



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: GRID-INDIA/NLDC/SO/Daily PSP Report

दिनांक: 10.12.2024

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, लापालंग, 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 09.12.2024.

महोदय/Dear Sir,

आईईजीसी-2023 की धारा स.-38(1) के प्रावधान के अनुसार, दिनांक 9-दिसंबर-2024 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रांभांप्रेके की वेबसाइट पर उपलब्ध है।

As per article 38(1) of the Indian Electricity Grid Code, the daily report pertaining power supply position of All India Power System for the date 09.12.2024, is available at the NLDC website.

धन्यवाद,
Thanks

Report for previous day

Date of Reporting: 10-Dec-2024

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)	53633	61279	45136	20590	2642	183280
Peak Shortage (MW)	67	0	0	0	0	67
Energy Met (MU)	1170	1466	1075	412	48	4172
Hydro Gen (MU)	132	29	83	18	15	277
Wind Gen (MU)	12	147	21	-	-	180
Solar Gen (MU)*	134.33	110.77	103.56	2.18	0.92	352
Energy Shortage (MU)	1.70	0.00	0.00	0.06	0.00	1.76
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	63283	71751	51363	21259	2815	206182
Time Of Maximum Demand Met	10:21	09:47	09:57	17:59	17:02	09:57

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	0.053	0.60	1.20	6.27	8.08	69.49	22.43

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	8430	0	151.0	64.9	-0.8	239	0.00
	Haryana	8088	0	147.6	106.3	-2.0	324	0.00
	Rajasthan	17602	0	331.9	114.5	0.6	1132	0.00
	Delhi	4075	0	71.3	71.8	-1.9	353	0.00
	UP	18122	0	318.8	100.8	-2.9	288	0.74
	Uttarakhand	2275	0	42.9	31.6	0.2	108	0.00
	HP	1947	0	36.4	29.8	-3.0	341	0.00
	J&K(UT) & Ladakh(UT)	2945	0	62.6	57.4	0.1	129	0.96
	Chandigarh	220	0	3.9	4.0	-0.1	47	0.00
Railways NR ISTS	187	0	3.9	3.9	0.0	19	0.00	
WR	Chhattisgarh	4478	0	92.6	43.0	-1.9	192	0.00
	Gujarat	21018	0	402.6	140.5	-14.8	677	0.00
	MP	17885	0	330.4	205.8	-6.7	576	0.00
	Maharashtra	27750	0	565.6	210.6	-6.7	462	0.00
	Goa	698	0	14.7	13.9	0.3	31	0.00
	DNHDDPDCL	1317	0	29.4	29.5	-0.1	40	0.00
	AMNSIL	830	0	18.2	8.7	-0.4	235	0.00
	BALCO	528	0	12.6	12.7	-0.1	12	0.00
RIL JAMNAGAR	0	0	0.0	0.0	0.0	0	0.00	
SR	Andhra Pradesh	9886	0	198.7	52.4	1.8	722	0.00
	Telangana	11784	0	227.2	134.2	0.1	513	0.00
	Karnataka	12032	0	228.1	61.9	0.7	387	0.00
	Kerala	4427	0	85.0	68.6	1.1	285	0.00
	Tamil Nadu	16208	0	327.4	187.2	2.1	779	0.00
ER	Puducherry	415	0	9.2	9.0	-0.3	27	0.00
	Bihar	4640	0	84.7	74.0	-0.8	320	0.06
	DVC	3284	0	65.7	-32.3	-0.1	259	0.00
	Jharkhand	2003	0	35.9	26.7	-1.8	221	0.00
	Odisha	4639	0	89.2	12.3	-0.9	543	0.00
	West Bengal	6877	0	134.9	18.9	-1.8	163	0.00
	Sikkim	115	0	1.8	1.8	0.0	30	0.00
Railways ER ISTS	7	0	0.2	0.2	0.0	8	0.00	
NER	Arunachal Pradesh	151	0	2.5	2.9	-0.7	13	0.00
	Assam	1554	0	26.3	19.5	0.5	119	0.00
	Manipur	245	0	3.9	3.8	0.1	39	0.00
	Meghalaya	379	0	6.5	5.6	-0.2	79	0.00
	Mizoram	154	0	2.1	1.8	-0.2	24	0.00
	Nagaland	173	0	2.6	2.6	-0.1	17	0.00
Tripura	266	0	4.0	4.5	0.2	34	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-4.8	1.2	-11.6	-15.9
Day Peak (MW)	-510.0	-213.6	-497.0	768.9

