

National Load Despatch Centre राष्ट्रीय भार प्रेषण केंद्र

POWER SYSTEM OPERATION CORPORATION LIMITED पाँवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

(Government of India Enterprise/ भारत सरकार का उद्यम) B-9, QUTUB INSTITUTIONAL AREA, KATWARIA SARAI, NEW DELHI -110016 बी-9, कृतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 27th Dec 2019

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.,२९ , रेस कोर्स क्रॉस रोड, बंगलुरु –५६०००९ Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 26.12.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 26-दिसम्बर-2019 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा॰भा॰प्रे॰के॰ 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 26 Dec 2019, 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 27-Dec-19

A. Power Supply Position at All India and Regional level

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs)	50216	47192	39550	17507	2356	156821
Peak Shortage (MW)	597	0	0	0	54	651
Energy Met (MU)	993	1115	950	339	41	3439
Hydro Gen (MU)	119	39	85	29	9	281
Wind Gen (MU)	4	51	19			73
Solar Gen (MU)*	25.03	18.70	65.39	1.22	0.03	110
Energy Shortage (MU)	12.5	0.0	0.0	0.0	0.2	12.7
Maximum Demand Met during the day (MW) & time	50760	55184	48582	18139	2493	170493
(from NLDC SCADA)	18:55	11:23	11:57	17:59	17:49	11:50

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	0.07	0.46	0.57	1.10	61.12	37.78

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
	Punjab	6171	0	123.3	58.0	-1.4	54	0.0
	Haryana	6901	0	134.5	84.6	1.7	245	0.0
NR	Rajasthan	12635	0	232.7	69.4	-2.5	138	0.0
	Delhi	4740	0	79.2	62.1	0.3	264	0.0
	UP	16375	0	293.2	118.4	2.7	1222	0.0
	Uttarakhand	2136	0	42,2	28.8	0.6	189	0.2
	HP	1644	0	30.6	23.5	-0.2	178	0.0
	J&K(UT) and Ladakh(UT)	2497	624	52.4	45.3	1.8	359	12.3
	Chandigarh	280	0	4.9	4.6	0.2	45	0.0
	Chhattisgarh	3351	0	74.5	17.2	-1.7	231	0.0
	Gujarat	15467	0	324.4	83.1	-2.7	507	0.0
	MP	13466	0	242.8	123.1	-3.2	497	0.0
WR	Maharashtra	21149	0	427.8	151.3	0.0	586	0.0
WK	Goa	605	0	13.1	12.4	0.2	56	0.0
	DD	325	0	7.4	6.9	0.5	38	0.0
	DNH	816	0	18.9	18.9	0.0	28	0.0
	Essar steel	327	0	6.1	6.1	0.0	269	0.0
	Andhra Pradesh	9118	0	168.2	69.5	0.5	478	0.0
	Telangana	11182	0	222.7	118.2	0.0	505	0.0
SR	Karnataka	12803	0	207.2	58.3	2.3	927	0.0
3N	Kerala	3624	0	72.7	57.1	1.6	223	0.0
	Tamil Nadu	13414	0	272.4	163.7	1.3	1167	0.0
	Pondy	373	0	6.8	7.1	-0.3	71	0.0
	Bihar	4550	0	75.2	74.6	-0.8	750	0.0
	DVC	3127	0	63.1	-37.4	0.6	201	0.0
ER	Jharkhand	1273	0	24.0	15.5	-0.9	347	0.0
EN	Odisha	3578	0	65.3	6.1	1.1	286	0.0
	West Bengal	6067	0	109.6	23.9	2.6	348	0.0
	Sikkim	138	0	2,2	1.9	0.3	31	0.0
	Arunachal Pradesh	123	2	2,2	1.9	0.1	41	0.0
	Assam	1370	33	22.4	17.6	0.1	104	0.1
	Manipur	213	1	2.6	3.2	-0.6	22	0.0
NER	Meghalaya	354	0	6.3	3.1	0.6	73	0.0
	Mizoram	101	2	1.9	1.3	0.1	21	0.0
	Nagaland	128	2	2.3	2.3	-0.1	19	0.0
	Tripura	223	0	3.8	1.7	-0.2	43	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	4.6	-8.4	-9.9
Day peak (MW)	314.9	-532.5	-761.0

