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: 29th June 2023

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 28.06.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 28-जून-2023 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 28th June 2023, 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: 29-Jun-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)	67195	51963	46574	23674	3117	192523
Peak Shortage (MW)	35	0	0	0	15	50
Energy Met (MU)	1505	1226	1105	497	61	4393
Hydro Gen (MU)	399	35	40	101	23	597
Wind Gen (MU)	15	121	218	-	-	354
Solar Gen (MU)*	121.71	35.66	105.67	1.81	0.93	266
Energy Shortage (MU)	0.40	0.00	0.00	0.02	0.89	1.31
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	69616	54070	51206	23765	3145	194218
Time Of Maximum Demand Met	22:43	19:34	10:35	20:19	18:55	22:30

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	0.036	0.00	0.16	2.55	2.71	75.38	21.91

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	13824	0	297.9	188.2	-0.6	162	0.00
	Haryana	9708	0	211.1	157.7	-1.2	196	0.00
	Rajasthan	11736	0	259.1	84.5	-1.6	420	0.00
	Delhi	5980	0	122.5	118.4	-1.8	152	0.00
	UP	24155	0	470.4	238.4	-0.3	265	0.00
	Uttarakhand	2145	0	46.0	16.9	-2.6	0	0.00
	HP	1677	0	34.6	-9.0	-0.3	71	0.06
	J&K(UT) & Ladakh(UT)	2459	0	52.8	25.2	1.1	359	0.34
	Chandigarh	302	0	6.2	6.3	0.0	23	0.00
	Railways_NR ISTS	198	0	4.1	3.5	0.6	40	0.00
WR	Chhattisgarh	3934	0	86.7	39.7	-0.8	208	0.00
	Gujarat	16057	0	357.0	186.8	-2.8	860	0.00
	MP	9684	0	205.7	97.0	-3.8	423	0.00
	Maharashtra	22713	0	502.6	174.1	-0.5	718	0.00
	Goa	614	0	12.4	12.4	-0.5	32	0.00
	DNHDDPDCL	1287	0	29.5	29.8	-0.3	65	0.00
	AMNSIL	863	0	19.6	10.2	-0.1	248	0.00
	BALCO	521	0	12.4	12.5	-0.1	7	0.00
SR	Andhra Pradesh	10604	0	229.1	56.1	-1.3	437	0.00
	Telangana	9070	0	187.6	82.9	-0.1	530	0.00
	Karnataka	12152	0	235.8	72.1	-2.4	749	0.00
	Kerala	3807	0	74.1	59.6	2.2	293	0.00
	Tamil Nadu	17390	0	367.5	158.6	-5.7	545	0.00
	Puducherry	465	0	10.4	10.3	-0.7	27	0.00
ER	Bihar	6037	0	115.0	108.9	-2.4	191	0.02
	DVC	3392	0	73.7	-28.7	0.9	338	0.00
	Jharkhand	1500	0	31.1	23.0	-0.7	168	0.00
	Odisha	5279	0	110.5	39.2	-3.8	304	0.00
	West Bengal	7735	0	164.9	52.2	-1.2	289	0.00
	Sikkim	82	0	1.3	1.4	-0.1	19	0.00
	Railways_ER ISTS	20	0	0.2	0.2	0.0	10	0.00
NER	Arunachal Pradesh	164	0	2.9	2.7	0.0	32	0.00
	Assam	2127	0	40.7	33.9	0.2	173	0.00
	Manipur	180	0	2.5	2.5	0.0	23	0.00
	Meghalaya	317	15	5.4	2.8	-0.1	53	0.89
	Mizoram	118	0	1.8	1.6	-0.2	11	0.00
	Nagaland	157	0	2.8	2.5	-0.1	25	0.00
	Tripura	257	0	4.8	4.3	0.3	108	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	25.7	5.6	-25.3	-11.9
Day Peak (MW)	1326.1	240.4	-1082.0	-569.6

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	317.7	-222.3	50.0	-151.9	6.5	0.0
Actual(MU)	283.3	-210.2	69.6	-156.1	9.4	-4.0
O/D/U/D(MU)	-34.4	12.1	19.6	-4.2	2.9	-4.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3269	11406	5068	1550	818	22111	42
State Sector	7945	14810	4438	2660	342	30195	58
Total	11214	26216	9506	4210	1160	52305	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	679	1343	613	622	12	3269	68
Lignite	29	12	56	0	0	98	2
Hydro	399	35	40	101	23	597	12
Nuclear	29	47	46	0	0	122	3
Gas, Naptha & Diesel	16	11	6	0	22	55	1
RES (Wind, Solar, Biomass & Others)	143	157	346	3	1	650	14
Total	1296	1604	1107	726	58	4791	100

Share of RES in total generation (%)	11.07	9.80	31.26	0.37	1.61	13.61
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	44.10	14.88	39.00	14.48	41.12	28.65

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.039
Based on State Max Demands	1.074

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	192549	12:24	135
Non-Solar hr	194218	22:30	67

