

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

To.

1. कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के.,14, गोल्फ क्लब रोड, कोलकाता - ७०००३३ 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 18.05.2020.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 18-मई-2020 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 18th May 2020, is available at the NLDC website.

धन्यवाद,

पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली



Report for previous day
A. Power Supply Position at All India and Regional level

Date of Reporting:

19-May-2020

A. I ower Suppr	y Position at An India and Regional level						
		NR	WR	SR	ER	NER	TOTAL
Demand Met dur	ing Evening Peak hrs(MW) (at 2000 hrs; from RLDCs)	44884	40443	34074	20377	2642	142420
Peak Shortage (M	IW)	982	0	0	0	21	1003
Energy Met (MU		1049	1040	834	428	46	3397
Hydro Gen (MU)		274	47	51	89	8	470
Wind Gen (MU)		8	81	105	-	-	194
Solar Gen (MU)*		42.83	26.80	66.52	4.88	0.04	141
Energy Shortage	(MU)	11.6	0.0	0.0	0.0	0.7	12.2
Maximum Demar	nd Met During the Day (MW) (From NLDC SCADA)	48870	46018	38396	20611	2636	150332
Time Of Maximu	m Demand Met (From NLDC SCADA)	22:26	15:11	15:27	23:32	19:38	22:31
B. Frequency Pr	rofile (%)						
Region	FVI	< 49.7	49.7 - 49.8	49.8 - 49.9	< 49.9	49.9 - 50.05	> 50.05
All India	0.027	0.00	0.23	4.13	4.36	80.37	15.27

C. Power Supply Position in States Max.Demand **Shortage during** | **Energy Met** Drawal OD(+)/UD(-) Max OD **Energy** Region **States** Met during the maximum Schedule **Shortage** (MU) (MW) (MU) dav(MW) Demand(MW) (MU) (MU) 142.3 -0.5 110 Punjab 6982 113.1 0.06628 135.5 2.1 Haryana 0 120.7 309 0.0Rajasthan 10637 0 225.6 81.8 1.3 418 0.0 Delhi 4079 -2.1 0 **78.7** 64.3 47 0.0 UP 18274 440 184.3 0.5 775 NR 367.1 1.2 Uttarakhand 1428 0 30.6 13.0 0.2 **65** 0.0 HP 1172 22.4 0.3 1.2 191 0.0 J&K(UT) & Ladakh(UT) 547 2189 22.5 43.3 1.3 286 10.3 Chandigarh 182 0 3.8 3.8 0.1 17 0.0 Chhattisgarh 3291 0 76.3 24.7 -1.2 250 0.0 14322 303.5 83.6 5.2 1023 Gujarat 0 0.0 MP 9259 0 205.3 116.3 -1.7 346 0.0 WR Maharashtra 19178 418.3 137.6 0.7 **508** 0.0 466 10.3 9.8 0.0 **56** 0.0 Goa 0 DD 196 0 4.2 4.0 0.2 29 0.0 DNH 324 0 7.4 7.3 0.1 31 0.0 **AMNSIL** 687 14.9 2.5 265 0 0.8 0.0 8618 82.3 Andhra Pradesh 174.1 -1.3 555 0.0 149.5 55.2 0.3 Telangana 7266 463 0.0 SR 8992 169.2 49.4 -1.7 495 Karnataka 0 0.0 3040 Kerala 0 63.3 43.5 -0.1 **170** 0.0 12418 0 270.5 134.4 **-4.1** 604 0.0 Tamil Nadu 331 0 7.0 7.2 -0.2 63 Puducherry 0.0 5378 98.8 255 Bihar 0 105.9 -1.3 0.0 DVC 2465 52.9 -29.5 0.7 349 0.0 Jharkhand 1470 26.9 19.8 336 0.0 0 -0.3 ER Odisha 4027 0 83.4 10.8 0.6 289 0.0 West Bengal 7915 0 157.7 40.9 2.3 359 0.0 94 -0.3 Sikkim 0 1.3 1.6 14 0.0 **Arunachal Pradesh** 105 1.9 3 **1.7** 0.1 61 0.0 Assam 1645 10 **27.6** 21.9 0.8 151 0.5 190 2.6 2.3 0.3 42 Manipur 0.0 **NER** 292 Meghalaya 0 **5.0** 3.4 -0.2 40 0.1 Mizoram 90 2 1.5 1.5 -0.2 12 0.0 128 2.1 2.1 -0.1 11 0.0 Nagaland 5.5 77 Tripura 302 5.5 0.6 0.0

