocked at APD & Agra to facilitate power reversal from Agra to BNC	26-02-2020 11:02	611:02:00	0
9	HVDC Agra Pole-4	HVDC	NR	MO	14-02-2020 23:43	Pole blocked on High Voltage	01-03-2020 00:00	360:17:00	0
10	HVDC Agra Pole-4	HVDC	NR	MO	27-02-2020 01:51	Pole blocked on High Voltage	01-03-2020 00:00	70:09:00	0
11	Rihand-Dadri Pole-I	HVDC	NR	TS	25-02-2020 14:05	Short circuit protection operated at Rihand end.	25-02-2020 18:48	4:43:00	1
12	Rihand-Dadri Pole-I	HVDC	NR	SE	01-02-2020 00:00	R-phase converter transformer replaced of pole-I at rihand.	02-02-2020 16:41	40:41:00	1
13	Rihand-Dadri Pole-II	HVDC	NR	TS	01-02-2020 00:00	Line protection due to blast in neutral bus ground switch. pole 1 was already out.	01-02-2020 02:18	2:18:00	1
14	765/400 kV ICT-I at Ajmer	ICT	NR	SE	24-02-2020 12:10	Spark in BCU	24-02-2020 12:42	0:32:00	0
15	765/400 kV ICT-I at Antah	ICT	NR	SO	23-02-2020 12:13	HV Side (765KV Side) P141 (Alstom) High Impedance Relay(87): R-Phase Operated 86A & 86B Operated LV Side (400KV Side): 86A & 86B Operated	26-02-2020 18:01	77:48:00	0
16	765/400 kV ICT-II at Agra	ICT	NR	SE	29-02-2020 11:43	To attend hot spot	29-02-2020 13:33	1:50:00	0
17	765/400 kV ICT-II at Anpara C	ICT	NR	SO	26-02-2020 10:51	for Maintenance, Inspection & Testing purpose	01-03-2020 00:00	85:09:00	0
18	765/400 kV ICT-II at G'Noida	ICT	NR	SO	06-02-2020 11:14	Spare change over with original B phase.	06-02-2020 12:39	1:25:00	0
19	765/400 kV ICT-II at Phagi	ICT	NR	TS	26-02-2020 12:06	Tripped on Oil temperature indicator B-phase indication	27-02-2020 17:14	29:08:00	1
20	765/400 kV ICT-II at Unnao	ICT	NR	SE	13-02-2020 16:14	Oil Leakage in CT oil leakage found from OLTC tank of Y-phase 1000 MVA ICT-II.	13-02-2020 17:28	1:14:00	0
21	765/400 kV ICT-III at Unnao	ICT	NR	SO	05-02-2020 10:01	To Complete Pending Works like inter tripping,Ferruling,wire dressing and HV E/F Relay testing by M/S TBEA	05-02-2020 20:15	10:14:00	0
22	765/400kV ICT-I at Bikaner	ICT	NR	SO	18-02-2020 10:21	AMP & Scheme modification of Spare ICT.	18-02-2020 18:25	8:04:00	0
23	765/400kV ICT-I at Bikaner	ICT	NR	SE	19-02-2020 10:34	Due to sparking in 64IOX relay	19-02-2020 13:29	2:55:00	0
24	765/400kV ICT-II at Bikaner	ICT	NR	SE	19-02-2020 10:34	ICT-II at Bikaner also opened at the time of Hand Tripping of ICT-I at 765KV Bikaner after observing sparking in BCU.	19-02-2020 13:05	2:31:00	0
25	765 kV Moga-Meerut	Line	NR	MO	02-02-2020 17:16	Manually opened due to High Voltage.	03-02-2020 09:26	16:10:00	0
26	765 kV Moga-Meerut	Line	NR	MO	03-02-2020 21:24	Manually opened due to High Voltage.	04-02-2020 07:03	9:39:00	0
27	765 kV Moga-Meerut	Line	NR	MO	04-02-2020 20:44	Manually opened due to High Voltage.	05-02-2020 07:22	10:38:00	0
28	765 kV Moga-Meerut	Line	NR	MO	05-02-2020 21:45	Manually opened due to High Voltage.	06-02-2020 06:49	9:04:00	0
29	765 kV Moga-Meerut	Line	NR	MO	06-02-2020 21:23	Manually opened due to High Voltage.	07-02-2020 07:39	10:16:00	0
30	765 kV Moga-Meerut	Line	NR	MO	07-02-2020 21:49	Manually opened due to High Voltage.	08-02-2020 10:10	12:21:00	0
31	765 kV Moga-Meerut	Line	NR	MO	08-02-2020 22:01	Manually opened due to High Voltage.	09-02-2020 09:48	11:47:00	0
32	765 kV Moga-Meerut	Line	NR	MO	09-02-2020 17:41	Manually opened due to High Voltage.	10-02-2020 06:15	12:34:00	0
33	765 kV Moga-Meerut	Line	NR	MO	10-02-2020 20:02	Manually opened due to High Voltage.	11-02-2020 11:07	15:05:00	0
34	765 kV Moga-Meerut	Line	NR	MO	11-02-2020 22:03	Manually opened due to High Voltage.	12-02-2020 07:19	9:16:00	0
35	765 kV Moga-Meerut	Line	NR	MO	12-02-2020 20:07	Manually opened due to High Voltage.	13-02-2020 07:41	11:34:00	0
36	765 kV Moga-Meerut	Line	NR	MO	13-02-2020 22:58	Manually opened due to High Voltage.	14-02-2020 07:16	8:18:00	0
37	765 kV Moga-Meerut	Line	NR	MO	14-02-2020 20:52	Manually opened due to High Voltage.	15-02-2020 07:39	10:47:00	0
38	765 kV Moga-Meerut	Line	NR	MO	15-02-2020 21:52	Manually opened due to High Voltage.	16-02-2020 09:44	11:52:00	0
39	765 kV Moga-Meerut	Line	NR	MO	16-02-2020 21:13	Manually opened due to High Voltage.	17-02-2020 07:43	10:30:00	0
40	765 kV Moga-Meerut	Line	NR	MO	17-02-2020 20:27	Manually opened due to High Voltage.	18-02-2020 08:04	11:37:00	0
41	765 kV Moga-Meerut	Line	NR	MO	18-02-2020 21:17	Manually opened due to High Voltage.	19-02-2020 06:51	9:34:00	0
42	765 kV Moga-Meerut	Line	NR	MO	19-02-2020 20:48	Manually opened due to High Voltage.	20-02-2020 06:37	9:49:00	0
43	765 kV Moga-Meerut	Line	NR	MO	20-02-2020 21:20	Manually opened due to High Voltage.	21-02-2020 09:00	11:40:00	0
44	765 kV Moga-Meerut	Line	NR	MO	21-02-2020 20:14	Manually opened due to High Voltage.	22-02-2020 07:09	10:55:00	0
45	765 kV Moga-Meerut	Line	NR	MO	22-02-2020 21:34	Manually opened due to High Voltage.	23-02-2020 08:01	10:27:00	0
46	765 kV Moga-Meerut	Line	NR	MO	23-02-2020 16:34	Manually opened due to High Voltage.	24-02-2020 06:54	14:20:00	0
47	765 kV Moga-Meerut	Line	NR	MO	24-02-2020 20:40	Manually opened due to High Voltage.	25-02-2020 07:06	10:26:00	0
48	765 kV Moga-Meerut	Line	NR	MO	25-02-2020 21:31	Manually opened due to High Voltage.	26-02-2020 07:05	9:34:00	0
49	765 kV Moga-Meerut	Line	NR	MO	26-02-2020 20:53	Manually opened due to High Voltage.	27-02-2020 08:06	11:13:00	0
50	765 kV Moga-Meerut	Line	NR	MO	27-02-2020 21:05	Manually opened due to High Voltage.	28-02-2020 07:31	10:26:00	0

