



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 September 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, लापालंग, 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 04.09.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 04-सितम्बर-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 04th September 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 05-Sep-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)	76274	64984	44155	25155	3424	213992
Peak Shortage (MW)	769	98	0	414	201	1482
Energy Met (MU)	1796	1574	1037	550	71	5029
Hydro Gen (MU)	361	87	53	121	34	655
Wind Gen (MU)	30	106	228	-	-	364
Solar Gen (MU)*	141.54	55.76	62.38	1.73	1.29	263
Energy Shortage (MU)	5.42	2.75	0.00	1.13	0.67	9.97
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	81220	72487	48844	26171	3712	226227
Time Of Maximum Demand Met	14:55	14:54	11:37	19:12	18:57	14:54

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	0.044	0.00	0.22	3.88	4.10	61.21	34.70

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	14986	0	317.7	179.8	-0.2	301	0.00
	Haryana	12310	0	262.6	197.6	-0.6	205	1.44
	Rajasthan	17363	0	371.6	149.1	-1.6	451	0.00
	Delhi	6642	0	135.8	111.3	-2.5	143	0.00
	UP	26528	0	559.9	257.7	-1.4	1923	0.00
	Uttarakhand	2314	0	49.6	25.7	0.8	168	0.70
	HP	1722	0	35.6	4.1	0.5	104	0.12
	J&K(UT) & Ladakh(UT)	2435	178	52.7	25.6	3.2	278	3.16
	Chandigarh	379	0	7.3	7.3	-0.1	35	0.00
Railways NR ISTS	166	0	3.4	3.3	0.1	43	0.00	
WR	Chhattisgarh	4767	0	109.2	54.8	-1.5	225	0.00
	Gujarat	24235	0	507.4	196.9	-0.2	957	0.00
	MP	14852	0	320.3	180.6	-0.9	1528	2.59
	Maharashtra	25851	0	566.2	211.5	-1.8	931	0.16
	Goa	665	0	13.8	13.7	0.1	60	0.00
	DNHDDPDCL	1279	0	28.5	29.1	-0.6	60	0.00
	AMNSIL	771	0	16.5	3.9	0.4	296	0.00
	BALCO	519	0	12.4	12.5	-0.1	4	0.00
SR	Andhra Pradesh	9549	0	205.4	64.5	-4.2	413	0.00
	Telangana	9677	0	191.6	70.6	-2.3	666	0.00
	Karnataka	11800	0	221.8	76.8	-3.6	487	0.00
	Kerala	4080	0	81.3	65.1	1.7	293	0.00
	Tamil Nadu	15936	0	326.8	101.9	-5.4	565	0.00
	Puducherry	446	0	9.9	9.5	-0.3	41	0.00
ER	Bihar	6871	0	134.6	135.7	-2.5	214	0.78
	DVC	3287	0	73.7	-46.7	0.4	311	0.00
	Jharkhand	1722	0	35.8	31.2	0.2	193	0.35
	Odisha	4934	0	105.5	32.6	-2.4	345	0.00
	West Bengal	9626	0	199.2	88.6	-4.3	385	0.00
	Sikkim	98	0	1.4	1.2	0.2	46	0.00
Railways ER ISTS	20	0	0.1	0.2	0.0	12	0.00	
NER	Arunachal Pradesh	166	0	3.2	2.9	-0.1	57	0.00
	Assam	2398	0	48.9	39.2	2.1	338	0.25
	Manipur	199	0	2.8	2.8	-0.1	40	0.00
	Meghalaya	285	0	5.2	1.6	-0.2	33	0.42
	Mizoram	127	0	2.0	1.3	-0.1	20	0.00
	Nagaland	167	0	3.3	3.1	-0.1	19	0.00
Tripura	335	0	6.2	7.3	0.3	53	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	39.7	8.9	-24.6	-31.1
Day Peak (MW)	1839.0	422.0	-1085.0	-1474.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	419.0	-253.0	-20.8	-141.4	-3.9	-0.1
Actual(MU)	407.9	-255.9	-21.6	-147.1	-1.3	-18.0
O/D/U/D(MU)	-11.1	-3.0	-0.7	-5.7	2.6	-17.9

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3104	7907	4908	1960	205	18083	47
State Sector	4305	8865	4412	2344	256	20181	53
Total	7409	16772	9320	4304	461	38264	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	833	1528	636	645	15	3656	68
Lignite	30	13	57	0	0	100	2
Hydro	361	87	53	121	34	655	12
Nuclear	29	54	46	0	0	129	2
Gas, Naptha & Diesel	50	92	6	0	29	176	3
RES (Wind, Solar, Biomass & Others)	179	164	336	3	1	683	13
Total	1482	1938	1133	769	79	5400	100

Share of RES in total generation (%)	12.06	8.46	29.64	0.38	1.63	12.64
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	38.36	15.70	38.39	16.10	45.28	27.17

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.027
Based on State Max Demands	1.058

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	226227	14:54	253
Non-Solar hr	215764	19:27	1047

