

# National Load Despatch Centre राष्टीय भार प्रेषण केंद्र

## POWER SYSTEM OPERATION CORPORATION LIMITED

### पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

(Government of India Enterprise/ भारत सरकार का उद्यम)

B-9, QUTUB INSTITUTIONAL AREA, KATWARIA SARAI, NEW DELHI -110016 बी-9, क़ुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 01st Mar 2018

To,

- कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के.,14, गोल्फ क्लब रोड, कोलकाता 700033
   Executive Director, ERLDC, 14 Golf Club Road, Tolleygunge, Kolkata, 700033
- 2. महाप्रबंधक, ऊ. क्षे. भा. प्रे. के., 18/ ए , शहीद जीत सिंह सनसनवाल मार्ग, नई दिल्ली 110016 General Manager, 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. महाप्रबंधक , द .क्षे .भा .प्रे .के ,,29 , रेस कोर्स क्रॉस रोड, बंगलुरु –560009 General Manager, SRLDC, 29, Race Course Cross Road, Bangalore-560009

## Sub: Daily PSP Report for the date 28.02.2018.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 28-Feb - 2018 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 28<sup>th</sup> Feb 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 1-Mar-18

#### A. Maximum Demand

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs)	42449	45860	43517	19128	2373	153327
Peak Shortage (MW)	521	34	0	0	54	609
Energy Met (MU)	922	1106	1012	380	40	3460
Hydro Gen(MU)	107	31	73	30	6	247
Wind Gen(MU)	2	28	47			77
Solar Gen (MU)*	5.70	16.87	52.43	0.89	0.02	76
Energy Shortage (MU)	20.8	0.0	2.2	0.0	0.5	23.6
Maximum Demand Met during the day (MW) (from NLDC SCADA)	44534	50628	45229	19259	2349	157231

### 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	0.069	0.00	1.38	22.14	23.52	73.73	2.75

C. Power Supply Position in States

		Max. Demand Met	Shortage during		Drawal	OD(+)/IID(-)	Max OD	E
RegionRegion	States	during the day	maximum Demand	Energy Met (MU)	Schedule (MU)	OD(+)/UD(-)		Energy
		(MW)	(MW)		Schedule (MU)	(MU)	(MW)	Shortage (MU
	Punjab	5590	0	116.1	27.0	0.5	248	0.0
	Haryana	6143	0	125.2	69.3	1.7	184	4.3
	Rajasthan	9800	714	210.5	62.7	3.7	370	5.8
	Delhi	3498	1	63.4	49.9	-0.2	171	0.0
NR	UP	14878	510	300.3	109.3	-0.1	590	1.4
	Uttarakhand	1821	0	33.3	25.5	-0.1	116	0.1
	HP	1529	0	27.0	21.9	0.7	157	0.0
	J&K	2113	443	43.0	39.9	-1.1	343	9.2
	Chandigarh	188	0	3.2	3.2	0.0	29	0.0
	Chhattisgarh	3595	0	80.4	18.5	-0.8	137	0.0
	Gujarat	14632	0	324.5	123.4	6.4	759	0.0
WR	MP	9953	0	201.5	109.1	-0.2	441	0.0
	Maharashtra	21451	0	454.9	147.1	-1.8	277	0.0
	Goa	473	0	9.6	9.1	-0.2	44	0.0
	DD	341	0	7.7	7.0	0.7	80	0.0
	DNH	759	0	17.5	16.7	0.8	68	0.0
	Essar steel	517	0	10.1	9.5	0.6	210	0.0
	Andhra Pradesh	8909	0	178.6	47.5	1.4	553	0.4
	Telangana	10109	0	213.2	101.3	-0.7	353	0.4
SR	Karnataka	10024	0	221.6	84.3	-2.9	311	0.5
JII	Kerala	3721	0	74.6	46.3	1.8	312	0.2
	Tamil Nadu	14681	0	317.0	155.5	0.7	564	0.8
	Pondy	349	0	7.2	7.6	-0.4	49	0.0
	Bihar	4189	0	70.7	63.4	-0.3	402	0.0
	DVC	3024	0	68.3	-56.5	1.5	385	0.0
ER	Jharkhand	1176	0	23.5	15.8	1.1	135	0.0
Liv	Odisha	4185	0	82.0	35.4	2.0	435	0.0
	West Bengal	7042	0	133.9	18.4	3.5	465	0.0
	Sikkim	100	0	1.6	1.5	0.1	20	0.0
	Arunachal Pradesh	120	1	2.3	1.9	0.4	59	0.0
	Assam	1364	34	23.1	18.9	1.2	146	0.4
	Manipur	173	0	2.4	2.6	-0.2	22	0.0
NER	Meghalaya	319	0	5.1	3.3	-0.2	57	0.0
	Mizoram	78	1	1.3	1.3	0.0	34	0.0
	Nagaland	128	0	2.0	1.9	0.0	40	0.0
	Tripura	225	0	3.7	2.4	0.3	26	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	2.0	-10.3	-13.7
Day peak (MW)	94.4	-463.0	-646.6

