

National Load Despatch Centre
राष्ट्रीय भार प्रेषण केंद्र
GRID CONTROLLER OF INDIA LIMITED
ग्रिड कंट्रोलर ऑफ इंडिया 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: 2 December 2023

To,

- कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के., 14, गोल्फ क्लब रोड, कोलकाता - 700033
Executive Director, ERLDC, 14 Golf Club Road, Tollygunge, Kolkata, 700033
- 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
- 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
- कार्यकारी निदेशक, ऊ.पू.क्षे.भा.प्रे.के., डोंगतेह, लोअर नोंग्रह, लापलंग, शिलोंग - 793006
Executive Director, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
- 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 01.12.2023.

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 01-दिसम्बर-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रांभांप्रेंकें 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 1st December 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 02-Dec-2023

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)	48007	51667	46176	19655	2470	167975
Peak Shortage (MW)	0	0	0	155	0	155
Energy Met (MU)	1045	1198	1050	420	48	3761
Hydro Gen (MU)	107	24	40	15	12	198
Wind Gen (MU)	31	123	29	-	-	184
Solar Gen (MU)*	86.23	41.19	94.49	2.08	1.15	225
Energy Shortage (MU)	0.21	0.00	0.00	1.17	0.00	1.38
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	54327	56715	50450	20966	2778	181216
Time Of Maximum Demand Met	10:11	09:41	11:41	18:15	17:09	09:53

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	0.060	0.00	0.58	9.87	10.45	73.60	15.95

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	7169	0	137.6	44.5	0.0	171	0.00
	Haryana	7041	0	136.4	96.1	-0.5	116	0.00
	Rajasthan	14615	0	272.2	107.2	-3.8	392	0.00
	Delhi	3978	0	71.0	62.6	-0.8	225	0.00
	UP	16019	0	291.1	121.7	-2.4	1200	0.00
	Uttarakhand	2104	0	39.1	30.4	-0.1	138	0.00
	HP	1928	0	34.5	27.2	-0.5	28	0.00
	J&K(UT) & Ladakh(UT)	2647	0	55.4	50.5	-0.5	68	0.21
	Chandigarh	218	0	3.6	3.7	-0.1	37	0.00
Railways NR ISTS	185	0	3.7	3.7	0.1	32	0.00	
WR	Chhattisgarh	4242	0	88.5	54.2	-0.1	278	0.00
	Gujarat	17076	0	351.6	150.5	-1.1	872	0.00
	MP	10806	0	207.6	108.7	-3.1	421	0.00
	Maharashtra	22606	0	477.4	178.8	3.0	641	0.00
	Goa	704	0	14.6	13.8	0.2	74	0.00
	DNHDDPDCL	1183	0	27.3	27.3	0.0	52	0.00
	AMNSIL	826	0	18.4	8.8	0.0	237	0.00
	BALCO	524	0	12.5	12.5	0.0	10	0.00
SR	Andhra Pradesh	9713	0	200.8	86.3	-0.9	466	0.00
	Telangana	9742	0	200.7	107.8	0.1	509	0.00
	Karnataka	13743	0	254.7	109.1	1.5	504	0.00
	Kerala	4108	0	84.9	71.2	1.4	225	0.00
	Tamil Nadu	15126	0	300.7	170.3	-2.4	532	0.00
	Puducherry	387	0	8.6	8.3	-0.4	34	0.00
ER	Bihar	4488	0	83.1	78.4	-0.9	200	0.00
	DVC	3157	0	70.7	-37.2	0.1	289	0.00
	Jharkhand	1626	0	30.2	24.3	-2.7	268	1.17
	Odisha	4824	0	100.9	27.6	-1.9	224	0.00
	West Bengal	7096	0	133.4	20.1	-2.8	33	0.00
	Sikkim	102	0	1.5	1.6	-0.2	28	0.00
	Railways ER ISTS	21	0	0.0	0.1	-0.1	16	0.00
NER	Arunachal Pradesh	162	0	2.8	2.9	-0.3	31	0.00
	Assam	1564	0	27.5	20.8	0.3	83	0.00
	Manipur	213	0	3.0	3.1	-0.1	37	0.00
	Meghalaya	352	0	6.5	5.3	-0.3	72	0.00
	Mizoram	127	0	1.9	1.8	-0.3	9	0.00
	Nagaland	143	0	2.5	2.3	0.0	9	0.00
	Tripura	236	0	3.9	4.9	-0.1	41	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-4.4	1.4	-22.4	-4.5
Day Peak (MW)	-328.3	194.6	-1053.0	-833.9

