National Load Despatch Centre
राष्ट्रीय भार प्रेषण केंद्र
POWER SYSTEM OPERATION CORPORATION LIMITED
पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड
(Government of India Enterprise/ भारत सरकार का उद्यम)
B-9, QUTUB INSTITUTIONAL AREA, KATWARIA SARAI, NEW DELHI -110016
बी-9, कुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 21st Mar 2020

To,

1. कार्यकारी निदेशक, पू .क्षे .भा .प्रे .के.,14 , गोल्फ क्लब रोड , कोलकाता - 700033
   Executive Director, ERLDC, 14 Golf Club Road, Tollygunge, Kolkata, 700033
2. कार्यकारी 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. कार्यकारी निदेशक, प .क्षे .भा .प्रे .के., एफ3-, एम आई डी सी क्षेत्र , अंधेरी, मुंबई -400093
   Executive Director, WRLDC, F-3, M.I.D.C. Area, Marol, Andheri (East), Mumbai-400093
4. कार्यकारी निदेशक, ऊ. पू. क्षे. भा. प्रे. के., डोंगतिएह, लोअर नोंग्रह , लापलंग, शिलोंग - 793006
   Executive Director, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
5. कार्यकारी निदेशक , द .क्षे .भा .प्रे .के.,29 , रेस कोर्स क्रॉस रोड, बंगलुरु -560009
   Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 20.03.2020.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 20-मार्च-2020 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा०भा०प्रे०के० की वेबसाइट पर उप्लब्ध है ।

As per article 5.5.1 of the Indian Electricity Grid Code, the daily report pertaining power supply position of All India Power System for the date 20th Mar 2020, is available at the NLDC website.

धन्यवाद,

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

Report for previous day **Date of Reporting:** **21-Mar-2020**

A. Power Supply Position at All India and Regional level

	NR	WR	SR	ER	NER	TOTAL
Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs)	41253	47497	44241	18653	2401	154045
Peak Shortage (MW)	598	0	0	0	69	667
Energy Met (MU)	866	1161	1128	367	43	3565
Hydro Gen (MU)	143	42	85	35	4	309
Wind Gen (MU)	10	75	30	-	-	116
Solar Gen (MU)*	40.48	28.40	92.59	4.64	0.03	166
Energy Shortage (MU)	9.3	0.0	0.0	0.0	0.6	9.9
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	42450	52842	52829	19001	2453	163729
Time Of Maximum Demand Met (From NLDC SCADA)	19:18	11:13	10:00	19:27	18:33	09:56

B. Frequency Profile (%)

Region	FVI	< 49.7	49.7 - 49.8	49.8 - 49.9	< 49.9	49.9 - 50.05	> 50.05
All India	0.034	0.00	0.00	1.38	1.38	71.92	26.70

C. Power Supply Position in States

Region	States	Max.Demand Met during the day(MW)	Shortage during maximum Demand(MW)	Energy Met (MU)	Drawal Schedule (MU)	OD(+)/UD(-) (MU)	Max OD (MW)	Energy Shortage (MU)
NR	Punjab	4985	0	105.6	81.4	-0.6	122	0.0
	Haryana	5856	0	117.4	85.6	1.0	207	0.0
	Rajasthan	12017	0	210.3	52.8	-0.7	264	0.0
	Delhi	3451	0	63.4	47.8	-0.5	190	0.0
	UP	14592	0	263.0	116.9	1.4	1256	0.0
	Uttarakhand	1764	0	34.4	13.5	1.2	202	0.0
	HP	1502	0	21.5	17.3	-0.5	169	0.0
	J&K(UT) & Ladakh(UT)	2393	598	47.3	38.5	0.8	421	9.3
	Chandigarh	183	0	3.1	3.3	-0.2	4	0.0
WR	Chhattisgarh	3864	0	83.6	31.7	-1.5	242	0.0
	Gujarat	16538	0	362.3	84.3	3.6	506	0.0
	MP	9946	0	195.1	106.8	-2.0	579	0.0
	Maharashtra	22672	0	478.2	150.6	-1.1	612	0.0
	Goa	497	0	10.5	10.4	-0.3	39	0.0
	DD	333	0	7.5	7.1	0.4	35	0.0
	DNH	800	0	18.9	19.1	-0.2	42	0.0
	Essar steel	827	0	5.3	5.1	0.2	253	0.0
SR	Andhra Pradesh	9896	0	198.5	97.2	0.5	667	0.0
	Telangana	11708	0	236.7	131.1	1.3	897	0.0
	Karnataka	12885	0	251.1	81.5	0.0	721	0.0
	Kerala	4074	0	84.5	59.5	1.9	213	0.0
	Tamil Nadu	15304	0	348.3	212.1	0.9	667	0.0
	Puducherry	394	0	8.5	8.6	-0.1	33	0.0
ER	Bihar	4102	0	75.2	70.7	0.9	510	0.0
	DVC	3275	0	62.9	-40.5	0.6	220	0.0
	Jharkhand	1212	0	22.9	14.5	-1.1	110	0.0
	Odisha	3688	0	64.8	-10.5	0.8	320	0.0
	West Bengal	7282	0	140.2	38.6	2.3	230	0.0
	Sikkim	102	0	1.3	1.8	-0.5	20	0.0
NER	Arunachal Pradesh	123	1	2.3	2.2	0.0	24	0.0
	Assam	1417	30	24.2	20.8	0.0	110	0.4
	Manipur	187	1	2.9	2.6	0.4	30	0.0
	Meghalaya	325	0	5.8	4.0	0.4	43	0.1
	Mizoram	97	1	1.8	1.4	0.1	26	0.0
	Nagaland	110	1	2.1	2.0	0.0	3	0.0
	Tripura	240	1	3.9	2.7	-0.4	43	0.0

