

#### 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: 13th Mar 2020

To,

- 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 2<sup>nd</sup> Mar-2020 to 08<sup>th</sup> Mar-2020.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, 02 मार्च -2020 से 08 मार्च -2020, सप्ताह की अखिल भारतीय प्रणाली की ग्रिड निष्पादन रिपोर्ट रा॰भा॰प्रे॰के॰ की वेबसाइट 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 2<sup>nd</sup> Mar-2020 to 08<sup>th</sup> Mar-2020 is available at the NLDC website.

Thanking You.

Yours faithfully,

Sr. DGM (SO-I)

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

साप्ताहिक रिपोर्ट ( 02 मार्च 2020 से 08 मार्च 2020 तक)

रिपोर्टिंग तिथि:-

13-Mar-20

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

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

क्षेत्र	उत्तरी ह	ोत्र	पश्चिम	ी क्षेत्र	दक्षिण	ी क्षेत्र	पूर्वी क्षेत्र पूर्वोत्तर		र 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॰)
02-03-2020	42209	600	50560		44448		17032		2334	89	156583	689
03-03-2020	42485	600	49877		44904		16713		2130	257	156109	857
04-03-2020	40876	561	49707		45593		16024		2395	55	154595	616
05-03-2020	40124	651	49198		44438		16760		2399	52	152919	703
06-03-2020	35391	480	48364		44548		16012		2312	104	146627	584
07-03-2020	39437	558	48778		43643		15694		2380	44	149932	602
08-03-2020	36208	551	46894		40918		15250		2267	70	141537	621

#### 2. ऊर्जा आपूर्ति और पनबिजली उत्पादन (मि०यू०)

97-1	उत्तरी ह	उत्तरी क्षेत्र		पश्चिमी क्षेत्र		दक्षिणी क्षेत्र		पूर्वी क्षेत्र		र क्षेत्र		कुल
क्षेत्र <i>/</i>	ऊर्जा आपूर्ति	पनविजली उत्पादन										
तिथि	(मि०यू०)	(मि॰यू०)	(मि॰यू॰)	(मि॰यू०)	(मि॰यू॰)	(मि॰यू०)	(मि॰यू०)	(मि॰यू०)	(मि॰यू०)	(मि॰यू०)	(मि॰यू०)	(मि०यू०)
02-03-2020	882	136	1199	35	1090	100	354	30	40	4	3565	306
03-03-2020	914	145	1219	44	1117	108	347	29	38	5	3635	330
04-03-2020	880	141	1208	33	1125	110	338	28	39	6	3591	317
05-03-2020	821	141	1208	38	1122	110	341	27	40	5	3533	320
06-03-2020	719	138	1182	33	1115	89	331	30	40	5	3388	295
07-03-2020	787	134	1166	30	1091	91	325	30	40	6	3409	291
08-03-2020	790	135	1150	42	1037	74	332	30	39	5	3349	287

#### 3. आवृत्ति (प्रतिशत समय में)

तिथि	49.8-49.9	<49.9	49.9-50.05	>50.05	Average	FVI
KII4	ऑo इंo ग्रिड	ऑo इंo ग्रिड	ऑo इंo ग्रिड	ऑo इंo ग्रिड	ऑо इं० ग्रिड	ऑo इंo ग्रिड
02-03-2020	9.03	10.06	73.66	16.28	49.99	0.046
03-03-2020	4.68	4.68	76.85	18.47	50.00	0.033
04-03-2020	4.73	4.73	72.35	22.92	50.01	0.036
05-03-2020	5.10	5.50	73.60	20.90	50.00	0.037
06-03-2020	7.23	7.69	70.30	22.01	50.00	0.045
07-03-2020	07-03-2020 8.76 08-03-2020 3.48		77.55	13.01	49.99	0.040
08-03-2020			73.99	22.52	50.01	0.036

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

#### 4. NEW ELEMENTS COMMISSIONED

1. 400 kV Bina-Sagar first time charged on 08-03-2020 at 22: hrs. (it is LILO of 400 kV satna-Bina-3 at sagar)

