



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: 6<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 05.12.2023.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 05-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 5<sup>th</sup> December 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 06-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)	48108	53116	40421	18933	2546	163124
Peak Shortage (MW)	0	0	0	179	0	179
Energy Met (MU)	1044	1244	903	408	48	3647
Hydro Gen (MU)	111	21	47	13	11	203
Wind Gen (MU)	19	150	55	-	-	224
Solar Gen (MU)*	111.23	44.45	67.46	3.43	0.63	227
Energy Shortage (MU)	0.06	0.00	0.00	0.86	0.00	0.92
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	53064	59915	43051	20771	2727	176479
Time Of Maximum Demand Met	09:41	09:36	08:07	17:44	16:59	09:25

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	0.054	0.00	1.44	7.82	9.26	72.41	18.33

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	7427	0	141.2	52.9	-1.5	165	0.00
	Haryana	7372	0	142.6	100.7	-0.6	199	0.00
	Rajasthan	14412	0	269.0	107.6	-4.9	94	0.00
	Delhi	3824	0	70.0	60.4	0.6	253	0.00
	UP	16141	0	285.5	113.6	-1.1	784	0.00
	Uttarakhand	2044	0	38.6	29.7	0.2	112	0.00
	HP	1974	0	34.4	27.0	-0.4	56	0.00
	J&K(UT) & Ladakh(UT)	2750	0	56.0	51.0	-0.5	119	0.06
	Chandigarh	220	0	3.6	3.6	-0.1	25	0.00
Railways NR ISTS	171	0	3.4	3.4	0.0	22	0.00	
WR	Chhattisgarh	4014	0	82.6	38.2	-2.1	286	0.00
	Gujarat	18177	0	364.2	164.4	0.9	671	0.00
	MP	11871	0	217.0	129.0	-4.0	948	0.00
	Maharashtra	24002	0	506.0	187.4	-0.1	566	0.00
	Goa	687	0	13.9	13.2	0.1	45	0.00
	DNHDDPDCL	1250	0	28.8	28.7	0.1	59	0.00
	AMNSIL	843	0	18.5	8.7	0.0	254	0.00
	BALCO	524	0	12.5	12.5	0.0	7	0.00
SR	Andhra Pradesh	6237	0	129.3	24.6	-1.9	483	0.00
	Telangana	9079	0	172.8	91.8	-0.7	735	0.00
	Karnataka	13423	0	248.6	118.9	0.0	1009	0.00
	Kerala	4264	0	85.2	70.3	1.0	241	0.00
	Tamil Nadu	13630	0	258.9	153.4	-0.3	1466	0.00
	Puducherry	400	0	8.5	8.0	-0.3	22	0.00
ER	Bihar	4321	0	82.2	76.0	0.8	351	0.06
	DVC	3208	0	69.7	-36.3	1.7	433	0.00
	Jharkhand	1557	0	28.9	24.2	-2.3	268	0.93
	Odisha	4271	0	91.3	25.8	-2.8	197	0.00
	West Bengal	6830	0	134.5	23.0	-3.5	108	0.00
	Sikkim	112	0	1.7	1.7	0.0	19	0.00
	Railways ER ISTS	8	0	0.1	0.1	0.0	1	0.00
NER	Arunachal Pradesh	161	0	2.9	2.7	0.0	41	0.00
	Assam	1548	0	27.3	20.7	0.5	156	0.00
	Manipur	212	0	3.0	3.0	0.0	31	0.00
	Meghalaya	367	0	6.4	5.1	-0.1	128	0.00
	Mizoram	136	0	1.9	2.0	-0.3	16	0.00
	Nagaland	148	0	2.3	2.3	-0.2	13	0.00
	Tripura	236	0	4.0	4.8	0.2	42	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-6.8	0.1	-13.1	-16.8
Day Peak (MW)	-388.0	122.0	-572.0	-767.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	229.8	-238.3	148.8	-143.3	3.0	0.0
Actual(MU)	211.0	-235.3	160.9	-148.3	3.2	-8.4
O/D/U/D(MU)	-18.7	2.9	12.2	-5.0	0.2	-8.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6383	13934	6528	3981	355	31181	41
State Sector	13481	18236	8994	3147	246	44104	59
Total	19864	32170	15522	7128	601	75284	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	579	1299	525	611	12	3026	75
Lignite	25	19	47	0	0	91	2
Hydro	111	21	47	13	11	203	5
Nuclear	21	53	76	0	0	149	4
Gas, Naptha & Diesel	10	14	5	0	26	55	1
RES (Wind, Solar, Biomass & Others)	154	198	144	6	1	501	12
Total	899	1604	844	629	50	4026	100

Share of RES in total generation (%)	17.07	12.32	17.09	0.88	1.25	12.45
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	31.73	16.92	31.66	2.93	23.61	21.21

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.017
Based on State Max Demands	1.064

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	176479	9:25	211
Non-Solar hr	175150	18:22	179

