



**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: 23<sup>rd</sup> Dec 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., डोंगतेह, 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 22.12.2020.**

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 22-दिसम्बर -2020 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा०भा०प्रे०के० 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 22<sup>st</sup> December 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: 23-Dec-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 19:00 hrs; from RLDCs)	51560	52031	39454	18390	2520	163955
Peak Shortage (MW)	931	0	0	163	40	1134
Energy Met (MU)	1043	1221	907	362	43	3575
Hydro Gen (MU)	110	51	73	37	12	282
Wind Gen (MU)	9	35	40	-	-	84
Solar Gen (MU)*	33.70	31.34	92.00	4.64	0.03	162
Energy Shortage (MU)	13.62	0.00	0.00	0.49	1.04	15.15
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	55216	60435	44438	18489	2693	177123
Time Of Maximum Demand Met (From NLDC SCADA)	10:14	10:30	10:56	18:37	17:31	10:27

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	0.035	0.00	0.00	6.64	6.64	76.92	16.44

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	6675	0	128.4	68.8	-2.1	20	0.00
	Haryana	6673	0	137.1	99.3	0.8	151	0.00
	Rajasthan	13725	130	256.5	95.3	2.4	627	2.27
	Delhi	4222	0	70.1	52.1	-0.1	274	0.00
	UP	17908	0	317.6	106.2	-0.2	354	0.15
	Uttarakhand	2266	0	42.1	25.9	0.7	228	0.00
	HP	1779	0	32.7	26.8	0.0	338	0.00
	J&K(UT) & Ladakh(UT)	2791	550	54.7	49.9	0.1	378	11.20
	Chandigarh	246	0	4.0	3.9	0.1	22	0.00
	Chhattisgarh	4010	0	85.4	31.8	0.1	355	0.00
WR	Gujarat	16363	0	340.1	67.8	5.8	919	0.00
	MP	15113	0	290.2	176.5	-2.4	576	0.00
	Maharashtra	22729	0	450.8	154.3	0.6	1358	0.00
	Goa	495	0	9.9	9.9	-0.1	60	0.00
	DD	335	0	7.5	7.3	0.2	28	0.00
	DNH	791	0	18.1	18.2	-0.1	45	0.00
	AMNSIL	827	0	18.7	9.4	-9.4	297	0.00
	Andhra Pradesh	8380	0	161.6	84.4	-0.6	373	0.00
	Telangana	10226	0	192.5	71.3	-0.4	646	0.00
	Karnataka	11157	0	206.1	73.2	0.1	448	0.00
SR	Kerala	3605	0	70.2	53.0	0.6	283	0.00
	Tamil Nadu	13288	0	270.2	170.3	-0.6	493	0.00
	Puducherry	331	0	6.6	6.8	-0.1	63	0.00
	Bihar	4994	0	85.6	85.2	-1.2	305	0.00
	DVC	3076	0	64.8	-37.3	-0.8	253	0.00
	Jharkhand	1430	0	26.2	20.2	-1.1	79	0.49
	Odisha	4407	0	69.2	-1.2	-0.2	264	0.00
	West Bengal	6220	0	114.1	5.0	-0.6	454	0.00
	Sikkim	146	0	2.4	1.9	0.5	43	0.00
	Arunachal Pradesh	119	1	2.2	2.2	-0.1	17	0.01
NER	Assam	1438	23	22.9	19.3	0.3	118	0.99
	Manipur	243	2	3.1	3.5	-0.4	57	0.01
	Meghalaya	396	0	6.9	4.2	0.0	44	0.00
	Mizoram	106	1	1.7	1.5	-0.2	20	0.01
	Nagaland	143	2	2.3	2.3	-0.1	13	0.02
	Tripura	272	0	3.4	3.2	-0.1	97	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	7.5	-9.4	-14.8
Day Peak (MW)	350.0	-561.8	-908.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	290.9	-302.1	131.7	-122.1	1.6	0.0
Actual(MU)	278.4	-291.9	121.0	-120.3	2.4	-10.3
O/D/UD(MU)	-12.5	10.2	-10.7	1.8	0.9	-10.3

