

#### National Load Despatch Centre

#### POWER SYSTEM OPERATION CORPORATION LIMITED

(A Government of India Enterprise)

CIN No.: U40105DL2009GOI188682

B-9, QUTUB INSTITUTIONAL AREA, KATWARIA SARAI, NEW DELHI -110016

Ref: POSOCO/NLDC/SO/Weekly Report

Date: 03rd Apr 2020

- 1. कार्यपालक निदेशक, पू. क्षे. भा. प्रे. के., 14, गोल्फ क्लब रोड , कोलकाता 700033 Executive Director, ERLDC, 14 Golf Club Road, Tolleygunge, Kolkata, 700033
- 2. कार्यपालक निदेशक, ऊ. क्षे. भा. प्रे. के., 18/ ए , शहीद जीत सिंह सनसनवाल मार्ग, नई दिल्ली 110016 Executive Director, NRLDC, 18-A, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi – 110016
- 3. कार्यपालक निदेशक, प. क्षे. भा. प्रे. के., एफ-3, एम आई डी सी क्षेत्र , अंधेरी, मुंबई 400093 Executive Director, WRLDC, F-3, M.I.D.C. Area, Marol, Andheri (East), Mumbai-400093
- 4. कार्यपालक निदेशक, ऊ. पू. क्षे. भा. प्रे. के., डोंगतिएह, लोअर नोंग्रह, लापलंग, शिलोंग 793006 Executive Director, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
- 5. कार्यपालक निदेशक, द. क्षे. भा. प्रे. के., 29, रेस कोर्स क्रॉस रोड, बंगलुरु 560009 Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Weekly Status Report 22<sup>nd</sup> Mar-2020 to 28<sup>th</sup> Mar-2020.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, 22 मार्च -2020 से 28 मार्च -2020, सप्ताह की अखिल भारतीय प्रणाली की ग्रिड निष्पादन रिपोर्ट रा०भा०प्रे०के० की वेबसाइँट पर निम्न लिंक पर उप्लब्ध है :-

As per article 5.5.1 of the Indian Electricity Grid Code, the weekly status report pertaining power supply position report of All India Power System for the week 22<sup>nd</sup> Mar-2020 to 28<sup>th</sup> Mar-2020 is available at the NLDC website.

Thanking You.

### पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली

साप्ताहिक रिपोर्ट ( 22 मार्च 2020 से 28 मार्च 2020 तक)

रिपोर्टिंग तिथि:-

3-Apr-20

(आई० ई० जी० सी० की धारा संख्या-5.5.1 के अंतर्गत)

1. अधिकतम मांग आपूर्ति और अधिकतम कमी (मे॰वा॰)

क्षेत्र	क्षेत्र उत्तरी क्षेत्र		पश्चिमी क्षेत्र		दक्षिण	दक्षिणी क्षेत्र		पूर्वी क्षेत्र		पूर्वोत्तर क्षेत्र		कुल	
दिनांक	अधिकतम मांग आपूर्ति	आधिकतम कमी	अधिकतम मांग आपूर्ति	आधिकतम कमी	अधिकतम मांग आपूर्ति	आधिकतम कमी	अधिकतम मांग आपूर्ति	आधिकतम कमी	अधिकतम मांग आपूर्ति	आधिकतम कमी	अधिकतम मांग आपूर्ति	आधिकतम कमी	
	(मे॰वा॰)	(मे॰वा॰)	(मे॰वा॰)	(मे॰वा॰)	(मे॰वा॰)	(मे॰वा॰)	(मे॰वा॰)	(मे॰वा॰)	(मे॰वा॰)	(मे॰वा॰)	(मे॰वा॰)	(मे॰वा॰)	
22-03-2020	31804	449	37511		37047		16479		2159	43	125000	492	
23-03-2020	33835	468	39571		39726		16528		2286	88	131946	556	
24-03-2020	30563	488	36306		36450		16352		2266	18	121937	506	
25-03-2020	29426	502	30556		34405		16617		2059	18	113063	520	
26-03-2020	28917	512	31652		34956		16865		2158	46	114548	558	
27-03-2020	24307	567	31190		34632		16583		2194	75	108906	642	
28-03-2020	25947	501	31192		35205		16768		2215	41	111327	542	

