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, क़ुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 21th Jul 2020

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 20.07.2020.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 20-जुलाई-2020 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 20th July 2020, 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: 21-Jul-2020**

A. Power Supply Position at All India and Regional level

	NR	WR	SR	ER	NER	TOTAL
Demand Met during Evening Peak hrs(MW) (at 2000 hrs; from RLDCs)	55876	42542	34935	21080	2491	156924
Peak Shortage (MW)	485	0	0	0	194	679
Energy Met (MU)	1236	1025	816	436	44	3557
Hydro Gen (MU)	346	25	102	132	31	636
Wind Gen (MU)	54	93	37	-	-	183
Solar Gen (MU)*	36.11	21.40	67.32	3.99	0.03	129
Energy Shortage (MU)	9.8	0.0	0.0	0.0	4.6	14.4
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	57386	44972	39131	20827	2508	157059
Time Of Maximum Demand Met (From NLDC SCADA)	00:00	10:52	09:54	23:03	20:07	20:09

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	0.030	0.00	0.01	3.69	3.70	74.52	21.78

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	9519	0	197.8	129.7	-5.2	117	0.0
	Haryana	8587	0	172.5	127.9	-1.3	278	0.0
	Rajasthan	11539	0	248.6	75.8	-1.6	282	0.0
	Delhi	5030	0	99.7	85.1	-1.1	287	0.0
	UP	20889	0	402.0	201.6	-2.6	384	0.0
	Uttarakhand	1818	0	40.1	19.2	0.4	136	0.0
	HP	1393	11	28.0	-2.9	-1.6	73	0.0
	J&K(UT) & Ladakh(UT)	2059	515	41.0	18.2	-0.3	244	9.8
	Chandigarh	292	0	6.1	6.5	-0.4	4	0.0
WR	Chhattisgarh	4072	0	96.8	33.0	-1.1	199	0.0
	Gujarat	13659	0	290.2	87.8	-5.4	525	0.0
	MP	9419	0	211.0	109.3	-3.4	391	0.0
	Maharashtra	17515	0	382.3	150.2	-0.2	655	0.0
	Goa	407	0	8.1	8.0	-0.4	37	0.0
	DD	238	0	5.1	5.1	0.0	16	0.0
	DNH	623	0	14.1	13.9	0.2	36	0.0
	AMNSIL	810	0	17.4	4.5	0.3	273	0.0
SR	Andhra Pradesh	7050	0	151.2	60.9	1.0	663	0.0
	Telangana	9323	0	186.1	89.5	-0.3	1143	0.0
	Karnataka	7692	0	144.6	64.5	2.5	766	0.0
	Kerala	2864	0	62.5	49.6	0.7	222	0.0
	Tamil Nadu	12551	0	264.1	124.0	-1.1	836	0.0
	Puducherry	353	0	7.2	7.7	-0.5	21	0.0
ER	Bihar	5240	0	91.0	87.7	-2.2	350	0.0
	DVC	2842	0	64.0	-32.8	1.0	309	0.0
	Jharkhand	1306	0	27.0	19.8	-1.1	154	0.0
	Odisha	4572	0	96.4	12.9	-0.5	337	0.0
	West Bengal	7629	0	156.6	48.2	1.0	485	0.0
	Sikkim	91	0	1.2	1.3	-0.1	19	0.0
NER	Arunachal Pradesh	107	0	1.9	1.7	0.1	17	0.0
	Assam	1583	167	26.8	23.8	-0.1	101	4.5
	Manipur	184	2	2.6	2.5	0.2	26	0.0
	Meghalaya	293	0	5.0	-0.7	-0.4	68	0.0
	Mizoram	94	0	1.7	1.3	0.2	11	0.0
	Nagaland	130	1	2.5	2.3	0.0	9	0.0
	Tripura	248	2	4.0	5.9	-0.8	28	0.0

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	50.0	-1.8	-25.9
Day Peak (MW)	2359.0	-205.2	-1100.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	257.9	-268.5	123.3	-106.4	-6.2	0.0
Actual(MU)	225.2	-256.8	141.6	-103.0	-8.8	-1.9
O/D/U/D(MU)	-32.7	11.6	18.3	3.4	-2.6	-1.9

