



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: 17th 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 16.12.2023.

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 16-दिसम्बर-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रीड निष्पादन रिपोर्ट रांभांप्रेंकें 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 16th December 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 17-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)	52787	58479	43459	18780	2620	176125
Peak Shortage (MW)	0	0	0	497	0	497
Energy Met (MU)	1144	1404	1047	402	47	4044
Hydro Gen (MU)	113	33	50	19	12	226
Wind Gen (MU)	5	58	46	-	-	109
Solar Gen (MU)*	108.39	52.71	56.23	2.65	1.03	221
Energy Shortage (MU)	0.24	0.00	0.00	3.75	0.05	4.04
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	58653	70532	52064	20185	2792	199275
Time Of Maximum Demand Met	09:44	10:20	08:13	18:02	17:18	09:44

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	0.041	0.00	0.07	5.13	5.20	72.62	22.18

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	7646	0	147.8	40.6	0.8	207	0.00
	Haryana	7749	0	148.1	91.3	-1.2	134	0.00
	Rajasthan	16563	0	309.5	122.1	-3.9	106	0.00
	Delhi	4003	0	70.5	60.2	0.6	318	0.00
	UP	18282	0	321.5	89.1	0.1	670	0.00
	Uttarakhand	2332	0	43.2	30.1	0.0	185	0.00
	HP	2087	0	37.2	30.4	-0.4	78	0.00
	J&K(UT) & Ladakh(UT)	2734	0	58.6	53.8	-0.1	96	0.24
	Chandigarh	225	0	3.8	3.7	0.1	30	0.00
Railways NR ISTS	184	0	3.6	3.5	0.1	28	0.00	
WR	Chhattisgarh	4275	0	86.7	25.6	-0.7	315	0.00
	Gujarat	20982	0	403.0	171.9	-3.6	405	0.00
	MP	15932	0	304.0	196.2	-2.5	654	0.00
	Maharashtra	26140	0	536.6	162.2	0.4	955	0.00
	Goa	666	0	13.6	12.5	0.5	88	0.00
	DNHDDPDCL	1259	0	28.7	28.6	0.1	48	0.00
	AMNSIL	823	0	18.8	9.5	-0.2	240	0.00
	BALCO	532	0	12.4	12.5	-0.1	8	0.00
SR	Andhra Pradesh	9291	0	184.9	73.4	-0.3	865	0.00
	Telangana	11796	0	217.4	113.1	0.8	789	0.00
	Karnataka	14079	0	256.8	107.9	2.3	1175	0.00
	Kerala	4109	0	83.2	68.2	1.9	311	0.00
	Tamil Nadu	15319	0	295.8	164.5	-2.8	660	0.00
	Puducherry	393	0	8.7	8.1	-0.1	46	0.00
ER	Bihar	4327	0	82.8	74.4	1.8	309	0.57
	DVC	3297	0	70.1	-47.0	0.2	288	0.00
	Jharkhand	1597	291	28.2	26.0	-1.3	284	3.18
	Odisha	4501	0	88.0	35.3	-1.9	284	0.00
	West Bengal	6464	0	131.3	24.3	-1.8	198	0.00
	Sikkim	103	0	1.8	1.8	-0.1	17	0.00
	Railways ER ISTS	26	0	0.1	0.1	0.0	12	0.00
NER	Arunachal Pradesh	168	0	2.9	2.8	0.0	29	0.00
	Assam	1534	0	26.4	21.7	-0.5	88	0.00
	Manipur	217	0	3.1	3.1	0.0	50	0.00
	Meghalaya	357	0	6.4	5.0	-0.2	67	0.05
	Mizoram	149	0	2.1	1.7	-0.2	15	0.00
	Nagaland	156	0	2.4	2.4	-0.1	17	0.00
	Tripura	231	0	3.8	2.7	-0.2	29	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-5.6	-2.8	-18.4	-10.5
Day Peak (MW)	-417.0	-179.0	-1016.0	-546.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	200.1	-219.8	157.6	-139.7	1.7	0.0
Actual(MU)	183.4	-219.3	169.3	-140.1	-0.4	-7.1
O/D/U/D(MU)	-16.7	0.4	11.7	-0.4	-2.1	-7.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6333	11819	5918	5511	155	29736	50
State Sector	7801	11643	6035	3766	190	29434	50
Total	14134	23462	11953	9277	345	59170	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	730	1544	640	591	15	3520	80
Lignite	25	19	47	0	0	91	2
Hydro	113	33	50	19	12	226	5
Nuclear	21	40	76	0	0	136	3
Gas, Naptha & Diesel	12	16	5	0	25	58	1
RES (Wind, Solar, Biomass & Others)	137	113	134	5	1	390	9
Total	1038	1765	951	615	53	4422	100

Share of RES in total generation (%)	13.23	6.39	14.12	0.80	1.99	8.83
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	26.12	10.54	27.31	3.84	24.18	17.04

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.024
Based on State Max Demands	1.056

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	199275	9:44	300
Non-Solar hr	187257	18:28	593