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	24.8	-0.7	-26.1
Day Peak (MW)	1342.0	-160.1	-1144.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	251.4	-298.7	128.4	-83.5	2.4	0.0
Actual(MU)	258.8	-296.7	103.6	-72.9	6.7	-0.5
O/D/U/D(MU)	7.4	2.1	-24.9	10.6	4.3	-0.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	5825	16928	10792	1196	649	35390
State Sector	16950	22081	11158	5092	11	55292
Total	22775	39008	21950	6288	660	90681

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	378	1044	379	444	7	2252
Lignite	22	15	33	0	0	70
Hydro	274	47	51	89	8	470
Nuclear	28	33	47	0	0	108
Gas, Naptha & Diesel	33	86	19	0	31	169
RES (Wind, Solar, Biomass & Others)	76	121	212	5	0	414
Total	811	1346	740	538	45	3481
	•	•		•		

Share of RES in total generation (%)	9.41	8.97	28.56	0.92	0.09	11.88
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation(%)	46.65	14.90	41.87	17.55	16.86	28.46

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.041
Rased on State May Demands	1 091

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.

INTER-REGIONAL EXCHANGES

Import=(+ve) /Export =(-ve) for NET (MU)
Date of Reporting: 19-May-2020

Sl No						1	Date of Reporting:	19-May-2020
	Voltage Level	Line Details	Circuit	Max Import	Max Export	Import (MU)	Export (MU)	NET (MU)
	voltage Level	Line Details	Circuit	(MW)	(MW)	Import (MO)	Export (MO)	NEI (MU)
Impo	rt/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	247	0.0	6.1	-6.1
3	765 kV	GAYA-VARANASI	D/C	0	594	0.0	6.2	-6.2
4	765 kV	SASARAM-FATEHPUR	S/C	156	152	0.3	0.0	0.3
5	765 kV	GAYA-BALIA	S/C	0	412	0.0	6.7	-6.7
6	400 kV	PUSAULI-VARANASI	S/C	0	241	0.0	4.9	-4.9
7	400 kV	PUSAULI -ALLAHABAD	S/C	0	89	0.0	1.2	-1.2
8	400 kV	MUZAFFARPUR-GORAKHPUR	D/C	0	663	0.0	10.6	-10.6
9	400 kV	PATNA-BALIA	Q/C	0	709	0.0	9.9	-9.9
10	400 kV	BIHARSHARIFF-BALIA	D/C	0	270	0.0	3.0	-3.0
11	400 kV	MOTIHARI-GORAKHPUR	D/C	0	351	0.0	6.0	-6.0
12	400 kV	BIHARSHARIFF-VARANASI	D/C	133	141	0.0	0.3	-0.3
13	220 kV	PUSAULI-SAHUPURI	S/C	0	221	0.0	4.3	-4.3
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	0.5	0.0	0.5
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
	102 K V		SiC	<u> </u>	ER-NR	0.9	59.2	-58.3
_	./E				EK-NK	0.9	59.2	-58.3
	rt/Export of ER (, 	
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	923	0	14.0	0.0	14.0
2	765 kV	NEW RANCHI-DHARAMJAIGARH	D/C	843	0	14.3	0.0	14.3
3	765 kV	JHARSUGUDA-DURG	D/C	79	111	0.0	0.4	-0.4
4	400 kV	JHARSUGUDA-RAIGARH	Q/C	192	72	1.3	0.0	1.3
								