List of Outages of Elements monitored by NLDC for the month of February-2020

S. No.	Name of Transmission Element	Type of the element	Region Involved	Category	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Outage Duration	Number of Cumulative tripping in the month
51	765 kV Moga-Meerut	Line	NR	MO	28-02-2020 20:43	Manually opened due to High Voltage.	01-03-2020 00:00	27:17:00	0
52	765kV Aligarh-Orai Ckt-1	Line	NR	TL	29-02-2020 22:12	Line tripped due to Y-N Fault, FLR: Orai- 186.27KM, Aligarh- 109.01KM, FC: Orai- 3.89KA,	29-02-2020 22:40	0:28:00	1
53	765kV Aligarh-Orai Ckt-1	Line	NR	TL	29-02-2020 22:40	Y-N fault. FD: 186.27km from Orai & FC: 3.89KA at Orai, Charging attempt taken at 23:35 hrs, but line doesn't hold. Fault distance: 186.27KM and FC : 3.89KA at Orai	01-03-2020 00:00	1:20:00	2
54	765kV Anpara C-Unnao	Line	NR	SO	14-02-2020 09:53	Annual routine protection testing of 765 KV Unnao-Anpara C line along with its Line reactor, Annual Maintenance & P543 Relay rectification 2. Line Maintenance by ETD-I Prayagraj.	15-02-2020 21:12	35:19:00	0
55	765kV Antah-Phagi-II	Line	NR	SO	05-02-2020 10:25	Restringing of earth wire at tower location No.457 of 765 kv Phagi- Anta Ckt-II	05-02-2020 13:23		
56	765kV Balia-Lucknow	Line	NR	TL	26-02-2020 03:37	Y-N fault,3.22KA,22.9km from Lucknow	26-02-2020 04:07	0:30:00	1
57	765kV Balia-Varanasi	Line	NR	SC	22-02-2020 08:16	Line diversion for facilitation Purvanchal exp. work	26-02-2020 20:56	108:40:00	0
58	765kV Bara-Mainpuri-II	Line	NR	TL	23-02-2020 06:46	DISTANCE PROTECTION OPTD B-Phase Earth Fault Zone-1 optd. FC- 2270.62A FL-231.86 kms	23-02-2020 12:35	5:49:00	1
59	765kV Fatehabad-Lalitpur-I	Line	NR	MO	09-02-2020 18:10	Manually opened due to High Voltage.	09-02-2020 19:25	1:15:00	0
60	765kV Fatehabad-Lalitpur-I	Line	NR	MO	14-02-2020 01:22	Manually opened due to High Voltage.	14-02-2020 06:56	5:34:00	0
61	765kV Fatehabad-Lalitpur-I	Line	NR	MO	21-02-2020 22:09	Manually opened due to High Voltage.	22-02-2020 07:30	9:21:00	0
62	765kV Fatehabad-Lalitpur-I	Line	NR	MO	25-02-2020 17:57	Manually opened due to High Voltage.	26-02-2020 11:20	17:23:00	0
63	765kV Fatehabad-Lalitpur-II	Line	NR	MO	22-02-2020 13:31	Manually opened due to High Voltage.	24-02-2020 10:12	44:41:00	0
64	765kV Fatehabad-Lalitpur-II	Line	NR	MO	26-02-2020 15:32	Manually opened due to High Voltage.	01-03-2020 00:00	80:28:00	0
65	765kV Fatehpur-Agra-I	Line	NR	MO	01-02-2020 21:57	Manually opened due to High Voltage.	02-02-2020 09:59	12:02:00	0
66	765kV Fatehpur-Agra-I	Line	NR	MO	03-02-2020 15:19	Manually opened due to High Voltage.	04-02-2020 08:18	16:59:00	0
67	765kV Fatehpur-Agra-I	Line	NR	MO	05-02-2020 13:20	Manually opened due to High Voltage.	07-02-2020 06:07	40:47:00	0
68	765kV Fatehpur-Agra-I	Line	NR	MO	12-02-2020 20:21	Manually opened due to High Voltage.	16-02-2020 10:04	85:43:00	0
69	765kV Fatehpur-Agra-I	Line	NR	MO	17-02-2020 16:09	Manually opened due to High Voltage.	18-02-2020 05:57	13:48:00	0
70	765kV Fatehpur-Agra-I	Line	NR	MO	19-02-2020 17:36	Manually opened due to High Voltage.	20-02-2020 07:08	13:32:00	0
71	765kV Fatehpur-Agra-I	Line	NR	MO	21-02-2020 01:28	Manually opened due to High Voltage.	25-02-2020 08:18	102:50:00	0
72	765kV Fatehpur-Agra-I	Line	NR	MO	28-02-2020 12:37	Manually opened due to High Voltage.	03-03-2020 08:42	92:05:00	0
73	765kV Fatehpur-Agra-II	Line	NR	MO	02-02-2020 14:15	Manually opened due to High Voltage.	03-02-2020 10:04	19:49:00	0
74	765kV Fatehpur-Agra-II	Line	NR	MO	04-02-2020 14:55	Manually opened due to High Voltage.	05-02-2020 08:40	17:45:00	0
