National Load Despatch Centre
राष्ट्रीय भार प्रेषण केंद्र
POWER SYSTEM OPERATION CORPORATION LIMITED
पॉवर सिस्टम ऑपरेशन कारपोरेशन 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: 24th November 2022

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 23.11.2022.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 23-नवंबर-2022 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 23nd November 2022, is available at the NLDC website.

धन्यवाद,

पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड
राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली

Report for previous day **Date of Reporting:** **24-Nov-2022**

A. Power Supply Position at All India and Regional level

	NR	WR	SR	ER	NER	TOTAL
Demand Met during Evening Peak hrs(MW) (at 19:00 hrs; from RLDCs)	48809	55854	41738	19294	2592	168287
Peak Shortage (MW)	70	0	0	522	0	592
Energy Met (MU)	1061	1373	937	404	46	3821
Hydro Gen (MU)	135	36	94	41	14	321
Wind Gen (MU)	2	38	49	-	-	89
Solar Gen (MU)*	107.90	52.78	75.45	5.21	0.88	242
Energy Shortage (MU)	1.63	0.00	0.00	4.98	0.00	6.61
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	53318	65320	44559	20128	2734	181812
Time Of Maximum Demand Met (From NLDC SCADA)	10:38	10:53	07:43	17:45	17:18	10:38

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	0.043	0.00	0.66	7.95	8.61	75.71	15.68

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	6991	0	131.1	42.7	-1.0	163	0.00
	Haryana	7152	0	133.9	67.9	1.0	298	0.00
	Rajasthan	15181	0	293.7	97.7	-0.3	253	0.00
	Delhi	3614	0	65.2	58.9	-1.3	161	0.00
	UP	16194	0	305.4	87.5	0.3	371	0.00
	Uttarakhand	2025	0	37.9	25.4	1.0	176	0.21
	HP	1937	0	33.9	23.3	-0.1	62	0.07
	J&K(UT) & Ladakh(UT)	2606	170	56.7	50.0	0.2	145	1.35
	Chandigarh	199	0	3.4	3.2	0.2	24	0.00
WR	Chhattisgarh	4003	0	86.0	34.4	-0.3	116	0.00
	Gujarat	18920	0	390.6	246.3	-1.2	1128	0.00
	MP	15624	0	309.5	189.9	-1.9	538	0.00
	Maharashtra	25408	0	530.9	163.3	2.3	853	0.00
	Goa	624	0	11.5	11.9	-1.1	40	0.00
	DNHDDPDCL	1186	0	27.1	27.0	0.1	71	0.00
	AMNSIL	797	0	17.2	10.8	0.1	250	0.00
SR	Andhra Pradesh	8220	0	174.6	66.9	0.2	449	0.00
	Telangana	9363	0	170.7	57.4	0.6	976	0.00
	Karnataka	11518	0	207.3	74.1	-0.1	715	0.00
	Kerala	3769	0	74.5	51.5	0.2	202	0.00
	Tamil Nadu	14649	0	301.5	177.6	-1.7	460	0.00
	Puducherry	388	0	8.6	8.2	-0.3	25	0.00
ER	Bihar	4447	0	80.5	65.3	2.8	200	0.00
	DVC	3266	0	70.0	-44.0	-0.3	175	0.00
	Jharkhand	1468	116	27.3	18.4	-0.1	123	4.98
	Odisha	4944	0	102.2	25.3	-0.1	277	0.00
	West Bengal	6628	0	122.2	-4.8	-1.0	187	0.00
	Sikkim	115	0	1.8	1.5	0.3	52	0.00
NER	Arunachal Pradesh	135	0	2.3	2.0	0.0	22	0.00
	Assam	1553	0	26.5	20.4	0.3	121	0.00
	Manipur	216	0	2.9	2.9	0.0	18	0.00
	Meghalaya	378	0	6.8	5.4	0.1	39	0.00
	Mizoram	124	0	1.9	1.7	-0.1	13	0.00
	Nagaland	160	0	2.2	2.0	0.0	27	0.00
	Tripura	223	0	3.8	2.8	-0.3	58	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	5.8	4.4	-22.0
Day Peak (MW)	361.6	286.0	-1027.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	156.5	-49.7	90.0	-194.0	-2.7	0.0
Actual(MU)	143.6	-53.7	84.1	-194.8	-3.8	-24.6
O/D/U/D(MU)	-12.9	-4.0	-5.8	-0.8	-1.1	-24.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	7487	12986	7228	3540	584	31824	47
State Sector	10395	14716	8578	2020	142	35850	53
Total	17882	27701	15806	5560	725	67674	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	660	1255	506	567	11	2999	76
Lignite	31	11	43	0	0	85	2
Hydro	136	36	94	41	14	322	8
Nuclear	26	35	53	0	0	115	3
Gas, Naptha & Diesel	16	8	6	0	30	59	1
RES (Wind, Solar, Biomass & Others)	128	92	163	5	1	389	10
Total	997	1438	865	613	56	3969	100

Share of RES in total generation (%)	12.85	6.41	18.83	0.86	1.58	9.81
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	29.15	11.40	35.86	7.50	26.89	20.81

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.023
Based on State Max Demands	1.067

Diversity factor = Sum of regional or state maximum demands / All India maximum demand

