



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: 24th 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 23.12.2021.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 23-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 23rd 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: 24-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)	54410	56961	40881	20214	2610	175076
Peak Shortage (MW)	1110	0	0	486	0	1596
Energy Met (MU)	1083	1294	932	408	45	3762
Hydro Gen (MU)	109	36	90	31	11	277
Wind Gen (MU)	3	15	14	-	-	32
Solar Gen (MU)*	36.02	38.06	105.60	4.43	0.27	184
Energy Shortage (MU)	8.59	0.34	0.00	5.28	0.06	14.27
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	55820	62635	46521	20597	2654	181379
Time Of Maximum Demand Met (From NLDC SCADA)	11:15	11:03	08:13	18:53	17:33	10:28

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	0.032	0.00	0.20	6.02	6.21	80.95	12.83

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	6773	0	130.2	67.5	-2.0	88	0.10
	Haryana	7344	0	136.2	75.9	-0.2	199	0.00
	Rajasthan	14778	225	281.2	87.1	4.4	528	3.76
	Delhi	4339	0	72.0	60.4	-0.4	286	0.00
	UP	18522	0	323.1	94.3	-0.5	292	0.00
	Uttarakhand	2309	0	42.9	0.9	0.9	165	0.08
	HP	1899	0	34.5	27.7	-0.2	181	0.00
	J&K(UT) & Ladakh(UT)	2862	300	58.6	55.3	-1.8	397	4.65
	Chandigarh	246	0	4.0	4.1	-0.1	28	0.00
	Chhattisgarh	3991	0	83.8	36.2	1.8	827	0.11
WR	Gujarat	17131	0	360.2	202.0	0.6	634	0.23
	MP	15486	0	302.0	193.9	-1.2	473	0.00
	Maharashtra	24405	0	492.4	138.0	-3.6	582	0.00
	Goa	578	0	12.0	10.9	0.5	41	0.00
	DD	333	0	7.3	7.2	0.1	36	0.00
	DNH	842	0	19.6	19.3	0.3	72	0.00
	AMNSIL	795	0	16.2	7.7	-0.4	291	0.00
SR	Andhra Pradesh	8979	0	170.3	72.9	0.2	400	0.00
	Telangana	10144	0	186.7	67.2	0.6	610	0.00
	Karnataka	11276	0	200.5	54.1	-0.5	609	0.00
	Kerala	3744	0	74.8	52.7	-0.4	289	0.00
	Tamil Nadu	14262	0	293.0	190.3	0.7	567	0.00
	Puducherry	348	0	7.0	7.3	-0.3	27	0.00
ER	Bihar	4977	0	81.7	71.2	-0.5	242	0.00
	DVC	3254	0	68.6	-46.1	0.1	438	2.00
	Jharkhand	1520	108	29.9	20.2	0.1	225	3.28
	Odisha	5705	0	113.0	56.5	-1.3	468	0.00
	West Bengal	6237	0	112.8	-4.3	1.1	277	0.00
NER	Sikkim	126	0	2.0	1.8	0.2	61	0.00
	Arunachal Pradesh	140	0	2.3	2.2	0.0	35	0.00
	Assam	1487	0	24.8	18.1	0.2	114	0.00
	Manipur	236	0	3.1	3.0	0.1	40	0.06
	Meghalaya	394	0	7.5	5.7	0.2	54	0.00
	Mizoram	138	0	1.8	1.7	-0.2	16	0.00
	Nagaland	135	0	2.3	2.1	0.2	12	0.00
	Tripura	220	0	3.5	3.5	-0.3	15	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	5.4	-6.1	-16.4
Day Peak (MW)	343.0	-496.6	-831.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	227.4	-149.5	78.1	-154.8	-1.2	0.0
Actual(MU)	213.9	-145.1	86.3	-154.6	-1.8	-1.3
O/D/U/D(MU)	-13.5	4.5	8.2	0.2	-0.6	-1.3

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	5582	12053	6422	2370	380	26807	39
State Sector	8586	17331	10753	4558	112	41339	61
Total	14168	29383	17175	6928	492	68145	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	648	1311	510	552	14	3035	79
Lignite	23	12	38	0	0	73	2
Hydro	109	36	90	31	11	277	7
Nuclear	33	33	69	0	0	135	4
Gas, Naptha & Diesel	15	12	8	0	26	61	2
RES (Wind, Solar, Biomass & Others)	64	54	145	4	0	268	7
Total	892	1488	860	588	51	3849	100
Share of RES in total generation (%)	7.18	3.71	16.90	0.76	0.53	6.97	
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	23.03	8.46	35.41	6.07	21.97	17.67	

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.038
Based on State Max Demands	1.080

