

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: 02nd February 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 01.02.2024.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 01-फ़रवरी-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 01st February 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 02-Feb-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)	55532	62157	47830	20990	2604	189113
Peak Shortage (MW)	70	0	0	462	214	746
Energy Met (MU)	1113	1488	1230	440	49	4320
Hydro Gen (MU)	94	41	49	22	10	215
Wind Gen (MU)	4	38	29	-	-	72
Solar Gen (MU)*	122.76	64.98	116.17	2.46	0.76	307
Energy Shortage (MU)	1.29	1.04	0.00	1.89	1.71	5.93
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	57339	73753	61371	21908	2675	211794
Time Of Maximum Demand Met	18:42	10:41	09:37	18:02	17:39	10:25

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	0.038	0.00	0.35	3.67	4.02	72.04	23.94

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	6649	0	136.2	34.6	-0.8	262	0.00
	Haryana	7168	0	132.4	83.1	-2.1	213	0.00
	Rajasthan	17238	0	319.8	128.5	-1.5	231	0.62
	Delhi	4993	0	84.7	78.3	-0.9	387	0.00
	UP	19036	0	314.6	93.5	-3.7	394	0.00
	Uttarakhand	2125	0	38.1	26.9	-1.2	236	0.59
	HP	1801	0	33.4	29.9	-1.1	120	0.00
	J&K(UT) & Ladakh(UT)	2778	0	45.1	46.2	-4.6	114	0.08
	Chandigarh	283	0	4.9	5.2	-0.3	26	0.00
Railways NR ISTS	177	0	3.6	3.1	0.5	65	0.00	
WR	Chhattisgarh	5280	0	109.4	45.6	-0.5	181	0.00
	Gujarat	20346	0	413.5	163.3	-0.2	563	0.00
	MP	16518	0	320.1	205.7	-5.6	733	1.04
	Maharashtra	27582	0	573.5	184.8	-3.6	696	0.00
	Goa	663	0	12.4	12.5	-0.6	38	0.00
	DNHDDPDCL	1238	0	28.8	29.5	-0.7	17	0.00
	AMNSIL	863	0	18.0	8.4	0.2	282	0.00
	BALCO	519	0	12.4	12.5	-0.1	3	0.00
SR	Andhra Pradesh	12162	0	225.3	92.2	0.6	657	0.00
	Telangana	13958	0	256.8	121.8	-2.0	656	0.00
	Karnataka	16202	0	293.4	123.2	-0.7	554	0.00
	Kerala	4220	0	85.6	71.5	0.7	368	0.00
	Tamil Nadu	17061	0	360.2	205.0	4.1	1915	0.00
	Puducherry	402	0	9.0	8.9	-0.4	26	0.00
ER	Bihar	4927	0	94.3	84.7	-2.1	472	0.91
	DVC	3328	0	70.4	-41.9	-0.1	390	0.00
	Jharkhand	1706	0	31.0	23.2	-1.8	268	0.98
	Odisha	4749	0	95.1	10.8	-1.3	467	0.00
	West Bengal	7024	0	146.6	24.3	-2.3	369	0.00
	Sikkim	122	0	2.1	1.9	0.1	34	0.00
	Railways ER ISTS	19	0	0.1	0.1	0.0	10	0.00
NER	Arunachal Pradesh	179	0	3.1	3.0	0.0	45	0.00
	Assam	1480	181	27.3	23.9	1.2	125	1.33
	Manipur	235	17	3.2	3.0	0.2	72	0.34
	Meghalaya	337	0	6.7	5.4	-0.2	27	0.00
	Mizoram	153	0	2.4	1.7	-0.1	20	0.00
	Nagaland	146	0	2.6	2.4	0.1	23	0.00
	Tripura	228	0	3.5	3.6	-0.6	22	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-8.4	-11.2	-21.3	-18.2
Day Peak (MW)	-609.2	-336.9	-1063.0	-770.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	194.9	-255.9	199.4	-148.2	9.9	0.0
Actual(MU)	175.6	-268.0	225.0	-151.7	11.2	-8.0
O/D/U/D(MU)	-19.3	-12.1	25.6	-3.4	1.2	-8.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	7461	8034	5298	5422	718	26932	53
State Sector	7506	8272	4936	2982	380	24074	47
Total	14967	16305	10234	8404	1097	51007	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	702	1629	725	656	10	3722	79
Lignite	31	16	64	0	0	111	2
Hydro	94	41	49	22	10	215	5
Nuclear	31	40	52	0	0	123	3
Gas, Naptha & Diesel	13	50	7	0	23	92	2
RES (Wind, Solar, Biomass & Others)	149	107	189	4	1	450	10
Total	1020	1882	1085	682	44	4713	100

Share of RES in total generation (%)	14.61	5.70	17.39	0.62	1.75	9.54
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	26.91	9.99	26.65	3.87	23.55	16.72

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.024
Based on State Max Demands	1.057

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	211794	10:25	214
Non-Solar hr	194842	18:00	356