75	765kV Fatehpur-Agra-II	Line	NR	MO	07-02-2020 01:22	Manually opened due to High Voltage.	07-02-2020 10:28	9:06:00	0
76	765kV Fatehpur-Agra-II	Line	NR	MO	07-02-2020 18:19	Manually opened due to High Voltage.	12-02-2020 07:26	109:07:00	0
77	765kV Fatehpur-Agra-II	Line	NR	MO	16-02-2020 16:33	Manually opened due to High Voltage.	17-02-2020 10:14	17:41:00	0
78	765kV Fatehpur-Agra-II	Line	NR	MO	18-02-2020 21:11	Manually opened due to High Voltage.	19-02-2020 08:43	11:32:00	0
79	765kV Fatehpur-Agra-II	Line	NR	MO	25-02-2020 13:29	Manually opened due to High Voltage.	28-02-2020 09:58	68:29:00	0
80	765kV Fatehpur-Agra-II	Line	NR	MO	29-02-2020 21:23	Manually opened due to High Voltage.	01-03-2020 06:44	9:21:00	0
81	765kV Jabalpur-Orai Ckt-2	Line	NR	TL	29-02-2020 21:50	From Orai end- BN fault, Fault Current=7.2 kA, Fault Current=59.8 km	01-03-2020 00:29	2:39:00	1
82	765kV Kanpur-Aligarh	Line	NR	MO	01-02-2020 21:51	Manually opened due to High Voltage.	02-02-2020 07:27	9:36:00	0
83	765kV Kanpur-Aligarh	Line	NR	MO	03-02-2020 19:41	Manually opened due to High Voltage.	04-02-2020 09:09	13:28:00	0
84	765kV Kanpur-Aligarh	Line	NR	MO	04-02-2020 20:23	Manually opened due to High Voltage.	05-02-2020 07:46	11:23:00	0
85	765kV Kanpur-Aligarh	Line	NR	MO	05-02-2020 21:43	Manually opened due to High Voltage.	06-02-2020 07:14	9:31:00	0
86	765kV Kanpur-Aligarh	Line	NR	MO	06-02-2020 21:58	Manually opened due to High Voltage.	07-02-2020 06:26	8:28:00	0
87	765kV Kanpur-Aligarh	Line	NR	MO	07-02-2020 21:39	Manually opened due to High Voltage.	08-02-2020 06:32	8:53:00	0
88	765kV Kanpur-Aligarh	Line	NR	MO	08-02-2020 14:56	Manually opened due to High Voltage.	09-02-2020 05:48	14:52:00	0
89	765kV Kanpur-Aligarh	Line	NR	MO	09-02-2020 15:15	Manually opened due to High Voltage.	10-02-2020 06:54	15:39:00	0
90	765kV Kanpur-Aligarh	Line	NR	MO	10-02-2020 21:36	Manually opened due to High Voltage.	12-02-2020 09:35	35:59:00	0
91	765kV Kanpur-Aligarh	Line	NR	MO	12-02-2020 20:33	Manually opened due to High Voltage.	13-02-2020 08:51	12:18:00	0
92	765kV Kanpur-Aligarh	Line	NR	MO	13-02-2020 13:24	Manually opened due to High Voltage.	14-02-2020 09:15	19:51:00	0
93	765kV Kanpur-Aligarh	Line	NR	MO	14-02-2020 21:46	Manually opened due to High Voltage.	15-02-2020 07:30	9:44:00	0
94	765kV Kanpur-Aligarh	Line	NR	MO	15-02-2020 21:11	Manually opened due to High Voltage.	16-02-2020 07:01	9:50:00	0
95	765kV Kanpur-Aligarh	Line	NR	MO	16-02-2020 17:56	Manually opened due to High Voltage.	17-02-2020 06:04	12:08:00	0
96	765kV Kanpur-Aligarh	Line	NR	MO	17-02-2020 21:14	Manually opened due to High Voltage.	18-02-2020 06:49	9:35:00	0
97	765kV Kanpur-Aligarh	Line	NR	MO	18-02-2020 21:16	Manually opened due to High Voltage.	19-02-2020 07:28	10:12:00	0
98	765kV Kanpur-Aligarh	Line	NR	MO	19-02-2020 21:34	Manually opened due to High Voltage.	21-02-2020 09:08	35:34:00	0
99	765kV Kanpur-Aligarh	Line	NR	MO	22-02-2020 22:07	Manually opened due to High Voltage.	23-02-2020 09:59	11:52:00	0
100	765kV Kanpur-Aligarh	Line	NR	MO	23-02-2020 21:08	Manually opened due to High Voltage.	24-02-2020 06:56	9:48:00	0
101	765kV Kanpur-Aligarh	Line	NR	MO	24-02-2020 23:15	Manually opened due to High Voltage.	25-02-2020 05:49	6:34:00	0
102	765kV Kanpur-Aligarh	Line	NR	MO	25-02-2020 21:31	Manually opened due to High Voltage.	26-02-2020 07:27	9:56:00	0
103	765kV Kanpur-Aligarh	Line	NR	MO	26-02-2020 21:41	Manually opened due to High Voltage.	27-02-2020 07:07	9:26:00	0
104	765kV Kanpur-Aligarh	Line	NR	MO	29-02-2020 00:45	Manually opened due to High Voltage.	29-02-2020 08:53	8:08:00	0

