

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: 10<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., डोंगतेिह, 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 09.12.2023.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 09-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 9<sup>th</sup> December 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 10-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)	48930	55439	43724	18745	2496	169334
Peak Shortage (MW)	0	0	0	303	0	303
Energy Met (MU)	1075	1283	1012	393	47	3810
Hydro Gen (MU)	112	24	45	19	14	213
Wind Gen (MU)	5	48	34	-	-	87
Solar Gen (MU)*	113.41	60.14	83.30	2.15	0.68	260
Energy Shortage (MU)	0.30	0.00	0.00	1.81	0.00	2.11
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	55840	62626	47776	19887	2677	185527
Time Of Maximum Demand Met	10:29	10:24	09:29	17:48	17:14	09:54

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	0.030	0.00	0.32	4.85	5.17	82.48	12.35

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	7847	0	141.4	48.2	-1.9	133	0.00
	Haryana	7642	0	145.0	103.4	-0.3	187	0.00
	Rajasthan	15609	0	287.3	123.9	-3.3	88	0.00
	Delhi	3826	0	67.1	58.1	-0.2	226	0.00
	UP	16406	0	294.6	101.7	-2.2	999	0.00
	Uttarakhand	2131	0	40.4	29.0	0.1	127	0.00
	HP	2000	0	35.8	28.8	-0.2	111	0.00
	J&K(UT) & Ladakh(UT)	2697	0	56.2	51.4	-0.5	56	0.30
	Chandigarh	199	0	3.5	3.6	-0.2	15	0.00
Railways NR ISTS	177	0	3.5	3.5	-0.1	11	0.00	
WR	Chhattisgarh	4144	0	85.4	27.1	-0.5	339	0.00
	Gujarat	19556	0	387.0	185.0	-0.2	464	0.00
	MP	12821	0	239.1	144.5	-3.6	544	0.00
	Maharashtra	23572	0	498.0	183.4	-6.3	770	0.00
	Goa	680	0	14.2	13.2	0.4	94	0.00
	DNHDDPDCL	1245	0	28.6	28.7	-0.1	26	0.00
	AMNSIL	862	0	17.9	8.0	-0.1	222	0.00
	BALCO	524	0	12.5	12.5	0.0	10	0.00
SR	Andhra Pradesh	8200	0	173.1	61.0	-0.8	896	0.00
	Telangana	9914	0	188.9	78.1	1.5	782	0.00
	Karnataka	13145	0	247.0	117.7	-2.7	608	0.00
	Kerala	4100	0	83.2	68.5	1.1	452	0.00
	Tamil Nadu	15250	0	311.0	189.4	-0.2	916	0.00
	Puducherry	403	0	8.9	8.5	-0.2	36	0.00
ER	Bihar	4106	0	77.5	72.2	-0.5	229	0.00
	DVC	3034	0	67.9	-41.2	-0.3	423	0.00
	Jharkhand	1497	0	29.0	23.2	-2.6	346	1.81
	Odisha	4361	0	88.5	15.9	-1.4	279	0.00
	West Bengal	6754	0	128.5	23.4	-1.8	203	0.00
	Sikkim	97	0	1.6	1.8	-0.2	28	0.00
Railways ER ISTS	17	0	0.1	0.1	0.0	6	0.00	
NER	Arunachal Pradesh	143	0	2.3	2.8	-0.6	8	0.00
	Assam	1492	0	26.8	20.9	0.5	132	0.00
	Manipur	216	0	2.8	3.1	-0.3	37	0.00
	Meghalaya	345	0	6.6	4.9	-0.2	52	0.00
	Mizoram	131	0	1.8	1.7	-0.3	13	0.00
	Nagaland	147	0	2.4	2.3	-0.1	17	0.00
Tripura	224	0	3.9	3.3	-0.3	26	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-4.8	0.3	-20.6	-13.0
Day Peak (MW)	-401.7	80.9	-1038.0	-764.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	225.6	-212.1	155.5	-170.4	1.3	0.0
Actual(MU)	207.1	-211.5	184.4	-189.4	1.0	-8.4
O/D/U/D(MU)	-18.5	0.6	28.9	-19.0	-0.3	-8.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6537	12544	7478	3981	155	30695	46
State Sector	11041	14890	7524	2905	205	36564	54
Total	17578	27433	15002	6886	360	67259	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	624	1422	589	634	13	3282	79
Lignite	30	15	45	0	0	89	2
Hydro	112	24	45	19	14	213	5
Nuclear	21	40	75	0	0	136	3
Gas, Naptha & Diesel	14	17	5	0	25	60	1
RES (Wind, Solar, Biomass & Others)	142	110	142	4	1	398	10
Total	942	1628	900	657	51	4179	100

Share of RES in total generation (%)	15.10	6.73	15.75	0.58	1.32	9.53
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	29.15	10.66	29.03	3.48	27.62	17.87

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.017
Based on State Max Demands	1.053

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	185527	9:54	95
Non-Solar hr	179340	18:23	213

