

## 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, कृतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 4<sup>th</sup> Sept 2018

Τо

- 1. कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के.,14, गोल्फ क्लब रोड, कोलकाता ७०००३३ Executive Director, ERLDC, 14 Golf Club Road, Tolleygunge, 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 ७९३००६ 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 03.09.2018.

महोदय/Dear Sir.

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 03-सितंबर-2018 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 3<sup>rd</sup> September 2018, 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** 4-Sep-18

#### A. Maximum Demand

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 2000 hrs; from RLDCs)	48490	41140	42601	21175	2665	156071
Peak Shortage (MW)	501	0	275	150	129	1055
Energy Met (MU)	1072	956	957	433	51	3469
Hydro Gen (MU)	357	46	182	112	25	722
Wind Gen (MU)	25	97	109			230
Solar Gen (MU)*	16.48	13.90	58.41	1.13	0.02	90
Energy Shortage (MU)	9.5	0.0	1.1	0.5	1.5	12.5
Maximum Demand Met during the day	49113	42521	42325	21498	2786	157142
(MW) & time (from NLDC SCADA)	19:51	07:38	19:00	19:29	18:42	19:38

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	0.027	0.00	0.34	5.54	5.88	89.20	4.92

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	9185	0	209.4	130.3	0.1	99	0.0
	Harvana	6531	0	140.7	125.8	-0.3	298	0.0
	Rajasthan	9790	0	207.9	63.8	2.0	526	0.0
	Delhi	4059	6	87.3	71.4	-1.5	29	0.0
	UP	15873	0	319.9	168.7	-0.9	162	0.0
	Uttarakhand	1671	0	35.8	14.5	-0.1	174	0.0
	HP	1349	0	26.8	-1.1	0.3	172	0.0
	J&K	2005	501	39.9	20.1	-4.6	155	9.5
	Chandigarh	207	0	4.4	5.3	-0.9	8	0.0
	Chhattisgarh	3619	0	81.1	14.3	-1.9	463	0.0
Gujar MP	Gujarat	11220	0	253.6	58.0	3.9	110	0.0
	MP	7368	0	159.3	60.8	-1.7	420	0.0
	Maharashtra	18962	0	414.9	120.5	-0.4	343	0.0
WK	Goa	403	0	9.8	9.0	0.1	124	0.0
	DD	324	0	7.3	6.5	0.8	157	0.0
	DNH	783	0	17.6	16.5	1.1	303	0.0
	Essar steel	528	0	11.0	10.7	0.3	342	0.0
	Andhra Pradesh	8706	0	186.8	32.4	3.2	675	0.0
	Telangana	9879	0	212.6	83.5	1.5	479	0.0
SR	Karnataka	9123	0	184.4	48.0	-0.2	642	0.0
3N	Kerala	3339	250	66.1	31.5	0.9	256	1.0
	Tamil Nadu	14417	0	300.2	101.3	3.3	552	0.0
	Pondy	335	25	7.0	6.9	0.0	54	0.1
	Bihar	4529	0	83.8	87.1	-3.3	250	0.0
	DVC	2875	0	67.1	-22.0	2.4	200	0.5
ER	Jharkhand	1159	0	22.9	18.0	-0.5	10	0.0
EN	Odisha	5063	0	100.0	37.3	1.2	200	0.0
	West Bengal	8537	0	157.6	61.3	4.2	450	0.0
	Sikkim	88	0	1.1	1.3	-0.2	10	0.0
	Arunachal Pradesh	125	2	2.2	2.6	-0.4	30	0.0
	Assam	1753	79	32.5	26.9	0.8	92	1.4
	Manipur	173	1	2.4	2.7	-0.3	40	0.0
NER	Meghalaya	289	0	5.1	0.2	-0.3	38	0.0
	Mizoram	73	0	1.5	1.1	0.1	19	0.0
	Nagaland	120	1	2.3	2.1	-0.2	24	0.0
	Tripura	273	2	5.0	4.0	0.6	47	0.0

 $\textbf{D. Transnational Exchanges} \ \ (\textbf{MU}) \textbf{-} \textbf{Import} (+\textbf{ve}) / \textbf{Export} (-\textbf{ve})$ 

	Bhutan	Nepal	Bangladesh
Actual(MU)	33.3	-5.2	-15.1
Day peak (MW)	1629.6	-388.0	-669.5

