

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: 5<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 04.12.2023.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 04-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 4<sup>th</sup> December 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 05-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)	47344	53370	39507	19333	2544	162098
Peak Shortage (MW)	0	0	0	216	0	216
Energy Met (MU)	1014	1236	925	407	47	3630
Hydro Gen (MU)	107	22	37	16	12	194
Wind Gen (MU)	11	153	61	-	-	225
Solar Gen (MU)*	109.05	46.91	60.32	4.48	1.05	222
Energy Shortage (MU)	0.18	0.00	0.00	1.56	0.00	1.74
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	51885	58964	44938	20964	2745	175512
Time Of Maximum Demand Met	10:32	09:48	09:11	17:49	17:13	09:46

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	0.048	0.00	0.36	3.76	4.12	71.36	24.52

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	6971	0	137.3	54.4	-1.1	174	0.00
	Haryana	7208	0	134.8	96.2	0.2	268	0.00
	Rajasthan	14144	0	261.0	101.4	-3.2	264	0.00
	Delhi	3769	0	69.4	60.1	0.2	184	0.00
	UP	15495	0	275.6	108.7	-0.3	1558	0.00
	Uttarakhand	2026	0	38.1	27.8	0.3	163	0.00
	HP	1929	0	34.3	26.9	0.1	58	0.18
	J&K(UT) & Ladakh(UT)	2687	80	56.3	51.0	0.7	233	0.00
	Chandigarh	204	0	3.5	3.7	-0.2	37	0.00
Railways_NR ISTS	177	0	3.6	3.7	0.0	9	0.00	
WR	0	4256	0	89.4	41.0	-1.2	235	0.00
	Gujarat	18286	0	361.9	165.7	-7.4	384	0.00
	MP	11310	0	209.8	121.4	-3.6	366	0.00
	Maharashtra	23816	0	503.9	184.2	1.4	646	0.00
	Goa	674	0	13.5	12.8	0.2	87	0.00
	DNHDDPDCL	1251	0	28.2	28.1	0.1	37	0.00
	0	836	0	17.1	8.6	-0.8	255	0.00
	0	524	0	12.5	12.5	0.0	9	0.00
	Andhra Pradesh	7789	0	158.5	36.0	-2.6	401	0.00
	Telangana	10264	0	194.0	114.0	1.1	620	0.00
SR	Karnataka	13117	0	243.5	109.6	-0.4	715	0.00
	Kerala	4236	0	84.2	70.7	1.9	263	0.00
	Tamil Nadu	11765	0	237.2	140.8	-3.4	264	0.00
	Puducherry	363	0	7.9	7.5	-0.3	24	0.00
	Bihar	4466	0	81.5	76.9	-1.4	291	0.00
	DVC	3193	0	68.6	-43.2	0.2	319	0.00
ER	Jharkhand	1545	0	28.6	26.2	-2.5	183	1.56
	Odisha	4387	0	94.0	35.4	-0.8	407	0.00
	West Bengal	6979	0	132.8	21.6	-2.9	62	0.00
	Sikkim	105	0	1.7	1.7	0.0	18	0.00
	Railways_ER ISTS	23	0	0.2	0.1	0.0	0	0.00
	Arunachal Pradesh	165	0	2.8	2.8	-0.1	17	0.00
NER	Assam	1527	0	26.1	19.1	0.5	135	0.00
	Manipur	217	0	3.0	3.0	0.0	33	0.00
	Meghalaya	362	0	6.3	5.2	-0.1	143	0.00
	Mizoram	134	0	1.9	1.8	-0.2	17	0.00
	Nagaland	147	0	2.3	2.3	-0.1	16	0.00
	Tripura	238	0	4.3	5.0	0.1	34	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-5.0	0.1	-13.3	-17.1
Day Peak (MW)	-311.0	87.0	-591.0	-763.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	215.6	-239.8	159.6	-136.4	1.1	0.0
Actual(MU)	202.9	-210.4	173.6	-143.9	1.8	24.0
OD/UD(MU)	-12.7	29.4	14.1	-7.5	0.7	24.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6423	12894	7028	3981	355	30681	42
State Sector	13421	17131	8704	2789	246	42291	58
Total	19844	30025	15732	6770	601	72971	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	568	1287	546	598	12	3011	75
Lignite	27	18	44	0	0	89	2
Hydro	107	22	37	16	12	194	5
Nuclear	21	53	76	0	0	149	4
Gas, Naptha & Diesel	9	12	4	0	27	53	1
RES (Wind, Solar, Biomass & Others)	144	201	148	6	1	500	13
Total	876	1594	855	621	51	3997	100