 $E.\ Import/export\ By\ Regions(in\ MU)\ -\ Import(+ve)/Export(-ve);\ OD(+)/UD(-)$

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	241.6	-261.3	121.6	-100.7	-1.2	-0.1
Actual(MU)	239.6	-271.6	127.8	-98.3	0.4	-2.1
O/D/U/D(MU)	-2.0	-10.2	6.2	2.4	1.6	-1.9

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	4381	15833	5952	2120	597	28882
State Sector	11700	15878	8660	4640	11	40889
Total	16081	31710	14612	6760	608	69771

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	507	1205	524	440	12	2687
Lignite	22	15	55	0	0	91
Hydro	119	39	85	29	9	281
Nuclear	27	27	44	0	0	99
Gas, Naptha & Diesel	38	40	18	0	25	121
RES (Wind, Solar, Biomass & Others)	58	81	125	1	0	265
Total	771	1407	851	470	46	3545

Share of RES in total generation (%)	7.49	5.76	14.72	0.26	0.06	7.49
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%)	26.46	10.44	29.95	6.47	19.30	18.20

H. All India Demand Diversity Factor

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Based on Regional Max Demands	1.027
Based on State Max Demands	1.060

Diversity factor = Sum of regional or state-wise maximum demands / All India maximum demand

 $[\]textbf{*Source} : \textbf{RLDCs for solar connected to ISTS; SLDCs for embedded solar. Limited visibility of embedded solar data.}$