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	3929	15347	10612	2150	677	32714
State Sector	10209	21666	14715	5742	47	52379
Total	14138	37013	25327	7892	723	85093

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	501	1048	346	433	7	2335
Lignite	17	15	23	0	0	56
Hydro	346	26	102	132	31	636
Nuclear	26	33	47	0	0	106
Gas, Naptha & Diesel	34	48	17	0	22	121
RES (Wind, Solar, Biomass & Others)	111	139	148	4	0	403
Total	1037	1309	684	569	59	3657
Share of RES in total generation (%)	10.74	10.61	21.66	0.71	0.05	11.01
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	46.70	15.07	43.53	23.83	51.77	31.31

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.049
Based on State Max Demands	1.095

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: 21-Jul-2020

Sl No	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
Import/Export of ER (With NR)								
1	HVDC	ALIPURDUAR-AGRA	D/C	0	0	0.0	31.2	-31.2
2	HVDC	PUSAULI B/B	-	0	0	0.0	9.6	-9.6
3	765 kV	GAYA-VARANASI	D/C	27	367	0.0	4.6	-4.6
4	765 kV	SASARAM-FATEHPUR	S/C	0	0	2.8	0.0	2.8
5	765 kV	GAYA-BALIA	S/C	0	0	0.0	6.6	-6.6
6	400 kV	PUSAULI-VARANASI	S/C	0	0	0.0	6.5	-6.5
7	400 kV	PUSAULI -ALLAHABAD	S/C	0	0	0.0	2.9	-2.9
8	400 kV	MUZAFFARPUR-GORAKHPUR	D/C	0	768	0.0	9.1	-9.1
9	400 kV	PATNA-BALIA	Q/C	0	717	0.0	11.3	-11.3
10	400 kV	BIHARSHARIFF-BALIA	D/C	0	333	0.0	5.1	-5.1
11	400 kV	MOTIHARI-GORAKHPUR	D/C	0	323	0.0	4.6	-4.6
12	400 kV	BIHARSHARIFF-VARANASI	D/C	133	137	0.3	0.0	0.3
13	220 kV	PUSAULI-SAHUPURI	S/C	0	0	0.0	1.6	-1.6
14	132 kV	SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	0	0	0.6	0.0	0.6
16	132 kV	KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0
17	132 kV	KARMANASA-CHANDAULI	S/C	0	0	0.0	0.0	0.0
					ER-NR	3.6	93.1	-89.5
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1576	0	26.4	0.0	26.4
2	765 kV	NEW RANCHI-DHARAMJAIGARH	D/C	1147	0	14.1	0.0	14.1
3	765 kV	JHARSUGUDA-DURG	D/C	205	92	0.9	0.0	0.9
4	400 kV	JHARSUGUDA-RAIGARH	Q/C	160	150	0.0	0.3	-0.3
5	400 kV	RANCHI-SIPAT	D/C	399	0	5.0	0.0	5.0
6	220 kV	BUDHIPADAR-RAIGARH	S/C	0	0	0.0	2.2	-2.2
7	220 kV	BUDHIPADAR-KORBA	D/C	134	0	2.3	0.0	2.3
					ER-WR	48.7	2.4	46.2
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0	366	0.0	8.4	-8.4
2	HVDC	TALCHER-KOLAR BIPOLE	D/C	0	1848	0.0	45.0	-45.0
3	765 kV	ANGUL-SRIKAKULAM	D/C	0	2820	0.0	48.9	-48.9
4	400 kV	TALCHER-I/C	D/C	263	772	0.0	4.0	-4.0
5	220 kV	BALIMELA-UPPER-SILERRU	S/C	0	0	0.0	0.0	0.0
					ER-SR	0.0	102.2	-102.2
