



**National Load Despatch Centre**

राष्ट्रीय भार प्रेषण केंद्र

**POWER SYSTEM OPERATION CORPORATION LIMITED**

**पावर 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: 24<sup>th</sup> 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., डोंगतेिह, 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 23.03.2020.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 23-मार्च-2020 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रांभांप्रेंके की वेबसाइट पर उपलब्ध 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 23<sup>rd</sup> 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: 24-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)	33835	39571	39726	16528	2286	131946
Peak Shortage (MW)	468	0	0	0	88	556
Energy Met (MU)	724	996	1030	325	39	3113
Hydro Gen (MU)	145	33	76	32	5	291
Wind Gen (MU)	6	31	23	-	-	60
Solar Gen (MU)*	32.92	25.90	93.75	4.66	0.02	157
Energy Shortage (MU)	10.5	0.0	0.0	0.0	1.2	11.7
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	37285	46640	49943	16360	2280	145495
Time Of Maximum Demand Met (From NLDC SCADA)	19:32	11:27	11:59	19:24	18:15	11:22

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	0.027	0.00	0.00	4.12	4.12	79.24	16.64

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	3965	0	74.7	57.8	-1.7	126	0.0
	Haryana	4583	0	92.0	68.7	1.0	203	0.0
	Rajasthan	9610	0	171.9	51.7	2.9	691	0.0
	Delhi	2448	0	48.7	32.7	-2.4	60	0.0
	UP	14232	0	247.4	113.3	0.7	744	0.0
	Uttarakhand	1212	0	21.7	9.8	-1.6	30	0.0
	HP	1305	0	20.5	11.8	-1.9	178	0.0
	J&K(UT) & Ladakh(UT)	2240	560	44.7	37.3	-0.8	252	10.5
	Chandigarh	157	0	2.4	2.9	-0.5	3	0.0
WR	Chhattisgarh	3485	0	86.4	33.8	-1.3	183	0.0
	Gujarat	13513	0	291.0	66.6	5.3	608	0.0
	MP	9595	0	183.4	111.7	-1.4	438	0.0
	Maharashtra	19288	0	403.6	118.9	-0.4	608	0.0
	Goa	355	0	6.9	6.9	-0.1	36	0.0
	DD	277	0	5.2	4.9	0.3	38	0.0
	DNH	702	0	15.0	15.1	-0.1	54	0.0
	Essar steel	806	0	4.3	4.1	0.2	269	0.0
SR	Andhra Pradesh	9317	0	181.4	88.3	0.0	583	0.0
	Telangana	11204	0	224.9	127.7	-0.5	653	0.0
	Karnataka	12348	0	238.3	81.6	-0.7	418	0.0
	Kerala	3557	0	75.3	60.1	1.0	325	0.0
	Tamil Nadu	13642	0	302.6	190.5	0.8	379	0.0
	Puducherry	348	0	7.0	7.3	-0.4	43	0.0
ER	Bihar	3999	0	63.0	65.1	-3.6	356	0.0
	DVC	2742	0	53.3	-35.8	0.1	390	0.0
	Jharkhand	1266	0	23.2	14.0	0.1	136	0.0
	Odisha	4430	0	69.1	-1.9	0.2	268	0.0
	West Bengal	5798	0	114.7	34.8	-0.4	290	0.0
	Sikkim	113	0	1.4	1.7	-0.3	22	0.0
NER	Arunachal Pradesh	121	1	1.9	2.0	-0.2	24	0.0
	Assam	1296	41	21.5	17.4	0.3	110	1.0
	Manipur	189	1	2.7	2.5	0.2	14	0.0
	Meghalaya	378	0	5.8	4.0	0.4	68	0.1
	Mizoram	106	1	1.8	1.4	0.2	21	0.0
	Nagaland	128	1	2.1	1.9	0.1	6	0.0
	Tripura	229	0	3.5	2.5	-0.2	20	0.0

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	1.6	-8.3	-20.6
Day Peak (MW)	318.2	-509.0	-1084.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	130.4	-237.2	197.1	-94.3	3.9	-0.2
Actual(MU)	107.8	-239.2	215.0	-91.4	6.1	-1.8
OD/UD(MU)	-22.6	-2.0	18.0	2.9	2.2	-1.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	5530	17972	5552	715	790	30559
State Sector	18233	18730	9518	6050	11	52542
Total	23763	36702	15070	6765	802	83101