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	229.8	-266.5	181.5	-147.2	2.3	0.0
Actual(MU)	213.3	-265.9	208.6	-158.1	1.8	-0.4
O/D/U/D(MU)	-16.5	0.5	27.1	-10.9	-0.6	-0.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	5803	12889	6028	3981	305	29006	41
State Sector	12601	17994	8294	2819	246	41953	59
Total	18404	30882	14322	6800	551	70959	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	606	1300	594	636	12	3148	77
Lignite	23	13	44	0	0	80	2
Hydro	107	24	40	15	12	198	5
Nuclear	21	53	76	0	0	150	4
Gas, Naptha & Diesel	12	16	5	0	27	59	1
RES (Wind, Solar, Biomass & Others)	136	166	155	3	1	461	11
Total	903	1572	913	654	52	4095	100

Share of RES in total generation (%)	15.03	10.53	17.00	0.51	2.20	11.26
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	29.11	15.44	29.65	2.83	25.50	19.74

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.022
Based on State Max Demands	1.052

I. All India Peak Demand and shortage at Solar and Non-Solar Hour

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	181216	9:53	216
Non-Solar hr	178894	18:24	155

Diversity factor = Sum of regional or state maximum demands / All India maximum demand

**Note: All generation MU figures are gross

***Godda (Jharkhand) -> Bangladesh power exchange is through the radial connection (isolated from Indian Grid)

Solar Hours -> 06:00 to 18:00hrs and rest are Non-Solar Hours

*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: 02-Dec-2023

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	-	0	48	0.0	1.3	-1.3
3	765 kV	GAYA-VARANASI	2	7	865	0.0	10.7	-10.7
4	765 kV	SASARAM-FATEHPUR	1	0	488	0.0	7.3	-7.3
5	765 kV	GAYA-BALIA	1	0	766	0.0	13.0	-13.0
6	400 kV	PUSAULI-VARANASI	1	15	29	0.0	0.1	-0.1
7	400 kV	PUSAULI-ALLAHABAD	1	0	66	0.0	1.1	-1.1
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	613	0.0	7.7	-7.7
9	400 kV	PATNA-BALIA	2	0	0	0.0	0.0	0.0
10	400 kV	NAUBATPUR-BALIA	2	0	759	0.0	12.4	-12.4
11	400 kV	BIHARSHARIFF-BALIA	2	0	381	0.0	5.1	-5.1
12	400 kV	MOTIHARI-GORAKHPUR	2	0	405	0.0	6.3	-6.3
13	400 kV	BIHARSHARIFF-VARANASI	2	0	388	0.0	4.9	-4.9
14	220 kV	SAHUPURI-KARAMNANA	1	3	85	0.0	1.0	-1.0
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.1	0.0	0.1
16	132 kV	GARWAH-RIHAND	1	30	0	0.2	0.0	0.2
17	132 kV	KARMANASA-SAHUPURI	1	0	0	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
ER-NR						0.3	71.0	-70.7
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	317	625	0.0	2.8	-2.8
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	253	808	0.0	4.7	-4.7
3	765 kV	JHARSUGUDA-DURG	2	0	883	0.0	16.2	-16.2
4	400 kV	JHARSUGUDA-RAIGARH	4	0	462	0.0	6.1	-6.1
5	400 kV	RANCHI-SIPAT	2	114	277	0.0	1.6	-1.6
6	220 kV	BUDHIPADAR-RAIGARH	1	17	114	0.0	1.2	-1.2
7	220 kV	BUDHIPADAR-KORBA	2	113	90	0.4	0.0	0.4
ER-WR						0.4	32.6	-32.3