5	400 kV	RANCHI-SIPAT	D/C	352	0	6.0	0.0	6.0
6	220 kV	BUDHIPADAR-RAIGARH	S/C	0	76	0.0	1.1	-1.1
7	220 kV	BUDHIPADAR-KORBA	D/C	178	0	2.8	0.0	2.8
				270	ER-WR	38.4	1.5	36.9
Imno	rt/Export of ER (With CD)			ER-WK	30.4	1.3	30.3
			- 10	1 .	•01			
1	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0	381	0.0	9.0	-9.0
2	HVDC	TALCHER-KOLAR BIPOLE	D/C	0	992	0.0	24.1	-24.1
3	765 kV	ANGUL-SRIKAKULAM	D/C	0	2625	0.0	52.5	-52.5
4		TALCHER-I/C	D/C	932	0	18.4	0.0	18.4
5			S/C	732	0			
3	220 kV	BALIMELA-UPPER-SILERRU	S/C	1		0.0	0.0	0.0
					ER-SR	0.0	85.6	-85.6
Impo	rt/Export of ER (With NER)						
1	400 kV	BINAGURI-BONGAIGAON	D/C	0	302	0.0	3.5	-3.5
2	400 kV	ALIPURDUAR-BONGAIGAON	D/C	0	510	0.0	8.2	-8.2
3	220 kV	ALIPURDUAR-SALAKATI	D/C	0	105	0.0	1.6	-1.6
					ER-NER	0.0	13.3	-13.3
-		(With NR)						
Impo	rt/Export of NER	(VICH IVA)				0.0	0.2	-8.3
Impo			-	0	403		0.5	
	rt/Export of NER HVDC	BISWANATH CHARIALI-AGRA	-	0	403 NER-NR		8.3	
1	HVDC	BISWANATH CHARIALI-AGRA	-	0	403 NER-NR	0.0	8.3	-8.3
1 Impo	HVDC	BISWANATH CHARIALI-AGRA (With NR)			NER-NR	0.0	8.3	-8.3
1 Impo	HVDC rt/Export of WR HVDC	BISWANATH CHARIALI-AGRA (With NR) CHAMPA-KURUKSHETRA	D/C	0	NER-NR 1825	0.0	8.3 57.6	-8.3 -57.6
1 Impo	HVDC rt/Export of WR HVDC HVDC	BISWANATH CHARIALI-AGRA (With NR)	D/C D/C		NER-NR	0.0	8.3	-8.3
1 Impo	HVDC rt/Export of WR HVDC	BISWANATH CHARIALI-AGRA (With NR) CHAMPA-KURUKSHETRA	D/C	0	NER-NR 1825	0.0	8.3 57.6	-8.3 -57.6
1 1 2 3	HVDC rt/Export of WR HVDC HVDC HVDC	BISWANATH CHARIALI-AGRA (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG	D/C D/C D/C	0 272 0	NER-NR 1825 104 1549	0.0 0.0 2.2 0.0	8.3 57.6 0.0 38.7	-8.3 -57.6 2.2 -38.7
1 1 2 3 4	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV	BISWANATH CHARIALI-AGRA (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA	D/C D/C D/C D/C	0 272 0 0	NER-NR 1825 104 1549 2607	0.0 0.0 2.2 0.0 0.0	57.6 0.0 38.7 47.9	-8.3 -57.6 2.2 -38.7 -47.9
1 1 2 3 4 5	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV	BISWANATH CHARIALI-AGRA (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR	D/C D/C D/C D/C D/C D/C	0 272 0 0	NER-NR 1825 104 1549 2607 1228	0.0 0.0 2.2 0.0 0.0 0.0	8.3 57.6 0.0 38.7 47.9 25.2	-8.3 -57.6 2.2 -38.7 -47.9 -25.2
1 1 2 3 4 5 6	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV	BISWANATH CHARIALI-AGRA (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI	D/C D/C D/C D/C D/C D/C D/C	0 272 0 0 0	NER-NR 1825 104 1549 2607 1228 947	0.0 0.0 2.2 0.0 0.0 0.0 0.0	8.3 57.6 0.0 38.7 47.9 25.2 31.8	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8
1 1 2 3 4 5	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV	BISWANATH CHARIALI-AGRA (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR	D/C D/C D/C D/C D/C D/C	0 272 0 0	NER-NR 1825 104 1549 2607 1228	0.0 0.0 2.2 0.0 0.0 0.0	8.3 57.6 0.0 38.7 47.9 25.2	-8.3 -57.6 2.2 -38.7 -47.9 -25.2
1 1 2 3 4 5 6	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV	BISWANATH CHARIALI-AGRA (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI	D/C D/C D/C D/C D/C D/C D/C	0 272 0 0 0	NER-NR 1825 104 1549 2607 1228 947	0.0 0.0 2.2 0.0 0.0 0.0 0.0	8.3 57.6 0.0 38.7 47.9 25.2 31.8	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7
1 Import 1 2 3 4 5 6 7 8	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV	With NR) CHAMPA-KURUKSHETRA 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 D/C S/C S/C	0 272 0 0 0 0 0 564	NER-NR 1825 104 1549 2607 1228 947 0 1374	0.0 2.2 0.0 0.0 0.0 0.0 10.7 0.0	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4
1 1 2 3 4 5 6 7 8	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 765 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA	D/C D/C D/C D/C D/C S/C S/C D/C	0 272 0 0 0 0 0 564 0 231	NER-NR 1825 104 1549 2607 1228 947 0 1374 590	0.0 0.0 2.2 0.0 0.0 0.0 10.7 0.0 0.0	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3
1 Import 1 2 3 4 5 6 7 8 9 10 10	HVDC rt/Export of WR HVDC HVDC T65 kV T65 kV T65 kV T65 kV T65 kV T65 kV	BISWANATH CHARIALI-AGRA (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-KANKROLI	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C	0 272 0 0 0 0 564 0 231 139	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45	0.0 2.2 0.0 0.0 0.0 0.0 10.7 0.0 0.0 11.1	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1