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: 02-Feb-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	1.3	-1.3
3	765 kV	GAYA-VARANASI	2	0	906	0.0	11.9	-11.9
4	765 kV	SASARAM-FATEHPUR	1	0	547	0.0	8.7	-8.7
5	765 kV	GAYA-BALIA	1	0	728	0.0	8.4	-8.4
6	400 kV	PUSAULI-VARANASI	1	24	59	0.0	0.6	-0.6
7	400 kV	PUSAULI-ALLAHABAD	1	11	74	0.0	0.5	-0.5
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	45	620	0.0	3.8	-3.8
9	400 kV	PATNA-BALIA	2	0	521	0.0	6.6	-6.6
10	400 kV	NAUBATPUR-BALIA	2	0	463	0.0	5.8	-5.8
11	400 kV	BIHARSHARIFF-BALIA	2	47	311	0.0	2.2	-2.2
12	400 kV	MOTIHARI-GORAKHPUR	2	0	450	0.0	5.3	-5.3
13	400 kV	BIHARSHARIFF-VARANASI	2	0	420	0.0	5.9	-5.9
14	220 kV	SAHUPURI-KARAMNANA	1	0	104	0.0	1.3	-1.3
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.5	0.0	0.5
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	62.1	-61.6
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	0	1519	0.0	21.6	-21.6
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	270	1101	0.0	11.1	-11.1
3	765 kV	JHARSUGUDA-DURG	2	0	775	0.0	15.8	-15.8
4	400 kV	JHARSUGUDA-RAIGARH	4	0	786	0.0	13.3	-13.3
5	400 kV	RANCHI-SIPAT	2	0	399	0.0	5.1	-5.1
6	220 kV	BUDHIPADAR-RAIGARH	1	0	169	0.0	2.7	-2.7
7	220 kV	BUDHIPADAR-KORBA	2	11	174	0.0	1.8	-1.8
ER-WR						0.0	71.4	-71.4
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	501	0.0	11.3	-11.3
2	HVDC	TALCHER-KOLAR BIPOLE	2	15	3	0.0	0.0	0.0
3	765 kV	ANGUL-SRIKAKULAM	2	0	3224	0.0	57.9	-57.9
4	400 kV	TALCHER-I/C	2	1917	0	43.8	0.0	43.8
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	69.2	-69.2
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	155	99	0.6	0.3	0.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	534	77	4.1	0.0	4.1
3	220 kV	ALIPURDUAR-SALAKATI	2	86	23	0.7	0.0	0.7
ER-NER						5.4	0.3	5.1
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	701	0	16.7	0.0	16.7
NER-NR						16.7	0.0	16.7
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	4012	0.0	83.5	-83.5
2	HVDC	VINDHYACHAL B/B	-	436	0	9.2	0.0	9.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1260	0.0	15.7	-15.7
4	765 kV	GWALIOR-AGRA	2	224	2167	0.2	15.4	-15.1
5	765 kV	GWALIOR-PHAGI	2	0	1977	0.0	24.8	-24.8
6	765 kV	JABALPUR-ORAI	2	55	1072	0.0	17.1	-17.1
7	765 kV	GWALIOR-ORAI	1	905	0	16.0	0.0	16.0
8	765 kV	SATNA-ORAI	1	0	1096	0.0	17.6	-17.6
9	765 kV	BANASKANTHA-CHITORGARH	2	1528	485	18.0	0.5	17.5
10	765 kV	VINDHYACHAL-VARANASI	2	0	2295	0.0	26.4	-26.4
11	400 kV	ZERDA-KANKROLI	1	208	170	2.4	0.2	2.1
12	400 kV	ZERDA -BHINMAL	1	650	320	4.6	1.0	3.7
13	400 kV	VINDHYACHAL -RIHAND	1	487	0	11.0	0.0	11.0
14	400 kV	RAPP-SHUJALPUR	2	477	528	3.2	2.0	1.2
15	220 kV	BHANPURA-RANPUR	1	186	85	1.1	0.3	0.8
16	220 kV	BHANPURA-MORAK	1	0	30	0.4	1.2	-0.9
17	220 kV	MEHGAON-AURAIYA	1	137	0	1.7	0.0	1.7
18	220 kV	MALANPUR-AURAIYA	1	104	16	1.1	0.0	1.1
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						68.8	205.7	-136.9
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1014	0.0	20.0	-20.0
2	HVDC	RAIGARH-PUGALUR	2	0	6630	0.0	88.1	-88.1
3	765 kV	SOLAPUR-RAICHUR	2	670	2635	1.0	24.6	-23.6
4	765 kV	WARDHA-NIZAMABAD	2	0	3041	0.0	42.5	-42.5
5	765 kV	WARORA-WARANGAL(NEW)	2	0	3227	0.0	45.0	-45.0
6	400 kV	KOLHAPUR-KUDGI	2	1413	0	15.4	0.0	15.4
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	103	1.9	0.0	1.9
WR-SR						18.3	220.3	-202.0

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)	-251	-3	-121	-2.90
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-257	180	-84	-2.02
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-223	-41	-135	-3.24
	NER	132kV GELEPHU-SALAKATI	-29	-10	-21	-0.52
	NER	132kV MOTANGA-RANGIA	22	3	11	0.26
NEPAL	NR	NEPAL IMPORT (FROM UP)	-76	0	-64	-1.53
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-76	0	-62	-1.50
	ER	NEPAL IMPORT (FROM BIHAR)	62	0	18	0.43
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-399	-127	-359	-8.61
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-929	-450	-780	-18.72
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-770	-739	-757	-18.18
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-134	0	-108	-2.60

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 02-Feb-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	9.26	0.00	0.00	0.80	0.00	0.00	10.06
Nepal	0.20	0.00	7.78	0.00	0.00	1.41	0.00	0.00	9.39
Bangladesh	18.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.55
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	18.75	0.00	17.04	0.00	0.00	2.21	0.00	0.00	38.00

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44
Nepal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44

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	0.44	0.00	-9.26	0.00	0.00	-0.80	0.00	0.00	-9.62
Nepal	-0.20	0.00	-7.78	0.00	0.00	-1.41	0.00	0.00	-9.39
Bangladesh	-18.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-18.55
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-18.31	0.00	-17.04	0.00	0.00	-2.21	0.00	0.00	-37.56