		IN	TER-REGI	ONAL EXCH	ANGES	Date of	Reporting :	27-Dec-19
i						Date of	keporting .	
Ì								Import=(+ve) /Export =(-ve) for NET (MU)
Sl No	Voltage	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export	NET
Import/E	Level Export of	ER (With NR)					(MU)	(MU)
4	HVDC	ALIPURDUAR-AGRA	-	0	0	0.0	0.0	0.0
5		PUSAULI B/B	S/C	0	299	0.0	7.7	-7.7
2	765kV	GAYA-VARANASI SASARAM-FATEHPUR	D/C S/C	0	822 177	0.0	11.6 5.1	-11.6 -5.1
3		GAYA-BALIA	S/C	0	436	0.0	7.5	-7.5
6		PUSAULI-VARANASI	S/C	0	216	0.0	4.5	-4.5
7		PUSAULI -ALLAHABAD	S/C	0	173	0.0	3.1	-3.1
9	400 kV	MUZAFFARPUR-GORAKHPUR PATNA-BALIA	D/C O/C	0	876 863	0.0	11.4	-11.4 -14.8
10	1	BIHARSHARIFF-BALIA	D/C	0	415	0.0	5.3	-5.3
11		MOTIHARI-GORAKHPUR	D/C	0	5	0.0	0.0	0.0
12		BIHARSHARIFF-VARANASI	D/C	33	373	0.0	3.5	-3.5
13	220 kV	PUSAULI-SAHUPURI	S/C	0	135	0.0	2.0	-2.0
14 15	-	SONE NAGAR-RIHAND GARWAH-RIHAND	S/C S/C	30	0	0.0	0.0	0.0
16	132 kV	KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0
17		KARMANASA-CHANDAULI	S/C	0	0	0.0	0.0	0.0
					ER-NR	0.4	68.7	-68.3
Import/E	export of	ER (With WR)					-	
18		JHARSUGUDA-DHARAMJAIGARH	Q/C	5503	199	9.8	0.0	9.8
19	765 kV	NEW RANCHI-DHARAMJAIGARH	D/C	563	195	2.6	0.0	2.6
20		JHARSUGUDA-DURG	D/C	999999	265	0.0	0.0	-2.4 0.9
22	400 kV	JHARSUGUDA-RAIGARH RANCHI-SIPAT	Q/C D/C	215 221	176 58	1.4	0.0	1.4
23	220 kV	BUDHIPADAR-RAIGARH	S/C	3	94	0.0	1.0	-1.0
24	220 KV	BUDHIPADAR-KORBA	D/C	180	0	2.8	0.0	2.8
					ER-WR	17.4	3.4	14.0
_	Export of	ER (With SR)	D/C	0.0	675.0	0.0	12.7	-13.7
26	HVDC	JEYPORE-GAZUWAKA B/B TALCHER-KOLAR BIPOLE	D/C D/C	0.0	675.0 2167.0	0.0	13.7 43.2	-13.7
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	2070.0	0.0	40.2	-40.2
28	400 kV	TALCHER-I/C	D/C	408.0	483.0	0.0	1.2	-1.2
29	220 kV	BALIMELA-UPPER-SILERRU	S/C	1.0	0.0	0.0	0.0	0.0
					ER-SR	0.0	97.0	-97.0
	export of	ER (With NER)	D/C	298	0	4.1	0.0	4
30	400 kV	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON	D/C	346	0	5.3	0.0	5
32	220 kV	ALIPURDUAR-SALAKATI	D/C	66	2	0.9	0.0	1
					ER-NER	10.2	0.0	10.2
		NER (With NR)	1					•
33	HVDC	BISWANATH CHARIALI-AGRA	-	490	0	11.8	0.0	11.8
Import/F	export of	WR (With NR)			NER-NR	11.8		11.8
34	Aport or	***************************************					0.0	
34		CHAMPA-KURUKSHETRA	D/C	0	2353	0.0	44.5	-44.5
35	HVDC	CHAMPA-KURUKSHETRA V'CHAL B/B	D/C D/C	0 449	2353 250			-44.5 1.2
	HVDC					0.0	44.5	
35 36 37	HVDC	V'CHAL B/B APL -MHG GWALIOR-AGRA	D/C D/C D/C	0 0	250 1926 2893	0.0 1.2 0.0 0.0	44.5 0.0 42.0 42.2	1.2 -42.0 -42.2
35 36 37 38	HVDC	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR	D/C D/C D/C D/C	0 0 0	250 1926 2893 1468	0.0 1.2 0.0 0.0 0.0	44.5 0.0 42.0 42.2 22.6	1.2 -42.0 -42.2 -22.6
35 36 37 38 39	HVDC - 765 kV	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI	D/C D/C D/C D/C D/C D/C	0 0 0 0 0	250 1926 2893 1468 982	0.0 1.2 0.0 0.0 0.0 0.0	44.5 0.0 42.0 42.2 22.6 30.3	1.2 -42.0 -42.2 -22.6 -30.3
35 36 37 38	-	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR	D/C D/C D/C D/C	0 0 0	250 1926 2893 1468	0.0 1.2 0.0 0.0 0.0	44.5 0.0 42.0 42.2 22.6	1.2 -42.0 -42.2 -22.6
35 36 37 38 39 40	-	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI	D/C D/C D/C D/C D/C S/C	0 0 0 0 0 0 589	250 1926 2893 1468 982	0.0 1.2 0.0 0.0 0.0 0.0 0.0	44.5 0.0 42.0 42.2 22.6 30.3 0.0	1.2 -42.0 -42.2 -22.6 -30.3 10.9
35 36 37 38 39 40 41	-	V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI	D/C D/C D/C D/C D/C S/C S/C	449 0 0 0 0 0 0 589	250 1926 2893 1468 982 0	0.0 1.2 0.0 0.0 0.0 0.0 0.0 10.9	44.5 0.0 42.0 42.2 22.6 30.3 0.0 29.6	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6
