

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: 12th 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 11.12.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 11-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 11th December 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 12-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)	50334	56805	44388	18758	2577	172862
Peak Shortage (MW)	0	0	0	239	0	239
Energy Met (MU)	1084	1327	1030	395	47	3883
Hydro Gen (MU)	110	26	45	21	12	214
Wind Gen (MU)	4	35	47	-	-	86
Solar Gen (MU)*	116.03	62.26	98.93	5.68	1.01	284
Energy Shortage (MU)	0.16	0.00	0.00	3.54	0.00	3.70
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	56996	65973	50173	19869	2641	192307
Time Of Maximum Demand Met	09:52	09:53	11:56	18:00	17:18	09:51

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	0.032	0.00	0.13	3.46	3.59	76.82	19.59

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	7467	0	138.2	40.2	-0.4	170	0.00
	Haryana	7580	0	142.1	99.5	0.2	186	0.00
	Rajasthan	16055	0	292.8	120.0	-0.1	226	0.00
	Delhi	3890	0	71.3	60.4	1.5	326	0.00
	UP	17031	0	301.6	99.0	-0.6	825	0.00
	Uttarakhand	2159	0	40.3	30.3	1.1	273	0.00
	HP	1971	0	35.4	28.1	0.1	128	0.00
	J&K(UT) & Ladakh(UT)	2769	0	55.8	51.1	-0.6	78	0.16
	Chandigarh	221	0	3.7	3.7	0.0	21	0.00
Railways NR ISTS	167	0	3.4	3.5	-0.1	12	0.00	
WR	Chhattisgarh	4185	0	84.6	26.9	-1.0	395	0.00
	Gujarat	19977	0	392.3	180.3	0.5	567	0.00
	MP	13861	0	258.4	161.3	-4.2	331	0.00
	Maharashtra	24542	0	518.4	192.8	-4.2	891	0.00
	Goa	702	0	14.2	13.0	0.6	88	0.00
	DNHDDPDCL	1258	0	28.3	28.2	0.1	55	0.00
	AMNSIL	803	0	18.0	9.1	-0.1	230	0.00
	BALCO	522	0	12.4	12.5	-0.1	5	0.00
SR	Andhra Pradesh	8419	0	178.6	70.3	-1.2	334	0.00
	Telangana	10787	0	200.2	80.5	1.7	651	0.00
	Karnataka	13885	0	252.2	116.6	-0.9	1010	0.00
	Kerala	4214	0	83.9	68.1	1.6	246	0.00
	Tamil Nadu	15348	0	307.5	175.7	0.7	736	0.00
	Puducherry	387	0	7.8	8.0	-0.3	41	0.00
ER	Bihar	4243	0	78.2	71.1	1.0	458	0.24
	DVC	3229	0	68.1	-43.3	0.9	364	0.00
	Jharkhand	1502	155	27.5	24.1	-1.7	252	3.30
	Odisha	4602	0	90.2	41.8	-1.6	360	0.00
	West Bengal	6407	0	129.2	16.6	-2.9	148	0.00
	Sikkim	103	0	1.7	1.7	0.0	15	0.00
Railways ER ISTS	11	0	0.1	0.1	0.0	0	0.00	
NER	Arunachal Pradesh	156	0	2.7	2.9	-0.3	55	0.00
	Assam	1514	0	26.5	20.3	0.7	160	0.00
	Manipur	195	0	2.9	2.9	0.1	34	0.00
	Meghalaya	338	0	6.5	4.7	0.0	182	0.00
	Mizoram	147	0	2.0	1.8	-0.3	32	0.00
	Nagaland	148	0	2.3	2.2	-0.1	17	0.00
Tripura	227	0	3.8	2.8	-0.3	28	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-5.1	-1.7	-21.4	-14.8
Day Peak (MW)	-520.0	-225.0	-1027.0	-1142.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	208.7	-203.4	143.0	-148.8	0.5	0.0
Actual(MU)	196.7	-202.2	159.4	-158.1	0.5	-3.7
O/D/U/D(MU)	-12.0	1.2	16.4	-9.4	0.0	-3.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6417	12744	6868	4251	155	30435	45
State Sector	11441	13541	7314	5170	190	37655	55
Total	17858	26284	14182	9421	345	68090	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	644	1467	590	599	13	3312	78
Lignite	27	15	50	0	0	91	2
Hydro	110	26	45	21	12	214	5
Nuclear	21	40	75	0	0	136	3
Gas, Naptha & Diesel	13	13	4	0	25	55	1
RES (Wind, Solar, Biomass & Others)	145	100	178	8	1	432	10
Total	959	1662	941	628	51	4241	100

Share of RES in total generation (%)	15.09	6.05	18.91	1.25	1.97	10.19
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	28.67	10.03	31.66	4.65	25.91	18.44

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.017
Based on State Max Demands	1.045

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	192307	9:51	327
Non-Solar hr	182520	18:29	376

