



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: 23<sup>st</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, लापालंग, 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 22.05.2023.**

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 22-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 22<sup>th</sup> May 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 23-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)	68209	61184	46719	25582	2864	204558
Peak Shortage (MW)	135	0	0	570	61	766
Energy Met (MU)	1544	1472	1109	560	49	4735
Hydro Gen (MU)	261	36	65	48	14	423
Wind Gen (MU)	59	135	45	-	-	238
Solar Gen (MU)*	143.52	68.03	120.50	2.44	0.95	335
Energy Shortage (MU)	5.79	0.00	0.00	8.72	1.36	15.87
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	69729	68657	54614	26927	2979	220974
Time Of Maximum Demand Met	14:30	15:17	15:28	14:56	19:03	15:02

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	0.078	0.37	3.89	10.21	14.47	66.25	19.28

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	10359	0	214.4	99.3	-0.5	133	0.00
	Haryana	9459	928	203.4	140.2	0.9	220	2.94
	Rajasthan	15627	0	327.3	78.4	-3.8	191	0.94
	Delhi	6427	0	129.9	118.3	-2.4	118	0.00
	UP	25910	0	521.7	230.7	-1.3	409	1.59
	Uttarakhand	2385	0	49.8	27.1	-0.9	99	0.16
	HP	1516	0	30.8	2.5	0.0	170	0.02
	J&K(UT) & Ladakh(UT)	2828	0	56.7	32.0	-1.2	81	0.14
	Chandigarh	330	0	6.5	6.5	0.0	40	0.00
Railways_NR ISTS	181	0	3.9	3.2	0.7	56	0.00	
WR	Chhattisgarh	4666	0	106.6	53.9	-0.1	350	0.00
	Gujarat	21293	0	446.3	201.1	-4.0	622	0.00
	MP	11856	0	256.4	142.4	-2.3	518	0.00
	Maharashtra	27426	0	590.0	219.2	-1.6	764	0.00
	Goa	749	0	15.0	15.8	-1.2	43	0.00
	DNHDDPDCL	1251	0	28.6	28.8	-0.2	51	0.00
	AMNSIL	769	0	17.0	10.1	0.0	229	0.00
	BALCO	518	0	12.4	12.4	0.0	9	0.00
	SR	Andhra Pradesh	11591	0	233.0	84.7	3.3	1171
Telangana		8995	0	179.1	46.7	-0.5	454	0.00
Karnataka		12774	0	236.5	63.6	-0.7	1022	0.00
Kerala		4150	0	88.6	65.0	-0.1	422	0.00
Tamil Nadu		17228	0	360.7	229.5	3.0	989	0.00
Puducherry		492	0	10.8	10.1	0.0	85	0.00
ER	Bihar	6657	0	130.3	121.6	-1.8	246	0.34
	DVC	3569	0	76.0	-35.0	1.5	392	0.00
	Jharkhand	1771	0	32.7	25.3	-0.1	466	8.37
	Odisha	6762	0	118.2	60.6	-2.2	311	0.00
	West Bengal	10533	0	201.3	82.8	-2.6	320	0.00
	Sikkim	104	0	1.5	1.1	0.5	69	0.00
	Railways_ER ISTS	9	0	0.2	0.2	0.0	3	0.00
NER	Arunachal Pradesh	155	0	2.6	2.9	-0.4	43	0.00
	Assam	1830	0	30.9	24.1	0.5	188	0.33
	Manipur	169	0	2.3	2.3	-0.1	30	0.00
	Meghalaya	289	61	4.5	2.4	-0.3	31	1.03
	Mizoram	117	0	1.8	1.8	-0.1	15	0.00
	Nagaland	141	0	2.5	2.5	-0.1	22	0.00
	Tripura	327	0	4.9	4.6	0.6	88	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	0.6	-7.2	-25.0	-14.6
Day Peak (MW)	92.9	-514.8	-1105.0	-672.5

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	247.9	-273.3	117.3	-88.3	-3.5	0.0
Actual(MU)	226.5	-279.2	137.0	-76.4	-0.8	7.1
O/D/U/D(MU)	-21.4	-5.9	19.8	11.9	2.7	7.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	2076	5427	6288	270	425	14486	38
State Sector	5255	12190	3068	2990	277	23779	62
Total	7331	17616	9356	3260	702	38265	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	848	1547	709	660	14	3778	74
Lignite	20	17	48	0	0	84	2
Hydro	261	36	65	48	14	423	8
Nuclear	29	38	46	0	0	113	2
Gas, Naptha & Diesel	36	41	6	0	28	111	2
RES (Wind, Solar, Biomass & Others)	211	204	189	2	1	608	12
Total	1406	1881	1062	710	57	5117	100

Share of RES in total generation (%)	15.03	10.84	17.78	0.35	1.65	11.87
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	35.69	14.72	28.20	7.06	26.04	22.35

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.008
Based on State Max Demands	1.046

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	220974	15:02	182
Non-Solar hr	209152	22:58	2419

