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: **15th 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 14.06.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 14-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 14th 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: 15-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)	65956	58750	48995	27320	2829	203850
Peak Shortage (MW)	57	0	0	491	51	599
Energy Met (MU)	1581	1422	1202	591	56	4852
Hydro Gen (MU)	345	26	62	85	25	542
Wind Gen (MU)	61	249	222	-	-	533
Solar Gen (MU)*	133.58	59.68	127.79	2.64	0.50	324
Energy Shortage (MU)	2.63	0.00	1.50	5.65	1.12	10.90
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	71761	62164	55214	28172	2982	214583
Time Of Maximum Demand Met	00:16	23:18	15:22	21:17	18:51	15:24

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	0.120	2.21	1.30	11.31	14.81	61.72	23.47

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	11193	0	205.5	107.0	-3.6	175	0.00
	Haryana	10816	0	222.9	162.9	-3.9	210	0.85
	Rajasthan	15616	0	331.5	89.4	-1.8	272	1.27
	Delhi	7089	0	142.6	130.4	-2.2	213	0.15
	UP	26769	0	532.9	266.5	-5.1	661	0.00
	Uttarakhand	2381	0	52.8	23.0	-1.1	208	0.03
	HP	1475	0	30.4	-4.7	0.3	171	0.03
	J&K(UT) & Ladakh(UT)	2403	0	51.7	25.8	-0.1	150	0.30
	Chandigarh	348	0	6.5	6.6	-0.1	39	0.00
	Railways_NR ISTS	187	0	4.1	3.3	0.8	73	0.00
WR	Chhattisgarh	4913	0	110.4	51.7	-2.0	274	0.00
	Gujarat	16796	0	367.4	122.3	-9.1	627	0.00
	MP	11728	0	257.8	143.7	-4.5	551	0.00
	Maharashtra	27048	0	611.2	208.0	1.2	874	0.00
	Goa	736	0	15.2	14.7	0.0	101	0.00
	DNHDDPDCL	1269	0	29.3	29.5	-0.2	76	0.00
	AMNSIL	818	0	17.9	11.9	-1.1	196	0.00
	BALCO	519	0	12.4	12.3	0.1	121	0.00
SR	Andhra Pradesh	12538	0	254.6	76.3	-0.7	452	0.00
	Telangana	10806	0	217.3	95.2	0.3	902	0.00
	Karnataka	12762	0	261.1	78.3	1.9	1093	1.50
	Kerala	3920	0	78.9	54.8	2.0	552	0.00
	Tamil Nadu	17734	0	379.1	158.0	-5.3	1028	0.00
	Puducherry	485	0	10.9	10.1	0.1	48	0.00
ER	Bihar	6559	636	127.5	115.7	-0.1	722	4.60
	DVC	3608	0	79.9	-35.6	1.7	276	0.00
	Jharkhand	1769	0	36.1	34.3	-3.2	345	0.78
	Odisha	6401	0	120.7	57.1	-1.4	476	0.28
	West Bengal	11190	0	225.8	99.7	-2.2	415	0.00
	Sikkim	87	0	1.4	1.3	0.1	33	0.00
	Railways_ER ISTS	11	0	0.1	0.2	-0.1	3	0.00
NER	Arunachal Pradesh	125	0	2.4	2.7	-0.4	24	0.00
	Assam	1896	0	36.8	30.3	0.2	172	0.00
	Manipur	162	0	2.1	2.3	-0.2	31	0.00
	Meghalaya	318	35	4.9	1.7	-0.4	39	1.12
	Mizoram	98	0	1.7	1.7	-0.3	1	0.00
	Nagaland	143	0	2.6	2.4	-0.1	20	0.00
	Tripura	271	0	5.1	5.5	0.1	40	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	7.8	6.3	-25.7	-9.9
Day Peak (MW)	607.5	279.1	-1113.0	-789.7

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	285.6	-295.1	73.4	-64.7	0.8	0.0
Actual(MU)	249.5	-287.3	93.1	-61.5	-0.5	-6.6
O/D/U/D(MU)	-36.1	7.8	19.7	3.3	-1.3	-6.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	2816	10006	4998	2315	585	20720	44
State Sector	5450	13466	5178	2500	241	26834	56
Total	8265	23471	10176	4815	826	47554	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	775	1414	641	633	15	3478	67
Lignite	24	18	54	0	0	96	2
Hydro	345	26	62	85	25	542	10
Nuclear	29	33	46	0	0	107	2
Gas, Naptha & Diesel	34	37	7	0	23	101	2
RES (Wind, Solar, Biomass & Others)	201	310	371	3	1	886	17
Total	1408	1838	1180	720	64	5210	100

Share of RES in total generation (%)	14.31	16.88	31.46	0.42	0.78	17.06
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	40.84	20.04	40.54	12.42	40.11	29.54

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.026
Based on State Max Demands	1.085

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	214583	15:24	427
Non-Solar hr	212431	22:59	2833

