



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: 18<sup>th</sup> May 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 17.05.2023.**

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 17-मई-2023 की अखिल भारतीय प्रणाली की

दैनिक ग्रीड निष्पादन रिपोर्ट रा०भा०प्रे०के० 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 17<sup>th</sup> May 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 18-May-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 20:00 hrs; from RLDCs)	61292	61517	50329	23855	2642	199635
Peak Shortage (MW)	130	44	1003	545	55	1777
Energy Met (MU)	1466	1477	1229	561	44	4777
Hydro Gen (MU)	218	48	90	48	10	412
Wind Gen (MU)	55	157	51	-	-	263
Solar Gen (MU)*	136.54	67.09	132.98	5.64	0.73	343
Energy Shortage (MU)	7.87	1.58	8.22	6.26	1.30	25.23
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	66838	68011	58369	26592	2672	221076
Time Of Maximum Demand Met	14:29	14:50	14:50	14:47	19:45	14:50

**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	0.050	0.00	0.53	9.44	9.98	73.43	16.60

**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	10133	0	202.8	77.0	-0.7	177	0.00
	Haryana	8905	0	198.3	130.5	0.1	261	2.64
	Rajasthan	15537	0	310.4	72.0	-3.9	369	1.95
	Delhi	5867	0	118.6	107.9	-1.9	163	0.00
	UP	23175	120	492.5	204.5	-3.3	240	2.03
	Uttarakhand	2322	0	48.2	29.1	0.4	227	0.37
	HP	1530	0	31.4	8.7	0.3	171	0.00
	J&K(UT) & Ladakh(UT)	2719	0	54.4	38.4	-0.3	240	0.88
	Chandigarh	318	0	6.0	6.0	0.1	53	0.00
Railways_NR ISTS	175	0	3.9	3.1	0.7	53	0.00	
WR	Chhattisgarh	4860	0	109.0	45.6	-1.6	187	0.00
	Gujarat	20479	0	439.4	180.3	-1.6	788	0.00
	MP	12004	0	261.4	138.3	-3.7	321	0.00
	Maharashtra	27404	0	594.6	203.3	-0.3	806	0.74
	Goa	700	0	14.5	14.8	-0.7	71	0.84
	DNHDDPDCL	1207	0	26.4	27.0	-0.6	64	0.00
	AMNSIL	858	0	19.3	9.8	-0.1	260	0.00
	BALCO	519	0	12.4	12.5	-0.1	4	0.00
SR	Andhra Pradesh	12482	151	249.0	106.6	5.8	1255	6.25
	Telangana	9627	0	198.0	75.3	1.0	513	0.00
	Karnataka	14353	0	274.4	91.7	7.1	1520	1.97
	Kerala	4726	0	99.4	67.6	0.7	275	0.00
	Tamil Nadu	18083	0	396.7	247.0	3.4	874	0.00
	Puducherry	512	0	11.3	10.4	0.2	59	0.00
	Bihar	6214	0	121.9	112.7	-3.2	481	1.64
ER	DVC	3626	0	77.7	-52.2	0.6	342	0.00
	Jharkhand	1699	101	34.5	27.6	-1.8	315	4.62
	Odisha	6474	0	120.6	48.7	-3.1	520	0.00
	West Bengal	10359	0	205.1	70.2	-2.0	351	0.00
	Sikkim	92	0	1.5	1.0	0.5	61	0.00
	Railways_ER ISTS	11	0	0.1	0.2	-0.1	0	0.00
NER	Arunachal Pradesh	161	0	2.7	2.4	0.2	46	0.00
	Assam	1701	0	26.6	20.4	0.3	147	0.13
	Manipur	167	0	2.2	2.3	-0.1	38	0.00
	Meghalaya	302	55	4.6	3.0	-0.3	45	1.17
	Mizoram	100	0	1.5	1.6	-0.4	4	0.00
	Nagaland	146	0	2.3	2.4	-0.1	11	0.00
	Tripura	235	0	4.2	4.1	-0.1	39	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	2.5	-8.2	-24.5	-9.7
Day Peak (MW)	300.0	-544.5	-1074.0	-459.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	219.0	-295.5	176.0	-94.3	-5.2	0.0
Actual(MU)	198.6	-312.1	215.9	-103.8	-5.2	-6.5
O/D/U/D(MU)	-20.4	-16.6	39.9	-9.5	0.1	-6.5

