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: 03 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 02.09.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 02-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 02 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: 03-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)	74045	64151	45734	25049	2989	211968
Peak Shortage (MW)	2656	2753	25	1979	603	8016
Energy Met (MU)	1750	1618	1189	604	64	5224
Hydro Gen (MU)	367	105	85	134	39	730
Wind Gen (MU)	47	61	122	-	-	230
Solar Gen (MU)*	142.54	60.25	111.66	1.92	1.06	317
Energy Shortage (MU)	40.86	38.87	0.10	23.51	7.88	111.22
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	79177	73903	58271	27397	3145	238620
Time Of Maximum Demand Met	14:35	14:33	12:30	00:00	18:23	12:49

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	0.031	0.00	0.49	4.00	4.49	80.92	14.59

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	12788	0	287.1	166.0	1.4	280	0.00
	Haryana	12220	0	250.8	174.2	1.5	348	13.67
	Rajasthan	17772	116	361.4	126.5	3.1	359	13.37
	Delhi	6575	0	135.1	114.5	-1.8	113	0.00
	UP	25837	354	569.0	240.8	-1.6	886	8.18
	Uttarakhand	2159	115	46.0	19.3	1.8	203	3.68
	HP	1701	0	36.3	2.1	2.0	271	0.08
	J&K(UT) & Ladakh(UT)	2553	50	53.7	25.9	3.7	331	1.88
	Chandigarh	349	0	7.3	7.2	0.1	35	0.00
	Railways_NR ISTS	176	0	3.6	2.5	1.1	89	0.00
WR	Chhattisgarh	5832	0	132.9	69.8	1.3	383	2.70
	Gujarat	24226	2123	511.6	183.9	0.0	1275	15.94
	MP	14096	143	302.0	158.4	1.8	773	16.60
	Maharashtra	27678	0	596.2	219.1	-1.8	1325	3.63
	Goa	674	0	14.2	13.3	0.8	72	0.00
	DNHDDPDCL	1278	0	29.4	29.5	-0.1	60	0.00
	AMNSIL	895	0	18.9	7.8	0.3	328	0.00
	BALCO	520	0	12.4	12.4	0.0	6	0.00
SR	Andhra Pradesh	11847	0	238.7	98.2	-1.7	727	0.00
	Telangana	14620	0	271.2	128.2	1.6	644	0.00
	Karnataka	13699	0	253.3	82.2	-1.0	399	0.00
	Kerala	3963	0	85.1	63.2	1.3	286	0.00
	Tamil Nadu	15197	0	330.6	131.9	4.6	843	0.00
	Puducherry	420	0	9.8	9.3	-0.2	35	0.10
ER	Bihar	6262	0	139.4	139.3	-0.5	449	18.03
	DVC	3876	0	77.7	-48.8	-0.9	272	0.00
	Jharkhand	1787	0	38.5	31.3	2.2	304	5.48
	Odisha	5355	0	120.1	39.8	-2.8	203	0.00
	West Bengal	10456	0	226.6	103.8	-0.3	443	0.00
	Sikkim	83	0	1.2	1.2	0.0	59	0.00
	Railways_ER ISTS	16	0	0.2	0.1	0.0	8	0.00
NER	Arunachal Pradesh	170	0	3.0	2.4	0.1	50	0.00
	Assam	2026	140	42.5	31.1	4.0	318	7.15
	Manipur	186	0	2.5	2.5	-0.1	39	0.00
	Meghalaya	287	69	4.8	-0.6	0.0	50	0.73
	Mizoram	118	0	1.9	1.1	0.0	30	0.00
	Nagaland	159	0	3.0	2.6	0.0	26	0.00
	Tripura	342	0	6.3	5.9	0.6	66	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	41.8	9.7	-25.5	-29.6
Day Peak (MW)	1853.7	483.0	-1117.0	-1435.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	308.3	-296.2	108.9	-109.8	-11.2	0.0
Actual(MU)	285.5	-285.4	109.3	-106.7	-8.8	-6.1
O/D/U/D(MU)	-22.9	10.8	0.4	3.1	2.5	-6.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	2471	7219	4548	2470	255	16962	46
State Sector	5030	8218	3758	2980	155	20141	54
Total	7501	15437	8306	5450	410	37103	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	875	1706	703	636	12	3932	70
Lignite	29	11	45	0	0	85	2
Hydro	367	105	85	134	39	730	13
Nuclear	29	54	46	0	0	129	2
Gas, Naptha & Diesel	58	78	3	0	29	168	3
RES (Wind, Solar, Biomass & Others)	197	122	277	3	1	599	11
Total	1555	2076	1158	773	81	5643	100

Share of RES in total generation (%)	12.65	5.88	23.88	0.38	1.31	10.62
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	38.12	13.52	35.24	17.69	49.21	25.84

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	238620	12:49	552
Non-Solar hr	215000	19:24	6406