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	242.0	-250.6	186.8	-183.7	5.6	0.0
Actual(MU)	242.4	-275.2	201.7	-180.5	4.6	-7.0
O/D/U/D(MU)	0.4	-24.6	14.9	3.2	-1.0	-7.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	5699	8349	8288	3838	551	26725	49
State Sector	8388	10203	6719	2464	353	28126	51
Total	14087	18552	15007	6302	904	54851	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	663	1486	590	637	9	3385	75
Lignite	22	11	43	0	0	76	2
Hydro	132	29	83	18	15	277	6
Nuclear	32	65	70	0	0	167	4
Gas, Naptha & Diesel	2	11	5	0	23	42	1
RES (Wind, Solar, Biomass & Others)	173	261	152	5	1	591	13
Total	1023	1864	943	659	48	4537	100

Share of RES in total generation (%)	16.87	14.01	16.08	0.72	1.96	13.04
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	32.85	19.07	32.36	2.69	32.85	22.73

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.020
Based on State Max Demands	1.055

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	206182	9:57	0
Non-Solar hr	195736	18:24	350

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: 10-Dec-2024

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	249	0.0	6.0	-6.0
3	765 kV	GAYA-VARANASI	2	0	1010	0.0	12.3	-12.3
4	765 kV	SASARAM-FATEHPUR	1	0	527	0.0	7.2	-7.2
5	765 kV	GAYA-BALIA	1	0	727	0.0	11.9	-11.9
6	400 kV	PUSAULI-VARANASI	1	0	158	0.0	3.1	-3.1
7	400 kV	PUSAULI-ALLAHABAD	1	0	140	0.0	2.8	-2.8
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	570	0.0	8.3	-8.3
9	400 kV	PATNA-BALIA	2	0	1028	0.0	18.5	-18.5
10	400 kV	NAUBATPUR-BALIA	2	0	699	0.0	6.0	-6.0
11	400 kV	BIHARSHARIFF-BALIA	2	41	262	0.0	5.1	-5.1
12	400 kV	MOTHARI-GORAKHPUR	2	0	563	0.0	9.7	-9.7
13	400 kV	BIHARSHARIFF-VARANASI	2	0	366	0.0	0.0	0.0
14	220 kV	SAHUPURI-KARAMNANA	1	9	99	0.0	0.1	-0.1
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.2	0.0	0.2
16	132 kV	GARWAH-RIHAND	1	30	0	0.4	0.0	0.4
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						0.6	90.9	-90.3
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	498	1201	0.0	3.6	-3.6
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	600	850	0.0	2.2	-2.2
3	765 kV	JHARSUGUDA-DURG	2	0	612	0.0	10.1	-10.1
4	400 kV	JHARSUGUDA-RAIGARH	4	0	650	0.0	9.4	-9.4
5	400 kV	RANCHI-SIPAT	2	0	103	0.0	0.0	0.0
6	220 kV	BUDHIPADAR-RAIGARH	1	0	92	0.0	1.2	-1.2
7	220 kV	BUDHIPADAR-KORBA	2	72	83	0.2	0.0	0.2
ER-WR						0.2	26.4	-26.2
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	624	0.0	10.4	-10.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1992	0.0	48.1	-48.1
3	765 kV	ANGUL-SRIKAKULAM	2	0	2971	0.0	57.3	-57.3
4	400 kV	TALCHER-I/C	2	0	422	0.0	7.6	-7.6
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	115.9	-115.9
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	298	0	3.3	0.0	3.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	528	0	6.4	0.0	6.4
3	220 kV	ALIPURDUAR-SALAKATI	2	97	0	1.2	0.0	1.2
ER-NER						10.8	0.0	10.8
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	664	0	15.7	0.0	15.7