List of Outages of Elements monitored by NLDC for the month of February-2020

S. No.	Name of Transmission Element	Type of the element	Region Involved	Category	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Outage Duration	Number of Cumulative tripping in the month
105	765kV Kanpur-Aligarh	Line	NR	TL	29-02-2020 11:00	Tripped on B-N Fault Kanpur- 311.935 km,2.27 KA	29-02-2020 15:31	4:31:00	1
106	765kV Kanpur-Aligarh	Line	NR	MO	29-02-2020 20:16	Manually opened due to High Voltage.	01-03-2020 09:24	13:08:00	1
107	765kV Kanpur-Aligarh	Line	NR	MO	01-02-2020 00:00	Manually opened due to high voltage.	01-02-2020 06:27	6:27:00	1
108	765kV Kanpur-Varanasi-I	Line	NR	TL	03-02-2020 11:16	Tripped on R-Y fault	03-02-2020 11:48	0:32:00	1
109	765kV Meerut-Bhiwani(PG)	Line	NR	MO	26-02-2020 21:23	Manually opened due to High Voltage.	01-03-2020 00:00	74:37:00	0
110	765kV Meerut-Bhiwani(PG)	Line	NR	MO	12-02-2020 21:58	Manually opened due to High Voltage.	17-02-2020 10:42	108:44:00	0
111	765kV Meerut-Bhiwani(PG)	Line	NR	MO	17-02-2020 21:50	Manually opened due to High Voltage.	26-02-2020 12:42	206:52:00	0
112	765kV Meerut-Bhiwani(PG)	Line	NR	MO	01-02-2020 00:00	Manually opened due to high voltage.	12-02-2020 11:51	275:51:00	0
113	765kV Phagi-Bhiwani-I	Line	NR	MO	01-02-2020 22:36	Manually opened due to High Voltage.	02-02-2020 07:52	9:16:00	0
114	765kV Phagi-Bhiwani-I	Line	NR	MO	04-02-2020 00:33	Manually opened due to High Voltage.	04-02-2020 07:08	6:35:00	0
115	765kV Phagi-Bhiwani-I	Line	NR	MO	05-02-2020 23:43	Manually opened due to High Voltage.	06-02-2020 06:55	7:12:00	0
116	765kV Phagi-Bhiwani-I	Line	NR	MO	09-02-2020 21:34	Manually opened due to High Voltage.	10-02-2020 05:57	8:23:00	0
117	765kV Phagi-Bhiwani-I	Line	NR	MO	11-02-2020 22:10	Manually opened due to High Voltage.	12-02-2020 18:51	20:41:00	0
118	765kV Phagi-Bhiwani-I	Line	NR	MO	13-02-2020 03:24	Manually opened due to High Voltage.	13-02-2020 07:28	4:04:00	0
119	765kV Phagi-Bhiwani-I	Line	NR	MO	16-02-2020 02:04	Manually opened due to High Voltage.	16-02-2020 06:19	4:15:00	0
120	765kV Phagi-Bhiwani-I	Line	NR	MO	20-02-2020 00:36	Manually opened due to High Voltage.	20-02-2020 06:46	6:10:00	0
121	765kV Phagi-Bhiwani-I	Line	NR	MO	20-02-2020 21:27	Manually opened due to High Voltage.	21-02-2020 06:46	9:19:00	0
122	765kV Phagi-Bhiwani-I	Line	NR	MO	25-02-2020 02:22	Manually opened due to High Voltage.	25-02-2020 07:45	5:23:00	0
123	765kV Phagi-Bhiwani-II	Line	NR	MO	01-02-2020 00:28	Manually opened due to High Voltage.	01-02-2020 07:22	6:54:00	0
124	765kV Phagi-Bhiwani-II	Line	NR	MO	03-02-2020 00:00	Manually opened due to High Voltage.	03-02-2020 06:41	6:41:00	0
125	765kV Phagi-Bhiwani-II	Line	NR	MO	04-02-2020 22:19	Manually opened due to High Voltage.	05-02-2020 07:00	8:41:00	0
126	765kV Phagi-Bhiwani-II	Line	NR	MO	09-02-2020 01:58	Manually opened due to High Voltage.	09-02-2020 06:07	4:09:00	0
127	765kV Phagi-Bhiwani-II	Line	NR	MO	10-02-2020 22:26	Manually opened due to High Voltage.	11-02-2020 07:20	8:54:00	0
128	765kV Phagi-Bhiwani-II	Line	NR	MO	13-02-2020 21:38	Manually opened due to High Voltage.	14-02-2020 06:45	9:07:00	0
129	765kV Phagi-Bhiwani-II	Line	NR	MO	24-02-2020 01:30	Manually opened due to High Voltage.	24-02-2020 06:18	4:48:00	0
130	765kV Phagi-Bhiwani-II	Line	NR	MO	29-02-2020 21:48	Manually opened due to High Voltage.	01-03-2020 00:00	2:12:00	0