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-Sep-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	801	0.0	19.9	-19.9
2	HVDC	PUSAULI B/B	-	0	97	0.0	2.4	-2.4
3	765 kV	GAYA-VARANASI	2	359	820	0.0	9.1	-9.1
4	765 kV	SASARAM-FATEHPUR	1	40	553	0.0	8.4	-8.4
5	765 kV	GAYA-BALIA	1	0	839	0.0	14.2	-14.2
6	400 kV	PUSAULI-VARANASI	1	7	88	0.0	0.5	-0.5
7	400 kV	PUSAULI-ALLAHABAD	1	0	117	0.0	1.8	-1.8
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	840	0.0	14.5	-14.5
9	400 kV	PATNA-BALIA	2	0	579	0.0	11.0	-11.0
10	400 kV	NAUBATPUR-BALIA	2	0	612	0.0	11.3	-11.3
11	400 kV	BIHARSHARIFF-BALIA	2	41	363	0.0	5.6	-5.6
12	400 kV	MOTIHARI-GORAKHPUR	2	0	465	0.0	8.4	-8.4
13	400 kV	BIHARSHARIFF-VARANASI	2	127	400	0.0	3.3	-3.3
14	220 kV	SAHUPURI-KARAMNANA	1	0	149	0.0	0.6	-0.6
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.5	0.0	0.5
17	132 kV	KARMANASA-SAHUPURI	1	0	0	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
ER-NR						0.5	110.9	-110.4
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	527	1198	0.0	9.5	-9.5
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1316	0	19.1	0.0	19.1
3	765 kV	JHARSUGUDA-DURG	2	0	279	0.0	3.6	-3.6
4	400 kV	JHARSUGUDA-RAIGARH	4	0	499	0.0	6.9	-6.9
5	400 kV	RANCHI-SIPAT	2	255	106	2.4	0.0	2.4
6	220 kV	BUDHIPADAR-RAIGARH	1	0	135	0.0	1.9	-1.9
7	220 kV	BUDHIPADAR-KORBA	2	33	38	0.0	0.0	0.0
ER-WR						21.5	21.9	-0.4
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	392	0.0	5.2	-5.2
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1342	0.0	25.4	-25.4
3	765 kV	ANGUL-SRIKAKULAM	2	0	1884	0.0	28.2	-28.2
4	400 kV	TALCHER-I/C	2	637	321	6.6	0.0	6.6
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	58.8	-58.8
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	350	0.0	5.3	-5.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	33	396	0.0	5.3	-5.3
3	220 kV	ALIPURDUAR-SALAKATI	2	0	97	0.0	1.5	-1.5
ER-NER						0.0	12.1	-12.1
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	553	0.0	13.3	-13.3
NER-NR						0.0	13.3	-13.3
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	5051	0.0	45.0	-45.0
2	HVDC	VINDHYACHAL B/B	-	270	53	2.9	0.7	2.1
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1450	0.0	36.3	-36.3
4	765 kV	GWALIOR-AGRA	2	0	2522	0.0	38.8	-38.8
5	765 kV	GWALIOR-PHAGI	2	7	1987	0.0	32.5	-32.5
6	765 kV	JABALPUR-ORAI	2	0	1521	0.0	24.5	-24.5
7	765 kV	GWALIOR-ORAI	1	791	0	0.0	2.8	-2.8
8	765 kV	SATNA-ORAI	1	0	1135	0.0	22.9	-22.9
9	765 kV	BANASKANTHA-CHITORGARH	2	1213	927	0.0	18.5	-18.5
10	765 kV	VINDHYACHAL-VARANASI	2	0	3489	0.0	30.8	-30.8
11	400 kV	ZERDA-KANKROLI	1	213	162	1.4	0.9	0.4
12	400 kV	ZERDA -BHINMAL	1	506	332	10.8	0.0	10.8
13	400 kV	VINDHYACHAL -RIHAND	1	951	0	10.7	0.0	10.7
14	400 kV	RAPP-SHUJALPUR	2	191	780	0.0	18.7	-18.7
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	114	0	1.8	0.0	1.8
18	220 kV	MALANPUR-AURAIYA	1	73	1	0.7	0.0	0.7
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						28.1	275.0	-246.9
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	305	353	3.8	3.4	0.5
2	HVDC	RAIGARH-PUGALUR	2	0	1304	0.0	45.2	-45.2
3	765 kV	SOLAPUR-RAICHUR	2	2563	0	35.0	0.0	35.0
4	765 kV	WARDHA-NIZAMABAD	2	901	1229	0.0	24.0	-24.0
5	400 kV	KOLHAPUR-KUDGI	2	1846	0	34.6	0.0	34.6
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	117	2.3	0.0	2.3
WR-SR						75.7	72.6	3.1

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)	713	476	618	14.83	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1108	871	959	23.01	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	129	-22	83	1.99	
	NER	132kV GELEPHU-SALAKATI	-8	-5	-7	-0.16	
	NER	132kV MOTANGA-RANGIA	0	0	0	0.00	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-55	0	-10	-0.25	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	477	299	381	9.15	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-947	-827	-912	-21.88	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1474	-913	-1297	-31.12	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-138	0	-115	-2.76	