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	222.0	-247.9	54.2	-31.7	7.3	4.0
Actual(MU)	210.5	-254.7	65.3	-27.5	5.8	-0.6
O/D/U/D(MU)	-11.6	-6.8	11.1	4.2	-1.5	-4.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	5046	16079	9882	1645	560	33213
State Sector	11420	18384	10313	6865	50	47032
Total	16466	34463	20195	8510	610	80244

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Thermal (Coal & Lignite)	438	1016	471	372	7	2304
Hydro	357	46	182	112	25	722
Nuclear	28	27	19	0	0	74
Gas, Naptha & Diesel	14	29	23	0	17	82
RES (Wind, Solar, Biomass & Others)	54	111	208	1	0	374
Total	891	1228	902	485	49	3555

Share of RES in total generation (%)	6.07	9.00	23.10	0.23	0.08	10.53
Share of Non-fossil fuel (Hydro, Nuclear and	49.25	14.95	15 35	23.36	51.74	32.91
RES) in total generation (%)	49.25	14.95	45.35	23.30	51.74	32.91

H. Diversity Factor
All India Demand Diversity Factor
1.007
Diversity factor = Sum of regional maximum demands / All India maximum demand

 $<sup>\</sup>textbf{*Source:} \ RLDCs \ for \ solar \ connected \ to \ ISTS; \ SLDCs \ for \ embedded \ solar. \ Limited \ visibility \ of \ embedded \ solar \ data.$ 

