



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: 13th 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 12.12.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 12-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 12th December 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 13-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)	50801	57526	44285	19535	2606	174753
Peak Shortage (MW)	92	0	0	256	0	348
Energy Met (MU)	1096	1357	1053	414	46	3967
Hydro Gen (MU)	106	30	46	21	12	216
Wind Gen (MU)	8	25	53	-	-	86
Solar Gen (MU)*	106.96	60.04	109.00	5.58	0.23	282
Energy Shortage (MU)	2.87	0.00	0.00	3.73	0.00	6.60
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	57130	68021	50946	20413	2582	195651
Time Of Maximum Demand Met	10:43	10:27	09:56	18:21	19:05	10:27

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	0.038	0.00	0.61	6.17	6.78	76.77	16.44

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	7529	0	140.7	38.9	0.9	333	0.00
	Haryana	7611	0	145.5	104.2	-2.5	123	0.00
	Rajasthan	15869	0	290.6	115.9	-4.3	202	0.00
	Delhi	3950	0	70.7	61.1	-0.1	258	0.00
	UP	16285	92	305.5	104.1	0.1	951	2.07
	Uttarakhand	2233	0	42.0	30.3	1.3	250	0.15
	HP	2070	0	37.4	30.0	0.6	192	0.00
	J&K(UT) & Ladakh(UT)	2698	0	56.4	51.3	0.0	159	0.65
	Chandigarh	230	0	3.8	3.7	0.0	32	0.00
Railways NR ISTS	177	0	3.4	3.4	0.0	29	0.00	
WR	Chhattisgarh	4260	0	86.4	28.1	-1.1	278	0.00
	Gujarat	20326	0	393.2	178.4	0.3	568	0.00
	MP	14282	0	270.6	167.8	-4.1	414	0.00
	Maharashtra	25348	0	533.2	190.9	-6.1	854	0.00
	Goa	699	0	14.3	13.4	0.3	197	0.00
	DNHDDPDCL	1248	0	28.8	28.7	0.1	45	0.00
	AMNSIL	803	0	18.0	9.0	-0.2	256	0.00
	BALCO	524	0	12.5	12.5	0.0	520	0.00
SR	Andhra Pradesh	8623	0	182.5	71.7	-1.6	371	0.00
	Telangana	11296	0	208.0	90.6	-1.1	726	0.00
	Karnataka	13698	0	254.2	115.1	-3.8	628	0.00
	Kerala	4182	0	84.3	67.0	1.4	327	0.00
	Tamil Nadu	15234	0	315.4	179.4	-1.8	445	0.00
	Puducherry	400	0	8.8	8.3	-0.2	25	0.00
ER	Bihar	4328	0	79.6	71.8	1.5	414	0.00
	DVC	3273	0	70.5	-43.9	0.8	316	0.00
	Jharkhand	1543	163	28.4	23.2	-1.5	301	3.73
	Odisha	4942	0	102.0	47.5	-0.2	317	0.00
	West Bengal	6329	0	132.1	17.5	-2.3	173	0.00
	Sikkim	109	0	1.7	1.8	-0.1	14	0.00
Railways ER ISTS	14	0	0.2	0.1	0.0	0	0.00	
NER	Arunachal Pradesh	171	0	2.9	2.8	0.0	35	0.00
	Assam	1508	0	25.5	21.0	0.1	94	0.00
	Manipur	216	0	3.0	2.9	0.1	32	0.00
	Meghalaya	330	0	6.4	4.7	-0.2	130	0.00
	Mizoram	143	0	2.0	1.8	-0.3	17	0.00
	Nagaland	144	0	2.3	2.4	-0.2	25	0.00
Tripura	231	0	3.9	2.8	-0.2	18	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-6.7	-2.1	-20.9	-16.3
Day Peak (MW)	-510.0	-215.5	-1028.0	-1162.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	212.8	-209.1	144.8	-151.1	2.5	0.0
Actual(MU)	206.8	-212.6	152.4	-157.6	3.1	-7.8
O/D/U/D(MU)	-6.0	-3.6	7.6	-6.5	0.6	-7.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6417	12744	6218	4251	468	30098	47
State Sector	10791	11478	6854	5260	190	34572	53
Total	17208	24221	13072	9511	658	64670	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	661	1513	600	620	11	3405	78
Lignite	25	15	52	0	0	92	2
Hydro	106	30	46	21	12	216	5
Nuclear	21	40	76	0	0	137	3
Gas, Naptha & Diesel	14	17	5	0	25	60	1
RES (Wind, Solar, Biomass & Others)	139	88	196	8	0	431	10
Total	965	1704	973	649	48	4340	100

Share of RES in total generation (%)	14.40	5.16	20.09	1.24	0.48	9.93
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	27.58	9.31	32.54	4.50	25.85	18.04

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.017
Based on State Max Demands	1.036

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	195651	10:27	447
Non-Solar hr	183132	18:26	665