D. Transnational Exchanges (MU) - Import(+ve)/Export(-ve)

	Bhutan	Nepal	Bangladesh
Actual (MU)	1.4	-10.0	-4.6
Day Peak (MW)	325.4	-598.2	-362.0

E. Import/Export by Regions (in MU) - Import(+ve)/Export(-ve); OD(+)/UD(-)

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	181.8	-274.1	203.7	-117.9	6.7	0.3
Actual(MU)	183.4	-297.2	222.5	-121.2	8.7	-3.8
O/D/U/D(MU)	1.6	-23.1	18.8	-3.3	2.1	-4.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	5030	14401	5452	1110	727	26720
State Sector	16525	13944	8635	4890	11	44005
Total	21555	28345	14087	6000	738	70725

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	401	1171	537	468	11	2589
Lignite	23	16	50	0	0	88
Hydro	143	42	85	35	4	309
Nuclear	23	37	67	0	0	128
Gas, Naptha & Diesel	28	67	18	0	23	137
RES (Wind, Solar, Biomass & Others)	75	118	150	5	0	349
Total	694	1450	908	508	39	3599
Share of RES in total generation (%)	10.86	8.16	16.56	0.91	0.08	9.69
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total	34.91	13.56	33.38	7.80	11.28	21.84

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.036
Based on State Max Demands	1.091

Diversity factor = Sum of regional or state maximum demands / All India maximum demand

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

Executive Director-NLDC

INTER-REGIONAL EXCHANGES

Import=(+ve) /Export =(-ve) for NET (MU)