		INTE	R-REGIO	ONAL EX	CHANGES			
						Date of I	Reporting:	4-Sep-18
								Import=(+ve) /Export =(-ve) for NET (MU)
Sl No	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
	Export of	ER (With NR)	D/C	117	156	0.0	1.2	1.2
2	765kV	GAYA-VARANASI SASARAM-FATEHPUR	D/C S/C	117 314	156 0	0.0 5.0	0.0	-1.2 5.0
3		GAYA-BALIA	S/C	0	234	0.0	4.4	-4.4
4	HVDC	ALIPURDUAR-AGRA	-	0	1453	0.0	33.9	-33.9
5		PUSAULI B/B PUSAULI-VARANASI	S/C S/C	0	148 163	0.0	0.0	-3.5 0.0
7		PUSAULI -ALLAHABAD	S/C	9	50	0.0	0.0	0.0
8	1	MUZAFFARPUR-GORAKHPUR	D/C	121	312	0.0	1.6	-1.6
9	400 kV	PATNA-BALIA	Q/C	0	643	0.0	12.5	-12.5
10		BIHARSHARIFF-BALIA	D/C	28	158	0.0	0.5	-0.5
11	ł	MOTIHARI-GORAKHPUR	D/C	119	0	4.1	0.0	4.1
12	220 kV	BIHARSHARIFF-VARANASI PUSAULI-SAHUPURI	D/C S/C	262	0 136	3.0 0.0	3.0	3.0 -3.0
14	220 KV	SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	122 1-37	GARWAH-RIHAND	S/C	35	0	0.5	0.0	0.5
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
I	aut a6	ED (Wist WD)			ER-NR	12.6	60.6	-48.0
	Aport of	ER (With WR)	2.5	12.5		27.0		27.0
18	765 kV	JHARSUGUDA-DHARAMJAIGARH S/C	D/C	1269	1	25.9	0.0	25.9
19 20		NEW RANCHI-DHARAMJAIGARH JHARSUGUDA-RAIGARH	D/C Q/C	1150 1238	0	19.0 24.3	0.0	19.0 24.3
21	400 kV	RANCHI-SIPAT	D/C	477	0	9.4	0.0	9.4
22	220 1-37	BUDHIPADAR-RAIGARH	S/C	0	1	2.9	0.0	2.9
23	220 kV	BUDHIPADAR-KORBA	D/C	291	0	2.7	0.0	2.7
					ER-WR	84.1	0.0	84.1
		ER (With SR)	I I	0.0	12010	0.0	47.0	15.0
24	765 kV	ANGUL-SRIKAKULAM JEYPORE-GAZUWAKA B/B	D/C D/C	0.0	1204.8 461.8	0.0	17.9	-17.9 -11.0
26	HVDC LINK	TALCHER-KOLAR BIPOLE	D/C	0.0	1485.0	0.0	29.8	-29.8
27	400 kV	TALCHER-I/C	D/C	1350.6	0.8	0.0	23.7	-23.7
28	220 kV	BALIMELA-UPPER-SILERRU	S/C	0.0	0.0	0.0	0.0	0.0
								50 F
T (70		ED AVIA NED			ER-SR	0.0	58.7	-58.7
	Export of	ER (With NER)	D/C	0				1
29	Export of	BINAGURI-BONGAIGAON	D/C	0	822	0.0	16.2	-16
			D/C D/C D/C	0 103 0				1
29 30 31	400 kV 220 kV	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI	D/C	103	822 348	0.0	16.2 1.2	-16 -1
29 30 31 Import/E	400 kV 220 kV Export of	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI NER (With NR)	D/C	0	822 348 164 ER-NER	0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0	-16 -1 -3 -21.0
29 30 31 Import/E	400 kV 220 kV Export of	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI	D/C	103	822 348 164 ER-NER	0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0	-16 -1 -3 -21.0
29 30 31 Import/E 32	400 kV 220 kV Export of HVDC	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA	D/C	0	822 348 164 ER-NER	0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0	-16 -1 -3 -21.0
29 30 31 Import/E 32	400 kV 220 kV Export of HVDC	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI NER (With NR)	D/C	0	822 348 164 ER-NER	0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0	-16 -1 -3 -21.0
29 30 31 Import/E 32	400 kV 220 kV Export of HVDC	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA	D/C D/C	0	822 348 164 ER-NER 701 NER-NR	0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0	-16 -1 -3 -21.0 -16.8 -16.8
29 30 31 Import/E 32 Import/E 33 34 35	220 kV Export of HVDC Export of	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG	D/C D/C  - D/C  D/C  D/C  D/C  D/C	0 0 0 0 241 0	822 348 164 ER-NER 701 NER-NR 1502 0 1453	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0	-16 -1 -3 -21.0 -16.8 -16.8 -24.3 -6.0 -20.4
29 30 31 Import/E 32 Import/E 33 34 35 36	220 kV Export of HVDC Export of	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA	D/C D/C  D/C  D/C  D/C  D/C  D/C  D/C	0 0 0 0 241 0	822 348 164 ER-NER 701 NER-NR 1502 0 1453 1146	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 6.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8	-16 -1 -3 -21.0 -16.8 -16.8 -24.3 -6.0 -20.4 -42.8
29 30 31 Import/E 32 Import/E 33 34 35 36 37	220 kV 220 kV Export of HVDC Export of HVDC	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR	D/C D/C  D/C  D/C  D/C  D/C  D/C  D/C	0 0 0 241 0 0	822 348 164 ER-NER 701 NER-NR 1502 0 1453 1146 1355	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8 24.6	-16 -1 -3 -21.0  -16.8 -16.8  -24.3 -6.0 -20.4 -42.8 -24.6
29 30 31 Import/E 32 Import/E 33 34 35 36	220 kV Export of HVDC Export of	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA	D/C D/C  D/C  D/C  D/C  D/C  D/C  D/C	0 0 0 0 241 0	822 348 164 ER-NER 701 NER-NR 1502 0 1453 1146	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 6.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8	-16 -1 -3 -21.0 -16.8 -16.8 -24.3 -6.0 -20.4 -42.8
