



**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: 22<sup>nd</sup> Nov 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 21.11.2021.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 21-नवंबर-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 21<sup>st</sup> November 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: 22-Nov-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)	42471	51224	33984	17447	2342	147468
Peak Shortage (MW)	200	0	0	60	0	260
Energy Met (MU)	887	1191	716	371	43	3208
Hydro Gen (MU)	119	27	98	51	13	308
Wind Gen (MU)	20	97	16	-	-	133
Solar Gen (MU)*	54.99	32.80	65.63	4.45	0.25	158
Energy Shortage (MU)	3.91	0.00	0.00	1.54	0.00	5.45
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	44415	54662	34955	18099	2528	151004
Time Of Maximum Demand Met (From NLDC SCADA)	10:40	10:54	18:26	17:57	17:17	18:21

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	0.028	0.00	0.00	0.37	0.37	73.87	25.76

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	5586	0	105.6	53.6	-1.5	81	0.00	
	Haryana	5257	0	107.3	79.2	0.3	299	0.00	
	Rajasthan	12517	0	230.6	53.1	-1.7	440	0.00	
	Delhi	3371	0	59.0	44.6	-1.4	139	0.00	
	UP	14643	0	266.7	111.8	-1.2	336	0.46	
	Uttarakhand	1755	0	32.5	21.5	0.1	87	0.00	
	HP	1559	0	28.4	19.6	-0.6	106	0.00	
	J&K(UT) & Ladakh(UT)	2727	200	53.8	46.3	-0.1	187	3.45	
	Chandigarh	161	0	2.7	3.7	-0.9	8	0.00	
	WR	Chhattisgarh	3508	0	79.1	27.3	0.1	246	0.00
Gujarat		14532	0	318.9	181.9	-5.9	325	0.00	
MP		13231	0	266.2	173.0	0.0	471	0.00	
Maharashtra		21638	0	471.7	162.7	-5.0	617	0.00	
Goa		527	0	11.1	10.8	-0.4	34	0.00	
DD		308	0	7.1	6.9	0.2	37	0.00	
DNH		818	0	19.1	19.0	0.1	67	0.00	
AMNSIL		829	0	18.1	9.3	0.0	317	0.00	
SR		Andhra Pradesh	7036	0	139.7	58.3	0.0	460	0.00
		Telangana	6390	0	135.5	43.7	0.8	433	0.00
	Karnataka	6491	0	130.5	29.5	-0.4	646	0.00	
	Kerala	3182	0	64.9	24.7	-0.5	233	0.00	
	Tamil Nadu	11450	0	238.6	120.6	-0.1	459	0.00	
	Puducherry	328	0	6.5	6.8	-0.3	40	0.00	
ER	Bihar	3999	0	73.4	63.6	0.0	417	0.00	
	DVC	3033	0	64.2	-31.2	-0.8	323	1.18	
	Jharkhand	1464	0	27.8	23.0	-0.5	160	0.35	
	Odisha	4720	0	94.5	41.5	-2.2	536	0.00	
	West Bengal	5948	0	109.5	6.7	-0.1	386	0.00	
	Sikkim	91	0	1.4	1.4	0.0	39	0.00	
NER	Arunachal Pradesh	129	0	2.3	2.1	0.0	50	0.00	
	Assam	1423	0	23.8	17.4	-0.5	61	0.00	
	Manipur	205	0	2.9	2.9	0.0	51	0.00	
	Meghalaya	345	0	6.7	5.0	0.1	42	0.00	
	Mizoram	109	0	1.7	1.3	-0.1	4	0.00	
	Nagaland	138	0	2.2	2.0	0.0	55	0.00	
	Tripura	218	0	3.5	1.6	-0.3	24	0.00	

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	13.9	1.5	-17.9
Day Peak (MW)	615.0	120.0	-885.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	164.3	-60.2	50.1	-148.4	-5.8	0.0
Actual(MU)	162.6	-59.3	51.2	-152.5	-5.5	-3.5
O/D/U/D(MU)	-1.8	1.0	1.1	-4.1	0.3	-3.5

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6310	17535	11832	1800	384	37860	44
State Sector	13385	19385	11261	4288	11	48329	56
Total	19695	36919	23093	6088	395	86189	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	467	1063	380	501	10	2421	73
Lignite	24	9	38	0	0	70	2
Hydro	119	27	98	51	13	308	9
Nuclear	26	32	46	0	0	103	3
Gas, Naptha & Diesel	20	8	9	0	30	66	2
RES (Wind, Solar, Biomass & Others)	94	131	106	4	0	335	10
Total	749	1269	676	557	53	3303	100

Share of RES in total generation (%)	12.60	10.30	15.63	0.80	0.47	10.15
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	31.87	14.96	36.86	10.03	24.96	22.60

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.139
Based on State Max Demands	1.057

