



National Load Despatch Centre
राष्ट्रीय भार प्रेषण केंद्र
POWER SYSTEM OPERATION CORPORATION LIMITED
पावर 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: 22nd 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., डोंगतेह, 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 21.07.2021.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 21-जुलाई-2021 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा०भा०प्रे०के० की वेबसाइट पर उपलब्ध 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 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: 22-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)	59098	46696	36753	23114	3044	168705
Peak Shortage (MW)	560	0	0	0	3	563
Energy Met (MU)	1244	1098	836	505	59	3742
Hydro Gen (MU)	350	26	116	109	34	634
Wind Gen (MU)	23	248	238	-	-	508
Solar Gen (MU)*	41.78	20.62	51.06	4.37	0.22	118
Energy Shortage (MU)	3.68	0.00	0.00	0.00	0.00	3.68
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	61909	54308	39126	23607	3059	169374
Time Of Maximum Demand Met (From NLDC SCADA)	21:58	09:47	11:05	22:41	19:33	19:52

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	0.022	0.00	0.06	1.47	1.53	78.60	19.87

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	10350	0	202.5	157.9	-9.5	146	0.00
	Haryana	8448	0	165.8	143.6	0.4	452	0.00
	Rajasthan	11534	0	258.6	96.6	4.5	736	0.23
	Delhi	5275	0	100.2	91.3	-1.3	89	0.00
	UP	21573	0	396.2	191.5	0.2	343	0.00
	Uttarakhand	1789	0	40.1	14.5	0.5	181	0.00
	HP	1465	0	28.5	-6.9	-2.8	0	0.00
	J&K(UT) & Ladakh(UT)	2318	250	46.9	22.4	-0.5	469	3.45
	Chandigarh	266	0	5.2	6.0	-0.7	29	0.00
WR	Chhattisgarh	3981	0	96.8	48.0	0.0	194	0.00
	Gujarat	14758	0	329.5	120.1	1.6	677	0.00
	MP	9557	0	215.9	138.9	-2.1	386	0.00
	Maharashtra	18670	0	398.3	118.0	-5.6	598	0.00
	Goa	514	0	11.1	10.3	0.2	38	0.00
	DD	332	0	7.4	7.2	0.2	21	0.00
	DNH	835	0	19.4	19.3	0.1	40	0.00
	AMNSIL	885	0	19.8	6.2	0.1	349	0.00
	Andhra Pradesh	7240	0	156.7	34.6	0.3	430	0.00
SR	Telangana	8007	0	155.3	50.8	-2.1	397	0.00
	Karnataka	7295	0	140.8	-10.3	-0.4	631	0.00
	Kerala	2971	0	64.6	24.1	-1.5	161	0.00
	Tamil Nadu	14008	0	309.9	120.8	-1.4	491	0.00
	Puducherry	385	0	8.4	8.3	0.0	63	0.00
ER	Bihar	6511	0	126.9	120.2	0.4	363	0.00
	DVC	2963	0	65.0	-31.8	-0.5	314	0.00
	Jharkhand	1625	0	29.8	25.3	-2.7	199	0.00
	Odisha	5423	0	111.1	40.1	-0.4	233	0.00
	West Bengal	8546	0	170.7	51.2	0.8	622	0.00
	Sikkim	86	0	1.4	1.5	-0.2	19	0.00
NER	Arumachal Pradesh	147	0	2.2	2.4	-0.2	53	0.00
	Assam	1977	0	39.2	31.5	0.5	197	0.00
	Manipur	192	0	2.6	2.7	-0.1	19	0.00
	Meghalaya	370	0	5.8	1.8	0.2	51	0.00
	Mizoram	103	0	1.5	1.6	-0.1	36	0.00
	Nagaland	144	0	2.6	2.4	-0.1	12	0.00
	Tripura	286	2	5.1	4.2	0.0	93	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	20.9	-2.8	-20.6
Day Peak (MW)	982.0	-315.3	-971.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	329.6	-222.1	-51.3	-53.2	-3.0	0.0
Actual(MU)	310.7	-211.7	-49.1	-54.4	-2.7	-7.2
OD/UD(MU)	-18.8	10.4	2.1	-1.3	0.4	-7.2

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	7972	16008	9942	1160	259	35340	42
State Sector	11595	22158	10295	5075	11	49134	58
Total	19567	38166	20237	6235	270	84474	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	453	964	379	462	10	2268	59
Lignite	22	11	33	0	0	66	2
Hydro	350	26	116	109	34	634	17
Nuclear	31	33	42	0	0	105	3
Gas, Naptha & Diesel	18	27	12	0	23	79	2
RES (Wind, Solar, Biomass & Others)	86	269	318	4	0	677	18
Total	959	1329	899	576	67	3830	100
Share of RES in total generation (%)	8.92	20.22	35.42	0.77	0.33	17.69	
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	48.65	24.61	52.92	19.69	51.09	37.00	

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.075
Based on State Max Demands	1.068