NER-NR						15.7	0.0	15.7
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	2558	0.0	40.7	-40.7
2	HVDC	VINDHYACHAL B/B	-	0	307	0.0	7.2	-7.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1456	0.0	15.8	-15.8
4	765 kV	GWALIOR-AGRA	2	0	2049	0.0	29.8	-29.8
5	765 kV	GWALIOR-PHAGI	2	673	1573	1.2	19.0	-17.8
6	765 kV	JABALPUR-ORAI	2	0	934	0.0	25.3	-25.3
7	765 kV	GWALIOR-ORAI	1	1036	0	13.5	0.0	13.5
8	765 kV	SATNA-ORAI	1	0	1003	0.0	18.3	-18.3
9	765 kV	BANASKANTHA-CHITORGARH	2	73	1267	0.0	12.3	-12.2
10	765 kV	VINDHYACHAL-VARANASI	2	0	2297	0.0	37.9	-37.9
11	400 kV	ZERDA-KANKROLI	1	51	218	0.1	1.7	-1.6
12	400 kV	ZERDA-BHINMAL	1	35	151	0.1	1.2	-1.1
13	400 kV	VINDHYACHAL -RIHAND	1	985	0	20.0	0.0	20.0
14	400 kV	RAPP-SHUJALPUR	2	535	234	3.0	1.1	1.9
15	400 kV	NEEMUCH-Chittorgarh	2	597	185	3.8	0.8	2.9
16	220 kV	BHANPURA-RANPUR	1	0	190	0.0	3.2	-3.2
17	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.7	-1.7
18	220 kV	MEHGAON-AURAIYA	1	104	7	1.0	0.0	1.0
19	220 kV	MALANPUR-AURAIYA	1	70	18	0.6	0.0	0.6
20	132 kV	GWALIOR-SAWAI MADHOPUR	1	0	0	0.0	0.0	0.0
21	132 kV	RAJGHAT-LALITPUR	2	0	0	0.0	0.0	0.0
WR-NR						43.3	216.1	-172.8
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1006	0.0	19.0	-19.0
2	HVDC	RAIGARH-PUGALUR	-	0	3003	0.0	33.4	-33.4
3	765 kV	SOLAPUR-RAICHUR	2	468	1444	0.7	13.2	-12.5
4	765 kV	WARDHA-NIZAMABAD	2	0	2325	0.0	39.0	-39.0
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2525	0.0	44.0	-44.0
6	400 kV	KOLHAPUR-KUDGI	2	1076	0	17.1	0.0	17.1
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	119	2.4	0.0	2.4
WR-SR						20.1	148.5	-128.4

INTERNATIONAL EXCHANGES

State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)	Import(+ve)/Export(-ve) Energy Exchange (MU)
BHUTAN	ER	400kV MANGDECHHU-ALIPURDUAR 1,2&3 i.e. ALIPURDUAR RECEIPT (from MANGDECHHU HEP 4*180MW)	-130	127	6	0.13
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-186	157	-4	-0.10
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-245	-144	-188	-4.50
	NER	132kV GELEPHU-SALAKATI	-35	0	-16	-0.38
	NER	132kV MOTANGA-RANGIA	15	0	2	0.05
NEPAL	NR	NEPAL IMPORT (FROM UP)	-44	0	0	0.00
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-44	0	-18	-0.43
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-229	0	68	1.63
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-440	-432	-435	-10.45
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	769	402	-664	-15.93
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-57	0	-48	-1.16

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 10-Dec-2024

Export From India (in MU)

Country	GNA (ISGS/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.00	0.00	5.05	0.00	0.00	0.89	0.00	0.00	5.94
Nepal	0.13	0.00	1.38	0.00	0.00	0.65	0.00	0.00	2.16
Bangladesh	10.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.75
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	10.88	0.00	6.43	0.00	0.00	1.54	0.00	0.00	18.85