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: 17-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	1.3	-1.3
3	765 kV	GAYA-VARANASI	2	0	1053	0.0	16.0	-16.0
4	765 kV	SASARAM-FATEHPUR	1	0	471	0.0	8.2	-8.2
5	765 kV	GAYA-BALIA	1	0	741	0.0	12.6	-12.6
6	400 kV	PUSAULI-VARANASI	1	21	44	0.0	0.4	-0.4
7	400 kV	PUSAULI-ALLAHABAD	1	0	71	0.0	0.9	-0.9
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	709	0.0	9.2	-9.2
9	400 kV	PATNA-BALIA	2	0	0	0.0	0.0	0.0
10	400 kV	NAUBATPUR-BALIA	2	0	694	0.0	11.6	-11.6
11	400 kV	BIHARSHARIFF-BALIA	2	0	391	0.0	5.6	-5.6
12	400 kV	MOTIHARI-GORAKHPUR	2	0	463	0.0	7.4	-7.4
13	400 kV	BIHARSHARIFF-VARANASI	2	0	358	0.0	4.7	-4.7
14	220 kV	SAHUPURI-KARAMNANA	1	11	109	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	0.7	0.0	0.7
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						0.7	78.9	-78.2
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	728	308	6.7	0.0	6.7
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	576	687	0.0	0.5	-0.5
3	765 kV	JHARSUGUDA-DURG	2	0	663	0.0	12.5	-12.5
4	400 kV	JHARSUGUDA-RAIGARH	4	0	545	0.0	6.8	-6.8
5	400 kV	RANCHI-SIPAT	2	135	241	0.0	0.8	-0.8
6	220 kV	BUDHIPADAR-RAIGARH	1	73	63	0.0	0.1	-0.1
7	220 kV	BUDHIPADAR-KORBA	2	190	41	1.9	0.0	1.9
ER-WR						8.6	20.6	-12.1
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	544	0.0	12.9	-12.9
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1990	0.0	46.9	-46.9
3	765 kV	ANGUL-SRIKAKULAM	2	0	2798	0.0	52.5	-52.5
4	400 kV	TALCHER-I/C	2	263	247	0.0	2.0	-2.0
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	112.3	-112.3
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	291	0	2.8	0.0	2.8
2	400 kV	ALIPURDUAR-BONGAIGAON	2	881	0	10.6	0.0	10.6
3	220 kV	ALIPURDUAR-SALAKATI	2	165	0	2.2	0.0	2.2
ER-NER						15.6	0.0	15.6
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	0	671	15.7	0.0	15.7
NER-NR						15.7	0.0	15.7
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	0	0.0	0.0	0.0
2	HVDC	VINDHYACHAL B/B	-	226	0	6.1	0.0	6.1
3	HVDC	MUNDRA-MOHINDERGARH	2	0	980	0.0	19.4	-19.4
4	765 kV	GWALIOR-AGRA	2	0	2334	0.0	34.3	-34.3
5	765 kV	GWALIOR-PHAGI	2	0	2138	0.0	36.8	-36.8
6	765 kV	JABALPUR-ORAI	2	0	1065	0.0	29.6	-29.6
7	765 kV	GWALIOR-ORAI	1	1150	0	18.7	0.0	18.7
8	765 kV	SATNA-ORAI	1	0	1112	0.0	21.7	-21.7
9	765 kV	BANASKANTHA-CHITORGARH	2	1583	109	14.1	0.1	14.0
10	765 kV	VINDHYACHAL-VARANASI	2	0	2737	0.0	42.5	-42.5
11	400 kV	ZERDA-KANKROLI	1	199	50	1.8	0.0	1.8
12	400 kV	ZERDA -BHINMAL	1	392	327	2.1	2.1	0.0
13	400 kV	VINDHYACHAL -RIHAND	1	953	0	21.9	0.0	21.9
14	400 kV	RAPP-SHUJALPUR	2	291	437	1.2	3.0	-1.8
15	220 kV	BHANPURA-RANPUR	1	0	140	0.0	2.3	-2.3
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.3	-1.3
17	220 kV	MEHGAON-AURAIYA	1	78	15	0.7	0.0	0.7
18	220 kV	MALANPUR-AURAIYA	1	53	30	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						66.9	193.3	-126.4
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1012	0.0	24.0	-24.0
2	HVDC	RAIGARH-PUGALUR	2	0	3003	0.0	23.3	-23.3
3	765 kV	SOLAPUR-RAICHUR	2	535	1590	1.8	8.4	-6.7
4	765 kV	WARDHA-NIZAMABAD	2	0	2257	0.0	34.3	-34.3
5	765 kV	WARORA-WARANGAL(NEW)	2	0	0	0.0	37.0	-37.0
6	400 kV	KOLHAPUR-KUDGI	2	1040	0	18.7	0.0	18.7
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	111	1.6	0.0	1.6
WR-SR						22.0	127.0	-105.0

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)	-149	65	-89	-2.15
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	271	-81	86	2.05
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-280	-78	-207	-4.96
	NER	132kV GELEPHU-SALAKATI	-30	-16	-23	-0.55
	NER	132kV MOTANGA-RANGIA	-13	0	-1	-0.03
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-61	0	-34	-0.81
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-179	-76	-83	-1.98
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-929	-311	-690	-16.56
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-546	-405	-439	-10.52
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-87	0	-76	-1.82

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 17-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	7.13	0.00	0.00	0.00	0.00	0.00	7.13
Nepal	0.37	0.00	2.89	0.00	0.00	0.00	0.00	0.00	3.26
Bangladesh	16.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.69
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	17.06	0.00	10.02	0.00	0.00	0.00	0.00	0.00	27.08

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	1.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.21
Nepal	0.00	0.00	0.05	0.00	0.00	0.28	0.00	0.00	0.33
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	1.21	0.00	0.05	0.00	0.00	0.28	0.00	0.00	1.54

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	1.21	0.00	-7.13	0.00	0.00	0.00	0.00	0.00	-5.92
Nepal	-0.37	0.00	-2.84	0.00	0.00	0.28	0.00	0.00	-2.93
Bangladesh	-16.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-16.69
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-15.85	0.00	-9.97	0.00	0.00	0.28	0.00	0.00	-25.54