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: 27th 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 16th Mar–2020 to 22nd Mar-2020.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, 16 मार्च -2020 से 22 मार्च -2020, सप्ताह की अखिल भारतीय प्रणाली की ग्रिड निष्पादन रिपोर्ट रा०भा०प्रे०के० 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 16 Mar–2020 to 22 Mar-2020 is available at the NLDC website.

Thanking You.

Yours faithfully,

CGM (SO-I) 27/3/2020

पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली

साप्ताहिक रिपोर्ट (16 मार्च 2019 से 22 मार्च 2020 तक) **रिपोर्टिंग तिथि:- 27-Mar-20**

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

1. अधिकतम मांग आपूर्ति और अधिकतम कमी (मे०वा०)

क्षेत्र	उत्तरी क्षेत्र		पश्चिमी क्षेत्र		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
	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)	(मे०वा०)
16-03-2020	38399	515	49175		45255		19367		2415	5	154611	520
17-03-2020	38981	493	50426		45097		19528		2424	56	156456	549
18-03-2020	40437	571	49440		45875		19292		2436	43	157480	614
19-03-2020	39473	534	48434		45593		17724		2418	58	153642	592
20-03-2020	41253	598	47497		44241		18653		2401	69	154045	667
21-03-2020	39680	564	46970		43591		17473		2437	64	150151	628
22-03-2020	31804	449	37511		37047		16479		2159	43	125000	492

2. ऊर्जा आपूर्ति और पनबिजली उत्पादन (मि०यू०)

क्षेत्र / तिथि	उत्तरी क्षेत्र		पश्चिमी क्षेत्र		दक्षिणी क्षेत्र		पूर्वी क्षेत्र		पूर्वोत्तर क्षेत्र		कुल	
	ऊर्जा आपूर्ति	पनबिजली उत्पादन	ऊर्जा आपूर्ति	पनबिजली उत्पादन	ऊर्जा आपूर्ति	पनबिजली उत्पादन	ऊर्जा आपूर्ति	पनबिजली उत्पादन	ऊर्जा आपूर्ति	पनबिजली उत्पादन	ऊर्जा आपूर्ति	पनबिजली उत्पादन
	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)	(मि०यू०)
16-03-2020	802	141	1156	61	1127	91	369	36	41	4	3494	332
17-03-2020	827	143	1187	64	1148	80	383	33	42	4	3586	325
18-03-2020	851	148	1170	43	1157	88	385	31	42	5	3605	315
19-03-2020	860	147	1171	46	1147	91	373	28	42	4	3594	315
20-03-2020	866	143	1161	42	1128	85	367	35	43	4	3565	309
21-03-2020	843	142	1143	39	1104	82	362	35	43	4	3495	303
22-03-2020	734	141	971	33	975	63	315	25	36	4	3030	265

3. आवृत्ति (प्रतिशत समय में)

तिथि	49.8-49.9	<49.9	49.9-50.05	>50.05	Average	FVI
	ऑ० इं० ग्रिड	ऑ० इं० ग्रिड	ऑ० इं० ग्रिड	ऑ० इं० ग्रिड	ऑ० इं० ग्रिड	ऑ० इं० ग्रिड
16-03-2020	9.28	9.28	70.06	20.66	49.99	0.044
17-03-2020	3.17	3.25	74.10	22.65	50.01	0.033
18-03-2020	7.16	7.37	71.88	20.75	50.00	0.041
19-03-2020	4.66	6.26	74.42	19.32	50.00	0.046
20-03-2020	1.38	1.38	71.92	26.70	50.02	0.034
21-03-2020	1.99	1.99	64.06	33.95	50.03	0.039
22-03-2020	6.64	8.02	57.89	34.09	50.02	0.067