29 30 31 Import/E 32 Import/E 33 34 35 36 37 38	220 kV 220 kV Export of HVDC Export of HVDC	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI	D/C D/C	0 0 0 241 0 0 0	822 348 164 ER-NER 701 NER-NR 1502 0 1453 1146 1355 550	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9	-16 -1 -3 -21.0  -16.8 -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9
29 30 31 Import/E 32 Import/E 33 34 35 36 37 38 39	220 kV 220 kV Export of HVDC Export of HVDC	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI	D/C D/C	0 0 0 241 0 0 0 0 0 308	822 348 164 ER-NER 701 NER-NR 1502 0 1453 1146 1355 550 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0	-16 -1 -3 -21.0 -16.8 -16.8 -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6
29 30 31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42	220 kV 220 kV Export of HVDC Export of HVDC	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL	D/C D/C D/C D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C	0 0 241 0 0 0 0 0 0 0 177 67	822 348 164 ER-NER 701 NER-NR 1502 0 1453 1146 1355 550 0 1900 102 189	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0 1.2	-16 -1 -3 -21.0  -16.8  -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 -1.5 -1.2
29 30 31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43	400 kV 220 kV Export of HVDC Export of HVDC 765 kV	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND	D/C D/C D/C D/C D/C D/C D/C D/C C D/C S/C S/C S/C S/C	0 0 241 0 0 0 0 0 0 0 308 0 177 67	822 348 164 ER-NER 701 NER-NR 1502 0 1453 1146 1355 550 0 1900 102 189 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0	-16 -1 -3 -21.0  -16.8 -16.8  -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 1.5 -1.2 17.1
29 30 31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44	400 kV 220 kV Export of HVDC Export of HVDC 765 kV	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR	D/C D/C D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C D/C	0 0 241 0 0 0 0 0 0 0 308 0 177 67 961	822 348 164 ER-NER 701 NER-NR 1502 0 1453 1146 1355 550 0 1900 102 189 0 396	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0 1.2 0.0 2	-16 -1 -3 -21.0  -16.8 -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 -1.5 -1.2 -17.1 -2
29 30 31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43	400 kV 220 kV Export of HVDC Export of HVDC 400 kV	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND	D/C D/C D/C D/C D/C D/C D/C D/C C D/C S/C S/C S/C S/C	0 0 241 0 0 0 0 0 0 0 308 0 177 67	822 348 164 ER-NER 701 NER-NR 1502 0 1453 1146 1355 550 0 1900 102 189 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0	-16 -1 -3 -21.0  -16.8 -16.8  -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 1.5 -1.2 17.1
29 30 31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45	400 kV 220 kV Export of HVDC Export of HVDC 765 kV	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA	D/C 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	0 0 0 241 0 0 0 0 0 0 308 0 177 67 961 0	822 348 164 ER-NER 701 NER-NR 1502 0 1453 1146 1355 550 0 1900 102 189 0 396 13	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0 1.2 0.0 2.3	-16 -1 -3 -21.0  -16.8 -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 -1.5 -1.2 -17.1 -2 -0.2
29 30 31 31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46	400 kV 220 kV Export of HVDC Export of HVDC 400 kV	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK	D/C 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	0 0 0 241 0 0 0 0 0 0 308 0 177 67 961 0	822 348 164 ER-NER 701 NER-NR 1502 0 1453 1146 1355 550 0 1900 102 189 0 396 13 51	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0 1.2 0.0 2 0.0 0.0 0.0 0.0 0.0 0.0	-16 -1 -3 -21.0  -16.8  -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 -1.2 -17.1 -2 -0.2 -0.6 -0.5 -1.0
29 30 31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47	400 kV 220 kV Export of HVDC Export of HVDC 400 kV	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA	D/C 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	0 0 0 241 0 0 0 0 0 308 0 177 67 961 0 0	822 348 164 ER-NER 701 NER-NR 1502 0 1453 1146 1355 550 0 1900 102 189 0 396 13 51 42 57 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0 1.2 0.0 0.3 0.6 0.5 1.0 0.0	-16 -1 -3 -21.0  -16.8  -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 -1.2 -17.1 -2 -0.2 -0.6 -0.5 -1.0 0.0
