

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: 17th January 2024

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 16.01.2024.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 16-जनवरी-2024 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 16th January 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 17-Jan-2024

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)	61093	61469	40482	21155	2557	186756
Peak Shortage (MW)	526	0	0	919	36	1481
Energy Met (MU)	1281	1467	1041	447	45	4281
Hydro Gen (MU)	94	42	46	22	10	214
Wind Gen (MU)	4	28	27	-	-	59
Solar Gen (MU)*	110.37	67.98	111.99	3.08	0.84	294
Energy Shortage (MU)	9.44	0.27	0.00	5.04	0.35	15.10
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	65633	73353	54277	22144	2598	215183
Time Of Maximum Demand Met	10:28	10:12	09:31	18:51	17:57	10:28

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	0.042	0.00	0.28	8.51	8.78	74.08	17.14

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	8766	0	164.6	57.5	0.9	206	0.00
	Haryana	9135	0	167.5	100.4	0.1	124	0.85
	Rajasthan	17458	0	328.7	117.8	-0.7	313	0.97
	Delhi	5376	0	91.9	76.9	0.2	283	0.00
	UP	20591	360	370.6	127.3	-0.2	856	6.77
	Uttarakhand	2315	80	46.5	36.0	0.6	200	0.52
	HP	2109	1	37.6	32.3	0.7	145	0.00
	J&K(UT) & Ladakh(UT)	2990	0	65.6	60.7	0.6	301	0.33
	Chandigarh	328	0	5.4	5.0	0.4	86	0.00
Railways NR ISTS	171	0	3.2	3.1	0.1	42	0.00	
WR	Chhattisgarh	5159	86	107.1	53.5	0.5	284	0.27
	Gujarat	20628	0	405.6	151.5	-0.5	1513	0.00
	MP	16723	0	308.7	182.1	-3.9	1171	0.00
	Maharashtra	27573	0	572.6	176.9	2.5	1509	0.00
	Goa	674	0	12.6	12.4	-0.2	74	0.00
	DNHDDPDCL	1260	0	28.8	28.6	0.2	55	0.00
	AMNSIL	851	0	19.0	10.1	-0.2	240	0.00
	BALCO	521	0	12.4	12.5	-0.1	520	0.00
SR	Andhra Pradesh	10710	0	190.5	64.1	-2.6	278	0.00
	Telangana	13229	0	242.4	113.2	-0.7	522	0.00
	Karnataka	15100	0	277.5	119.0	0.3	790	0.00
	Kerala	4166	0	82.3	64.7	0.6	444	0.00
	Tamil Nadu	12191	0	242.5	132.4	-1.2	478	0.00
	Puducherry	276	0	5.9	6.3	-0.5	16	0.00
ER	Bihar	5110	66	100.0	95.1	1.1	319	2.64
	DVC	3383	0	70.1	-47.7	-0.2	256	0.00
	Jharkhand	1653	113	31.6	23.1	-1.4	260	2.40
	Odisha	5082	0	98.8	24.5	-3.0	294	0.00
	West Bengal	6897	0	144.4	28.2	-1.7	221	0.00
	Sikkim	123	0	2.0	2.0	0.0	18	0.00
Railways ER ISTS	0	0	0.0	0.1	-0.1	4	0.00	
NER	Arunachal Pradesh	166	0	2.4	2.9	-0.6	27	0.00
	Assam	1426	0	25.0	19.7	0.6	141	0.00
	Manipur	205	0	3.1	2.9	0.2	51	0.05
	Meghalaya	331	36	6.4	5.0	-0.1	58	0.30
	Mizoram	155	0	1.8	1.6	-0.1	23	0.00
	Nagaland	140	0	2.3	2.2	0.0	24	0.00
Tripura	226	0	4.0	3.1	-0.4	14	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-10.6	-8.1	-20.7	-25.7
Day Peak (MW)	-700.0	-413.0	-1013.0	-1334.3

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	301.3	-248.5	76.4	-133.1	3.9	0.0
Actual(MU)	310.0	-252.1	69.4	-137.0	2.7	-7.0
O/D/U/D(MU)	8.7	-3.6	-6.9	-3.9	-1.2	-7.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	7697	9072	4068	4766	452	26055	50
State Sector	6576	10100	4955	4351	302	26283	50
Total	14273	19172	9023	9117	754	52339	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	757	1624	701	644	11	3737	80
Lignite	30	20	61	0	0	110	2
Hydro	94	42	46	22	10	214	5
Nuclear	26	24	71	0	0	122	3
Gas, Naptha & Diesel	17	32	5	0	26	81	2
RES (Wind, Solar, Biomass & Others)	137	99	162	4	1	404	9
Total	1061	1842	1046	671	48	4668	100

Share of RES in total generation (%)	12.94	5.39	15.50	0.66	1.76	8.65
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	24.26	8.99	26.66	3.97	23.67	15.85

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.013
Based on State Max Demands	1.037

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	215183	10:28	1693
Non-Solar hr	194692	17:00	939

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 -> 07:00 to 17:00hrs 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-Jan-2024

