



**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: 19<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 18.12.2021.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 18-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 18<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: 19-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)	53469	55606	39412	18904	2559	169950
Peak Shortage (MW)	250	0	0	306	0	556
Energy Met (MU)	1056	1266	882	381	44	3629
Hydro Gen (MU)	108	28	71	28	6	242
Wind Gen (MU)	15	120	46	-	-	181
Solar Gen (MU)*	67.21	38.18	102.55	4.61	0.28	213
Energy Shortage (MU)	4.73	0.00	0.00	3.68	0.00	8.41
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	54314	61386	43576	19123	2637	174258
Time Of Maximum Demand Met (From NLDC SCADA)	18:23	10:27	08:13	18:01	17:22	09:55

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	0.029	0.00	0.00	0.65	0.65	71.51	27.84

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	7280	0	140.1	78.2	-0.7	223	0.00
	Haryana	7186	0	134.9	85.7	0.0	250	0.00
	Rajasthan	15121	0	271.9	79.2	0.4	328	0.00
	Delhi	3980	0	66.8	58.6	-0.2	208	0.00
	UP	18020	0	306.7	103.3	-0.5	407	0.00
	Uttarakhand	2202	0	41.6	28.2	0.8	219	0.08
	HP	1955	0	35.3	28.6	-0.5	188	0.00
	J&K(UT) & Ladakh(UT)	2628	300	55.3	50.6	-0.4	155	4.65
	Chandigarh	232	0	3.8	4.1	-0.2	34	0.00
	Chhattisgarh	3812	0	82.1	29.4	0.2	254	0.00
WR	Gujarat	17448	0	354.4	166.4	2.4	505	0.00
	MP	15110	0	292.5	178.3	-0.7	612	0.00
	Maharashtra	23448	0	481.3	134.1	-4.3	514	0.00
	Goa	559	0	11.9	11.4	-0.1	26	0.00
	DD	323	0	7.3	7.0	0.3	34	0.00
	DNH	831	0	19.2	19.2	0.0	45	0.00
	AMNSIL	773	0	16.9	8.2	-0.2	286	0.00
	Andhra Pradesh	8280	0	163.4	78.0	-0.3	314	0.00
	Telangana	9701	0	178.4	68.0	-0.6	716	0.00
	Karnataka	10005	0	180.6	34.5	-0.8	423	0.00
SR	Kerala	3782	0	76.4	54.3	-0.5	242	0.00
	Tamil Nadu	13697	0	276.4	168.6	-1.0	510	0.00
	Puducherry	339	0	7.0	7.3	-0.4	25	0.00
	Bihar	4535	0	76.2	65.6	-1.1	215	0.00
	DVC	3193	0	65.6	-42.7	0.6	462	2.36
	Jharkhand	1579	0	29.7	20.6	-0.8	167	1.32
	Odisha	4910	0	96.4	29.2	0.2	269	0.00
	West Bengal	6344	0	111.3	-8.1	0.4	425	0.00
	Sikkim	114	0	1.7	1.8	-0.1	51	0.00
	NER	Arunachal Pradesh	126	0	2.2	2.1	0.0	33
Assam		1469	0	24.4	18.2	-0.3	80	0.00
Manipur		224	0	3.3	3.3	0.0	24	0.00
Meghalaya		384	0	7.1	5.4	0.3	68	0.00
Mizoram		124	0	1.9	1.6	0.0	8	0.00
Nagaland		145	0	2.4	2.2	0.0	15	0.00
Tripura		221	0	3.0	1.6	-0.8	20	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	5.4	-2.6	-14.6
Day Peak (MW)	308.0	-291.9	-838.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	244.8	-159.3	80.3	-165.9	0.0	0.0
Actual(MU)	242.6	-151.9	72.3	-169.1	1.8	-4.3
O/D/U/D(MU)	-2.2	7.4	-8.0	-3.3	1.8	-4.3

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6537	14228	6942	2360	830	30897	41
State Sector	11056	18206	11831	3008	11	44111	59
Total	17593	32433	18773	5368	841	75007	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	569	1189	460	533	12	2762	74
Lignite	24	10	35	0	0	68	2
Hydro	108	28	71	28	6	242	7
Nuclear	28	33	70	0	0	130	4
Gas, Naptha & Diesel	11	11	9	0	29	60	2
RES (Wind, Solar, Biomass & Others)	107	160	178	5	0	449	12
Total	847	1430	822	565	47	3711	100

Share of RES in total generation (%)	12.65	11.17	21.59	0.82	0.59	12.11
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	28.73	15.45	38.73	5.71	13.96	22.14

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.039
Based on State Max Demands	1.091

