



**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: 20<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 19.12.2021.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 19-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 19<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: 20-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)	49838	52109	35520	18712	2409	158588
Peak Shortage (MW)	250	0	0	231	0	481
Energy Met (MU)	1017	1215	838	368	44	3481
Hydro Gen (MU)	107	29	66	29	10	241
Wind Gen (MU)	6	90	54	-	-	151
Solar Gen (MU)*	68.13	41.86	103.87	4.72	0.28	219
Energy Shortage (MU)	16.65	0.00	0.00	2.60	0.00	19.25
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	53287	58928	41381	18730	2506	169689
Time Of Maximum Demand Met (From NLDC SCADA)	10:36	11:01	09:40	18:30	17:51	10:51

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	0.00	1.81	1.81	62.72	35.47

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	6539	0	129.5	69.9	-0.9	297	0.00
	Haryana	6674	0	125.4	78.6	0.6	133	0.00
	Rajasthan	15198	0	268.0	82.2	0.4	347	0.00
	Delhi	4080	0	63.9	55.1	-3.0	316	0.00
	UP	17361	0	306.6	102.1	-1.4	408	0.00
	Uttarakhand	2095	0	38.5	26.6	-0.5	168	0.00
	HP	1821	0	32.9	26.0	-0.8	197	0.00
	J&K(UT) & Ladakh(UT)	2426	250	48.7	45.0	-1.4	125	16.65
WR	Chandigarh	218	0	3.6	3.8	-0.2	50	0.00
	Chhattisgarh	3743	0	81.1	30.2	-0.1	238	0.00
	Gujarat	16348	0	329.4	167.2	-0.4	488	0.00
	MP	15238	0	287.0	179.2	-1.9	551	0.00
	Maharashtra	22811	0	463.6	134.7	-0.7	909	0.00
	Goa	485	0	10.1	9.8	-0.3	31	0.00
	DD	293	0	5.5	5.5	0.0	21	0.00
	DNH	815	0	18.9	18.8	0.1	42	0.00
SR	AMNSIL	854	0	18.9	8.8	0.0	283	0.00
	Andhra Pradesh	8405	0	160.4	69.5	1.0	563	0.00
	Telangana	9246	0	174.6	68.5	0.9	578	0.00
	Karnataka	9152	0	168.6	30.1	-1.2	1015	0.00
	Kerala	3414	0	69.4	50.7	0.0	168	0.00
	Tamil Nadu	11945	0	258.6	149.4	0.8	630	0.00
	Puducherry	301	0	6.2	6.7	-0.5	24	0.00
	ER	Bihar	4524	0	78.0	70.6	0.6	560
DVC		3157	0	66.0	-42.2	-1.3	320	2.19
Jharkhand		1678	0	31.1	21.1	-0.3	179	0.42
Odisha		4911	0	88.7	31.6	-0.2	555	0.00
West Bengal		5418	0	103.0	-18.3	0.5	351	0.00
Sikkim		95	0	1.5	1.7	-0.2	40	0.00
NER	Arunachal Pradesh	126	0	2.2	2.2	-0.1	98	0.00
	Assam	1375	0	23.4	17.0	-0.2	75	0.00
	Manipur	219	0	3.2	3.3	0.0	32	0.00
	Meghalaya	384	0	7.2	5.7	0.3	58	0.00
	Mizoram	118	0	1.7	1.5	-0.1	8	0.00
	Nagaland	128	0	2.5	2.3	0.1	17	0.00
	Tripura	215	0	3.3	1.5	-0.1	44	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	5.3	-4.9	-16.7
Day Peak (MW)	275.0	97.2	-855.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	227.8	-131.3	68.4	-162.2	-2.8	0.0
Actual(MU)	208.7	-119.4	61.1	-155.3	-1.1	-6.0
O/D/U/D(MU)	-19.2	11.9	-7.3	6.9	1.7	-6.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6422	14728	7732	2010	380	31272	42
State Sector	10741	17746	11031	3708	11	43236	58
Total	17163	32473	18763	5718	391	74507	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	558	1131	423	515	10	2637	74
Lignite	24	9	34	0	0	67	2
Hydro	107	29	66	29	10	241	7
Nuclear	32	33	70	0	0	135	4
Gas, Naptha & Diesel	15	9	9	0	29	62	2
RES (Wind, Solar, Biomass & Others)	100	133	185	5	0	424	12
Total	834	1345	788	548	49	3564	100

Share of RES in total generation (%)	11.95	9.92	23.54	0.86	0.57	11.88
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	28.57	14.54	40.78	6.13	20.57	22.41

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.030
Based on State Max Demands	1.071