29 30 31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49	220 kV 220 kV 220 kV 2xport of HVDC 400 kV 400 kV 220 kV	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	D/C 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	0 0 241 0 0 0 0 0 0 0 0 308 0 177 67 961 0 0 0	822 348 164 ER-NER 701 NER-NR 1502 0 1453 1146 1355 550 0 1900 102 189 0 396 13 51 42 57	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0 2 0.0 2 0.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	-16 -1 -3 -21.0  -16.8  -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 -1.2 -17.1 -2 -0.2 -0.6 -0.5 -1.0
29 30 31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49	400 kV 220 kV Export of HVDC Approximately 400 kV 400 kV 220 kV 132kV Export of	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA	D/C 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	0 0 241 0 0 0 0 0 0 0 0 308 0 177 67 961 0 0 0	822 348 164 ER-NER 701 NER-NR 1502 0 1453 1146 1355 550 0 1900 102 189 0 396 13 51 42 57 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0 1.2 0.0 0.3 0.6 0.5 1.0 0.0	-16 -1 -3 -21.0  -16.8  -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 -1.2 -17.1 -2 -0.2 -0.6 -0.5 -1.0 0.0
29 30 31  Import/E 32  Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49	220 kV 220 kV 220 kV 2xport of HVDC 400 kV 400 kV 220 kV	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR)	D/C 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	0 0 241 0 0 0 0 0 0 308 0 177 67 961 0 19 3 0	822 348 164 ER-NER  701 NER-NR  1502 0 1453 1146 1355 550 0 1900 102 189 0 396 13 51 42 57 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0 1.2 0.0 2 0.3 0.6 0.5 1.0 0.0 175.7	-16 -1 -3 -21.0  -16.8 -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 -1.2 -17.1 -2 -0.2 -0.6 -0.5 -1.0 0.0 -145.3
29 30 31  Import/E 32  Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49  Import/E 50	400 kV 220 kV Export of HVDC Apport of HVDC LINK	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 241 0 0 0 0 0 0 0 308 0 177 67 961 0 0 0	822 348 164 ER-NER  701 NER-NR  1502 0 1453 1146 1355 550 0 1900 102 189 0 396 13 51 42 57 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0 2 0.3 0.6 0.5 1.0 0.0 175.7	-16 -1 -3 -21.0  -16.8 -16.8  -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 -1.5 -1.2 -17.1 -2 -0.6 -0.5 -1.0 -0.0 -145.3
29 30 31  Import/E 32  Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49  Import/E 50 51 52 53	220 kV  Export of HVDC  Avort of HVDC  Avort of HVDC  Avort of HVDC  Avort of HVDC  LINK  765 kV	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD	D/C   D/C   D/C   D/C   D/C   D/C   D/C   S/C   S/C	0 0 0 241 0 0 0 0 0 0 0 0 308 0 177 67 961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	822 348 164 ER-NER  701 NER-NR  1502 0 1453 1146 1355 550 0 1900 102 189 0 396 13 51 42 57 0 WR-NR  508 0 233 1800	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0 2 0.3 0.6 0.5 1.0 0.0 175.7	-16 -1 -3 -21.0  -16.8 -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 -1.5 -1.2 -17.1 -2 -0.2 -0.6 -0.5 -1.0 0.0 -145.3
29 30 31  Import/E 32  Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49  Import/E 50 51 52 53 54	400 kV 220 kV Export of HVDC Apport of HVDC LINK	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (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	0 0 0 241 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	822 348 164 ER-NER  701 NER-NR  1502 0 1453 1146 1355 550 0 1900 102 189 0 396 13 51 42 57 0 WR-NR  508 0 233 1800 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0 2 0.3 0.6 0.5 1.0 0.0 175.7 9.1 0.0 1.5 24.5 0.0	-16 -1 -3 -21.0  -16.8 -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 -1.5 -1.2 -17.1 -2 -0.2 -0.6 -0.5 -1.0 0.0 -145.3  -9.1 0.0 -1.5 -24.5 -9.2
29 30 31  Import/E 32  Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49  Import/E 50 51 52 53 54 55	220 kV  Export of HVDC  Avoir of HVDC  LINK  Avoir of	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (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   S/C   S/C	0 0 0 241 0 0 0 0 0 0 0 0 308 0 177 67 961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	822 348 164 ER-NER  701 NER-NR  1502 0 1453 1146 1355 550 0 1900 102 189 0 396 13 51 42 57 0 WR-NR  508 0 233 1800 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0 2 0.3 0.6 0.5 1.0 0.0 175.7 9.1 0.0 1.5 24.5 0.0 0.0	-16 -1 -3 -21.0  -16.8 -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 -1.5 -1.2 -17.1 -2 -0.2 -0.6 -0.5 -1.0 -0.0 -145.3  -9.1 -0.0 -1.5 -24.5 -9.2 -0.0
