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: 13th 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 12.07.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 12-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 12th 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: 13-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)	65066	54929	44177	26628	3173	193973
Peak Shortage (MW)	790	360	0	0	57	1207
Energy Met (MU)	1446	1291	1094	602	61	4494
Hydro Gen (MU)	235	60	55	124	35	508
Wind Gen (MU)	40	130	160	-	-	330
Solar Gen (MU)*	137.87	43.20	97.65	5.41	0.61	285
Energy Shortage (MU)	4.55	1.04	0.00	1.07	1.18	7.84
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	65596	57905	52208	28885	3235	200357
Time Of Maximum Demand Met	22:38	19:46	09:50	23:38	19:29	14:51

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	0.046	0.00	1.52	5.99	7.51	74.46	18.03

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	12941	0	266.6	152.7	-1.7	262	0.00
	Haryana	9192	0	197.4	144.5	-0.4	206	0.00
	Rajasthan	12693	0	270.7	74.6	-0.2	419	1.81
	Delhi	5607	0	119.6	113.5	0.2	423	0.00
	UP	23944	0	466.8	190.1	-2.3	475	0.00
	Uttarakhand	1741	0	36.9	29.5	0.5	189	1.38
	HP	1305	10	27.3	14.7	6.2	1212	0.05
	J&K(UT) & Ladakh(UT)	2590	117	52.3	23.8	-3.6	14	1.31
	Chandigarh	268	0	5.6	5.2	0.3	55	0.00
	Railways_NR ISTS	158	0	3.2	3.3	-0.2	21	0.00
WR	Chhattisgarh	4864	127	111.9	70.0	0.9	492	0.90
	Gujarat	15882	0	351.7	156.4	-4.3	939	0.00
	MP	10742	0	231.0	94.9	-1.3	516	0.00
	Maharashtra	23519	0	520.6	195.5	-6.7	804	0.14
	Goa	639	0	13.3	13.4	-0.2	168	0.00
	DNHDDPDCL	1297	0	30.3	30.3	0.0	107	0.00
	AMNSIL	879	0	20.0	9.9	0.2	277	0.00
	BALCO	517	0	12.4	12.5	-0.1	5	0.00
SR	Andhra Pradesh	10322	0	213.6	60.0	2.1	591	0.00
	Telangana	11979	0	232.2	113.5	2.5	923	0.00
	Karnataka	12010	0	221.7	69.8	-0.4	564	0.00
	Kerala	3941	0	78.5	56.2	2.4	432	0.00
	Tamil Nadu	16008	0	338.7	162.7	-2.8	276	0.00
	Puducherry	463	0	9.6	9.2	-0.2	58	0.00
ER	Bihar	6809	0	137.5	128.3	-1.8	276	1.07
	DVC	3400	0	76.0	-41.3	-0.9	219	0.00
	Jharkhand	1807	0	39.6	34.9	0.0	91	0.00
	Odisha	6587	0	127.2	59.5	0.4	445	0.00
	West Bengal	10142	0	220.4	102.4	-2.1	223	0.00
	Sikkim	86	0	1.5	1.5	0.0	10	0.00
	Railways_ER ISTS	12	0	0.1	0.3	-0.2	0	0.00
NER	Arunachal Pradesh	149	0	2.6	2.6	-0.3	48	0.00
	Assam	2116	0	40.3	34.7	0.2	131	0.00
	Manipur	162	0	2.3	2.5	-0.2	18	0.00
	Meghalaya	336	0	4.9	0.6	0.0	81	1.18
	Mizoram	114	0	1.9	1.6	-0.2	21	0.00
	Nagaland	157	0	2.9	2.6	-0.2	42	0.00
	Tripura	313	0	5.9	5.7	0.3	64	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	39.2	8.3	-25.3	-26.1
Day Peak (MW)	1923.0	371.0	-1099.0	-1539.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	322.9	-305.8	98.3	-109.4	-6.0	0.0
Actual(MU)	299.4	-306.9	123.6	-113.3	-5.9	-3.1
O/D/U/D(MU)	-23.5	-1.1	25.3	-3.9	0.1	-3.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	7425	10061	7068	1705	305	26563	44
State Sector	7000	15744	7823	3260	322	34148	56
Total	14424	25805	14891	4965	626	60711	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	758	1409	613	635	14	3428	71
Lignite	27	16	48	0	0	91	2
Hydro	235	60	55	124	35	508	10
Nuclear	24	47	44	0	0	116	2
Gas, Naptha & Diesel	9	17	6	0	25	57	1
RES (Wind, Solar, Biomass & Others)	184	174	276	7	1	642	13
Total	1237	1723	1043	765	74	4841	100

Share of RES in total generation (%)	14.88	10.11	26.50	0.92	0.82	13.26
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	35.85	16.31	36.04	17.07	47.42	26.14

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.037
Based on State Max Demands	1.076

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	200357	14:51	0
Non-Solar hr	198414	20:11	1207

