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 May 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 20.05.2020.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 20-मई-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 May 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-May-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)	46619	41649	37137	11487	2435	139327
Peak Shortage (MW)	1206	0	0	0	139	1345
Energy Met (MU)	1087	1052	898	294	45	3375
Hydro Gen (MU)	245	38	76	79	10	447
Wind Gen (MU)	12	83	173	-	-	268
Solar Gen (MU)*	43.14	28.80	81.61	4.22	0.01	158
Energy Shortage (MU)	12.0	0.0	0.0	0.0	1.2	13.2
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	50338	45347	39623	17288	2492	144709
Time Of Maximum Demand Met (From NLDC SCADA)	22:19	15:33	11:55	00:01	19:04	22:21

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	0.023	0.00	0.01	3.58	3.59	84.67	11.74

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	6841	0	145.4	118.6	-0.9	89	0.0
	Haryana	6697	0	139.8	119.2	1.9	229	0.0
	Rajasthan	11017	0	230.0	79.7	2.6	445	0.0
	Delhi	4216	0	82.3	67.8	-2.7	103	0.0
	UP	18936	170	383.2	182.3	2.5	687	1.3
	Uttarakhand	1477	0	32.9	14.5	0.8	133	0.0
	HP	1185	0	23.8	1.7	2.9	264	0.0
	J&K(UT) & Ladakh(UT)	2225	556	45.3	26.3	3.0	403	10.7
	Chandigarh	194	0	4.0	4.0	0.0	23	0.0
WR	Chhattisgarh	3301	0	74.8	23.4	-0.7	221	0.0
	Gujarat	14335	0	308.6	87.3	3.6	308	0.0
	MP	9317	0	203.8	113.9	-2.4	411	0.0
	Maharashtra	19273	0	426.2	146.5	-0.6	466	0.0
	Goa	505	0	10.6	10.3	-0.1	52	0.0
	DD	206	0	4.4	4.4	0.0	21	0.0
	DNH	365	0	8.1	8.1	0.0	265	0.0
	AMNSIL	721	0	15.0	4.4	-0.2	192	0.0
SR	Andhra Pradesh	8890	0	175.5	64.7	0.1	681	0.0
	Telangana	7627	0	159.8	61.6	0.3	426	0.0
	Karnataka	9836	0	188.0	54.2	-0.1	610	0.0
	Kerala	3483	0	70.1	46.9	0.3	176	0.0
	Tamil Nadu	12927	0	296.7	132.1	-2.4	441	0.0
	Puducherry	365	0	7.7	7.9	-0.2	46	0.0
ER	Bihar	5193	0	93.3	86.1	-0.2	150	0.0
	DVC	2404	0	47.3	-23.4	0.0	200	0.0
	Jharkhand	1280	0	19.3	14.7	-1.9	150	0.0
	Odisha	3002	0	57.4	-10.5	-1.2	220	0.0
	West Bengal	5895	0	75.1	21.5	-3.9	200	0.0
	Sikkim	86	0	1.2	1.3	-0.1	25	0.0
NER	Arunachal Pradesh	100	1	2.0	1.5	0.4	45	0.0
	Assam	1542	100	28.4	22.9	0.0	147	1.0
	Manipur	176	1	2.4	2.3	0.1	22	0.0
	Meghalaya	298	0	5.0	3.0	-0.1	34	0.1
	Mizoram	95	1	1.6	1.4	0.1	13	0.0
	Nagaland	119	2	2.2	2.2	-0.1	13	0.0
	Tripura	226	1	3.7	4.0	-0.4	47	0.0

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	23.5	-0.7	-11.2
Day Peak (MW)	1468.5	-135.0	-667.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	280.9	-296.3	119.7	-109.8	5.0	-0.5
Actual(MU)	292.7	-300.4	111.1	-108.6	3.0	-2.2
O/D/U/D(MU)	11.8	-4.1	-8.6	1.3	-2.1	-1.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	5825	16068	11292	3206	649	37040
State Sector	16410	21576	14018	8152	11	60167
Total	22235	37643	25310	11358	660	97206

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	398	1083	316	353	7	2157
Lignite	23	15	34	0	0	72
Hydro	245	38	76	79	10	447
Nuclear	28	34	48	0	0	109
Gas, Naptha & Diesel	33	74	19	0	31	157
RES (Wind, Solar, Biomass & Others)	80	125	302	4	0	511
Total	807	1369	794	436	48	3453
Share of RES in total generation (%)	9.89	9.14	38.08	0.97	0.02	14.81
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	43.62	14.39	53.58	19.09	21.55	30.92

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.072
Based on State Max Demands	1.136

