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: 02nd September 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 01.09.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 01-सितम्बर-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 01nd September 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: 02-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)	72187	64813	47304	25488	3162	212954
Peak Shortage (MW)	3577	4655	400	1644	469	10745
Energy Met (MU)	1717	1595	1224	616	66	5219
Hydro Gen (MU)	365	102	112	140	40	758
Wind Gen (MU)	25	47	54	-	-	125
Solar Gen (MU)*	140.40	59.95	117.92	2.50	0.96	322
Energy Shortage (MU)	56.00	39.45	6.30	17.84	4.69	124.28
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	77621	74035	60813	27431	3251	239978
Time Of Maximum Demand Met	12:21	14:29	12:29	23:59	18:13	12:22

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	0.114	3.21	5.75	11.38	20.33	70.29	9.37

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	12944	0	287.1	163.8	-0.6	118	0.00
	Haryana	11685	331	253.5	166.5	1.2	303	10.13
	Rajasthan	16485	667	333.0	121.3	4.2	432	34.81
	Delhi	6681	0	138.1	120.5	-2.9	208	0.00
	UP	25261	560	559.2	232.4	-3.5	830	4.84
	Uttarakhand	2175	155	45.6	19.0	1.1	217	2.84
	HP	1680	0	35.9	0.5	2.9	276	0.00
	J&K(UT) & Ladakh(UT)	2576	220	53.8	26.6	3.0	342	3.38
	Chandigarh	363	0	7.5	6.7	0.8	72	0.00
	Railways_NR ISTS	176	0	3.6	2.2	1.4	94	0.00
WR	Chhattisgarh	5829	8	129.6	69.7	2.0	477	8.27
	Gujarat	24544	191	500.7	172.9	7.0	1859	8.33
	MP	14118	0	299.9	159.7	7.1	1302	7.05
	Maharashtra	27462	0	591.4	213.9	0.1	835	15.80
	Goa	697	0	14.2	13.1	0.9	119	0.00
	DNHDDPDCL	1229	0	28.6	29.2	-0.6	52	0.00
	AMNSIL	821	0	18.3	8.5	-0.2	323	0.00
	BALCO	519	0	12.4	12.6	-0.2	5	0.00
SR	Andhra Pradesh	12327	0	244.6	102.6	2.7	814	0.00
	Telangana	14999	0	279.4	130.2	-0.8	673	0.00
	Karnataka	14698	0	257.0	94.3	0.4	967	6.30
	Kerala	4107	0	87.3	56.3	1.3	313	0.00
	Tamil Nadu	15984	0	346.0	169.1	1.4	857	0.00
	Puducherry	431	0	9.7	9.2	-0.2	41	0.00
ER	Bihar	6886	412	149.6	146.2	2.4	0	9.69
	DVC	3409	0	78.2	-45.9	-0.4	0	0.00
	Jharkhand	1787	0	36.3	31.4	1.7	0	8.15
	Odisha	5636	0	130.5	46.4	0.4	0	0.00
	West Bengal	10667	0	220.3	94.8	7.1	0	0.00
	Sikkim	83	0	1.3	1.4	0.0	0	0.00
	Railways_ER ISTS	19	0	0.2	0.1	0.0	0	0.00
NER	Arunachal Pradesh	171	0	3.1	3.0	-0.5	14	0.00
	Assam	2091	200	44.3	34.1	2.8	309	3.88
	Manipur	185	0	2.6	2.6	0.0	31	0.00
	Meghalaya	284	50	5.3	-0.2	0.0	63	0.81
	Mizoram	116	0	1.8	1.3	-0.3	12	0.00
	Nagaland	169	0	3.1	2.8	-0.1	8	0.00
	Tripura	329	0	6.2	6.0	0.1	30	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	40.2	11.0	-25.4	-29.6
Day Peak (MW)	2055.1	436.0	-1111.0	-1435.9

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	290.3	-284.8	128.6	-121.0	-13.1	0.0
Actual(MU)	250.3	-268.8	137.9	-115.9	-11.6	-8.1
O/D/U/D(MU)	-40.0	16.1	9.3	5.1	1.4	-8.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	1761	7219	5508	2560	255	17302	44
State Sector	5105	8526	4518	3580	157	21885	56
Total	6866	15744	10026	6140	412	39187	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	908	1613	743	658	17	3938	70
Lignite	24	13	44	0	0	80	1
Hydro	365	102	112	140	40	758	14
Nuclear	29	54	48	0	0	131	2
Gas, Naptha & Diesel	61	109	6	0	28	205	4
RES (Wind, Solar, Biomass & Others)	172	108	214	4	1	499	9
Total	1559	1998	1167	801	86	5612	100

Share of RES in total generation (%)	11.03	5.39	18.25	0.47	1.12	8.86
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	36.32	13.18	31.98	17.90	47.74	24.72

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.013
Based on State Max Demands	1.040

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	239978	12:22	1578
Non-Solar hr	215586	22:40	7591