1 Import 1 2 3 4 5 6 7 8 9 10 11	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 765 kV 400 kV	BISWANATH CHARIALI-AGRA (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL	D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C	0 272 0 0 0 0 564 0 231 139 112	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168	0.0 2.2 0.0 0.0 0.0 0.0 10.7 0.0 0.0 1.1 0.0	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7
1 Import 1 2 3 4 5 6 7 8 9 10	HVDC rt/Export of WR HVDC HVDC T65 kV T65 kV T65 kV T65 kV T65 kV T65 kV	BISWANATH CHARIALI-AGRA (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-KANKROLI	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C	0 272 0 0 0 0 564 0 231 139	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45	0.0 2.2 0.0 0.0 0.0 0.0 10.7 0.0 0.0 11.1	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1
1 Import 1 2 3 4 5 6 7 8 9 10 11	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 765 kV 400 kV	BISWANATH CHARIALI-AGRA (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND	D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C	0 272 0 0 0 0 564 0 231 139 112	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168	0.0 2.2 0.0 0.0 0.0 0.0 10.7 0.0 0.0 1.1 0.0	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7
1 Import	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR	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	0 272 0 0 0 0 564 0 231 139 112 981	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289	0.0 0.0 2.2 0.0 0.0 0.0 10.7 0.0 0.0 1.1 0.0 22.5 0.0	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0
1 Import 1 2 3 4 5 6 7 8 9 10 11 12 13 14	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 400 kV	BISWANATH CHARIALI-AGRA (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -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	0 272 0 0 0 0 564 0 231 139 112 981 81	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78	0.0 0.0 2.2 0.0 0.0 0.0 10.7 0.0 0.0 1.1 0.0 22.5 0.0 1.9	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4
1 Import 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 400 kV 220 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR 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	0 272 0 0 0 0 564 0 231 139 112 981 81	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78 112	0.0 0.0 2.2 0.0 0.0 0.0 10.7 0.0 0.0 1.1 0.0 22.5 0.0 1.9 0.0	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5 0.2	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4 -0.2
1 Important 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 400 kV 220 kV 220 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-BHINMAL V'CHAL -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	0 272 0 0 0 0 564 0 231 139 112 981 81 10	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78 112 1	0.0 0.0 2.2 0.0 0.0 0.0 10.7 0.0 0.0 1.1 0.0 22.5 0.0 1.9	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5 0.2 0.0	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4 -0.2 0.1
1 Import 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 400 kV 220 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR 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	0 272 0 0 0 0 564 0 231 139 112 981 81	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78 112	0.0 0.0 2.2 0.0 0.0 0.0 10.7 0.0 0.0 1.1 0.0 22.5 0.0 1.9 0.0	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5 0.2	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4 -0.2
1 Import	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 220 kV 220 kV 220 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-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	0 272 0 0 0 0 564 0 231 139 112 981 81 10 0	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78 112 1	0.0 0.0 2.2 0.0 0.0 0.0 10.7 0.0 1.1 0.0 22.5 0.0 1.9 0.0 0.1 0.4	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5 0.2 0.0 0.0	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4 -0.2 0.1 0.4
1 Important 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 400 kV 220 kV 220 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-BHINMAL V'CHAL -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	0 272 0 0 0 0 564 0 231 139 112 981 81 10	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78 112 1 21 0	0.0 0.0 2.2 0.0 0.0 0.0 10.7 0.0 1.1 0.0 22.5 0.0 1.9 0.0 0.1 0.4 0.0	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5 0.2 0.0 0.0 0.0	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4 -0.2 0.1 0.4 0.0
