



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: 15th 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 14.12.2021.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 14-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 14th December 2021, is available at the NLDC website.

धन्यवाद,

पाँवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड
राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली



Report for previous day

Date of Reporting: 15-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)	51391	55000	39216	17681	2542	165830
Peak Shortage (MW)	320	0	0	771	0	1091
Energy Met (MU)	1034	1267	871	374	44	3591
Hydro Gen (MU)	109	38	91	39	12	289
Wind Gen (MU)	6	59	52	-	-	117
Solar Gen (MU)*	61.86	34.77	70.15	4.76	0.26	172
Energy Shortage (MU)	4.92	0.00	0.00	6.03	0.00	10.95
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	52638	60266	41999	18404	2587	171075
Time Of Maximum Demand Met (From NLDC SCADA)	10:24	10:28	08:17	17:54	17:32	10:24

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	0.061	0.09	3.06	10.08	13.23	70.89	15.88

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	6807	0	135.4	75.6	-0.6	94	0.20
	Haryana	7066	0	133.5	94.1	0.2	227	0.00
	Rajasthan	15114	0	269.9	94.2	1.9	271	0.00
	Delhi	3823	0	64.0	54.1	-2.2	317	0.00
	UP	17190	0	295.1	105.5	0.1	668	0.00
	Uttarakhand	2105	0	39.0	27.0	0.4	189	0.07
	HP	1840	0	34.1	26.3	0.2	112	0.00
	J&K(UT) & Ladakh(UT)	2988	250	59.9	53.8	0.9	239	4.65
WR	Chhattisgarh	206	0	3.4	3.8	-0.4	20	0.00
	Gujarat	3676	0	79.4	29.2	-0.6	216	0.00
	Maharashtra	16860	0	353.2	185.7	-1.0	510	0.00
	MP	14949	0	292.0	177.2	-0.2	677	0.00
	Goa	23771	0	486.0	140.8	5.5	509	0.00
	DD	607	0	12.4	11.9	-0.1	53	0.00
	DNH	331	0	7.3	7.0	0.3	73	0.00
	AMNSIL	829	0	19.1	18.8	0.3	88	0.00
SR	Andhra Pradesh	793	0	17.7	8.6	0.1	256	0.00
	Telangana	7859	0	164.8	72.6	0.5	932	0.00
	Karnataka	9294	0	176.9	67.5	-0.7	544	0.00
	Kerala	9025	0	170.9	31.0	-1.4	426	0.00
	Tamil Nadu	3745	0	76.2	48.8	0.1	218	0.00
	Puducherry	13302	0	275.2	154.3	-0.1	631	0.00
ER	Bihar	353	0	7.2	7.6	-0.4	25	0.00
	DVC	4245	0	74.2	62.9	-0.2	426	0.53
	Jharkhand	3146	60	65.2	-41.9	-2.3	307	1.81
	Odisha	1393	168	25.6	20.4	-0.3	280	3.69
	West Bengal	4933	0	96.2	31.6	0.5	544	0.00
	Sikkim	6057	0	111.4	-10.3	1.2	550	0.00
NER	Arunachal Pradesh	111	0	1.8	0.8	1.0	81	0.00
	Assam	126	0	2.4	2.3	0.0	26	0.00
	Manipur	1439	0	24.2	18.5	-0.3	107	0.00
	Meghalaya	235	0	3.2	3.1	0.1	30	0.00
	Mizoram	373	0	6.7	5.8	-0.1	49	0.00
	Nagaland	128	0	1.8	1.6	-0.2	12	0.00
	Tripura	157	0	2.5	2.3	0.1	15	0.00
		222	0	3.6	2.2	-0.4	20	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	6.5	-3.0	-15.6
Day Peak (MW)	337.0	-394.4	-818.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	265.1	-147.9	56.9	-168.7	-5.3	0.0
Actual(MU)	263.0	-136.2	42.1	-166.4	-5.4	-2.8
O/D/U/D(MU)	-2.0	11.7	-14.7	2.2	0.0	-2.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	7187	14313	7732	3880	350	33462	41
State Sector	12886	19151	10641	4538	11	47226	59
Total	20073	33463	18373	8418	361	80687	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	536	1225	484	516	12	2773	76
Lignite	19	15	39	0	0	73	2
Hydro	109	38	91	39	12	289	8
Nuclear	27	33	69	0	0	130	4
Gas, Naptha & Diesel	15	11	9	0	30	65	2
RES (Wind, Solar, Biomass & Others)	93	95	150	5	0	343	9
Total	799	1417	841	561	54	3673	100

Share of RES in total generation (%)	11.59	6.73	17.78	0.84	0.48	9.33
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation(%)	28.69	11.72	36.86	7.88	21.78	20.73

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.028
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)