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-May-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	-	0	0	0.0	0.0	0.0
2	HVDC	PUSAULI B/B	S/C	2	248	0.0	5.7	-5.7
3	765 kV	GAYA-VARANASI	D/C	0	810	0.0	10.5	-10.5
4	765 kV	SASARAM-FATEHPUR	S/C	28	352	0.0	3.0	-3.0
5	765 kV	GAYA-BALIA	S/C	0	468	0.0	7.6	-7.6
6	400 kV	PUSAULI-VARANASI	S/C	0	211	0.0	3.8	-3.8
7	400 kV	PUSAULI -ALLAHABAD	S/C	10	142	0.0	1.7	-1.7
8	400 kV	MUZAFFARPUR-GORAKHPUR	D/C	0	1116	0.0	15.2	-15.2
9	400 kV	PATNA-BALIA	Q/C	0	923	0.0	13.5	-13.5
10	400 kV	BIHARSHARIFF-BALIA	D/C	0	478	0.0	5.7	-5.7
11	400 kV	MOTIHARI-GORAKHPUR	D/C	0	332	0.0	5.6	-5.6
12	400 kV	BIHARSHARIFF-VARANASI	D/C	47	407	0.0	2.7	-2.7
13	220 kV	PUSAULI-SAHUPURI	S/C	1	161	0.0	2.5	-2.5
14	132 kV	SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	30	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	0.6	77.4	-76.8
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1100	0	14.5	0.0	14.5
2	765 kV	NEW RANCHI-DHARAMJAIGARH	D/C	573	246	3.5	0.0	3.5
3	765 kV	JHARSUGUDA-DURG	D/C	33	200	0.0	2.0	-2.0
4	400 kV	JHARSUGUDA-RAIGARH	Q/C	178	96	1.0	0.0	1.0
5	400 kV	RANCHI-SIPAT	D/C	246	45	3.2	0.0	3.2
6	220 kV	BUDHIPADAR-RAIGARH	S/C	0	146	0.0	2.5	-2.5
7	220 kV	BUDHIPADAR-KORBA	D/C	102	21	1.0	0.0	1.0
					ER-WR	23.2	4.4	18.7
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0	436	0.0	8.9	-8.9
2	HVDC	TALCHER-KOLAR BIPOLE	D/C	0	1980	0.0	28.4	-28.4
3	765 kV	ANGUL-SRIKAKULAM	D/C	0	2693	0.0	51.1	-51.1
4	400 kV	TALCHER-I/C	D/C	913	191	13.1	0.0	13.1
5	220 kV	BALIMELA-UPPER-SILERRU	S/C	1	0	0.0	0.0	0.0
					ER-SR	0.0	88.4	-88.4
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	D/C	130	167	0.0	1.5	-1.5
2	400 kV	ALIPURDUAR-BONGAIGAON	D/C	0	349	0.0	5.6	-5.6
3	220 kV	ALIPURDUAR-SALAKATI	D/C	0	75	0.0	1.1	-1.1
					ER-NER	0.0	8.2	-8.2
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	-	0	250	0.0	6.1	-6.1
					NER-NR	0.0	6.1	-6.1
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	D/C	0	2109	0.0	65.9	-65.9
2	HVDC	V'CHAL B/B	D/C	0	102	0.0	2.4	-2.4
3	HVDC	APL -MHG	D/C	0	1918	0.0	42.8	-42.8
4	765 kV	GWALIOR-AGRA	D/C	0	2525	0.0	49.8	-49.8
5	765 kV	PHAGI-GWALIOR	D/C	0	1270	0.0	23.3	-23.3
6	765 kV	JABALPUR-ORAI	D/C	0	905	0.0	30.9	-30.9
7	765 kV	GWALIOR-ORAI	S/C	610	0	12.6	0.0	12.6
8	765 kV	SATNA-ORAI	S/C	0	1390	0.0	30.6	-30.6
9	765 kV	CHITORGARH-BANASKANTHA	D/C	341	778	0.0	3.2	-3.2
10	400 kV	ZERDA-KANKROLI	S/C	159	65	1.9	0.0	1.9
11	400 kV	ZERDA -BHINMAL	S/C	137	157	0.0	0.1	-0.1
12	400 kV	V'CHAL -RIHAND	S/C	985	0	22.2	0.0	22.2
13	400 kV	RAPP-SHUJALPUR	D/C	142	323	0.0	1.6	-1.6
14	220 kV	BHANPURA-RANPUR	S/C	40	71	2.0	0.6	1.4
15	220 kV	BHANPURA-MORAK	S/C	0	110	0.0	0.1	-0.1
16	220 kV	MEHGAON-AURAIYA	S/C	64	0	0.1	0.0	0.1
17	220 kV	MALANPUR-AURAIYA	S/C	33	19	0.0	0.0	0.0
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	38.8	251.3	-212.5
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	982	0.0	15.8	-15.8
2	HVDC	BARSUR-L.SILERU	-	0	0	0.0	0.0	0.0
3	HVDC	HVDC-RAIGARH-PUGALUR	D/C	0	459	0.0	2.3	-2.3
4	765 kV	SOLAPUR-RAICHUR	D/C	512	2333	0.7	18.3	-17.6
5	765 kV	WARDHA-NIZAMABAD	D/C	0	2521	0.0	38.4	-38.4
6	400 kV	KOLHAPUR-KUDGI	D/C	566	134	6.9	0.0	6.8
7	220 kV	KOLHAPUR-CHIKODI	D/C	0	0	0.0	0.0	0.0
8	220 kV	PONDA-AMBEWADI	S/C	1	0	0.0	0.0	0.0
9	220 kV	XELDEM-AMBEWADI	S/C	0	92	1.7	0.0	1.7
					WR-SR	9.3	74.8	-65.5

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	164	99	88	2.1
	ER	MANGDECHHU (4 x 180) ALIPURDUAR RECEIPT	700	559	425	10.2
	ER	TALA (6 * 170) BINAGURI RECEIPT	448	338	371	8.9
	NER	132KV-SALAKATI - GELEPHU	0	0	8	0.2
	NER	132KV-RANGIA - DEOTHANG	0	0	40	1.0
NEPAL	NR	132KV-Tanakpur(NH) - Mahendranagar(PG)	0	0	0	0.0
	ER	132KV-BIHAR - NEPAL	-41	-2	-18	-0.4
	ER	220KV-MUZAFFARPUR - DHALKEBAR DC	-94	-2	-11	-0.3
BANGLADESH	ER	Bheramara HVDC(Bangladesh)	-550	-8	-364	-8.7
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-1	59	0	-52	-1.3
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-2	58	0	-52	-1.2