***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: 24-Nov-2022

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	0	0.0	0.0	0.0
2	HVDC	PUSAULI B/B	-	0	346	0.0	8.2	-8.2
3	765 kV	GAYA-VARANASI	2	0	763	0.0	11.8	-11.8
4	765 kV	SASARAM-FATEHPUR	1	0	424	0.0	7.8	-7.8
5	765 kV	GAYA-BALIA	1	0	644	0.0	12.5	-12.5
6	400 kV	PUSAULI-VARANASI	1	0	254	0.0	4.8	-4.8
7	400 kV	PUSAULI -ALLAHABAD	1	0	194	0.0	3.5	-3.5
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	830	0.0	13.3	-13.3
9	400 kV	PATNA-BALIA	2	0	838	0.0	15.8	-15.8
10	400 kV	NAUBATPUR-BALIA	2	0	753	0.0	12.9	-12.9
11	400 kV	BIHARSHARIFF-BALIA	2	0	573	0.0	9.8	-9.8
12	400 kV	MOTIHARI-GORAKHPUR	2	0	548	0.0	9.6	-9.6
13	400 kV	BIHARSHARIFF-VARANASI	2	0	357	0.0	5.7	-5.7
14	220 kV	SAHUPURI-KARAMNASA	1	2	101	0.0	1.0	-1.0
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	25	0	0.4	0.0	0.4
17	132 kV	KARMANASA-SAHUPURI	1	0	35	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	0.4	116.7	-116.3
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	592	197	2.9	0.0	2.9
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	264	557	0.0	1.8	-1.8
3	765 kV	JHARSUGUDA-DURG	2	0	462	0.0	8.0	-8.0
4	400 kV	JHARSUGUDA-RAIGARH	4	33	378	0.0	4.0	-4.0
5	400 kV	RANCHI-SIPAT	2	80	231	0.0	1.4	-1.4
6	220 kV	BUDHIPADAR-RAIGARH	1	13	111	0.0	1.3	-1.3
7	220 kV	BUDHIPADAR-KORBA	2	109	53	0.7	0.0	0.7
					ER-WR	3.6	16.4	-12.9
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	549	0.0	12.2	-12.2
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1641	0.0	39.6	-39.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2817	0.0	46.8	-46.8
4	400 kV	TALCHER-I/C	2	0	331	0.0	6.5	-6.5
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	98.6	-98.6
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	252	0.0	3.6	-3.6
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	306	0.0	4.2	-4.2
3	220 kV	ALIPURDUAR-SALAKATI	2	3	29	0.0	0.4	-0.4
					ER-NER	0.0	8.2	-8.2
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	502	0.0	12.2	-12.2
					NER-NR	0.0	12.2	-12.2
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	601	0.0	8.6	-8.6
2	HVDC	VINDHYACHAL B/B	-	437	0	12.1	0.0	12.1
3	HVDC	MUNDRA-MOHINDERGARH	2	1445	0	0.0	25.3	-25.3
4	765 kV	GWALIOR-AGRA	2	0	1307	0.1	16.2	-16.1
5	765 kV	GWALIOR-PHAGI	2	0	2068	0.0	36.0	-36.0
6	765 kV	JABALPUR-ORAI	2	0	781	0.0	27.5	-27.5
7	765 kV	GWALIOR-ORAI	1	887	0	15.7	0.0	15.7
8	765 kV	SATNA-ORAI	1	0	925	0.0	18.9	-18.9
9	765 kV	BANASKANTHA-CHITORGARH	2	2153	0	31.3	0.0	31.3
10	765 kV	VINDHYACHAL-VARANASI	2	0	2084	0.0	35.9	-35.9
11	400 kV	ZERDA-KANKROLI	1	328	0	4.3	0.0	4.3
12	400 kV	ZERDA -BHINMAL	1	510	162	4.4	0.0	4.4
13	400 kV	VINDHYACHAL -RIHAND	1	973	0	22.2	0.0	22.2
14	400 kV	RAPP-SHUJALPUR	2	412	416	1.9	2.7	-0.8
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.6	-1.6
17	220 kV	MEHGAON-AURAIYA	1	154	0	1.1	0.0	1.1
18	220 kV	MALANPUR-AURAIYA	1	125	0	1.6	0.0	1.6
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	94.7	172.7	-78.1
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	307	0	7.2	0.0	7.2
2	HVDC	RAIGARH-PUGALUR	2	0	1201	0.0	24.6	-24.6
3	765 kV	SOLAPUR-RAICHUR	2	630	1932	2.2	10.4	-8.2
4	765 kV	WARDHA-NIZAMABAD	2	0	2720	0.0	33.6	-33.6
5	400 kV	KOLHAPUR-KUDGI	2	1227	0	19.2	0.0	19.2
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	118	2.2	0.0	2.2
					WR-SR	30.8	68.5	-37.7

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)	56	0	16	0.38
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW)	279	0	249	5.98
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	0	0	0	-0.77
	NER	132kV GELEPHU-SALAKATI	4	0	1	0.01
	NER	132kV MOTANGA-RANGIA	19	0	6	0.14
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	0.00
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	286	72	185	4.43
BANGLADESH	ER	BHERAMARA B/B HVDC (BANGLADESH)	-912	-672	-820	-19.69
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-115	0	-98	-2.34