List of Outages of Elements monitored by NLDC for the month of February-2020

S. No.	Name of Transmission Element	Type of the element	Region Involved	Category	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Outage Duration	Number of Cumulative tripping in the month
Western Region Elements									
1	240 Mvar B/R-I at Padghe	Bus Reactor	WR	SO	07-02-2020 11:26	For taking out of service of B Phase Bus Reactor and Spare Reactor in service in place of B PH Bus Reactor.	07-02-2020 16:25	4:59:00	0
2	330Mvar Bus Reactor-I at Banaskantha	Bus Reactor	WR	SO	24-02-2020 09:54	CSD Fine tuning, Dia to be kept open	24-02-2020 15:24	5:30:00	0
3	B/R-I at Champa	Bus Reactor	WR	SO	13-02-2020 12:15	For AMP works.	13-02-2020 18:46	6:31:00	0
4	B/R-I at Indore	Bus Reactor	WR	SO	19-02-2020 10:06	Tie Bay CSD Troubleshooting works.	19-02-2020 14:10	4:04:00	0
5	B/R-I at Indore	Bus Reactor	WR	SO	20-02-2020 09:43	Tie Bay CSD Troubleshooting works.	20-02-2020 15:55	6:12:00	0
6	B/R-I at Jabalpur	Bus Reactor	WR	SO	08-02-2020 10:41	AMP work	08-02-2020 18:46	8:05:00	0
7	765/400 kV ICT-I at Champa	ICT	WR	SO	06-02-2020 10:40	For AMP works.	07-02-2020 06:21	19:41:00	0
8	765/400 kV ICT-I at Indore	ICT	WR	SO	01-02-2020 10:51	Amp works	01-02-2020 18:59	8:08:00	0
9	765/400 kV ICT-II at Aurangabad(PG)	ICT	WR	SO	20-02-2020 09:06	B-ph MOG replacement work	20-02-2020 17:51	8:45:00	0
10	765/400 kV ICT-II at Raipur PS(Durg)	ICT	WR	SO	05-02-2020 12:30	For AMP works.	05-02-2020 19:43	7:13:00	0
11	765/400 kV ICT-II at Sipat	ICT	WR	SO	17-02-2020 09:16	For Planned Maintenance	19-02-2020 18:24	57:08:00	0
12	765/400 kV ICT-IV at Raigarh-PS(Kotra)	ICT	WR	SO	01-02-2020 09:55	For amp works.	01-02-2020 19:48	9:53:00	0
13	765/400kV ICT-I at Bhuj	ICT	WR	SC	25-02-2020 07:57	Jumper connection of extension pkg.	25-02-2020 19:48	11:51:00	0
14	765/400kV ICT-II at Bhuj	ICT	WR	SC	22-02-2020 08:48	Jumper connection of extension pkg.	22-02-2020 21:32	12:44:00	0
15	765 kV Durg-Champa-I	Line	WR	SO	26-02-2020 10:10	For line AMP works	26-02-2020 20:31	10:21:00	0
16	765 kV Durg-Champa-II	Line	WR	SO	25-02-2020 11:20	For line AMP works	25-02-2020 21:15	9:55:00	0
17	765kV Aurangabad-Dhule(BDTCL)	Line	WR	TL	06-02-2020 13:54	Aurangabad: B-E fault ,103 KM,5.9 KA	06-02-2020 15:32	1:38:00	1
18	765kV Aurangabad-Phadge Ckt-I	Line	WR	SO	13-02-2020 13:46	For taking B Phase Aurangabad Line Reactor in service and Spare Reactor out of service.	13-02-2020 16:50	3:04:00	0
19	765kV Aurangabad-Phadge Ckt-I	Line	WR	SO	17-02-2020 12:24	For taking out of service of B Phase Aurangabad Line Reactor Reactor and Spare Reactor in service in place of B PH Aurangabad Line Reactor Reactor.	17-02-2020 14:09	1:45:00	0
20	765kV Aurangabad-Sholapur-I	Line	WR	MO	11-02-2020 19:54	Manually opened due to High Voltage.	20-02-2020 08:07	204:13:00	0
21	765kV Aurangabad-Sholapur-I	Line	WR	MO	27-02-2020 21:37	Manually opened due to High Voltage.	28-02-2020 07:48	10:11:00	0
22	765kV Aurangabad-Sholapur-II	Line	WR	MO	10-02-2020 18:36	Manually opened due to High Voltage.	11-02-2020 07:41	13:05:00	0
23	765kV Aurangabad-Sholapur-II	Line	WR	MO	20-02-2020 16:38	Manually opened due to High Voltage.	26-02-2020 06:34	133:56:00	0
24	765kV Bhuj-Banaskantha-I	Line	WR	SE	21-02-2020 17:52	To attend hot spot in Isolator.	21-02-2020 22:10	4:18:00	0
25	765kV Bilaspur-Rajnandgaon-II	Line	WR	TL	23-02-2020 23:54	Zone-1 (R-B Ph Fault), R-12.3 KA, B- 14.3 KA, 59.9 KMS	24-02-2020 01:21	1:27:00	1
26	765kV Dhule-Vadodara	Line	WR	SE	24-02-2020 12:25	Arrest Oil leakage in B-ph LR	24-02-2020 19:22	6:57:00	0
27	765kV Durg-Wardha-I	Line	WR	MO	04-02-2020 23:18	Manually opened due to High Voltage.	18-02-2020 05:52	318:36:00	0
28	765kV Durg-Wardha-I	Line	WR	TL	24-02-2020 19:34	Tripped on R phase fault	24-02-2020 21:04	1:30:00	1
29	765kV Durg-Wardha-I	Line	WR	MO	01-02-2020 00:00	Manually opened due to high voltage.	04-02-2020 11:11	83:11:00	1
30	765kV Durg-Wardha-II	Line	WR	TL	24-02-2020 19:34	Tripped on Y-B phase fault	26-02-2020 04:32	32:58:00	1
31	765kV Durg-Wardha-III	Line	WR	MO	17-02-2020 22:34	Manually opened due to High Voltage.	25-02-2020 07:56	177:22:00	0
32	765kV Durg-Wardha-IV	Line	WR	MO	25-02-2020 14:36	Manually opened due to High Voltage	01-03-2020 00:00	105:24:00	0
33	765kV Jabalpur-Dharamjaigarh-I	Line	WR	MO	01-02-2020 00:00	Manually opened due to high voltage.	15-02-2020 10:31	346:31:00	0
34	765kV Jabalpur-Dharamjaigarh-II	Line	WR	MO	21-02-2020 15:15	Manually opened due to High Voltage.	01-03-2020 00:00	200:45:00	0
35	765kV Jabalpur-Dharamjaigarh-III	Line	WR	MO	11-02-2020 16:25	Manually opened due to High Voltage.	22-02-2020 07:23	254:58:00	0
36	765kV Jabalpur-Dharamjaigarh-IV	Line	WR	MO	24-02-2020 22:53	Manually opened due to High Voltage.	01-03-2020 00:00	121:07:00	0
37	765kV New Parli - Solapur Ckt-I	Line	WR	SO	26-02-2020 11:20	For line equipment AMP works at Warora end.	26-02-2020 22:06	10:46:00	0
38	765kV New Parli - Solapur Ckt-II	Line	WR	SO	27-02-2020 09:25	For line equipment AMP works at Warora end.	27-02-2020 19:51	10:26:00	0
39	765kV Pune-Phadge	Line	WR	SO	19-02-2020 10:05	To attend the tilted terminal connector of B-phase line bushing of 765kV Pune-Padghe line at Padghe-GIS	19-02-2020 14:29	4:24:00	0
40	765kV Pune-Sholapur	Line	WR	MO	26-02-2020 22:06	Manually opened due to High Voltage.	01-03-2020 00:00	73:54:00	0
41	765kV Pune-Sholapur	Line	WR	MO	01-02-2020 00:00	Manually opened due to high voltage.	14-02-2020 08:57	320:57:00	0
42	765kV Pune-Sholapur	Line	WR	MO	15-02-2020 19:52	Manually opened due to High Voltage.	17-02-2020 11:32	39:40:00	0
43	765kV Sasan-Satna-I	Line	WR	SO	05-02-2020 09:45	For insulator cleaning and AMP Works.	05-02-2020 19:20	9:35:00	0
44	765kV Sasan-Satna-II	Line	WR	SO	06-02-2020 10:21	For insulator cleaning and AMP Works.	06-02-2020 19:29	9:08:00	0
45	765kV Seoni-Wardha-I	Line	WR	SO	04-02-2020 11:24	Line and LR AMP works	04-02-2020 22:22	10:58:00	0
46	765kV Seoni-Wardha-I	Line	WR	SO	29-02-2020 10:14	Line amp work and spare line reactor taken in service.	01-03-2020 06:54	20:40:00	0
47	765kV Sipat-Bilaspur-I	Line	WR	SO	04-02-2020 08:23	Tower strengthening works	04-02-2020 15:46	7:23:00	0
48	765kV Sipat-Bilaspur-I	Line	WR	SO	05-02-2020 09:11	For tower strengthening works.	05-02-2020 19:33	10:22:00	0
49	765kV Sipat-Bilaspur-I	Line	WR	SO	06-02-2020 09:04	For tower strengthening works	06-02-2020 19:12	10:08:00	0