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: 13-Dec-2023

Sl No	Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
Import/Export of ER (With NR)								
1	HVDC	ALIPURDUAR-AGRA	2	0	0	0.0	0.0	0.0
2	HVDC	PUSAULI B/B	-	0	49	0.0	0.8	-0.8
3	765 kV	GAYA-VARANASI	2	0	1201	0.0	19.9	-19.9
4	765 kV	SASARAM-FATEHPUR	1	0	631	0.0	10.5	-10.5
5	765 kV	GAYA-BALIA	1	0	722	0.0	13.8	-13.8
6	400 kV	PUSAULI-VARANASI	1	46	10	0.5	0.0	0.5
7	400 kV	PUSAULI-ALLAHABAD	1	0	77	0.0	1.1	-1.1
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	614	0.0	9.7	-9.7
9	400 kV	PATNA-BALIA	2	0	0	0.0	0.0	0.0
10	400 kV	NAUBATPUR-BALIA	2	0	733	0.0	12.5	-12.5
11	400 kV	BIHARSHARIFF-BALIA	2	0	381	0.0	6.0	-6.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	452	0.0	7.9	-7.9
13	400 kV	BIHARSHARIFF-VARANASI	2	0	429	0.0	5.4	-5.4
14	220 kV	SAHUPURI-KARAMNANA	1	0	93	0.0	1.6	-1.6
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
ER-NR						0.5	89.2	-88.7
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	339	635	0.0	4.4	-4.4
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	227	917	0.0	6.6	-6.6
3	765 kV	JHARSUGUDA-DURG	2	0	660	0.0	12.4	-12.4
4	400 kV	JHARSUGUDA-RAIGARH	4	36	447	0.0	4.0	-4.0
5	400 kV	RANCHI-SIPAT	2	28	251	0.0	1.3	-1.3
6	220 kV	BUDHIPADAR-RAIGARH	1	0	118	0.0	1.8	-1.8
7	220 kV	BUDHIPADAR-KORBA	2	152	12	1.8	0.0	1.8
ER-WR						1.8	30.5	-28.7
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	544	0.0	12.4	-12.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1986	0.0	40.6	-40.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2251	0.0	45.5	-45.5
4	400 kV	TALCHER-I/C	2	269	224	4.0	0.0	4.0
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	98.5	-98.5
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	256	54	2.0	0.1	1.9
2	400 kV	ALIPURDUAR-BONGAIGAON	2	807	12	8.5	0.0	8.5
3	220 kV	ALIPURDUAR-SALAKATI	2	156	0	2.0	0.0	2.0
ER-NER						12.5	0.1	12.4
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	670	0	16.0	0.0	16.0
NER-NR						16.0	0.0	16.0
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	1015	0.0	24.3	-24.3
2	HVDC	VINDHYACHAL B/B	-	440	0	10.7	0.0	10.7
3	HVDC	MUNDRA-MOHINDERGARH	2	0	594	0.0	14.6	-14.6
4	765 kV	GWALIOR-AGRA	2	0	2246	0.0	37.2	-37.2
5	765 kV	GWALIOR-PHAGI	2	0	2310	0.0	37.7	-37.7
6	765 kV	JABALPUR-ORAI	2	0	920	0.0	32.1	-32.1
7	765 kV	GWALIOR-ORAI	1	1115	0	17.5	0.0	17.5
8	765 kV	SATNA-ORAI	1	0	1124	0.0	23.4	-23.4
9	765 kV	BANASKANTHA-CHITORGARH	2	1518	0	20.5	0.0	20.5
10	765 kV	VINDHYACHAL-VARANASI	2	0	2334	0.0	38.6	-38.6
11	400 kV	ZERDA-KANKROLI	1	223	0	2.8	0.0	2.8
12	400 kV	ZERDA -BHINMAL	1	360	91	1.9	0.2	1.7
13	400 kV	VINDHYACHAL -RIHAND	1	955	0	21.5	0.0	21.5
14	400 kV	RAPP-SHUALPUR	2	201	362	0.7	3.6	-2.9
15	220 kV	BHANPURA-RANPUR	1	0	132	0.0	2.2	-2.2
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.1	-1.1
17	220 kV	MEHGAON-AURAIYA	1	78	16	0.5	0.0	0.5
18	220 kV	MALANPUR-AURAIYA	1	54	28	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
WR-NR						76.3	215.1	-138.8
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1007	0.0	23.8	-23.8
2	HVDC	RAIGARH-PUGALUR	2	0	4009	0.0	58.2	-58.2
3	765 kV	SOLAPUR-RAICHUR	2	1471	371	8.6	1.4	7.2
4	765 kV	WARDHA-NIZAMABAD	2	0	1585	0.0	24.6	-24.6
5	765 kV	WARORA-WARANGAL(NEW)	2	0	1737	0.0	28.9	-28.9
6	400 kV	KOLHAPUR-KUDGI	2	1403	0	22.8	0.0	22.8
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	2.2	0.0	2.2
WR-SR						33.6	136.9	-103.4

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)	-170	-61	-106	-2.54
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	296	-66	79	1.88
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-282	-149	-229	-5.49
	NER	132kV GELEPHU-SALAKATI	-37	-17	-25	-0.61
	NER	132kV MOTANGA-RANGIA	10	0	3	0.07
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-74	0	-22	-0.52
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-229	-32	-67	-1.61
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-928	-642	-789	-18.93
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1162	-226	-678	-16.27
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-100	0	-83	-1.98

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 13-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	0.67	0.00	0.00	7.44
Nepal	0.00	0.00	1.71	0.00	0.00	0.08	0.00	0.00	1.79
Bangladesh	19.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.29
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	19.29	0.00	8.48	0.00	0.00	0.75	0.00	0.00	28.52

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
		IEX	PXIL	HPX	IEX	PXIL	HPX		
Bhutan	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66
Nepal	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.28
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	0.66	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.94

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	0.66	0.00	-6.77	0.00	0.00	-0.67	0.00	0.00	-6.78
Nepal	0.00	0.00	-1.43	0.00	0.00	-0.08	0.00	0.00	-1.51
Bangladesh	-19.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-19.29
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-18.63	0.00	-8.20	0.00	0.00	-0.75	0.00	0.00	-27.58