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: 22nd Sep 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 21.09.2020.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 21-सितंबर-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 21st September 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: 22-Sep-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)	65893	45738	35433	21504	2705	171273
Peak Shortage (MW)	134	0	0	0	12	146
Energy Met (MU)	1480	1028	765	438	53	3763
Hydro Gen (MU)	311	103	136	127	24	701
Wind Gen (MU)	6	31	188	-	-	226
Solar Gen (MU)*	40.20	25.11	61.95	4.33	0.11	132
Energy Shortage (MU)	0.0	0.0	0.0	0.0	0.1	0.1
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	66494	46379	37262	21517	2740	172778
Time Of Maximum Demand Met (From NLDC SCADA)	20:25	19:20	10:05	19:30	19:34	19:23

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	0.00	4.44	4.44	82.71	12.85

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	12358	0	275.9	149.8	-2.6	37	0.0
	Haryana	9654	0	212.9	151.3	0.3	165	0.0
	Rajasthan	12128	0	263.0	86.5	1.5	518	0.0
	Delhi	6063	0	123.9	107.9	-0.1	221	0.0
	UP	22865	0	476.3	222.2	-2.0	618	0.0
	Uttarakhand	2027	0	43.0	23.7	0.0	122	0.0
	HP	1447	28	31.6	5.8	-0.5	74	0.0
	J&K(UT) & Ladakh(UT)	2295	0	47.4	24.6	0.7	216	0.0
	Chandigarh	315	0	6.1	6.1	0.0	13	0.0
WR	Chhattisgarh	4028	0	82.7	19.7	-2.0	236	0.0
	Gujarat	14428	0	305.3	79.7	0.7	775	0.0
	MP	9728	0	219.8	109.5	-2.4	388	0.0
	Maharashtra	17290	0	369.6	143.6	-12.4	595	0.0
	Goa	432	0	9.0	8.5	-0.1	49	0.0
	DD	325	0	7.0	6.9	0.1	21	0.0
	DNH	774	0	17.7	17.7	0.0	32	0.0
	AMNSIL	848	0	16.9	1.6	0.8	282	0.0
SR	Andhra Pradesh	7050	0	147.1	29.8	-0.9	339	0.0
	Telangana	6921	0	143.0	54.8	0.0	490	0.0
	Karnataka	7330	0	136.1	24.6	-2.6	799	0.0
	Kerala	3005	0	60.2	29.8	0.1	174	0.0
	Tamil Nadu	13043	0	271.1	119.6	-3.1	436	0.0
	Puducherry	378	0	7.4	7.7	-0.3	47	0.0
ER	Bihar	5760	0	102.9	99.4	-1.4	500	0.0
	DVC	3035	0	62.2	-40.3	-0.1	277	0.0
	Jharkhand	1476	0	25.0	19.8	-3.0	200	0.0
	Odisha	4334	0	86.1	15.5	-0.6	494	0.0
	West Bengal	7754	0	160.6	54.4	-0.1	424	0.0
	Sikkim	86	0	1.0	1.3	-0.3	20	0.0
NER	Arunachal Pradesh	113	0	2.1	2.1	0.0	50	0.0
	Assam	1768	13	33.4	29.5	-0.4	153	0.0
	Manipur	187	1	2.7	2.5	0.1	45	0.0
	Meghalaya	364	0	5.8	1.2	-0.3	26	0.0
	Mizoram	84	0	1.7	1.2	0.0	43	0.0
	Nagaland	132	1	2.4	2.4	-0.2	21	0.0
	Tripura	273	3	4.6	6.5	-0.2	44	0.0

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	47.8	-2.7	-25.8
Day Peak (MW)	2032.0	-286.4	-1116.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	371.8	-308.7	47.0	-109.5	-0.6	0.0
Actual(MU)	388.8	-318.9	29.9	-101.2	-2.8	-4.2
O/D/U/D(MU)	17.0	-10.1	-17.2	8.3	-2.2	-4.2

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	3601	16843	13752	1655	309	36160
State Sector	6484	19446	18032	5455	112	49529
Total	10085	36289	31784	7110	421	85689

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	662	1118	223	428	10	2442
Lignite	31	10	19	0	0	60
Hydro	311	103	136	127	24	701
Nuclear	26	21	69	0	0	116
Gas, Naptha & Diesel	30	68	16	0	27	140
RES (Wind, Solar, Biomass & Others)	61	57	280	4	0	403
Total	1121	1377	742	560	61	3861
Share of RES in total generation (%)	5.46	4.16	37.74	0.77	0.18	10.44
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	35.54	13.17	65.29	23.49	38.80	31.59

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.009
Based on State Max Demands	1.042

