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: 16th Dec 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 15.12.2021.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 15-दिसंबर-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 15th December 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:** **16-Dec-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 19:00 hrs; from RLDCs)	51431	55378	39749	17774	2538	166870
Peak Shortage (MW)	250	0	0	613	0	863
Energy Met (MU)	1038	1267	877	375	45	3602
Hydro Gen (MU)	112	39	86	38	11	286
Wind Gen (MU)	6	82	53	-	-	141
Solar Gen (MU)*	56.27	33.22	77.09	4.28	0.27	171
Energy Shortage (MU)	5.36	0.00	0.00	10.62	0.00	15.98
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	52490	60121	42554	17919	2640	170945
Time Of Maximum Demand Met (From NLDC SCADA)	10:28	10:47	08:16	18:17	17:16	10:26

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	0.040	0.00	0.36	10.03	10.39	74.15	15.46

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	6517	0	131.9	71.4	-0.3	156	0.56
	Haryana	7186	0	134.3	92.6	1.6	257	0.00
	Rajasthan	14748	0	270.6	82.6	1.9	336	0.00
	Delhi	3985	0	66.3	55.4	-1.2	220	0.00
	UP	17061	0	301.0	113.5	-1.4	618	0.00
	Uttarakhand	2066	0	38.9	26.4	-0.1	168	0.15
	HP	1940	0	34.9	27.0	0.1	300	0.00
	J&K(UT) & Ladakh(UT)	2938	250	57.1	53.8	-1.6	349	4.65
	Chandigarh	220	0	3.5	3.7	-0.2	44	0.00
WR	Chhattisgarh	3697	0	79.6	27.5	0.2	277	0.00
	Gujarat	16595	0	349.7	177.6	0.2	591	0.00
	MP	14954	0	293.3	178.1	-0.2	647	0.00
	Maharashtra	23848	0	485.6	139.6	3.3	910	0.00
	Goa	610	0	12.8	12.1	0.1	62	0.00
	DD	336	0	7.4	7.2	0.2	24	0.00
	DNH	849	0	19.2	19.0	0.2	79	0.00
	AMNSIL	868	0	19.2	8.8	0.0	289	0.00
SR	Andhra Pradesh	8051	0	166.4	77.8	0.0	585	0.00
	Telangana	9310	0	175.0	63.7	-1.3	517	0.00
	Karnataka	9410	0	174.2	31.6	2.1	465	0.00
	Kerala	3818	0	76.7	50.6	-0.1	139	0.00
	Tamil Nadu	13665	0	277.7	158.1	0.2	688	0.00
	Puducherry	357	0	7.1	7.3	-0.2	28	0.00
ER	Bihar	4059	0	75.8	63.0	0.7	437	2.50
	DVC	3180	60	64.2	-41.8	-2.4	362	1.73
	Jharkhand	1327	128	24.5	19.3	-0.3	294	6.39
	Odisha	4984	0	96.3	33.3	0.1	443	0.00
	West Bengal	6051	0	112.3	-6.4	2.1	554	0.00
	Sikkim	108	0	2.2	1.4	0.8	74	0.00
NER	Arunachal Pradesh	126	0	2.1	2.2	-0.2	29	0.00
	Assam	1448	0	24.7	18.3	-0.1	102	0.00
	Manipur	229	0	3.2	3.2	0.0	31	0.00
	Meghalaya	389	0	6.9	5.8	-0.1	43	0.00
	Mizoram	125	0	1.7	1.6	-0.2	12	0.00
	Nagaland	155	0	2.5	2.3	0.1	19	0.00
	Tripura	223	0	3.5	2.2	-0.4	23	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	6.2	-3.2	-15.4
Day Peak (MW)	439.0	-394.4	-818.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	246.5	-148.2	58.0	-151.4	-4.8	0.0
Actual(MU)	246.8	-144.4	47.3	-147.1	-5.1	-2.6
O/D/U/D(MU)	0.3	3.8	-10.7	4.3	-0.2	-2.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6987	15183	7942	3880	350	34342	42
State Sector	13781	18969	10431	3378	11	46569	58
Total	20768	34151	18373	7258	361	80910	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	556	1220	484	503	13	2776	75
Lignite	20	13	37	0	0	71	2
Hydro	112	39	86	38	11	286	8
Nuclear	28	33	69	0	0	130	4
Gas, Naptha & Diesel	14	10	9	0	30	63	2
RES (Wind, Solar, Biomass & Others)	87	117	158	4	0	367	10
Total	818	1432	844	545	54	3693	100

Share of RES in total generation (%)	10.68	8.14	18.73	0.78	0.50	9.93
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	27.77	13.17	37.12	7.75	21.11	21.19

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.028
Based on State Max Demands	1.085