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	1.2	-1.2
3	765 kV	GAYA-VARANASI	2	0	780	0.0	11.8	-11.8
4	765 kV	SASARAM-FATEHPUR	1	0	434	0.0	7.2	-7.2
5	765 kV	GAYA-BALIA	1	0	845	0.0	14.9	-14.9
6	400 kV	PUSAULI-VARANASI	1	15	35	0.0	0.4	-0.4
7	400 kV	PUSAULI-ALLAHABAD	1	6	51	0.0	0.8	-0.8
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	587	0.0	8.3	-8.3
9	400 kV	PATNA-BALIA	2	0	585	0.0	11.6	-11.6
10	400 kV	NAUBATPUR-BALIA	2	0	612	0.0	12.1	-12.1
11	400 kV	BIHARSHARIFF-BALIA	2	0	297	0.0	4.9	-4.9
12	400 kV	MOTIHARI-GORAKHPUR	2	0	500	0.0	9.2	-9.2
13	400 kV	BIHARSHARIFF-VARANASI	2	0	319	0.0	2.6	-2.6
14	220 kV	SAHUPURI-KARAMNANA	1	0	139	0.0	1.6	-1.6
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.1	0.0	0.1
16	132 kV	GARWAH-RIHAND	1	30	0	0.4	0.0	0.4
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	86.5	-86.0
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	228	1139	0.0	10.0	-10.0
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1008	189	8.2	0.0	8.2
3	765 kV	JHARSUGUDA-DURG	2	0	564	0.0	10.6	-10.6
4	400 kV	JHARSUGUDA-RAIGARH	4	0	644	0.0	10.0	-10.0
5	400 kV	RANCHI-SIPAT	2	200	191	0.0	0.3	-0.3
6	220 kV	BUDHIPADAR-RAIGARH	1	0	113	0.0	1.5	-1.5
7	220 kV	BUDHIPADAR-KORBA	2	65	78	0.1	0.0	0.1
ER-WR						8.3	32.4	-24.1
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	330	0.0	7.3	-7.3
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1851	0.0	83.0	-83.0
3	765 kV	ANGUL-SRIKAKULAM	2	0	1979	0.0	35.6	-35.6
4	400 kV	TALCHER-I/C	2	408	89	0.0	38.2	-38.2
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	125.9	-125.9
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	132	79	1.6	0.1	1.6
2	400 kV	ALIPURDUAR-BONGAIGAON	2	515	70	7.6	0.0	7.6
3	220 kV	ALIPURDUAR-SALAKATI	2	104	0	1.7	0.0	1.7
ER-NER						10.9	0.1	10.8
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	657	0	14.2	0.0	14.2
NER-NR						14.2	0.0	14.2
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	5025	0.0	62.0	-62.0
2	HVDC	VINDHYACHAL B/B	-	0	482	0.0	3.4	-3.4
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1913	0.0	42.8	-42.8
4	765 kV	GWALIOR-AGRA	2	0	2776	0.0	46.4	-46.4
5	765 kV	GWALIOR-PHAGI	2	0	1326	0.0	20.6	-20.6
6	765 kV	JABALPUR-ORAI	2	0	1186	0.0	36.4	-36.4
7	765 kV	GWALIOR-ORAI	1	966	0	15.3	0.0	15.3
8	765 kV	SATNA-ORAI	1	0	1118	0.0	22.2	-22.2
9	765 kV	BANASKANTHA-CHITORGARH	2	1037	606	10.7	0.9	9.9
10	765 kV	VINDHYACHAL-VARANASI	2	0	3537	0.0	57.5	-57.5
11	400 kV	ZERDA-KANKROLI	1	144	113	1.3	0.2	1.0
12	400 kV	ZERDA -BHINMAL	1	495	337	2.7	1.5	1.2
13	400 kV	VINDHYACHAL -RIHAND	1	977	0	22.6	0.0	22.6
14	400 kV	RAPP-SHUJALPUR	2	67	541	0.1	4.5	-4.5
15	220 kV	BHANPURA-RANPUR	1	181	64	1.8	0.0	1.8
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.1	-1.1
17	220 kV	MEHGAON-AURAIYA	1	53	13	0.0	0.0	0.0
18	220 kV	MALANPUR-AURAIYA	1	32	36	0.6	0.0	0.6
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						55.0	299.5	-244.5
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	307	0.0	7.2	-7.2
2	HVDC	RAIGARH-PUGALUR	2	0	606	0.0	14.5	-14.5
3	765 kV	SOLAPUR-RAICHUR	2	1514	796	11.8	1.9	9.8
4	765 kV	WARDHA-NIZAMABAD	2	233	1818	0.3	21.8	-21.5
5	765 kV	WARORA-WARANGAL(NEW)	2	142	1863	0.1	22.3	-22.2
6	400 kV	KOLHAPUR-KUDGI	2	1518	0	22.3	0.0	22.3
7	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
8	220 kV	PONDA-AMBEWADI	1	0	66	0.0	0.6	-0.6
9	220 kV	XELDEM-AMBEWADI	1	0	110	2.2	0.0	2.2
WR-SR						36.6	68.3	-31.7

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)	-230	-24	-136	-3.27
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-268	191	-98	-2.36
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-236	-70	-176	-4.22
	NER	132kV GELEPHU-SALAKATI	-33	-7	-26	-0.62
	NER	132kV MOTANGA-RANGIA	-12	0	-3	-0.08
NEPAL	NR	NEPAL IMPORT (FROM UP)	-70	0	0	0.00
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-70	0	-50	-1.20
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-413	-50	-287	-6.89
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-915	-578	-788	-18.92
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1334	-810	-1073	-25.74
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-98	0	-74	-1.78

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 17-Jan-2024

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	11.16	0.00	0.00	0.20	0.00	0.00	11.36
Nepal	0.26	0.00	7.81	0.00	0.00	0.07	0.00	0.00	8.14
Bangladesh	18.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.85
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	19.11	0.00	18.97	0.00	0.00	0.27	0.00	0.00	38.35

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
Nepal	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.15
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	0.48	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.63

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	0.48	0.00	-11.16	0.00	0.00	-0.20	0.00	0.00	-10.88
Nepal	-0.26	0.00	-7.81	0.00	0.00	0.08	0.00	0.00	-7.99
Bangladesh	-18.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-18.85
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	-18.97	0.00	0.00	-0.12	0.00	0.00	-37.72