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	705	0.0	16.2	-16.2
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1995	0.0	46.3	-46.3
3	765 kV	ANGUL-SRIKAKULAM	2	0	2637	0.0	50.4	-50.4
4	400 kV	TALCHER-I/C	2	245	988	0.0	4.5	-4.5
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	112.8	-112.8
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	275	24	2.4	0.0	2.4
2	400 kV	ALIPURDUAR-BONGAIGAON	2	863	0	9.5	0.0	9.5
3	220 kV	ALIPURDUAR-SALAKATI	2	166	0	2.2	0.0	2.2
ER-NER						14.1	0.0	14.1
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	656	0	16.2	0.0	16.2
NER-NR						16.2	0.0	16.2
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	2042	0.0	38.6	-38.6
2	HVDC	VINDHYACHAL B/B	-	136	0	3.6	0.0	3.6
3	HVDC	MUNDRA-MOHINDERGARH	2	0	265	0.0	6.1	-6.1
4	765 kV	GWALIOR-AGRA	2	0	1866	0.0	31.0	-31.0
5	765 kV	GWALIOR-PHAGI	2	0	1828	0.0	24.2	-24.2
6	765 kV	JABALPUR-ORAI	2	0	840	0.0	11.8	-11.8
7	765 kV	GWALIOR-ORAI	1	986	0	1.4	0.0	1.4
8	765 kV	SATNA-ORAI	1	0	1058	0.0	20.5	-20.5
9	765 kV	BANASKANTHA-CHITORGARH	2	339	580	0.0	24.0	-24.0
10	765 kV	VINDHYACHAL-VARANASI	2	0	2299	0.0	41.6	-41.6
11	400 kV	ZERDA-KANKROLI	1	61	90	0.2	0.5	-0.3
12	400 kV	ZERDA -BHINMAL	1	284	222	10.7	0.0	10.7
13	400 kV	VINDHYACHAL -RIHAND	1	962	0	10.6	0.0	10.6
14	400 kV	RAPP-SHUJALPUR	2	223	307	0.8	1.7	-0.9
15	220 kV	BHANPURA-RANPUR	1	0	144	0.0	2.3	-2.3
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.0	-1.0
17	220 kV	MEHGAON-AURAIYA	1	85	0	0.7	0.0	0.7
18	220 kV	MALANPUR-AURAIYA	1	60	14	0.3	0.0	0.3
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						28.3	203.3	-175.0
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1004	0.0	14.5	-14.5
2	HVDC	RAIGARH-PUGALUR	2	0	3005	0.0	64.2	-64.2
3	765 kV	SOLAPUR-RAICHUR	2	859	1294	1.1	11.5	-10.4
4	765 kV	WARDHA-NIZAMABAD	2	0	2241	0.0	11.0	-11.0
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2320	0.0	38.6	-38.6
6	400 kV	KOLHAPUR-KUDGI	2	920	0	14.9	0.0	14.9
7	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
8	220 kV	PONDA-AMBEWADI	1	0	0	0.0	0.0	0.0
9	220 kV	XELDEM-AMBEWADI	1	0	116	2.1	0.0	2.1
WR-SR						18.2	139.8	-121.6

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)	-181	14	-41	-0.99
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	298	70	132	3.16
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-276	-199	-252	-6.06
	NER	132kV GELEPHU-SALAKATI	-32	-16	-23	-0.56
	NER	132kV MOTANGA-RANGIA	9	0	2	0.05
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	41	0	4	0.10
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	154	0	54	1.30
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-938	-640	-835	-20.04
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-834	-49	-187	-4.48
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-115	0	-98	-2.36