#### 2. ऊर्जा आपूर्ति और पनबिजली उत्पादन (मि॰यू०)

क्षेत्र	उत्तरी क्षेत्र		पश्चिम	पश्चिमी क्षेत्र		दक्षिणी क्षेत्र		पूर्वी क्षेत्र		र क्षेत्र		कुल	
/	কৰ্जা आपूर्ति	पनविजली उत्पादन	ऊर्जा आपूर्ति	पनविजली उत्पादन	ऊर्जा आपूर्ति	पनविजली उत्पादन	ऊर्जा आपूर्ति	पनविजली उत्पादन	ऊर्जा आपूर्ति	पनविजली उत्पादन	ऊर्जा आपूर्ति	पनविजली उत्पादन	
तिथि	(मि०यू०)	(मि॰यू०)	(मि॰यू॰)	(मि॰यू॰)	(मि॰यू॰)	(मि॰यू०)	(मि॰यू॰)	(मि॰यू०)	(मि॰यू०)	(मि॰यू०)	(मि॰यू०)	(मि॰यू॰)	
22-03-2020	734	141	971	33	975	63	315	25	36	4	3030	265	
23-03-2020	724	145	996	33	1030	76	325	32	39	5	3113	291	
24-03-2020	695	144	944	35	983	71	314	33	39	4	2974	288	
25-03-2020	665	144	844	29	911	63	320	32	36	4	2777	272	
26-03-2020	628	148	771	35	891	71	327	39	35	4	2652	297	
27-03-2020	566	142	761	35	896	78	333	39	36	4	2592	298	
28-03-2020	579	158	781	27	900	73	333	41	36	4	2628	304	

#### 3. आवृत्ति (प्रतिशत समय में)

तिथि	49.8-49.9	<49.9	49.9-50.05	>50.05	Average	FVI
MIS	ऑo इंo ग्रिड					
22-03-2020	6.64	8.02	57.89	34.09	50.02	0.067
23-03-2020	4.12	4.12	79.24	16.64	50.00	0.027
24-03-2020	1.10	1.10	58.53	40.37	50.04	0.049
25-03-2020	2.81	2.81	67.91	29.28	50.02	0.042
26-03-2020	7.58	8.08	68.43	23.50	50.01	0.043
27-03-2020	7.30	8.45	74.05	17.50	49.99	0.045
28-03-2020	3.52	3.83	65.39	30.78	50.02	0.051

<sup>\*</sup>NEW & SR grid running in synchronisation.