35 36 37 38 39 40 41 42 43	-	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C	449 0 0 0 0 589 0 216 143 77	250 1926 2893 1468 982 0 1514 833 126 385	0.0 1.2 0.0 0.0 0.0 0.0 10.9 0.0 1.4 1.2	44.5 0.0 42.0 42.2 22.6 30.3 0.0 29.6 4.3 0.0	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6 -2.9 1.2 -1.9
35 36 37 38 39 40 41 42 43 44	765 kV	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C	449 0 0 0 0 589 0 216 143 77 969	250 1926 2893 1468 982 0 1514 833 126 385	0.0 1.2 0.0 0.0 0.0 0.0 10.9 0.0 1.4 1.2 0.0 22.3	44.5 0.0 42.0 42.2 22.6 30.3 0.0 29.6 4.3 0.0 1.9	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6 -2.9 1.2 -1.9 22.3
35 36 37 38 39 40 41 42 43 44 45 46	765 kV	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	449 0 0 0 0 0 589 0 216 143 77 969 142	250 1926 2893 1468 982 0 1514 833 126 385 0 365	0.0 1.2 0.0 0.0 0.0 0.0 10.9 0.0 1.4 1.2 0.0 22.3	44.5 0.0 42.0 42.2 22.6 30.3 0.0 29.6 4.3 0.0 1.9	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6 -2.9 1.2 -1.9 22.3
35 36 37 38 39 40 41 42 43 44 45 46 47	- 765 kV - 400 kV	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR	D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	449 0 0 0 0 589 0 216 143 77 969	250 1926 2893 1468 982 0 1514 833 126 385	0.0 1.2 0.0 0.0 0.0 0.0 10.9 0.0 1.4 1.2 0.0 22.3	44.5 0.0 42.0 42.2 22.6 30.3 0.0 29.6 4.3 0.0 1.9	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6 -2.9 1.2 -1.9 22.3
35 36 37 38 39 40 41 42 43 44 45 46	765 kV	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	449 0 0 0 0 589 0 216 143 77 969 142 28	250 1926 2893 1468 982 0 1514 833 126 385 0 365 59	0.0 1.2 0.0 0.0 0.0 10.9 0.0 1.4 1.2 0.0 22.3 0	44.5 0.0 42.0 42.2 22.6 30.3 0.0 29.6 4.3 0.0 1.9 0.0 1	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6 -2.9 1.2 -1.9 22.3 -1 0.6
35 36 37 38 39 40 41 42 43 44 45 46 47	- 765 kV - 400 kV	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK	D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	449 0 0 0 0 589 0 216 143 77 969 142 28 30	250 1926 2893 1468 982 0 1514 833 126 385 0 365 59 80	0.0 1.2 0.0 0.0 0.0 0.0 10.9 0.0 1.4 1.2 0.0 22.3 0	44.5 0.0 42.0 42.2 22.6 30.3 0.0 29.6 4.3 0.0 1.9 0.0 1 0.1 0.6	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6 -2.9 1.2 -1.9 22.3 -1 0.6 -0.6
35 36 37 38 39 40 41 42 43 44 45 46 47 48	- 765 kV - 400 kV	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA	D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	449 0 0 0 0 589 0 216 143 77 969 142 28 30 113	250 1926 2893 1468 982 0 1514 833 126 385 0 365 59 80 0 40	0.0 1.2 0.0 0.0 0.0 0.0 10.9 0.0 1.4 1.2 0.0 22.3 0 0.7 0.1 1.2 0.4 0.0	44.5 0.0 42.0 42.2 22.6 30.3 0.0 29.6 4.3 0.0 1.9 0.0 1 0.1 0.6 0.0 0.1	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6 -2.9 1.2 -1.9 22.3 -1 0.6 -0.6 1.2 0.3
35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51	- 765 kV - 400 kV - 220 kV	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI GWALIOR-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	449 0 0 0 0 0 589 0 216 143 77 969 142 28 30 113 64	250 1926 2893 1468 982 0 1514 833 126 385 0 365 59 80 0 40	0.0 1.2 0.0 0.0 0.0 0.0 10.9 0.0 1.4 1.2 0.0 22.3 0 0.7 0.1 1.2 0.4	44.5 0.0 42.0 42.2 22.6 30.3 0.0 29.6 4.3 0.0 1.9 0.0 1 0.1 0.6 0.0 0.1	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6 -2.9 1.2 -1.9 22.3 -1 0.6 -0.6 1.2 0.3