29 30 31  Import/E 32  Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49  Import/E 50 51 52 53 54 55 56	220 kV  Export of HVDC  Avort of HVDC  Avort of HVDC  Avort of HVDC  Avort of HVDC  LINK  765 kV	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (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   S/C   S/C	0 0 241 0 0 0 0 0 0 0 0 0 308 0 0 177 67 961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	822 348 164 ER-NER  701 NER-NR  1502 0 1453 1146 1355 550 0 1900 102 189 0 396 13 51 42 57 0 WR-NR  508 0 233 1800 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0 2 0.3 0.6 0.5 1.0 0.0 175.7 9.1 0.0 1.5 24.5 0.0 0.0	-16 -1 -3 -21.0  -16.8 -16.8  -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 -1.2 -17.1 -2 -0.2 -0.6 -0.5 -1.0 -0.0 -145.3  -9.1 -0.0 -1.5 -24.5 -9.2 -0.0 -0.0 -0.0
29 30 31  Import/E 32  Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49  Import/E 50 51 52 53 54 55	220 kV  Export of HVDC  Avoir of HVDC  LINK  Avoir of	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (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   S/C   S/C	0 0 0 241 0 0 0 0 0 0 0 0 308 0 177 67 961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	822 348 164 ER-NER  701 NER-NR  1502 0 1453 1146 1355 550 0 1900 102 189 0 396 13 51 42 57 0 WR-NR  508 0 233 1800 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0 2 0.3 0.6 0.5 1.0 0.0 175.7 9.1 0.0 1.5 24.5 0.0 0.0 0.0	-16 -1 -3 -21.0  -16.8 -16.8  -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 -1.2 -17.1 -2 -0.2 -0.6 -0.5 -1.0 -0.0 -145.3  -9.1 -0.0 -1.5 -24.5 -9.2 -0.0 -0.0 -1.9
29 30 31  Import/E 32  Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49  Import/E 50 51 52 53 54 55 56	220 kV  Export of HVDC  Avoir of HVDC  LINK  Avoir of	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C   D/C   D/C   D/C   D/C   S/C   S/C	0 0 0 241 0 0 0 0 0 0 0 0 308 0 0 177 67 961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	822 348 164 ER-NER  701 NER-NR  1502 0 1453 1146 1355 550 0 1900 102 189 0 396 13 51 42 57 0 WR-NR  508 0 233 1800 0 0 0 100 WR-SR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0 2 0.3 0.6 0.5 1.0 0.0 175.7 9.1 0.0 1.5 24.5 0.0 0.0	-16 -1 -3 -21.0  -16.8 -16.8  -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 -1.2 -17.1 -2 -0.2 -0.6 -0.5 -1.0 -0.0 -145.3  -9.1 -0.0 -1.5 -24.5 -9.2 -0.0 -0.0 -0.0
29 30 31  Import/E 32  Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49  Import/E 50 51 52 53 54 55 56	220 kV  Export of HVDC  Avoir of HVDC  LINK  Avoir of	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C   D/C   D/C   D/C   D/C   S/C   S/C	0 0 241 0 0 0 0 0 0 0 0 0 308 0 0 177 67 961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	822 348 164 ER-NER  701 NER-NR  1502 0 1453 1146 1355 550 0 1900 102 189 0 396 13 51 42 57 0 WR-NR  508 0 233 1800 0 0 0 100 WR-SR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0 2 0.3 0.6 0.5 1.0 0.0 175.7 9.1 0.0 1.5 24.5 0.0 0.0 0.0	-16 -1 -3 -21.0  -16.8 -16.8  -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 -1.2 -17.1 -2 -0.2 -0.6 -0.5 -1.0 -0.0 -145.3  -9.1 -0.0 -1.5 -24.5 -9.2 -0.0 -0.0 -1.9
29 30 31  Import/E 32  Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49  Import/E 50 51 52 53 54 55 56 57	220 kV  Export of HVDC  Avoir of HVDC  LINK  Avoir of	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C   D/C   D/C   D/C   D/C   S/C   S/C	0 0 0 241 0 0 0 0 0 0 0 0 308 0 0 177 67 961 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	822 348 164 ER-NER  701 NER-NR  1502 0 1453 1146 1355 550 0 1900 102 189 0 396 13 51 42 57 0 WR-NR  508 0 233 1800 0 0 0 100 WR-SR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16.2 1.2 3.5 21.0 16.8 16.8 16.8 24.3 0.0 20.4 42.8 24.6 16.9 0.0 41.3 0.0 2 0.3 0.6 0.5 1.0 0.0 175.7 9.1 0.0 1.5 24.5 0.0 0.0 0.0	-16 -1 -3 -21.0  -16.8 -16.8  -16.8  -24.3 -6.0 -20.4 -42.8 -24.6 -16.9 -5.6 -41.3 -1.2 -17.1 -2 -0.2 -0.6 -0.5 -1.0 -0.0 -145.3  -9.1 -0.0 -1.5 -24.5 -9.2 -0.0 -0.0 -1.9 -24.1