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: 21st Apr 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 20.04.2020.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 20-अप्रैल-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 Apr 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-Apr-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)	34761	36892	33392	15669	1995	122709
Peak Shortage (MW)	523	0	0	0	117	640
Energy Met (MU)	728	929	856	321	30	2864
Hydro Gen (MU)	175	37	66	71	8	357
Wind Gen (MU)	19	64	34	-	-	118
Solar Gen (MU)*	29.83	27.12	88.33	4.63	0.03	150
Energy Shortage (MU)	10.8	0.0	0.0	0.0	2.0	12.7
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	35896	40383	39729	16200	2064	126189
Time Of Maximum Demand Met (From NLDC SCADA)	00:00	15:02	11:55	19:29	18:40	00:00

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	0.036	0.00	0.00	1.88	1.88	72.40	25.73

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	3897	0	75.3	58.7	-2.3	124	0.0
	Haryana	4822	0	86.1	79.8	-0.4	114	0.0
	Rajasthan	7054	0	154.1	50.5	-4.6	635	0.0
	Delhi	2935	0	59.9	48.5	-0.8	177	0.0
	UP	14244	0	268.3	108.1	-1.6	411	0.0
	Uttarakhand	1098	0	22.1	6.6	0.4	143	0.0
	HP	825	0	13.9	-3.3	1.4	215	0.0
	J&K(UT) & Ladakh(UT)	2093	523	45.5	31.2	0.0	236	10.8
	Chandigarh	130	0	2.6	3.7	-1.0	7	0.0
WR	Chhattisgarh	3263	0	77.9	21.9	-1.5	132	0.0
	Gujarat	12047	0	265.8	87.5	2.0	376	0.0
	MP	8672	0	182.2	102.9	-0.8	447	0.0
	Maharashtra	17949	0	388.6	163.4	-0.4	630	0.0
	Goa	458	0	8.2	8.4	-0.2	60	0.0
	DD	116	0	2.5	2.5	0.0	14	0.0
	DNH	129	0	2.9	2.9	0.0	29	0.0
	AMNSIL	323	0	0.9	0.5	0.5	152	0.0
SR	Andhra Pradesh	8455	0	170.6	100.5	0.2	414	0.0
	Telangana	6978	0	145.1	54.8	-0.8	643	0.0
	Karnataka	10204	0	207.4	66.1	0.5	561	0.0
	Kerala	3730	0	71.7	51.6	1.2	194	0.0
	Tamil Nadu	10842	0	255.6	181.2	-0.1	317	0.0
	Puducherry	286	0	5.7	5.9	-0.2	27	0.0
ER	Bihar	4410	0	70.2	71.0	-1.5	639	0.0
	DVC	1527	0	30.7	-21.8	0.8	225	0.0
	Jharkhand	1288	0	22.6	16.1	-1.5	78	0.0
	Odisha	3706	0	78.2	3.4	0.4	136	0.0
	West Bengal	6263	0	118.4	32.9	-0.7	283	0.0
	Sikkim	91	0	1.3	1.6	-0.3	6	0.0
NER	Arunachal Pradesh	86	2	1.4	1.6	-0.3	35	0.0
	Assam	1201	86	15.5	13.2	-0.3	107	1.8
	Manipur	177	3	2.3	2.2	0.1	26	0.0
	Meghalaya	259	0	3.7	3.3	-0.2	19	0.1
	Mizoram	76	1	1.5	1.3	0.1	25	0.0
	Nagaland	116	2	2.1	1.9	-0.1	13	0.0
	Tripura	232	0	3.4	3.5	-1.0	46	0.0

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	14.3	-0.8	-15.8
Day Peak (MW)	940.5	-139.9	-1072.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	110.2	-175.7	161.3	-89.3	-4.2	2.3
Actual(MU)	99.1	-178.1	178.4	-89.6	-9.4	0.4
O/D/U/D(MU)	-11.0	-2.5	17.2	-0.3	-5.2	-1.9

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	6618	20692	7432	1530	649	36920
State Sector	19383	25200	12728	7662	11	64984
Total	26001	45892	20160	9192	660	101904

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	324	873	365	368	7	1937
Lignite	17	11	42	0	0	70
Hydro	175	37	66	71	8	357
Nuclear	27	36	51	0	0	115
Gas, Naptha & Diesel	23	57	20	0	26	127
RES (Wind, Solar, Biomass & Others)	80	104	145	5	0	333
Total	647	1118	690	443	41	2940
Share of RES in total generation (%)	12.29	9.29	21.03	1.05	0.07	11.33
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	43.59	15.84	38.12	17.09	19.78	27.42

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.064
Based on State Max Demands	1.109