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	352	1049	480	420	10	2311
Lignite	18	14	43	0	0	75
Hydro	145	33	76	32	5	291
Nuclear	20	33	69	0	0	122
Gas, Naptha & Diesel	25	53	17	0	23	118
RES (Wind, Solar, Biomass & Others)	67	66	132	5	0	270
Total	626	1248	817	457	38	3187

Share of RES in total generation (%)	10.76	5.26	16.16	1.04	0.05	8.47
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total	37.03	10.57	33.89	8.07	12.75	21.42

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.048
Based on State Max Demands	1.093

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: 24-Mar-2020

Sl No	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)	
<b>Import/Export of ER (With NR)</b>									
1	HVDC	ALIPURDUAR-AGRA	-	0	0	0.0	0.0	0.0	
2	HVDC	PUSAULI B/B	S/C	0	251	0.0	6.2	-6.2	
3	765 kV	GAYA-VARANASI	D/C	0	452	0.0	4.6	-4.6	
4	765 kV	SASARAM-FATEHPUR	S/C	122	187	0.0	1.1	-1.1	
5	765 kV	GAYA-BALIA	S/C	0	346	0.0	5.5	-5.5	
6	400 kV	PUSAULI-VARANASI	S/C	0	215	0.0	4.8	-4.8	
7	400 kV	PUSAULI-ALLAHABAD	S/C	0	103	0.0	1.7	-1.7	
8	400 kV	MUZAFFARPUR-GORAKHPUR	D/C	4	443	0.0	5.6	-5.6	
9	400 kV	PATNA-BALIA	O/C	0	529	0.0	8.8	-8.8	
10	400 kV	BIHARSHARIFF-BALIA	D/C	0	191	0.0	2.4	-2.4	
11	400 kV	MOTHARI-GORAKHPUR	D/C	0	287	0.0	5.5	-5.5	
12	400 kV	BIHARSHARIFF-VARANASI	D/C	208	80	1.7	0.0	1.7	
13	220 kV	PUSAULI-SAHUPURI	S/C	0	135	0.0	2.2	-2.2	
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	0.4	0.0	0.4	
16	132 kV	KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0	
17	132 kV	KARMANASA-CHANDALI	S/C	0	0	0.0	0.0	0.0	
						ER-NR	2.0	48.3	-46.3
<b>Import/Export of ER (With WR)</b>									
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1411	0	26.6	0.0	26.6	
2	765 kV	NEW RANCHI-DHARAMJAIGARH	D/C	748	129	6.0	0.0	6.0	
3	765 kV	JHARSUGUDA-DURG	D/C	42	169	0.0	1.7	-1.7	
4	400 kV	JHARSUGUDA-RAIGARH	Q/C	66	186	0.0	1.4	-1.4	
5	400 kV	RANCHI-SIPAT	D/C	270	33	1.9	0.0	1.9	
6	220 kV	BUDHIPADAR-RAIGARH	S/C	1	108	0.0	1.3	-1.3	
7	220 kV	BUDHIPADAR-KORBA	D/C	159	0	2.7	0.0	2.7	
						ER-WR	37.2	4.3	32.8
<b>Import/Export of ER (With SR)</b>									
1	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0	691	0.0	16.3	-16.3	
2	HVDC	TALCHER-KOLAR BIPOLE	D/C	0	2465	0.0	46.0	-46.0	
3	765 kV	ANGUL-SRIKAKULAM	D/C	0	3303	0.0	65.9	-65.9	
4	400 kV	TALCHER-I/C	D/C	1084	987	0.0	8.1	-8.1	
5	220 kV	BALIMELA-UPPER-SILERRU	S/C	1	0	0.0	0.0	0.0	
						ER-SR	0.0	128.2	-128.2
<b>Import/Export of ER (With NER)</b>									