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: 02-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	802	0.0	18.0	-18.0
2	HVDC	PUSAULI B/B	-	0	95	0.0	2.4	-2.4
3	765 kV	GAYA-VARANASI	2	249	310	0.0	1.5	-1.5
4	765 kV	SASARAM-FATEHPUR	1	0	312	0.0	6.2	-6.2
5	765 kV	GAYA-BALIA	1	0	509	0.0	8.0	-8.0
6	400 kV	PUSAULI-VARANASI	1	0	128	0.0	2.1	-2.1
7	400 kV	PUSAULI -ALLAHABAD	1	24	53	0.0	0.2	-0.2
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	641	0.0	11.0	-11.0
9	400 kV	PATNA-BALIA	2	0	502	0.0	9.7	-9.7
10	400 kV	NAUBATPUR-BALIA	2	0	518	0.0	9.0	-9.0
11	400 kV	BIHARSHARIFF-BALIA	2	45	168	0.0	1.5	-1.5
12	400 kV	MOTIHARI-GORAKHPUR	2	0	376	0.0	6.8	-6.8
13	400 kV	BIHARSHARIFF-VARANASI	2	114	137	0.0	0.7	-0.7
14	220 kV	SAHUPURI-KARAMNASA	1	0	126	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	0.5	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	78.9	-78.4
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1538	0	19.9	0.0	19.9
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1120	86	13.3	0.0	13.3
3	765 kV	JHARSUGUDA-DURG	2	86	199	0.0	1.3	-1.3
4	400 kV	JHARSUGUDA-RAIGARH	4	0	430	0.0	7.1	-7.1
5	400 kV	RANCHI-SIPAT	2	169	48	0.0	0.7	-0.7
6	220 kV	BUDHIPADAR-RAIGARH	1	0	186	0.0	3.2	-3.2
7	220 kV	BUDHIPADAR-KORBA	2	10	40	0.0	0.4	-0.4
					ER-WR	33.3	12.7	20.6
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	392	0.0	8.8	-8.8
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1987	0.0	44.1	-44.1
3	765 kV	ANGUL-SRIKAKULAM	2	0	2198	0.0	39.5	-39.5
4	400 kV	TALCHER-I/C	2	86	729	0.0	10.5	-10.5
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	92.4	-92.4
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	42	190	0.0	1.3	-1.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	170	172	0.9	0.0	0.9
3	220 kV	ALIPURDUAR-SALAKATI	2	20	53	0.0	0.3	-0.3
					ER-NER	0.9	1.6	-0.7
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	553	0.0	13.2	-13.2
					NER-NR	0.0	13.2	-13.2
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3528	0.0	75.2	-75.2
2	HVDC	VINDHYACHAL B/B	-	180	0	4.9	0.0	4.9
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1449	0.0	33.5	-33.5
4	765 kV	GWALIOR-AGRA	2	130	1597	0.0	18.3	-18.2
5	765 kV	GWALIOR-PHAGI	2	55	1446	0.0	21.7	-21.7
6	765 kV	JABALPUR-ORAI	2	0	751	0.0	20.9	-20.9
7	765 kV	GWALIOR-ORAI	1	853	0	16.5	0.0	16.5
8	765 kV	SATNA-ORAI	1	0	799	0.0	16.0	-16.0
9	765 kV	BANASKANTHA-CHITORGARH	2	1838	277	15.5	0.0	15.5
10	765 kV	VINDHYACHAL-VARANASI	2	0	2898	0.0	50.0	-50.0
11	400 kV	ZERDA-KANKROLI	1	322	29	2.9	0.0	2.8
12	400 kV	ZERDA -BHINMAL	1	663	120	4.1	0.0	4.1
13	400 kV	VINDHYACHAL -RIHAND	1	964	0	22.3	0.0	22.3
14	400 kV	RAPP-SHUJALPUR	2	366	365	0.0	1.3	-1.3
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.2	-2.2
17	220 kV	MEHGAON-AURAIYA	1	173	0	3.3	0.0	3.3
18	220 kV	MALANPUR-AURAIYA	1	137	0	2.6	0.0	2.6
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	72.1	239.1	-167.0
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1007	0.0	20.7	-20.7
2	HVDC	RAIGARH-PUGALUR	2	0	4011	0.0	47.5	-47.5
3	765 kV	SOLAPUR-RAICHUR	2	839	1275	2.8	9.0	-6.2
4	765 kV	WARDHA-NIZAMABAD	2	0	2137	0.0	35.6	-35.6
5	400 kV	KOLHAPUR-KUDGI	2	1567	0	27.5	0.0	27.5
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	121	2.4	0.0	2.4
					WR-SR	32.7	112.7	-80.0

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)	725	459	618	14.82
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1049	954	971	23.30
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	150	-2	47	1.12
	NER	132kV GELEPHU-SALAKATI	34	9	23	0.55
	NER	132kV MOTANGA-RANGIA	64	3	17	0.40
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-27	0	25	0.60
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	463	308	432	10.36
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-947	-826	-916	-21.99
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1436	700	-1234	-29.61
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-164	0	-143	-3.44

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 02-Sep-2023

Export From India (in MU)

Country	(ISGS/LTA/MTOA) PPA	STOA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nepal	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Bangladesh	22.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.01
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	22.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.04

Import by India(in MU)

Country	(ISGS/LTA/MTOA) PPA	STOA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	37.92	2.82	0.00	0.00	0.00	0.00	0.00	0.00	40.74
Nepal	0.00	0.00	9.17	0.00	0.00	0.00	0.00	0.00	9.17
Bangladesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Import	37.92	2.82	9.17	0.00	0.00	0.00	0.00	0.00	49.91

Net from India(in MU) **-ve : Export / +ve : Import**

Country	(ISGS/LTA/MTOA) PPA	STOA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	37.92	2.82	0.00	0.00	0.00	0.00	0.00	0.00	40.74
Nepal	-0.03	0.00	9.17	0.00	0.00	0.00	0.00	0.00	9.14
Bangladesh	-22.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-22.01
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	15.88	2.82	9.17	0.00	0.00	0.00	0.00	0.00	27.87