#### 4. NEW ELEMENTS COMMISSIONED

- 11	

#### 5. Maximum Demand Met during the day & Peak Hour Shortage in States (in MW)

	Date	1	3-2020		3-2020		3-2020	25-03	3-2020	26-03	-2020	27-03	3-2020	28-03	3-2020
Region	States	Max. Demand Met during the day	Peak hr Shortage	Max. Demand Met during the day	Peak hr Shortage	Max. Demand Met during the day	Peak hr Shortage	Max. Demand Met during the day	Peak hr Shortage	Max. Demand Met during the day	Peak hr Shortage	03-01-2020	Peak hr Shortage	Max. Demand Met during the day	Peak hr Shortage
	Punjab	3995	0	3965	0	3521	0	3377	0	3399	0	2973	0	3044	0
	Haryana	5064	0	4583	0	4668	0	4155	0	3959	0	3781	0	3632	0
	Rajasthan	10077	0	9610	0	9839	0	9439	0	7330	0	5599	0	6704	0
	Delhi	2282	0	2448	0	2379	0	2419	0	2273	0	2425	0	2294	0
NR	UP	13391	0	14232	0	12751	0	13813	75	13913	0	11359	0	13031	0
	Uttarakhand	1131	0	1212	0	1128	0	1066	0	1033	0	1044	0	959	0
	HP	954	0	1305	0	967	0	927	0	775	0	895	0	875	0
	J&K	2067	517	2240	560	2057	514	2181	545	2085	521	2161	540	2202	550
	Chandigarh	143	0	157	0	136	0	149	0	140	0	149	0	141	0
	Chhattisgarh	3505	0	3485	0	3508	0	3222	0	3244	0	3134	0	3156	0
	Gujarat	13564	0	13513	0	12222	0	10970	0	10468	0	8962	0	9263	0
	MP	9290	0	9595	0	9455	0	9001	0	7593	0	6065	0	7276	0
WR	Maharashtra	17909	0	19288	0	18693	0	17559	0	15472	0	15819	0	16197	0
***	Goa	365	0	355	0	364	0	328	0	340	0	343	0	343	0
	DD	282	0	277	0	234	0	101	0	67	0	64	0	63	0
	DNH	776	0	702	0	627	0	266	0	101	0	86	0	78	0
	Essar steel	756	0	806	0	557	0	329	0	319	0	264	0	234	0
	Andhra Pradesh	8514	0	9317	0	8784	0	8220	0	8217	0	8095	0	8138	0
	Telangana	10290	0	11204	0	10379	0	10478	0	10019	0	9953	0	10211	0
SR	Karnataka	11011	0	12348	0	12348	0	10893	0	10713	0	10907	0	10660	0
J.,	Kerala	3628	0	3557	0	3600	0	3362	0	3521	0	3546	0	3581	0
	Tamil Nadu	12233	0	13642	0	12833	0	11144	0	11124	0	10791	0	10791	0
	Pondy	327	0	348	0	270	0	209	0	213	0	207	0	207	0
	Bihar	3942	0	3999	0	3822	0	3975	0	4161	0	4222	0	4236	0
	DVC	2726	0	2742	0	1906	0	1762	0	1728	0	1625	0	1664	0
ER	Jharkhand	1256	0	1266	0	1293	0	1275	0	1250	0	1209	0	1302	0
	Odisha	3408	0	4430	0	3940	0	4007	0	3988	0	3929	0	3939	0
	West Bengal	5587	0	5798	0	5743	0	5799	0	5999	0	6036	0	6270	0
	Sikkim	82	0	113	0	110	0	103	0	99	0	95	0	104	0
	Arunachal Pradesh	118	1	121	1	110	2	108	3	110	2	107	1	112	1
	Assam	1160	22	1296	41	1273	7	1226	10	1250	31	1337	9	1287	26
	Manipur	190	1	189	1	186	4	177	1	173	2	176	2	183	0
NER	Meghalaya	320	0	378	0	311	0	297	2	289	3	277	0	249	0
	Mizoram	99	1	106	1	94	2	89	1	93	1	94	1	93	1
	Nagaland	124	2	128	1	120	2	117	2	105	3	113	2	109	2
	Tripura	216	2	229	0	230	1	232	5	252	8	249	1	253	0

### 6. Energy Consumption in States (MUs)

Region	States	22-03-2020	23-03-2020	24-03-2020	25-03-2020	26-03-2020	27-03-2020	28-03-2020
	Punjab	86.3	74.7	69.6	63.1	66.9	57.6	56.1
	Haryana	93.0	92.0	85.9	76.7	74.7	65.9	64.8
	Rajasthan	178.7	171.9	171.4	161.2	127.9	105.8	123.5
	Delhi	46.1	48.7	46.0	46.1	44.1	44.4	42.4
NR	UP	240.8	247.4	241.6	239.9	238.9	217.3	219.4
	Uttarakhand	22.5	21.7	19.5	18.2	18.0	17.0	16.9
	НР	13.0	20.5	15.6	12.8	12.0	12.9	12.6
	J&K	45.6	44.7	42.8	44.6	43.2	42.9	40.9
	Chandigarh	2.4	2.4	2.3	2.3	2.3	2.4	2.2
	Chhattisgarh	81.6	86.4	80.8	75.2	73.4	77.0	73.6
	Gujarat	282.4	291.0	263.0	238.2	207.5	192.3	201.7
	MP	182.1	183.4	178.9	160.0	150.3	131.8	142.8
WR	Maharashtra	395.6	403.6	394.4	357.9	328.0	348.2	351.0
VVI	Goa	7.4	6.9	7.2	6.2	6.9	7.0	6.8
	DD	3.6	5.2	4.6	1.7	1.5	1.4	1.4
	DNH	13.5	15.0	12.9	3.2	2.2	2.0	1.7
	Essar steel	4.4	4.3	2.1	1.8	1.4	1.3	1.9
	Andhra Pradesh	176.7	181.4	175.4	162.1	159.7	160.4	161.0
	Telangana	219.7	224.9	210.7	207.4	202.5	202.7	208.6
SR	Karnataka	226.4	238.3	231.2	214.9	213.6	217.4	214.6
ЭN	Kerala	69.9	75.3	69.9	66.7	65.7	66.6	67.5
	Tamil Nadu	276.5	302.6	290.7	256.3	245.9	244.7	244.5
	Pondy	6.1	7.0	5.0	4.2	4.1	4.1	4.1
	Bihar	68.2	63.0	69.9	72.7	73.3	76.3	67.3
	DVC	57.5	53.3	38.1	34.9	34.3	33.6	32.9
ER	Jharkhand	21.5	23.2	23.9	24.2	23.2	23.7	23.0
EN	Odisha	66.5	69.1	74.7	79.1	82.7	80.7	82.8
	West Bengal	100.4	114.7	106.4	107.8	111.8	117.0	125.2
	Sikkim	1.0	1.4	1.5	1.4	1.3	1.3	1.3
	Arunachal Pradesh	2.1	1.9	2.0	2.1	2.0	2.0	1.9
	Assam	19.0	21.5	21.3	19.5	19.1	20.6	21.0
	Manipur	2.4	2.7	2.6	2.3	2.5	2.5	2.4
NER	Meghalaya	5.6	5.8	5.3	5.0	4.7	4.3	3.7
	Mizoram	1.6	1.8	1.7	1.5	1.6	1.8	1.5
	Nagaland	2.2	2.1	2.0	2.1	2.1	2.1	2.0
	Tripura	3.1	3.5	3.6	3.5	3.2	3.1	3.6
Α	LL INDIA TOTAL	3025.3	3113.1	2974.2	2776.5	2652.4	2591.9	2628.5

# पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली

साप्ताहिक रिपोर्ट ( 22 मार्च 2020 से 28 मार्च 2020 तक)

(आई० ई० जी० सी०	(आई० ई० जी० सी० की धारा संख्या-5.5.1 के अंतर्गत)												
7. अंतर्क्षेत्रीय विनिम	7. अंतक्षेत्रीय विनिमय [प्रथम) क्षेत्र से द्वितीय क्षेत्र को आयात (+) / निर्यात (-) ]												
दिनांक	22-03-2020	23-03-2020	24-03-2020	25-03-2020	26-03-2020	27-03-2020	28-03-2020						
East to North	-28.0	-46.3	-39.5	-28.4	-26.0	-23.1	-23.0						
East to West	36.1	32.8	44.6	45.8	41.2	33.1	30.1						
East to South	-102.8	-128.2	-118.6	-100.2	-107.2	-114.8	-110.8						
East to North-East	-15.3	5.4	5.1	3.7	3.5	3.0	0.5						
North-East to North	-10.0	11.4	11.5	11.5	11.8	11.5	9.8						
West to North	-60.8	-86.5	-82.2	-64.9	-71.1	-32.4	-26.8						
West to South	-117.3	-127.9	-108.6	-93.8	-97.2	-99.0	-102.8						

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

## साप्ताहिक रिपोर्ट ( 22 मार्च 2020 से 28 मार्च 2020 तक)

<b>.</b>	भूटान внит	ΓAN		नेपाल NEPAL		बांग्ल	ादेश BANGLA	DESH
दिनांक Date	Energy Exchange	Day Average (MW)	Energy Exchange	Day Peak (MW)	Day Average (MW)	Energy Exchange	Day Peak (MW)	Day Average (MW)
22-03-2020	1.3	55	-9.3	-509	-386	-19.5	-1078	-813
23-03-2020	1.6	65	-8.3	-509	-347	-20.6	-1084	-858
24-03-2020	2.8	115	-5.8	-317	-242	-20.6	-1090	-858
25-03-2020	3.2	133	-1.8	-145	-74	-20.6	-1088	-858
26-03-2020	3.8	159	-1.2	-154	-49	-16.7	-888	-696
27-03-2020	5.0	206	-2.9	-198	-121	-10.7	-638	-445
28-03-2020	5.6	235	-1.0	-178	-41	-13.1	-847	-547
কুল Total	23.2		-30.2			-121.8		

