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, क़ुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 01st February 2024

To,

1. कार्यकारी निदेशक, पू.क्षे .भा .प्रे .के.,14 , गोल्फ क्लब रोड , कोलकाता - 700033
   Executive Director, ERLDC, 14 Golf Club Road, Tollygunge, Kolkata, 700033
2. 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
3. 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
4. कार्यकारी निदेशक, ऊ. पू. क्षे. भा. प्रे. के., डोंगतिएह, लोअर नोंग्रह , लापलंग, शिलोंग – 793006
   Executive Director, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
5. 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 31.01.2024.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 31-जनवरी-2024 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा०भा०प्रे०के० की वेबसाइट पर उप्लब्ध 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 31st January 2024, is available at the NLDC website.

धन्यवाद,

ग्रिड कंट्रलर ऑफ इंडिया लिमिटेड
राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली

Report for previous day **Date of Reporting: 01-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)	55369	61672	48829	20818	2571	189259
Peak Shortage (MW)	430	345	0	950	119	1844
Energy Met (MU)	1201	1500	1219	452	49	4421
Hydro Gen (MU)	88	50	51	22	9	220
Wind Gen (MU)	7	54	30	-	-	91
Solar Gen (MU)*	107.13	56.30	126.83	5.14	0.79	296
Energy Shortage (MU)	6.29	6.67	0.00	7.63	2.15	22.74
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	62879	73740	60804	21573	2609	220092
Time Of Maximum Demand Met	10:40	10:39	09:44	18:15	18:40	10:44

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	0.031	0.00	0.00	3.24	3.24	78.10	18.66

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	6750	0	140.0	36.6	-0.6	303	0.00
	Haryana	7748	0	144.6	89.0	-1.4	234	1.45
	Rajasthan	17486	0	325.0	129.1	-1.0	272	3.41
	Delhi	5296	0	88.7	79.6	1.0	459	0.00
	UP	17985	0	351.6	115.7	-0.8	407	0.00
	Uttarakhand	2343	210	47.0	32.1	1.0	210	0.74
	HP	1941	0	36.9	32.2	0.1	153	0.00
	J&K(UT) & Ladakh(UT)	2917	0	59.0	58.0	-2.8	187	0.69
	Chandigarh	297	0	4.9	4.8	0.1	69	0.00
	Railways_NR ISTS	185	0	3.4	3.4	0.0	43	0.00
WR	Chhattisgarh	5334	0	109.7	45.6	0.0	355	0.00
	Gujarat	20572	0	407.9	151.6	-0.2	458	0.00
	MP	17043	79	323.9	206.1	0.1	850	6.67
	Maharashtra	28384	0	586.0	179.3	2.3	1463	0.00
	Goa	667	0	12.8	12.7	-0.4	75	0.00
	DNHDDPDCL	1259	0	29.2	29.2	0.0	41	0.00
	AMNSIL	835	0	18.4	9.1	0.0	293	0.00
	BALCO	523	0	12.5	12.5	0.0	6	0.00
SR	Andhra Pradesh	12029	0	221.5	88.9	0.0	682	0.00
	Telangana	13511	0	254.8	124.6	-0.4	870	0.00
	Karnataka	15668	0	293.0	119.1	-1.7	721	0.00
	Kerala	4340	0	85.8	68.7	0.9	188	0.00
	Tamil Nadu	17035	0	354.8	184.5	3.5	1427	0.00
	Puducherry	418	0	9.2	8.9	-0.2	25	0.00
ER	Bihar	4813	330	94.2	85.2	-2.9	386	5.10
	DVC	3393	0	71.0	-47.5	-1.2	342	0.00
	Jharkhand	1611	91	31.3	22.6	-0.9	255	2.54
	Odisha	4875	0	98.7	10.4	-0.7	350	0.00
	West Bengal	7245	0	154.2	27.5	-2.2	364	0.00
	Sikkim	126	0	2.1	2.2	-0.1	19	0.00
	Railways_ER ISTS	6	0	0.1	0.1	0.0	1	0.00
NER	Arunachal Pradesh	181	0	3.1	2.9	0.2	82	0.00
	Assam	1413	109	26.8	24.1	0.6	203	1.76
	Manipur	221	10	3.1	2.8	0.3	46	0.39
	Meghalaya	349	0	6.8	5.1	0.0	327	0.00
	Mizoram	158	0	2.5	1.7	-0.2	27	0.00
	Nagaland	145	0	2.2	2.3	-0.1	35	0.00
	Tripura	228	0	4.0	3.7	-0.2	33	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-7.3	-11.3	-20.9	-19.1
Day Peak (MW)	-603.0	-588.0	-1073.0	-1322.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	245.0	-273.9	162.8	-143.7	9.7	0.0
Actual(MU)	241.8	-287.0	176.8	-148.8	10.4	-6.8
O/D/U/D(MU)	-3.2	-13.2	14.0	-5.1	0.6	-6.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	7371	9014	4638	5582	533	27137	52
State Sector	7821	10257	4235	2297	380	24988	48
Total	15192	19270	8873	7879	912	52126	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	740	1639	754	661	11	3805	79
Lignite	34	15	70	0	0	119	2
Hydro	88	50	51	22	9	220	5
Nuclear	31	40	52	0	0	123	3
Gas, Naptha & Diesel	16	48	6	0	22	92	2
RES (Wind, Solar, Biomass & Others)	136	114	187	7	1	445	9
Total	1045	1906	1119	690	43	4804	100

