



National Load Despatch Centre  
राष्ट्रीय भार प्रेषण केंद्र  
GRID CONTROLLER OF INDIA LIMITED  
ग्रीड 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: 19<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 18.12.2023.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 18-दिसम्बर-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रीड 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 18<sup>th</sup> December 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 19-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)	54159	57593	42478	19479	2612	176321
Peak Shortage (MW)	0	0	0	288	0	288
Energy Met (MU)	1159	1394	1020	400	47	4020
Hydro Gen (MU)	116	31	42	15	11	215
Wind Gen (MU)	25	173	85	-	-	283
Solar Gen (MU)*	109.85	56.58	67.46	2.71	1.21	238
Energy Shortage (MU)	0.06	0.00	0.00	1.29	0.00	1.35
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	60857	70819	51397	20575	2739	203058
Time Of Maximum Demand Met	10:26	10:25	09:40	17:48	17:30	10:26

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	0.058	0.00	2.21	8.18	10.39	69.25	20.36

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	7765	0	147.2	47.1	-1.5	95	0.00
	Haryana	7781	0	146.2	92.6	-0.8	272	0.00
	Rajasthan	16952	0	314.9	123.4	-4.8	189	0.00
	Delhi	4096	0	71.2	63.3	-0.2	250	0.00
	UP	18848	0	331.9	114.0	-0.8	1456	0.00
	Uttarakhand	2324	0	42.7	29.0	0.5	177	0.00
	HP	2097	0	37.2	30.1	0.1	137	0.00
	J&K(UT) & Ladakh(UT)	2903	0	60.5	56.1	-0.9	190	0.06
	Chandigarh	245	0	4.0	4.1	-0.1	28	0.00
Railways NR ISTS	169	0	3.5	3.6	-0.1	15	0.00	
WR	Chhattisgarh	4183	0	87.8	24.2	0.1	261	0.00
	Gujarat	20519	0	390.3	133.1	-5.5	614	0.00
	MP	16944	0	315.3	203.1	-4.6	751	0.00
	Maharashtra	26372	0	529.1	168.5	-1.7	596	0.00
	Goa	647	0	10.7	13.6	-3.5	121	0.00
	DNHDDPDCL	1248	0	28.3	28.2	0.1	93	0.00
	AMNSIL	894	0	20.2	10.6	-0.2	269	0.00
	BALCO	519	0	12.4	12.5	-0.1	3	0.00
SR	Andhra Pradesh	9524	0	188.6	57.7	-1.9	425	0.00
	Telangana	11742	0	213.2	92.6	-0.6	477	0.00
	Karnataka	13954	0	251.7	104.0	-3.8	779	0.00
	Kerala	4009	0	77.8	62.8	0.6	212	0.00
	Tamil Nadu	14243	0	280.1	170.2	-1.0	925	0.00
	Puducherry	388	0	8.3	8.2	-0.6	22	0.00
ER	Bihar	4611	0	84.0	76.6	1.2	392	0.00
	DVC	3184	0	69.6	-46.3	-0.7	226	0.00
	Jharkhand	1747	0	31.2	24.5	-2.2	282	1.29
	Odisha	4144	0	88.2	22.5	-2.0	234	0.00
	West Bengal	6544	0	125.5	21.7	-2.9	66	0.00
	Sikkim	108	0	1.7	1.7	0.0	12	0.00
Railways ER ISTS	17	0	0.1	0.1	0.0	15	0.00	
NER	Arunachal Pradesh	171	0	2.9	2.7	0.0	14	0.00
	Assam	1517	0	25.7	20.5	-0.2	86	0.00
	Manipur	227	0	3.2	3.0	0.2	15	0.00
	Meghalaya	335	0	6.5	5.3	0.0	20	0.00
	Mizoram	140	0	2.3	1.8	-0.1	16	0.00
	Nagaland	157	0	2.6	2.4	0.1	21	0.00
Tripura	224	0	3.7	2.8	-0.1	20	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-6.6	-4.6	-20.5	-10.6
Day Peak (MW)	-312.9	-288.0	-1036.0	-566.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	240.4	-253.0	156.2	-145.0	1.4	0.0
Actual(MU)	223.0	-250.8	162.7	-143.6	1.8	-6.9
O/D/U/D(MU)	-17.4	2.2	6.5	1.5	0.4	-6.9