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	164.8	-153.0	95.8	-110.0	4.3	1.9
Actual(MU)	157.7	-156.3	89.4	-95.6	4.2	-0.6
O/D/U/D(MU)	-7.1	-3.3	-6.4	14.4	-0.1	-2.5

### F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	4997	15921	5502	795	265	27480
State Sector	11970	18035	3930	4775	50	38760
Total	16967	33956	9432	5570	314	66240

#### G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	Total
Thermal (Coal & Lignite)	594	1137	650	471	10	2861
Hydro	107	31	73	30	6	247
Nuclear	28	24	46	0	0	99
Gas, Naptha & Diesel	22	53	19	0	23	117
RES (Wind, Solar, Biomass & Others)	36	45	145	2	0	228
Total	786	1289	934	503	39	3551

		IVII	<u>R-REGI</u>	ONAL EXC	CHANGES	Date of I	Reporting :	1-Mar
								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)
nport/E		ER (With NR)						
1	7651-37	GAYA-VARANASI	D/C	0	449	0.0	6.3	-6.3
3	765kV	SASARAM-FATEHPUR GAYA-BALIA	S/C S/C	0	221 379	0.0	1.6 6.3	-1.6 -6.3
4		ALIPURDUAR-AGRA	3/C	0	0	0.0	0.0	0.0
5	HVDC	PUSAULI B/B	S/C	0	199	0.0	4.6	-4.6
6		PUSAULI-VARANASI	S/C	0	160	0.0	0.0	0.0
7		PUSAULI -ALLAHABAD	S/C	0	107	0.0	0.0	0.0
8		MUZAFFARPUR-GORAKHPUR	D/C	0	482	0.0	6.3	-6.3
9	400 kV	PATNA-BALIA	Q/C	0	965	0.0	16.5	-16.5
10		BIHARSHARIFF-BALIA	D/C	0	291	0.0	5.1	-5.1
11		MOTIHARI-GORAKHPUR	D/C	0	364	0.0	6.8	-6.8
12		BIHARSHARIFF-VARANASI	D/C	0	252	0.0	2.7	-2.7
13	220 kV	PUSAULI-SAHUPURI	S/C	0	170	0.0	3.3	-3.3
14		SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	122 1-37	GARWAH-RIHAND	S/C	0	0	0.5	0.0	0.5
16	132 kV	KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0
17	1	KARMANASA-CHANDAULI	S/C	0	0	0.0	0.0	0.0
		•			ER-NR	0.5	59.4	-59.0
iport/E	xport of	ER (With WR)						
18	765 kV	JHARSUGUDA-DHARAMJAIGARH S/C	D/C	0	0	4.9	0.0	4.9
19	705 KV	NEW RANCHI-DHARAMJAIGARH	D/C	0	522	0.0	6.7	-6.7
20	400 kV	JHARSUGUDA-RAIGARH	Q/C	0	198	0.0	1.2	-1.2
21	400 KV	RANCHI-SIPAT	D/C	0	136	0.0	0.7	-0.7
22	220 kV	BUDHIPADAR-RAIGARH	S/C	0	141	0.0	1.9	-1.9
23	220 KV	BUDHIPADAR-KORBA	D/C	0	0	3.5	0.0	3.5
					ER-WR	8.4	10.4	-2.0
iport/E	xport of l	ER (With SR)						,
24	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	0.0	0.0	18.2	-18.2
25	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0.0	345.7	0.0	14.6	-14.6
26	LINK	TALCHER-KOLAR BIPOLE	D/C	0.0	2254.3	0.0	47.9	-47.9
~-	400 kV	TALCHER-I/C	D/C	0.0	869.6	1.9	1.7	0.2
27						1.9		0.2
27 28	220 kV	BALIMELA-UPPER-SILERRU	S/C	0.0	0.0	0.0	0.0	0.0
28	220 kV	•	S/C					
28 nport/E	220 kV	ER (With NER)		0.0	0.0 ER-SR	0.0	0.0 <b>80.6</b>	0.0 -80.6
28 nport/E 29	220 kV export of	•	D/C	0.0	0.0 ER-SR 858	0.0 <b>0.0</b>	0.0	0.0 -80.6
28 nport/E 29 30	220 kV export of 400 kV	ER (With NER) BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON	D/C D/C	0.0	0.0 ER-SR 858 697	0.0 0.0 0.3 3.9	0.0 <b>80.6</b> 0.0	0.0 -80.6
28 1 <b>port/E</b> 29	220 kV export of	ER (With NER) BINAGURI-BONGAIGAON	D/C	0.0	0.0 ER-SR 858 697 0	0.0 0.0 0.3 3.9 0.0	0.0 <b>80.6</b> 0.0	0.0 -80.6 0 4 -1