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	6956	11829	8752	2440	572	30550
State Sector	10246	15811	12046	4432	112	42646
Total	17202	27640	20798	6872	684	73196

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	524	1352	447	471	7	2802
Lignite	20	12	33	0	0	65
Hydro	110	51	73	37	12	282
Nuclear	28	28	59	0	0	115
Gas, Naptha & Diesel	27	35	12	0	25	99
RES (Wind, Solar, Biomass & Others)	73	68	167	5	0	313
Total	781	1547	790	512	45	3675
Share of RES in total generation (%)	9.32	4.41	21.17	0.91	0.07	8.52
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	26.94	9.52	37.83	8.04	27.75	19.33

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.023
Based on State Max Demands	1.156

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: 23-Dec-2020

Sl No	Voltage Level	Line Details	No. of 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	2	0	0	0.0	0.0	0.0
2	HVDC	PUSAULI B/B	2	0	251	0.0	6.0	-6.0
3	765 kV	GAYA-VARANASI	2	0	878	0.0	11.3	-11.3
4	765 kV	SASARAM-FATEHPUR	1	33	295	0.0	3.0	-3.0
5	765 kV	GAYA-BALIA	1	0	792	0.0	11.7	-11.7
6	400 kV	PUSAULI-VARANASI	1	0	189	0.0	3.9	-3.9
7	400 kV	PUSAULI-ALLAHABAD	1	0	123	0.0	2.2	-2.2
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	826	0.0	10.0	-10.0
9	400 kV	PATNA-BALIA	4	0	1436	0.0	22.1	-22.1
10	400 kV	BIHARSHARIFF-BALIA	2	0	419	0.0	6.6	-6.6
11	400 kV	MOTIHARI-GORAKHPUR	2	0	333	0.0	5.3	-5.3
12	400 kV	BIHARSHARIFF-VARANASI	2	17	366	0.0	3.2	-3.2
13	220 kV	PUSAULI-SAHUPURI	1	69	50	0.2	0.0	0.2
14	132 kV	SONE NAGAR-RIHAND	1	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	1	20	0	0.4	0.0	0.4
16	132 kV	KARMANASA-SAHUPURI	1	0	0	0.0	0.0	0.0
17	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
						ER-NR	0.6	-84.7
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	782	613	4.6	0.0	4.6
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	886	0	11.8	0.0	11.8
3	765 kV	JHARSUGUDA-DURG	2	108	351	0.0	3.6	-3.6
4	400 kV	JHARSUGUDA-RAIGARH	4	76	397	0.0	4.0	-4.0
5	400 kV	RANCHI-SIPAT	2	246	39	3.0	0.0	3.0
6	220 kV	BUDHIPADAR-RAIGARH	1	3	115	0.0	1.4	-1.4
7	220 kV	BUDHIPADAR-KORBA	2	75	73	0.0	0.2	-0.2
						ER-WR	19.5	10.3
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	478	0.0	11.1	-11.1
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1989	0.0	44.7	-44.7
3	765 kV	ANGUL-SRIKAKULAM	2	14306	2561	0.0	45.8	-45.8
4	400 kV	827	2	265	638	0.0	3.6	-3.6
5	220 kV	BALIMELA-UPPER-SILERRU	1	1	0	0.0	0.0	0.0
						ER-SR	101.6	-101.6
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	210	16	3.2	0.0	3.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	333	7	4.7	0.0	4.7
