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: 06th July 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 05.07.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 05-जुलाई-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 05rd July 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: 06-Jul-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)	66103	56104	44448	25387	3295	195337
Peak Shortage (MW)	0	0	0	456	9	465
Energy Met (MU)	1538	1324	1050	569	65	4547
Hydro Gen (MU)	391	44	49	128	25	636
Wind Gen (MU)	35	73	250	-	-	358
Solar Gen (MU)*	127.95	46.18	87.18	5.26	1.19	268
Energy Shortage (MU)	0.44	0.00	0.00	1.98	1.00	3.42
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	71326	58280	49273	27394	3380	198089
Time Of Maximum Demand Met	00:26	19:38	12:01	23:25	19:22	22:16

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	0.048	0.00	0.20	4.27	4.47	67.52	28.02

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	12375	0	230.4	153.0	-8.7	195	0.00
	Haryana	11099	0	240.2	194.0	-2.7	216	0.00
	Rajasthan	14149	0	301.4	106.7	-0.5	539	0.00
	Delhi	6540	0	134.4	130.6	-2.8	103	0.00
	UP	24938	0	490.9	222.0	-0.2	548	0.00
	Uttarakhand	2134	0	48.3	24.0	1.0	154	0.28
	HP	1666	0	33.8	-9.6	-0.9	76	0.10
	J&K(UT) & Ladakh(UT)	2349	0	48.7	21.8	0.3	216	0.06
	Chandigarh	321	0	6.1	6.5	-0.5	36	0.00
	Railways_NR ISTS	175	0	3.8	3.5	0.3	47	0.00
WR	Chhattisgarh	5027	0	115.2	65.2	-0.7	286	0.00
	Gujarat	17126	0	384.0	182.8	-0.7	571	0.00
	MP	10584	0	232.8	117.2	-3.1	313	0.00
	Maharashtra	23313	0	520.3	192.2	-6.3	734	0.00
	Goa	602	0	12.1	12.1	-0.5	42	0.00
	DNHDDPDCL	1291	0	29.7	29.8	-0.1	115	0.00
	AMNSIL	824	0	17.7	10.5	0.0	348	0.00
	BALCO	519	0	12.4	12.5	-0.1	8	0.00
SR	Andhra Pradesh	9740	0	207.7	34.9	0.1	703	0.00
	Telangana	10853	0	212.3	109.3	-0.4	1032	0.00
	Karnataka	10787	0	212.0	64.4	-0.8	719	0.00
	Kerala	3413	0	66.2	46.0	1.8	415	0.00
	Tamil Nadu	16159	0	342.8	120.6	-3.9	733	0.00
	Puducherry	415	0	9.2	8.9	-0.4	28	0.00
ER	Bihar	6488	169	118.0	114.3	-1.6	244	1.98
	DVC	3449	0	74.9	-34.3	-0.4	359	0.00
	Jharkhand	1722	0	36.7	29.7	-2.0	173	0.00
	Odisha	6089	0	117.9	41.3	-3.3	295	0.00
	West Bengal	10264	0	220.1	91.8	-2.1	324	0.00
	Sikkim	91	0	1.5	1.5	0.0	15	0.00
	Railways_ER ISTS	15	0	0.0	0.3	-0.3	0	0.00
NER	Arunachal Pradesh	158	0	2.8	2.4	0.2	94	0.00
	Assam	2253	0	44.6	36.4	1.5	149	0.00
	Manipur	182	0	2.7	2.7	0.1	16	0.00
	Meghalaya	322	9	5.3	1.3	-0.2	91	1.00
	Mizoram	117	0	1.8	1.6	-0.2	12	0.00
	Nagaland	157	0	2.8	2.4	0.0	24	0.00
	Tripura	301	0	5.1	5.2	0.2	79	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	43.5	8.5	-24.6	-16.1
Day Peak (MW)	2145.0	373.0	-1095.0	-816.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	300.8	-222.3	24.8	-108.6	5.4	0.0
Actual(MU)	273.3	-219.8	35.4	-105.4	8.9	-7.6
O/D/U/D(MU)	-27.5	2.5	10.7	3.2	3.5	-7.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3100	10796	7408	2220	818	24342	44
State Sector	8520	13723	6258	2200	261	30962	56
Total	11620	24519	13666	4420	1079	55303	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	726	1426	578	596	14	3341	68
Lignite	23	14	48	0	0	85	2
Hydro	391	44	49	128	25	636	13
Nuclear	25	46	46	0	0	116	2
Gas, Naptha & Diesel	11	27	7	0	22	67	1
RES (Wind, Solar, Biomass & Others)	170	120	356	6	1	654	13
Total	1346	1678	1084	729	63	4899	100

Share of RES in total generation (%)	12.62	7.18	32.89	0.80	1.89	13.34
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	43.49	12.52	41.61	18.35	41.66	28.70

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.058
Based on State Max Demands	1.100

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	196921	12:02	46
Non-Solar hr	198089	22:16	380