**F. Generation Outage(MW)**

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	2646	6992	5708	2400	425	18171	45
State Sector	5170	10317	5378	1070	277	22211	55
Total	7815	17309	11086	3470	702	40382	100

**G. Sourcewise generation (Gross) (MU)**

	NR	WR	SR	ER	NER	All India	% Share
Coal	868	1534	682	700	16	3801	74
Lignite	18	17	54	0	0	90	2
Hydro	218	48	90	48	10	412	8
Nuclear	25	44	52	0	0	121	2
Gas, Naptha & Diesel	24	41	6	0	29	99	2
RES (Wind, Solar, Biomass & Others)	203	225	212	6	1	648	13
Total	1356	1909	1095	754	56	5171	100

Share of RES in total generation (%)	15.00	11.81	19.38	0.84	1.31	12.54
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	32.85	16.62	32.29	6.91	18.48	22.81

**H. All India Demand Diversity Factor**

Based on Regional Max Demands	1.006
Based on State Max Demands	1.039

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	221076	14:50	515.5
Non-Solar hr	204951	22:34	3175

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: 18-May-2023

Sl No	Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
<b>Import/Export of ER (With NR)</b>								
1	HVDC	ALIPURDUAR-AGRA	2	0	0	0.0	0.0	0.0
2	HVDC	PUSAULI B/B	-	0	247	0.0	2.4	-2.4
3	765 kV	GAYA-VARANASI	2	162	444	0.0	4.0	-4.0
4	765 kV	SASARAM-FATEHPUR	1	0	278	0.0	3.9	-3.9
5	765 kV	GAYA-BALIA	1	0	631	0.0	11.3	-11.3
6	400 kV	PUSAULI-VARANASI	1	0	142	0.0	1.4	-1.4
7	400 kV	PUSAULI-ALLAHABAD	1	0	123	0.0	0.8	-0.8
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	122	754	0.0	7.7	-7.7
9	400 kV	PATNA-BALIA	2	0	540	0.0	8.1	-8.1
10	400 kV	NAUBATPUR-BALIA	2	0	552	0.0	7.8	-7.8
11	400 kV	BIHARSHARIFF-BALIA	2	84	293	0.0	2.9	-2.9
12	400 kV	MOTIHARI-GORAKHPUR	2	0	420	0.0	6.1	-6.1
13	400 kV	BIHARSHARIFF-VARANASI	2	104	201	0.0	1.7	-1.7
14	220 kV	SAHUPURI-KARAMNUSA	1	0	196	0.0	3.0	-3.0
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	25	0	0.4	0.0	0.4
17	132 kV	KARMANASA-SAHUPURI	1	0	62	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
<b>ER-NR</b>						<b>0.4</b>	<b>61.1</b>	<b>-60.7</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	793	616	2.6	0.0	2.6
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	742	357	3.1	0.0	3.1
3	765 kV	JHARSUGUDA-DURG	2	0	439	0.0	7.5	-7.5
4	400 kV	JHARSUGUDA-RAIGARH	4	24	326	0.0	3.9	-3.9
5	400 kV	RANCHI-SIPAT	2	193	75	1.0	0.0	1.0
6	220 kV	BUDHIPADAR-RAIGARH	1	0	77	0.0	1.7	-1.7
7	220 kV	BUDHIPADAR-KORBA	2	155	0	2.5	0.0	2.5
<b>ER-WR</b>						<b>9.2</b>	<b>13.2</b>	<b>-3.9</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	604	0.0	12.4	-12.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1692	0.0	40.8	-40.8
3	765 kV	ANGUL-SRIKAKULAM	2	0	2941	0.0	49.1	-49.1
