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: 19th 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 18.07.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 18-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 18th 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: 19-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)	70438	55001	45446	26168	3389	200442
Peak Shortage (MW)	175	0	0	578	38	791
Energy Met (MU)	1589	1291	1073	591	65	4610
Hydro Gen (MU)	372	57	44	132	37	642
Wind Gen (MU)	27	143	272	-	-	442
Solar Gen (MU)*	124.45	36.10	75.98	1.85	1.37	240
Energy Shortage (MU)	0.42	0.00	0.00	2.30	0.34	3.06
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	71773	57067	49927	28436	3408	202935
Time Of Maximum Demand Met	22:23	19:33	09:46	21:56	19:40	19:50

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	0.029	0.00	0.09	5.38	5.47	81.15	13.38

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	14394	0	308.5	174.5	-1.8	233	0.00
	Haryana	10012	0	218.9	169.4	-2.0	138	0.00
	Rajasthan	13098	0	285.0	96.6	-1.8	363	0.00
	Delhi	5879	0	127.3	122.6	-2.3	67	0.00
	UP	25976	0	509.9	243.3	-0.7	390	0.00
	Uttarakhand	1959	0	44.0	27.8	-0.1	163	0.30
	HP	1565	0	32.8	3.8	-0.4	56	0.00
	J&K(UT) & Ladakh(UT)	2446	100	52.5	26.8	-0.5	193	0.12
	Chandigarh	352	0	7.1	7.3	-0.2	24	0.00
	Railways_NR ISTS	152	0	3.2	3.5	-0.3	0	0.00
WR	Chhattisgarh	4514	0	100.3	53.5	-0.9	252	0.00
	Gujarat	17672	0	389.3	167.1	-0.6	392	0.00
	MP	10867	0	232.0	120.5	-1.1	663	0.00
	Maharashtra	22723	0	495.4	186.3	-4.7	518	0.00
	Goa	622	0	12.5	12.8	-0.7	25	0.00
	DNHDDPDCL	1306	0	30.2	30.3	-0.1	31	0.00
	AMNSIL	818	0	18.7	9.8	0.0	255	0.00
	BALCO	522	0	12.4	12.5	-0.1	9	0.00
SR	Andhra Pradesh	9403	0	199.8	30.2	-3.2	542	0.00
	Telangana	10595	0	210.6	101.1	-2.8	667	0.00
	Karnataka	11004	0	207.0	48.3	-2.7	432	0.00
	Kerala	3906	0	80.0	60.1	1.2	260	0.00
	Tamil Nadu	17025	0	365.9	145.9	-3.7	462	0.00
	Puducherry	462	0	10.3	10.0	-0.4	16	0.00
ER	Bihar	6870	561	145.2	134.8	-0.7	281	2.30
	DVC	3370	0	76.0	-38.5	-0.4	186	0.00
	Jharkhand	1784	0	36.9	32.3	0.2	114	0.00
	Odisha	6347	0	116.9	34.9	-0.1	283	0.00
	West Bengal	10087	0	215.0	104.2	-2.3	282	0.00
	Sikkim	83	0	1.2	1.2	0.0	19	0.00
	Railways_ER ISTS	23	0	0.1	0.4	-0.2	9	0.00
NER	Arunachal Pradesh	159	0	2.8	2.6	-0.4	20	0.00
	Assam	2255	0	43.7	35.2	1.0	129	0.00
	Manipur	190	0	2.7	2.7	0.0	22	0.00
	Meghalaya	323	0	5.5	0.9	-0.3	38	0.34
	Mizoram	112	0	1.9	1.6	-0.1	15	0.00
	Nagaland	164	0	2.9	2.6	-0.1	11	0.00
	Tripura	324	0	5.8	5.9	0.0	60	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	43.8	7.1	-25.3	-14.7
Day Peak (MW)	1983.7	306.0	-1106.0	-659.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	337.1	-269.3	41.0	-100.0	-8.8	0.0
Actual(MU)	317.6	-264.5	41.5	-91.2	-7.0	-3.6
O/D/U/D(MU)	-19.5	4.8	0.5	8.8	1.8	-3.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	2747	10929	7718	2860	271	24525	45
State Sector	7040	14186	5623	2710	212	29770	55
Total	9787	25114	13341	5570	483	54295	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	755	1353	578	612	14	3312	67
Lignite	26	15	56	0	0	97	2
Hydro	372	57	44	132	37	642	13
Nuclear	29	47	46	0	0	122	2
Gas, Naptha & Diesel	22	26	7	0	28	82	2
RES (Wind, Solar, Biomass & Others)	158	180	366	3	1	708	14
Total	1362	1679	1097	747	80	4963	100

Share of RES in total generation (%)	11.60	10.74	33.37	0.38	1.72	14.27
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	41.06	16.93	41.56	18.07	48.18	29.66

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.037
Based on State Max Demands	1.080

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	202416	11:57	45
Non-Solar hr	202935	19:50	75

