



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: 21<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 , 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 20.05.2023.**

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 20-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 20<sup>th</sup> May 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 21-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)	65328	62216	48310	25628	2678	204160
Peak Shortage (MW)	100	0	0	305	43	448
Energy Met (MU)	1467	1495	1214	561	50	4788
Hydro Gen (MU)	228	47	69	71	17	431
Wind Gen (MU)	45	123	81	-	-	249
Solar Gen (MU)*	140.92	64.58	115.59	2.20	1.10	324
Energy Shortage (MU)	1.16	1.00	0.00	1.78	1.32	5.26
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	68261	68500	58366	26777	2859	217155
Time Of Maximum Demand Met	22:29	15:01	12:57	23:17	18:48	15:20

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	0.045	0.00	0.35	5.80	6.15	73.90	19.95

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	9186	0	197.3	72.4	0.2	221	0.00
	Haryana	9556	0	193.4	138.3	-0.5	119	0.00
	Rajasthan	15459	0	318.0	89.2	-3.3	374	0.00
	Delhi	5391	0	110.9	102.5	-4.3	13	0.00
	UP	24774	0	501.3	218.2	-0.4	362	0.97
	Uttarakhand	2298	0	48.7	28.9	-0.3	113	0.01
	HP	1579	0	31.7	8.8	-0.2	98	0.00
	J&K(UT) & Ladakh(UT)	2760	0	56.0	35.3	-2.0	220	0.18
	Chandigarh	284	0	5.8	5.8	-0.1	33	0.00
Railways_NR ISTS	171	0	3.8	3.3	0.5	29	0.00	
WR	Chhattisgarh	4724	0	104.2	44.1	-1.8	291	0.00
	Gujarat	21022	0	447.8	206.5	-1.7	894	0.00
	MP	12075	0	271.2	151.5	-3.3	375	0.00
	Maharashtra	27254	0	596.0	214.3	-0.7	858	1.00
	Goa	747	0	16.5	15.9	0.2	55	0.00
	DNHDDPDCL	1230	0	28.8	29.1	-0.3	32	0.00
	AMNSIL	829	0	17.7	9.1	-0.1	279	0.00
	BALCO	520	0	12.4	12.4	0.0	7	0.00
SR	Andhra Pradesh	12113	0	235.8	83.1	-0.5	586	0.00
	Telangana	9441	0	195.5	70.4	-1.6	302	0.00
	Karnataka	15092	0	287.5	94.8	0.0	745	0.00
	Kerala	4713	0	96.9	69.0	0.0	373	0.00
	Tamil Nadu	17949	0	387.7	220.8	-0.5	475	0.00
	Puducherry	498	0	11.1	10.7	-0.4	48	0.00
ER	Bihar	6514	0	132.0	119.9	-1.4	220	0.17
	DVC	3529	0	78.4	-35.9	2.0	501	0.00
	Jharkhand	1825	115	36.6	30.5	-2.2	184	1.61
	Odisha	6196	0	121.5	58.2	-0.6	491	0.00
	West Bengal	9712	0	191.4	62.3	-1.9	307	0.00
	Sikkim	86	0	1.3	1.3	0.0	54	0.00
	Railways_ER ISTS	8	0	0.1	0.1	-0.1	2	0.00
NER	Arunachal Pradesh	138	0	2.3	2.9	-0.7	9	0.00
	Assam	1740	0	31.8	25.6	0.1	156	0.00
	Manipur	177	0	2.2	2.3	-0.1	13	0.00
	Meghalaya	314	43	4.8	3.8	-0.1	71	1.32
	Mizoram	113	0	1.7	1.8	-0.3	15	0.00
	Nagaland	158	0	2.4	2.4	-0.1	14	0.00
	Tripura	300	0	5.2	5.5	0.2	54	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	5.3	-4.1	-24.7	-10.4
Day Peak (MW)	367.4	-162.2	-1103.0	-614.4

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	238.8	-260.0	130.3	-105.1	-4.1	0.0
Actual(MU)	211.8	-264.0	157.9	-106.7	-2.9	-3.8
O/D/U/D(MU)	-27.0	-4.0	27.6	-1.7	1.2	-3.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	2513	5677	5288	270	425	14173	39
State Sector	5805	10865	2298	2520	277	21764	61
Total	8318	16542	7586	2790	702	35937	100

G. Sourcwise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	834	1555	736	673	15	3813	74
Lignite	22	18	48	0	0	89	2
Hydro	228	47	69	71	17	431	8
Nuclear	25	44	46	0	0	115	2
Gas, Naptha & Diesel	34	39	6	0	28	107	2
RES (Wind, Solar, Biomass & Others)	198	189	227	2	1	617	12
Total	1340	1892	1132	745	61	5171	100

Share of RES in total generation (%)	14.73	9.97	20.05	0.30	1.81	11.92
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	33.62	14.79	30.19	9.78	29.12	22.49

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.035
Based on State Max Demands	1.061

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	217155	15:20	54
Non-Solar hr	212042	22:30	364

