



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: 22st 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., डोंगतेिह, 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 21.05.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 21-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 21th May 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 22-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)	65236	58595	42813	24923	2444	194011
Peak Shortage (MW)	88	0	0	141	16	245
Energy Met (MU)	1463	1433	1098	562	46	4602
Hydro Gen (MU)	238	35	63	55	13	405
Wind Gen (MU)	65	132	70	-	-	267
Solar Gen (MU)*	140.11	64.74	115.98	2.34	1.01	324
Energy Shortage (MU)	0.41	0.57	0.00	2.72	0.97	4.67
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	68456	65106	51371	26893	2476	207935
Time Of Maximum Demand Met	22:39	00:00	14:29	00:19	19:08	14:48

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	0.041	0.00	0.00	6.15	6.15	74.26	19.59

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	10336	0	212.0	93.5	-0.7	290	0.00
	Haryana	9328	19	184.0	131.7	-1.8	134	0.32
	Rajasthan	14779	0	315.0	70.3	-6.0	257	0.00
	Delhi	5948	0	110.2	103.4	-6.1	60	0.00
	UP	24821	0	501.7	229.9	0.3	496	0.00
	Uttarakhand	2126	0	46.1	25.9	-0.6	127	0.00
	HP	1387	0	28.7	3.4	0.0	87	0.00
	J&K(UT) & Ladakh(UT)	2744	88	55.8	34.9	-1.1	92	0.09
	Chandigarh	283	0	5.5	5.7	-0.2	21	0.00
Railways NR ISTS	174	0	3.8	3.2	0.6	45	0.00	
WR	Chhattisgarh	4703	0	105.3	45.4	-1.9	168	0.00
	Gujarat	19303	0	422.7	199.9	-0.1	559	0.00
	MP	11753	0	255.9	140.8	-3.3	660	0.00
	Maharashtra	26942	508	579.3	216.8	-3.1	711	0.57
	Goa	719	0	12.5	12.6	-0.5	70	0.00
	DNHDDPDCL	1220	0	28.0	28.3	-0.3	20	0.00
	AMNSIL	768	0	17.3	10.9	-0.3	268	0.00
	BALCO	519	0	12.4	12.4	0.0	12	0.00
SR	Andhra Pradesh	11303	0	225.7	76.4	0.8	762	0.00
	Telangana	8670	0	181.2	53.9	-0.8	466	0.00
	Karnataka	12877	0	243.3	82.8	-2.9	585	0.00
	Kerala	4123	0	86.9	63.9	-0.5	220	0.00
	Tamil Nadu	16147	0	350.1	192.3	0.7	743	0.00
	Puducherry	464	0	10.5	10.5	-0.7	112	0.00
ER	Bihar	6372	0	131.7	122.4	-2.0	182	1.24
	DVC	3402	0	73.2	-30.7	-0.5	368	0.00
	Jharkhand	1821	0	36.6	31.5	-2.5	183	1.48
	Odisha	6940	0	119.4	64.4	-1.5	365	0.00
	West Bengal	9768	0	200.4	74.9	-2.1	253	0.00
	Sikkim	70	0	1.1	1.1	-0.1	20	0.00
Railways ER ISTS	8	0	0.1	0.2	-0.1	2	0.00	
NER	Arunachal Pradesh	148	0	2.4	2.8	-0.5	18	0.00
	Assam	1506	0	27.2	21.1	-0.2	125	0.00
	Manipur	173	0	2.3	2.4	-0.1	29	0.00
	Meghalaya	264	16	4.5	3.6	-0.3	51	0.97
	Mizoram	104	0	1.8	1.7	-0.2	12	0.00
	Nagaland	140	0	2.5	2.5	-0.1	20	0.00
Tripura	257	0	4.9	5.4	0.2	77	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	3.0	-5.9	-25.2	-13.9
Day Peak (MW)	306.0	-395.8	-1114.0	-656.8

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	235.0	-247.9	93.9	-77.5	-3.6	0.0
Actual(MU)	208.9	-256.0	121.6	-78.7	-3.1	-7.3
O/D/U/D(MU)	-26.2	-8.0	27.7	-1.2	0.4	-7.3

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3029	6671	5288	270	400	15658	39
State Sector	5405	12694	2908	3290	277	24573	61
Total	8433	19365	8196	3560	677	40231	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	817	1506	699	658	15	3694	74
Lignite	21	17	47	0	0	85	2
Hydro	238	35	63	55	13	405	8
Nuclear	28	36	46	0	0	109	2
Gas, Naptha & Diesel	19	6	6	0	28	59	1
RES (Wind, Solar, Biomass & Others)	217	198	209	2	1	627	13
Total	1341	1798	1070	715	56	4980	100

Share of RES in total generation (%)	16.20	11.00	19.51	0.33	1.79	12.59
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	36.05	14.94	29.73	8.05	24.55	22.92

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.030
Based on State Max Demands	1.069

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	207935	14:48	27
Non-Solar hr	207895	0:01	807