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: 20-Dec-2021

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	0.0	0.0	0.0	
3	765 kV	GAYA-VARANASI	2	0	932	0.0	10.5	-10.5	
4	765 kV	SASARAM-FATEHPUR	1	0	555	0.0	7.7	-7.7	
5	765 kV	GAYA-BALIA	1	0	573	0.0	10.2	-10.2	
6	400 kV	PUSAULI-VARANASI	1	58	89	0.0	0.2	-0.2	
7	400 kV	16.65	1	7	147	0.0	19.3	-1.6	
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	778	0.0	9.5	-9.5	
9	400 kV	PATNA-BALIA	4	0	1390	0.0	21.9	-21.9	
10	400 kV	BIHARSHARIF-BALIA	2	0	405	0.0	5.1	-5.1	
11	400 kV	MOTIHARI-GORAKHPUR	2	0	520	0.0	8.1	-8.1	
12	400 kV	BIHARSHARIF-VARANASI	2	0	290	0.0	4.4	-4.4	
13	220 kV	PUSAULI-SAHUPURI	1	0	213	0.0	1.4	-1.4	
14	132 kV	SONE NAGAR-RIHAND	1	0	25	0.0	0.0	0.0	
15	132 kV	GARWAH-RIHAND	1	25	0	0.3	0.0	0.3	
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	0.3	80.5	-80.2
<b>Import/Export of ER (With WR)</b>									
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	746	698	0.6	0.0	0.6	
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	111	1007	0.0	8.0	-8.0	
3	765 kV	JHARSUGUDA-DURG	2	35	372	0.0	4.5	-4.5	
4	400 kV	JHARSUGUDA-RAIGARH	4	166	441	0.0	4.1	-4.1	
5	400 kV	RANCHI-SIPAT	2	87	361	0.0	2.3	-2.3	
6	220 kV	BUDHIPADAR-RAIGARH	1	0	153	0.0	2.0	-2.0	
7	220 kV	BUDHIPADAR-KORBA	2	63	32	0.3	0.0	0.3	
						ER-WR	0.9	20.9	-20.0
<b>Import/Export of ER (With SR)</b>									
1	HVDC	JEYPORE-GAZUWAKA B/B	2	393	0	7.6	0.0	7.6	
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1969	0.0	35.4	-35.4	
3	765 kV	ANGUL-SRIKAKULAM	2	0	3093	0.0	53.0	-53.0	
4	400 kV	TALCHER/JC	2	1081	644	2.0	0.0	2.0	
5	220 kV	BALIMELA-UPPER-SILERRU	1	2	0	0.0	0.0	0.0	
						ER-SR	7.6	88.4	-80.8
<b>Import/Export of ER (With NER)</b>									
1	400 kV	BINAGURI-BONGAIGAON	2	38	333	0.0	4.4	-4.4	
2	400 kV	ALIPURDUAR-BONGAIGAON	2	65	474	0.0	6.1	-6.1	
3	220 kV	ALIPURDUAR-SALAKATI	2	4	88	0.0	1.0	-1.0	
						ER-NER	0.0	11.6	-11.6
<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	2499	0.0	49.7	-49.7	
2	HVDC	VINDHYACHAL B/B	-	448	0	8.4	0.0	8.4	
3	HVDC	MUNDRU-MOHENDERGARH	2	0	255	0.0	6.2	-6.2	
4	765 kV	GWALIOR-AGRA	2	0	1585	0.0	23.7	-23.7	
5	765 kV	GWALIOR-PHAGI	2	0	1953	0.0	29.6	-29.6	
6	765 kV	JABALPUR-ORAI	2	0	825	0.0	24.7	-24.7	
7	765 kV	GWALIOR-ORAI	1	929	0	16.1	0.0	16.1	
8	765 kV	SATNA-ORAI	1	0	973	0.0	18.2	-18.2	
9	765 kV	BANASKANTHA-CHITORGARH	2	1331	0	15.7	0.0	15.7	
10	765 kV	VINDHYACHAL-VARANASI	2	0	2285	0.0	38.3	-38.3	
11	400 kV	ZERDA-KANKROLI	1	239	0	3.5	0.0	3.5	
12	400 kV	ZERDA-BHINMAL	1	251	96	2.3	0.0	2.3	
13	400 kV	VINDHYACHAL-RIHAND	1	974	0	21.5	0.0	21.5	
14	400 kV	RAPP-SHUJALPUR	2	120	132	0.0	1.1	-1.1	
15	220 kV	BHANPUR-RANPUR	1	0	0	0.0	0.0	0.0	
16	220 kV	BHANPUR-MORAK	1	0	30	1.5	0.1	1.4	
17	220 kV	MEHGAON-AURAIYA	1	149	0	1.3	0.0	1.3	
18	220 kV	MALANPUR-AURAIYA	1	99	0	2.3	0.0	2.3	
19	132 kV	GWALIOR-SAWALMADHOPUR	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	72.6	191.6	-119.0
<b>Import/Export of WR (With SR)</b>									
1	HVDC	BHADRAWATI B/B	-	990	515	6.6	5.8	0.7	
2	HVDC	RAIGARH-PUGALUR	2	2408	1002	0.4	0.0	0.4	
3	765 kV	SOLAPUR-RAICHUR	2	1034	1373	0.0	6.8	-6.8	
4	765 kV	WARDHA-NIZAMABAD	2	0	2605	0.0	37.2	-37.2	
5	400 kV	KOLHAPUR-KUDGI	2	1409	0	21.4	0.0	21.4	
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	1	102	1.1	0.0	1.1	
						WR-SR	29.5	49.9	-20.4

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)	97	0	66	1.6
	ER	400kV TALA-BINAGURI 1,2,3 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW) 220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	152	149	152	3.8
	ER	132kV GELEPHU-SALAKATI	8	0	3	0.1
	NER	132kV MOTANGA-RANGIA	7	0	2	0.1
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-46	0	-8	-0.2
NEPAL	ER	NEPAL IMPORT (FROM BIHAR)	-146	0	-20	-0.5
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	289	53	-176	-4.2
BANGLADESH	ER	BHERAMARA B/B HVDC (BANGLADESH)	-736	-402	-614	-14.7
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-119	0	-82	-2.0