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: 23th July 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 22.07.2022.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 22-जुलाई-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 22nd July 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:** **23-Jul-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 20:00 hrs; from RLDCs)	58681	50761	40966	25591	3258	179257
Peak Shortage (MW)	35	0	0	943	0	978
Energy Met (MU)	1332	1158	966	556	62	4074
Hydro Gen (MU)	334	102	148	128	33	746
Wind Gen (MU)	27	132	118	-	-	277
Solar Gen (MU)*	81.44	35.96	66.30	4.17	0.68	189
Energy Shortage (MU)	1.95	0.00	0.00	5.60	0.00	7.55
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	62614	50194	46411	25957	3321	179923
Time Of Maximum Demand Met (From NLDC SCADA)	22:40	19:45	09:55	23:08	19:38	19:57

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	0.027	0.00	0.23	1.71	1.94	84.01	14.05

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	9552	0	202.2	147.8	-2.0	143	0.00
	Haryana	8694	0	183.2	113.8	0.6	263	0.00
	Rajasthan	10927	0	243.5	58.1	-1.9	382	1.12
	Delhi	5691	0	121.3	111.1	-1.5	154	0.01
	UP	22010	0	446.6	202.1	-1.0	495	0.00
	Uttarakhand	2040	35	44.9	23.4	0.0	50	0.82
	HP	1662	0	34.0	-4.0	1.1	166	0.00
	J&K(UT) & Ladakh(UT)	1947	0	49.9	29.2	-4.8	99	0.00
	Chandigarh	311	0	6.2	6.4	-0.2	34	0.00
WR	Chhattisgarh	4353	0	101.4	50.3	-0.3	154	0.00
	Gujarat	14954	0	332.0	176.2	2.3	877	0.00
	MP	9829	0	214.0	69.0	0.4	746	0.00
	Maharashtra	20658	0	455.0	163.9	-0.5	945	0.00
	Goa	595	0	12.2	12.4	-0.2	40	0.00
	DNHDDPDCL	1116	0	26.1	26.2	-0.1	49	0.00
	AMNSIL	795	0	17.6	10.6	0.4	259	0.00
SR	Andhra Pradesh	8782	0	190.7	72.6	0.9	800	0.00
	Telangana	10735	0	184.3	78.5	2.0	776	0.00
	Karnataka	10360	0	188.2	53.8	0.3	700	0.00
	Kerala	3418	0	72.4	37.3	-0.2	331	0.00
	Tamil Nadu	14987	0	321.0	143.3	-1.0	729	0.00
	Puducherry	417	0	9.5	9.1	-0.3	38	0.00
ER	Bihar	6195	765	122.9	113.0	1.3	313	3.88
	DVC	3538	0	77.4	-35.4	-0.7	364	0.00
	Jharkhand	1575	0	32.4	24.5	-1.1	197	1.72
	Odisha	5843	0	126.6	66.1	-0.1	353	0.00
	West Bengal	9435	0	195.0	81.4	-0.3	248	0.00
	Sikkim	97	0	1.5	1.5	0.0	26	0.00
NER	Arunachal Pradesh	109	0	2.2	2.3	-0.4	6	0.00
	Assam	2249	0	41.5	33.4	1.0	175	0.00
	Manipur	195	0	2.7	2.7	0.0	24	0.00
	Meghalaya	309	0	5.8	0.1	0.0	28	0.00
	Mizoram	106	0	1.6	0.9	-0.2	18	0.00
	Nagaland	143	0	2.7	2.3	-0.1	12	0.00
	Tripura	327	0	5.5	5.6	0.3	114	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	39.6	7.7	-24.5
Day Peak (MW)	1869.0	353.0	-1092.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	211.7	-160.2	35.6	-76.7	-10.4	0.0
Actual(MU)	190.4	-156.3	42.8	-72.1	-10.4	-5.6
O/D/U/D(MU)	-21.3	3.9	7.2	4.6	0.0	-5.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3432	18671	6138	3035	309	31584	44
State Sector	8185	18369	10685	3250	150	40638	56
Total	11617	37039	16823	6285	459	72222	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	693	1010	446	532	15	2696	63
Lignite	25	12	62	0	0	100	2
Hydro	337	102	148	128	33	748	18
Nuclear	29	40	67	0	0	137	3
Gas, Naptha & Diesel	16	3	9	0	29	57	1
RES (Wind, Solar, Biomass & Others)	125	169	222	4	1	522	12
Total	1226	1337	955	664	78	4260	100

Share of RES in total generation (%)	10.24	12.64	23.29	0.64	0.87	12.25
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	40.12	23.29	45.85	19.92	42.82	33.02

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.048
Based on State Max Demands	1.078

