



National Load Despatch Centre
राष्ट्रीय भार प्रेषण केंद्र
GRID CONTROLLER OF INDIA LIMITED
ग्रीड कंट्रोलर ऑफ इंडिया लिमिटेड
(Government of India Enterprise/ भारत सरकार का उद्यम)
B-9, QUTUB INSTITUTIONAL AREA, KATWARIA SARAI, NEW DELHI -110016
बी-9, कुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 18th July 2023

To,

- कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के.,14 , गोल्फ क्लब रोड , कोलकाता - 700033
Executive Director, ERLDC, 14 Golf Club Road, Tollygunge, Kolkata, 700033
- 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
- 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
- कार्यकारी निदेशक, ऊ. पू.क्षे.भा.प्रे.के., डोंगतेिह, लोअर नोंग्रह , लापलंग, शिलोंग – 793006
Executive Director, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
- 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 17.07.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 17-जुलाई-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रीड निष्पादन रिपोर्ट रा०भा०प्रे०के० की वेबसाइट पर उपलब्ध 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 17th July 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 18-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)	71061	54935	47876	24937	3160	201969
Peak Shortage (MW)	828	0	0	346	18	1192
Energy Met (MU)	1565	1278	1117	575	59	4595
Hydro Gen (MU)	363	56	57	124	37	637
Wind Gen (MU)	24	117	223	-	-	364
Solar Gen (MU)*	125.57	39.16	90.05	1.64	0.67	257
Energy Shortage (MU)	2.61	0.00	0.00	1.90	0.47	4.98
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	72520	56790	54160	27503	3162	204718
Time Of Maximum Demand Met	22:12	19:47	10:21	22:54	18:52	11:21

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	0.028	0.00	0.44	3.00	3.44	79.88	16.69

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	14352	0	299.2	167.6	-0.3	112	0.00
	Haryana	10473	0	218.9	168.0	-0.2	232	0.00
	Rajasthan	12218	0	275.6	91.5	-1.2	329	1.28
	Delhi	6165	0	127.2	123.0	-1.8	85	0.00
	UP	25732	0	502.4	230.0	-0.9	379	1.23
	Uttarakhand	2099	0	45.3	27.3	0.4	155	0.03
	HP	1614	0	33.0	3.3	0.2	116	0.07
	J&K(UT) & Ladakh(UT)	2486	0	53.2	27.8	-0.8	257	0.00
	Chandigarh	368	0	7.2	7.1	0.2	38	0.00
Railways_NR ISTS	171	0	3.2	3.4	-0.2	35	0.00	
WR	Chhattisgarh	4300	0	98.1	50.7	-2.2	164	0.00
	Gujarat	17107	0	380.7	167.9	-1.4	766	0.00
	MP	10344	0	226.7	112.3	-2.8	336	0.00
	Maharashtra	22843	0	499.1	185.4	-6.3	612	0.00
	Goa	618	0	12.9	12.6	-0.1	43	0.00
	DNHDDPDCL	1276	0	29.5	29.7	-0.2	57	0.00
	AMNSIL	820	0	18.4	11.6	-0.3	221	0.00
	BALCO	517	0	12.4	12.5	-0.1	2	0.00
SR	Andhra Pradesh	9939	0	209.5	46.8	0.3	730	0.00
	Telangana	12134	0	246.1	122.9	1.0	993	0.00
	Karnataka	12053	0	215.6	54.8	-0.1	452	0.00
	Kerala	3906	0	79.4	54.8	1.6	221	0.00
	Tamil Nadu	16762	0	357.0	157.1	-2.4	588	0.00
	Puducherry	455	0	10.0	9.4	-0.1	36	0.00
ER	Bihar	6744	112	140.1	129.1	1.3	207	1.27
	DVC	3465	0	74.3	-39.7	0.0	417	0.00
	Jharkhand	1657	0	34.8	31.1	0.6	224	0.63
	Odisha	6272	0	123.4	35.9	-1.8	304	0.00
	West Bengal	9571	0	201.2	89.6	-1.3	454	0.00
	Sikkim	80	0	1.2	0.8	0.4	81	0.00
	Railways_ER ISTS	23	0	0.1	0.4	-0.2	9	0.00
NER	Arunachal Pradesh	165	0	2.7	2.5	-0.3	18	0.00
	Assam	2065	0	38.2	30.9	0.4	128	0.00
	Manipur	187	0	2.6	2.6	0.0	29	0.00
	Meghalaya	325	4	5.4	0.9	-0.1	45	0.47
	Mizoram	109	0	1.8	1.7	-0.2	10	0.00
	Nagaland	143	0	2.7	2.3	0.0	16	0.00
	Tripura	323	0	5.7	5.8	-0.1	55	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	41.8	8.8	-25.4	-14.7
Day Peak (MW)	1828.0	410.0	-1107.0	-670.3

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	322.8	-270.1	90.6	-129.6	-13.9	0.0
Actual(MU)	296.4	-268.7	103.2	-124.2	-14.2	-7.4
O/D/U/D(MU)	-26.4	1.3	12.6	5.4	-0.3	-7.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3442	10949	7718	2560	271	24940	45
State Sector	7475	14273	5713	2710	212	30383	55
Total	10917	25222	13431	5270	483	55323	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	762	1375	583	637	15	3372	68
Lignite	24	16	58	0	0	98	2
Hydro	363	56	57	124	37	637	13
Nuclear	29	47	46	0	0	122	2
Gas, Naptha & Diesel	20	18	7	0	28	73	1
RES (Wind, Solar, Biomass & Others)	156	157	330	2	1	646	13
Total	1355	1668	1081	763	81	4948	100

