



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: 01st Jan 2022

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 31.12.2021.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 31-दिसंबर-2021 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रांभांप्रेके 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 31st December 2021, 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: 01-Jan-2022

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)	53319	53267	39728	19650	2566	168530
Peak Shortage (MW)	250	0	0	448	0	698
Energy Met (MU)	1057	1207	943	403	46	3655
Hydro Gen (MU)	101	33	84	30	11	258
Wind Gen (MU)	25	127	77	-	-	229
Solar Gen (MU)*	41.34	31.94	66.68	4.18	0.28	144
Energy Shortage (MU)	5.03	0.26	0.00	2.66	0.00	7.95
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	55141	59995	47654	20167	2636	181459
Time Of Maximum Demand Met (From NLDC SCADA)	10:45	10:54	09:44	18:26	17:34	10:44

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	0.062	0.60	1.28	10.03	11.92	69.98	18.10

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	7158	0	132.1	72.2	-0.1	226	0.00	
	Haryana	6963	0	129.4	74.9	0.1	136	0.00	
	Rajasthan	14801	0	265.1	71.6	-0.8	312	0.38	
	Delhi	4583	0	74.0	62.4	-0.7	243	0.00	
	UP	17934	0	315.8	88.9	-1.6	309	0.00	
	Uttarakhand	2270	0	42.0	29.6	0.1	162	0.00	
	HP	1969	0	36.1	29.5	-0.5	152	0.00	
	J&K(UT) & Ladakh(UT)	2968	300	58.4	53.6	-0.1	713	4.65	
	Chandigarh	247	0	4.0	4.0	0.0	32	0.00	
	WR	Chhattisgarh	3612	0	76.4	24.0	-0.2	244	0.00
Gujarat		17217	78	348.9	173.8	3.3	1057	0.26	
MP		13931	0	260.8	152.7	-1.4	641	0.00	
Maharashtra		23484	0	464.6	125.4	-4.7	758	0.00	
Goa		596	0	12.4	11.6	0.3	33	0.00	
DD		308	0	6.9	6.7	0.2	21	0.00	
DNH		805	0	19.0	18.9	0.1	60	0.00	
AMNSIL		729	0	17.5	10.8	-10.8	291	0.00	
SR		Andhra Pradesh	9003	0	175.6	73.6	0.9	706	0.00
		Telangana	10935	0	203.6	88.8	-0.4	475	0.00
	Karnataka	11910	0	208.1	53.7	-2.6	751	0.00	
	Kerala	3749	0	74.9	54.5	-0.3	214	0.00	
	Tamil Nadu	13145	0	273.4	152.9	-1.2	619	0.00	
	Puducherry	343	0	6.9	7.3	-0.4	46	0.00	
	ER	Bihar	4750	0	81.5	72.2	-1.4	371	0.83
		DVC	3419	60	68.7	-36.0	-1.8	354	0.88
		Jharkhand	1641	0	30.2	22.0	-1.2	161	0.95
		Odisha	5389	0	106.9	62.8	0.2	412	0.00
West Bengal		6190	0	113.9	-6.3	-0.5	313	0.00	
NER	Sikkim	115	0	1.8	1.9	-0.1	50	0.00	
	Arunachal Pradesh	134	0	2.4	2.4	-0.2	32	0.00	
	Assam	1446	0	25.1	18.6	0.0	140	0.00	
	Manipur	223	0	3.5	3.7	-0.2	38	0.00	
	Meghalaya	387	0	7.6	5.9	0.1	66	0.00	
	Mizoram	122	0	1.9	1.5	-0.2	27	0.00	
	Nagaland	136	0	2.4	2.2	0.0	23	0.00	
Tripura	223	0	3.5	3.7	-0.3	19	0.00		

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	5.1	-4.5	-12.7
Day Peak (MW)	533.0	-393.4	-763.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	251.7	-198.2	85.5	-143.8	4.7	0.0
Actual(MU)	264.2	-210.6	82.2	-142.9	2.9	-4.2
O/D/U/D(MU)	12.5	-12.4	-3.3	0.8	-1.8	-4.2