***NEW & SR grid running in synchronisation.**

4. NEW ELEMENTS COMMISSIONED

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

Region	Date	16-03-2020		17-03-2020		18-03-2020		19-03-2020		20-03-2020		21-03-2020		22-03-2020	
	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	Max. Demand Met during the day	Peak hr Shortage	Max. Demand Met during the day	Peak hr Shortage
NR	Punjab	4904	0	4945	0	5083	0	5080	0	4985	0	5222	0	3995	0
	Haryana	5652	0	5813	0	5918	0	5791	0	5856	0	5698	0	5064	0
	Rajasthan	11777	0	12291	0	12205	0	12151	0	12017	0	10895	0	10077	0
	Delhi	3433	0	3420	0	3439	0	3413	0	3451	0	3215	0	2282	0
	UP	12791	0	13608	0	13962	135	13911	0	14592	0	15116	0	13391	0
	Uttarakhand	1758	0	1778	0	1770	0	1697	0	1764	0	1712	0	1131	0
	HP	1558	0	1511	0	1550	0	1513	0	1502	0	1434	60	954	0
	J&K	2061	515	1979	495	2358	589	2139	535	2393	598	2434	609	2067	517
	Chandigarh	202	0	196	0	202	0	188	0	183	0	166	0	143	0
WR	Chhattisgarh	3821	0	3989	0	3860	0	3843	0	3864	0	3848	0	3505	0
	Gujarat	15714	0	16447	0	16193	0	16511	0	16538	0	16816	0	13564	0
	MP	10359	0	10461	0	10454	0	10359	0	9946	0	9846	0	9290	0
	Maharashtra	23607	0	24012	0	22771	0	22807	0	22672	0	22272	0	17909	0
	Goa	495	0	552	4	507	0	479	0	497	0	478	0	365	0
	DD	318	0	333	0	332	0	326	0	333	0	328	0	282	0
	DNH	809	0	807	0	803	0	811	0	800	0	818	0	776	0
	Essar steel	723	0	765	0	778	0	840	0	827	0	814	0	756	0
SR	Andhra Pradesh	9967	0	9980	0	10207	0	10201	0	9896	0	9810	0	8514	0
	Telangana	11929	0	12051	0	12548	0	12408	0	11708	0	11541	0	10290	0
	Karnataka	13258	0	12854	0	12890	0	12497	0	12885	0	12039	0	11011	0
	Kerala	4087	0	4068	0	4182	0	4116	0	4074	0	3738	0	3628	0
	Tamil Nadu	15565	0	15481	0	15538	0	15591	0	15304	0	14695	0	12233	0
	Pondy	392	0	396	0	399	0	386	0	394	0	385	0	327	0
ER	Bihar	3870	0	4030	285	4153	0	4248	0	4102	0	3822	0	3942	0
	DVC	3068	0	3086	365	2998	0	2994	0	3275	0	2952	0	2726	0
	Jharkhand	1303	0	1306	148	1281	0	1200	0	1212	0	1201	0	1256	0
	Odisha	4044	0	4006	508	3988	0	3939	0	3688	0	3463	0	3408	0
	West Bengal	7250	0	7352	369	7288	0	7143	0	7282	0	6734	0	5587	0
	Sikkim	128	0	128	35	129	0	101	0	102	0	102	0	82	0
NER	Arunachal Pradesh	120	1	118	2	121	1	123	1	123	1	121	1	118	1
	Assam	1460	10	1456	18	1428	25	1466	40	1417	30	1408	42	1160	22
	Manipur	166	2	164	3	189	1	186	2	187	1	186	2	190	1
	Meghalaya	321	0	324	0	317	0	317	0	325	0	357	0	320	0
	Mizoram	100	1	98	2	99	1	98	2	97	1	101	1	99	1
	Nagaland	136	1	134	1	123	2	118	1	110	1	124	1	124	2
	Tripura	251	0	248	0	244	1	241	1	240	1	239	2	216	2