Share of RES in total generation (%)	16.39	12.62	17.28	1.03	2.04	12.51
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	31.02	17.31	30.46	3.65	24.85	21.10

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.022
Based on State Max Demands	1.063

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	175512	9:46	241
Non-Solar hr	172974	18:16	296

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: 05-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	1022	0.0	13.6	-13.6
4	765 kV	SASARAM-FATEHPUR	1	0	504	0.0	7.0	-7.0
5	765 kV	GAYA-BALIA	1	0	699	0.0	11.8	-11.8
6	400 kV	PUSAULI-VARANASI	1	25	30	0.1	0.0	0.1
7	400 kV	PUSAULI-ALLAHABAD	1	0	73	0.0	1.3	-1.3
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	524	0.0	7.9	-7.9
9	400 kV	PATNA-BALIA	2	0	0	0.0	0.0	0.0
10	400 kV	NAUBATPUR-BALIA	2	0	753	0.0	10.6	-10.6
11	400 kV	BIHARSHARIFF-BALIA	2	0	381	0.0	4.8	-4.8
12	400 kV	MOTIHARI-GORAKHPUR	2	0	432	0.0	5.9	-5.9
13	400 kV	BIHARSHARIFF-VARANASI	2	0	420	0.0	5.1	-5.1
14	220 kV	SAHUPURI-KARAMNUSA	1	27	109	0.0	0.9	-0.9
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>0.1</b>	<b>70.2</b>	<b>-70.1</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	171	552	0.0	4.4	-4.4
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	290	796	0.0	3.5	-3.5
3	765 kV	JHARSUGUDA-DURG	2	0	596	0.0	11.0	-11.0
4	400 kV	JHARSUGUDA-RAIGARH	4	0	541	0.0	6.1	-6.1
5	400 kV	RANCHI-SIPAT	2	77	281	0.0	1.5	-1.5
6	220 kV	BUDHIPADAR-RAIGARH	1	33	112	0.0	0.8	-0.8
7	220 kV	BUDHIPADAR-KORBA	2	175	43	2.1	0.0	2.1
<b>ER-WR</b>						<b>2.1</b>	<b>27.2</b>	<b>-25.2</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	709	0.0	16.6	-16.6
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1645	0.0	39.7	-39.7
3	765 kV	ANGUL-SRIKAKULAM	2	0	2415	0.0	47.4	-47.4
4	400 kV	TALCHER-IC	2	259	675	0.0	0.6	-0.6
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>0.0</b>	<b>103.6</b>	<b>-103.6</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	250	23	2.4	0.0	2.4
2	400 kV	ALIPURDUAR-BONGAIGAON	2	794	0	9.6	0.0	9.6
3	220 kV	ALIPURDUAR-SALAKATI	2	155	0	2.1	0.0	2.1
<b>ER-NER</b>						<b>14.1</b>	<b>0.0</b>	<b>14.1</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIALI-AGRA	2	659	0	16.1	0.0	16.1
<b>NER-NR</b>						<b>16.1</b>	<b>0.0</b>	<b>16.1</b>
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	1520	0.0	36.4	-36.4
2	HVDC	VINDHYACHAL B/B	-	274	0	7.3	0.0	7.3
3	HVDC	MUNDRA-MOHINDERGARH	2	0	258	0.0	6.1	-6.1
4	765 kV	GWALIOR-AGRA	2	0	2092	0.0	35.8	-35.8
5	765 kV	GWALIOR-PHAGI	2	0	1903	0.0	24.5	-24.5
6	765 kV	JABALPUR-ORAI	2	0	919	0.0	28.7	-28.7
7	765 kV	GWALIOR-ORAI	1	988	0	13.6	0.0	13.6
8	765 kV	SATNA-ORAI	1	0	1053	0.0	20.9	-20.9
9	765 kV	BANASKANTHA-CHITORGARH	2	787	711	0.0	2.3	-2.3
10	765 kV	VINDHYACHAL-VARANASI	2	0	2293	0.0	40.6	-40.6