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: 06-Jul-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	1501	0.0	37.0	-37.0
2	HVDC	PUSAULI B/B	-	2	146	0.0	2.8	-2.8
3	765 kV	GAYA-VARANASI	2	684	446	1.0	0.0	1.0
4	765 kV	SASARAM-FATEHPUR	1	141	280	0.0	2.0	-2.0
5	765 kV	GAYA-BALIA	1	0	681	0.0	10.1	-10.1
6	400 kV	PUSAULI-VARANASI	1	0	156	0.0	1.8	-1.8
7	400 kV	PUSAULI -ALLAHABAD	1	43	94	0.0	1.0	-1.0
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	671	0.0	10.0	-10.0
9	400 kV	PATNA-BALIA	2	0	556	0.0	9.6	-9.6
10	400 kV	NAUBATPUR-BALIA	2	0	591	0.0	9.7	-9.7
11	400 kV	BIHARSHARIFF-BALIA	2	14	285	0.0	3.5	-3.5
12	400 kV	MOTIHARI-GORAKHPUR	2	0	485	0.0	6.9	-6.9
13	400 kV	BIHARSHARIFF-VARANASI	2	276	196	0.0	0.2	-0.2
14	220 kV	SAHUPURI-KARAMNASA	1	12	100	0.0	1.3	-1.3
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.7	0.0	0.7
17	132 kV	KARMANASA-SAHUPURI	1	0	50	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	1.7	95.8	-94.1
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1569	158	17.2	0.0	17.2
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1646	172	27.8	0.0	27.8
3	765 kV	JHARSUGUDA-DURG	2	54	372	0.0	2.1	-2.1
4	400 kV	JHARSUGUDA-RAIGARH	4	0	453	0.0	5.1	-5.1
5	400 kV	RANCHI-SIPAT	2	341	116	4.3	0.0	4.3
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	1.6	-1.6
7	220 kV	BUDHIPADAR-KORBA	2	83	8	0.1	0.0	0.1
					ER-WR	49.3	8.9	40.4
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	497	0.0	7.5	-7.5
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	793	0.0	19.3	-19.3
3	765 kV	ANGUL-SRIKAKULAM	2	0	2488	0.0	41.1	-41.1
4	400 kV	TALCHER-I/C	2	624	40	10.5	0.0	10.5
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	67.9	-67.9
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	493	0.0	8.2	-8.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	9	417	0.0	4.8	-4.8
3	220 kV	ALIPURDUAR-SALAKATI	2	0	127	0.0	1.9	-1.9
					ER-NER	0.0	14.8	-14.8
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	307	0.0	7.5	-7.5
					NER-NR	0.0	7.5	-7.5
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	4538	0.0	70.1	-70.1
2	HVDC	VINDHYACHAL B/B	-	444	0	12.2	0.0	12.2
3	HVDC	MUNDRA-MOHINDERGARH	2	265	0	5.9	0.0	5.9
4	765 kV	GWALIOR-AGRA	2	0	2300	0.0	27.0	-27.0
5	765 kV	GWALIOR-PHAGI	2	239	1655	0.4	23.6	-23.2
6	765 kV	JABALPUR-ORAI	2	0	1188	0.0	32.1	-32.1
7	765 kV	GWALIOR-ORAI	1	664	0	11.2	0.0	11.2
8	765 kV	SATNA-ORAI	1	0	1101	0.0	20.0	-20.0
9	765 kV	BANASKANTHA-CHITORGARH	2	1131	690	10.4	3.0	7.4
10	765 kV	VINDHYACHAL-VARANASI	2	0	3415	0.0	61.4	-61.4
11	400 kV	ZERDA-KANKROLI	1	194	93	1.7	0.4	1.3
12	400 kV	ZERDA -BHINMAL	1	454	124	3.3	0.5	2.8
13	400 kV	VINDHYACHAL -RIHAND	1	954	0	21.5	0.0	21.5
14	400 kV	RAPP-SHUJALPUR	2	195	671	0.8	6.4	-5.6
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.5	-2.5
17	220 kV	MEHGAON-AURAIYA	1	91	0	0.9	0.0	0.9
18	220 kV	MALANPUR-AURAIYA	1	90	17	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	68.9	247.1	-178.2
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	996	0	15.8	0.0	15.8
2	HVDC	RAIGARH-PUGALUR	2	0	4008	0.0	22.5	-22.5
3	765 kV	SOLAPUR-RAICHUR	2	1820	579	16.2	1.1	15.1
4	765 kV	WARDHA-NIZAMABAD	2	0	2774	0.0	37.2	-37.2
5	400 kV	KOLHAPUR-KUDGI	2	1293	0	25.5	0.0	25.5
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	114	2.1	0.0	2.1
					WR-SR	59.6	60.9	-1.2

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)	688	572	613	14.70
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1058	978	984	23.62
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	305	122	150	3.60
	NER	132kV GELEPHU-SALAKATI	35	7	28	0.67
	NER	132kV MOTANGA-RANGIA	58	25	40	0.95
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-56	0	-4	-0.09
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	429	214	358	8.58
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-932	-853	-880	-21.12
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-816	-544	-673	-16.14
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-163	0	-143	-3.44