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	D/C	0	378	0.0	3.7	-3.7
2	400 kV	ALIPURDUAR-BONGAIGAON	D/C	100	344	0.0	0.6	-0.6
3	220 kV	ALIPURDUAR-SALAKATI	D/C	0	107	0.0	1.3	-1.3
					ER-NER	0.0	5.6	-5.6
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	D/C	0	704	0.0	16.8	-16.8
					NER-NR	0.0	16.8	-16.8
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	D/C	0	1001	0.0	29.4	-29.4
2	HVDC	VINDHYACHAL B/B	-	362	0	9.7	0.0	9.7
3	HVDC	MUNDRA-MOHINDERGARH	D/C	0	2500	0.0	19.4	-19.4
4	765 kV	GWALIOR-AGRA	D/C	0	2386	0.0	34.4	-34.4
5	765 kV	PHAGI-GWALIOR	D/C	0	1218	0.0	16.3	-16.3
6	765 kV	JABALPUR-ORAI	D/C	0	899	0.0	27.1	-27.1
7	765 kV	GWALIOR-ORAI	S/C	364	0	6.6	0.0	6.6
8	765 kV	SATNA-ORAI	S/C	0	1418	0.0	27.3	-27.3
9	765 kV	CHITORGARH-BANASKANTHA	D/C	0	1243	0.0	16.2	-16.2
10	400 kV	ZERDA-KANKROLI	S/C	117	225	0.0	0.5	-0.5
11	400 kV	ZERDA -BHINMAL	S/C	257	290	2.5	0.0	2.5
12	400 kV	VINDHYACHAL -RIHAND	S/C	968	0	22.5	0.0	22.5
13	400 kV	RAPP-SHUJALPUR	D/C	209	370	0.0	0.1	-0.1
14	220 kV	BHANPURA-RANPUR	S/C	11	0	0.0	1.1	-1.0
15	220 kV	BHANPURA-MORAK	S/C	2	106	0.0	1.4	-1.4
16	220 kV	MEHGAON-AURAIYA	S/C	80	20	0.4	0.2	0.2
17	220 kV	MALANPUR-AURAIYA	S/C	56	46	0.8	0.1	0.8
18	132 kV	GWALIOR-SAWAI MADHOPUR	S/C	0	0	0.0	0.0	0.0
19	132 kV	RAJGHAT-LALITPUR	D/C	0	0	0.0	0.0	0.0
					WR-NR	42.5	173.3	-130.8
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	512	0.0	14.2	-14.2
2	HVDC	RAIGARH-PUGALUR	D/C	0	595	0.0	0.0	0.0
3	765 kV	SOLAPUR-RAICHUR	D/C	62	2405	0.0	29.1	-29.1
4	765 kV	WARDHA-NIZAMABAD	D/C	0	3059	0.0	42.2	-42.2
5	400 kV	KOLHAPUR-KUDGI	D/C	364	36	4.1	0.0	4.1
6	220 kV	KOLHAPUR-CHIKODI	D/C	0	0	0.0	0.0	0.0
7	220 kV	PONDA-AMBEWADI	S/C	0	0	0.0	0.0	0.0
8	220 kV	XELDEM-AMBEWADI	S/C	0	98	1.7	0.0	1.7
					WR-SR	5.8	85.5	-79.7

INTERNATIONAL EXCHANGES

State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)	Energy Exchange (MU)
BHUTAN	ER	DAGACHU (2 * 63)	0	0	0	0.0
	ER	CHUKA (4 * 84) BIRPARA RECEIPT	398	325	313	7.5
	ER	MANGDECHHU (4 x 180) ALIPURDUAR RECEIPT	772	764	615	14.8
	ER	TALA (6 * 170) BINAGURI RECEIPT	1066	1053	1051	25.2
	NER	132KV-SALAKATI - GELEPHU	56	0	52	1.3
	NER	132KV-RANGIA - DEOTHANG	60	0	54	1.3
NEPAL	NR	132KV-Tanakpur(NH) - Mahendranagar(PG)	-60	0	-28	-0.7
	ER	132KV-BIHAR - NEPAL	-101	-1	-38	-0.9
	ER	220KV-MUZAFFARPUR - DHALKEBAR DC	-44	-2	-8	-0.2
BANGLADESH	ER	Bheramara HVDC(Bangladesh)	-954	-949	-949	-22.8
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-1	73	0	-65	-1.6
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-2	73	0	-65	-1.6