				8). Ma	ajor Gr	id Inciden	ces (Pr	ovisional)	:-			
S.No.	Region	Name of Elements	Owner / Agency	Outag	e	Revival	İ	Outage Duration	Event	Generation	Load Loss(MW)	Category as per CEA
5	negion	(Tripped/Manually opened)	Owner / Agency	Date	Time	Date	Time	Time	(As reported)	Loss(MW)	LOAU LOSS(IVIVV)	Grid Standards
1	NER	132 kV Ranganadi - Ziro T/L	Dop Arunachal	26-Mar-20	15:18	26-Mar-20	15:28	00:10	At around 15:18 Hrs of 26/03/2020, 132 kV Ranganadi - Ziro T/L tripped causing blackout of radially connected 132 kV Ziro, Daporijo, Along, Pashighat, Roing, Tezu and Namsai buses.Due to the disturbance, estimated load loss of around 16 MW was observed at Ziro, Daporjio, Along, Pasighat, Roing, Tezu and Namsai area of Arunachal Pradesh . No generation loss was observed	Nil	16	GD-1
2	WR	400KV Bus-1 at Pithampur 400/Z20KV ICT-1 at Pithampur 400KV 2x 50MVAR Bus reactor at Pithampur 400KV Pithampur-Indore(PG)-1 400KV Pithampur-Singaji-2 400KV Pithampur-Badnawar-1 400KV Pithampur-Singaji-4	Madhya Pradesh	26-Mar-20	21:13	26-Mar-20	22:56	01:43	At 21:13 hrs/26.03.20 LBB protection operated in 400KV Bus-1 at Pithampur (MP) Substation leading to tripping 400 KV Bus-1 at Pithampur along with 400/220KV ICT-1, 400KV 2x 50 MVAR Bus reactor, 400KV Pithampur-Indore(PG)-1, 400KV Pithampur-Singaji-2, 400KV Pithampur-Badnawar-1.	Nil	Nil	GI-II
3	SR	230KV KALVENDAPATTU-KADAPERI 230KV SRIPERAMBADUR-KADAPERI-1 230KV SRIPERAMBADUR-KADAPERI-2	Tamil Nadu	29-Mar-20	04:03	29-Mar-20	06:03	02:00	At 04:03 Hrs, 230KV SRIPERAMBADUR-KADAPERI-2 CT blasted and resulted tripping of mentioned elements.	Nil	80	GD-1
4	ER	220kV Santaldih(STPS)-Chandil 220kV Ranchi-Chandil 220kV Ramchandrapur-Chandil	Jharkhand	29-Mar-20	19:21	29-Mar-20	19:45	00:24	At 19:21 Hrs,R-Ph CT of 220kV Santaldih(STPS)-Chandil line failed at chandil end.subsequently mentioned elements tripped at chandil amd 220kV Chandil S/S became dead.	Nil	210	GD-1
5	ER	220 KV Muzaffarpur Hajipur 1 220 KV Muzaffarpur KBUNL 2 220 KV Muzaffarpur Dhalkebar - 1 400/220 KV ICT 1 and 2 at Muzaffarpur	ISTS	28-Mar-20	18:49	28-Mar-20	20:00	01:11	At 18:49 hrs, 220 KV Muzaffarpur bus 1 tripped on LBB maloperation associated with 400/220 KV ICT 1 CB. Due to this, 220 KV Muzaffarpur Hajipur 1, 220 KV Muzaffarpur KBUNL 2, 220 KV Muzaffarpur Dhalkebar - 1, 400/220 KV ICT 1 and 2 at Muzaffarpur tripped.	0	0	GI-1
6	NER	132 kV Loktak - Ningthoukhong line & 132 kV Imphal - Ningthoukhong line	MSPCL	23-Mar-20	08:24	23-Mar-20	08:48	00:24	Ningthoukhong area of Manipur Power System was connected with rest of NER Grid through 132 kV Loktak- Ningthoukhong line and 132 kV Imphal - Ningthoukhong line(132 kV KV Kakching - Kongba line was kept open to control over-loading of 132 kV Loktak-Ningthoukhong line)  At 08:24 Hrs on 23.03.2020, 132 kV Loktak - Ningthoukhong & Imphal - Ningthoukhong lines tripped. Due to tripping of these elements, Ningthoukhong area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	50	GD-1
7	NER	Kohima area of Nagaland Power System & Karong Area of Manipur Power System	MSPCL & DOP Nagaland	29-Mar-20	12:48	29-Mar-20	13:12	00:24	Kohima area of Nagaland Power System & Karong Area of Manipur Power System were connected with the rest of NER Grid through 132 kV Wokha-Sanis line & 132 Imphal(Yurembam)-Karong Line (132 Dimapur - Kohima line faulty w.e.f. 20:48 Hrs on 28.03.20) At 12:48 Hrs on 29.03.2020, 132 kV Wokha - Sanis line and 132 Imphal(Yurembam)-Karong line tripped. Due to tripping of these elements, Kohima & Karong areas was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	19	GD 1