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	7886	12618	6102	1800	664	29069	41
State Sector	10115	18063	9916	3558	112	41764	59
Total	18001	30681	16018	5358	776	70833	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	572	1190	493	545	10	2810	75
Lignite	21	12	44	0	0	77	2
Hydro	101	33	84	30	11	258	7
Nuclear	28	33	70	0	0	130	3
Gas, Naptha & Diesel	15	11	10	0	26	63	2
RES (Wind, Solar, Biomass & Others)	92	160	172	4	0	428	11
Total	830	1439	871	579	48	3767	100

Share of RES in total generation (%)	11.04	11.12	19.68	0.73	0.59	11.35
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	26.60	15.69	37.27	5.83	24.41	21.68

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.023
Based on State Max Demands	1.155

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: 01-Jan-2022

Sl No	Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)	
Import/Export of ER (With NR)									
1	HVDC	ALIPURDUAR-AGRA	2	0	0	0.0	0.0	0.0	
2	HVDC	PUSAULI B/B	-	3	0	0.0	0.0	0.0	
3	765 kV	GAYA-VARANASI	2	21	843	0.0	10.3	-10.3	
4	765 kV	SASARAM-FATEHPUR	1	0	453	0.0	2.8	-2.8	
5	765 kV	GAYA-BALIA	1	0	624	0.0	11.9	-11.9	
6	400 kV	PUSAULI-VARANASI	1	48	261	0.0	3.2	-3.2	
7	400 kV	PUSAULI-ALLAHABAD	1	0	277	0.0	3.3	-3.3	
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	1027	0.0	15.2	-15.2	
9	400 kV	PATNA-BALIA	4	0	1547	0.0	28.5	-28.5	
10	400 kV	BIHARSHARIFF-BALIA	2	0	492	0.0	7.2	-7.2	
11	400 kV	MOTIHARI-GORAKHPUR	2	0	648	0.0	10.3	-10.3	
12	400 kV	BIHARSHARIFF-VARANASI	2	0	392	0.0	5.9	-5.9	
13	220 kV	PUSAULI-SAHUPURI	1	0	182	0.0	2.4	-2.4	
14	132 kV	SONE NAGAR-RIHAND	1	0	0	0.0	0.0	0.0	
15	132 kV	GARWAH-RIHAND	1	25	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-CHANDAU	1	0	0	0.0	0.0	0.0	
						ER-NR	0.4	100.9	-100.5
Import/Export of ER (With WR)									
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	927	236	7.9	0.0	7.9	
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	747	738	0.0	0.5	-0.5	
3	765 kV	JHARSUGUDA-DURG	2	252	154	1.9	0.0	1.9	
4	400 kV	JHARSUGUDA-RAIGARH	4	408	189	2.4	0.0	2.4	
5	400 kV	RANCHI-SIPAT	2	249	168	0.4	0.0	0.4	
6	220 kV	BUDHIPADAR-RAIGARH	1	110	30	0.8	0.0	0.8	
7	220 kV	BUDHIPADAR-KORBA	2	179	0	1.9	0.0	1.9	
						ER-WR	15.3	0.5	14.8
Import/Export of ER (With SR)									
1	HVDC	JEYPORE-GAZIWAKA B/B	2	0	396	0.0	8.8	-8.8	
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1986	0.0	39.1	-39.1	
3	765 kV	ANGUL-SIRSAKULAM	2	0	2997	0.0	45.8	-45.8	
4	400 kV	TALCHER-IC	2	922	979	0.7	0.0	0.7	
5	220 kV	BALIMELA-UPPER-SILERRU	1	2	0	0.0	0.0	0.0	
						ER-SR	0.0	93.6	-93.6
Import/Export of ER (With NER)									