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: 19-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	-	3	0	0.0	0.0	0.0	
3	765 kV	GAYA-VARANASI	2	0	938	0.0	11.3	-11.3	
4	765 kV	SASARAM-FATEHPUR	1	0	544	0.0	6.7	-6.7	
5	765 kV	GAYA-BALIA	1	0	597	0.0	11.3	-11.3	
6	400 kV	PUSAULI-VARANASI	1	48	172	0.0	0.6	-0.6	
7	400 kV	PUSAULI-ALLAHABAD	1	15	177	0.0	1.6	-1.6	
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	785	0.0	10.7	-10.7	
9	400 kV	PATNA-BALIA	4	0	1440	0.0	26.5	-26.5	
10	400 kV	BIHARSHARIFF-BALIA	2	0	473	0.0	7.6	-7.6	
11	400 kV	MOTIHARI-GORAKHPUR	2	0	481	0.0	8.4	-8.4	
12	400 kV	BIHARSHARIFF-VARANASI	2	0	290	0.0	7.0	-7.0	
13	220 kV	PUSAULI-SAHUPURI	1	15	100	0.0	1.4	-1.4	
14	132 kV	SONE NAGAR-RIHAND	1	0	0	0.0	0.0	0.0	
15	132 kV	GARWAH-RIHAND	1	25	0	0.3	0.0	0.3	
16	132 kV	KARMANASA-SAHUPURI	1	0	0	0.0	0.0	0.0	
17	132 kV	KARMANASA-CHANDAUJI	1	0	24	0.0	0.7	-0.7	
						ER-NR	0.3	94.1	-93.8
<b>Import/Export of ER (With WR)</b>									
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	611	663	0.4	0.0	0.4	
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	218	952	0.0	7.1	-7.1	
3	765 kV	JHARSUGUDA-DURG	2	57	300	0.0	2.4	-2.4	
4	400 kV	JHARSUGUDA-RAIGARH	4	174	387	0.0	2.9	-2.9	
5	400 kV	RANCHI-SIPAT	2	105	361	0.0	2.6	-2.6	
6	220 kV	BUDHIPADAR-RAIGARH	1	0	134	0.0	1.8	-1.8	
7	220 kV	BUDHIPADAR-KORBA	2	68	26	0.5	0.0	0.5	
						ER-WR	0.9	16.8	-15.9
<b>Import/Export of ER (With SR)</b>									
1	HVDC	JEYPORE-GAZUWAKA B/B	2	194	0	5.0	0.0	5.0	
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1980	0.0	38.3	-38.3	
3	765 kV	ANGUL-SRIKAKULAM	2	0	3140	0.0	51.6	-51.6	
4	400 kV	TALCHER-I/C	2	705	769	1.0	0.0	1.0	
5	220 kV	BALIMEL-A-UPPER-SILERRU	1	2	0	0.0	0.0	0.0	
						ER-SR	5.0	89.9	-84.9
<b>Import/Export of ER (With NER)</b>									
1	400 kV	BINAGURI-BONGAIGAON	2	0	420	0.0	5.5	-5.5	
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	574	0.0	7.1	-7.1	
3	220 kV	ALIPURDUAR-SALAKATI	2	0	102	0.0	1.2	-1.2	
						ER-NER	0.0	13.8	-13.8
<b>Import/Export of NER (With NR)</b>									
1	HVDC	BISWANATH CHARIAL-AGRA	2	0	503	0.0	12.1	-12.1	
						NER-NR	0.0	12.1	-12.1
<b>Import/Export of WR (With NR)</b>									
1	HVDC	CHAMPA-KURUKSHETRA	2	0	2514	0.0	50.5	-50.5	
2	HVDC	VINDHYACHAL B/B	-	184	9	2.6	0.0	2.6	
3	HVDC	MUNDRA-MOHINDERGARH	2	0	254	0.0	6.2	-6.2	
4	765 kV	GWALIOR-AGRA	2	0	1803	0.0	28.2	-28.2	
5	765 kV	GWALIOR-PHAGI	2	0	1922	0.0	28.0	-28.0	
6	765 kV	JABALPUR-ORAI	2	0	720	0.0	24.8	-24.8	
7	765 kV	GWALIOR-ORAI	1	1036	0	17.0	0.0	17.0	
8	765 kV	SAINA-ORAI	1	0	948	0.0	17.7	-17.7	
9	765 kV	BANASKANTHA-CHITORGARH	2	1085	135	10.0	0.0	10.0	
10	765 kV	VINDHYACHAL-VARANASI	2	0	2395	0.0	38.3	-38.3	
11	400 kV	ZERDA-KANKROLI	1	275	0	3.0	0.0	3.0	
12	400 kV	ZERDA-BHINMAL	1	289	131	2.3	0.0	2.3	
13	400 kV	VINDHYACHAL-RIHAND	1	966	0	20.0	0.0	20.0	
14	400 kV	RAPP-SHILJALPUR	2	149	352	0.4	2.5	-2.1	
15	220 kV	BHANPURA-RANPUR	1	112	76	0.4	0.2	0.2	
16	220 kV	BHANPURA-MORAK	1	0	30	0.4	0.7	-0.3	
17	220 kV	MEHGAON-AURAIYA	1	145	0	1.1	0.0	1.1	
18	220 kV	MALANPUR-AURAIYA	1	92	0	2.0	0.0	2.0	
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	59.1	196.9	-137.8
<b>Import/Export of WR (With SR)</b>									
1	HVDC	BHADRAWATI B/B	-	496	315	4.6	3.6	1.0	
2	HVDC	RAIGARH-PUGALUR	2	1549	1000	0.0	0.8	-0.8	
3	765 kV	SOLAPUR-RAICHUR	2	862	1726	2.9	13.8	-10.9	
4	765 kV	WARDHA-NIZAMABAD	2	0	3253	0.0	40.1	-40.1	
5	400 kV	KOLHAPUR-KUDGI	2	1436	0	19.9	0.0	19.9	
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	77	1.0	0.0	1.0	
						WR-SR	28.3	58.3	-29.9

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)	104	0	68	1.6
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW))	171	0	155	3.7
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	14	4	-4	-0.1
	NER	132kV GELEPHU-SALAKATI	8	0	0	0.0
	NER	132kV MOTANGA-RANGIA	12	2	5	0.1
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	0.0
	ER	NEPAL IMPORT (FROM BIHAR)	-84	0	-14	-0.3
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-208	13	-94	-2.3
BANGLADESH	ER	BHERAMARA B/B HVDC (BANGLADESH)	-736	-340	-529	-12.7
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-102	0	-80	-1.9