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: 23-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	97	0.0	2.5	-2.5
3	765 kV	GAYA-VARANASI	2	312	632	0.0	3.2	-3.2
4	765 kV	SASARAM-FATEHPUR	1	43	459	0.0	3.4	-3.4
5	765 kV	GAYA-BALIA	1	0	717	0.0	12.6	-12.6
6	400 kV	PUSAULI-VARANASI	1	0	122	0.0	1.5	-1.5
7	400 kV	PUSAULI -ALLAHABAD	1	14	102	0.0	0.9	-0.9
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	84	960	0.0	9.2	-9.2
9	400 kV	PATNA-BALIA	2	0	724	0.0	10.9	-10.9
10	400 kV	NAUBATPUR-BALIA	2	0	754	0.0	11.2	-11.2
11	400 kV	BIHARSHARIFF-BALIA	2	150	465	0.0	3.6	-3.6
12	400 kV	MOTTHARI-GORAKHPUR	2	0	585	0.0	7.2	-7.2
13	400 kV	BIHARSHARIFF-VARANASI	2	235	338	0.0	1.5	-1.5
14	220 kV	SAHUPURI-KARAMNANA	1	0	206	0.0	3.6	-3.6
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	25	0	0.3	0.0	0.3
17	132 kV	KARMANASA-SAHUPURI	1	0	64	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>0.3</b>	<b>71.2</b>	<b>-70.8</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1411	0	17.7	0.0	17.7
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1531	0	24.0	0.0	24.0
3	765 kV	JHARSUGUDA-DURG	2	0	388	0.0	4.7	-4.7
4	400 kV	JHARSUGUDA-RAIGARH	4	100	442	0.0	4.2	-4.2
5	400 kV	RANCHI-SIPAT	2	337	47	3.3	0.0	3.3
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	0.8	-0.8
7	220 kV	BUDHIPADAR-KORBA	2	187	0	2.9	0.0	2.9
<b>ER-WR</b>						<b>47.9</b>	<b>9.7</b>	<b>38.3</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	545	0.0	12.5	-12.5
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1650	0.0	39.6	-39.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2700	0.0	51.4	-51.4
4	400 kV	TALCHER-I/C	2	285	13	4.8	0.0	4.8
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>0.0</b>	<b>103.5</b>	<b>-103.5</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	256	33	2.2	0.0	2.1
2	400 kV	ALIPURDUAR-BONGAIGAON	2	796	0	9.2	0.0	9.2
3	220 kV	ALIPURDUAR-SALAKATI	2	146	0	1.8	0.0	1.8
<b>ER-NER</b>						<b>13.1</b>	<b>0.0</b>	<b>13.1</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIALI-AGRA	2	483	0	10.5	0.0	10.5
<b>NER-NR</b>						<b>10.5</b>	<b>0.0</b>	<b>10.5</b>
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	4011	0.0	61.5	-61.5
2	HVDC	VINDHYACHAL B/B	-	454	0	12.2	0.0	12.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	301	0.0	7.4	-7.4
4	765 kV	GWALIOR-AGRA	2	0	2211	0.0	35.2	-35.2
5	765 kV	GWALIOR-PHAGI	2	556	1590	1.7	14.7	-13.1
6	765 kV	JABALPUR-ORAI	2	0	1147	0.0	31.3	-31.3
7	765 kV	GWALIOR-ORAI	1	677	0	10.4	0.0	10.4
8	765 kV	SATNA-ORAI	1	0	1078	0.0	20.3	-20.3
9	765 kV	BANASKANTHA-CHITORGARH	2	1082	618	8.1	1.1	7.0
10	765 kV	VINDHYACHAL-VARANASI	2	0	3416	0.0	59.0	-59.0
11	400 kV	ZERDA-KANKROLI	1	190	91	2.1	0.1	2.0
12	400 kV	ZERDA -BHINMAL	1	654	130	5.8	0.2	5.7
13	400 kV	VINDHYACHAL -RIHAND	1	965	0	21.8	0.0	21.8
14	400 kV	RAPP-SHUJALPUR	2	418	454	2.4	2.6	-0.2
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.4	-2.4
17	220 kV	MEHGAON-AURAIYA	1	72	0	0.8	0.0	0.7
18	220 kV	MALANPUR-AURAIYA	1	54	15	0.4	0.0	0.4
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>65.8</b>	<b>235.8</b>	<b>-170.1</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	0	504	0.0	12.0	-12.0
2	HVDC	RAIGARH-PUGALUR	2	0	2501	0.0	47.1	-47.1
3	765 kV	SOLAPUR-RAICHUR	2	861	1724	4.6	11.8	-7.2
4	765 kV	WARDHA-NIZAMABAD	2	0	2126	0.0	29.9	-29.9
5	400 kV	KOLHAPUR-KUDGI	2	1228	0	23.0	0.0	23.0
6	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
7	220 kV	PONDA-AMBEWADI	1	2	0	0.0	0.0	0.0
8	220 kV	XELDEM-AMBEWADI	1	1	133	2.4	0.0	2.4
<b>WR-SR</b>						<b>30.0</b>	<b>100.8</b>	<b>-70.8</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)	118	-27	43	1.02
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	177	68	130	3.13
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-169	-93	-136	-3.27
	NER	132kV GELEPHU-SALAKATI	20	5	12	0.29
	NER	132kV MOTANGA-RANGIA	-38	-7	-23	-0.56
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-76	0	-58	-1.40
	ER	NEPAL IMPORT (FROM BIHAR)	-106	-15	-67	-1.60
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-333	-25	-177	-4.25
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-937	-784	-905	-21.71
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-673	-533	-608	-14.60
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-168	0	-136	-3.26