Share of RES in total generation (%)	13.02	5.96	16.70	1.02	1.82	9.25
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	24.50	10.70	25.95	4.24	24.67	16.46

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.006
Based on State Max Demands	1.023

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	220092	10:44	1756
Non-Solar hr	194664	18:43	1806

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: 01-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	729	0.0	12.4	-12.4
4	765 kV	SASARAM-FATEHPUR	1	0	472	0.0	9.3	-9.3
5	765 kV	GAYA-BALIA	1	0	748	0.0	12.6	-12.6
6	400 kV	PUSAULI-VARANASI	1	25	59	0.0	0.4	-0.4
7	400 kV	PUSAULI -ALLAHABAD	1	12	73	0.0	0.8	-0.8
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	8	582	0.0	5.9	-5.9
9	400 kV	PATNA-BALIA	2	0	480	0.0	8.4	-8.4
10	400 kV	NAUBATPUR-BALIA	2	0	509	0.0	9.1	-9.1
11	400 kV	BIHARSHARIFF-BALIA	2	0	354	0.0	6.6	-6.6
12	400 kV	MOTIHARI-GORAKHPUR	2	0	416	0.0	6.3	-6.3
13	400 kV	BIHARSHARIFF-VARANASI	2	0	396	0.0	7.1	-7.1
14	220 kV	SAHUPURI-KARAMNASA	1	0	125	0.0	1.7	-1.7
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.6	0.0	0.6
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	**0.6**	**81.9**	**-81.3**
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	0	1403	0.0	20.9	-20.9
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	692	545	3.2	0.0	3.2
3	765 kV	JHARSUGUDA-DURG	2	0	755	0.0	14.9	-14.9
4	400 kV	JHARSUGUDA-RAIGARH	4	0	745	0.0	13.5	-13.5
5	400 kV	RANCHI-SIPAT	2	69	285	0.0	4.9	-4.9
6	220 kV	BUDHIPADAR-RAIGARH	1	0	160	0.0	2.5	-2.5
7	220 kV	BUDHIPADAR-KORBA	2	0	185	0.0	2.1	-2.1
					ER-WR	**3.2**	**58.8**	**-55.6**
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	515	0.0	11.3	-11.3
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	3	0.0	0.0	0.0
3	765 kV	ANGUL-SRIKAKULAM	2	0	2852	0.0	52.0	-52.0
4	400 kV	TALCHER-I/C	2	1919	0	43.9	0.0	43.9
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	**0.0**	**63.3**	**-63.3**
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	180	97	0.8	0.3	0.6
2	400 kV	ALIPURDUAR-BONGAIGAON	2	582	71	4.8	0.0	4.8
3	220 kV	ALIPURDUAR-SALAKATI	2	97	26	0.6	0.0	0.6
					ER-NER	**6.3**	**0.3**	**6.0**
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-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	3000	0.0	47.1	-47.1
2	HVDC	VINDHYACHAL B/B	-	246	0	6.1	0.0	6.1
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1262	0.0	31.5	-31.5
4	765 kV	GWALIOR-AGRA	2	0	2284	0.0	30.5	-30.5
5	765 kV	GWALIOR-PHAGI	2	0	1906	0.0	30.3	-30.3
6	765 kV	JABALPUR-ORAI	2	0	1101	0.0	30.4	-30.4
7	765 kV	GWALIOR-ORAI	1	1072	0	17.7	0.0	17.7