1	400 kV	BINAGURI-BONGAIGAON	2	46	176	0.0	1.6	-1.6	
2	400 kV	ALIPURDUAR-BONGAIGAON	2	90	232	0.0	1.7	-1.7	
3	220 kV	ALIPURDUAR-SALAKATI	2	9	46	0.0	0.4	-0.4	
						ER-NER	0.0	3.7	-3.7
Import/Export of <null> (With <null>)									
No Records Found									
						NER-NR	0.0	0.0	0.0
Import/Export of WR (With NR)									
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3009	0.0	43.6	-43.6	
2	HVDC	VINDHYACHAL B/B	-	445	0	7.4	0.0	7.4	
3	HVDC	MUNDRA-MOHINDERGARH	2	0	254	0.0	6.2	-6.2	
4	765 kV	GWALIOR-AGRA	2	0	2418	0.0	39.5	-39.5	
5	765 kV	GWALIOR-PHAGI	2	0	2302	0.0	31.3	-31.3	
6	765 kV	JABALPUR-ORAI	2	0	978	0.0	33.4	-33.4	
7	765 kV	GWALIOR-ORAI	1	1249	0	18.7	0.0	18.7	
8	765 kV	SATNA-ORAI	1	0	1057	0.0	19.8	-19.8	
9	765 kV	BANASKANTHA-CHITORGARH	1	912	306	8.0	0.0	8.0	
10	765 kV	VINDHYACHAL-VARANASI	2	0	2924	0.0	45.8	-45.8	
11	400 kV	ZERDA-KANKROLI	1	225	0	2.4	0.0	2.4	
12	400 kV	ZERDA-BHINMAL	1	284	108	2.2	0.0	2.2	
13	400 kV	VINDHYACHAL-RIHAND	1	975	0	20.1	0.0	20.1	
14	400 kV	RAPP-SHUJALPUR	2	31	577	0.0	5.5	-5.5	
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0	
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.0	-1.0	
17	220 kV	MEHGAON-AURAIYA	1	122	0	0.6	0.0	0.6	
18	220 kV	MALANPUR-AURAIYA	1	72	6	1.4	0.0	1.4	
19	132 kV	GWALIOR-SAWAI MADHOPUR	1	0	0	0.0	0.0	0.0	
20	132 kV	RAJGHAT-LALITPUR	2	0	0	0.0	0.0	0.0	
						WR-NR	60.6	225.9	-165.3
Import/Export of WR (With SR)									
1	HVDC	BHADRAWATI BB	-	0	319	0.0	7.4	-7.4	
2	HVDC	RAIGARH-PUGALUR	2	717	602	2.6	0.0	2.6	
3	765 kV	SOJAPUR-RAICHUR	2	841	2470	1.5	12.6	-11.1	
4	765 kV	WARDHA-NIZAMABAD	2	0	3357	0.0	37.9	-37.9	
5	400 kV	KOLHAPUR-KUDGI	2	1467	0	22.2	0.0	22.2	
6	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0	
7	220 kV	PONDA-AMBEWADI	1	0	0	0.0	0.0	0.0	
8	220 kV	XELDEM-AMBEWADI	1	0	74	1.3	0.0	1.3	
						WR-SR	27.6	58.0	-30.4

INTERNATIONAL EXCHANGES

Import(+ve)/Export(-ve)

State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)	Energy Exchange (MU)
BHUTAN	ER	400kV MANGDECHHU-ALIPURDUAR 1,2&3 i.e. ALIPURDUAR RECEIPT (from MANGDECHHU HEP 4*180MW)	99	0	56	1.4
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW))	417	0	179	4.3
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	0	0	0	-0.5
	NER	132kV GELEPHU-SALAKATI	-9	0	-3	-0.1
	NER	132kV MOTANGA-RANGIA	-9	2	-13	-0.3
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-73	0	-55	-1.3
	ER	NEPAL IMPORT (FROM BIHAR)	-193	-11	-62	-1.5
BANGLADESH	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-127	0	-70	-1.7
	ER	BHERAMARA B/B HVDC (BANGLADESH)	-686	-334	-464	-11.1
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-77	0	-67	-1.6