List of Outages of Elements monitored by NLDC for the month of February-2020

S. No.	Name of Transmission Element	Type of the element	Region Involved	Category	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Outage Duration	Number of Cumulative tripping in the month
50	765kV Sipat-Bilaspur-I	Line	WR	SO	09-02-2020 08:48	For tower strengthening works	09-02-2020 20:16	11:28:00	0
51	765kV Sipat-Bilaspur-I	Line	WR	SO	11-02-2020 08:50	For tower strengthening works.	11-02-2020 19:35	10:45:00	0
52	765kV Sipat-Bilaspur-I	Line	WR	SO	12-02-2020 08:51	For tower strengthening works.	12-02-2020 19:42	10:51:00	0
53	765kV Sipat-Bilaspur-I	Line	WR	SO	24-02-2020 08:33	Tower strengthening work	24-02-2020 20:00	11:27:00	0
54	765kV Sipat-Bilaspur-I	Line	WR	SO	25-02-2020 09:35	Tower strengthening work	25-02-2020 19:27	9:52:00	0
55	765kV Sipat-Bilaspur-II	Line	WR	SO	26-02-2020 08:18	Tower strengthening work	26-02-2020 20:21	12:03:00	0
56	765kV Sipat-Bilaspur-II	Line	WR	SO	27-02-2020 08:56	For Tower strengthening works	27-02-2020 19:59	11:03:00	0
57	765kV VindhyaChal(PS)- Jabalpur- II	Line	WR	SO	28-02-2020 11:18	Attending of Oil leakage in Y Ph PRD and line AMP on opportunity.	28-02-2020 15:20	4:02:00	0
58	765kV Wardha-Aurangabad-I	Line	WR	SO	25-02-2020 07:37	for facilitating restoration of 765kV Durg-Wardha 3. Same dia, Main bay of Durg3 is out at Wardha.	25-02-2020 08:01	0:24:00	0
59	765kV Wardha-Aurangabad-II	Line	WR	MO	14-02-2020 21:22	Manually opened due to High Voltage.	15-02-2020 10:34	13:12:00	0
60	765kV Wardha-Aurangabad-II	Line	WR	MO	22-02-2020 18:08	Manually opened due to High Voltage.	25-02-2020 07:27	61:19:00	0
61	765kV Wardha-Aurangabad-II	Line	WR	MO	28-02-2020 19:59	Manually opened due to High Voltage.	01-03-2020 00:00	28:01:00	0
62	765kV Wardha-Aurangabad-III	Line	WR	MO	03-02-2020 18:06	Manually opened due to High Voltage.	05-02-2020 10:20	40:14:00	0
63	765kV Wardha-Aurangabad-III	Line	WR	SE	15-02-2020 10:43	To attend hotspot in terminal connector of R phase HV Bushing of non-switchable LR at Aurangabad end	15-02-2020 14:40	3:57:00	0
64	765kV Wardha-Aurangabad-IV	Line	WR	MO	25-01-2020 18:12	Manually opened due to high voltage.	03-02-2020 09:34	207:22:00	0
65	765kV Wardha-Aurangabad-IV	Line	WR	MO	05-02-2020 17:44	Manually opened due to High Voltage.	14-02-2020 09:24	207:40:00	0
66	765kV Wardha-Aurangabad-IV	Line	WR	MO	15-02-2020 20:04	Manually opened due to High Voltage.	22-02-2020 09:02	156:58:00	0
67	765kV Wardha-Aurangabad-IV	Line	WR	MO	26-02-2020 17:46	Manually opened due to High Voltage.	28-02-2020 07:59	38:13:00	0
68	765kV Warora-Rajnandgaon-II	Line	WR	SO	01-02-2020 08:59	Annual maintenance of line equipments	01-02-2020 19:23	10:24:00	0
69	765kV Warora-Rajnandgaon-II	Line	WR	TL	24-02-2020 20:24	Warora end details are Y-B phase fault, FD-221.0km, FC-5.5kAmp	24-02-2020 22:06	1:42:00	1

List of Outages of Elements monitored by NLDC for the month of February-2020

S. No.	Name of Transmission Element	Type of the element	Region Involved	Catagory	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Outage Duration	Number of Cumulative tripping in the month
--------	------------------------------	---------------------	-----------------	----------	------------------------	-------------------------------	---------------------------	-----------------	--

Eastern Region Elements

S. No.	Name of Transmission Element	Type of the element	Region Involved	Catagory	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Outage Duration	Number of Cumulative tripping in the month
1	765/400 kV ICT-I at Jharsuguda	ICT	ER	SO	14-02-2020 09:43	AMP Work	14-02-2020 19:57	10:14:00	0
2	765kV Angul-Jharsuguda-III	Line	ER	MO	16-02-2020 22:20	Manually opened due to High Voltage.	17-02-2020 09:36	11:16:00	0
3	765kV Angul-Jharsuguda-III	Line	ER	MO	22-02-2020 13:50	Manually opened due to High Voltage.	25-02-2020 17:44	75:54:00	0
4	765kV Angul-Jharsuguda-IV	Line	ER	MO	05-02-2020 14:04	Manually opened due to High Voltage.	13-02-2020 10:16	188:12:00	0
5	765kV Angul-Jharsuguda-IV	Line	ER	MO	17-02-2020 21:13	Manually opened due to High Voltage.	21-02-2020 08:35	83:22:00	0
6	765kV Jharsuguda-Darlipalli Ckt-I	Line	ER	SO	05-02-2020 09:25	S/D of Main and tie bay of line at Darlipalli	06-02-2020 18:58	33:33:00	0
7	B/R-I at Angul	Bus Reactor	ER	SE	17-02-2020 09:18	To attend hot spot. AMP Work	17-02-2020 18:47	9:29:00	0
8	B/R-II at Angul	Bus Reactor	ER	SO	19-02-2020 09:22	AMP Work	19-02-2020 18:14	8:52:00	0
9	HVDC Alipurdaur Pole-3	HVDC	ER	MO	01-02-2020 00:00	Pole blocked on system high voltage.	14-02-2020 08:56	320:56:00	0
10	HVDC Alipurdaur Pole-3	HVDC	ER	MO	14-02-2020 23:43	Pole blocked on High Voltage	01-03-2020 00:00	360:17:00	0
11	HVDC Alipurdaur Pole-4	HVDC	ER	MO	01-02-2020 00:00	Pole 4 blocked at APD & Agra to facilitate power reversal from Agra to BNC	26-02-2020 11:02	611:02:00	0
12	HVDC Alipurdaur Pole-4	HVDC	ER	MO	27-02-2020 01:51	Pole blocked on High Voltage	01-03-2020 00:00	70:09:00	0