28 nport/E 29 30 31	220 kV Export of 400 kV 220 kV	ER (With NER) BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI	D/C D/C	0.0	0.0 ER-SR 858 697	0.0 0.0 0.3 3.9	0.0 <b>80.6</b> 0.0	0.0 -80.6
28  nport/E 29 30 31  nport/E	220 kV  Export of 400 kV  220 kV  Export of 1	ER (With NER) BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI NER (With NR)	D/C D/C	0.0	0.0 ER-SR 858 697 0 ER-NER	0.0 0.0 0.3 3.9 0.0 4.2	0.0 80.6 0.0 1.2 1.2	0.0 -80.6 0 4 -1 3.0
28 nport/E 29 30 31	220 kV Export of 400 kV 220 kV	ER (With NER) BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI	D/C D/C	0.0	0.0 ER-SR 858 697 0 ER-NER	0.0 0.0 0.3 3.9 0.0 4.2	0.0 80.6 0.0 1.2 1.2	0.0 -80.6 0 4 -1 3.0
28 mport/E 29 30 31 mport/E 32	220 kV Export of 400 kV 220 kV Export of 1 HVDC	ER (With NER) BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI NER (With NR) BISWANATH CHARIALI-AGRA	D/C D/C	0.0	0.0 ER-SR 858 697 0 ER-NER	0.0 0.0 0.3 3.9 0.0 4.2	0.0 80.6 0.0 1.2 1.2	0.0 -80.6 0 4 -1 3.0
28  nport/E 29 30 31  nport/E 32	220 kV Export of 400 kV 220 kV Export of 1 HVDC	ER (With NER) BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR)	D/C D/C D/C	0.0 0 0 0	0.0  ER-SR  858  697  0  ER-NER  495  NER-NR	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5	0.0 80.6 0.0 1.2 1.2 3.4 3.4	0.0 -80.6 0 4 -1 3.0
28  mport/E 29 30 31  mport/E 32  mport/E 33	220 kV Export of 400 kV 220 kV Export of 1 HVDC	ER (With NER)  BINAGURI-BONGAIGAON  ALIPURDUAR-BONGAIGAON  ALIPURDUAR-SALAKATI  NER (With NR)  BISWANATH CHARIALI-AGRA  WR (With NR)  CHAMPA-KURUKSHETRA	D/C D/C D/C	0.0 0 0 0	0.0  ER-SR  858  697  0  ER-NER  495  NER-NR	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5	0.0 80.6 0.0 1.2 1.2 3.4 3.4 51.3	0.0 -80.6 0 4 -1 3.0 6.2 6.2
28  nport/E 29 30 31  nport/E 32  nport/E 33 34	220 kV Export of 400 kV 220 kV Export of 1 HVDC	ER (With NER)  BINAGURI-BONGAIGAON  ALIPURDUAR-BONGAIGAON  ALIPURDUAR-SALAKATI  NER (With NR)  BISWANATH CHARIALI-AGRA  WR (With NR)  CHAMPA-KURUKSHETRA  VCHAL B/B	D/C   D/C   D/C   D/C   -	0.0 0 0 0 691	0.0  ER-SR  858 697 0 ER-NER  495 NER-NR  1105	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5	0.0 80.6 0.0 1.2 1.2 3.4 3.4 51.3	0.0 -80.6 0 4 -1 3.0 6.2 6.2 -51.3 4.7
28  nport/E 29 30 31  nport/E 32  nport/E 33 34 35	220 kV Export of 400 kV 220 kV Export of 1 HVDC	ER (With NER) BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR)  CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG	D/C   D/C	0.0 0 0 0 691	0.0  ER-SR  858  697  0  ER-NER  495  NER-NR  1105  0  1010	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5	0.0 80.6 0.0 1.2 1.2 3.4 3.4 3.4 51.3 0.0 23.8	0.0 -80.6 0 4 -1 3.0 6.2 6.2 -51.3 4.7 -23.8
28  aport/E 29 30 31  aport/E 32  aport/E 33 34 35 36	220 kV Export of 400 kV 220 kV Export of 1 HVDC	ER (With NER) 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	0.0 0 0 0 691 0 250 0	0.0  ER-SR  858 697 0  ER-NER  495  NER-NR  1105 0 1010 2658	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0	0.0 80.6 0.0 1.2 1.2 3.4 3.4 51.3 0.0 23.8 45.6	0.0 -80.6 0 4 -1 3.0 6.2 6.2 -51.3 4.7 -23.8 -45.6