35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51	- 765 kV - 400 kV - 220 kV	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI GWALIOR-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR)	D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	449 0 0 0 0 0 589 0 216 143 77 969 142 28 30 113 64 0	250 1926 2893 1468 982 0 1514 833 126 385 0 365 59 80 0 40 0 WR-NR	0.0 1.2 0.0 0.0 0.0 0.0 0.0 1.4 1.2 0.0 22.3 0 0.7 0.1 1.2 0.4 0.0 39.4	44.5 0.0 42.0 42.2 22.6 30.3 0.0 29.6 4.3 0.0 1.9 0.0 1 0.1 0.6 0.0 0.1 0.0 218.9	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6 -2.9 1.2 -1.9 22.3 -1 0.6 -0.6 1.2 0.3 0.0 -179.5
35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51	- 765 kV - 400 kV - 220 kV	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI GWALIOR-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	449 0 0 0 0 0 589 0 216 143 77 969 142 28 30 113 64	250 1926 2893 1468 982 0 1514 833 126 385 0 365 59 80 0 40	0.0 1.2 0.0 0.0 0.0 0.0 10.9 0.0 1.4 1.2 0.0 22.3 0 0.7 0.1 1.2 0.4 0.0	44.5 0.0 42.0 42.2 22.6 30.3 0.0 29.6 4.3 0.0 1.9 0.0 1 0.1 0.6 0.0 0.1	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6 -2.9 1.2 -1.9 22.3 -1 0.6 -0.6 1.2 0.3
35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51	- 765 kV - 400 kV - 220 kV - 132kV - HVDC	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B	D/C D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	449 0 0 0 0 0 589 0 216 143 77 969 142 28 30 113 64 0	250 1926 2893 1468 982 0 1514 833 126 385 0 365 59 80 0 40 0 WR-NR	0.0 1.2 0.0 0.0 0.0 0.0 10.9 0.0 1.4 1.2 0.0 22.3 0 0.7 0.1 1.2 0.4 0.0 39.4	44.5 0.0 42.0 42.2 22.6 30.3 0.0 29.6 4.3 0.0 1.9 0.0 1.9 0.0 0.1 0.6 0.0 0.1 0.0 218.9	1.2
35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53	- 765 kV - 400 kV - 220 kV - 132kV	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU	D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	449 0 0 0 0 0 589 0 216 143 77 969 142 28 30 113 64 0	250 1926 2893 1468 982 0 1514 833 126 385 0 365 59 80 0 WR-NR	0.0 1.2 0.0 0.0 0.0 0.0 10.9 0.0 1.4 1.2 0.0 22.3 0 0.7 0.1 1.2 0.4 0.0 39.4	44.5 0.0 42.0 42.0 42.2 22.6 30.3 0.0 29.6 4.3 0.0 1.9 0.0 1 0.1 0.6 0.0 0.1 0.1 0.1 0.6 0.0 0.1 0.1 0.0 0.1 0.1 0.0 0.1 0.0 0.1 0.0 0.1 0.0 0.1 0.0 0.0	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6 -2.9 1.2 -1.9 22.3 -1 0.6 -0.6 1.2 0.3 0.0 -179.5
35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56	- 765 kV - 400 kV - 220 kV - 132kV - HVDC	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHASPUR-LSILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI	D/C	449 0 0 0 0 0 589 0 216 143 77 969 142 28 30 113 64 0	250 1926 2893 1468 982 0 1514 833 126 385 0 365 59 80 0 WR-NR	0.0 1.2 0.0 0.0 0.0 0.0 10.9 0.0 1.4 1.2 0.0 22.3 0 0.7 0.1 1.2 0.4 0.0 39.4 0.0 0.0 0.0 0.1 0.0 16.3	44.5 0.0 42.0 42.0 42.2 22.6 30.3 0.0 29.6 4.3 0.0 1.9 0.0 1 0.1 0.6 0.0 0.1 0.0 218.9 11.8 0.0 30.1 50.6 0.0	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6 -2.9 1.2 -1.9 22.3 -1 0.6 -0.6 1.2 0.3 0.0 -179.5
35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	- 765 kV - 400 kV - 220 kV - 132kV - 2xport of - HVDC - 765 kV - 400 kV	VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI GWALIOR-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-BANASKANTHA BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-LSILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	D/C	449 0 0 0 0 589 0 216 143 77 969 142 28 30 1113 64 0	250 1926 2893 1468 982 0 1514 833 126 385 0 365 59 80 0 WR-NR	0.0 1.2 0.0 0.0 0.0 0.0 10.9 0.0 1.4 1.2 0.0 22.3 0 0.7 0.1 1.2 0.4 0.0 39.4 0.0 0.0 0.1 0.0 0.0 0.1 0.0	44.5 0.0 42.0 42.0 42.2 22.6 30.3 0.0 29.6 4.3 0.0 1.9 0.0 1 0.1 0.6 0.0 0.1 0.0 218.9 11.8 0.0 30.1 50.6 0.0 0.0	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6 -2.9 1.2 -1.9 22.3 -1 0.6 -0.6 1.2 0.3 0.0 -179.5