6. Energy Consumption in States (MUs)

Region	States	16-03-2020	17-03-2020	18-03-2020	19-03-2020	20-03-2020	21-03-2020	22-03-2020
NR	Punjab	95.3	96.5	102.4	103.9	105.6	105.7	86.3
	Haryana	105.7	111.5	115.1	116.2	117.4	115.1	93.0
	Rajasthan	205.6	213.6	215.2	216.8	210.3	202.4	178.7
	Delhi	59.2	60.2	60.7	60.6	63.4	59.1	46.1
	UP	232.8	240.9	249.9	256.7	263.0	255.7	240.8
	Uttarakhand	33.2	33.8	34.0	33.7	34.4	33.4	22.5
	HP	24.6	24.1	24.7	24.7	21.5	21.1	13.0
	J&K	42.6	43.1	46.0	44.8	47.3	47.7	45.6
	Chandigarh	3.3	3.2	3.2	3.1	3.1	2.8	2.4
WR	Chhattisgarh	85.1	89.8	89.1	83.7	83.6	84.4	81.6
	Gujarat	338.0	349.9	355.9	364.5	362.3	357.9	282.4
	MP	202.7	205.4	203.4	200.5	195.1	191.5	182.1
	Maharashtra	490.5	499.3	479.6	479.0	478.2	468.2	395.6
	Goa	10.4	11.1	10.9	10.6	10.5	9.9	7.4
	DD	7.1	7.4	7.4	7.4	7.5	7.4	3.6
	DNH	18.7	18.9	19.0	19.1	18.9	18.9	13.5
	Essar steel	3.7	5.1	4.5	6.5	5.3	5.2	4.4
SR	Andhra Pradesh	201.2	205.1	204.3	201.3	198.5	192.9	176.7
	Telangana	241.2	247.4	256.2	247.4	236.7	236.8	219.7
	Karnataka	255.6	256.9	256.0	258.6	251.1	244.8	226.4
	Kerala	83.0	84.5	84.7	85.3	84.5	81.7	69.9
	Tamil Nadu	337.6	346.2	347.2	345.6	348.3	339.8	276.5
	Pondy	8.0	8.3	8.3	8.3	8.5	8.3	6.1
ER	Bihar	71.7	72.0	73.4	74.1	75.2	68.6	68.2
	DVC	63.6	63.3	63.5	63.1	62.9	61.7	57.5
	Jharkhand	23.7	24.5	24.4	23.9	22.9	23.3	21.5
	Odisha	79.4	79.6	80.3	69.3	64.8	71.6	66.5
	West Bengal	129.0	142.0	142.2	141.3	140.2	135.2	100.4
	Sikkim	1.4	1.4	1.4	1.4	1.3	1.4	1.0
NER	Arunachal Pradesh	2.1	2.0	2.2	2.2	2.3	2.2	2.1
	Assam	23.4	23.9	23.7	24.2	24.2	24.0	19.0
	Manipur	2.3	2.6	2.9	2.9	2.9	2.7	2.4
	Meghalaya	5.4	5.4	5.4	5.2	5.8	5.8	5.6
	Mizoram	1.6	1.7	1.8	1.8	1.8	1.8	1.6
	Nagaland	2.1	2.2	2.2	2.1	2.1	2.2	2.2
	Tripura	3.9	3.8	3.8	3.8	3.9	3.8	3.1
ALL INDIA TOTAL		**3494.4**	**3586.4**	**3604.8**	**3593.5**	**3565.2**	**3495.1**	**3025.3**

पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली

साप्ताहिक रिपोर्ट (16 मार्च 2019 से 22 मार्च 2020 तक)

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

7. अंतर्क्षेत्रीय विनिमय [प्रथम क्षेत्र से द्वितीय क्षेत्र को आयात (+) / निर्यात (-)]

दिनांक	16-03-2020	17-03-2020	18-03-2020	19-03-2020	20-03-2020	21-03-2020	22-03-2020
East to North	-79.3	-78.2	-68.3	-68.3	-61.7	-53.2	-28.0
East to West	23.2	23.5	32.8	43.9	44.6	32.8	36.1
East to South	-129.4	-124.5	-128.6	-127.7	-129.5	-132.3	-102.8
East to North-East	3.2	3.2	3.0	-10.9	-19.6	-16.3	-15.3
North-East to North	11.6	11.4	11.6	-2.0	-9.5	-7.2	-10.0
West to North	-116.9	-119.7	-108.0	-107.5	-118.0	-107.9	-60.8
West to South	-118.8	-115.6	-124.6	-132.6	-132.4	-125.6	-117.3

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

साप्ताहिक रिपोर्ट (16 मार्च 2019 से 22 मार्च 2020 तक)

दिनांक Date	भूटान BHUTAN		नेपाल NEPAL			बांग्लादेश BANGLADESH		
	Energy Exchange	Day Average (MW)	Energy Exchange	Day Peak (MW)	Day Average (MW)	Energy Exchange	Day Peak (MW)	Day Average (MW)
16-03-2020	2.5	105	-11.7	-495	-486	-17.0	-1079	-708
17-03-2020	1.5	63	-14.2	-579	-590	-10.6	-776	-442
18-03-2020	1.4	58	-11.0	-583	-460	-17.0	-1078	-708
19-03-2020	1.3	55	-11.4	-594	-474	-15.8	-966	-660
20-03-2020	1.4	57	-10.0	-598	-419	-4.6	-362	-191
21-03-2020	2.6	108	-8.3	-463	-346	-10.1	-1084	-421
22-03-2020	1.3	55	-9.3	-509	-386	-19.5	-1078	-813
कुल Total	**12.1**		**-75.8**			**-94.6**		