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-Apr-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	0	251	0.0	6.1	-6.1
3	765 kV	GAYA-VARANASI	D/C	175	571	0.0	5.8	-5.8
4	765 kV	SASARAM-FATEHPUR	S/C	185	276	0.0	1.7	-1.7
5	765 kV	GAYA-BALIA	S/C	0	409	0.0	5.1	-5.1
6	400 kV	PUSAULI-VARANASI	S/C	0	221	0.0	4.1	-4.1
7	400 kV	PUSAULI -ALLAHABAD	S/C	0	140	0.0	1.8	-1.8
8	400 kV	MUZAFFARPUR-GORAKHPUR	D/C	11	946	0.0	11.1	-11.1
9	400 kV	PATNA-BALIA	O/C	0	796	0.0	10.2	-10.2
10	400 kV	BIHARSHARIFF-BALIA	D/C	0	484	0.0	6.2	-6.2
11	400 kV	MOTIHARI-GORAKHPUR	D/C	0	236	0.0	3.6	-3.6
12	400 kV	BIHARSHARIFF-VARANASI	D/C	181	310	0.0	1.4	-1.4
13	220 kV	PUSAULI-SAHUPURI	S/C	0	158	0.0	2.6	-2.6
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	0.4	0.0	0.4
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	0.4	59.8	-59.4
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1200	0	20.1	0.0	20.1
2	765 kV	NEW RANCHI-DHARAMJAIGARH	D/C	678	260	4.9	0.0	4.9
3	765 kV	JHARSUGUDA-DURG	D/C	42	184	0.0	2.1	-2.1
4	400 kV	JHARSUGUDA-RAIGARH	Q/C	42	235	0.0	2.3	-2.3
5	400 kV	RANCHI-SIPAT	D/C	235	91	1.5	0.0	1.5
6	220 kV	BUDHIPADAR-RAIGARH	S/C	0	134	0.0	2.1	-2.1
7	220 kV	BUDHIPADAR-KORBA	D/C	197	0	2.9	0.0	2.9
					ER-WR	29.5	6.6	22.9
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0	540	0.0	8.3	-8.3
2	HVDC	TALCHER-KOLAR BIPOLE	D/C	0	1983	0.0	45.5	-45.5
3	765 kV	ANGUL-SRIKAKULAM	D/C	0	3230	0.0	61.9	-61.9
4	400 kV	TALCHER-I/C	D/C	710	996	0.0	10.1	-10.1
5	220 kV	BALIMELA-UPPER-SILERRU	S/C	1	0	0.0	0.0	0.0
					ER-SR	0.0	115.6	-115.6
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	D/C	511	0	8.5	0.0	8.5
2	400 kV	ALIPURDUAR-BONGAIGAON	D/C	608	0	10.8	0.0	10.8
3	220 kV	ALIPURDUAR-SALAKATI	D/C	125	0	2.1	0.0	2.1
					ER-NER	21.3	0.0	21.3
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	-	488	0	11.6	0.0	11.6
					NER-NR	11.6	0.0	11.6
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	D/C	0	0	0.0	3.6	-3.6
2	HVDC	V'CHAL B/B	D/C	447	100	10.9	0.2	10.7
3	HVDC	APL -MHG	D/C	0	694	0.0	17.0	-17.0
4	765 kV	GWALIOR-AGRA	D/C	0	1897	0.0	31.8	-31.8
5	765 kV	PHAGI-GWALIOR	D/C	37	859	0.0	12.2	-12.2
6	765 kV	JABALPUR-ORAI	D/C	0	578	0.0	19.2	-19.2
7	765 kV	GWALIOR-ORAI	S/C	472	0	8.6	0.0	8.6
8	765 kV	SATNA-ORAI	S/C	0	1098	0.0	22.7	-22.7
9	765 kV	CHITORGARH-BANASKANTHA	D/C	508	428	0.4	0.0	0.4
10	400 kV	ZERDA-KANKROLI	S/C	197	4	2.6	0.0	2.6
11	400 kV	ZERDA -BHINMAL	S/C	359	91	3.2	0.0	3.2
12	400 kV	V'CHAL -RIHAND	S/C	957	0	22.1	0.0	22.1
13	400 kV	RAPP-SHUJALPUR	D/C	328	81	2.0	0.0	2.0
14	220 kV	BHANPURA-RANPUR	S/C	51	43	0.0	0.7	-0.7
15	220 kV	BHANPURA-MORAK	S/C	0	68	0.0	1.1	-1.1
16	220 kV	MEHGAON-AURAIYA	S/C	106	0	1.4	0.0	1.4
17	220 kV	MALANPUR-AURAIYA	S/C	73	0	0.8	0.0	0.8
18	132 kV	GWALIOR-SAWAI MADHOPUR	S/C	0	0	0.0	0.0	0.0
					WR-NR	51.9	108.4	-56.5
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	518	0.0	12.2	-12.2
2	HVDC	BARSUR-L.SILERU	-	0	0	0.0	0.0	0.0
3	765 kV	SOLAPUR-RAICHUR	D/C	0	2632	0.0	38.2	-38.2
4	765 kV	WARDHA-NIZAMABAD	D/C	0	2750	0.0	49.0	-49.0
5	400 kV	KOLHAPUR-KUDGI	D/C	419	426	0.0	0.3	-0.3
6	220 kV	KOLHAPUR-CHIKODI	D/C	0	0	0.0	0.0	0.0
7	220 kV	PONDA-AMBEWADI	S/C	1	94	0.0	1.2	-1.2
8	220 kV	XELDEM-AMBEWADI	S/C	1	68	1.1	0.0	1.1
					WR-SR	1.1	100.8	-99.7

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	85	72	48	1.1
	ER	MANGDECHHU (4 x 180) ALIPURDUAR RECEIPT	373	372	274	6.6
	ER	TALA (6 * 170) BINAGURI RECEIPT	343	280	248	6.0
	NER	132KV-SALAKATI - GELEPHU	22	0	-5	-0.1
	NER	132KV-RANGIA - DEOTHANG	0	0	18	0.4
NEPAL	NR	132KV-Tanakpur(NH) - Mahendranagar(PG)	0	0	0	0.0
	ER	132KV-BIHAR - NEPAL	-34	-4	-10	-0.2
	ER	220KV-MUZAFFARPUR - DHALKEBAR DC	-106	-4	-23	-0.6
BANGLADESH	ER	Bheramara HVDC(Bangladesh)	-960	-266	-566	-13.6
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-1	56	0	-45	-1.1
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-2	56	0	-45	-1.1