Southern Region Elements

S. No.	Name of Transmission Element	Type of the element	Region Involved	Catagory	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Outage Duration	Number of Cumulative tripping in the month
1	240Mvar B/R-II at Raichur	Bus Reactor	SR	SO	08-02-2020 10:05	For taking spare reactor into service in place of Yph	08-02-2020 12:11	2:06:00	0
2	B/R-I at Cuddapah	Bus Reactor	SR	TS	04-02-2020 10:37	Spare changeover	04-02-2020 13:30	2:53:00	1
3	765kV Cuddapah-Chilkuripetha Ckt-I	Line	SR	MO	19-02-2020 17:59	Manually opened due to High Voltage.	28-02-2020 07:51	205:52:00	0
4	765kV Cuddapah-Chilkuripetha Ckt-I	Line	SR	MO	28-02-2020 18:00	Manually opened due to High Voltage.	01-03-2020 00:00	30:00:00	0
5	765kV Cuddapah-Chilkuripetha Ckt-II	Line	SR	MO	01-02-2020 00:00	Manually opened due to high voltage.	11-02-2020 08:00	248:00:00	0
6	765kV Cuddapah-Thiruvalam Ckt-I	Line	SR	MO	02-02-2020 21:33	Manually opened due to High Voltage.	03-02-2020 06:26	8:53:00	0
7	765kV Cuddapah-Thiruvalam Ckt-I	Line	SR	TV	09-02-2020 18:01	Tripped on O/V	09-02-2020 18:10	0:09:00	1
8	765kV Cuddapah-Thiruvalam Ckt-I	Line	SR	MO	09-02-2020 18:10	After tripping on over voltage line kept open on high voltage	10-02-2020 09:23	15:13:00	1
9	765kV Cuddapah-Thiruvalam Ckt-I	Line	SR	TV	10-02-2020 18:06	Tripped on over voltage.	10-02-2020 18:19	0:13:00	2
10	765kV Cuddapah-Thiruvalam Ckt-I	Line	SR	MO	12-02-2020 20:20	Manually opened due to High Voltage.	13-02-2020 06:41	10:21:00	2
11	765kV Cuddapah-Thiruvalam Ckt-I	Line	SR	MO	13-02-2020 21:19	Manually opened due to High Voltage.	14-02-2020 07:50	10:31:00	2
12	765kV Cuddapah-Thiruvalam Ckt-I	Line	SR	MO	14-02-2020 21:34	Manually opened due to High Voltage.	15-02-2020 06:50	9:16:00	2
13	765kV Cuddapah-Thiruvalam Ckt-I	Line	SR	MO	15-02-2020 22:06	Manually opened due to High Voltage.	16-02-2020 07:02	8:56:00	2
14	765kV Cuddapah-Thiruvalam Ckt-I	Line	SR	TV	16-02-2020 18:01	Tripped on O/V	16-02-2020 18:10	0:09:00	3
15	765kV Cuddapah-Thiruvalam Ckt-I	Line	SR	MO	16-02-2020 18:10	After tripping on over voltage line kept open on high voltage	17-02-2020 09:00	14:50:00	3
16	765kV Cuddapah-Thiruvalam Ckt-I	Line	SR	MO	17-02-2020 20:52	Manually opened due to High Voltage.	18-02-2020 07:07	10:15:00	3
17	765kV Cuddapah-Thiruvalam Ckt-I	Line	SR	MO	18-02-2020 20:27	Manually opened due to High Voltage.	19-02-2020 07:15	10:48:00	3
18	765kV Cuddapah-Thiruvalam Ckt-I	Line	SR	MO	28-02-2020 18:00	Manually opened due to High Voltage.	28-02-2020 20:06	2:06:00	3
19	765kV Cuddapah-Thiruvalam Ckt-II	Line	SR	MO	03-02-2020 23:03	Manually opened due to High Voltage.	04-02-2020 06:16	7:13:00	0
20	765kV Cuddapah-Thiruvalam Ckt-II	Line	SR	MO	09-02-2020 01:16	Manually opened due to High Voltage.	09-02-2020 09:07	7:51:00	0
21	765kV Cuddapah-Thiruvalam Ckt-II	Line	SR	MO	10-02-2020 18:06	Manually opened due to High Voltage.	11-02-2020 08:02	13:56:00	0
22	765kV Cuddapah-Thiruvalam Ckt-II	Line	SR	MO	11-02-2020 19:44	Manually opened due to High Voltage.	12-02-2020 07:01	11:17:00	0
23	765kV Nizamabad-Maheswaram-I	Line	SR	MO	01-02-2020 00:14	Manually opened due to High Voltage.	01-02-2020 06:55	6:41:00	0
24	765kV Nizamabad-Maheswaram-I	Line	SR	MO	01-02-2020 20:33	Manually opened due to High Voltage.	02-02-2020 05:54	9:21:00	0
25	765kV Nizamabad-Maheswaram-I	Line	SR	MO	07-02-2020 21:46	Manually opened due to High Voltage.	08-02-2020 06:28	8:42:00	0
26	765kV Nizamabad-Maheswaram-I	Line	SR	MO	16-02-2020 21:19	Manually opened due to High Voltage.	17-02-2020 05:43	8:24:00	0
27	765kV Nizamabad-Maheswaram-I	Line	SR	MO	18-02-2020 21:19	Manually opened due to High Voltage.	19-02-2020 05:51	8:32:00	0
28	765kV Nizamabad-Maheswaram-I	Line	SR	MO	21-02-2020 00:51	Manually opened due to High Voltage.	22-02-2020 06:19	9:28:00	0
29	765kV Nizamabad-Maheswaram-I	Line	SR	MO	25-02-2020 21:45	Manually opened due to High Voltage.	26-02-2020 00:05	2:20:00	0
30	765kV Nizamabad-Maheswaram-II	Line	SR	MO	02-02-2020 20:43	Manually opened due to High Voltage.	03-02-2020 05:51	9:08:00	0
31	765kV Nizamabad-Maheswaram-II	Line	SR	MO	09-02-2020 22:29	Manually opened due to High Voltage.	10-02-2020 05:20	6:51:00	0