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

	Date	02-03	3-2020	03-03	-2020	04-03	-2020	05-03	-2020	06-03	3-2020	07-03	3-2020	08-03	3-2020
Region	States	Max. Demand Met during the day	Peak hr Shortage												
	Punjab	5444	0	5594	0	5426	0	5128	0	4749	0	4841	0	4846	0
	Haryana	5941	0	6120	0	5853	0	5245	0	4695	0	5415	0	4703	0
	Rajasthan	13285	0	13448	0	13381	0	12307	0	8918	0	10542	0	11159	0
	Delhi	3310	0	3406	0	3457	0	3475	0	3682	0	3517	0	3427	0
NR	UP	13628	0	13860	0	12771	0	13181	0	10994	0	13388	0	12961	0
	Uttarakhand	1798	0	1863	0	1860	0	1801	0	1612	0	1765	0	1892	0
	HP	1642	0	1650	0	1639	0	1601	0	1602	0	1656	0	1612	0
	J&K	2401	600	2724	681	2407	602	2606	651	2249	562	2329	582	2289	572
	Chandigarh	185	0	211	0	212	0	209	0	218	0	204	0	190	0
	Chhattisgarh	3910	0	3963	0	3758	0	3756	0	3853	0	3384	0	3619	0
	Gujarat	16462	0	16482	0	15860	0	16147	0	15833	0	15818	0	15557	0
	MP	11531	0	11997	0	12111	0	12058	0	11927	0	11537	0	11427	0
WR	Maharashtra	22839	0	23294	0	23251	0	23583	0	23493	0	23287	0	22251	0
VVIX	Goa	523	0	526	0	524	0	473	0	498	0	493	0	441	0
	DD	325	0	340	0	339	0	335	0	343	0	333	0	324	0
	DNH	802	0	803	0	819	0	823	0	814	0	812	0	805	0
	Essar steel	775	0	776	0	772	0	827	0	861	0	803	0	799	0
	Andhra Pradesh	9750	0	9903	0	10005	0	9982	0	9790	0	8950	0	8760	0
	Telangana	12741	0	12941	0	12658	0	12667	0	12452	0	12105	0	11301	0
SR	Karnataka	11745	0	12289	0	12230	0	12703	0	12753	0	12576	0	11923	0
31	Kerala	3930	0	3833	60	3860	0	3834	0	3870	0	3745	0	3694	0
	Tamil Nadu	14799	0	15130	0	15502	0	15286	0	15242	0	14749	0	13183	0
	Pondy	368	0	383	0	395	0	383	0	397	0	392	0	331	0
	Bihar	3878	0	4037	0	4018	0	4004	0	3612	0	3807	0	3814	0
	DVC	3029	0	3066	0	2955	0	2974	0	2873	0	2936	0	2892	0
ER	Jharkhand	1284	0	1179	0	1120	0	1319	0	1184	0	1180	0	1253	0
LN	Odisha	3829	0	3837	0	3518	0	3721	0	3622	0	3614	0	3677	0
	West Bengal	6531	0	6305	0	6283	0	6354	0	6535	0	6300	0	5884	0
	Sikkim	163	0	153	0	154	0	143	0	107	0	113	0	99	0
	Arunachal Pradesh	118	2	126	2	119	1	122	2	124	2	121	1	125	1
	Assam	1320	71	1196	165	1348	33	1367	20	1314	75	1361	22	1276	36
	Manipur	190	3	178	6	200	1	202	3	192	4	197	2	178	1
NER	Meghalaya	335	4	338	0	359	0	364	0	364	0	349	0	326	0
	Mizoram	101	3	100	1	101	1	98	2	101	1	106	1	105	1
	Nagaland	114	3	118	2	124	3	124	2	127	2	127	1	128	1
	Tripura	230	11	224	1	231	0	225	3	224	0	223	0	220	0