35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	- 765 kV - 400 kV - 220 kV - 132kV - 2xport of - HVDC - 765 kV - 400 kV	VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI GWALIOR-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA - BHINMAL VCHAL - RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-LSILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	D/C	449 0 0 0 0 0 589 0 216 143 77 969 142 28 30 113 64 0 0 0 0 288 0 0	250 1926 2893 1468 982 0 1514 833 126 385 0 365 59 80 0 40 0 WR-NR	0.0 1.2 0.0 0.0 0.0 0.0 10.9 0.0 1.4 1.2 0.0 22.3 0 0.7 0.1 1.2 0.4 0.0 39.4 0.0 0.0 0.1 0.0 0.1 0.0 0.0 16.3	44.5 0.0 42.0 42.0 42.0 42.0 30.3 0.0 29.6 4.3 0.0 1.9 0.0 1 0.1 0.6 0.0 218.9 11.8 0.0 30.1 50.6 0.0 0.0	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6 -2.9 1.2 -1.9 22.3 -1 0.6 -0.6 -0.6 -1.2 0.3 0.0 -179.5
35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	- 765 kV - 400 kV - 220 kV - 132kV - 2xport of - HVDC - 765 kV - 400 kV	VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI GWALIOR-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-BANASKANTHA BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-LSILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	D/C	449 0 0 0 0 589 0 216 143 77 969 142 28 30 1113 64 0	250 1926 2893 1468 982 0 1514 833 126 385 0 365 59 80 0 40 0 WR-NR 495 0 2241 2685 0 0 94	0.0 1.2 0.0 0.0 0.0 0.0 10.9 0.0 1.4 1.2 0.0 22.3 0 0.7 0.1 1.2 0.4 0.0 39.4 0.0 0.0 0.1 0.0 0.1 0.0 16.3 0.0 0.0 1.8	44.5 0.0 42.0 42.0 42.0 42.0 30.3 0.0 29.6 4.3 0.0 1.9 0.0 1 0.1 0.6 0.0 218.9 11.8 0.0 30.1 50.6 0.0 0.0 1.6 0.0 0.0	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6 -2.9 1.2 -1.9 22.3 -1 0.6 -0.6 -0.6 -1.2 0.3 0.0 -179.5
35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	- 765 kV - 400 kV - 220 kV - 132kV - 2xport of - HVDC - 765 kV - 400 kV	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI GWALIOR-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WALIORAI GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-RUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C	449 0 0 0 0 0 0 0 589 0 216 143 77 969 142 28 30 113 64 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	250 1926 2893 1468 982 0 1514 833 126 385 0 365 59 80 0 40 0 WR-NR	0.0 1.2 0.0 0.0 0.0 0.0 10.9 0.0 1.4 1.2 0.0 22.3 0 0.7 0.1 1.2 0.4 0.0 39.4 0.0 0.0 0.1 0.0 0.1 0.0 0.0 16.3	44.5 0.0 42.0 42.0 42.0 42.0 30.3 0.0 29.6 4.3 0.0 1.9 0.0 1 0.1 0.6 0.0 218.9 11.8 0.0 30.1 50.6 0.0 0.0	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6 -2.9 1.2 -1.9 22.3 -1 0.6 -0.6 -0.6 -1.2 0.3 0.0 -179.5
35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	- 765 kV - 400 kV - 220 kV - 132kV - 2xport of - HVDC - 765 kV - 400 kV	VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI GWALIOR-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WALIORAI GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-RUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C	449 0 0 0 0 0 589 0 216 143 77 969 142 28 30 113 64 0 0 0 0 288 0 0	250 1926 2893 1468 982 0 1514 833 126 385 0 365 59 80 0 40 0 WR-NR	0.0 1.2 0.0 0.0 0.0 0.0 10.9 0.0 1.4 1.2 0.0 22.3 0 0.7 0.1 1.2 0.4 0.0 39.4 0.0 0.0 0.1 0.0 0.1 0.0 16.3 0.0 0.0 1.8	44.5 0.0 42.0 42.0 42.0 42.0 30.3 0.0 29.6 4.3 0.0 1.9 0.0 1 0.1 0.6 0.0 218.9 11.8 0.0 30.1 50.6 0.0 0.0 1.6 0.0 0.0	1.2 -42.0 -42.2 -22.6 -30.3 10.9 -29.6 -2.9 1.2 -1.9 22.3 -1 0.6 -0.6 1.2 0.3 0.0 -179.5 -11.8 0.0 -30.0 -50.6 16.3 0.0 -1.6 1.8