4	400 kV	TALCHER-I/C	2	207	0	3.5	0.0	3.5
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>0.0</b>	<b>102.3</b>	<b>-102.3</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	244	0	3.3	0.0	3.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	751	0	11.0	0.0	11.0
3	220 kV	ALIPURDUAR-SALAKATI	2	146	0	2.2	0.0	2.2
<b>ER-NER</b>						<b>16.5</b>	<b>0.0</b>	<b>16.5</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIALI-AGRA	2	484	0	11.4	0.0	11.4
<b>NER-NR</b>						<b>11.4</b>	<b>0.0</b>	<b>11.4</b>
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3534	0.0	77.9	-77.9
2	HVDC	VINDHYACHAL B/B	-	451	0	12.0	0.0	12.0
3	HVDC	MUNDRA-MOHINDERGARH	2	0	788	0.0	19.4	-19.4
4	765 kV	GWALIOR-AGRA	2	0	1611	0.0	25.5	-25.5
5	765 kV	GWALIOR-PHAGI	2	337	1015	1.2	10.7	-9.6
6	765 kV	JABALPUR-ORAI	2	0	724	0.0	19.7	-19.7
7	765 kV	GWALIOR-ORAI	1	572	0	9.3	0.0	9.3
8	765 kV	SATNA-ORAI	1	0	938	0.0	19.3	-19.3
9	765 kV	BANASKANTHA-CHITORGARH	2	1301	214	10.1	0.3	9.8
10	765 kV	VINDHYACHAL-VARANASI	2	0	2389	0.0	45.3	-45.3
11	400 kV	ZERDA-KANKROLI	1	228	0	2.8	0.0	2.8
12	400 kV	ZERDA-BHINMAL	1	517	0	6.2	0.0	6.2
13	400 kV	VINDHYACHAL-RIHAND	1	966	0	21.9	0.0	21.9
14	400 kV	RAPP-SHUJALPUR	2	372	212	3.3	0.9	2.4
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.9	-2.9
17	220 kV	MEHGAON-AURAIYA	1	73	3	0.9	0.0	0.9
18	220 kV	MALANPUR-AURAIYA	1	63	2	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
<b>WR-NR</b>						<b>68.2</b>	<b>221.7</b>	<b>-153.4</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	0	1009	0.0	24.0	-24.0
2	HVDC	RAIGARH-PUGALUR	2	0	6022	0.0	122.2	-122.2
3	765 kV	SOLAPUR-RAICHUR	2	913	2061	6.1	11.6	-5.6
4	765 kV	WARDHA-NIZAMABAD	2	0	2534	0.0	32.3	-32.3
5	400 kV	KOLHAPUR-KUDGI	2	1233	0	21.8	0.0	21.8
6	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
7	220 kV	PONDA-AMBEWADI	1	0	91	0.0	0.8	-0.8
8	220 kV	XELDEM-AMBEWADI	1	1	116	0.6	0.0	0.6
<b>WR-SR</b>						<b>28.6</b>	<b>190.9</b>	<b>-162.4</b>

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)	94	-23	40	0.96	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	260	124	156	3.76	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-170	-4	-96	-2.30	
	NER	132kV GELEPHU-SALAKATI	-21	-6	-16	-0.39	
	NER	132kV MOTANGA-RANGIA	28	5	18	0.42	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-74	0	-61	-1.46	
	ER	NEPAL IMPORT (FROM BIHAR)	-102	-6	-36	-0.88	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-369	-104	-245	-5.87	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-927	-817	-900	-21.60	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-459	-342	-404	-9.70	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-147	0	-123	-2.94	