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: 22nd June 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 21.06.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 21-जून-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 21st June 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: 22-Jun-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)	72481	61116	45252	24561	2805	206215
Peak Shortage (MW)	0	79	0	0	17	96
Energy Met (MU)	1615	1462	1127	582	49	4835
Hydro Gen (MU)	385	32	48	115	29	609
Wind Gen (MU)	58	112	122	-	-	291
Solar Gen (MU)*	136.24	56.42	99.16	2.27	0.60	295
Energy Shortage (MU)	0.55	0.42	0.00	0.41	1.13	2.51
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	74979	65748	53179	27358	2942	217678
Time Of Maximum Demand Met	22:26	15:19	12:44	00:03	19:11	14:52

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	0.042	0.00	0.44	8.09	8.53	76.09	15.38

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	14917	0	333.1	194.1	0.1	684	0.00
	Haryana	10996	0	238.4	176.1	-2.4	127	0.16
	Rajasthan	12578	0	272.7	50.7	-3.6	312	0.00
	Delhi	6382	0	132.4	119.6	-2.6	189	0.00
	UP	24714	0	484.4	227.1	-0.6	398	0.00
	Uttarakhand	2504	0	53.7	23.9	-1.1	120	0.00
	HP	1619	0	34.3	-3.3	-0.6	72	0.02
	J&K(UT) & Ladakh(UT)	2429	0	53.9	26.1	0.9	171	0.37
	Chandigarh	393	0	7.7	7.6	0.1	32	0.00
	Railways_NR ISTS	195	0	4.0	3.3	0.7	50	0.00
WR	Chhattisgarh	5047	0	114.5	59.2	-1.7	224	0.09
	Gujarat	18041	0	396.5	171.3	-3.4	591	0.00
	MP	11364	0	239.2	124.6	-4.4	324	0.00
	Maharashtra	28546	0	636.1	235.5	3.8	1065	0.33
	Goa	734	0	15.6	14.8	0.2	143	0.00
	DNHDDPDCL	1311	0	30.4	30.5	-0.1	88	0.00
	AMNSIL	833	0	17.7	7.3	0.2	264	0.00
	BALCO	521	0	12.4	12.4	0.0	61	0.00
SR	Andhra Pradesh	10732	0	222.1	75.4	-1.5	483	0.00
	Telangana	11393	0	222.0	105.7	-2.2	799	0.00
	Karnataka	12888	0	246.2	75.9	-1.1	805	0.00
	Kerala	3971	0	81.5	65.2	1.4	257	0.00
	Tamil Nadu	16222	0	345.4	172.0	-2.0	523	0.00
	Puducherry	425	0	9.5	9.3	-0.5	41	0.00
ER	Bihar	6375	0	135.5	127.5	-1.5	237	0.41
	DVC	3433	0	75.6	-49.4	-1.0	330	0.00
	Jharkhand	1665	0	35.8	29.0	-1.6	202	0.00
	Odisha	5774	0	125.0	51.1	-1.7	268	0.00
	West Bengal	10017	0	208.4	79.6	-2.3	624	0.00
	Sikkim	87	0	1.4	1.4	-0.1	26	0.00
	Railways_ER ISTS	22	0	0.2	0.3	0.0	0	0.00
NER	Arunachal Pradesh	133	0	2.5	2.4	-0.1	31	0.00
	Assam	1809	0	30.2	23.5	-0.1	114	0.00
	Manipur	175	0	2.4	2.5	-0.1	18	0.00
	Meghalaya	305	17	4.7	1.5	-0.1	63	1.13
	Mizoram	113	0	1.6	1.6	-0.3	8	0.00
	Nagaland	154	0	2.7	2.5	-0.1	12	0.00
	Tripura	297	0	4.9	5.8	-0.2	66	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	41.7	6.4	-25.4	-17.9
Day Peak (MW)	1855.0	131.1	-1105.0	-877.8

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	266.5	-195.9	113.0	-167.8	-15.7	0.0
Actual(MU)	229.6	-199.8	138.2	-157.8	-14.5	-4.4
O/D/U/D(MU)	-36.9	-3.9	25.2	10.1	1.2	-4.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	1231	8830	5238	1810	455	17564	46
State Sector	5425	9883	3978	1050	220	20556	54
Total	6656	18713	9216	2860	675	38119	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	781	1481	661	681	14	3618	70
Lignite	30	17	58	0	0	106	2
Hydro	385	32	48	115	29	609	12
Nuclear	29	35	51	0	0	115	2
Gas, Naptha & Diesel	43	51	7	0	28	129	2
RES (Wind, Solar, Biomass & Others)	201	169	243	3	1	617	12
Total	1470	1786	1067	799	72	5194	100

Share of RES in total generation (%)	13.66	9.48	22.77	0.39	0.84	11.91
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	41.84	13.23	32.03	15.05	41.01	25.89

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.029
Based on State Max Demands	1.052

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	217678	14:52	57
Non-Solar hr	210872	22:31	124

