



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: 17th 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 16.12.2021.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 16-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 16th 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: 17-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)	52074	55468	39964	18192	2572	168270
Peak Shortage (MW)	250	0	0	427	0	677
Energy Met (MU)	1045	1272	887	381	45	3630
Hydro Gen (MU)	112	34	82	31	13	271
Wind Gen (MU)	9	85	44	-	-	139
Solar Gen (MU)*	57.42	34.11	99.09	4.73	0.28	196
Energy Shortage (MU)	5.37	0.00	0.00	6.50	0.00	11.87
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	52746	61366	43080	18234	2691	172941
Time Of Maximum Demand Met (From NLDC SCADA)	11:16	10:56	08:23	18:59	17:32	11:00

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	0.036	0.00	0.00	3.82	3.82	71.11	25.07

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	6851	0	133.4	76.0	-0.4	209	0.20
	Haryana	7146	0	133.8	93.4	0.1	143	0.48
	Rajasthan	15150	0	271.2	80.6	1.0	379	0.00
	Delhi	3926	0	67.0	55.4	-1.0	247	0.00
	UP	16961	0	300.6	98.1	-1.4	422	0.00
	Uttarakhand	2147	0	39.9	26.0	0.7	164	0.00
	HP	1915	0	34.9	27.5	0.2	223	0.04
	J&K(UT) & Ladakh(UT)	2785	250	60.4	53.6	1.7	465	4.65
	Chandigarh	223	0	3.6	3.8	-0.2	26	0.00
	Chhattisgarh	3709	0	80.9	28.0	0.7	307	0.00
WR	Gujarat	17354	0	351.4	178.1	-1.6	744	0.00
	MP	15005	0	295.4	178.0	0.7	615	0.00
	Maharashtra	23750	0	485.6	137.6	-2.1	656	0.00
	Goa	610	0	12.6	11.9	0.1	77	0.00
	DD	329	0	7.3	7.0	0.3	40	0.00
	DNH	848	0	19.4	19.2	0.2	50	0.00
	AMNSIL	868	0	19.5	6.1	-0.2	236	0.00
SR	Andhra Pradesh	8225	0	166.7	76.5	-0.1	455	0.00
	Telangana	9430	0	176.0	63.8	0.2	680	0.00
	Karnataka	9387	0	177.9	36.0	-1.4	511	0.00
	Kerala	3783	0	76.5	50.3	0.3	195	0.00
	Tamil Nadu	14041	0	282.7	163.4	1.5	760	0.00
	Puducherry	351	0	6.9	7.4	-0.6	40	0.00
ER	Bihar	4183	0	75.6	64.0	-0.1	196	0.08
	DVC	3104	156	66.4	-46.4	-0.4	491	2.35
	Jharkhand	1511	271	25.9	21.2	-0.9	237	4.07
	Odisha	4764	0	96.4	30.1	0.0	464	0.00
	West Bengal	5971	0	114.1	-4.6	0.5	270	0.00
NER	Sikkim	116	0	2.1	1.8	0.3	67	0.00
	Arunachal Pradesh	131	0	2.2	2.3	-0.2	35	0.00
	Assam	1483	0	24.7	18.1	-0.1	65	0.00
	Manipur	234	0	3.2	3.3	-0.1	34	0.00
	Meghalaya	397	0	7.3	5.7	0.2	35	0.00
	Mizoram	124	0	1.9	1.6	-0.1	10	0.00
	Nagaland	157	0	2.5	2.3	0.1	15	0.00
	Tripura	225	0	3.5	2.0	-0.5	19	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	6.0	-2.9	-13.4
Day Peak (MW)	320.0	-218.8	-808.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	245.7	-149.2	68.7	-160.2	-5.1	0.0
Actual(MU)	236.4	-144.2	65.0	-153.5	-6.0	-2.4
O/D/U/D(MU)	-9.4	5.0	-3.7	6.7	-0.9	-2.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6987	15023	7942	3020	380	33352	43
State Sector	11601	18126	10493	3218	11	43448	57
Total	18588	33148	18435	6238	391	76799	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	567	1224	465	521	13	2790	75
Lignite	23	13	37	0	0	73	2
Hvdro	112	34	82	31	13	271	7
Nuclear	28	33	69	0	0	130	3
Gas, Naptha & Diesel	15	12	9	0	29	65	2
RES (Wind, Solar, Biomass & Others)	92	121	173	5	0	390	10
Total	836	1436	835	557	56	3719	100
Share of RES in total generation (%)	11.02	8.39	20.66	0.85	0.50	10.49	
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	27.68	13.02	38.77	6.45	24.10	21.28	

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.030
Based on State Max Demands	1.082

