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 July 2021

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 23.07.2021.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 23-जुलाई-2021 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 23rd July 2021, 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-Jul-2021**

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)	61409	47974	36764	22676	2981	171804
Peak Shortage (MW)	720	0	0	0	0	720
Energy Met (MU)	1385	1121	827	498	56	3888
Hydro Gen (MU)	368	32	136	111	31	678
Wind Gen (MU)	10	135	224	-	-	369
Solar Gen (MU)*	47.26	21.40	69.32	4.40	0.27	143
Energy Shortage (MU)	3.85	0.00	0.00	0.00	0.00	3.85
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	64551	49529	38658	23316	2999	172813
Time Of Maximum Demand Met (From NLDC SCADA)	22:20	10:25	12:28	00:24	19:48	19:44

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	0.046	0.03	1.11	10.66	11.80	76.72	11.48

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	11444	0	260.0	176.0	-1.1	68	0.00
	Haryana	8904	0	188.7	164.3	1.3	269	0.00
	Rajasthan	11862	0	257.9	114.8	-0.2	449	0.00
	Delhi	5536	0	113.5	99.8	0.2	221	0.00
	UP	22520	0	437.7	188.8	-0.7	485	0.40
	Uttarakhand	1993	0	43.2	15.6	1.6	189	0.00
	HP	1469	0	29.5	-6.6	-4.0	0	0.00
	J&K(UT) & Ladakh(UT)	2398	250	48.3	22.7	0.3	216	3.45
	Chandigarh	308	0	6.1	6.2	-0.1	24	0.00
WR	Chhattisgarh	3948	0	93.5	46.5	-0.4	236	0.00
	Gujarat	16485	0	364.9	179.9	2.7	734	0.00
	MP	9246	0	209.6	127.5	0.0	661	0.00
	Maharashtra	19120	0	396.8	121.0	-3.3	612	0.00
	Goa	524	0	11.3	10.5	0.2	45	0.00
	DD	331	0	7.4	7.1	0.3	43	0.00
	DNH	826	0	19.3	19.3	0.0	99	0.00
	AMNSIL	843	0	17.8	5.0	-0.2	299	0.00
SR	Andhra Pradesh	7171	0	149.1	31.9	-0.3	1015	0.00
	Telangana	7387	0	144.2	30.1	-2.4	487	0.00
	Karnataka	7466	0	144.8	-5.0	-0.7	770	0.00
	Kerala	3283	0	67.8	28.2	-1.6	188	0.00
	Tamil Nadu	14257	0	313.0	110.2	-1.0	820	0.00
	Puducherry	396	0	8.6	8.7	-0.1	33	0.00
ER	Bihar	6407	0	126.5	121.7	-1.1	599	0.00
	DVC	3066	0	63.5	-38.5	0.2	744	0.00
	Jharkhand	1588	0	30.3	25.0	-1.0	324	0.00
	Odisha	5762	0	107.3	34.9	-0.7	444	0.00
	West Bengal	8349	0	169.5	51.6	-0.8	446	0.00
	Sikkim	80	0	1.3	1.5	-0.2	24	0.00
NER	Arunachal Pradesh	134	0	2.2	2.3	0.0	70	0.00
	Assam	1975	0	37.4	30.1	0.3	134	0.00
	Manipur	185	1	2.6	2.5	0.1	58	0.00
	Meghalaya	294	0	5.4	2.4	-0.1	22	0.00
	Mizoram	99	0	1.6	1.5	0.0	8	0.00
	Nagaland	140	1	2.6	2.4	-0.1	18	0.00
	Tripura	271	0	4.6	4.1	-0.5	30	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	22.8	-4.3	-21.3
Day Peak (MW)	1131.0	-348.0	-914.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	382.1	-205.9	-72.8	-96.9	-6.5	0.0
Actual(MU)	379.7	-200.8	-80.4	-98.5	-8.5	-8.4
O/D/U/D(MU)	-2.4	5.2	-7.6	-1.6	-2.0	-8.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	7472	16808	10582	660	259	35780	43
State Sector	10290	22454	10458	4895	11	48108	57
Total	17762	39262	21040	5555	270	83888	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	514	1069	367	506	11	2466	62
Lignite	23	13	43	0	0	79	2
Hydro	368	32	136	111	31	678	17
Nuclear	31	32	42	0	0	105	3
Gas, Naptha & Diesel	23	34	10	0	28	95	2
RES (Wind, Solar, Biomass & Others)	79	157	321	4	0	562	14
Total	1037	1337	920	621	70	3985	100

Share of RES in total generation (%)	7.62	11.73	34.96	0.71	0.39	14.11
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	46.04	16.55	54.33	18.59	44.93	33.75

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.036
Based on State Max Demands	1.077