1	400 kV	BINAGURI-BONGAIGAOON	D/C	220	55	1.7	0.0	1.7	
2	400 kV	ALIPURDUAR-BONGAIGAOON	D/C	319	29	3.0	0.0	3.0	
3	220 kV	ALIPURDUAR-SALAKATI	D/C	65	10	0.7	0.0	0.7	
						ER-NER	5.4	0.0	5.4
<b>Import/Export of NER (With NR)</b>									
1	HVDC	BISWANATH CHARIALI-AGRA	-	485	0	11.4	0.0	11.4	
						NER-NR	11.4	0.0	11.4
<b>Import/Export of WR (With NR)</b>									
1	HVDC	CHAMPA-KURUKSHETRA	D/C	0	0	0.0	7.2	-7.2	
2	HVDC	V'CHAL B/B	D/C	450	0	12.1	0.0	12.1	
3	HVDC	APL -MHG	D/C	0	1077	0.0	26.7	-26.7	
4	765 kV	GWALIOR-AGRA	D/C	0	1995	0.0	37.0	-37.0	
5	765 kV	PHAGI-GWALIOR	D/C	0	1216	0.0	20.4	-20.4	
6	765 kV	JABALPUR-ORAI	D/C	0	683	0.0	24.6	-24.6	
7	765 kV	GWALIOR-ORAI	S/C	634	0	10.6	0.0	10.6	
8	765 kV	SATNA-ORAI	S/C	0	1268	0.0	26.4	-26.4	
9	765 kV	CHITORGARH-BANASKANTHA	D/C	725	0	6.4	0.0	6.4	
10	400 kV	ZERDA-KANKROLI	S/C	198	0	3.3	0.0	3.3	
11	400 kV	ZERDA -BHINMAL	S/C	230	10	2.7	0.0	2.7	
12	400 kV	V'CHAL -RIHAND	S/C	973	0	22.6	0.0	22.6	
13	400 kV	RAPP-SHUALPUR	D/C	57	287	0.0	0.9	-0.9	
14	220 kV	BHANPURA-RANPUR	S/C	0	66	0.0	1.2	-1.2	
15	220 kV	BHANPURA-MORAK	S/C	0	112	0.0	1.6	-1.6	
16	220 kV	MEHGAON-AURAIYA	S/C	109	0	1.2	0.0	1.2	
17	220 kV	MALANPUR-AURAIYA	S/C	66	11	0.4	0.0	0.4	
18	132 kV	GWALIOR-SAWAI MADHOPUR	S/C	0	0	0.0	0.0	0.0	
						WR-NR	59.4	146.0	-86.5
<b>Import/Export of WR (With SR)</b>									
1	HVDC	BHADRAWATI B/B	-	0	1002	0.0	23.1	-23.1	
2	HVDC	BARSUR-L.SILERU	-	0	0	0.0	0.0	0.0	
3	765 kV	SOLAPUR-RAICHUR	D/C	0	2760	0.0	46.4	-46.4	
4	765 kV	WARDHA-NIZAMABAD	D/C	0	3424	0.0	66.6	-66.6	
5	400 kV	KOLHAPUR-KUDGI	D/C	714	0	8.2	0.0	8.2	
6	220 kV	KOLHAPUR-CHIKODI	D/C	0	0	0.0	0.0	0.0	
7	220 kV	PONDA-AMBEWADI	S/C	0	58	0.0	1.1	-1.1	
8	220 kV	XELDEM-AMBEWADI	S/C	0	66	1.2	0.0	1.2	
						WR-SR	9.4	137.2	-127.9
<b>INTERNATIONAL EXCHANGES</b>									
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	-35	-0.8			
	ER	MANGDECHHU (4 x 180) ALIPURDUAR RECEIPT	115	104	103	2.5			
	ER	TALA ( 6 * 170 ) BINAGURI RECEIPT	70	0	29	0.7			
	NER	132KV-SALAKATI - GELEPHU	16	0	-22	-0.5			
	NER	132KV-RANGIA - DEOTHANG	34	0	-10	-0.3			
NEPAL	NR	132KV-Tanakpur(NH) - Mahendranagar(PG)	0	0	0	-1.1			
	ER	132KV-BIHAR - NEPAL	-170	-20	-53	-1.3			
	ER	220KV-MUZAFFARPUR - DHALKEBAR DC	-280	-216	-249	-6.0			
BANGLADESH	ER	Bheramara HVDC(Bangladesh)	-956	-406	-746	-17.9			
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-1	64	0	-56	-1.4			
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-2	64	0	-56	-1.4			