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: 22-May-2023

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	97	0.0	2.5	-2.5
3	765 kV	GAYA-VARANASI	2	650	588	0.0	2.2	-2.2
4	765 kV	SASARAM-FATEHPUR	1	159	444	0.0	4.9	-4.9
5	765 kV	GAYA-BALIA	1	0	700	0.0	11.5	-11.5
6	400 kV	PUSAULI-VARANASI	1	0	112	0.0	1.4	-1.4
7	400 kV	PUSAULI-ALLAHABAD	1	6	98	0.0	1.1	-1.1
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	155	932	0.0	11.4	-11.4
9	400 kV	PATNA-BALIA	2	0	692	0.0	11.1	-11.1
10	400 kV	NAUBATPUR-BALIA	2	0	733	0.0	11.2	-11.2
11	400 kV	BIHARSHARIFF-BALIA	2	158	440	0.0	4.1	-4.1
12	400 kV	MOTIHARI-GORAKHPUR	2	45	588	0.0	8.2	-8.2
13	400 kV	BIHARSHARIFF-VARANASI	2	269	312	0.0	1.7	-1.7
14	220 kV	SAHUPURI-KARAMNANA	1	0	204	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	62	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDALI	1	0	0	0.0	0.0	0.0
					ER-NR	0.5	75.0	-74.5
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1493	0	17.9	0.0	17.9
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1347	0	21.9	0.0	21.9
3	765 kV	JHARSUGUDA-DURG	2	8	350	0.0	4.7	-4.7
4	400 kV	JHARSUGUDA-RAIGARH	4	196	357	0.0	3.1	-3.1
5	400 kV	RANCHI-SIPAT	2	362	0	4.3	0.0	4.3
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	0.6	-0.6
7	220 kV	BUDHIPADAR-KORBA	2	163	0	3.6	0.0	3.6
					ER-WR	47.6	8.5	39.1
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	545	0.0	12.5	-12.5
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1976	0.0	44.1	-44.1
3	765 kV	ANGUL-SRIKAKULAM	2	0	2574	0.0	45.4	-45.4
4	400 kV	TALCHER-I/C	2	239	698	0.0	1.0	-1.0
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	102.0	-102.0
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	284	0	3.1	0.0	3.1
2	400 kV	ALIPURDUAR-BONGAIGAON	2	875	0	9.2	0.0	9.2
3	220 kV	ALIPURDUAR-SALAKATI	2	156	0	1.7	0.0	1.7
					ER-NER	14.0	0.0	14.0
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	483	0	11.4	0.0	11.4
					NER-NR	11.4	0.0	11.4
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	1995	0.0	35.2	-35.2
2	HVDC	VINDHYACHAL B/B	-	454	0	12.1	0.0	12.1
3	HVDC	MUNDRA-MOHINDERGARH	2	0	789	0.0	12.3	-12.3
4	765 kV	GWALIOR-AGRA	2	0	2286	0.0	36.0	-36.0
5	765 kV	GWALIOR-PHAGI	2	382	1591	1.2	17.2	-16.0
6	765 kV	JABALPUR-ORAI	2	0	1147	0.0	33.1	-33.1
7	765 kV	GWALIOR-ORAI	1	687	0	11.2	0.0	11.2
8	765 kV	SATNA-ORAI	1	0	1073	0.0	20.3	-20.3
9	765 kV	BANASKANTHA-CHITORGARH	2	1409	483	12.9	1.0	12.0
10	765 kV	VINDHYACHAL-VARANASI	2	0	3281	0.0	64.6	-64.6
11	400 kV	ZERDA-KANKROLI	1	244	58	3.0	0.1	2.9
12	400 kV	ZERDA -BHINMAL	1	648	34	7.7	0.0	7.7
13	400 kV	VINDHYACHAL -RIHAND	1	967	0	22.1	0.0	22.1
14	400 kV	RAPP-SHUJALPUR	2	408	454	2.4	3.8	-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	2.1	-2.1
17	220 kV	MEHGAON-AURAIYA	1	62	4	0.4	0.0	0.4
18	220 kV	MALANPUR-AURAIYA	1	45	19	0.2	0.1	0.2
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	73.2	225.6	-152.4
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	508	0.0	12.0	-12.0
2	HVDC	RAIGARH-PUGALUR	2	0	3001	0.0	48.7	-48.7
3	765 kV	SOLAPUR-RAICHUR	2	1243	732	1.0	8.4	-7.4
4	765 kV	WARDHA-NIZAMABAD	2	0	1550	0.0	22.6	-22.6
5	400 kV	KOLHAPUR-KUDGI	2	1330	0	25.0	0.0	25.0
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	1	120	1.3	0.0	1.3
					WR-SR	27.3	91.7	-64.3

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)	255	54	120	2.88	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	177	135	160	3.84	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-154	-92	-126	-3.01	
	NER	132kV GELEPHU-SALAKATI	-19	-4	-9	-0.22	
	NER	132kV MOTANGA-RANGIA	-37	-11	-22	-0.53	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-75	0	-60	-1.45	
	ER	NEPAL IMPORT (FROM BIHAR)	-97	0	-32	-0.76	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-224	-5	-152	-3.64	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-936	-703	-898	-21.56	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-657	-481	-579	-13.89	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-178	0	-150	-3.61	