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-Jul-2021

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	701	0.0	17.1	-17.1
2	HVDC	PUSAULI B/B	-	0	247	0.0	5.9	-5.9
3	765 kV	GAYA-VARANASI	2	0	918	0.0	14.1	-14.1
4	765 kV	SASARAM-FATEHPUR	1	169	108	0.7	0.0	0.7
5	765 kV	GAYA-BALIA	1	0	817	0.0	13.6	-13.6
6	400 kV	PUSAULI-VARANASI	1	0	234	0.0	4.6	-4.6
7	400 kV	PUSAULI -ALLAHABAD	1	0	106	0.0	1.3	-1.3
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	697	0.0	11.7	-11.7
9	400 kV	PATNA-BALIA	4	0	1390	0.0	22.8	-22.8
10	400 kV	BIHARSHARIFF-BALIA	2	0	446	0.0	6.5	-6.5
11	400 kV	MOTIHARI-GORAKHPUR	2	0	424	0.0	7.3	-7.3
12	400 kV	BIHARSHARIFF-VARANASI	2	0	252	0.0	3.3	-3.3
13	220 kV	PUSAULI-SAHUPURI	1	0	154	0.0	2.8	-2.8
14	132 kV	SONE NAGAR-RIHAND	1	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	1	20	0	0.5	0.0	0.5
16	132 kV	KARMANASA-SAHUPURI	1	0	0	0.0	0.0	0.0
17	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	1.2	110.8	-109.6
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	14	1080	0.0	9.7	-9.7
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	2014	0	32.6	0.0	32.6
3	765 kV	JHARSUGUDA-DURG	2	205	54	2.5	0.0	2.5
4	400 kV	JHARSUGUDA-RAIGARH	4	161	200	0.0	0.9	-0.9
5	400 kV	RANCHI-SIPAT	2	483	0	8.6	0.0	8.6
6	220 kV	BUDHIPADAR-RAIGARH	1	1	114	0.0	1.8	-1.8
7	220 kV	BUDHIPADAR-KORBA	2	115	10	1.5	0.0	1.5
					ER-WR	45.2	12.4	32.8
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	298	0	7.4	0.0	7.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1091	0.0	25.8	-25.8
3	765 kV	ANGUL-SRIKAKULAM	2	0	2161	0.0	28.4	-28.4
4	400 kV	TALCHER-I/C	2	437	348	1.8	0.0	1.8
5	220 kV	BALIMELA-UPPER-SILERRU	1	1	0	0.0	0.0	0.0
					ER-SR	7.4	54.1	-46.8
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	14	312	0.0	2.5	-2.5
2	400 kV	ALIPURDUAR-BONGAIGAON	2	31	480	0.0	2.7	-2.7
3	220 kV	ALIPURDUAR-SALAKATI	2	0	118	0.0	1.4	-1.4
					ER-NER	0.0	6.6	-6.6
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	843	0.0	16.8	-16.8
					NER-NR	0.0	16.8	-16.8
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	5036	0.0	72.6	-72.6
2	HVDC	VINDHYACHAL B/B	-	0	203	0.0	4.8	-4.8
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1450	0.0	26.9	-26.9
4	765 kV	GWALIOR-AGRA	2	0	3385	0.0	59.5	-59.5
5	765 kV	GWALIOR-PHAGI	2	0	1956	39.5	0.0	39.5
6	765 kV	JABALPUR-ORAI	2	0	1433	0.0	52.6	-52.6
7	765 kV	GWALIOR-ORAI	1	745	0	14.1	0.0	14.1
8	765 kV	SATNA-ORAI	1	0	1519	0.0	30.7	-30.7
9	765 kV	BANASKANTHA-CHITORGARH	2	703	801	1.2	0.0	1.2
10	400 kV	ZERDA-KANKROLI	1	180	109	1.4	0.0	1.4
11	400 kV	ZERDA -BHINMAL	1	203	182	1.2	0.0	1.2
12	400 kV	VINDHYACHAL -RIHAND	1	955	0	22.1	0.0	22.1
13	400 kV	RAPP-SHUJALPUR	2	0	739	12.1	0.0	12.1
14	220 kV	BHANPURA-RANPUR	1	0	133	0.0	2.4	-2.4
15	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.0	-2.0
16	220 kV	MEHGAON-AURAIYA	1	80	26	0.1	0.3	-0.2
17	220 kV	MALANPUR-AURAIYA	1	46	56	0.3	0.1	0.2
18	132 kV	GWALIOR-SAWAI MADHOPUR	1	0	0	0.0	0.0	0.0
19	132 kV	RAJGHAT-LALITPUR	2	0	0	0.0	0.0	0.0
					WR-NR	91.9	251.8	-159.9
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	794	0	14.5	0.0	14.5
2	HVDC	RAIGARH-PUGALUR	2	2155	0	37.1	0.0	37.1
3	765 kV	SOLAPUR-RAICHUR	2	1971	648	23.9	0.0	23.9
4	765 kV	WARDHA-NIZAMABAD	2	700	1247	0.0	2.7	-2.7
5	400 kV	KOLHAPUR-KUDGI	2	1361	0	24.5	0.0	24.5
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	1	81	0.4	0.0	0.4
					WR-SR	100.4	2.7	97.7

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)	634	623	623	14.9
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW)	147	0	39	0.9
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	258	210	217	5.2
	NER	132kV GELEPHU-SALAKATI	29	0	20	0.5
	NER	132kV MOTANGA-RANGIA	64	37	53	1.3
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-70	0	-42	-1.0
	ER	NEPAL IMPORT (FROM BIHAR)	-165	-1	-68	-1.6
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-113	-2	-70	-1.7
BANGLADESH	ER	BHERAMARA B/B HVDC (BANGLADESH)	-791	0	-784	-18.8
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-123	0	-103	-2.5