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 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 14.07.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 14-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 14th 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: 15-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)	67437	56281	48275	27012	3193	202198
Peak Shortage (MW)	1498	107	0	0	19	1624
Energy Met (MU)	1514	1323	1131	586	61	4616
Hydro Gen (MU)	335	58	55	130	33	611
Wind Gen (MU)	41	124	215	-	-	380
Solar Gen (MU)*	129.23	46.56	114.83	2.16	0.93	294
Energy Shortage (MU)	6.81	1.81	0.00	0.99	1.14	10.75
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	68316	58691	53302	29190	3219	205712
Time Of Maximum Demand Met	22:30	10:41	12:44	00:02	19:06	11:38

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	0.00	1.40	1.40	71.74	26.86

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	13906	0	295.0	172.5	-1.7	87	0.00
	Haryana	10150	0	215.4	157.8	-1.3	176	0.00
	Rajasthan	12654	0	270.8	85.1	0.9	405	5.35
	Delhi	5862	0	123.4	119.8	-2.5	102	0.00
	UP	24652	0	475.5	206.2	0.9	745	0.00
	Uttarakhand	1843	75	40.0	19.8	0.1	138	0.48
	HP	1520	0	31.5	8.1	0.6	192	0.07
	J&K(UT) & Ladakh(UT)	2470	0	53.2	26.4	0.6	84	0.91
	Chandigarh	311	0	6.3	6.2	0.1	22	0.00
	Railways_NR ISTS	153	0	3.3	3.3	-0.1	22	0.00
WR	Chhattisgarh	5216	91	120.1	73.2	0.5	403	1.81
	Gujarat	17023	0	378.4	158.0	-1.1	403	0.00
	MP	10885	0	226.7	113.1	-3.7	411	0.00
	Maharashtra	23431	0	524.3	181.2	-2.2	566	0.00
	Goa	630	0	12.9	12.7	-0.1	37	0.00
	DNHDDPDCL	1295	0	30.4	30.3	0.1	98	0.00
	AMNSIL	869	0	17.5	10.5	-1.3	0	0.00
	BALCO	522	0	12.4	12.5	-0.1	526	0.00
SR	Andhra Pradesh	10075	0	212.4	33.6	1.4	1107	0.00
	Telangana	12610	0	260.1	149.2	0.4	693	0.00
	Karnataka	12038	0	222.7	60.7	-0.2	490	0.00
	Kerala	3815	0	76.5	55.2	1.6	387	0.00
	Tamil Nadu	16221	0	349.5	158.6	-2.1	513	0.00
	Puducherry	456	0	10.1	9.7	-0.3	32	0.00
ER	Bihar	6350	0	128.3	121.2	-1.7	470	0.85
	DVC	3430	0	76.5	-42.8	0.3	206	0.00
	Jharkhand	1766	0	38.9	33.1	0.8	193	0.15
	Odisha	6970	0	120.5	47.4	-0.8	498	0.00
	West Bengal	10558	0	220.7	103.0	-1.3	384	0.00
	Sikkim	83	0	1.3	1.3	0.0	22	0.00
	Railways_ER ISTS	16	0	0.3	0.3	0.0	5	0.00
NER	Arunachal Pradesh	142	0	2.6	2.4	0.0	36	0.00
	Assam	2139	0	40.9	34.5	0.8	177	0.00
	Manipur	184	0	2.6	2.5	0.2	24	0.00
	Meghalaya	330	19	4.9	0.5	0.0	65	1.14
	Mizoram	108	0	1.8	1.6	-0.2	18	0.00
	Nagaland	157	0	2.9	2.6	-0.2	9	0.00
	Tripura	314	0	5.7	5.6	0.0	45	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	41.7	10.8	-24.7	-14.7
Day Peak (MW)	1897.0	417.0	-1089.0	-648.7

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	311.7	-292.4	101.5	-114.6	-6.2	0.0
Actual(MU)	283.3	-303.4	120.2	-103.5	-4.0	-7.4
O/D/U/D(MU)	-28.4	-11.0	18.7	11.1	2.3	-7.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3861	10432	7218	1705	338	23554	43
State Sector	7875	13091	7693	2820	306	31784	57
Total	11736	23523	14911	4525	644	55338	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	735	1417	565	624	14	3355	67
Lignite	24	17	59	0	0	100	2
Hydro	335	58	55	130	33	611	12
Nuclear	29	47	46	0	0	122	2
Gas, Naptha & Diesel	24	30	6	0	25	85	2
RES (Wind, Solar, Biomass & Others)	177	171	348	4	1	700	14
Total	1324	1740	1080	758	73	4974	100

Share of RES in total generation (%)	13.35	9.83	32.25	0.47	1.28	14.08
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	40.82	15.84	41.62	17.66	46.97	28.82

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.034
Based on State Max Demands	1.075

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	205712	11:38	81
Non-Solar hr	202790	19:52	944