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: 16-Dec-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	-	2	0	0.0	0.0	0.0
3	765 kV	GAYA-VARANASI	2	0	1008	0.0	13.6	-13.6
4	765 kV	SASARAM-FATEHPUR	1	0	700	0.0	9.1	-9.1
5	765 kV	GAYA-BALIA	1	0	644	0.0	12.2	-12.2
6	400 kV	PUSAULI-VARANASI	1	19	78	0.0	1.4	-1.4
7	400 kV	PUSAULI -ALLAHABAD	1	0	127	0.0	1.6	-1.6
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	758	0.0	9.9	-9.9
9	400 kV	PATNA-BALIA	4	0	1307	0.0	23.0	-23.0
10	400 kV	BIHARSHARIFF-BALIA	2	0	537	0.0	7.1	-7.1
11	400 kV	MOTIHARI-GORAKHPUR	2	0	421	0.0	6.9	-6.9
12	400 kV	BIHARSHARIFF-VARANASI	2	0	380	0.0	6.3	-6.3
13	220 kV	PUSAULI-SAHUPURI	1	0	102	0.0	1.6	-1.6
14	132 kV	SONE NAGAR-RIHAND	1	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	1	25	0	0.3	0.0	0.3
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	0.3	92.6	-92.4
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	861	459	7.4	0.0	7.4
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	73	1063	0.0	7.6	-7.6
3	765 kV	JHARSUGUDA-DURG	2	194	159	0.3	0.0	0.3
4	400 kV	JHARSUGUDA-RAIGARH	4	243	338	0.0	0.4	-0.4
5	400 kV	RANCHI-SIPAT	2	89	335	0.0	2.0	-2.0
6	220 kV	BUDHIPADAR-RAIGARH	1	0	146	0.0	1.6	-1.6
7	220 kV	BUDHIPADAR-KORBA	2	89	67	0.3	0.0	0.3
					ER-WR	8.0	11.6	-3.6
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	496	0	10.2	0.0	10.2
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1990	0.0	40.3	-40.3
3	765 kV	ANGUL-SRIKAKULAM	2	0	3075	0.0	56.8	-56.8
4	400 kV	TALCHER-I/C	2	869	988	2.5	0.0	2.5
5	220 kV	BALIMELA-UPPER-SILERRU	1	2	0	0.0	0.0	0.0
					ER-SR	10.2	97.1	-86.9
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	28	206	0.0	2.5	-2.5
2	400 kV	ALIPURDUAR-BONGAIGAON	2	17	300	0.0	3.8	-3.8
3	220 kV	ALIPURDUAR-SALAKATI	2	4	57	0.0	0.6	-0.6
					ER-NER	0.0	6.9	-6.9
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.0	-12.0
					NER-NR	0.0	12.0	-12.0
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3006	0.0	54.0	-54.0
2	HVDC	VINDHYACHAL B/B	-	206	0	5.5	0.0	5.5
3	HVDC	MUNDRA-MOHINDERGARH	2	0	254	0.0	6.2	-6.2
4	765 kV	GWALIOR-AGRA	2	0	1717	0.0	27.4	-27.4
5	765 kV	GWALIOR-PHAGI	2	0	2312	0.0	33.7	-33.7
6	765 kV	JABALPUR-ORAI	2	0	1191	0.0	22.8	-22.8
7	765 kV	GWALIOR-ORAI	1	840	0	12.4	0.0	12.4
8	765 kV	SATNA-ORAI	1	0	1273	0.0	22.5	-22.5
9	765 kV	BANASKANTHA-CHITORGARH	2	1100	0	13.5	0.0	13.5
10	765 kV	VINDHYACHAL-VARANASI	2	0	2098	0.0	37.0	-37.0
11	400 kV	ZERDA-KANKROLI	1	222	0	3.1	0.0	3.1
12	400 kV	ZERDA -BHINMAL	1	181	199	1.3	0.0	1.3
13	400 kV	VINDHYACHAL -RIHAND	1	958	0	21.5	0.0	21.5
14	400 kV	RAPP-SHUJALPUR	2	147	402	0.3	2.5	-2.2
15	220 kV	BHANPURA-RANPUR	1	69	64	0.6	0.2	0.5
16	220 kV	BHANPURA-MORAK	1	0	30	1.5	0.0	1.5
17	220 kV	MEHGAON-AURAIYA	1	132	0	1.2	0.0	1.2
18	220 kV	MALANPUR-AURAIYA	1	87	0	2.0	0.0	2.0
19	132 kV	GWALIOR-SAWAI MADHOPUR	1	0	0	0.0	0.0	0.0
20	132 kV	RAJGHAT-LALITPUR	2	0	0	0.0	0.0	0.0
					WR-NR	63.0	206.3	-143.3
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	987	0	14.1	0.0	14.1
2	HVDC	RAIGARH-PUGALUR	2	1740	0	17.7	0.0	17.7
3	765 kV	SOLAPUR-RAICHUR	2	604	1587	1.0	15.2	-14.3
4	765 kV	WARDHA-NIZAMABAD	2	0	2897	0.0	45.3	-45.3
5	400 kV	KOLHAPUR-KUDGI	2	1433	0	21.2	0.0	21.2
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	94	1.8	0.0	1.8
					WR-SR	55.7	60.6	-4.8

INTERNATIONAL EXCHANGES

Import(+ve)/Export(-ve)

State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)	Energy Exchange (MU)
BHUTAN	ER	400kV MANGDECHHU-ALIPURDUAR 1,2&3 i.e. ALIPURDUAR RECEIPT (from MANGDECHU HEP 4*180MW)	106	0	79	1.9
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW)	299	154	174	4.2
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	17	0	-1	0.0
	NER	132kV GELEPHU-SALAKATI	5	0	1	0.0
	NER	132kV MOTANGA-RANGIA	12	0	5	0.1
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	0.0
	ER	NEPAL IMPORT (FROM BIHAR)	-114	-20	-22	-0.5
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-280	0	-112	-2.7
BANGLADESH	ER	BHERAMARA B/B HVDC (BANGLADESH)	-721	-480	-558	-13.4
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-97	0	-84	-2.0