



**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: 14<sup>th</sup> Dec 2021

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 13.12.2021.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 13-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 13<sup>th</sup> 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: 14-Dec-2021

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)	50184	55176	39135	17818	2521	164834
Peak Shortage (MW)	448	0	0	528	0	976
Energy Met (MU)	1010	1254	853	371	44	3532
Hydro Gen (MU)	115	34	91	37	12	288
Wind Gen (MU)	8	48	60	-	-	116
Solar Gen (MU)*	52.98	33.92	76.13	4.63	0.26	168
Energy Shortage (MU)	6.85	0.00	0.00	4.08	0.00	10.93
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	51271	60411	41049	18655	2626	168533
Time Of Maximum Demand Met (From NLDC SCADA)	12:20	10:58	09:58	17:45	17:24	10:38

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	0.047	0.00	1.05	10.48	11.54	70.91	17.56

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	6857	0	135.0	79.1	-1.2	87	0.00
	Haryana	6920	0	126.7	89.5	1.0	215	0.77
	Rajasthan	14881	0	264.8	88.7	1.0	470	1.43
	Delhi	3817	0	64.9	53.0	-0.6	254	0.00
	UP	16568	0	285.1	96.4	-2.3	375	0.00
	Uttarakhand	2024	0	37.9	26.0	0.8	188	0.00
	HP	1850	0	33.5	25.1	0.3	161	0.00
	J&K(UT) & Ladakh(UT)	2917	300	59.2	52.8	1.3	379	4.65
WR	Chandigarh	204	0	3.3	3.8	-0.4	33	0.00
	Chhattisgarh	3629	0	78.8	34.0	0.3	259	0.00
	Gujarat	17303	0	355.0	195.9	3.6	653	0.00
	MP	14795	0	287.1	176.2	-1.4	581	0.00
	Maharashtra	23060	0	477.4	141.2	4.0	731	0.00
	Goa	599	0	12.3	11.6	0.1	36	0.00
	DD	323	0	7.0	7.0	0.0	22	0.00
	DNH	836	0	19.1	19.1	0.0	54	0.00
SR	AMNSIL	749	0	17.0	7.8	0.2	298	0.00
	Andhra Pradesh	7837	0	162.2	76.7	0.0	573	0.00
	Telangana	9195	0	173.8	64.9	-0.7	352	0.00
	Karnataka	9177	0	165.7	27.1	-1.6	630	0.00
	Kerala	3827	0	75.9	45.9	0.0	236	0.00
	Tamil Nadu	13346	0	268.1	148.7	-0.7	543	0.00
	Puducherry	364	0	7.4	7.8	-0.4	50	0.00
	ER	Bihar	4271	0	72.2	61.8	-0.5	168
DVC		3325	0	66.6	-39.6	-0.7	253	1.41
Jharkhand		1514	0	26.2	21.5	-0.8	227	2.68
Odisha		4833	0	95.9	36.4	0.5	377	0.00
West Bengal		6173	0	108.5	-11.3	0.6	446	0.00
Sikkim		114	0	1.5	1.0	0.5	83	0.00
NER	Arunachal Pradesh	122	0	2.5	2.2	0.1	34	0.00
	Assam	1443	0	23.7	18.6	-0.6	106	0.00
	Manipur	223	0	3.2	3.2	0.0	25	0.00
	Meghalaya	379	0	7.2	5.8	0.0	40	0.00
	Mizoram	124	0	1.6	1.6	-0.2	6	0.00
	Nagaland	145	0	2.5	2.3	0.1	16	0.00
	Tripura	219	0	3.6	2.2	-0.4	12	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	7.0	-2.4	-12.1
Day Peak (MW)	392.0	-351.2	-815.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	255.7	-134.4	57.1	-173.6	-4.8	0.0
Actual(MU)	260.6	-129.5	44.4	-175.2	-5.1	-4.8
OD/UD(MU)	4.9	4.9	-12.7	-1.7	-0.3	-4.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	7687	14228	8232	3220	350	33717	42
State Sector	12886	19071	10431	3878	11	46276	58
Total	20573	33298	18663	7098	361	79992	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	513	1215	455	528	12	2724	75
Lignite	20	15	36	0	0	72	2
Hvdro	115	34	91	37	12	288	8
Nuclear	27	33	69	0	0	129	4
Gas, Naptha & Diesel	15	10	9	0	30	64	2
RES (Wind, Solar, Biomass & Others)	86	83	163	5	0	337	9
Total	777	1390	824	570	54	3615	100

Share of RES in total generation (%)	11.11	5.96	19.84	0.81	0.48	9.34
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	29.44	10.74	39.27	7.33	21.82	20.89

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.033
Based on State Max Demands	1.092

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)