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-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	1003	0.0	23.5	-23.5
2	HVDC	PUSAULI B/B	-	0	147	0.0	3.8	-3.8
3	765 kV	GAYA-VARANASI	2	724	366	0.0	0.3	-0.3
4	765 kV	SASARAM-FATEHPUR	1	177	223	0.0	1.8	-1.8
5	765 kV	GAYA-BALIA	1	0	608	0.0	8.7	-8.7
6	400 kV	PUSAULI-VARANASI	1	0	136	0.0	2.2	-2.2
7	400 kV	PUSAULI -ALLAHABAD	1	0	106	0.0	1.4	-1.4
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	728	0.0	12.7	-12.7
9	400 kV	PATNA-BALIA	2	0	463	0.0	7.9	-7.9
10	400 kV	NAUBATPUR-BALIA	2	44	481	0.0	7.8	-7.8
11	400 kV	BIHARSHARIFF-BALIA	2	104	197	0.0	2.6	-2.6
12	400 kV	MOTIHARI-GORAKHPUR	2	0	409	0.0	7.0	-7.0
13	400 kV	BIHARSHARIFF-VARANASI	2	269	155	0.0	0.3	-0.3
14	220 kV	SAHUPURI-KARAMNASA	1	0	131	0.0	1.9	-1.9
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	62	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	0.7	81.8	-81.1
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1345	0	20.8	0.0	20.8
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1517	482	20.8	0.0	20.8
3	765 kV	JHARSUGUDA-DURG	2	192	471	0.0	2.6	-2.6
4	400 kV	JHARSUGUDA-RAIGARH	4	3	553	0.0	5.5	-5.5
5	400 kV	RANCHI-SIPAT	2	343	186	3.4	0.0	3.4
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	2.3	-2.3
7	220 kV	BUDHIPADAR-KORBA	2	78	4	0.0	0.2	-0.2
					ER-WR	45.0	10.5	34.5
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	460	0.0	10.1	-10.1
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1977	0.0	33.7	-33.7
3	765 kV	ANGUL-SRIKAKULAM	2	0	2685	0.0	41.9	-41.9
4	400 kV	TALCHER-I/C	2	164	638	0.0	0.8	-0.8
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	85.7	-85.7
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	46	368	0.1	4.2	-4.1
2	400 kV	ALIPURDUAR-BONGAIGAON	2	240	391	0.0	2.0	-2.0
3	220 kV	ALIPURDUAR-SALAKATI	2	15	115	0.0	1.2	-1.2
					ER-NER	0.1	7.4	-7.3
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.1	-12.1
					NER-NR	0.0	12.1	-12.1
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	4024	0.0	81.9	-81.9
2	HVDC	VINDHYACHAL B/B	-	441	0	12.2	0.0	12.2
3	HVDC	MUNDRA-MOHINDERGARH	2	263	493	0.0	3.8	-3.8
4	765 kV	GWALIOR-AGRA	2	13	2164	0.0	28.2	-28.2
5	765 kV	GWALIOR-PHAGI	2	112	1624	0.1	22.0	-21.9
6	765 kV	JABALPUR-ORAI	2	0	1089	0.0	28.2	-28.2
7	765 kV	GWALIOR-ORAI	1	615	0	10.8	0.0	10.8
8	765 kV	SATNA-ORAI	1	0	1088	0.0	21.0	-21.0
9	765 kV	BANASKANTHA-CHITORGARH	2	763	1089	5.8	6.9	-1.0
10	765 kV	VINDHYACHAL-VARANASI	2	0	3294	0.0	58.3	-58.3
11	400 kV	ZERDA-KANKROLI	1	175	156	1.3	0.8	0.5
12	400 kV	ZERDA -BHINMAL	1	462	142	5.0	0.5	4.5
13	400 kV	VINDHYACHAL -RIHAND	1	951	0	21.8	0.0	21.8
14	400 kV	RAPP-SHUJALPUR	2	172	613	0.7	5.0	-4.4
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.3	-2.3
17	220 kV	MEHGAON-AURAIYA	1	121	0	1.7	0.0	1.7
18	220 kV	MALANPUR-AURAIYA	1	93	0	1.1	0.0	1.1
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	60.5	258.7	-198.2
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	301	1007	3.3	7.7	-4.5
2	HVDC	RAIGARH-PUGALUR	2	0	5016	0.0	59.9	-59.9
3	765 kV	SOLAPUR-RAICHUR	2	1440	1503	8.9	3.4	5.5
4	765 kV	WARDHA-NIZAMABAD	2	0	2793	0.0	37.0	-37.0
5	400 kV	KOLHAPUR-KUDGI	2	1461	0	24.1	0.0	24.1
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	105	2.0	0.0	2.0
					WR-SR	38.2	108.1	-69.8

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)	0	0	0	14.18
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	0	0	0	24.03
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	0	0	0	4.05
	NER	132kV GELEPHU-SALAKATI	0	0	0	0.00
	NER	132kV MOTANGA-RANGIA	-65	14	-25	-0.60
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	-0.58
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	481	353	476	11.43
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-917	-780	-885	-21.25
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-649	-566	-614	-14.74
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-172	0	-143	-3.42