



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: 05th 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., डोंगतेह, 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 04.07.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 04-जुलाई-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रीड निष्पादन रिपोर्ट रांभांप्रेके 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 04rd July 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 05-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)	71334	56732	43853	25477	3115	200511
Peak Shortage (MW)	315	0	0	0	28	343
Energy Met (MU)	1631	1338	1079	576	63	4686
Hydro Gen (MU)	397	45	50	132	28	651
Wind Gen (MU)	45	72	248	-	-	364
Solar Gen (MU)*	135.44	50.18	92.20	2.74	1.09	282
Energy Shortage (MU)	4.33	0.00	0.00	0.89	0.59	5.81
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	73465	59049	51050	27611	3166	206300
Time Of Maximum Demand Met	22:25	10:22	12:13	23:28	19:44	11:53

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	0.035	0.00	0.00	2.49	2.49	71.81	25.70

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	14350	0	309.9	209.4	-1.7	194	0.00
	Haryana	11659	0	250.5	202.2	-1.3	256	4.07
	Rajasthan	13978	0	296.6	89.1	-5.2	320	0.00
	Delhi	6696	0	139.5	135.9	-2.7	247	0.00
	UP	24609	0	493.3	218.8	-0.9	340	0.00
	Uttarakhand	2151	0	47.4	22.9	0.9	203	0.26
	HP	1616	0	34.1	-9.3	-0.9	26	0.00
	J&K(UT) & Ladakh(UT)	2371	0	49.7	23.2	-0.2	216	0.00
	Chandigarh	326	0	6.8	6.8	-0.1	44	0.00
Railways NR ISTS	172	0	3.4	3.5	-0.1	32	0.00	
WR	Chhattisgarh	5022	0	116.8	67.7	0.1	285	0.00
	Gujarat	17413	0	378.6	201.7	-1.2	828	0.00
	MP	10582	0	234.0	116.2	-2.0	650	0.00
	Maharashtra	24535	0	535.6	188.8	-2.1	678	0.00
	Goa	625	0	12.8	12.8	-0.5	37	0.00
	DNHDDPDCL	1284	0	29.7	29.9	-0.2	47	0.00
	AMNSIL	802	0	17.9	10.2	0.5	255	0.00
	BALCO	519	0	12.4	12.4	0.0	59	0.00
SR	Andhra Pradesh	10314	0	213.7	37.6	2.1	761	0.00
	Telangana	11616	0	230.0	116.7	1.9	1199	0.00
	Karnataka	11484	0	219.1	63.2	1.3	674	0.00
	Kerala	3334	0	68.8	53.5	0.7	330	0.00
	Tamil Nadu	16185	0	339.1	108.6	-6.5	455	0.00
	Puducherry	408	0	8.1	8.1	-0.7	31	0.00
	Bihar	6182	0	119.7	116.5	-2.1	287	0.39
ER	DVC	3363	0	76.1	-41.3	0.1	299	0.00
	Jharkhand	1715	0	35.5	28.5	-1.8	139	0.50
	Odisha	5696	0	125.0	44.0	0.3	507	0.00
	West Bengal	10404	0	218.1	88.6	-1.3	481	0.00
	Sikkim	87	0	1.3	1.5	-0.2	10	0.00
	Railways ER ISTS	20	0	0.2	0.3	-0.1	0	0.00
NER	Arunachal Pradesh	139	0	2.6	2.0	0.4	132	0.00
	Assam	2110	0	41.5	34.0	1.1	163	0.08
	Manipur	187	0	2.7	2.6	0.1	34	0.00
	Meghalaya	312	12	5.4	1.6	-0.2	119	0.51
	Mizoram	112	0	1.9	1.6	-0.2	18	0.00
	Nagaland	137	0	2.7	2.5	-0.2	21	0.00
	Tripura	322	0	6.0	5.3	0.6	93	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	43.2	8.8	-25.0	-14.7
Day Peak (MW)	1984.0	381.3	-1100.0	-670.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	330.0	-219.3	21.9	-132.8	0.1	0.0
Actual(MU)	302.4	-218.6	48.2	-134.4	2.5	0.2
O/D/U/D(MU)	-27.6	0.7	26.3	-1.6	2.4	0.2

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3329	10356	7618	2220	818	24341	45
State Sector	7450	13685	6523	2310	261	30229	55
Total	10778	24041	14141	4530	1079	54569	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	754	1428	612	642	15	3451	68
Lignite	27	12	51	0	0	90	2
Hydro	397	45	50	133	28	651	13
Nuclear	29	47	46	0	0	122	2
Gas, Naptha & Diesel	15	23	7	0	23	68	1
RES (Wind, Solar, Biomass & Others)	188	123	358	4	1	673	13
Total	1409	1678	1123	779	67	5056	100

Share of RES in total generation (%)	13.32	7.30	31.84	0.55	1.63	13.35
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	43.56	12.77	40.38	17.88	42.73	28.70

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.038
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	206300	11:53	81
Non-Solar hr	203475	22:25	1071