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: 17-Dec-2021			
						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	2	2	0	0.0	0.0	0.0	
3	765 kV	GAYA-VARANASI	2	0	1030	0.0	12.2	-12.2	
4	765 kV	SASARAM-FATEHPUR	1	0	700	0.0	8.9	-8.9	
5	765 kV	GAYA-BALIA	1	0	651	0.0	11.3	-11.3	
6	400 kV	PUSAULI-VARANASI	1	0	54	0.0	1.0	-1.0	
7	400 kV	PUSAULI-ALLAHABAD	1	0	84	0.0	1.7	-1.7	
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	740	0.0	10.8	-10.8	
9	400 kV	PATNA-BALIA	4	0	1263	0.0	22.1	-22.1	
10	400 kV	BIHARSHARIFF-BALIA	2	0	503	0.0	6.7	-6.7	
11	400 kV	MOTIHARI-GORAKHPUR	2	0	378	0.0	6.4	-6.4	
12	400 kV	BIHARSHARIFF-VARANASI	2	0	380	0.0	5.9	-5.9	
13	220 kV	PUSAULI-SAHUPURI	1	0	93	0.0	0.6	-0.6	
14	132 kV	SONE NAGAR-RIHAND	1	0	0	0.0	0.0	0.0	
15	132 kV	GARWAH-RIHAND	1	25	0	0.0	0.0	0.0	
16	132 kV	KARMANASA-SAHUPURI	1	0	0	0.0	0.0	0.0	
17	132 kV	KARMANASA-CHANDAULI	1	0	19	0.0	0.1	-0.1	
						ER-NR	0.3	87.6	-87.3
Import/Export of ER (With WR)									
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	821	798	1.2	0.0	1.2	
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	25	938	0.0	7.8	-7.8	
3	765 kV	JHARSUGUDA-DURG	2	130	264	0.0	1.4	-1.4	
4	400 kV	JHARSUGUDA-RAIGARH	4	231	373	0.0	1.7	-1.7	
5	400 kV	RANCHI-SIPAT	2	84	325	0.0	1.9	-1.9	
6	220 kV	BUDHIPADAR-RAIGARH	1	7	154	0.0	1.9	-1.9	
7	220 kV	BUDHIPADAR-KORBA	2	74	40	0.4	0.0	0.4	
						ER-WR	1.6	14.7	-13.2
Import/Export of ER (With SR)									
1	HVDC	JEYPORE-GAZUWAKA B/B	2	187	0	4.9	0.0	4.9	
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1985	0.0	39.0	-39.0	
3	765 kV	ANGUL-SRIKAKULAM	2	0	2938	0.0	53.6	-53.6	
4	400 kV	TALCHER-I/C	2	853	996	1.9	0.0	1.9	
5	220 kV	BALMELA-UPPER-SILERRU	1	2	0	0.0	0.0	0.0	
						ER-SR	4.9	92.7	-87.8
Import/Export of ER (With NER)									
1	400 kV	BINAGURI-BONGAIGAON	2	54	252	0.0	2.5	-2.5	
2	400 kV	ALIPURDUAR-BONGAIGAON	2	87	350	0.0	3.0	-3.0	
3	220 kV	ALIPURDUAR-SALAKATI	2	9	62	0.0	0.5	-0.5	
						ER-NER	0.0	6.1	-6.1
Import/Export of NER (With NR)									
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.1	-12.1	
						NER-NR	0.0	12.1	-12.1
Import/Export of WR (With NR)									
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3011	0.0	55.9	-55.9	
2	HVDC	VINDHYACHAL B/B	2	207	0	5.4	0.0	5.4	
3	HVDC	MUNDRAL-MOHINDERGARH	2	0	255	0.0	6.2	-6.2	
4	765 kV	GWALIOR-AGRA	2	0	1696	0.0	25.2	-25.2	
5	765 kV	GWALIOR-PHAGI	2	0	2347	0.0	33.1	-33.1	
6	765 kV	JABALPUR-ORAI	2	0	1169	0.0	22.8	-22.8	
7	765 kV	GWALIOR-ORAI	1	891	0	13.8	0.0	13.8	
8	765 kV	SATNA-ORAI	1	0	1270	0.0	20.9	-20.9	
9	765 kV	BANASKANTHA-CHITORGARH	2	1093	94	13.4	0.0	13.4	
10	765 kV	VINDHYACHAL-VARANASI	2	0	2013	0.0	37.3	-37.3	
11	400 kV	ZERDA-KANKROLI	1	203	0	3.3	0.0	3.3	
12	400 kV	ZERDA -BHINMAL	1	239	145	2.4	0.0	2.4	
13	400 kV	VINDHYACHAL -RIHAND	1	978	0	21.8	0.0	21.8	
14	400 kV	RAPP-SHUALPUR	2	240	385	0.8	2.1	-1.3	
15	220 kV	BHANPURA-RANPUR	1	69	72	0.6	0.2	0.3	
16	220 kV	BHANPURA-MORAK	1	0	30	1.4	0.0	1.4	
17	220 kV	MEHGAON-AURAIYA	1	135	0	1.2	0.0	1.2	
18	220 kV	MALANPUR-AURAIYA	1	90	0	2.2	0.0	2.2	
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	66.4	203.8	-137.5
Import/Export of WR (With SR)									
1	HVDC	BHADRAWATI B/B	-	598	515	4.3	2.5	1.8	
2	HVDC	RAIGARH-PUGALUR	2	964	1001	2.7	0.0	2.7	
3	765 kV	SOLAPUR-RAICHUR	2	1140	1571	3.5	12.4	-8.9	
4	765 kV	WARDHA-NIZAMABAD	2	0	2914	0.0	38.2	-38.2	
5	400 kV	KOLHAPUR-KUDGI	2	1532	0	21.6	0.0	21.6	
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	78	1.2	0.0	1.2	
						WR-SR	33.2	53.2	-19.9

INTERNATIONAL EXCHANGES				Import(+ve)/Export(-ve) Energy Exchange (MU)			
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)	108	0	77	1.8	
	ER	400kV TALA-BINAGURI 1,2,3 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	168	154	164	3.9	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	26	0	1	0.0	
	NER	132kV GELEPHU-SALAKATI	5	-5	2	0.0	
	NER	132kV MOTANGA-RANGIA	9	2	5	0.1	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-36	0	-2	-0.1	
	ER	NEPAL IMPORT (FROM BIHAR)	119	0	19	0.5	
BANGLADESH	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-302	0	-139	-3.3	
	ER	BHERAMARA B/B HVDC (BANGLADESH)	-721	-377	-485	-11.6	
BANGLADESH	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-87	0	-74	-1.8	