## 6. Energy Consumption in States (MUs)

Region	States	02-03-2020	03-03-2020	04-03-2020	05-03-2020	06-03-2020	07-03-2020	08-03-2020	
	Punjab	111.2	116.5	114.0	101.7	91.6	97.3	93.8	
	Haryana	110.4	119.5	114.0	97.2	87.6	99.1	93.2	
	Rajasthan	236.5	244.7	225.9	215.6	153.3	193.9	201.1	
	Delhi	61.5	62.8	63.9	62.9	64.4	59.9	58.2	
NR	UP	250.8	257.1	250.0	230.3	209.5	218.8	232.1	
	Uttarakhand	33.8	35.0	35.1	34.8	32.9	34.6	33.8	
	НР	27.5	28.4	28.2	29.4	29.6	30.5	27.5	
	J&K	46.8	46.9	45.4	45.7	46.8	49.2	47.4	
	Chandigarh	3.1	3.4	3.4	3.3	3.5	3.5	3.1	
	Chhattisgarh	91.3	86.2	84.3	85.1	83.5	72.2	81.2	
	Gujarat	360.1	363.1	356.5	354.3	345.3	344.0	335.6	
	MP	226.7	234.3	232.1	232.0	220.7	221.5	221.0	
WR	Maharashtra	476.6	490.8	490.1	491.6	486.1	486.1	471.5	
VVK	Goa	10.9	11.0	11.0	10.4	10.4	10.4	9.2	
	DD	7.1	7.6	7.7	7.5	7.6	7.6	7.4	
	DNH	18.6	19.0	19.2	19.5	19.1	19.1	19.0	
	Essar steel	7.3	6.6	7.5	8.1	9.6	5.4	5.4	
	Andhra Pradesh	195.3	195.9	201.2	199.5	194.7	185.7	182.4	
	Telangana	248.6	254.0	254.1	247.3	244.1	237.6	226.7	
SR	Karnataka	237.2	245.1	244.5	251.9	248.5	247.7	237.4	
ЭN	Kerala	78.9	79.9	80.0	79.2	79.4	79.5	73.9	
	Tamil Nadu	323.0	334.0	337.3	336.3	339.7	332.2	309.7	
	Pondy	7.5	7.9	8.1	8.0	8.5	8.2	7.4	
	Bihar	72.1	73.1	73.5	73.5	67.3	64.8	71.1	
	DVC	63.8	62.9	59.7	60.3	59.5	59.5	60.8	
ER	Jharkhand	24.2	22.9	21.7	20.3	21.0	20.9	22.5	
EN	Odisha	72.4	71.6	69.9	69.3	67.8	68.6	71.4	
	West Bengal	120.1	115.5	111.4	115.5	114.0	109.7	104.9	
	Sikkim	1.4	1.5	1.7	1.7	1.4	1.5	1.3	
	Arunachal Pradesh	2.1	2.2	2.1	2.1	2.2	2.3	2.3	
	Assam	22.5	20.3	21.3	22.5	22.5	22.2	21.0	
	Manipur	2.7	2.5	2.8	2.6	2.6	2.7	2.7	
NER	Meghalaya	5.6	5.7	5.5	5.9	5.7	5.9	5.7	
	Mizoram	1.6	1.6	1.7	1.6	1.7	1.6	1.7	
	Nagaland	2.1	2.2	2.2	2.1	2.2	2.2	2.2	
	Tripura	3.5	3.4	3.5	3.5	3.6	3.6	3.4	
Α	LL INDIA TOTAL	3564.8	3634.8	3590.6	3532.6	3387.6	3409.3	3348.7	

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

साप्ताहिक रिपोर्ट ( 02 मार्च 2020 से 08 मार्च 2020 तक)

(आइ० इ० जा० सा	आई० ई० जी० सी० की धारा संख्या-5.5.1 के अंतर्गत)												
7. अंतक्षेत्रीय विनिम	7. अंतक्षेत्रीय विनिमय [प्रथम) क्षेत्र से द्वितीय क्षेत्र को आयात (+) / निर्यात (-) ]												
	-		, , ,	, , <u>-</u>									
दिनांक	02-03-2020	03-03-2020	04-03-2020	05-03-2020	06-03-2020	07-03-2020	08-03-2020						
East to North	-43.2	-55.6	-48.8	-39.1	-30.4	-48.0	-41.1						
East to West	39.0	32.0	34.7	42.8	40.1	26.8	33.2						
East to South	-132.3	-129.4	-131.3	-129.5	-130.4	-123.9	-126.7						
East to North-East	-20.4	-22.3	-24.9	-24.5	-27.8	-29.0	-26.3						
North-East to North	-12.0	-11.6	-11.2	-12.3	-11.0	-11.0	-12.1						
West to North	-136.5	-133.0	-123.0	-94.6	-68.0	-95.7	-94.8						
West to South	-103.7	-114.9	-114.7	-118.1	-121.3	-116.5	-111.8						

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

## साप्ताहिक रिपोर्ट ( 02 मार्च 2020 से 08 मार्च 2020 तक)

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

	भूटान внит	AN	, , ,	नेपाल NEPAL		बांग्लादेश BANGLADESH			
दिनांक Date	Energy Exchange	Day Average (MW)	Energy Exchange	Day Peak (MW)	Day Average (MW)	Energy Exchange	Day Peak (MW)	Day Average (MW)	
02-03-2020	1.9	78	-10.6	-565	-441	-16.0	-1026	-665	
03-03-2020	2.7	114	-10.0	-563	-416	-13.7	-863	-571	
04-03-2020	2.2	90	-10.3	-523	-523 -431		-1021	-666	
05-03-2020	1.3	56	-9.9	-570 -412		-16.3	-1021	-677	
06-03-2020	1.3	53	-10.0	-560	-418	-9.9	-771	-411	
07-03-2020	0.7	27	-8.2	-503	-340	-14.8	-943	-618	
08-03-2020	0.8	34	-9.2	-506	-382	-16.6	-1024	-690	
कुल Total	10.9		-68.2			-103.1			