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: 05-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	35.6	-35.6
2	HVDC	PUSAULI B/B	-	0	97	0.0	2.4	-2.4
3	765 kV	GAYA-VARANASI	2	133	632	0.0	5.3	-5.3
4	765 kV	SASARAM-FATEHPUR	1	0	383	0.0	5.3	-5.3
5	765 kV	GAYA-BALIA	1	0	696	0.0	11.2	-11.2
6	400 kV	PUSAULI-VARANASI	1	0	94	0.0	1.3	-1.3
7	400 kV	PUSAULI-ALLAHABAD	1	0	94	0.0	1.0	-1.0
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	881	0.0	14.6	-14.6
9	400 kV	PATNA-BALIA	2	0	628	0.0	12.1	-12.1
10	400 kV	NAUBATPUR-BALIA	2	0	663	0.0	12.1	-12.1
11	400 kV	BIHARSHARIFF-BALIA	2	0	387	0.0	4.8	-4.8
12	400 kV	MOTIHARI-GORAKHPUR	2	0	513	0.0	9.0	-9.0
13	400 kV	BIHARSHARIFF-VARANASI	2	61	290	0.0	2.5	-2.5
14	220 kV	SAHUPURI-KARAMNANA	1	0	117	0.0	1.5	-1.5
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						0.7	118.7	-118.0
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1303	0	16.7	0.0	16.7
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1673	177	22.5	0.0	22.5
3	765 kV	JHARSUGUDA-DURG	2	10	290	0.0	3.5	-3.5
4	400 kV	JHARSUGUDA-RAIGARH	4	0	464	0.0	6.9	-6.9
5	400 kV	RANCHI-SIPAT	2	315	138	2.8	0.0	2.8
6	220 kV	BUDHIPADAR-RAIGARH	1	0	99	0.0	2.4	-2.4
7	220 kV	BUDHIPADAR-KORBA	2	83	0	0.2	0.0	0.2
ER-WR						42.1	12.8	29.3
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	557	0.0	9.5	-9.5
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	991	0.0	18.3	-18.3
3	765 kV	ANGUL-SRIKAKULAM	2	0	2393	0.0	38.9	-38.9
4	400 kV	TALCHER-I/C	2	737	0	10.0	0.0	10.0
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	66.7	-66.7
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	409	0.0	6.0	-6.0
2	400 kV	ALIPURDUAR-BONGAIGAON	2	252	298	0.0	1.1	-1.1
3	220 kV	ALIPURDUAR-SALAKATI	2	2	92	0.0	1.2	-1.2
ER-NER						0.0	8.3	-8.3
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	0	307	0.0	7.3	-7.3
NER-NR						0.0	7.3	-7.3
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	4032	0.0	56.9	-56.9
2	HVDC	VINDHYACHAL B/B	-	442	0	12.2	0.0	12.2
3	HVDC	MUNDRA-MOHINDERGARH	2	264	0	0.0	6.0	-6.0
4	765 kV	GWALIOR-AGRA	2	0	2341	0.0	32.5	-32.5
5	765 kV	GWALIOR-PHAGI	2	0	1863	0.0	26.7	-26.7
6	765 kV	JABALPUR-ORAI	2	0	1231	0.0	35.5	-35.5
7	765 kV	GWALIOR-ORAI	1	745	0	11.5	0.0	11.5
8	765 kV	SATNA-ORAI	1	0	1198	0.0	22.4	-22.4
9	765 kV	BANASKANTHA-CHITORGARH	2	1453	790	14.3	3.7	10.6
10	765 kV	VINDHYACHAL-VARANASI	2	0	3449	0.0	57.5	-57.5
11	400 kV	ZERDA-KANKROLI	1	260	90	2.7	0.4	2.2
12	400 kV	ZERDA-BHINMAL	1	565	47	6.2	0.1	6.1
13	400 kV	VINDHYACHAL-RIHAND	1	955	0	21.4	0.0	21.4
14	400 kV	RAPP-SHUJALPUR	2	222	684	1.3	6.7	-5.5
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.7	-2.7
17	220 kV	MEHGAON-AURAIYA	1	85	0	1.0	0.0	1.0
18	220 kV	MALANPUR-AURAIYA	1	57	21	0.5	0.1	0.5
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						71.0	251.3	-180.3
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	781	0	2.7	6.0	-3.3
2	HVDC	RAIGARH-PUGALUR	2	0	3004	0.0	25.9	-25.9
3	765 kV	SOLAPUR-RAICHUR	2	2113	258	22.0	0.3	21.8
4	765 kV	WARDHA-NIZAMABAD	2	0	2345	0.0	31.3	-31.3
5	400 kV	KOLHAPUR-KUDGI	2	1480	0	27.3	0.0	27.3
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	112	2.1	0.0	2.1
WR-SR						54.2	63.4	-9.2

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 MANGDECHHU HEP 4*180MW)	0	0	0	14.62	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	0	0	0	23.73	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	0	0	0	3.34	
	NER	132kV GELEPHU-SALAKATI	31	6	22	0.52	
	NER	132kV MOTANGA-RANGIA	58	8	41	0.98	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-47	0	-12	-0.29	
	ER	NEPAL IMPORT (FROM BIHAR)	-27	0	-3	-0.08	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	455	239	381	9.14	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-937	-863	-896	-21.50	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-670	-555	-610	-14.65	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-163	0	-145	-3.48	