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6553	13334	8818	5651	205	34561	54
State Sector	8011	11237	6620	3856	190	29913	46
Total	14564	24571	15438	9507	395	64474	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	674	1437	574	602	14	3301	75
Lignite	28	17	42	0	0	87	2
Hydro	116	31	42	15	11	215	5
Nuclear	21	41	76	0	0	137	3
Gas, Naptha & Diesel	13	15	6	0	25	58	1
RES (Wind, Solar, Biomass & Others)	158	233	187	4	1	584	13
Total	1010	1774	927	622	51	4384	100

Share of RES in total generation (%)	15.66	13.14	20.15	0.70	2.36	13.33
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	29.27	17.25	32.85	2.41	23.73	21.31

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.016
Based on State Max Demands	1.041

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	203058	10:26	1
Non-Solar hr	187364	18:23	279

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: 19-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	-	2	49	0.0	1.2	-1.2
3	765 kV	GAYA-VARANASI	2	0	1135	0.0	13.5	-13.5
4	765 kV	SASARAM-FATEHPUR	1	0	471	0.0	6.6	-6.6
5	765 kV	GAYA-BALIA	1	0	782	0.0	14.1	-14.1
6	400 kV	PUSAULI-VARANASI	1	38	23	0.1	0.0	0.1
7	400 kV	PUSAULI-ALLAHABAD	1	0	75	0.0	1.3	-1.3
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	674	0.0	8.8	-8.8
9	400 kV	PATNA-BALIA	2	0	0	0.0	0.0	0.0
10	400 kV	NAUBATPUR-BALIA	2	0	711	0.0	11.0	-11.0
11	400 kV	BIHARSHARIFF-BALIA	2	0	401	0.0	5.6	-5.6
12	400 kV	MOTIHARI-GORAKHPUR	2	0	464	0.0	7.1	-7.1
13	400 kV	BIHARSHARIFF-VARANASI	2	0	478	0.0	6.4	-6.4
14	220 kV	SAHPURI-KARAMNANA	1	33	84	0.0	0.8	-0.8
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-CHANDALI	1	0	0	0.0	0.0	0.0
<b>ER-NR</b>						<b>0.1</b>	<b>76.4</b>	<b>-76.3</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	646	684	0.0	5.0	-5.0
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	606	789	0.0	0.2	-0.2
3	765 kV	JHARSUGUDA-DURG	2	0	736	0.0	12.4	-12.4
4	400 kV	JHARSUGUDA-RAIGARH	4	0	748	0.0	10.2	-10.2
5	400 kV	RANCHI-SIPAT	2	157	289	0.0	1.1	-1.1
6	220 kV	BUDHIPADAR-RAIGARH	1	72	97	0.0	0.4	-0.4
7	220 kV	BUDHIPADAR-KORBA	2	168	70	1.3	0.0	1.3
<b>ER-WR</b>						<b>1.3</b>	<b>29.3</b>	<b>-28.0</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	544	0.0	5.0	-5.0
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1993	0.0	41.3	-41.3
3	765 kV	ANGUL-SRIKAKULAM	2	0	2921	0.0	47.8	-47.8
4	400 kV	TALCHER-I/C	2	421	992	0.0	1.8	-1.8
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>0.0</b>	<b>94.1</b>	<b>-94.1</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	268	2	2.3	0.0	2.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	829	0	9.3	0.0	9.3
3	220 kV	ALIPURDUAR-SALAKATI	2	150	0	2.1	0.0	2.1
<b>ER-NER</b>						<b>13.7</b>	<b>0.0</b>	<b>13.7</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIALI-AGRA	2	676	0	16.3	0.0	16.3
<b>NER-NR</b>						<b>16.3</b>	<b>0.0</b>	<b>16.3</b>
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KURUKSHETRA	2	1	0	0.0	0.0	0.0
2	HVDC	VINDHYACHAL B/B	-	227	0	6.1	0.0	6.1