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: 19-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	1001	0.0	24.1	-24.1
2	HVDC	PUSAULI B/B	-	0	108	0.0	2.7	-2.7
3	765 kV	GAYA-VARANASI	2	581	553	0.0	1.9	-1.9
4	765 kV	SASARAM-FATEHPUR	1	170	282	0.0	2.0	-2.0
5	765 kV	GAYA-BALIA	1	0	655	0.0	11.0	-11.0
6	400 kV	PUSAULI-VARANASI	1	0	121	0.0	1.6	-1.6
7	400 kV	PUSAULI -ALLAHABAD	1	0	83	0.0	1.0	-1.0
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	854	0.0	13.0	-13.0
9	400 kV	PATNA-BALIA	2	0	477	0.0	6.7	-6.7
10	400 kV	NAUBATPUR-BALIA	2	10	493	0.0	6.3	-6.3
11	400 kV	BIHARSHARIFF-BALIA	2	80	291	0.0	3.0	-3.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	534	0.0	8.3	-8.3
13	400 kV	BIHARSHARIFF-VARANASI	2	201	242	0.0	0.8	-0.8
14	220 kV	SAHUPURI-KARAMNASA	1	14	134	0.0	1.7	-1.7
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	40	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	0.7	84.0	-83.3
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1266	76	14.6	0.0	14.6
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1733	320	24.2	0.0	24.2
3	765 kV	JHARSUGUDA-DURG	2	153	537	0.0	3.7	-3.7
4	400 kV	JHARSUGUDA-RAIGARH	4	69	745	0.0	5.5	-5.5
5	400 kV	RANCHI-SIPAT	2	406	204	3.6	0.0	3.6
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	1.2	-1.2
7	220 kV	BUDHIPADAR-KORBA	2	73	38	0.0	0.3	-0.3
					ER-WR	42.4	10.7	31.7
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	189	450	0.0	2.7	-2.7
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1637	0.0	27.3	-27.3
3	765 kV	ANGUL-SRIKAKULAM	2	0	2679	0.0	38.4	-38.4
4	400 kV	TALCHER-I/C	2	625	426	3.9	0.0	3.9
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	68.3	-68.3
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	124	292	0.1	3.0	-2.8
2	400 kV	ALIPURDUAR-BONGAIGAON	2	361	241	0.0	0.2	-0.2
3	220 kV	ALIPURDUAR-SALAKATI	2	37	74	0.0	0.7	-0.7
					ER-NER	0.1	3.8	-3.7
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.0	-12.0
					NER-NR	0.0	12.0	-12.0
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	5045	0.0	87.4	-87.4
2	HVDC	VINDHYACHAL B/B	-	435	0	7.1	0.0	7.1
3	HVDC	MUNDRA-MOHINDERGARH	2	260	0	5.9	0.0	5.9
4	765 kV	GWALIOR-AGRA	2	0	2230	0.0	35.3	-35.3
5	765 kV	GWALIOR-PHAGI	2	0	1552	0.0	23.4	-23.4
6	765 kV	JABALPUR-ORAI	2	0	1113	0.0	35.0	-35.0
7	765 kV	GWALIOR-ORAI	1	696	0	11.6	0.0	11.6
8	765 kV	SATNA-ORAI	1	0	1056	0.0	21.8	-21.8
9	765 kV	BANASKANTHA-CHITORGARH	2	841	1152	4.4	6.8	-2.4
10	765 kV	VINDHYACHAL-VARANASI	2	0	3401	0.0	62.7	-62.7
11	400 kV	ZERDA-KANKROLI	1	162	171	1.0	0.9	0.1
12	400 kV	ZERDA -BHINMAL	1	389	250	2.5	1.2	1.3
13	400 kV	VINDHYACHAL -RIHAND	1	959	0	21.5	0.0	21.5
14	400 kV	RAPP-SHUJALPUR	2	59	608	0.1	6.3	-6.2
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	114	0	1.6	0.0	1.6
18	220 kV	MALANPUR-AURAIYA	1	83	0	0.9	0.0	0.9
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	56.6	283.0	-226.5
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	994	1000	9.3	6.9	2.4
2	HVDC	RAIGARH-PUGALUR	2	0	2001	0.0	18.8	-18.8
3	765 kV	SOLAPUR-RAICHUR	2	1957	1063	13.4	2.0	11.4
4	765 kV	WARDHA-NIZAMABAD	2	247	2563	0.1	26.6	-26.5
5	400 kV	KOLHAPUR-KUDGI	2	1486	0	23.0	0.0	23.0
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	0	115	2.1	0.0	2.1
					WR-SR	47.9	54.3	-6.4

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)	687	583	627	15.05
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1115	935	976	23.43
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	196	39	165	3.97
	NER	132kV GELEPHU-SALAKATI	26	0	7	0.18
	NER	132kV MOTANGA-RANGIA	65	35	50	1.20
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-66	0	-22	-0.53
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	372	239	318	7.63
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-930	-786	-899	-21.58
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-659	-574	-613	-14.71
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-176	0	-157	-3.76