28  aport/E 29 30 31  aport/E 32  aport/E 33 34 35 36 37	220 kV  Export of 400 kV  220 kV  Export of HVDC  Export of HVDC	ER (With NER) 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	0.0 0 0 0 691 0 250 0 0 484	0.0  ER-SR  858  697  0  ER-NER  495  NER-NR  1105  0  1010  2658  1188	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0	0.0 80.6 0.0 1.2 1.2 3.4 3.4 3.4 51.3 0.0 23.8 45.6 22.7	0.0 -80.6 0 4 -1 3.0 6.2 6.2 6.2 -51.3 4.7 -23.8 -45.6 -22.7
28  aport/E 29 30 31  aport/E 32  aport/E 33 34 35 36 37 38	220 kV  Export of 400 kV  220 kV  Export of HVDC  Export of HVDC	ER (With NER)  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  ZERDA-KANKROLI	D/C   S/C   S/C	0.0 0 0 0 691 0 250 0 0 484 307	0.0  ER-SR  858 697 0  ER-NER  495  NER-NR  1105 0 1010 2658 1188 0	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 0.0 0.0	0.0 80.6 0.0 1.2 1.2 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0	0.0 -80.6 0 4 -1 3.0 6.2 6.2 6.2 -51.3 4.7 -23.8 -45.6 -22.7 5.6
28  aport/E 29 30 31  aport/E 32  aport/E 33 34 35 36 37 38 39	220 kV  Export of 400 kV  220 kV  Export of HVDC  Export of HVDC	ER (With NER)  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  ZERDA-KANKROLI  ZERDA -BHINMAL	D/C	0.0 0 0 0 691 0 250 0 0 484 307 278	0.0  ER-SR  858 697 0  ER-NER  495  NER-NR  1105 0 1010 2658 1188 0 0	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 0.0 5.6 3.7	0.0 80.6 0.0 1.2 1.2 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0 0.0	0.0 -80.6 0 4 -1 3.0 6.2 6.2 6.2 -51.3 4.7 -23.8 -45.6 -22.7 5.6 3.7
28  29 30 31  20 32  20 20 20 20 20 20 20 20 20 20 20 20 2	220 kV  Export of 400 kV  220 kV  Export of 1  HVDC  Export of 1  HVDC	ER (With NER) 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 ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND	D/C D/C D/C D/C D/C D/C D/C D/C D/C S/C S/C S/C	0.0 0 0 0 691 0 250 0 0 484 307 278 972	0.0  ER-SR  858 697 0  ER-NER  495  NER-NR  1105 0 1010 2658 1188 0 0	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 0.0 5.6 3.7 22.6	0.0 80.6 0.0 1.2 1.2 1.2 3.4 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0	0.0 -80.6 0 4 -1 3.0 6.2 6.2 6.2 -51.3 4.7 -23.8 -45.6 -22.7 5.6 3.7 22.6
28  29 30 31  31  pport/E 32  pport/E 33 34 35 36 37 38 39 40 41	220 kV  Export of 400 kV  220 kV  Export of 1  HVDC  Export of 1  HVDC	ER (With NER)  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  ZERDA-BHINMAL  V'CHAL -RIHAND  RAPP-SHUJALPUR	D/C   S/C   S/C   S/C   S/C   D/C   D/C	0.0 0 0 0 0 691 0 250 0 0 484 307 278 972 0	0.0  ER-SR  858 697 0  ER-NER  495  NER-NR  1105 0 1010 2658 11188 0 0 0	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 80.6 0.0 1.2 1.2 1.2 51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0	0.0 -80.6 0 4 -1 3.0 6.2 6.2 6.2 -51.3 4.7 -23.8 -45.6 -22.7 5.6 3.7 22.6