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: 22-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	1000	0.0	14.1	-14.1	
2	HVDC	PUSAULI-B/B	-	0	245	0.0	5.7	-5.7	
3	765 kV	GAYA-VARANASI	2	0	601	0.0	6.9	-6.9	
4	765 kV	SASARAM-EATEHPUR	1	348	0	4.3	0.0	-4.3	
5	765 kV	GAYA-BALIA	1	0	669	0.0	10.0	-10.0	
6	400 kV	PUSAULI-VARANASI	1	0	240	0.0	4.8	-4.8	
7	400 kV	PUSAULI-ALLAHABAD	1	0	87	0.0	1.0	-1.0	
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	563	0.0	7.6	-7.6	
9	400 kV	PATNA-BALIA	4	0	1028	0.0	17.3	-17.3	
10	400 kV	BIHARSHARIFF-BALIA	2	84	344	0.0	4.8	-4.8	
11	400 kV	MOTIHARI-GORAKHPUR	2	0	319	0.0	4.1	-4.1	
12	400 kV	BIHARSHARIFF-VARANASI	2	138	176	0.0	0.4	-0.4	
13	220 kV	PUSAULI-SAHUPURI	1	0	143	0.0	2.6	-2.6	
14	132 kV	SONENAGAR-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-CHANDAUJI	1	0	0	0.0	0.0	0.0	
						ER-NR	4.8	79.3	-74.4
Import/Export of ER (With WR)									
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	722	107	5.0	0.0	5.0	
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	2121	0	38.6	0.0	38.6	
3	765 kV	JHARSUGUDA-DURG	2	293	0	4.7	0.0	4.7	
4	400 kV	JHARSUGUDA-RAIGARH	4	83	192	0.0	1.0	-1.0	
5	400 kV	RANCHI-SIPAT	2	527	0	8.9	0.0	8.9	
6	220 kV	BUDHIPADAR-RAIGARH	1	0	120	0.0	2.0	-2.0	
7	220 kV	BUDHIPADAR-KORBA	2	116	0	2.0	0.0	2.0	
						ER-WR	59.3	2.9	56.3
Import/Export of ER (With SR)									
1	HVDC	JEYPORE-GAZUWAKA B/B	2	300	0	7.3	0.0	7.3	
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1638	0.0	31.4	-31.4	
3	765 kV	ANGUL-SRIKAKULAM	2	0	2122	0.0	32.2	-32.2	
4	400 kV	TALCHER-J/C	2	367	899	0.0	7.4	-7.4	
5	220 kV	BALIMELA-UPPER-SILERRU	1	1	0	0.0	0.0	0.0	
						ER-SR	7.3	63.6	-56.3
Import/Export of ER (With NER)									
1	400 kV	BINAGURI-BONGAIGAON	2	78	321	0.1	2.9	-2.8	
2	400 kV	ALIPURDUAR-BONGAIGAON	2	46	419	0.0	3.7	-3.7	
3	220 kV	ALIPURDUAR-SALAKATI	2	0	113	0.0	1.5	-1.5	
						ER-NER	0.1	8.2	-8.0
Import/Export of NER (With NR)									
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	704	0.0	12.6	-12.6	
						NER-NR	0.0	12.6	-12.6
Import/Export of WR (With NR)									
1	HVDC	CHAMPA-KURUKSHETRA	2	0	4533	0.0	62.3	-62.3	
2	HVDC	VINDHYACHAL B/B	-	195	203	3.8	1.0	-2.8	
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1915	0.0	32.5	-32.5	
4	765 kV	GWALIOR-AGRA	2	0	3466	0.0	56.1	-56.1	
5	765 kV	GWALIOR-PHAGI	2	0	1409	0.0	20.6	-20.6	
6	765 kV	JABALPUR-ORAI	2	0	1310	0.0	43.6	-43.6	
7	765 kV	GWALIOR-ORAI	1	514	0	10.0	0.0	10.0	
8	765 kV	SATNA-ORAI	1	0	1529	0.0	29.3	-29.3	
9	765 kV	BANASKANTHA-CHITORGARH	2	0	895	0.0	11.9	-11.9	
10	400 kV	ZERDA-KANKROLI	1	50	118	0.0	0.6	-0.6	
11	400 kV	ZERDA-BHINMAL	1	212	256	0.0	0.8	-0.8	
12	400 kV	VINDHYACHAL-RIHAND	1	963	0	20.8	0.0	20.8	
13	400 kV	RAPP-SHUJALPUR	2	0	545	0.0	6.1	-6.1	
14	220 kV	BHANPURA-RANPUR	1	0	124	0.0	2.0	-2.0	
15	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.4	-1.4	
16	220 kV	MEHGAON-AURAIYA	1	58	31	0.1	0.5	-0.4	
17	220 kV	MALANPUR-AURAIYA	1	27	58	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	35.0	268.7	-233.7
Import/Export of WR (With SR)									
1	HVDC	BHADRAWATI B/B	-	300	0	7.3	0.0	7.3	
2	HVDC	RAIGARH-PUGALUR	2	2148	0	49.7	0.0	49.7	
3	765 kV	SOLAPUR-RAICHUR	2	1391	697	13.6	0.0	13.6	
4	765 kV	WARDHA-NIZAMABAD	2	186	1604	0.2	13.1	-12.9	
5	400 kV	KOLHAPUR-KUDGI	2	1222	0	21.2	0.0	21.2	
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	81	1.4	0.0	1.4	
						WR-SR	93.5	13.1	80.4
INTERNATIONAL EXCHANGES									
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 MANGDECHHU HEP 4*180MW)	642	0	592	14.2			
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW))	0	0	0	0.0			
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	233	0	207	5.0			
	NER	132kV GELEPHU-SALAKATI	30	19	24	0.6			
NER	132kV MOTANGA-RANGIA	67	3	50	1.2				
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-76	0	-47	-1.1			
	ER	NEPAL IMPORT (FROM BIHAR)	-117	-1	-24	-0.6			
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-122	-30	-45	-1.1			
BANGLADESH	ER	BHERAMARA B/B HVDC (BANGLADESH)	-828	-626	-744	-17.9			
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	143	0	-115	-2.8			