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: 15-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	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	614	198	4.5	0.0	4.5
4	765 kV	SASARAM-FATEHPUR	1	123	325	0.0	2.7	-2.7
5	765 kV	GAYA-BALIA	1	0	563	0.0	8.9	-8.9
6	400 kV	PUSAULI-VARANASI	1	0	114	0.0	1.7	-1.7
7	400 kV	PUSAULI -ALLAHABAD	1	10	62	0.0	0.5	-0.5
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	95	896	0.0	11.7	-11.7
9	400 kV	PATNA-BALIA	2	21	447	0.0	6.5	-6.5
10	400 kV	NAUBATPUR-BALIA	2	61	457	0.0	6.3	-6.3
11	400 kV	BIHARSHARIFF-BALIA	2	129	403	0.0	4.6	-4.6
12	400 kV	MOTIHARI-GORAKHPUR	2	161	412	0.0	4.7	-4.7
13	400 kV	BIHARSHARIFF-VARANASI	2	242	169	0.0	0.1	-0.1
14	220 kV	SAHUPURI-KARAMNASA	1	0	204	0.0	3.3	-3.3
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	25	0	0.7	0.0	0.7
17	132 kV	KARMANASA-SAHUPURI	1	0	65	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	5.2	53.3	-48.2
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1070	218	10.1	0.0	10.1
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1486	293	19.8	0.0	19.8
3	765 kV	JHARSUGUDA-DURG	2	12	735	0.0	6.5	-6.5
4	400 kV	JHARSUGUDA-RAIGARH	4	6	465	0.0	5.4	-5.4
5	400 kV	RANCHI-SIPAT	2	336	173	3.9	0.0	3.9
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	1.8	-1.8
7	220 kV	BUDHIPADAR-KORBA	2	143	0	2.7	0.0	2.7
					ER-WR	36.6	13.7	22.9
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	307	0	7.6	0.0	7.6
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	997	0.0	24.2	-24.2
3	765 kV	ANGUL-SRIKAKULAM	2	0	3041	0.0	55.1	-55.1
4	400 kV	TALCHER-I/C	2	409	189	3.8	0.0	3.8
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	7.6	79.3	-71.7
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	310	28	2.6	0.0	2.6
2	400 kV	ALIPURDUAR-BONGAIGAON	2	385	1	2.8	0.0	2.8
3	220 kV	ALIPURDUAR-SALAKATI	2	72	9	0.6	0.0	0.6
					ER-NER	6.0	0.0	6.0
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	236	0	5.2	0.0	5.2
					NER-NR	5.2	0.0	5.2
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	5032	0.0	90.9	-90.9
2	HVDC	VINDHYACHAL B/B	-	448	0	6.2	0.0	6.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1722	0.0	27.7	-27.7
4	765 kV	GWALIOR-AGRA	2	0	1773	0.0	27.1	-27.1
5	765 kV	GWALIOR-PHAGI	2	641	813	3.4	7.3	-3.9
6	765 kV	JABALPUR-ORAI	2	0	852	0.0	23.4	-23.4
7	765 kV	GWALIOR-ORAI	1	528	0	8.3	0.0	8.3
8	765 kV	SATNA-ORAI	1	0	925	0.0	18.7	-18.7
9	765 kV	BANASKANTHA-CHITORGARH	2	636	685	3.1	3.5	-0.4
10	765 kV	VINDHYACHAL-VARANASI	2	0	3521	0.0	62.0	-62.0
11	400 kV	ZERDA-KANKROLI	1	155	70	1.2	0.2	1.1
12	400 kV	ZERDA -BHINMAL	1	510	43	5.1	0.1	5.1
13	400 kV	VINDHYACHAL -RIHAND	1	959	0	19.7	0.0	19.7
14	400 kV	RAPP-SHUJALPUR	2	351	271	3.1	1.2	1.8
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.7	-2.7
17	220 kV	MEHGAON-AURAIYA	1	110	0	1.1	0.0	1.1
18	220 kV	MALANPUR-AURAIYA	1	79	0	0.6	0.0	0.6
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	51.9	264.6	-212.7
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	993	1004	11.7	4.8	6.9
2	HVDC	RAIGARH-PUGALUR	2	0	3510	0.0	42.4	-42.4
3	765 kV	SOLAPUR-RAICHUR	2	1791	1493	7.2	5.9	1.4
4	765 kV	WARDHA-NIZAMABAD	2	0	2753	0.0	44.3	-44.3
5	400 kV	KOLHAPUR-KUDGI	2	1536	0	24.4	0.0	24.4
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	0	121	2.4	0.0	2.4
					WR-SR	45.8	97.3	-51.5

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)	470	127	291	6.98
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	211	116	153	3.66
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-116	-55	-80	-1.93
	NER	132kV GELEPHU-SALAKATI	12	1	1	0.03
	NER	132kV MOTANGA-RANGIA	-52	-1	-37	-0.90
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-69	0	-49	-1.17
	ER	NEPAL IMPORT (FROM BIHAR)	-22	-9	-15	-0.37
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	370	157	327	7.85
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-929	-728	-904	-21.70
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-790	0	-412	-9.88
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-184	0	-166	-3.98