List of Outages of Elements monitored by NLDC for the month of February-2020

S. No.	Name of Transmission Element	Type of the element	Region Involved	Category	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Outage Duration	Number of Cumulative tripping in the month
32	765kV Nizamabad- Maheswaram-II	Line	SR	MO	10-02-2020 22:34	Manually opened due to High Voltage.	11-02-2020 06:27	7:53:00	0
33	765kV Nizamabad- Maheswaram-II	Line	SR	MO	12-02-2020 01:39	Manually opened due to High Voltage.	12-02-2020 07:06	5:27:00	0
34	765kV Nizamabad- Maheswaram-II	Line	SR	MO	15-02-2020 20:01	Manually opened due to High Voltage.	16-02-2020 06:45	10:44:00	0
35	765kV Nizamabad- Maheswaram-II	Line	SR	MO	17-02-2020 21:13	Manually opened due to High Voltage.	18-02-2020 05:44	8:31:00	0
36	765kV Nizamabad- Maheswaram-II	Line	SR	MO	19-02-2020 22:05	Manually opened due to High Voltage.	20-02-2020 04:18	6:13:00	0
37	765kV Nizamabad- Maheswaram-II	Line	SR	MO	20-02-2020 21:06	Manually opened due to High Voltage.	21-02-2020 04:17	7:11:00	0
38	765kV Nizamabad- Maheswaram-II	Line	SR	MO	22-02-2020 21:15	Manually opened due to High Voltage.	23-02-2020 01:50	4:35:00	0
39	765kV Nizamabad- Maheswaram-II	Line	SR	MO	23-02-2020 18:14	Manually opened due to High Voltage.	24-02-2020 06:25	12:11:00	0
40	765kV Nizamabad- Maheswaram-II	Line	SR	MO	28-02-2020 19:48	Manually opened due to High Voltage.	29-02-2020 00:06	4:18:00	0
41	765kV Vemagiri-Chilkuripeta Ckt-I	Line	SR	MO	03-02-2020 19:23	Manually opened due to High Voltage.	05-02-2020 09:37	38:14:00	0
42	765kV Vemagiri-Chilkuripeta Ckt-I	Line	SR	MO	06-02-2020 20:04	Manually opened due to High Voltage.	07-02-2020 09:06	13:02:00	0
43	765kV Vemagiri-Chilkuripeta Ckt-I	Line	SR	MO	10-02-2020 18:12	Manually opened due to High Voltage.	19-02-2020 10:40	208:28:00	0
44	765kV Vemagiri-Chilkuripeta Ckt-I	Line	SR	MO	21-02-2020 21:26	Manually opened due to High Voltage.	22-02-2020 06:29	9:03:00	0
45	765kV Vemagiri-Chilkuripeta Ckt-II	Line	SR	MO	01-02-2020 00:00	Manually opened due to high voltage.	03-02-2020 09:30	57:30:00	0
46	765kV Vemagiri-Chilkuripeta Ckt-II	Line	SR	MO	05-02-2020 20:55	Manually opened due to High Voltage.	06-02-2020 06:02	9:07:00	0
47	765kV Vemagiri-Chilkuripeta Ckt-II	Line	SR	MO	07-02-2020 17:49	Manually opened due to High Voltage.	10-02-2020 09:47	63:58:00	0

List of Outages of Elements monitored by NLDC for the month of February-2020

S. No.	Name of Transmission Element	Type of the element	Region Involved	Category	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Outage Duration	Number of Cumulative tripping in the month
North Eastern Region Elements									
S. No.	Name of Transmission Element	Type of the element	Region Involved	Category	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	Outage Duration	Number of Cumulative tripping in the month
1	HVDC Biswanath Chariali Pole-1	HVDC	NER	MO	04-02-2020 19:33	Pole blocked on High Voltage	15-02-2020 07:59	252:26:00	0
2	HVDC Biswanath Chariali Pole-1	HVDC	NER	TS	04-02-2020 14:29	Pole tripped	04-02-2020 15:15	0:46:00	1
3	HVDC Biswanath Chariali Pole-2	HVDC	NER	MO	01-02-2020 00:00	Pole blocked on system high voltage.	04-02-2020 13:50	85:50:00	0
4	HVDC Biswanath Chariali Pole-2	HVDC	NER	TS	12-02-2020 13:52	protection indication received at BNC end.	12-02-2020 14:52	1:00:00	1
5	HVDC Biswanath Chariali Pole-2	HVDC	NER	MO	16-02-2020 00:34	Manually opened due to High Voltage.	01-03-2020 00:00	335:26:00	1
TL= Tripping due to Line Fault									
TS= Tripping due to S/S Fault									
MO= Opened due to system constraints									
TV= Tripped on Overvoltage									
SC= Planned Shutdown for construction activities									
SO= Planned Shutdown for O&M activities									
SE= Emergency Shutdown									
TP= Protection Maloperation									
ME= Miscellaneous outage									

Outage Considered on account of Reduced Voltage Operation Mode in Month February-2020								
S. No.	Name of Transmission Element	Type of the element	Region Involved	Tripping Date and Time	Brief Reason/Relay Indication	Restoration Date and Time	RVO mode duration	Outage duration considered
1	Talcher-Kolar Pole-I	HVDC	ER/SR	05-02-2020 23:17	Bipole went into RVO Mode	06-02-2020 08:37	09:20:00	1:52:00
2	Talcher-Kolar Pole-II	HVDC	ER/SR	05-02-2020 23:21	Bipole went into RVO Mode	06-02-2020 08:41	09:20:00	1:52:00

24. System Reliability Indices Report for the month of February 2020

Percentage (%) of times ATC was violated

S.No.	Corridor	Number of Blocks Violated	Number of Hours Violated	%Violation
1	WR-NR	0	0.00	0.00
2	ER-NR	0	0.00	0.00
3	Import of NR	0	0.00	0.00
4	NEW-SR	9	2.25	0.32
5	NER Import	0	0.00	0.00

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

S.No.	Corridor	Number of Blocks Violated	Number of Hours Violated	%Violation
1	WR-NR	0	0.00	0.00
2	ER-NR	0	0.00	0.00
3	Import of NR	0	0.00	0.00
4	NEW-SR	0	0.00	0.00
4	NER Import	0	0.00	0.00

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

पावर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

NATIONAL LOAD DESPATCH CENTRE – राष्ट्रीय भार प्रेषण केन्द्र

**First floor, B-9, Qutab Institutional Area,
Katwaria Sarai, New Delhi-110016.**