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: 21-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	2.4	-2.4
3	765 kV	GAYA-VARANASI	2	0	728	0.0	8.1	-8.1
4	765 kV	SASARAM-FATEHPUR	1	0	454	0.0	7.0	-7.0
5	765 kV	GAYA-BALIA	1	0	804	0.0	13.5	-13.5
6	400 kV	PUSAULI-VARANASI	1	0	85	0.0	1.2	-1.2
7	400 kV	PUSAULI -ALLAHABAD	1	0	88	0.0	1.2	-1.2
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	934	0.0	13.1	-13.1
9	400 kV	PATNA-BALIA	2	0	669	0.0	11.0	-11.0
10	400 kV	NAUBATPUR-BALIA	2	0	706	0.0	11.5	-11.5
11	400 kV	BIHARSHARIFF-BALIA	2	0	543	0.0	7.0	-7.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	500	0.0	8.0	-8.0
13	400 kV	BIHARSHARIFF-VARANASI	2	18	360	0.0	3.9	-3.9
14	220 kV	SAHUPURI-KARAMNANA	1	0	198	0.0	3.9	-3.9
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	25	0	0.5	0.0	0.5
17	132 kV	KARMANASA-SAHUPURI	1	0	54	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>0.5</b>	<b>91.7</b>	<b>-91.2</b>
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1352	25	19.6	0.0	19.6
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1208	215	15.5	0.0	15.5
3	765 kV	JHARSUGUDA-DURG	2	0	448	0.0	6.7	-6.7
4	400 kV	JHARSUGUDA-RAIGARH	4	0	456	0.0	6.0	-6.0
5	400 kV	RANCHI-SIPAT	2	273	114	1.9	0.0	1.9
6	220 kV	BUDHIPADAR-RAIGARH	1	0	46	0.0	0.9	-0.9
7	220 kV	BUDHIPADAR-KORBA	2	124	0	2.9	0.0	2.9
<b>ER-WR</b>						<b>39.9</b>	<b>13.5</b>	<b>26.3</b>
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	544	0.0	12.3	-12.3
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1784	0.0	35.4	-35.4
3	765 kV	ANGUL-SRIKAKULAM	2	0	2929	0.0	56.3	-56.3
4	400 kV	TALCHER-I/C	2	788	64	8.4	0.0	8.4
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
<b>ER-SR</b>						<b>0.0</b>	<b>103.9</b>	<b>-103.9</b>
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	228	0	3.3	0.0	3.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	662	0	10.5	0.0	10.5
3	220 kV	ALIPURDUAR-SALAKATI	2	103	0	1.3	0.0	1.3
<b>ER-NER</b>						<b>15.1</b>	<b>0.0</b>	<b>15.1</b>
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIALI-AGRA	2	482	0	11.5	0.0	11.5
<b>NER-NR</b>						<b>11.5</b>	<b>0.0</b>	<b>11.5</b>
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	1497	0.0	19.4	-19.4
2	HVDC	VINDHYACHAL B/B	-	451	0	12.1	0.0	12.1
3	HVDC	MUNDRA-MOHINDERGARH	2	0	787	0.0	18.8	-18.8
4	765 kV	GWALIOR-AGRA	2	0	2331	0.0	35.0	-35.0
5	765 kV	GWALIOR-PHAGI	2	29	1355	0.0	19.4	-19.4
6	765 kV	JABALPUR-ORAI	2	0	1102	0.0	33.8	-33.8
7	765 kV	GWALIOR-ORAI	1	657	0	12.3	0.0	12.3
8	765 kV	SATNA-ORAI	1	0	1047	0.0	21.4	-21.4
9	765 kV	BANASKANTHA-CHITORGARH	2	1599	631	14.1	1.6	12.4
10	765 kV	VINDHYACHAL-VARANASI	2	0	3284	0.0	55.3	-55.3
11	400 kV	ZERDA-KANKROLI	1	249	51	2.7	0.1	2.7
12	400 kV	ZERDA -BHINMAL	1	559	0	5.5	0.0	5.5
13	400 kV	VINDHYACHAL -RIHAND	1	967	0	22.0	0.0	22.0
14	400 kV	RAPP-SHUJALPUR	2	339	398	1.7	3.1	-1.4
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.4	-2.4
17	220 kV	MEHGAON-AURAIYA	1	77	0	1.1	0.0	1.1
18	220 kV	MALANPUR-AURAIYA	1	60	0	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>72.2</b>	<b>210.2</b>	<b>-138.0</b>
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	0	505	0.0	12.0	-12.0
2	HVDC	RAIGARH-PUGALUR	2	0	4512	0.0	66.1	-66.1
3	765 kV	SOLAPUR-RAICHUR	2	1127	1422	2.2	9.5	-7.3
4	765 kV	WARDHA-NIZAMABAD	2	0	2230	0.0	36.5	-36.5
5	400 kV	KOLHAPUR-KUDGI	2	1298	0	19.9	0.0	19.9
6	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
7	220 kV	PONDA-AMBEWADI	1	0	0	0.0	0.0	0.0
8	220 kV	XELDEM-AMBEWADI	1	0	126	2.5	0.0	2.5
<b>WR-SR</b>						<b>24.6</b>	<b>124.1</b>	<b>-99.5</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)	234	35	130	3.13	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	194	129	163	3.92	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-140	-58	-104	-2.49	
	NER	132kV GELEPHU-SALAKATI	-15	2	-5	-0.11	
	NER	132kV MOTANGA-RANGIA	48	21	36	0.86	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-72	0	-50	-1.20	
	ER	NEPAL IMPORT (FROM BIHAR)	94	0	41	0.97	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-184	-39	-162	-3.89	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-933	-740	-880	-21.13	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-614	-332	-433	-10.40	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-170	0	-149	-3.58	