	8). Major Grid Incidences (Provisional):-												
S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Out Date	tage Time	Reviv	Time	Outage Duration Time	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards	
1	NR	400KV Jhakri- Karcham I 400KV Jhakri- Karcham II 400KV Jhakri- Punchkula I 400KV Jhakri- Punchkula II 400KV Jhakri- Rampur I 400KV Jhakri- Rampur II 400KV Jhakri- Rampur II 400KV Bus I, II, III 8. IV Unit Number I, 2, 5, 6 at Bampur Unit Number 3, 4, 5, 6 at Rampur Unit Number 2, 4 at Karcham	SJVN	1-Mar-20	06:09	1-Mar-20	07:12	01:03	400 kV Bus Bar protection operated at 06:09 Hrs. 400 kV bus 1,2,3&4 tripped along with 6 nos. 400kV lines at Naptha Jhakri Substation. Total Generation loss was around 1300MW at NJPC (870MW), Rampur (280MW) & Karcham (170 MW).	1300	Nil	GD-1	
2		220kV Kozhikode-Areakode-I 220kV Kozhikode-Areakode-I 220kV Kozhikode-Areakode-II 400kV Nechikode-Areakode-III 400kV Neelmangla-Talaguppa 400/220kV Kozhikode ICT-I 400kV Mysore-Kozhikode I 400kV Mysore-Kozhikode I 400kV Mysore-Kozhikode II 400kV Hassan ICT-I 400kV UPCI-Hassan II 400kV UPCI-Hassan II 400kV UPCI-Hassan II 400kV UPCI-Hassan II 400/220kV Mysore ICT-II 400/220kV Mysore ICT-II 220kV Hassan-Yelachanalii 400/220kV Mysore ICT-II 220kV Hassan-Yelachanalii 400/220kV Mysore ICT-II 400/220kV Kozhikode ICT-II 400/220kV Kozhikode ICT-II 400/220kV Kozhikode ICT-II 400/220kV Kozhikode ICT-II 400/220kV Mysopa-Hassan Hassan Bus reactor -I 400kV Talaguppa-ICT-I 400/220kV Mysopa-Hassan Hassan Bus reactor -I 400/220kV Hassan-I 400/220kV Hassan-II 400/220kV Hassan-II 400/220kV Hassan-II 400/220kV Hassan-II 400/220kV Hassan-II 400/220kV Hassan-II 400/22		1-Mar-20	13:57	1-Mar-20	14:30	00:33	In the antecedent conditions 400kV Mysore – Nelamangala line-1 and 2 were under planned shutdown. 400kV Nelamangala- Hassan tripped on B-N fault. Auto reclose was not attempted since the line was in non-auto mode. After around 8secs 400kV Talaguppa-Hassan tripped on overcurrent protection at Talaguppa end, line did not trip at Hassan end. Simultaneously 400kV Talaguppa – Nelamangala also tripped on R-N fault. Auto reclose was not attempted since the line was in non-auto mode. This led to complete loss of supply at 400kV Massan, 400kV Talaguppa, 400kV Mysore, 400kV Kozhikode, 400/220kV UPCL, 220kV Sharavathy, 220kV Varahi stations.	1754	2380	GD-1	
3	SR	220 kV Edamon-Edappon 220 kV Edappon-Kayankulam	Kerala	3-Mar-20	07:43	3-Mar-20	09:42	01:59	220kV Edappon Bus bar protection operated (B-Ph CT at Bus coupler failure). Both Bus 1 and Bus 2 tripped, subsequently tripping 220 kV Edamon-Edappon, 220 kV Edappon-Kayankulam lines.	Nil	60	GD-1	
4	NER	132 kV Loktak-Ningthoukhong 132 kV Imphal-Ningthoukhong	Manipur	3-Mar-20	15:57	3-Mar-20	17:54	01:57	At 15:57 hrs, 132 kV Loktak-Ningthoukhong and 132 kV Imphal-Ningthoukhong got tripped. As the 132 kV Churachandpur, Elangkangpokpi & Kakching Substations of Manipur are radially connected from 132 kV Ningthoukhong, the above mentioned trippings caused blackout of all those substations. Due to this incident, Ningthoukhong, Churachandpur, Elankangpokpi and Kakching area of Manipur state was affected and load loss of around 17 MW has occured. There was no generation loss.	0	17	GD-1	