Date of Reporting: 21-Mar-2020

Sl No	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
Import/Export of ER (With NR)								
1	HVDC	ALIPURDUAR-AGRA	-	0	0	0.0	0.0	0.0
2	HVDC	PUSAULI B/B	S/C	0	249	0.0	6.2	-6.2
3	765 kV	GAYA-VARANASI	D/C	0	649	0.0	8.4	-8.4
4	765 kV	SASARAM-FATEHPUR	S/C	53	338	0.0	2.8	-2.8
5	765 kV	GAYA-BALIA	S/C	0	496	0.0	8.0	-8.0
6	400 kV	PUSAULI-VARANASI	S/C	0	206	0.0	3.0	-3.0
7	400 kV	PUSAULI -ALLAHABAD	S/C	0	263	0.0	3.0	-3.0
8	400 kV	MUZAFFARPUR-GORAKHPUR	D/C	0	502	0.0	5.3	-5.3
9	400 kV	PATNA-BALIA	Q/C	0	654	0.0	13.2	-13.2
10	400 kV	BIHARSHARIFF-BALIA	D/C	0	341	0.0	4.5	-4.5
11	400 kV	MOTIHARI-GORAKHPUR	D/C	0	323	0.0	5.9	-5.9
12	400 kV	BIHARSHARIFF-VARANASI	D/C	160	171	0.8	0.0	0.8
13	220 kV	PUSAULI-SAHUPURI	S/C	0	150	0.0	2.5	-2.5
14	132 kV	SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	30	0	0.3	0.0	0.3
16	132 kV	KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0
17	132 kV	KARMANASA-CHANDAULI	S/C	0	0	0.0	0.0	0.0
					ER-NR	1.1	62.8	-61.7
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1662	0	33.0	0.0	33.0
2	765 kV	NEW RANCHI-DHARAMJAIGARH	D/C	818	144	8.2	0.0	8.2
3	765 kV	JHARSUGUDA-DURG	D/C	108	90	0.5	0.0	0.5
4	400 kV	JHARSUGUDA-RAIGARH	Q/C	96	187	0.0	0.7	-0.7
5	400 kV	RANCHI-SIPAT	D/C	260	64	2.9	0.0	2.9
6	220 kV	BUDHIPADAR-RAIGARH	S/C	0	111	0.0	1.4	-1.4
7	220 kV	BUDHIPADAR-KORBA	D/C	133	0	2.0	0.0	2.0
					ER-WR	46.6	2.1	44.6
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0	773	0.0	16.2	-16.2
2	HVDC	TALCHER-KOLAR BIPOLE	D/C	0	2462	0.0	50.1	-50.1
3	765 kV	ANGUL-SRIKAKULAM	D/C	0	3147	0.0	63.2	-63.2
4	400 kV	TALCHER-I/C	D/C	0	1346	0.0	11.9	-11.9
5	220 kV	BALIMELA-UPPER-SILERRU	S/C	1	0	0.0	0.0	0.0
					ER-SR	0.0	129.5	-129.5
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	D/C	0	466	0.0	7.4	-7.4
2	400 kV	ALIPURDUAR-BONGAIGAON	D/C	0	612	0.0	10.5	-10.5
3	220 kV	ALIPURDUAR-SALAKATI	D/C	0	106	0.0	1.7	-1.7
					ER-NER	0.0	19.6	-19.6
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	-	0	502	0.0	9.5	-9.5
					NER-NR	0.0	9.5	-9.5
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	D/C	0	162	0.0	7.8	-7.8
2	HVDC	V'CHAL B/B	D/C	448	0	10.0	0.0	10.0
3	HVDC	APL -MHG	D/C	0	1079	0.0	26.7	-26.7
4	765 kV	GWALIOR-AGRA	D/C	0	2249	0.0	41.2	-41.2
5	765 kV	PHAGI-GWALIOR	D/C	0	1087	0.0	18.3	-18.3
6	765 kV	JABALPUR-ORAI	D/C	0	774	0.0	29.8	-29.8
7	765 kV	GWALIOR-ORAI	S/C	470	0	7.7	0.0	7.7
8	765 kV	SATNA-ORAI	S/C	0	1325	0.0	28.4	-28.4
9	765 kV	CHITORGARH-BANASKANTHA	D/C	163	566	0.0	5.5	-5.5
10	400 kV	ZERDA-KANKROLI	S/C	126	38	0.9	0.0	0.9
11	400 kV	ZERDA -BHINMAL	S/C	115	190	0.0	0.3	-0.3
12	400 kV	V'CHAL -RIHAND	S/C	977	0	22.8	0.0	22.8
13	400 kV	RAPP-SHUJALPUR	D/C	110	208	0.8	0.0	0.8
14	220 kV	BHANPURA-RANPUR	S/C	4	73	0.0	1.2	-1.2
15	220 kV	BHANPURA-MORAK	S/C	0	132	0.0	1.9	-1.9
16	220 kV	MEHGAON-AURAIYA	S/C	95	0	0.9	0.0	0.9
17	220 kV	MALANPUR-AURAIYA	S/C	48	28	0.2	0.1	0.1
18	132 kV	GWALIOR-SAWAI MADHOPUR	S/C	0	0	0.0	0.0	0.0
					WR-NR	43.3	161.3	-118.0
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1006	0.0	24.0	-24.0
2	HVDC	BARSUR-L.SILERU	-	0	0	0.0	0.0	0.0
3	765 kV	SOLAPUR-RAICHUR	D/C	0	2671	0.0	51.5	-51.5
4	765 kV	WARDHA-NIZAMABAD	D/C	0	3345	0.0	68.6	-68.6
5	400 kV	KOLHAPUR-KUDGI	D/C	801	0	11.6	0.0	11.6
6	220 kV	KOLHAPUR-CHIKODI	D/C	0	0	0.0	0.0	0.0
7	220 kV	PONDA-AMBEWADI	S/C	0	82	0.0	1.5	-1.5
8	220 kV	XELDEM-AMBEWADI	S/C	0	101	1.7	0.0	1.7
					WR-SR	13.3	145.7	-132.4

INTERNATIONAL EXCHANGES

State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)	Energy Exchange (MU)
BHUTAN	ER	DAGACHU (2 * 63)	0	0	0	0.0
	ER	CHUKA (4 * 84) BIRPARA RECEIPT	0	0	-46	-1.1
	ER	MANGDECHHU (4 x 180) ALIPURDUAR RECEIPT	113	98	101	2.4
	ER	TALA (6 * 170) BINAGURI RECEIPT	84	39	25	0.6
	NER	132KV-SALAKATI - GELEPHU	16	0	-9	-0.2
	NER	132KV-RANGIA - DEOTHANG	47	0	-15	-0.4
NEPAL	NR	132KV-Tanakpur(NH) - Mahendranagar(PG)	0	0	0	-1.2
	ER	132KV-BIHAR - NEPAL	-237	-13	-110	-2.6
	ER	220KV-MUZAFFARPUR - DHALKEBAR DC	-302	-216	-258	-6.2
BANGLADESH	ER	Bheramara HVDC(Bangladesh)	-254	-252	-94	-2.2
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-1	54	0	-49	-1.2
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-2	54	0	-49	-1.2