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: 12-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	48	0.0	1.3	-1.3
3	765 kV	GAYA-VARANASI	2	0	1116	0.0	16.6	-16.6
4	765 kV	SASARAM-FATEHPUR	1	0	582	0.0	9.2	-9.2
5	765 kV	GAYA-BALIA	1	0	676	0.0	12.4	-12.4
6	400 kV	PUSAULI-VARANASI	1	14	40	0.0	0.3	-0.3
7	400 kV	PUSAULI-ALLAHABAD	1	0	62	0.0	0.9	-0.9
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	708	0.0	9.3	-9.3
9	400 kV	PATNA-BALIA	2	0	0	0.0	0.0	0.0
10	400 kV	NAUBATPUR-BALIA	2	0	719	0.0	11.9	-11.9
11	400 kV	BIHARSHARIFF-BALIA	2	0	375	0.0	5.0	-5.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	458	0.0	7.3	-7.3
13	400 kV	BIHARSHARIFF-VARANASI	2	0	415	0.0	4.5	-4.5
14	220 kV	SAHUPURI-KARAMNANA	1	6	94	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
ER-NR						0.0	79.7	-79.7
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	0	1136	0.0	11.7	-11.7
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	143	1207	0.0	8.9	-8.9
3	765 kV	JHARSUGUDA-DURG	2	0	720	0.0	13.1	-13.1
4	400 kV	JHARSUGUDA-RAIGARH	4	64	496	0.0	4.5	-4.5
5	400 kV	RANCHI-SIPAT	2	76	349	0.0	2.7	-2.7
6	220 kV	BUDHIPADAR-RAIGARH	1	10	123	0.0	1.3	-1.3
7	220 kV	BUDHIPADAR-KORBA	2	167	46	1.5	0.0	1.5
ER-WR						1.5	42.1	-40.6
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	1987	0.0	40.6	-40.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2348	0.0	44.7	-44.7
4	400 kV	TALCHER-I/C	2	676	241	2.2	0.0	2.2
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	97.6	-97.6
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	333	5	2.6	0.0	2.6
2	400 kV	ALIPURDUAR-BONGAIGAON	2	987	0	10.4	0.0	10.4
3	220 kV	ALIPURDUAR-SALAKATI	2	188	0	2.3	0.0	2.3
ER-NER						15.3	0.0	15.3
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	666	0	15.9	0.0	15.9
NER-NR						15.9	0.0	15.9
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	2036	0.0	38.1	-38.1
2	HVDC	VINDHYACHAL B/B	-	270	0	7.3	0.0	7.3
3	HVDC	MUNDRA-MOHINDERGARH	2	0	594	0.0	12.2	-12.2
4	765 kV	GWALIOR-AGRA	2	0	1951	0.0	31.1	-31.1
5	765 kV	GWALIOR-PHAGI	2	0	2377	0.0	35.4	-35.4
6	765 kV	JABALPUR-ORAI	2	0	857	0.0	25.1	-25.1
7	765 kV	GWALIOR-ORAI	1	1099	0	17.5	0.0	17.5
8	765 kV	SATNA-ORAI	1	0	1129	0.0	22.6	-22.6
9	765 kV	BANASKANTHA-CHITORGARH	2	1634	4	21.8	0.0	21.8
10	765 kV	VINDHYACHAL-VARANASI	2	0	2108	0.0	38.3	-38.3
11	400 kV	ZERDA-KANKROLI	1	208	54	2.7	0.0	2.7
12	400 kV	ZERDA -BHINMAL	1	420	129	2.5	0.3	2.2
13	400 kV	VINDHYACHAL -RIHAND	1	957	0	21.3	0.0	21.3
14	400 kV	RAPP-SHUJALPUR	2	243	408	0.8	3.2	-2.4
15	220 kV	BHANPURA-RANPUR	1	0	129	0.0	2.2	-2.2
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.0	-1.0
17	220 kV	MEHGAON-AURAIYA	1	86	11	0.6	0.0	0.6
18	220 kV	MALANPUR-AURAIYA	1	66	22	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
WR-NR						74.7	209.7	-135.0
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1006	0.0	13.6	-13.6
2	HVDC	RAIGARH-PUGALUR	2	0	4511	0.0	63.3	-63.3
3	765 kV	SOLAPUR-RAICHUR	2	1421	652	6.7	3.1	3.6
4	765 kV	WARDHA-NIZAMABAD	2	0	1745	0.0	26.2	-26.2
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2004	0.0	30.6	-30.6
6	400 kV	KOLHAPUR-KUDGI	2	1367	0	20.8	0.0	20.8
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	112	2.2	0.0	2.2
WR-SR						29.7	136.8	-107.1

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)	-187	50	-89	-2.14
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	345	-54	130	3.12
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-296	-173	-235	-5.64
	NER	132kV GELEPHU-SALAKATI	-34	-5	-21	-0.50
	NER	132kV MOTANGA-RANGIA	10	1	3	0.08
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-59	0	-19	-0.45
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-225	45	-53	-1.28
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-927	-642	-806	-19.35
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1142	-199	-618	-14.82
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-100	0	-83	-2.00

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 12-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	5.50	0.00	0.00	0.33	0.00	0.00	5.83
Nepal	0.00	0.00	1.95	0.00	0.00	0.00	0.00	0.00	1.95
Bangladesh	19.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.46
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	19.46	0.00	7.45	0.00	0.00	0.33	0.00	0.00	27.24

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
Nepal	0.00	0.00	0.16	0.00	0.00	0.21	0.00	0.00	0.37
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	0.68	0.00	0.16	0.00	0.00	0.21	0.00	0.00	1.05

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	0.68	0.00	-5.50	0.00	0.00	-0.33	0.00	0.00	-5.15
Nepal	0.00	0.00	-1.78	0.00	0.00	0.21	0.00	0.00	-1.57
Bangladesh	-19.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-19.46
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-18.78	0.00	-7.28	0.00	0.00	-0.12	0.00	0.00	-26.18