Sl No	Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	Date of Reporting: 14-Dec-2021			
						Import (MU)	Export (MU)	NET (MU)	
<b>Import/Export of ER (With NR)</b>									
1	HVDC	ALIPURDUAR-AGRA	2	0	502	0.0	12.3	-12.3	
2	HVDC	PUSAULI B/B	-	2	0	0.0	0.0	0.0	
3	765 kV	GAYA-VARANASI	2	0	1010	0.0	15.0	-15.0	
4	765 kV	SASARAM-FATEHPUR	1	0	652	0.0	10.4	-10.4	
5	765 kV	GAYA-BALIA	1	0	650	0.0	11.7	-11.7	
6	400 kV	PUSAULLY-VARANASI	1	12	118	0.0	1.5	-1.5	
7	400 kV	PUSAULI-ALLAHABAD	1	31950	168	0.0	1.8	-1.8	
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	782	0.0	10.1	-10.1	
9	400 kV	PATNA-BALIA	4	0	1576	0.0	26.4	-26.4	
10	400 kV	BIHARSHARIFF-BALIA	2	0	555	0.0	8.8	-8.8	
11	400 kV	MOTIHARI-GORAKHPUR	2	0	671	0.0	9.8	-9.8	
12	400 kV	BIHARSHARIFF-VARANASI	2	0	440	0.0	7.1	-7.1	
13	220 kV	PUSAULI-SAHUPURI	1	0	116	0.0	1.7	-1.7	
14	132 kV	SONE NAGAR-RIHAND	1	0	0	0.1	0.0	0.1	
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-CHANDALI	1	0	0	0.0	0.0	0.0	
						ER-NR	0.5	116.5	-116.0
<b>Import/Export of ER (With WR)</b>									
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	675	838	2.2	0.0	2.2	
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	93	1042	0.0	9.7	-9.7	
3	765 kV	JHARSUGUDA-DURG	2	2	237	0.0	2.2	-2.2	
4	400 kV	JHARSUGUDA-RAIGARH	4	3	417	0.0	4.5	-4.5	
5	400 kV	RANCHI-SIPAT	2	57	349	0.0	3.2	-3.2	
6	220 kV	BUDHIPADAR-RAIGARH	1	0	160	0.0	1.8	-1.8	
7	220 kV	BUDHIPADAR-KORBA	2	64	109	0.0	0.4	-0.4	
						ER-WR	2.2	21.7	-19.5
<b>Import/Export of ER (With SR)</b>									
1	HVDC	JEYPORE-GAZIWAKA B/B	2	442	0	8.7	0.0	8.7	
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1978	0.0	32.9	-32.9	
3	765 kV	ANGUL-SIRSAKULAM	2	0	2787	0.0	48.5	-48.5	
4	400 kV	TALCHER-IC	2	832	634	7.2	0.0	7.2	
5	220 kV	BALIMELA-UPPER-SILERRU	1	2	0	0.0	0.0	0.0	
						ER-SR	8.7	81.4	-72.7
<b>Import/Export of ER (With NER)</b>									
1	400 kV	BINAGURI-BONGAIGAON	2	0	354	0.0	4.7	-4.7	
2	400 kV	ALIPURDUAR-BONGAIGAON	2	149	295	0.0	1.7	-1.7	
3	220 kV	ALIPURDUAR-SALAKATI	2	7	73	0.0	0.7	-0.7	
						ER-NER	0.0	7.1	-7.1
<b>Import/Export of NER (With NR)</b>									
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.2	-12.2	
						NER-NR	0.0	12.2	-12.2
<b>Import/Export of WR (With NR)</b>									
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3012	0.0	45.2	-45.2	
2	HVDC	VINDHYACHAL B/B	-	185	2	5.0	0.0	5.0	
3	HVDC	MUNDIRA-MOHINDERGARH	2	0	449	0.0	7.0	-7.0	
4	765 kV	GWALIOR-AGRA	2	0	1872	0.0	25.5	-25.5	
5	765 kV	GWALIOR-PHAGI	2	0	2339	0.0	40.0	-40.0	
6	765 kV	JABALPUR-ORAI	2	39	1001	0.0	25.7	-25.7	
7	765 kV	GWALIOR-ORAI	1	890	0	13.7	0.0	13.7	
8	765 kV	SATNA-ORAI	1	0	1352	0.0	22.7	-22.7	
9	765 kV	BANASKANTHA-CHITORGARH	2	1373	0	19.8	0.0	19.8	
10	765 kV	VINDHYACHAL-VARANASI	2	0	1902	0.0	34.5	-34.5	
11	400 kV	ZERDA-KANKROLI	1	301	0	4.4	0.0	4.4	
12	400 kV	ZERDA-BHINMAL	1	330	60	3.4	0.0	3.4	
13	400 kV	VINDHYACHAL-RIHAND	1	981	0	18.7	0.0	18.7	
14	400 kV	RAPP-SHUALPUR	2	102	488	0.1	3.9	-3.7	
15	220 kV	BHANPURA-RANPUR	1	116	57	1.1	0.1	1.0	
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.3	-1.3	
17	220 kV	MEHGAON-AURAIYA	1	137	0	1.5	0.0	1.5	
18	220 kV	MALANPUR-AURAIYA	1	92	0	2.4	0.0	2.4	
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	70.1	205.8	-135.7
<b>Import/Export of WR (With SR)</b>									
1	HVDC	BHADRAWATI B/B	-	987	623	6.6	9.3	-2.7	
2	HVDC	RAIGARH-PUGALUR	2	962	1001	0.0	3.6	-3.6	
3	765 kV	SOLAPUR-RAICHUR	2	1191	1391	3.8	7.8	-4.0	
4	765 kV	WARDHA-NIZAMABAD	2	40	2365	0.0	27.0	-27.0	
5	400 kV	KOLHAPUR-KUDGI	2	1608	0	23.0	0.0	23.0	
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	94	1.7	0.0	1.7	
						WR-SR	35.1	47.7	-12.6

**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)	126	0	96	2.3
	ER	400kV TALA-BINAGURI 1,2,4 & 400kV MALBASE - BINAGURI i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW)	200	149	183	4.4
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	46	0	10	0.3
	NER	132kV GELEPHU-SALAKATI	-5	0	0	0.0
	NER	132kV MOTANGA-RANGIA	14	2	3	0.1
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	0.0
	ER	NEPAL IMPORT (FROM BIHAR)	-94	0	-2	-0.1
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-257	-12	-100	-2.4
BANGLADESH	ER	BHERAMARA B/B HVDC (BANGLADESH)	-715	0	-428	-10.3
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-100	0	-77	-1.8