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: 23-Jul-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	501	0.0	12.6	-12.6
2	HVDC	PUSAULI B/B	-	0	49	0.0	1.3	-1.3
3	765 kV	GAYA-VARANASI	2	670	228	3.6	0.0	3.6
4	765 kV	SASARAM-FATEHPUR	1	125	205	0.0	1.2	-1.2
5	765 kV	GAYA-BALIA	1	0	579	0.0	8.8	-8.8
6	400 kV	PUSAULI-VARANASI	1	4	60	0.0	0.4	-0.4
7	400 kV	PUSAULI -ALLAHABAD	1	4	60	0.0	0.7	-0.7
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	876	0.0	13.7	-13.7
9	400 kV	PATNA-BALIA	2	0	596	0.0	11.0	-11.0
10	400 kV	NAUBATPUR-BALIA	2	0	600	0.0	11.4	-11.4
11	400 kV	BIHARSHARIFF-BALIA	2	0	504	0.0	6.0	-6.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	449	0.0	7.3	-7.3
13	400 kV	BIHARSHARIFF-VARANASI	2	208	156	0.3	0.0	0.3
14	220 kV	SAHUPURI-KARAMNASA	1	0	142	0.0	1.8	-1.8
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	0	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	4.3	76.1	-71.9
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	629	0	19.8	0.0	19.8
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1273	601	14.2	0.0	14.2
3	765 kV	JHARSUGUDA-DURG	2	0	314	0.0	1.6	-1.6
4	400 kV	JHARSUGUDA-RAIGARH	4	0	312	0.7	0.0	0.7
5	400 kV	RANCHI-SIPAT	2	282	201	2.8	0.0	2.8
6	220 kV	BUDHIPADAR-RAIGARH	1	21	100	0.0	0.9	-0.9
7	220 kV	BUDHIPADAR-KORBA	2	141	12	1.3	0.0	1.3
					ER-WR	38.9	2.5	36.3
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	587	0	14.5	0.0	14.5
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	2476	0.0	41.8	-41.8
3	765 kV	ANGUL-SRIKAKULAM	2	0	3137	0.0	48.9	-48.9
4	400 kV	TALCHER-I/C	2	269	632	3.2	0.0	3.2
5	220 kV	BALIMELA-UPPER-SILERRU	1	2	0	0.0	0.0	0.0
					ER-SR	14.5	90.7	-76.2
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	150	263	0.5	2.4	-1.9
2	400 kV	ALIPURDUAR-BONGAIGAON	2	221	385	0.0	2.7	-2.7
3	220 kV	ALIPURDUAR-SALAKATI	2	23	105	0.0	1.2	-1.2
					ER-NER	0.5	6.3	-5.9
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	704	0.0	16.9	-16.9
					NER-NR	0.0	16.9	-16.9
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	1768	0.0	24.0	-24.0
2	HVDC	VINDHYACHAL B/B	-	441	0	12.1	0.0	12.1
3	HVDC	MUNDRA-MOHINDERGARH	2	0	613	0.0	12.2	-12.2
4	765 kV	GWALIOR-AGRA	2	339	1848	0.3	26.4	-26.1
5	765 kV	GWALIOR-PHAGI	2	625	1390	1.4	13.7	-12.3
6	765 kV	JABALPUR-ORAI	2	85	805	0.0	17.0	-17.0
7	765 kV	GWALIOR-ORAI	1	725	0	11.0	0.0	11.0
8	765 kV	SATNA-ORAI	1	0	899	0.0	17.4	-17.4
9	765 kV	BANASKANTHA-CHITORGARH	2	1480	401	10.2	0.0	10.2
10	765 kV	VINDHYACHAL-VARANASI	2	0	3022	0.0	57.7	-57.7
11	400 kV	ZERDA-KANKROLI	1	312	0	3.0	0.0	3.0
12	400 kV	ZERDA -BHINMAL	1	533	0	5.5	0.0	5.5
13	400 kV	VINDHYACHAL -RIHAND	1	959	0	21.8	0.0	21.8
14	400 kV	RAPP-SHUJALPUR	2	351	510	1.5	3.4	-2.0
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.4	-2.4
17	220 kV	MEHGAON-AURAIYA	1	123	0	0.6	0.0	0.6
18	220 kV	MALANPUR-AURAIYA	1	88	7	1.3	0.0	1.3
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	68.6	174.1	-105.5
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	984	0	20.2	0.0	20.2
2	HVDC	RAIGARH-PUGALUR	2	584	2498	0.0	16.4	-16.4
3	765 kV	SOLAPUR-RAICHUR	2	539	1903	2.2	7.7	-5.5
4	765 kV	WARDHA-NIZAMABAD	2	0	3283	0.0	43.2	-43.2
5	400 kV	KOLHAPUR-KUDGI	2	1513	0	28.4	0.0	28.4
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	103	2.0	0.0	2.0
					WR-SR	52.7	67.2	-14.5

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)	584	0	579	13.9
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW)	1027	0	1004	24.1
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	221	0	102	2.5
	NER	132kV GELEPHU-SALAKATI	48	1	28	0.7
	NER	132kV MOTANGA-RANGIA	17	-4	8	0.2
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-53	0	-27	-0.6
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.0
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	406	179	347	8.3
BANGLADESH	ER	BHERAMARA B/B HVDC (BANGLADESH)	-920	-878	-898	-21.6
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-172	0	-125	-3.0