28  29 30 31 31  apport/E 32  apport/E 33 34 35 36 37 38 39 40 41 42	220 kV  Export of 400 kV  220 kV  Export of 1  HVDC  Export of 1  HVDC	ER (With NER) 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 ZERDA-KANKOLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BADOD-KOTA	D/C   S/C   S/C	0.0 0 0 0 0 691 0 250 0 0 484 307 278 972 0 102	0.0  ER-SR  858 697 0  ER-NER  495  NER-NR  1105 0 1010 2658 1188 0 0 0 1	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 0.0 0.0 5.6 3.7 22.6 0 1.3	0.0 80.6 0.0 1.2 1.2 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0 2	0.0 -80.6 0 4 -1 3.0 6.2 6.2 6.2 -51.3 4.7 -23.8 -45.6 -22.7 5.6 3.7 22.6 -2 1.3
28  29 30 31 31  pport/E 32  port/S 33 34 35 36 37 38 39 40 41 42 43	220 kV  Export of 400 kV  220 kV  Export of 1  HVDC  Export of 1  HVDC	ER (With NER) 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 ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-MORAK	D/C   S/C   S/C	0.0 0 0 0 0 691 0 250 0 0 484 307 278 972 0 102 64	0.0  ER-SR  858  697  0  ER-NER  495  NER-NR  1105  0  1010  2658  1188  0  0  1  0  1	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 9.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.3 0.6	0.0 80.6 0.0 1.2 1.2 1.2 3.4 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 -80.6 0 4 -1 3.0 6.2 6.2 6.2 -51.3 4.7 -23.8 -45.6 -22.7 5.6 3.7 22.6 -2 -2 1.3 0.5
28  29 30 31 31  32  34 35 36 37 38 39 40 40 41 42 43 44	220 kV  Export of 400 kV  220 kV  Export of 1  HVDC  AVOID HVDC  765 kV	ER (With NER)  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  ZERDA-KANKROLI  ZERDA-BHINMAL  VCHAL -RIHAND  RAPP-SHUJALPUR  BADOD-MORAK  MEHGAON-AURAIYA	D/C   S/C   S/C	0.0 0 0 0 0 691 0 250 0 0 484 307 278 972 0 102 64 110	0.0  ER-SR  858  697  0  ER-NER  495  NER-NR  1105  0  1010  2658  1188  0  0  1  0  1  0  19	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 0.0 5.6 3.7 22.6 0 1.3 0.6 1.3	0.0 80.6 0.0 1.2 1.2 1.2 3.4 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 -80.6 0 4 -1 3.0 6.2 6.2 6.2 -51.3 4.7 -23.8 -45.6 -22.7 5.6 3.7 22.6 21.3 0.5 1.3
28  29 30 31 31  **port/E 32  **port/E 33 34 35 36 37 38 39 40 41 41 42 43 44 45	220 kV  Export of 400 kV  220 kV  Export of 1  HVDC  765 kV  400 kV	ER (With NER)  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  ZERDA-BHINMAL  V'CHAL -RIHAND  RAPP-SHUJALPUR  BADOD-MORAK  MEHGAON-AURAIYA	D/C	0.0 0 0 0 0 691 0 250 0 0 484 307 278 972 0 102 64 110 65	0.0  ER-SR  858 697 0  ER-NER  495  NER-NR  1105 0 1010 2658 1188 0 0 0 1 1 0 19	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 0.0 5.6 3.7 22.6 0 1.3 0.9	0.0 80.6 0.0 1.2 1.2 3.4 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0 0.0 0.0 0.0	0.0 -80.6 0 4 -1 3.0 6.2 6.2 6.2 -51.3 4.7 -23.8 -45.6 -22.7 5.6 3.7 22.6 -2 1.3 0.5 1.3
