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: 21st Apr 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 20.04.2021.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 20-अप्रैल-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 20th April 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:** **21-Apr-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)	46292	51664	44549	23432	2628	168565
Peak Shortage (MW)	350	0	0	0	8	358
Energy Met (MU)	1010	1336	1093	508	46	3992
Hydro Gen (MU)	111	44	67	44	11	277
Wind Gen (MU)	24	90	55	-	-	170
Solar Gen (MU)*	42.43	35.34	92.98	5.34	0.21	176
Energy Shortage (MU)	7.66	0.20	0.00	0.00	0.05	7.91
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	47022	58548	50908	23888	2934	174171
Time Of Maximum Demand Met (From NLDC SCADA)	00:01	15:03	12:44	22:31	18:51	09:57

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	0.047	0.00	0.59	7.46	8.05	65.65	26.29

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	5965	0	125.0	59.6	-1.1	123	0.00
	Haryana	6876	0	128.5	94.5	-4.4	273	0.00
	Rajasthan	10917	0	208.8	58.0	-2.5	574	1.26
	Delhi	3491	0	69.5	54.1	-1.7	99	0.00
	UP	18681	0	352.7	105.1	-5.1	357	0.00
	Uttarakhand	1809	0	39.1	24.6	0.3	158	0.00
	HP	1549	0	30.2	18.9	0.0	141	0.00
	J&K(UT) & Ladakh(UT)	2450	350	52.3	40.6	1.0	350	6.40
	Chandigarh	183	0	3.6	3.9	-0.2	20	0.00
WR	Chhattisgarh	4482	0	99.1	54.2	-3.2	281	0.20
	Gujarat	18112	0	396.0	114.1	-1.8	572	0.00
	MP	11001	0	239.3	138.1	-3.4	423	0.00
	Maharashtra	24367	0	546.5	178.6	-1.9	616	0.00
	Goa	571	0	12.2	11.8	-0.1	31	0.00
	DD	321	0	7.2	7.0	0.2	41	0.00
	DNH	777	0	18.4	18.5	-0.1	42	0.00
	AMNSIL	751	0	17.1	1.9	0.2	258	0.00
SR	Andhra Pradesh	10332	0	207.8	100.5	1.0	1020	0.00
	Telangana	10243	0	210.5	100.2	-0.4	414	0.00
	Karnataka	11688	0	237.5	65.8	-0.2	739	0.00
	Kerala	3788	0	78.7	58.4	0.4	247	0.00
	Tamil Nadu	15586	0	348.5	222.7	1.7	790	0.00
	Puducherry	439	0	9.5	9.5	0.0	48	0.00
ER	Bihar	5648	0	114.5	101.5	3.1	205	0.00
	DVC	3165	0	69.8	-44.1	-0.6	108	0.00
	Jharkhand	1658	0	29.9	24.0	-2.8	175	0.00
	Odisha	4812	0	101.1	44.1	0.5	374	0.00
	West Bengal	9239	0	192.0	51.6	1.2	405	0.00
	Sikkim	56	0	0.8	1.6	-0.7	10	0.00
NER	Arunachal Pradesh	130	3	2.2	2.1	0.0	32	0.01
	Assam	1636	0	26.6	22.6	0.2	121	0.00
	Manipur	200	2	2.5	2.5	0.0	28	0.01
	Meghalaya	321	0	5.5	3.6	0.1	52	0.00
	Mizoram	108	4	1.6	1.6	-0.1	16	0.01
	Nagaland	140	3	2.3	2.2	0.1	18	0.02
	Tripura	298	0	5.2	3.6	0.8	107	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	6.9	-18.2	-20.8
Day Peak (MW)	435.0	-807.2	-898.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	188.6	-282.7	180.5	-94.7	8.4	0.0
Actual(MU)	164.3	-291.7	192.9	-88.3	10.8	-12.1
O/D/U/D(MU)	-24.3	-9.0	12.3	6.4	2.4	-12.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	4078	11868	8302	48	1310	25606	41
State Sector	12005	13374	6965	4845	11	37200	59
Total	16083	25242	15267	4893	1321	62806	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	582	1403	571	583	15	3154	77
Lignite	19	9	44	0	0	72	2
Hydro	111	44	67	44	11	277	7
Nuclear	31	11	43	0	0	84	2
Gas, Naptha & Diesel	38	49	11	0	15	113	3
RES (Wind, Solar, Biomass & Others)	90	126	179	5	0	401	10
Total	871	1642	914	633	41	4101	100

Share of RES in total generation (%)	10.38	7.68	19.57	0.85	0.51	9.78
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	26.64	11.00	31.58	7.83	27.29	18.58

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.052
Based on State Max Demands	1.101