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: 06-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	1065	0.0	13.9	-13.9
4	765 kV	SASARAM-FATEHPUR	1	0	508	0.0	7.6	-7.6
5	765 kV	GAYA-BALIA	1	0	662	0.0	10.8	-10.8
6	400 kV	PUSAULI-VARANASI	1	46	11	0.4	0.0	0.4
7	400 kV	PUSAULI-ALLAHABAD	1	0	93	0.0	1.5	-1.5
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	697	0.0	8.0	-8.0
9	400 kV	PATNA-BALIA	2	0	0	0.0	0.0	0.0
10	400 kV	NAUBATPUR-BALIA	2	0	664	0.0	9.5	-9.5
11	400 kV	BIHARSHARIF-BALIA	2	47	334	0.0	3.1	-3.1
12	400 kV	MOTIHARI-GORAKHPUR	2	0	456	0.0	6.4	-6.4
13	400 kV	BIHARSHARIF-VARANASI	2	0	405	0.0	5.0	-5.0
14	220 kV	SAHUPURI-KARAMNANA	1	13	97	0.0	1.1	-1.1
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>0.4</b>	<b>68.1</b>	<b>-67.8</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	0	705	0.0	8.2	-8.2
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	511	549	0.4	0.0	0.4
3	765 kV	JHARSUGUDA-DURG	2	0	657	0.0	12.0	-12.0
4	400 kV	JHARSUGUDA-RAIGARH	4	0	711	0.0	8.9	-8.9
5	400 kV	RANCHI-SIPAT	2	160	247	0.0	0.8	-0.8
6	220 kV	BUDHIPADAR-RAIGARH	1	32	124	0.0	0.7	-0.7
7	220 kV	BUDHIPADAR-KORBA	2	138	52	1.2	0.0	1.2
<b>ER-WR</b>						<b>1.5</b>	<b>30.5</b>	<b>-29.0</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	718	0.0	16.4	-16.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1763	0.0	39.6	-39.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2539	0.0	48.3	-48.3
4	400 kV	TALCHER-I/C	2	471	662	0.0	0.4	-0.4
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>0.0</b>	<b>104.2</b>	<b>-104.2</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	241	38	1.8	0.0	1.8
2	400 kV	ALIPURDUAR-BONGAIGAON	2	783	0	8.0	0.0	8.0
3	220 kV	ALIPURDUAR-SALAKATI	2	154	0	1.9	0.0	1.9
<b>ER-NER</b>						<b>11.7</b>	<b>0.0</b>	<b>11.7</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIAL-AGRA	2	657	0	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	1523	0.0	37.4	-37.4
2	HVDC	VINDHYACHAL B/B	-	271	0	7.3	0.0	7.3
3	HVDC	MUNDRA-MOHINDERGARH	2	0	256	0.0	6.1	-6.1
4	765 kV	GWALIOR-AGRA	2	0	2138	0.0	37.6	-37.6
5	765 kV	GWALIOR-PHAGI	2	0	1864	0.0	27.4	-27.4
6	765 kV	JABALPUR-ORAI	2	0	886	0.0	27.9	-27.9
7	765 kV	GWALIOR-ORAI	1	1022	0	14.5	0.0	14.5
8	765 kV	SATNA-ORAI	1	0	1103	0.0	22.2	-22.2
9	765 kV	BANASKANTHA-CHITORGARH	2	674	632	4.3	4.6	-0.3
10	765 kV	VINDHYACHAL-VARANASI	2	0	2375	0.0	45.8	-45.8
11	400 kV	ZERDA-KANKROLI	1	137	42	1.2	0.1	1.1
12	400 kV	ZERDA -BHINMAL	1	327	199	1.7	1.6	0.1
13	400 kV	VINDHYACHAL -RIHAND	1	970	0	20.0	0.0	20.0
14	400 kV	RAPP-SHUALPUR	2	314	250	1.0	2.4	-1.4
15	220 kV	BHANPURA-RANPUR	1	0	150	0.0	2.4	-2.4
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.0	-1.0
17	220 kV	MEHGAON-AURAIYA	1	58	24	0.5	0.0	0.5
18	220 kV	MALANPUR-AURAIYA	1	37	30	0.2	0.1	0.1
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>50.6</b>	<b>216.6</b>	<b>-166.0</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	0	304	0.0	7.2	-7.2
2	HVDC	RAIGARH-PUGALUR	2	0	2002	0.0	27.8	-27.8
3	765 kV	SOLAPUR-RAICHUR	2	327	1187	0.2	11.0	-10.8
4	765 kV	WARDHA-NIZAMABAD	2	0	2117	0.0	34.8	-34.8
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2180	0.0	34.9	-34.9
6	400 kV	KOLHAPUR-KUDGI	2	988	0	14.6	0.0	14.6
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	110	2.1	0.0	2.1
<b>WR-SR</b>						<b>16.9</b>	<b>115.6</b>	<b>-98.7</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)	-214	-2	-93	-2.22
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	304	20	94	2.26
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-290	-202	-262	-6.28
	NER	132kV GELEPHU-SALAKATI	-35	-14	-25	-0.59
	NER	132kV MOTANGA-RANGIA	12	0	3	0.08
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-64	0	-1	-0.03
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	75	-8	4	0.10
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-458	-219	-446	-10.70
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-767	-509	-698	-16.76
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-114	0	-101	-2.42

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 06-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	7.61	0.00	0.00	0.00	0.17	0.00	0.00	7.78
Nepal	0.07	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.33
Bangladesh	10.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.53
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	10.60	0.00	7.61	0.00	0.00	0.00	0.43	0.00	0.00	18.64

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	0.00	0.72
Nepal	0.00	0.00	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.72
Bangladesh	0.00	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	0.00
Total Import	0.72	0.00	0.72	0.00	0.00	0.00	0.00	0.00	0.00	1.44

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	-7.61	0.00	0.00	0.00	-0.17	0.00	0.00	-7.06
Nepal	-0.07	0.00	0.72	0.00	0.00	0.00	-0.26	0.00	0.00	0.39
Bangladesh	-10.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-10.53
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-9.88	0.00	-6.89	0.00	0.00	0.00	-0.43	0.00	0.00	-17.20