1 Import 1 2 3 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 400 kV 220 kV 220 kV 220 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-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	0 272 0 0 0 0 564 0 231 139 112 981 81 10 0	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78 112 1	0.0 0.0 2.2 0.0 0.0 0.0 10.7 0.0 1.1 0.0 22.5 0.0 1.9 0.0 0.1 0.4	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5 0.2 0.0 0.0	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4 -0.2 0.1 0.4
1 Important	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 400 kV 220 kV 220 kV 220 kV 220 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-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	0 272 0 0 0 0 564 0 231 139 112 981 81 10 0 61 33	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78 112 1 21 0 WR-NR	0.0 0.0 2.2 0.0 0.0 0.0 0.0 10.7 0.0 0.0 1.1 0.0 22.5 0.0 1.9 0.0 0.1 0.4 0.0 38.7	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5 0.2 0.0 0.0 0.0 237.2	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4 -0.2 0.1 0.4 0.0 -198.4
1 Import 1 2 3 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 400 kV 220 kV 220 kV 220 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR (With SR) BHADRAWATI B/B	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	0 272 0 0 0 0 564 0 231 139 112 981 81 10 0	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78 112 1 21 0 WR-NR	0.0 0.0 2.2 0.0 0.0 0.0 10.7 0.0 1.1 0.0 22.5 0.0 1.9 0.0 0.1 0.4 0.0 38.7	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5 0.2 0.0 0.0 0.0	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4 -0.2 0.1 0.4 0.0 -198.4
1 Important	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 400 kV 220 kV 220 kV 220 kV 132 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-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	0 272 0 0 0 0 564 0 231 139 112 981 81 10 0 61 33	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78 112 1 21 0 WR-NR	0.0 0.0 2.2 0.0 0.0 0.0 0.0 10.7 0.0 0.0 1.1 0.0 22.5 0.0 1.9 0.0 0.1 0.4 0.0 38.7	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5 0.2 0.0 0.0 0.0 237.2	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4 -0.2 0.1 0.4 0.0 -198.4
Impoi 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Impoi 1 2	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR HVDC HVDC	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR 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	0 272 0 0 0 0 564 0 231 139 112 981 81 10 0 61 33 0	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78 112 1 21 0 WR-NR	0.0 0.0 2.2 0.0 0.0 0.0 10.7 0.0 1.1 0.0 22.5 0.0 1.9 0.0 0.1 0.4 0.0 38.7	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5 0.2 0.0 0.0 0.0 237.2	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4 -0.2 0.1 0.4 0.0 -198.4
1 Import 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Import 1 2 3 3	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR HVDC HVDC 765 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR	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	0 272 0 0 0 0 564 0 231 139 112 981 81 10 0	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78 112 1 21 0 WR-NR	0.0 0.0 2.2 0.0 0.0 0.0 0.0 10.7 0.0 0.0 1.1 0.0 22.5 0.0 1.9 0.0 0.1 0.4 0.0 38.7	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5 0.2 0.0 0.0 0.0 237.2	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4 -0.2 0.1 0.4 0.0 -198.4 -12.0 0.0 -15.7
1 Important 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Important 2 3 4 4 4 4 4 4 15 1 4 15 1 1 1 1 1 1 1 1 1	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR HVDC HVDC 765 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD	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	0 272 0 0 0 0 564 0 231 139 112 981 81 10 0 61 33 0	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78 112 1 21 0 WR-NR 522 0 1440 2009	0.0 0.0 2.2 0.0 0.0 0.0 0.0 10.7 0.0 0.0 1.1 0.0 22.5 0.0 1.9 0.0 0.1 0.4 0.0 38.7	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5 0.2 0.0 0.0 237.2	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4 -0.2 0.1 0.4 0.0 -198.4 -12.0 0.0 -15.7 -38.1