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-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	0	0.0	0.0	0.0
2	HVDC	PUSAULI B/B	-	0	248	0.0	6.1	-6.1
3	765 kV	GAYA-VARANASI	2	77	487	0.0	7.5	-7.5
4	765 kV	SASARAM-FATEHPUR	1	101	179	0.0	1.9	-1.9
5	765 kV	GAYA-BALIA	1	0	410	0.0	7.2	-7.2
6	400 kV	PUSAULI-VARANASI	1	0	249	0.0	5.1	-5.1
7	400 kV	PUSAULI -ALLAHABAD	1	0	62	0.0	0.8	-0.8
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	272	426	0.0	4.9	-4.9
9	400 kV	PATNA-BALIA	4	0	831	0.0	15.8	-15.8
10	400 kV	BIHARSHARIFF-BALIA	2	103	238	0.0	2.2	-2.2
11	400 kV	MOTIHARI-GORAKHPUR	2	0	348	0.0	3.2	-3.2
12	400 kV	BIHARSHARIFF-VARANASI	2	111	182	0.0	1.4	-1.4
13	220 kV	PUSAULI-SAHUPURI	1	39	104	0.0	1.0	-1.0
14	132 kV	SONE NAGAR-RIHAND	1	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	1	20	0	0.2	0.0	0.2
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	0.2	57.0	-56.8
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1696	0	26.0	0.0	26.0
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1082	208	14.1	0.0	14.1
3	765 kV	JHARSUGUDA-DURG	2	132	201	0.0	0.3	-0.3
4	400 kV	JHARSUGUDA-RAIGARH	4	187	336	0.0	3.5	-3.5
5	400 kV	RANCHI-SIPAT	2	262	113	2.0	0.0	2.0
6	220 kV	BUDHIPADAR-RAIGARH	1	0	151	0.0	2.4	-2.4
7	220 kV	BUDHIPADAR-KORBA	2	161	0	2.4	0.0	2.4
					ER-WR	44.5	6.1	38.4
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	531	0.0	11.4	-11.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	2477	0.0	49.1	-49.1
3	765 kV	ANGUL-SRIKAKULAM	2	0	3139	0.0	61.6	-61.6
4	400 kV	TALCHER-I/C	2	0	661	0.0	4.6	-4.6
5	220 kV	BALIMELA-UPPER-SILERRU	1	1	0	0.0	0.0	0.0
					ER-SR	0.0	122.1	-122.1
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	162	171	0.3	0.0	0.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	251	233	0.9	0.0	0.9
3	220 kV	ALIPURDUAR-SALAKATI	2	40	45	0.1	0.0	0.1
					ER-NER	1.2	0.0	1.2
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	495	0	11.8	0.0	11.8
					NER-NR	11.8	0.0	11.8
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	0	0.0	24.2	-24.2
2	HVDC	VINDHYACHAL B/B	-	206	308	0.0	4.0	-4.0
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1457	0.0	34.1	-34.1
4	765 kV	GWALIOR-AGRA	2	0	2301	0.0	38.8	-38.8
5	765 kV	PHAGI-GWALIOR	2	0	1786	0.0	29.0	-29.0
6	765 kV	JABALPUR-ORAI	2	665	948	0.0	30.4	-30.4
7	765 kV	GWALIOR-ORAI	1	801	0	13.7	0.0	13.7
8	765 kV	SATNA-ORAI	1	0	1298	0.0	26.4	-26.4
9	765 kV	CHITORGARH-BANASKANTHA	2	1124	0	13.4	0.0	13.4
10	400 kV	ZERDA-KANKROLI	1	372	0	4.6	0.0	4.6
11	400 kV	ZERDA -BHINMAL	1	634	0	7.0	0.0	7.0
12	400 kV	VINDHYACHAL -RIHAND	1	857	0	19.3	0.0	19.3
13	400 kV	RAPP-SHUJALPUR	2	296	394	1.0	3.7	-2.8
14	220 kV	BHANPURA-RANPUR	1	25	70	0.0	0.8	-0.8
15	220 kV	BHANPURA-MORAK	1	0	30	0.1	0.5	-0.4
16	220 kV	MEHGAON-AURAIYA	1	116	0	0.8	0.0	0.8
17	220 kV	MALANPUR-AURAIYA	1	81	0	1.5	0.0	1.5
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	61.5	191.8	-130.3
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1012	0.0	18.8	-18.8
2	HVDC	RAIGARH-PUGALUR	2	0	3025	0.0	49.5	-49.5
3	765 kV	SOLAPUR-RAICHUR	2	21	1986	0.0	22.8	-22.8
4	765 kV	WARDHA-NIZAMABAD	2	0	2475	0.0	42.6	-42.6
5	400 kV	KOLHAPUR-KUDGI	2	829	4	10.4	0.0	10.4
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	116	2.0	0.0	2.0
					WR-SR	12.4	133.7	-121.2

INTERNATIONAL EXCHANGES

State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)	Energy Exchange (MU)
BHUTAN	ER	400kV MANGDECHHU-ALIPURDUAR 1&2 i.e. ALIPURDUAR RECEIPT (from MANGDECHU HEP 4*180MW)	205	0	153	3.7
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW)	178	93	135	3.3
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	42	0	0	0.0
	NER	132KV-GEYLEGPHU - SALAKATI	23	10	15	0.4
	NER	132kV Motanga-Rangia	-13	10	-4	-0.1
NEPAL	NR	132KV-TANAKPUR(NH) - MAHENDRANAGAR(PG)	-79	0	-72	-1.7
	ER	400KV-MUZAFFARPUR - DHALKEBAR DC	-366	-299	-366	-9.1
	ER	132KV-BIHAR - NEPAL	-362	-267	-306	-7.4
BANGLADESH	ER	BHERAMARA HVDC(BANGLADESH)	-735	-729	-729	-17.5
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-1	81	0	-69	-1.7
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-2	82	0	-69	-1.7