3	220 kV	ALIPURDUAR-SALAKATI	2	53	16	0.5	0.0	0.5
						ER-NER	8.5	8.5
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIAL-AGRA	2	492	0	11.6	0.0	11.6
						NER-NR	11.6	11.6
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	2001	0.0	48.7	-48.7
2	HVDC	VINDHYACHAL B/B	2	49	252	0.8	2.2	-1.4
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1925	0.0	40.7	-40.7
4	765 kV	GWALIOR-AGRA	2	0	2820	0.0	50.9	-50.9
5	765 kV	PHAGI-GWALIOR	2	0	1660	0.0	25.6	-25.6
6	765 kV	JABALPUR-ORAI	2	0	1087	0.0	39.6	-39.6
7	765 kV	GWALIOR-ORAI	1	730	0	13.2	0.0	13.2
8	765 kV	SATNA-ORAI	1	0	1428	0.0	29.9	-29.9
9	765 kV	CHITORGARH-BANASKANTHA	2	46	592	0.0	4.8	-4.8
10	400 kV	ZERDA-KANKROLI	1	92	136	0.0	0.4	-0.4
11	400 kV	ZERDA-BHINMAL	1	99	383	0.0	3.5	-3.5
12	400 kV	VINDHYACHAL-RIHAND	1	977	0	22.6	0.0	22.6
13	400 kV	RAPP-SHUALPUR	2	0	554	0.0	6.5	-6.5
14	220 kV	BHANPUR-RANPUR	1	0	167	0.0	2.1	-2.1
15	220 kV	BHANPUR-MORAK	1	11	0	0.1	1.0	-0.8
16	220 kV	MEHGAON-AURAIYA	1	108	0	0.4	0.0	0.4
17	220 kV	MALANPUR-AURAIYA	1	59	21	1.4	0.0	1.4
18	132 kV	GWALIOR-SAWAI MADHOPUR	1	0	0	0.0	0.0	0.0
19	132 kV	RAJGHAT-LALITPUR	2	0	0	0.0	0.0	0.0
						WR-NR	38.6	-217.2
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	0	1016	0.0	18.3	-18.3
2	HVDC	RAIGARH-PUGALUR	2	0	1490	0.0	11.2	-11.2
3	765 kV	SOLAPUR-RAICHUR	2	1237	2120	0.0	23.3	-23.3
4	765 kV	WARDHA-NIZAMABAD	2	212	2419	0.1	30.2	-30.2
5	400 kV	KOLHAPUR-KUDGI	2	1421	0	18.0	0.0	18.0
6	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
7	220 kV	PONDA-AMBEWADI	1	1	0	0.0	0.0	0.0
8	220 kV	XELDEM-AMBEWADI	1	1	45	0.7	0.0	0.7
						WR-SR	18.8	-64.3
<b>INTERNATIONAL EXCHANGES</b>								
State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)	Energy Exchange (MU)		
BHUTAN	ER	400KV MANGDECHHU-ALIPURDUAR 1&2 I.e. ALIPURDUAR RECEIPT (from MANGDECHHU HEP 4*180MW)	140	0	135	3.3		
	ER	400KV TALA-BINAGURI 1,2,4 (& 400KV MALBASE - BINAGURI) I.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	162	156	161	3.9		
	ER	220KV CHUKHA-BIRPARA 1&2 (& 220KV MALBASE - BIRPARA) I.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	40	0	15	0.4		
	NER	132KV-GEYLEGPHU - SALAKATI	22	4	12	0.3		
	NER	132KV Motanga-Rangia	-13	7	-3	-0.1		
NEPAL	NR	132KV-TANAKPUR(NH) - MAHENDRANAGAR(PG)	0	0	0	-1.3		
	ER	400KV-MUZAFFARPUR - DHALKEBAR DC	-255	-178	-237	-5.7		
	ER	132KV-BHAR - NEPAL	-245	-1	-98	-2.3		
BANGLADESH	ER	BHERAMARA HVDC(BANGLADESH)	-802	-322	-540	-13.0		
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-1	53	0	-38	-0.9		
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-2	53	0	-38	-0.9		