Share of RES in total generation (%)	11.53	9.41	30.53	0.30	0.83	13.06
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	40.52	15.57	40.08	16.56	46.69	28.41

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.045
Based on State Max Demands	1.074

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	204718	11:21	689
Non-Solar hr	204116	21:33	876

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: 18-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	1002	0.0	24.7	-24.7
2	HVDC	PUSAULI B/B	-	0	108	0.0	2.7	-2.7
3	765 kV	GAYA-VARANASI	2	268	585	0.0	5.3	-5.3
4	765 kV	SASARAM-FATEHPUR	1	67	328	0.0	3.9	-3.9
5	765 kV	GAYA-BALIA	1	0	656	0.0	11.2	-11.2
6	400 kV	PUSAULI-VARANASI	1	0	109	0.0	1.6	-1.6
7	400 kV	PUSAULI -ALLAHABAD	1	0	89	0.0	1.1	-1.1
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	808	0.0	15.2	-15.2
9	400 kV	PATNA-BALIA	2	0	445	0.0	8.1	-8.1
10	400 kV	NAUBATPUR-BALIA	2	0	455	0.0	8.3	-8.3
11	400 kV	BIHARSHARIFF-BALIA	2	0	281	0.0	4.8	-4.8
12	400 kV	MOTIHARI-GORAKHPUR	2	0	489	0.0	9.5	-9.5
13	400 kV	BIHARSHARIFF-VARANASI	2	155	229	0.0	2.1	-2.1
14	220 kV	SAHUPURI-KARAMNANA	1	0	146	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	0.6	0.0	0.6
17	132 kV	KARMANASA-SAHUPURI	1	0	66	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
ER-NR						0.6	100.3	-99.6
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1287	0	19.7	0.0	19.7
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1329	673	14.6	0.0	14.6
3	765 kV	JHARSUGUDA-DURG	2	61	550	0.0	5.0	-5.0
4	400 kV	JHARSUGUDA-RAIGARH	4	11	387	0.0	4.6	-4.6
5	400 kV	RANCHI-SIPAT	2	270	229	2.1	0.0	2.1
6	220 kV	BUDHIPADAR-RAIGARH	1	0	131	0.0	2.6	-2.6
7	220 kV	BUDHIPADAR-KORBA	2	100	37	0.8	0.0	0.8
ER-WR						37.1	12.2	25.0
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	448	0.0	10.1	-10.1
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1641	0.0	34.2	-34.2
3	765 kV	ANGUL-SRIKAKULAM	2	0	2720	0.0	43.2	-43.2
4	400 kV	TALCHER-I/C	2	164	283	0.0	1.0	-1.0
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	87.4	-87.4
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	155	185	0.5	0.9	-0.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	246	102	3.5	0.0	3.5
3	220 kV	ALIPURDUAR-SALAKATI	2	13	60	0.0	0.2	-0.2
ER-NER						4.0	1.0	2.9
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	5040	0.0	78.6	-78.6
2	HVDC	VINDHYACHAL B/B	-	435	0	11.7	0.0	11.7
3	HVDC	MUNDRA-MOHINDERGARH	2	260	0	2.3	0.0	2.3
4	765 kV	GWALIOR-AGRA	2	112	2269	0.1	31.5	-31.5
5	765 kV	GWALIOR-PHAGI	2	0	1533	0.0	25.1	-25.1
6	765 kV	JABALPUR-ORAI	2	0	1112	0.0	32.7	-32.7
7	765 kV	GWALIOR-ORAI	1	684	0	12.2	0.0	12.2
8	765 kV	SATNA-ORAI	1	0	1104	0.0	21.9	-21.9
9	765 kV	BANASKANTHA-CHITORGARH	2	1386	881	8.9	4.9	4.1
10	765 kV	VINDHYACHAL-VARANASI	2	0	3311	0.0	53.8	-53.8
11	400 kV	ZERDA-KANKROLI	1	239	143	1.6	0.6	1.0
12	400 kV	ZERDA -BHINMAL	1	454	176	3.2	0.8	2.5
13	400 kV	VINDHYACHAL -RIHAND	1	959	0	22.0	0.0	22.0
14	400 kV	RAPP-SHUJALPUR	2	152	579	0.4	6.0	-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	2.1	-2.1
17	220 kV	MEHGAON-AURAIYA	1	133	0	1.7	0.0	1.7
18	220 kV	MALANPUR-AURAIYA	1	101	0	1.0	0.0	1.0
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						65.1	257.9	-192.8
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	505	0.0	9.9	-9.9
2	HVDC	RAIGARH-PUGALUR	2	0	3007	0.0	27.9	-27.9
3	765 kV	SOLAPUR-RAICHUR	2	1127	1409	6.1	4.8	1.2
4	765 kV	WARDHA-NIZAMABAD	2	0	2895	0.0	37.6	-37.6
5	400 kV	KOLHAPUR-KUDGI	2	1277	0	21.1	0.0	21.1
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	113	2.2	0.0	2.2
WR-SR						29.4	80.3	-50.9

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 MANGDECHHU HEP 4*180MW)	645	616	633	15.18	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1058	0	1008	24.19	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	170	110	136	3.27	
	NER	132kV GELEPHU-SALAKATI	0	0	0	0.00	
	NER	132kV MOTANGA-RANGIA	-55	-12	-36	-0.87	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-41	0	-3	-0.07	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	451	316	368	8.82	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-936	-790	-906	-21.75	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-670	-560	-614	-14.74	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-171	0	-150	-3.61	