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-Sep-2020

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	999	0.0	24.3	-24.3
2	HVDC	PUSAULI B/B	-	0	297	0.0	7.3	-7.3
3	765 kV	GAYA-VARANASI	2	0	577	0.0	8.2	-8.2
4	765 kV	SASARAM-FATEHPUR	1	234	46	2.3	0.0	2.3
5	765 kV	GAYA-BALIA	1	0	553	0.0	9.7	-9.7
6	400 kV	PUSAULI-VARANASI	1	0	260	0.0	5.5	-5.5
7	400 kV	PUSAULI -ALLAHABAD	1	0	116	0.0	1.6	-1.6
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	783	0.0	14.1	-14.1
9	400 kV	PATNA-BALIA	4	0	879	0.0	17.1	-17.1
10	400 kV	BIHARSHARIFF-BALIA	2	0	421	0.0	6.6	-6.6
11	400 kV	MOTIHARI-GORAKHPUR	2	0	340	0.0	5.7	-5.7
12	400 kV	BIHARSHARIFF-VARANASI	2	112	189	0.0	0.2	-0.2
13	220 kV	PUSAULI-SAHUPURI	1	0	128	0.0	2.6	-2.6
14	132 kV	SONE NAGAR-RIHAND	1	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	1	30	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	2.5	102.8	-100.3
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	887	151	6.1	0.0	6.1
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1452	0	20.5	0.0	20.5
3	765 kV	JHARSUGUDA-DURG	2	168	48	1.7	0.0	1.7
4	400 kV	JHARSUGUDA-RAIGARH	4	507	0	9.0	0.0	9.0
5	400 kV	RANCHI-SIPAT	2	601	0	11.0	0.0	11.0
6	220 kV	BUDHIPADAR-RAIGARH	1	0	83	0.0	1.0	-1.0
7	220 kV	BUDHIPADAR-KORBA	2	216	0	4.0	0.0	4.0
					ER-WR	52.3	1.0	51.3
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	645	0.0	14.9	-14.9
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1644	0.0	31.5	-31.5
3	765 kV	ANGUL-SRIKAKULAM	2	0	1999	0.0	27.5	-27.5
4	400 kV	TALCHER-I/C	2	583	883	0.0	5.2	-5.2
5	220 kV	BALIMELA-UPPER-SILERRU	1	1	0	0.0	0.0	0.0
					ER-SR	0.0	73.9	-73.9
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	349	0.0	4.3	-4.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	2	301	0.0	3.6	-3.6
3	220 kV	ALIPURDUAR-SALAKATI	2	0	110	0.0	1.7	-1.7
					ER-NER	0.0	9.5	-9.5
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	604	0.0	14.4	-14.4
					NER-NR	0.0	14.4	-14.4
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	1754	0.0	72.4	-72.4
2	HVDC	VINDHYACHAL B/B	-	0	492	0.0	5.1	-5.1
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1733	0.0	33.5	-33.5
4	765 kV	GWALIOR-AGRA	2	0	2918	0.0	55.3	-55.3
5	765 kV	PHAGI-GWALIOR	2	0	1131	0.0	22.5	-22.5
6	765 kV	JABALPUR-ORAI	2	0	1170	0.0	45.4	-45.4
7	765 kV	GWALIOR-ORAI	1	422	0	8.1	0.0	8.1
8	765 kV	SATNA-ORAI	1	0	1552	0.0	34.2	-34.2
9	765 kV	CHITORGARH-BANASKANTHA	2	0	1406	0.0	22.3	-22.3
10	400 kV	ZERDA-KANKROLI	1	0	256	0.0	3.7	-3.7
11	400 kV	ZERDA -BHINMAL	1	0	380	0.0	5.3	-5.3
12	400 kV	VINDHYACHAL -RIHAND	1	969	0	22.6	0.0	22.6
13	400 kV	RAPP-SHUJALPUR	2	0	567	0.0	9.9	-9.9
14	220 kV	BHANPURA-RANPUR	1	0	147	0.0	2.3	-2.3
15	220 kV	BHANPURA-MORAK	1	11	0	0.0	2.2	-2.2
16	220 kV	MEHGAON-AURAIYA	1	80	0	0.1	0.2	-0.1
17	220 kV	MALANPUR-AURAIYA	1	32	37	0.9	0.0	0.9
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	31.7	314.3	-282.6
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	300	316	3.1	4.2	-1.1
2	HVDC	RAIGARH-PUGALUR	2	0	316	0.0	6.1	-6.1
3	765 kV	SOLAPUR-RAICHUR	2	1839	669	16.2	0.0	16.2
4	765 kV	WARDHA-NIZAMABAD	2	37	1483	0.0	15.0	-15.0
5	400 kV	KOLHAPUR-KUDGI	2	1148	0	20.7	0.0	20.7
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	72	1.2	0.0	1.2
					WR-SR	41.1	25.2	15.9

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)	728	0	583	14.0
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW)	1067	0	998	24.0
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	353	0	313	7.5
	NER	132KV-GEYLEGPHU - SALAKATI	-51	0	-45	-1.1
	NER	132kV Motanga-Rangia	-65	-18	-54	-1.3
NEPAL	NR	132KV-TANAKPUR(NH) - MAHENDRANAGAR(PG)	-54	0	-22	-0.5
	ER	132KV-BIHAR - NEPAL	-52	-1	-15	-0.3
	ER	220KV-MUZAFFARPUR - DHALKEBAR DC	-180	-8	-78	-1.9

BANGLADESH	ER	BHERAMARA HVDC(BANGLADESH)	-942	-931	-937	-22.5
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-1	86	0	-70	-1.7
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-2	88	0	-69	-1.7