



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: 09<sup>th</sup> 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 08.12.2023.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 08-दिसम्बर-2023 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 8<sup>th</sup> December 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 09-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)	49330	54989	44514	19344	2491	170668
Peak Shortage (MW)	0	0	0	156	0	156
Energy Met (MU)	1080	1265	1029	401	46	3822
Hydro Gen (MU)	113	24	49	18	13	217
Wind Gen (MU)	4	55	22	-	-	81
Solar Gen (MU)*	112.31	54.63	81.57	1.71	0.36	251
Energy Shortage (MU)	0.23	0.00	0.00	1.77	0.00	2.00
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	56079	61746	49250	19941	2652	187684
Time Of Maximum Demand Met	10:38	09:59	09:41	18:45	17:27	09:59

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	0.040	0.00	1.04	7.61	8.66	79.93	11.41

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	7327	0	138.6	43.5	-2.8	52	0.00
	Haryana	7589	0	145.4	98.4	-0.3	177	0.00
	Rajasthan	15584	0	286.6	123.6	-3.2	187	0.00
	Delhi	4032	0	71.2	62.5	-0.4	299	0.00
	UP	16298	0	297.7	109.7	-0.4	712	0.00
	Uttarakhand	2142	0	40.7	29.7	0.1	135	0.00
	HP	2017	0	35.9	28.2	0.1	102	0.00
	J&K(UT) & Ladakh(UT)	2751	0	56.9	51.8	-0.3	245	0.23
	Chandigarh	223	0	3.6	3.5	0.1	34	0.00
Railways NR ISTS	162	0	3.2	3.5	-0.3	9	0.00	
WR	Chhattisgarh	4111	0	84.4	30.5	-1.2	467	0.00
	Gujarat	19271	0	382.0	190.4	-1.3	561	0.00
	MP	12237	0	228.0	135.7	-4.8	284	0.00
	Maharashtra	23465	0	497.0	181.3	-1.1	614	0.00
	Goa	670	0	13.6	12.8	0.2	53	0.00
	DNHDDPDCL	1255	0	28.9	28.9	0.0	23	0.00
	AMNSIL	829	0	18.8	8.0	0.4	240	0.00
BALCO	524	0	12.5	12.5	0.0	9	0.00	
SR	Andhra Pradesh	8365	0	173.8	52.7	-1.2	619	0.00
	Telangana	9988	0	188.3	88.5	-1.3	670	0.00
	Karnataka	14052	0	257.9	122.9	-0.8	808	0.00
	Kerala	4138	0	84.8	69.1	1.6	422	0.00
	Tamil Nadu	15296	0	315.6	188.3	0.6	632	0.00
	Puducherry	406	0	9.0	8.4	-0.2	36	0.00
ER	Bihar	4189	223	78.7	70.6	2.3	285	0.19
	DVC	3195	0	67.9	-39.2	0.4	384	0.00
	Jharkhand	1713	0	28.4	21.4	-0.8	412	1.58
	Odisha	4644	0	95.2	22.2	-3.4	322	0.00
	West Bengal	6829	0	129.0	22.8	-2.2	188	0.00
	Sikkim	96	0	1.6	1.6	0.0	18	0.00
Railways ER ISTS	27	0	0.1	0.1	0.0	5	0.00	
NER	Arunachal Pradesh	150	0	2.4	2.8	-0.5	38	0.00
	Assam	1502	0	25.4	19.9	0.3	154	0.00
	Manipur	207	0	2.9	3.1	-0.2	38	0.00
	Meghalaya	345	0	6.7	5.4	-0.2	58	0.00
	Mizoram	129	0	1.9	1.9	-0.4	8	0.00
	Nagaland	149	0	2.6	2.0	0.3	12	0.00
Tripura	219	0	4.2	4.4	0.4	32	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-5.6	-2.0	-17.4	-11.7
Day Peak (MW)	-352.0	-206.6	-988.0	-675.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	224.8	-222.2	163.0	-165.9	0.3	0.0
Actual(MU)	205.1	-224.4	189.0	-178.5	-0.5	-9.2
O/D/U/D(MU)	-19.7	-2.2	26.0	-12.6	-0.8	-9.2

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6540	12644	6928	3981	155	30247	45
State Sector	11091	14914	7724	3295	306	37329	55
Total	17631	27557	14652	7276	461	67576	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	630	1411	617	635	13	3306	79
Lignite	29	16	47	0	0	92	2
Hydro	113	24	49	18	13	217	5
Nuclear	21	40	70	0	0	130	3
Gas, Naptha & Diesel	14	18	5	0	25	62	1
RES (Wind, Solar, Biomass & Others)	139	111	127	3	0	381	9
Total	946	1620	914	656	52	4188	100

Share of RES in total generation (%)	14.72	6.87	13.92	0.50	0.74	9.11
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	28.84	10.84	26.90	3.24	25.36	17.40

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.010
Based on State Max Demands	1.044

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	187684	9:59	178
Non-Solar hr	179981	18:15	379