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: 03-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	19.6	-19.6
2	HVDC	PUSAULI B/B	-	0	95	0.0	2.5	-2.5
3	765 kV	GAYA-VARANASI	2	238	288	0.0	0.9	-0.9
4	765 kV	SASARAM-FATEHPUR	1	0	316	0.0	5.4	-5.4
5	765 kV	GAYA-BALIA	1	0	611	0.0	9.3	-9.3
6	400 kV	PUSAULI-VARANASI	1	0	122	0.0	1.9	-1.9
7	400 kV	PUSAULI -ALLAHABAD	1	16	67	0.0	0.4	-0.4
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	750	0.0	12.3	-12.3
9	400 kV	PATNA-BALIA	2	0	453	0.0	8.7	-8.7
10	400 kV	NAUBATPUR-BALIA	2	0	473	0.0	8.8	-8.8
11	400 kV	BIHARSHARIFF-BALIA	2	41	291	0.0	3.6	-3.6
12	400 kV	MOTIHARI-GORAKHPUR	2	0	393	0.0	7.1	-7.1
13	400 kV	BIHARSHARIFF-VARANASI	2	106	155	0.0	1.2	-1.2
14	220 kV	SAHUPURI-KARAMNASA	1	0	146	0.0	2.2	-2.2
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.4	0.0	0.4
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	**0.4**	**83.8**	**-83.4**
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1774	0	22.4	0.0	22.4
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1062	0	16.2	0.0	16.2
3	765 kV	JHARSUGUDA-DURG	2	73	181	0.0	1.0	-1.0
4	400 kV	JHARSUGUDA-RAIGARH	4	0	458	0.0	6.1	-6.1
5	400 kV	RANCHI-SIPAT	2	178	62	1.8	0.0	1.8
6	220 kV	BUDHIPADAR-RAIGARH	1	0	183	0.0	3.2	-3.2
7	220 kV	BUDHIPADAR-KORBA	2	15	34	0.0	0.3	-0.3
					ER-WR	**40.4**	**10.6**	**29.9**
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	556	0.0	8.6	-8.6
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1641	0.0	36.7	-36.7
3	765 kV	ANGUL-SRIKAKULAM	2	0	2411	0.0	41.6	-41.6
4	400 kV	TALCHER-I/C	2	191	344	0.0	3.4	-3.4
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	**0.0**	**86.9**	**-86.9**
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	30	225	0.1	2.3	-2.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	136	250	1.3	0.0	1.3
3	220 kV	ALIPURDUAR-SALAKATI	2	33	59	0.0	0.4	-0.4
					ER-NER	**1.3**	**2.7**	**-1.4**
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	553	0.0	13.6	-13.6
					NER-NR	**0.0**	**13.6**	**-13.6**
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	4537	0.0	84.3	-84.3
2	HVDC	VINDHYACHAL B/B	-	438	0	6.1	0.0	6.1
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1449	0.0	22.1	-22.1
4	765 kV	GWALIOR-AGRA	2	47	1788	0.0	23.1	-23.1
5	765 kV	GWALIOR-PHAGI	2	54	1568	0.0	22.1	-22.1
6	765 kV	JABALPUR-ORAI	2	0	1025	0.0	28.1	-28.1
7	765 kV	GWALIOR-ORAI	1	822	0	14.8	0.0	14.8
8	765 kV	SATNA-ORAI	1	0	970	0.0	18.1	-18.1
9	765 kV	BANASKANTHA-CHITORGARH	2	1715	722	9.9	0.0	9.9
10	765 kV	VINDHYACHAL-VARANASI	2	0	3081	0.0	56.3	-56.3
11	400 kV	ZERDA-KANKROLI	1	297	123	2.5	0.4	2.2
12	400 kV	ZERDA -BHINMAL	1	659	175	4.7	0.0	4.7
13	400 kV	VINDHYACHAL -RIHAND	1	951	0	22.1	0.0	22.1
14	400 kV	RAPP-SHUJALPUR	2	329	532	0.0	3.3	-3.3
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.7	-2.7
17	220 kV	MEHGAON-AURAIYA	1	181	0	2.8	0.0	2.8
18	220 kV	MALANPUR-AURAIYA	1	134	0	1.9	0.0	1.9
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	**64.8**	**260.4**	**-195.6**
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1005	0.0	10.4	-10.4
2	HVDC	RAIGARH-PUGALUR	2	0	2506	0.0	34.5	-34.5
3	765 kV	SOLAPUR-RAICHUR	2	1136	1311	3.7	6.8	-3.1
4	765 kV	WARDHA-NIZAMABAD	2	0	2220	0.0	37.0	-37.0
5	400 kV	KOLHAPUR-KUDGI	2	1490	0	23.8	0.0	23.8
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	122	2.4	0.0	2.4
					WR-SR	**29.9**	**88.6**	**-58.7**

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)	681	641	669	16.05
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1016	974	975	23.40
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	109	24	68	1.64
	NER	132kV GELEPHU-SALAKATI	37	15	30	0.73
	NER	132kV MOTANGA-RANGIA	0	0	0	0.00
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-19	0	23	0.55
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	502	314	381	9.15
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-941	0	-909	-21.83
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1435	-699	-1234	-29.61
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-176	0	-154	-3.70

CROSS BORDER EXCHANGE SCHEDULE **Date of Reporting: 03-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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bangladesh	22.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.02
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	22.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.02

Import by India(in MU)

Country	(ISGS/LTA/MTOA) PPA	STOA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	38.72	2.84	0.00	0.00	0.00	0.00	0.00	0.00	41.56
Nepal	0.00	0.00	10.14	0.00	0.00	0.00	0.00	0.00	10.14
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	38.72	2.84	10.14	0.00	0.00	0.00	0.00	0.00	51.70

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	38.72	2.84	0.00	0.00	0.00	0.00	0.00	0.00	41.56
Nepal	0.00	0.00	10.14	0.00	0.00	0.00	0.00	0.00	10.14
Bangladesh	-22.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-22.02
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	16.70	2.84	10.14	0.00	0.00	0.00	0.00	0.00	29.68