8). Major Grid Incidences (Provisional):-

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration	Event *(As reported)*	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time	Time				
1	ER	400kV Teesta III – Kishanganj 400kV Teesta III – Dikchu 400kV Rangpo – Dikchu	TUL	15/Mar/20	13:52	15/Mar/20	14:31	0:39	At 13:52 hrs, 400 KV Teesta III and 400kV Dikchu become dead when 400kV Teesta III – Kishanganj, 400kV Teesta III – Dikchu and 400kV Rangpo – Dikchu tripped on BN fault. Running units of Teesta III tripped on loss of evacuation path resulting generation loss of 200 MW at Teesta III. There was no generation at Dikchu.	200	Nil	**GI-2**
2	ER	220 kV Tenughat (TTPS) – Biharsharif 220 kV Patratu (PTPS) – Tenughat (TTPS)	Patna/Jharkhand	15/Mar/20	16:12	15/Mar/20	16:34	0:22	At 16:12 hrs 220 kV Tenughat (TTPS) – Biharsharif and 220 kV Patratu (PTPS) – Tenughat (TTPS) tripped on earth fault. Running units of Tenughat tripped of loss of evacuation path resulting generation loss of 300 MW at Tenughat.	300	Nil	**GI-1**
3	SR	400KV GUTTUR-KAIGA 1 400KV GUTTUR-KAIGA 2 400KV NARENDRA-GUTTUR 1 400KV NARENDRA-GUTTUR 2 400KV GUTTUR-DHONI 400KV GUTTUR-JINDAL 400KV HIRIYUR-GUTTUR 1 400KV HIRIYUR-GUTTUR 2 400/220Kv Guttur ICT-1 400/220Kv Guttur ICT-2	KPTCL	17/Mar/20	20:00	17/Mar/20	21:12	1:12	As Informed by KPTCL SLDC, LBB protection of 400kV Kaiga-Guttur line-2 CB got mal-operated during transient fault in line. This resulted in tripping of all 400kV lines and 400/220kV ICT's at Guttur station. 220kV lines were not affected and were in charged condition. 400/220kV Guttur Station has Double Main and Transfer bus scheme in 400kV switchyard and Main & transfer bus with bypass isolator scheme in 220kV switchyard.	Nil	Nil	**GI-2**
4	WR	220kV KIM L&T Mora Line 220kV KIM Kosamba line-1 220kV KIM Sugen Line 2 220kV KIM Utran line-2 220/66 kV 100 MVA TR-1 220/66 kV 100 MVA TR-2 220/66 kV 100 MVA TR-3 220/66 kV 100 MVA TR-4 220 kV GESEG KIM Line	Gurjat	18/Mar/20	10:15	18/Mar/20	10:35	0:20	At 10:15 Hrs. 220 kV BUS -2 at KIM tripped. As intimated by Gujarat SLDC, Y- phase isolator jumper of 220kV KIM L&T Mora Line towards 220 kV BUS-2 found detached. GSEG Stage 2 (351 MW) unit tripped on the jerk, which was generating 350 MW	350	200	**GD-1**

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration	Event *(As reported)*	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time	Time				
5	WR	765kV Tamnar Bus-1 765kV Tamnar Bus-2 765kV Tamnar-Kotra-1 765kV Tamnar-Kotra-2 765/400kV Tamnar ICT-1 765/400kV Tamnar ICT-2 765/400kV Tamnar ICT-3 765/400kV Tamnar ICT-4 765kV Bus Reactor Tamnar 400kV Tamnar Bus-1 400kV Tamnar Bus-2 400kV Tamnar-TRN Energy-1 400kV Tamnar-TRN Energy-2 400kV Tamnar-JPL stg II-1 400kV Tamnar-JPL stg II-2 400kV Tamnar-JPL stg II-3 400kV Tamnar-JPL stg II-4 TRN Generator Turbine-1 TRN Generator Turbine-2 JPL unit-3 JPL unit-4 400kV JPL stg-I-Raipur-1 400kV JPL stg-I-Raipur-2 400kV JPL stg-I-JPL stg-II-2 400kV Bus Reactor 400kV JPL stg-I Bus-1 400kV JPL stg-I Bus-2 400/220kV JPL stg-I ICT-1 400/220kV JPL stg-I ICT-2 400kV JPLstg-II Bus-1 400kV JPLstg-II Bus-2 400kV JPLstg-II ST-1 400kV JPLstg-II ST-3 400kV TRN Energy Bus-1 400kV TRN Energy Bus-2 400kV JPLstg-II ST-2 400kV JPL stg-I-ST-1 400kV JPL stg-I-ST-3	TRN/PG	19/Mar/20	14:44	19/Mar/20	15:07	0:23	At 14:44 Hrs Tamnar 765kV and 400kV system voltage became dead. TRN GT-1, GT-2 tripped at 14:44 Hrs system voltage became dead at 14:44 Hrs. JPL Unit-3 & 4 tripped at 14:42 Hrs system voltage became dead at 14:42 Hrs. Heavy thunderstrom Observed at Korba, Raigarh and jagdalpur	1195	Nil	**GI-2**
6	SR	All lines connected to 220kV Shimoga	KPTCL	19/Mar/20	17:08	19/Mar/20	17:28	0:20	At Shimoga SS, Bus Bar Protection operated due to fault in 220kV shimoga-Varahi 2	Nil	250	**GD-1**