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: 09-Dec-2023

Sl No	Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
<b>Import/Export of ER (With NR)</b>								
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	0	1124	0.0	17.1	-17.1
4	765 kV	SASARAM-FATEHPUR	1	0	569	0.0	9.7	-9.7
5	765 kV	GAYA-BALIA	1	0	676	0.0	12.7	-12.7
6	400 kV	PUSAULI-VARANASI	1	39	16	0.0	0.0	0.0
7	400 kV	PUSAULI-ALLAHABAD	1	0	86	0.0	1.3	-1.3
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	700	0.0	9.1	-9.1
9	400 kV	PATNA-BALIA	2	0	0	0.0	0.0	0.0
10	400 kV	NAUBATPUR-BALIA	2	0	739	0.0	12.8	-12.8
11	400 kV	BIHARSHARIFF-BALIA	2	0	387	0.0	5.0	-5.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	464	0.0	7.6	-7.6
13	400 kV	BIHARSHARIFF-VARANASI	2	0	443	0.0	4.9	-4.9
14	220 kV	SAHUPURI-KARAMNANA	1	5	107	0.0	1.3	-1.3
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.0	0.0	0.0
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
<b>ER-NR</b>						<b>0.0</b>	<b>82.7</b>	<b>-82.7</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	40	1141	0.0	13.2	-13.2
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	116	1117	0.0	8.8	-8.8
3	765 kV	JHARSUGUDA-DURG	2	0	751	0.0	14.5	-14.5
4	400 kV	JHARSUGUDA-RAIGARH	4	0	636	0.0	8.5	-8.5
5	400 kV	RANCHI-SIPAT	2	28	352	0.0	3.0	-3.0
6	220 kV	BUDHIPADAR-RAIGARH	1	0	114	0.0	1.8	-1.8
7	220 kV	BUDHIPADAR-KORBA	2	144	49	1.3	0.0	1.3
<b>ER-WR</b>						<b>1.3</b>	<b>49.7</b>	<b>-48.4</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	544	0.0	12.4	-12.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1993	0.0	46.5	-46.5
3	765 kV	ANGUL-SRIKAKULAM	2	0	2597	0.0	49.3	-49.3
4	400 kV	TALCHER-I/C	2	260	337	0.0	2.4	-2.4
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>0.0</b>	<b>108.2</b>	<b>-108.2</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	300	4	2.6	0.0	2.6
2	400 kV	ALIPURDUAR-BONGAIGAON	2	922	0	10.0	0.0	10.0
3	220 kV	ALIPURDUAR-SALAKATI	2	176	0	2.1	0.0	2.1
<b>ER-NER</b>						<b>14.7</b>	<b>0.0</b>	<b>14.7</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	658	15.5	0.0	15.5
<b>NER-NR</b>						<b>15.5</b>	<b>0.0</b>	<b>15.5</b>
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	1528	0.0	36.5	-36.5
2	HVDC	VINDHYACHAL B/B	-	264	0	7.3	0.0	7.3
3	HVDC	MUNDRA-MOHINDERGARH	2	0	786	0.0	13.9	-13.9
4	765 kV	GWALIOR-AGRA	2	0	2018	0.0	32.5	-32.5
5	765 kV	GWALIOR-PHAGI	2	0	2386	0.0	37.5	-37.5
6	765 kV	JABALPUR-ORAI	2	0	794	0.0	29.0	-29.0
7	765 kV	GWALIOR-ORAI	1	1152	0	17.4	0.0	17.4
8	765 kV	SATNA-ORAI	1	0	1105	0.0	23.4	-23.4
9	765 kV	BANASKANTHA-CHITORGARH	2	1742	0	20.9	0.0	20.9
10	765 kV	VINDHYACHAL-VARANASI	2	0	2155	0.0	40.4	-40.4
11	400 kV	ZERDA-KANKROLI	1	258	0	3.1	0.0	3.1
12	400 kV	ZERDA -BHINMAL	1	471	163	2.9	0.6	2.3
13	400 kV	VINDHYACHAL -RIHAND	1	952	0	22.1	0.0	22.1
14	400 kV	RAPP-SHUJALPUR	2	211	365	0.4	2.9	-2.5
15	220 kV	BHANPURA-RANPUR	1	0	129	0.0	2.0	-2.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	0.8	-0.8
17	220 kV	MEHGAON-AURAIYA	1	86	8	0.6	0.0	0.6
18	220 kV	MALANPUR-AURAIYA	1	58	16	0.1	0.1	0.0
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
<b>WR-NR</b>						<b>74.8</b>	<b>219.5</b>	<b>-144.7</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	0	1007	0.0	23.3	-23.3
2	HVDC	RAIGARH-PUGALUR	2	0	3008	0.0	57.4	-57.4
3	765 kV	SOLAPUR-RAICHUR	2	1267	1043	3.0	8.1	-5.1
4	765 kV	WARDHA-NIZAMABAD	2	0	2060	0.0	29.3	-29.3
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2128	0.0	33.5	-33.5
6	400 kV	KOLHAPUR-KUDGI	2	1394	0	18.6	0.0	18.6
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	107	2.1	0.0	2.1
<b>WR-SR</b>						<b>23.7</b>	<b>151.6</b>	<b>-127.9</b>

**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)	-155	54	-89	-2.13
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	292	34	117	2.82
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-268	-164	-236	-5.67
	NER	132kV GELEPHU-SALAKATI	-8	0	-1	-0.02
	NER	132kV MOTANGA-RANGIA	-32	-9	-26	-0.63
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-64	0	-12	-0.30
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-237	0	-70	-1.67
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-884	-354	-646	-15.50
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-675	-394	-486	-11.66
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-104	0	-78	-1.86

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 09-Dec-2023

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	6.77	0.00	0.00	0.00	0.00	0.00	6.77
Nepal	0.10	0.00	0.64	0.00	0.00	1.10	0.00	0.00	1.84
Bangladesh	15.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.51
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	15.61	0.00	7.41	0.00	0.00	1.10	0.00	0.00	24.12

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	1.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
Nepal	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.21
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	1.09	0.00	0.21	0.00	0.00	0.00	0.00	0.00	1.30

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	1.09	0.00	-6.77	0.00	0.00	0.00	0.00	0.00	-5.68
Nepal	-0.10	0.00	-0.42	0.00	0.00	-1.10	0.00	0.00	-1.62
Bangladesh	-15.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-15.51
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-14.52	0.00	-7.19	0.00	0.00	-1.10	0.00	0.00	-22.81