11	400 kV	ZERDA-KANKROLI	1	150	62	0.7	0.2	0.5
12	400 kV	ZERDA-BHINMAL	1	241	237	0.0	1.1	-1.1
13	400 kV	VINDHYACHAL -RIHAND	1	957	0	20.8	0.0	20.8
14	400 kV	RAPP-SHUALPUR	2	262	323	1.0	2.2	-1.2
15	220 kV	BHANPURA-RANPUR	1	0	98	0.0	1.6	-1.6
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	0.7	-0.7
17	220 kV	MEHGAON-AURAIYA	1	49	23	0.0	0.0	0.0
18	220 kV	MALANPUR-AURAIYA	1	36	31	0.0	0.2	-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>43.4</b>	<b>201.1</b>	<b>-157.6</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	0	507	0.0	11.2	-11.2
2	HVDC	RAIGARH-PUGALUR	2	0	2004	0.0	42.6	-42.6
3	765 kV	SOLAPUR-RAICHUR	2	415	871	0.8	6.8	-6.0
4	765 kV	WARDHA-NIZAMABAD	2	0	2156	0.0	36.3	-36.3
5	765 kV	WARORA-WARANGAL(NEW)	2	0	0	0.0	0.0	0.0
6	400 kV	KOLHAPUR-KUDGI	2	966	0	16.5	0.0	16.5
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	114	2.1	0.0	2.1
<b>WR-SR</b>						<b>19.4</b>	<b>96.9</b>	<b>-77.5</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	10	-81	-1.94
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	294	60	143	3.42
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-287	-150	-251	-6.03
	NER	132kV GELEPHU-SALAKATI	-35	-16	-25	-0.60
	NER	132kV MOTANGA-RANGIA	16	-4	5	0.11
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	0.13
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	128	-36	8	0.20
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-458	-220	-443	-10.64
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-763	-498	-713	-17.11
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	133	0	-110	-2.64

## CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 05-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	5.96	0.00	0.00	0.00	0.00	0.00	5.96
Nepal	0.12	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.65
Bangladesh	10.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.56
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Export</b>	<b>10.68</b>	<b>0.00</b>	<b>5.96</b>	<b>0.00</b>	<b>0.00</b>	<b>0.53</b>	<b>0.00</b>	<b>0.00</b>	<b>17.17</b>

## Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
Nepal	0.00	0.00	1.23	0.00	0.00	0.00	0.00	0.00	1.23
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
<b>Total Import</b>	<b>0.73</b>	<b>0.00</b>	<b>1.23</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.96</b>

## 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	0.73	0.00	-5.96	0.00	0.00	0.00	0.00	0.00	-5.23
Nepal	-0.12	0.00	1.23	0.00	0.00	-0.53	0.00	0.00	0.58
Bangladesh	-10.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-10.56
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Net</b>	<b>-9.95</b>	<b>0.00</b>	<b>-4.73</b>	<b>0.00</b>	<b>0.00</b>	<b>-0.53</b>	<b>0.00</b>	<b>0.00</b>	<b>-15.21</b>