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: 13-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	1503	0.0	29.4	-29.4
2	HVDC	PUSAULI B/B	-	0	149	0.0	3.7	-3.7
3	765 kV	GAYA-VARANASI	2	496	386	0.9	0.0	0.9
4	765 kV	SASARAM-FATEHPUR	1	120	339	0.0	3.1	-3.1
5	765 kV	GAYA-BALIA	1	0	673	0.0	10.0	-10.0
6	400 kV	PUSAULI-VARANASI	1	0	150	0.0	2.5	-2.5
7	400 kV	PUSAULI -ALLAHABAD	1	0	94	0.0	1.0	-1.0
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	739	0.0	11.2	-11.2
9	400 kV	PATNA-BALIA	2	0	529	0.0	9.9	-9.9
10	400 kV	NAUBATPUR-BALIA	2	0	535	0.0	9.6	-9.6
11	400 kV	BIHARSHARIFF-BALIA	2	80	256	0.0	3.9	-3.9
12	400 kV	MOTIHARI-GORAKHPUR	2	0	426	0.0	7.0	-7.0
13	400 kV	BIHARSHARIFF-VARANASI	2	217	155	0.0	0.4	-0.4
14	220 kV	SAHUPURI-KARAMNASA	1	0	130	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	8	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	1.5	93.6	-92.0
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1714	0	25.3	0.0	25.3
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1555	383	18.6	0.0	18.6
3	765 kV	JHARSUGUDA-DURG	2	215	364	0.0	1.3	-1.3
4	400 kV	JHARSUGUDA-RAIGARH	4	123	374	0.0	2.8	-2.8
5	400 kV	RANCHI-SIPAT	2	337	156	3.5	0.0	3.5
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	1.9	-1.9
7	220 kV	BUDHIPADAR-KORBA	2	72	0	0.0	0.3	-0.3
					ER-WR	47.3	6.2	41.1
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	514	0.0	10.1	-10.1
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1983	0.0	43.4	-43.4
3	765 kV	ANGUL-SRIKAKULAM	2	0	3019	0.0	38.5	-38.5
4	400 kV	TALCHER-I/C	2	0	648	0.0	10.4	-10.4
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	92.0	-92.0
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	419	0.0	4.6	-4.6
2	400 kV	ALIPURDUAR-BONGAIGAON	2	183	208	0.0	0.0	0.0
3	220 kV	ALIPURDUAR-SALAKATI	2	5	90	0.0	0.9	-0.9
					ER-NER	0.0	5.5	-5.4
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	704	0.0	12.6	-12.6
					NER-NR	0.0	12.6	-12.6
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	5035	0.0	72.8	-72.8
2	HVDC	VINDHYACHAL B/B	-	268	0	7.3	0.0	7.3
3	HVDC	MUNDRA-MOHINDERGARH	2	0	979	0.0	16.1	-16.1
4	765 kV	GWALIOR-AGRA	2	69	2290	0.0	28.4	-28.4
5	765 kV	GWALIOR-PHAGI	2	331	1570	0.6	20.9	-20.2
6	765 kV	JABALPUR-ORAI	2	0	1102	0.0	27.6	-27.6
7	765 kV	GWALIOR-ORAI	1	644	0	10.5	0.0	10.5
8	765 kV	SATNA-ORAI	1	0	1071	0.0	20.5	-20.5
9	765 kV	BANASKANTHA-CHITORGARH	2	882	908	6.5	6.5	0.0
10	765 kV	VINDHYACHAL-VARANASI	2	0	3534	0.0	57.3	-57.3
11	400 kV	ZERDA-KANKROLI	1	209	105	1.7	0.5	1.2
12	400 kV	ZERDA -BHINMAL	1	576	41	6.5	0.0	6.5
13	400 kV	VINDHYACHAL -RIHAND	1	962	0	22.2	0.0	22.2
14	400 kV	RAPP-SHUJALPUR	2	297	590	1.1	6.0	-5.0
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.6	-1.6
17	220 kV	MEHGAON-AURAIYA	1	104	0	1.2	0.0	1.2
18	220 kV	MALANPUR-AURAIYA	1	75	10	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	58.1	258.2	-200.1
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1007	0.0	16.2	-16.2
2	HVDC	RAIGARH-PUGALUR	2	0	5516	0.0	56.5	-56.5
3	765 kV	SOLAPUR-RAICHUR	2	1644	2532	11.5	3.4	8.1
4	765 kV	WARDHA-NIZAMABAD	2	0	3385	0.0	30.7	-30.7
5	400 kV	KOLHAPUR-KUDGI	2	1497	0	27.6	0.0	27.6
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	41.2	106.8	-65.6

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)	636	0	584	14.03
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1030	532	864	20.74
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	191	96	120	2.88
	NER	132kV GELEPHU-SALAKATI	27	21	24	0.57
	NER	132kV MOTANGA-RANGIA	53	29	39	0.94
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-69	0	-29	-0.70
	ER	NEPAL IMPORT (FROM BIHAR)	-13	0	-2	-0.06
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	453	280	376	9.03
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-929	-795	-905	-21.73
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1539	-602	-1089	-26.13
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-170	0	-150	-3.60