3	HVDC	MUNDRA-MOHINDERGARH	2	0	497	0.0	12.2	-12.2
4	765 kV	GWALIOR-AGRA	2	0	2509	0.0	39.6	-39.6
5	765 kV	GWALIOR-PHAGI	2	0	2175	0.0	30.7	-30.7
6	765 kV	JABALPUR-ORAI	2	0	1089	0.0	33.8	-33.8
7	765 kV	GWALIOR-ORAI	1	1111	0	16.1	0.0	16.1
8	765 kV	SATNA-ORAI	1	0	1180	0.0	22.6	-22.6
9	765 kV	BANASKANTHA-CHITORGARH	2	336	1167	0.0	10.3	-10.3
10	765 kV	VINDHYACHAL-VARANASI	2	0	2844	0.0	49.1	-49.1
11	400 kV	ZERDA-KANKROLI	1	28	150	0.0	1.4	-1.4
12	400 kV	ZERDA -BHINMAL	1	174	405	0.0	3.0	-3.0
13	400 kV	VINDHYACHAL -RIHAND	1	967	0	20.4	0.0	20.4
14	400 kV	RAPP-SHUALPUR	2	202	471	0.0	2.4	-2.4
15	220 kV	BHANPURA-RANPUR	1	0	148	0.0	2.5	-2.5
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.4	-1.4
17	220 kV	MEHGAON-AURAIYA	1	84	16	0.7	0.0	0.7
18	220 kV	MALANPUR-AURAIYA	1	55	31	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>43.5</b>	<b>209.0</b>	<b>-165.6</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	0	1012	0.0	23.9	-23.9
2	HVDC	RAIGARH-PUGALUR	2	0	3006	0.0	52.8	-52.8
3	765 kV	SOLAPUR-RAICHUR	2	1008	1834	0.6	0.0	0.6
4	765 kV	WARDHA-NIZAMABAD	2	0	2531	0.0	25.6	-25.6
5	765 kV	WARORA-WARANGAL(NEW)	2	0	0	0.0	32.5	-32.5
6	400 kV	KOLHAPUR-KUDGI	2	1297	0	20.6	0.0	20.6
7	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
8	220 kV	PONDA-AMBEWADI	1	0	70	0.0	0.0	0.0
9	220 kV	XELDEM-AMBEWADI	1	1	103	0.6	0.0	0.6
<b>WR-SR</b>						<b>21.8</b>	<b>134.8</b>	<b>-113.0</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)	-159	9	-81	-1.94
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	346	-60	25	0.60
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-297	-60	-203	-4.88
	NER	132kV GELEPHU-SALAKATI	-30	-13	-22	-0.52
	NER	132kV MOTANGA-RANGIA	14	0	6	0.14
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-68	0	-38	-0.91
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-288	0	-152	-3.64
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-930	-500	-764	-18.33
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-566	-384	-443	-10.64
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-106	0	-90	-2.17

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 19-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	7.17	0.00	0.00	0.00	0.00	0.00	7.17
Nepal	0.32	0.00	3.43	0.00	0.00	0.08	0.00	0.00	3.83
Bangladesh	18.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.31
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	18.63	0.00	10.60	0.00	0.00	0.08	0.00	0.00	29.31

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06
Nepal	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.03
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	1.06	0.00	0.03	0.00	0.00	0.00	0.00	0.00	1.09

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	1.06	0.00	-7.17	0.00	0.00	0.00	0.00	0.00	-6.11
Nepal	-0.32	0.00	-3.40	0.00	0.00	-0.08	0.00	0.00	-3.80
Bangladesh	-18.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-18.31
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-17.57	0.00	-10.57	0.00	0.00	-0.08	0.00	0.00	-28.22