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72
Nepal	0.00	0.00	0.28	0.00	0.00	0.11	0.00	0.00	0.39
Bangladesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Import	0.72	0.00	0.28	0.00	0.00	0.11	0.00	0.00	1.11

Net from India(in MU)

-ve : Export / +ve : Import

Country	GNA (ISGS/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.72	0.00	-5.05	0.00	0.00	-0.89	0.00	0.00	-5.22
Nepal	-0.13	0.00	-1.10	0.00	0.00	-0.55	0.00	0.00	-1.78
Bangladesh	-10.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-10.75
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-10.16	0.00	-6.15	0.00	0.00	-1.44	0.00	0.00	-17.75

15 Min (INSTANTANEOUS) ALL INDIA GRID FREQUENCY, GENERATION & DEMAND MET (SCADA DATA)												
TIME	FREQUENCY (Hz)	DEMAND MET (MW)	NUCLEAR (MW)	WIND (MW)	SOLAR (MW)	HYDRO** (MW)	GAS (MW)	THERMAL (MW)	OTHERS* (MW)	NET DEMAND MET (MW)	TOTAL GENERATION (MW)	NET TRANSNATIONAL EXCHANGE (MW)
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I=A-(C+D))	(J=B+C+D+E+F+G+H)	(K)
0:00	49.97	140263	6649	8564	1	8098	1848	117439	2912	131698	145511	-823
0:15	49.97	139610	6528	8501	0	7303	1776	117468	2903	131109	144479	-641
0:30	49.97	138960	6441	8498	6	7031	1780	116883	2909	130456	143548	-664
0:45	49.97	138350	6456	8601	3	7073	1691	116239	2906	129746	142969	-652
1:00	49.97	137595	6435	8698	12	6940	1801	115657	2902	128885	142445	-639
1:15	50.02	136741	6439	8831	13	6972	1862	114614	2911	127897	141642	-686
1:30	50.07	136169	6450	8954	13	6920	1824	114135	2906	127202	141202	-687
1:45	50.07	135578	6456	9286	4	6746	1791	113303	2949	126288	140535	-651
2:00	50.12	135006	6456	9459	13	6398	1800	113037	2897	125534	140060	-648
2:15	50.12	134685	6464	9630	14	6068	1790	112867	2894	125041	139727	-636
2:30	50.07	134145	6458	9727	4	6126	1685	112120	2920	124414	139040	-620
2:45	50.07	134000	6462	9831	4	6149	1781	112144	2921	124165	139292	-674
3:00	50.07	133583	6479	9722	11	6201	1686	111701	2921	123850	138721	-678
3:15	49.97	133394	6470	9453	8	6364	1688	111567	2902	123933	138452	-669
3:30	50.02	133697	6487	9316	9	6439	1784	111949	2902	124372	138886	-644
3:45	50.02	133927	6489	9176	3	6369	1790	112239	2930	124748	138996	-714
4:00	50.02	134210	6486	9193	4	6366	1795	112531	2918	125013	139293	-670
4:15	50.02	136029	6474	8988	9	6403	1695	114554	2932	127032	141055	-674
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5:30	50.02	149586	6487	9161	12	7808	1691	126241	2911	140413	154311	-566
5:45	49.99	153460	6491	9236	10	8791	1920	129197	2921	144214	158566	-665
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7:00	49.99	180426	6513	10008	726	17229	1704	146025	2928	169692	185133	-861
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7:30	49.99	187747	6492	9989	2942	19089	1909	148491	2984	174816	191898	-838
7:45	50.04	190467	6508	9891	5210	19939	1701	148930	2984	175366	194263	-805
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8:30	50.04	196088	6511	9180	16538	13583	1904	149167	3103	170370	199986	-789
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9:15	49.94	202961	6485	6842	28963	9708	1857	149874	3146	167156	206875	-782
9:30	49.94	204830	6473	6076	32505	9536	1827	149392	3085	166249	208894	-773
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19:00	50.08	191423	6561	8212	232	24386	1817	152174	2833	182979	196215	-482
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