1 Important	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR HVDC HVDC 765 kV 400 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI	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 D/C S/C S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 272 0 0 0 0 564 0 231 139 112 981 81 10 0 61 33 0	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78 112 1 21 0 WR-NR 522 0 1440 2009 176	0.0 0.0 2.2 0.0 0.0 0.0 10.7 0.0 1.1 0.0 22.5 0.0 1.9 0.0 0.1 0.4 0.0 38.7 0.0 0.0 0.0 3.5	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5 0.2 0.0 0.0 237.2	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4 -0.2 0.1 0.4 0.0 -198.4 -12.0 0.0 -15.7 -38.1 2.8
1 Important 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Important 2 3 4 4 4 4 4 4 15 1 4 15 1 1 1 1 1 1 1 1 1	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR HVDC HVDC 765 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD	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 D/C S/C S/C S/C D/C S/C S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 272 0 0 0 0 564 0 231 139 112 981 81 10 0 61 33 0	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78 112 1 21 0 WR-NR 522 0 1440 2009	0.0 0.0 2.2 0.0 0.0 0.0 0.0 10.7 0.0 0.0 1.1 0.0 22.5 0.0 1.9 0.0 0.1 0.4 0.0 38.7	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5 0.2 0.0 0.0 237.2	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4 -0.2 0.1 0.4 0.0 -198.4 -12.0 0.0 -15.7 -38.1
Import	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR HVDC HVDC 765 kV 400 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI	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 D/C S/C S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 272 0 0 0 0 564 0 231 139 112 981 81 10 0 61 33 0	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78 112 1 21 0 WR-NR 522 0 1440 2009 176	0.0 0.0 2.2 0.0 0.0 0.0 10.7 0.0 1.1 0.0 22.5 0.0 1.9 0.0 0.1 0.4 0.0 38.7 0.0 0.0 0.0 3.5	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5 0.2 0.0 0.0 237.2	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4 -0.2 0.1 0.4 0.0 -198.4 -12.0 0.0 -15.7 -38.1 2.8
1 Import 1 2 3 4 5 6 7 18 Import 1 2 3 4 4 5 5 6 6 7 18 Import 1 2 3 4 5 6 6 7 7 18 15 16 17 18 18 15 16 17 18 18 15 16 17 18 18 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR HVDC HVDC 765 kV 765 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITORGARH-BANASKANTHA ZERDA-BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI	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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 272 0 0 0 0 564 0 231 139 112 981 81 10 0 61 33 0	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78 112 1 21 0 WR-NR 522 0 1440 2009 176 0 0	0.0 0.0 2.2 0.0 0.0 0.0 10.7 0.0 1.1 0.0 22.5 0.0 1.9 0.0 0.1 0.4 0.0 38.7	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5 0.2 0.0 0.0 237.2 12.0 0.0 15.8 38.1 0.7 0.0 0.0 0.0	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4 -0.2 0.1 0.4 0.0 -198.4 -12.0 0.0 -15.7 -38.1 2.8 0.0 0.0
Import	HVDC rt/Export of WR HVDC HVDC HVDC 765 kV 765 kV 765 kV 765 kV 400 kV 400 kV 400 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR HVDC HVDC 765 kV 400 kV	With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI CHITORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	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 D/C S/C S/C S/C D/C S/C S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 272 0 0 0 0 564 0 231 139 112 981 81 10 0 61 33 0	NER-NR 1825 104 1549 2607 1228 947 0 1374 590 45 168 0 289 78 112 1 21 0 WR-NR 522 0 1440 2009 176 0	0.0 0.0 2.2 0.0 0.0 0.0 0.0 10.7 0.0 0.0 1.1 0.0 22.5 0.0 1.9 0.0 0.1 0.4 0.0 38.7	8.3 57.6 0.0 38.7 47.9 25.2 31.8 0.0 30.4 3.3 0.0 0.7 0.0 1.0 0.5 0.2 0.0 0.0 237.2 12.0 0.0 15.8 38.1 0.7 0.0	-8.3 -57.6 2.2 -38.7 -47.9 -25.2 -31.8 10.7 -30.4 -3.3 1.1 -0.7 22.5 -1.0 1.4 -0.2 0.1 0.4 0.0 -198.4 -12.0 0.0 -15.7 -38.1 2.8 0.0

INTERNATIONAL EXCHANGES									
State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)	Energy Exchange (MU)			
	ER	DAGACHU (2 * 63)	0	0	0	0.0			
	ER	CHUKA (4 * 84) BIRPARA	148	111	117	2.8			
BHUTAN	ER	MANGDECHHU (4 x 180)	579	431	408	9.8			
	ER	TALA (6 * 170) BINAGURI	459	383	403	9.7			
	NER	132KV-SALAKATI - GELEPHU	0	0	9	0.2			
	NER	132KV-RANGIA - DEOTHANG	0	0	44	1.1			
	NR	132KV-Tanakpur(NH) -	0	0	0	-0.2			
NEPAL	ER	132KV-BIHAR - NEPAL	-40	-2	-11	-0.3			
	ER	220KV-MUZAFFARPUR -	-104	-2	-13	-0.3			
	ER	Bheramara HVDC(Bangladesh)	-958	-760	-929	-22.3			
BANGLADESH	NER	132KV-SURAJMANI NAGAR -	93	0	-80	-1.9			
	NER	132KV-SURAJMANI NAGAR -	93	0	-80	-1.9			