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: 22-Jun-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	1001	0.0	24.0	-24.0
2	HVDC	PUSAULI B/B	-	0	97	0.0	2.3	-2.3
3	765 kV	GAYA-VARANASI	2	249	430	0.0	3.7	-3.7
4	765 kV	SASARAM-FATEHPUR	1	86	468	0.0	6.4	-6.4
5	765 kV	GAYA-BALIA	1	0	919	0.0	12.3	-12.3
6	400 kV	PUSAULI-VARANASI	1	0	106	0.0	1.3	-1.3
7	400 kV	PUSAULI -ALLAHABAD	1	0	101	0.0	1.0	-1.0
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	970	0.0	14.8	-14.8
9	400 kV	PATNA-BALIA	2	0	716	0.0	12.1	-12.1
10	400 kV	NAUBATPUR-BALIA	2	0	873	0.0	13.4	-13.4
11	400 kV	BIHARSHARIFF-BALIA	2	0	485	0.0	7.6	-7.6
12	400 kV	MOTIHARI-GORAKHPUR	2	0	617	0.0	10.5	-10.5
13	400 kV	BIHARSHARIFF-VARANASI	2	136	375	0.0	4.3	-4.3
14	220 kV	SAHUPURI-KARAMNASA	1	0	197	0.0	3.9	-3.9
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	25	0	0.8	0.0	0.8
17	132 kV	KARMANASA-SAHUPURI	1	0	53	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	**0.8**	**117.6**	**-116.8**
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1839	0	25.9	0.0	25.9
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	938	760	8.5	0.0	8.5
3	765 kV	JHARSUGUDA-DURG	2	0	666	0.0	7.2	-7.2
4	400 kV	JHARSUGUDA-RAIGARH	4	8	586	0.0	6.4	-6.4
5	400 kV	RANCHI-SIPAT	2	212	352	0.0	0.5	-0.5
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	0.6	-0.6
7	220 kV	BUDHIPADAR-KORBA	2	131	0	2.4	0.0	2.4
					ER-WR	**36.8**	**14.6**	**22.2**
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	436	0.0	6.8	-6.8
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1985	0.0	48.0	-48.0
3	765 kV	ANGUL-SRIKAKULAM	2	0	3341	0.0	47.5	-47.5
4	400 kV	TALCHER-I/C	2	0	712	0.0	14.8	-14.8
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	**0.0**	**102.3**	**-102.3**
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	260	303	1.1	0.0	1.1
2	400 kV	ALIPURDUAR-BONGAIGAON	2	520	286	3.6	0.0	3.6
3	220 kV	ALIPURDUAR-SALAKATI	2	70	92	0.0	0.2	-0.2
					ER-NER	**4.7**	**0.2**	**4.5**
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	502	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	2510	0.0	41.2	-41.2
2	HVDC	VINDHYACHAL B/B	-	274	0	7.3	0.0	7.3
3	HVDC	MUNDRA-MOHINDERGARH	2	526	0	0.0	5.2	-5.2
4	765 kV	GWALIOR-AGRA	2	557	2425	0.6	25.4	-24.9
5	765 kV	GWALIOR-PHAGI	2	519	1429	2.2	15.6	-13.5
6	765 kV	JABALPUR-ORAI	2	125	1250	0.0	25.7	-25.7
7	765 kV	GWALIOR-ORAI	1	548	0	8.8	0.0	8.8
8	765 kV	SATNA-ORAI	1	0	1160	0.0	20.8	-20.8
9	765 kV	BANASKANTHA-CHITORGARH	2	1762	799	18.2	2.7	15.5
10	765 kV	VINDHYACHAL-VARANASI	2	0	3455	0.0	54.0	-54.0
11	400 kV	ZERDA-KANKROLI	1	538	100	4.9	0.3	4.6
12	400 kV	ZERDA -BHINMAL	1	806	56	6.5	0.1	6.4
13	400 kV	VINDHYACHAL -RIHAND	1	951	0	21.8	0.0	21.8
14	400 kV	RAPP-SHUJALPUR	2	519	494	5.2	2.2	2.9
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.0	-2.0
17	220 kV	MEHGAON-AURAIYA	1	123	0	1.3	0.0	1.3
18	220 kV	MALANPUR-AURAIYA	1	98	0	0.9	0.0	0.9
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	**77.6**	**195.2**	**-117.6**
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1009	0.0	12.9	-12.9
2	HVDC	RAIGARH-PUGALUR	2	0	4012	0.0	58.0	-58.0
3	765 kV	SOLAPUR-RAICHUR	2	1480	2052	9.6	4.1	5.5
4	765 kV	WARDHA-NIZAMABAD	2	0	2969	0.0	34.5	-34.5
5	400 kV	KOLHAPUR-KUDGI	2	1578	0	27.2	0.0	27.2
6	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
7	220 kV	PONDA-AMBEWADI	1	2	0	0.0	0.0	0.0
8	220 kV	XELDEM-AMBEWADI	1	0	124	2.4	0.0	2.4
					WR-SR	**39.2**	**109.5**	**-70.3**

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)	679	574	632	15.17
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1083	1005	1018	24.43
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	146	107	123	2.95
	NER	132kV GELEPHU-SALAKATI	-18	-1	-10	-0.24
	NER	132kV MOTANGA-RANGIA	-42	0	-26	-0.63
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-68	0	-45	-1.08
	ER	NEPAL IMPORT (FROM BIHAR)	61	0	27	0.66
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	138	0	138	6.79
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-928	-798	-899	-21.57
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-878	-604	-745	-17.88
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-177	0	-159	-3.82