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: 24-Dec-2021

Sl No	Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	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	0	0.0	0.0	0.0
3	765 kV	GAYA-VARANASI	2	0	683	0.0	9.7	-9.7
4	765 kV	SASARAM-FATEHPUR	1	0	594	0.0	8.4	-8.4
5	765 kV	GAYA-BALIA	1	0	568	0.0	9.7	-9.7
6	400 kV	PUSAULI-VARANASI	1	10	185	0.0	1.9	-1.9
7	400 kV	PUSAULI-ALLAHABAD	1	9	162	0.0	1.4	-1.4
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	700	0.0	9.2	-9.2
9	400 kV	PATNA-BALIA	4	0	1176	0.0	21.8	-21.8
10	400 kV	BIHARSHARIFF-BALIA	2	0	383	0.0	6.0	-6.0
11	400 kV	MOTIHARI-GORAKHPUR	2	0	442	0.0	6.9	-6.9
12	400 kV	BIHARSHARIFF-VARANASI	2	0	267	0.0	4.2	-4.2
13	220 kV	PUSAULI-SAHUPURI	1	12	172	0.0	1.8	-1.8
14	132 kV	SONENAGAR-RIHAND	1	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	1	25	0	0.5	0.0	-0.5
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	80.8	-80.3
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	827	192	9.2	0.0	9.2
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	149	965	0.0	8.1	-8.1
3	765 kV	JHARSUGUDA-DURG	2	83	278	0.0	3.4	-3.4
4	400 kV	JHARSUGUDA-RAIGARH	4	142	419	0.0	2.9	-2.9
5	400 kV	RANCHI-SIPAT	2	86	307	0.0	2.9	-2.9
6	220 kV	BUDHIPADAR-RAIGARH	1	89	97	0.0	0.3	-0.3
7	220 kV	BUDHIPADAR-KORBA	2	114	20	1.3	0.0	1.3
						ER-WR	17.5	-7.1
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	549	0.0	12.4	-12.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1987	0.0	42.8	-42.8
3	765 kV	ANGUL-SRIKAKULAM	2	0	2571	0.0	42.9	-42.9
4	400 kV	TALCHER-I/C	2	1748	980	0.0	1.4	-1.4
5	220 kV	BALMELA-UPPER-SILERRU	1	2	0	0.0	0.0	0.0
						ER-SR	98.1	-98.1
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	329	0.0	4.2	-4.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	457	0.0	5.3	-5.3
3	220 kV	ALIPURDUAR-SALAKATI	2	0	81	0.0	1.1	-1.1
						ER-NER	10.5	-10.5
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALL-AGRA	2	0	503	0.0	12.1	-12.1
						NER-NR	12.1	-12.1
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3008	0.0	60.3	-60.3
2	HVDC	VINDHYACHAL B/B	-	227	486	0.0	1.9	-1.9
3	HVDC	MUNDRAMOHINDERGARH	2	0	253	0.0	6.2	-6.2
4	765 kV	GWALIOR-AGRA	2	0	1471	0.0	18.5	-18.5
5	765 kV	GWALIOR-PHAGI	2	0	2356	0.0	36.4	-36.4
6	765 kV	JABALPUR-ORAI	2	0	876	0.0	24.9	-24.9
7	765 kV	GWALIOR-ORAI	1	953	0	17.7	0.0	17.7
8	765 kV	SATNA-ORAI	1	0	1047	0.0	19.0	-19.0
9	765 kV	BANASKANTHA-CHITORGARH	2	1739	0	27.9	0.0	27.9
10	765 kV	VINDHYACHAL-VARANASI	2	0	2022	0.0	34.5	-34.5
11	400 kV	ZERDA-KANKROLI	1	284	0	5.0	0.0	5.0
12	400 kV	ZERDA -BHINMAL	1	301	10	3.6	0.0	3.6
13	400 kV	VINDHYACHAL -RIHAND	1	984	0	22.2	0.0	22.2
14	400 kV	RAPP-SHUALPUR	2	158	335	0.6	1.5	-0.9
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.7	0.0	0.7
17	220 kV	MEHGAON-AURAIYA	1	157	0	1.6	0.0	1.6
18	220 kV	MALANPUR-AURAIYA	1	102	0	2.3	0.0	2.3
19	132 kV	GWALIOR-SAWAIMADHOPUR	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	81.5	-122.3
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1016	0.0	18.5	-18.5
2	HVDC	RAIGARH-PUGALUR	2	721	606	0.0	3.5	-3.5
3	765 kV	SOLAPUR-RAICHUR	2	970	1281	4.6	6.6	-2.0
4	765 kV	WARDHA-NIZAMABAD	2	0	2397	0.0	28.2	-28.2
5	400 kV	KOLHAPUR-KUDGI	2	1344	0	20.9	0.0	20.9
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	62	1.1	0.0	1.1
						WR-SR	26.6	-30.1

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)	144	28	56	1.4
	ER	400kV TALA-BINAGURI 1,2,3 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW))	178	161	175	4.2
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	13	0	-7	-0.2
	NER	132kV GELEPHU-SALAKATI	7	-6	1	0.0
	NER	132kV MOTANGA-RANGIA	11	-4	0	0.0
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-71	0	-17	-0.4
	ER	NEPAL IMPORT (FROM BIHAR)	-128	-12	-75	-1.8
BANGLADESH	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-298	0	-163	-3.9
	ER	BHERAMARA B/B HVDC (BANGLADESH)	-738	-400	-611	-14.7
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-93	0	-71	-1.7