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: 29-Jun-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	1503	0.0	34.5	-34.5
2	HVDC	PUSAULI B/B	-	0	97	0.0	2.3	-2.3
3	765 kV	GAYA-VARANASI	2	182	368	0.0	2.6	-2.6
4	765 kV	SASARAM-FATEHPUR	1	19	273	0.0	3.2	-3.2
5	765 kV	GAYA-BALIA	1	0	879	0.0	12.3	-12.3
6	400 kV	PUSAULI-VARANASI	1	0	89	0.0	1.2	-1.2
7	400 kV	PUSAULI -ALLAHABAD	1	0	93	0.0	1.1	-1.1
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	861	0.0	13.0	-13.0
9	400 kV	PATNA-BALIA	2	0	698	0.0	11.5	-11.5
10	400 kV	NAUBATPUR-BALIA	2	0	732	0.0	11.3	-11.3
11	400 kV	BIHARSHARIFF-BALIA	2	0	317	0.0	3.9	-3.9
12	400 kV	MOTIHARI-GORAKHPUR	2	0	558	0.0	9.0	-9.0
13	400 kV	BIHARSHARIFF-VARANASI	2	116	286	0.0	2.3	-2.3
14	220 kV	SAHUPURI-KARAMNASA	1	0	157	0.0	2.0	-2.0
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	63	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	0.6	110.1	-109.5
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1196	210	9.9	0.0	9.9
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1329	838	14.5	0.0	14.5
3	765 kV	JHARSUGUDA-DURG	2	7	404	0.0	4.3	-4.3
4	400 kV	JHARSUGUDA-RAIGARH	4	201	218	0.0	0.6	-0.6
5	400 kV	RANCHI-SIPAT	2	282	252	2.5	0.0	2.5
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	1.4	-1.4
7	220 kV	BUDHIPADAR-KORBA	2	129	0	1.9	0.0	1.9
					ER-WR	28.7	6.2	22.5
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	237	0.0	5.1	-5.1
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1984	0.0	33.7	-33.7
3	765 kV	ANGUL-SRIKAKULAM	2	0	2957	0.0	47.6	-47.6
4	400 kV	TALCHER-I/C	2	267	1019	0.0	4.1	-4.1
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	86.4	-86.4
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	518	0.0	9.3	-9.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	137	396	0.0	4.9	-4.9
3	220 kV	ALIPURDUAR-SALAKATI	2	0	107	0.0	1.6	-1.6
					ER-NER	0.0	15.8	-15.8
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	501	0.0	7.8	-7.8
					NER-NR	0.0	7.8	-7.8
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	5052	0.0	71.7	-71.7
2	HVDC	VINDHYACHAL B/B	-	442	0	12.2	0.0	12.2
3	HVDC	MUNDRA-MOHINDERGARH	2	264	0	2.2	0.0	2.2
4	765 kV	GWALIOR-AGRA	2	386	2655	0.3	32.0	-31.7
5	765 kV	GWALIOR-PHAGI	2	14	1760	0.0	20.4	-20.4
6	765 kV	JABALPUR-ORAI	2	108	1291	0.0	30.1	-30.1
7	765 kV	GWALIOR-ORAI	1	633	0	10.6	0.0	10.6
8	765 kV	SATNA-ORAI	1	0	1174	0.0	21.4	-21.4
9	765 kV	BANASKANTHA-CHITORGARH	2	1325	606	12.6	2.1	10.5
10	765 kV	VINDHYACHAL-VARANASI	2	0	3321	0.0	57.2	-57.2
11	400 kV	ZERDA-KANKROLI	1	269	85	2.9	0.2	2.7
12	400 kV	ZERDA -BHINMAL	1	481	97	5.8	0.2	5.6
13	400 kV	VINDHYACHAL -RIHAND	1	955	0	20.7	0.0	20.7
14	400 kV	RAPP-SHUJALPUR	2	246	697	1.3	4.7	-3.4
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	105	9	0.8	0.0	0.8
18	220 kV	MALANPUR-AURAIYA	1	78	29	0.4	0.1	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
					WR-NR	69.9	242.3	-172.5
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	996	351	12.7	1.7	11.0
2	HVDC	RAIGARH-PUGALUR	2	0	2504	0.0	23.8	-23.8
3	765 kV	SOLAPUR-RAICHUR	2	1895	1812	12.1	5.9	6.2
4	765 kV	WARDHA-NIZAMABAD	2	0	2748	0.0	35.0	-35.0
5	400 kV	KOLHAPUR-KUDGI	2	1476	0	24.2	0.0	24.2
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	118	2.3	0.0	2.3
					WR-SR	51.3	66.3	-15.0

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)	582	386	439	10.52
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	691	417	529	12.70
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	105	20	55	1.33
	NER	132kV GELEPHU-SALAKATI	30	19	25	0.59
	NER	132kV MOTANGA-RANGIA	31	12	22	0.53
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-68	0	-32	-0.78
	ER	NEPAL IMPORT (FROM BIHAR)	-54	-11	-22	-0.53
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	362	207	289	6.93
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-936	-860	-933	-22.39
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-570	-384	-496	-11.91
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-146	0	-120	-2.88