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: 22-Nov-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	500	0.0	13.0	-13.0	
2	HVDC	PUSAULI B/B	-	0	248	0.0	5.9	-5.9	
3	765 kV	GAYA-VARANASI	2	0	515	0.0	6.1	-6.1	
4	765 kV	SASARAM-FATEHPUR	1	0	420	0.0	5.2	-5.2	
5	765 kV	GAYA-BALIA	1	0	346	0.0	7.2	-7.2	
6	400 kV	PUSAULI-VARANASI	1	0	166	0.0	3.2	-3.2	
7	400 kV	PUSAULI-ALLAHABAD	1	0	155	0.0	2.7	-2.7	
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	556	0.0	8.4	-8.4	
9	400 kV	PATNA-BALIA	4	0	877	0.0	12.9	-12.9	
10	400 kV	BIHARSHARIFF-BALIA	2	5	328	0.0	3.7	-3.7	
11	400 kV	MOTIHARI-GORAKHPUR	2	0	338	0.0	5.2	-5.2	
12	400 kV	BIHARSHARIFF-VARANASI	2	47	249	0.0	2.2	-2.2	
13	220 kV	PUSAULI-SAHUPURI	1	18	74	0.0	0.7	-0.7	
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	0	0.0	0.0	0.0	
						ER-NR	0.3	76.2	-75.9
<b>Import/Export of ER (With WR)</b>									
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	78	1161	0.0	15.0	-15.0	
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	370	631	0.0	0.5	-0.5	
3	765 kV	JHARSUGUDA-DURG	2	0	323	0.0	5.7	-5.7	
4	400 kV	JHARSUGUDA-RAIGARH	4	6	387	0.0	4.1	-4.1	
5	400 kV	RANCHI-SIPAT	2	101	212	0.0	0.5	-0.5	
6	220 kV	BUDHIPADAR-RAIGARH	1	25	69	0.0	0.7	-0.7	
7	220 kV	BUDHIPADAR-KORBA	2	133	0	1.9	0.0	1.9	
						ER-WR	1.9	26.4	-24.5
<b>Import/Export of ER (With SR)</b>									
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	392	0.0	8.5	-8.5	
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1644	0.0	39.1	-39.1	
3	765 kV	ANGUL-SRIKAKULAM	2	0	3089	0.0	47.4	-47.4	
4	400 kV	TALCHER-I/C	2	397	461	4.6	0.0	4.6	
5	220 kV	BALIMELA-UPPER-SILERRU	1	2	0	0.0	0.0	0.0	
						ER-SR	0.0	95.1	-95.1
<b>Import/Export of ER (With NER)</b>									
1	400 kV	BINAGURI-BONGAIGAON	2	0	267	0.0	3.9	-3.9	
2	400 kV	ALIPURDUAR-BONGAIGAON	2	63	222	0.0	1.7	-1.7	
3	220 kV	ALIPURDUAR-SALAKATI	2	0	60	0.0	0.7	-0.7	
						ER-NER	0.0	6.3	-6.3
<b>Import/Export of NER (With NR)</b>									
1	HVDC	BISWANATH CHARIAL-AGRA	2	0	503	0.0	12.0	-12.0	
						NER-NR	0.0	12.0	-12.0
<b>Import/Export of WR (With NR)</b>									
1	HVDC	CHAMPA-KURUKSHETRA	2	0	1119	0.0	26.4	-26.4	
2	HVDC	VINDHYACHAL B/B	-	451	0	12.2	0.0	12.2	
3	HVDC	MUNDRA-MOHINDERGARH	2	0	0	0.0	0.0	0.0	
4	765 kV	GWALIOR-AGRA	2	0	1953	0.0	27.1	-27.1	
5	765 kV	GWALIOR-PHAGI	2	0	1844	0.0	28.9	-28.9	
6	765 kV	JABALPUR-ORAI	2	0	714	0.0	22.7	-22.7	
7	765 kV	GWALIOR-ORAI	1	918	0	15.9	0.0	15.9	
8	765 kV	SAINA-ORAI	1	0	922	0.0	18.5	-18.5	
9	765 kV	BANASKANTHA-CHITORGARH	2	1116	0	14.3	0.0	14.3	
10	765 kV	VINDHYACHAL-VARANASI	0	2	2182	0.0	37.6	-37.6	
11	400 kV	ZERDA-KANKROLI	1	257	0	3.9	0.0	3.9	
12	400 kV	ZERDA-BHINMAL	1	322	0	4.5	0.0	4.5	
13	400 kV	VINDHYACHAL-RIHAND	1	967	0	22.0	0.0	22.0	
14	400 kV	RAPP-SHILJALPUR	2	232	218	1.6	0.5	1.1	
15	220 kV	BHANPURA-RANPUR	1	143	2	1.8	0.0	1.8	
16	220 kV	BHANPURA-MORAK	1	0	30	0.5	0.6	-0.1	
17	220 kV	MEHGAON-AURAIYA	1	134	0	1.3	0.0	1.3	
18	220 kV	MALANPUR-AURAIYA	1	94	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	79.8	162.2	-82.4
<b>Import/Export of WR (With SR)</b>									
1	HVDC	BHADRAWATI B/B	-	0	8	0.0	0.0	0.0	
2	HVDC	RAIGARH-PUGALUR	2	964	0	17.0	0.0	17.0	
3	765 kV	SOLAPUR-RAICHUR	2	1422	1961	0.0	5.8	-5.8	
4	765 kV	WARDHA-NIZAMABAD	2	23	2311	0.0	25.8	-25.8	
5	400 kV	KOLHAPUR-KUDGI	2	1000	0	11.9	0.0	11.9	
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	0	90	1.7	0.0	1.7	
						WR-SR	30.7	31.6	-0.9

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)	184	0	174	4.2
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW))	366	360	363	8.7
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	43	0	25	0.6
	NER	132kV GELEPHU-SALAKATI	8	0	6	0.1
	NER	132kV MOTANGA-RANGIA	13	4	9	0.2
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	0.0
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.0
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	120	30	64	1.5
BANGLADESH	ER	BHERAMARA B/B HVDC (BANGLADESH)	-740	-489	-661	-15.9
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-145	0	-85	-2.0