Date of Reporting: 15-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	501	0.0	12.4	-12.4
2	HVDC	PUSAULI B/B	-	2	0	0.0	18.0	0.0
3	765 kV	GAYA-VARANASI	2	0	1213	0.0	18.0	-18.0
4	765 kV	SASARAMI-FATEHPUR	1	0	636	0.0	9.3	-9.3
5	765 kV	GAYA-BALIA	1	0	637	0.0	7.2	-7.2
6	400 kV	PUSAULLY-VARANASI	1	15	101	0.0	1.5	-1.5
7	400 kV	PUSAULI-ALLAHABAD	1	6	121	0.0	1.2	-1.2
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	668	0.0	9.0	-9.0
9	400 kV	PATNA-BALIA	4	0	1542	0.0	26.1	-26.1
10	400 kV	BIHARSHARIFF-BALIA	2	0	541	0.0	8.8	-8.8
11	400 kV	MOTIHARI-GORAKHPUR	2	0	518	0.0	8.0	-8.0
12	400 kV	BIHARSHARIFF-VARANASI	2	0	380	0.0	6.6	-6.6
13	220 kV	PUSAULI-SAHUPURI	1	0	115	0.0	1.6	-1.6
14	132 kV	SONE NAGAR-RIHAND	1	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	1	25	0	0.2	0.0	0.2
16	132 kV	KARMANASA-SAHUPURI	1	0	0	0.0	0.0	0.0
17	132 kV	KARMANASA-CHANDALI	1	0	0	0.0	0.0	0.0
ER-NR						0.2	109.5	-109.3
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	719	578	2.6	0.0	2.6
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	0	1121	0.0	10.2	-10.2
3	765 kV	JHARSUGUDA-DURG	2	103	164	0.0	0.9	-0.9
4	400 kV	JHARSUGUDA-RAIGARH	4	178	353	0.0	2.7	-2.7
5	400 kV	RANCHI-SIPAT	2	61	358	0.0	4.4	-4.4
6	220 kV	BUDHIPADAR-RAIGARH	1	0	158	0.0	2.3	-2.3
7	220 kV	BUDHIPADAR-KORBA	2	80	88	0.0	0.1	-0.1
ER-WR						2.6	20.6	-18.0
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZIYAKA B/B	2	597	0	9.4	0.0	9.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1982	0.0	28.4	-28.4
3	765 kV	ANGUL-SRIKAKULAM	2	0	3033	0.0	54.7	-54.7
4	400 kV	TALCHER-IC	2	1354	217	12.9	0.0	12.9
5	220 kV	BALIMELA-UPPER-SILERRU	1	2	0	0.0	0.0	0.0
ER-SR						9.4	83.1	-73.7
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	285	0.0	4.6	-4.6
2	400 kV	ALIPURDUAR-BONGAIGAON	2	151	207	0.0	1.7	-1.7
3	220 kV	ALIPURDUAR-SALAKATI	2	20	56	0.0	0.6	-0.6
ER-NER						0.0	6.8	-6.8
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.0	-12.0
NER-NR						0.0	12.0	-12.0
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3018	0.0	47.8	-47.8
2	HVDC	VINDHYACHAL B/B	-	205	0	5.5	0.0	5.5
3	HVDC	MUNDIRA-MOHINDERGARH	2	0	449	0.0	8.2	-8.2
4	765 kV	GWALIOR-AGRA	2	0	1681	0.0	25.6	-25.6
5	765 kV	GWALIOR-PHAGI	2	0	2524	0.0	38.6	-38.6
6	765 kV	JABALPUR-ORAI	2	0	949	0.0	23.6	-23.6
7	765 kV	GWALIOR-ORAI	1	880	0	13.5	0.0	13.5
8	765 kV	SATNA-ORAI	1	0	1310	0.0	22.4	-22.4
9	765 kV	BANASKANTHA-CHITORGARH	2	1228	0	16.9	0.0	16.9
10	765 kV	VINDHYACHAL-VARANASI	2	0	1961	0.0	32.1	-32.1
11	400 kV	ZERDA-KANKROLI	1	237	0	3.6	0.0	3.6
12	400 kV	ZERDA-BHINMAL	1	224	180	2.1	0.0	2.1
13	400 kV	VINDHYACHAL-RIHAND	1	958	0	12.2	0.0	12.2
14	400 kV	RAPP-SHUJALPUR	2	209	524	0.3	3.7	-3.3
15	220 kV	BHANPURA-RANPUR	1	132	66	0.8	0.1	0.7
16	220 kV	BHANPURA-MORAK	1	0	30	0.7	0.9	-0.2
17	220 kV	MEHGAON-AURAIYA	1	140	0	1.3	0.0	1.3
18	220 kV	MALANPUR-AURAIYA	1	89	0	2.3	0.0	2.3
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						59.1	203.0	-143.9
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	987	617	11.2	5.2	6.0
2	HVDC	RAIGARH-PUGALUR	2	1642	606	9.5	0.0	9.5
3	765 kV	SOLAPUR-RAICHUR	2	612	1547	1.4	10.0	-8.6
4	765 kV	WARDHA-NIZAMABAD	2	0	2822	0.0	41.0	-41.0
5	400 kV	KOLHAPUR-KUDGI	2	1474	0	22.3	0.0	22.3
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	94	1.4	0.0	1.4
WR-SR						45.8	56.2	-10.4

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)	116	0	94	2.3
	ER	400kV TALA-BINAGURI 1,2,4 & 400kV MALBASE - BINAGURI i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW))	177	169	172	4.1
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	25	0	5	0.1
	NER	132kV GELEPHU-SALAKATI	7	0	1	0.0
	NER	132kV MOTANGA-RANGIA	11	0	1	0.0
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	0.0
	ER	NEPAL IMPORT (FROM BIHAR)	-94	0	-19	-0.5
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-300	23	-106	-2.5
BANGLADESH	ER	BHERAMARA B/B HVDC (BANGLADESH)	-720	-440	-569	-13.7
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-98	0	-83	-2.0