8	765 kV	SATNA-ORAI	1	0	1052	0.0	20.2	-20.2
9	765 kV	BANASKANTHA-CHITORGARH	2	887	523	10.7	0.9	9.9
10	765 kV	VINDHYACHAL-VARANASI	2	0	2824	0.0	39.0	-39.0
11	400 kV	ZERDA-KANKROLI	1	156	106	1.4	0.2	1.1
12	400 kV	ZERDA -BHINMAL	1	519	259	3.0	1.2	1.8
13	400 kV	VINDHYACHAL -RIHAND	1	489	0	10.9	0.0	10.9
14	400 kV	RAPP-SHUJALPUR	2	286	440	1.0	2.9	-1.8
15	220 kV	BHANPURA-RANPUR	1	138	117	0.8	0.5	0.3
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.6	-1.6
17	220 kV	MEHGAON-AURAIYA	1	118	1	1.2	0.0	1.2
18	220 kV	MALANPUR-AURAIYA	1	87	22	0.7	0.0	0.7
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	**53.5**	**236.1**	**-182.6**
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1013	0.0	22.4	-22.4
2	HVDC	RAIGARH-PUGALUR	2	0	4513	0.0	77.9	-77.9
3	765 kV	SOLAPUR-RAICHUR	2	1134	2423	4.0	15.5	-11.5
4	765 kV	WARDHA-NIZAMABAD	2	0	2531	0.0	32.2	-32.2
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2540	0.0	35.5	-35.5
6	400 kV	KOLHAPUR-KUDGI	2	1525	0	17.9	0.0	17.9
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	98	1.8	0.0	1.8
					WR-SR	**23.7**	**183.6**	**-159.9**

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 MANGDECHU HEP 4*180MW)	-246	-9	-137	-3.28
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-254	176	-23	-0.55
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-228	-20	-134	-3.21
	NER	132kV GELEPHU-SALAKATI	-27	0	-22	-0.52
	NER	132kV MOTANGA-RANGIA	28	0	10	0.24
NEPAL	NR	NEPAL IMPORT (FROM UP)	-80	0	-11	-0.27
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-80	0	-60	-1.44
	ER	NEPAL IMPORT (FROM BIHAR)	-139	-5	-29	-0.70
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-449	-30	-370	-8.88
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-944	-432	-762	-18.28
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1322	-457	-796	-19.11
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-129	0	-108	-2.59

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 01-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	9.31	0.00	0.00	0.34	0.00	0.00	9.65
Nepal	0.18	0.00	7.83	0.00	0.00	0.48	0.00	0.00	8.49
Bangladesh	18.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.18
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	18.36	0.00	17.14	0.00	0.00	0.82	0.00	0.00	36.32

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	-9.31	0.00	0.00	-0.34	0.00	0.00	-9.21
Nepal	-0.18	0.00	-7.83	0.00	0.00	-0.48	0.00	0.00	-8.49
Bangladesh	-18.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-18.18
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-17.92	0.00	-17.14	0.00	0.00	-0.82	0.00	0.00	-35.88