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-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	1159	0.0	18.6	-18.6
4	765 kV	SASARAM-FATEHPUR	1	0	570	0.0	10.0	-10.0
5	765 kV	GAYA-BALIA	1	0	678	0.0	12.9	-12.9
6	400 kV	PUSAULI-VARANASI	1	17	25	0.0	1.9	-1.9
7	400 kV	PUSAULI-ALLAHABAD	1	0	66	0.0	0.2	-0.2
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	714	0.0	9.0	-9.0
9	400 kV	PATNA-BALIA	2	0	0	0.0	0.0	0.0
10	400 kV	NAUBATPUR-BALIA	2	0	740	0.0	12.6	-12.6
11	400 kV	BIHARSHARIFF-BALIA	2	0	395	0.0	5.4	-5.4
12	400 kV	MOTIHARI-GORAKHPUR	2	0	465	0.0	7.6	-7.6
13	400 kV	BIHARSHARIFF-VARANASI	2	0	429	0.0	5.3	-5.3
14	220 kV	SAHUPURI-KARAMNANA	1	0	94	0.0	1.2	-1.2
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>85.8</b>	<b>-85.8</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	0	1342	0.0	20.4	-20.4
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	17	1143	0.0	10.4	-10.4
3	765 kV	JHARSUGUDA-DURG	2	0	795	0.0	15.7	-15.7
4	400 kV	JHARSUGUDA-RAIGARH	4	0	685	0.0	10.1	-10.1
5	400 kV	RANCHI-SIPAT	2	34	377	0.0	3.6	-3.6
6	220 kV	BUDHIPADAR-RAIGARH	1	12	101	0.0	1.5	-1.5
7	220 kV	BUDHIPADAR-KORBA	2	136	50	1.1	0.0	1.1
<b>ER-WR</b>						<b>1.1</b>	<b>61.7</b>	<b>-60.6</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	544	0.0	12.7	-12.7
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1651	0.0	38.5	-38.5
3	765 kV	ANGUL-SRIKAKULAM	2	0	2640	0.0	51.8	-51.8
4	400 kV	TALCHER-I/C	2	556	17	6.0	0.0	6.0
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>0.0</b>	<b>103.0</b>	<b>-103.0</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	302	2	2.2	0.0	2.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	938	0	9.2	0.0	9.2
3	220 kV	ALIPURDUAR-SALAKATI	2	181	0	2.1	0.0	2.1
<b>ER-NER</b>						<b>13.5</b>	<b>0.0</b>	<b>13.5</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIALI-AGRA	2	655	0	15.9	0.0	15.9
<b>NER-NR</b>						<b>15.9</b>	<b>0.0</b>	<b>15.9</b>
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	1528	0.0	35.4	-35.4
2	HVDC	VINDHYACHAL B/B	-	264	0	7.3	0.0	7.3
3	HVDC	MUNDRA-MOHINDERGARH	2	0	787	0.0	16.6	-16.6
4	765 kV	GWALIOR-AGRA	2	0	1839	0.0	32.1	-32.1
5	765 kV	GWALIOR-PHAGI	2	0	2361	0.0	38.4	-38.4
6	765 kV	JABALPUR-ORAI	2	0	817	0.0	26.5	-26.5
7	765 kV	GWALIOR-ORAI	1	1043	0	17.7	0.0	17.7
8	765 kV	SATNA-ORAI	1	0	1108	0.0	23.2	-23.2
9	765 kV	BANASKANTHA-CHITORGARH	2	1515	0	20.0	0.0	20.0
10	765 kV	VINDHYACHAL-VARANASI	2	0	2023	0.0	36.9	-36.9
11	400 kV	ZERDA-KANKROLI	1	216	0	2.5	0.0	2.5
12	400 kV	ZERDA -BHINMAL	1	394	158	2.4	0.7	1.7
13	400 kV	VINDHYACHAL -RIHAND	1	958	0	21.5	0.0	21.5
14	400 kV	RAPP-SHUALPUR	2	199	382	0.0	2.1	-2.1
15	220 kV	BHANPURA-RANPUR	1	0	127	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	83	6	0.6	0.0	0.6
18	220 kV	MALANPUR-AURAIYA	1	63	14	0.3	0.1	0.2
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>72.2</b>	<b>214.7</b>	<b>-142.5</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	0	1001	0.0	20.4	-20.4
2	HVDC	RAIGARH-PUGALUR	2	0	4008	0.0	55.6	-55.6
3	765 kV	SOLAPUR-RAICHUR	2	739	836	2.2	8.7	-6.4
4	765 kV	WARDHA-NIZAMABAD	2	0	1826	0.0	30.2	-30.2
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2115	0.0	36.4	-36.4
6	400 kV	KOLHAPUR-KUDGI	2	1255	0	18.5	0.0	18.5
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	115	2.2	0.0	2.2
<b>WR-SR</b>						<b>22.9</b>	<b>151.2</b>	<b>-128.3</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)	-178	25	-83	-1.99
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	315	-9	151	3.62
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-284	-203	-243	-5.82
	NER	132kV GELEPHU-SALAKATI	-35	-14	-26	-0.61
	NER	132kV MOTANGA-RANGIA	9	-4	1	0.02
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-60	0	-16	-0.39
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	68	20	27	0.64
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-932	-546	-773	-18.55
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-764	-416	-540	-12.95
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-106	0	-86	-2.06