28  port/E 29 30 31 31  port/E 32  port/E 33 34 35 36 37 38 39 40 40 41 42 43 44	220 kV  Export of 400 kV  220 kV  Export of 1  HVDC  AVOID HVDC  765 kV	ER (With NER)  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  ZERDA-KANKROLI  ZERDA-BHINMAL  VCHAL -RIHAND  RAPP-SHUJALPUR  BADOD-MORAK  MEHGAON-AURAIYA	D/C   S/C   S/C	0.0 0 0 0 0 691 0 250 0 0 484 307 278 972 0 102 64 110	0.0  ER-SR  858 697 0  ER-NER  495  NER-NR  1105 0 1010 2658 11188 0 0 0 1 1 0 0 0 1 0 0 0 0 0 0 0	0.0 0.3 3.9 0.0 4.2 9.5 9.5 0.0 4.7 0.0 0.0 0.0 5.6 3.7 22.6 0 1.3 0.6 1.3	0.0 80.6 0.0 1.2 1.2 3.4 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 -80.6  0 4 -1 3.0  6.2 6.2 6.2  -51.3 4.7 -23.8 -45.6 -22.7 5.6 3.7 22.6 -1.3 0.5 1.3 0.9 0.0
28  apport/E 29 30 31  apport/E 32  apport/E 33 34 35 36 37 39 40 41 42 43 44 44 45 46	220 kV  Export of 400 kV  220 kV  Export of 1  HVDC  Approx of 1  HVDC  765 kV  400 kV  220 kV	ER (With NER)  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  ZERDA-KANKROLI  ZERDA-BHINMAL  VCHAL -RIHAND  RAPP-SDUALPUR  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR	D/C	0.0 0 0 0 0 691 0 250 0 0 484 307 278 972 0 102 64 110 65	0.0  ER-SR  858 697 0  ER-NER  495  NER-NR  1105 0 1010 2658 1188 0 0 0 1 1 0 19	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 0.0 5.6 3.7 22.6 0 1.3 0.9	0.0 80.6 0.0 1.2 1.2 3.4 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0 0.0 0.0 0.0	0.0 -80.6 0 4 -1 3.0 6.2 6.2 6.2 -51.3 4.7 -23.8 -45.6 -22.7 5.6 3.7 22.6 -2 1.3 0.5 1.3
28  port/E 29 30 31  port/E 32  port/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46	220 kV  xport of 400 kV  220 kV  xport of 1  HVDC  765 kV  400 kV  220 kV  xport of 1  xport of 1  xport of 1	ER (With NER) 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 ZERDA-KANKOLI ZERDA-BHINNAL VCHAL-RIHAND RAPP-SHUJALPUR BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR)	D/C	0.0  0 0 0 0 0 0 0 250 0 0 484 307 278 972 0 102 64 110 65 0	0.0  ER-SR  858 697 0  ER-NER  495  NER-NR  1105 0 1010 2658 1188 0 0 0 1 0 0 WR-NR	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 0.0 5.6 3.7 22.6 0 1.3 0.6 1.3 0.6 40.8	0.0 80.6 0.0 1.2 1.2 1.2 3.4 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 -80.6  0 4 -1 3.0  6.2 6.2 -51.3 4.7 -23.8 -45.6 -22.7 5.6 3.7 22.6 -2 1.3 0.5 1.3 0.9 0.0 -105.1
28  29 30 31 31  pport/E 32  pport/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46	220 kV  Export of 400 kV  220 kV  Export of 1  HVDC  Approx of 1  HVDC  765 kV  400 kV  220 kV  132kV  Export of 1  HVDC	ER (With NER) 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 ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B	D/C   S/C   S/C	0.0  0  0  0  0  0  0  250  0  0  484  307  278  972  0  102  64  110  65  0	0.0  ER-SR  858 697 0  ER-NER  495  NER-NR  1105 0 1010 2658 1188 0 0 0 1 1 0 WR-NR	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 0.0 5.6 3.7 22.6 0 1.3 0.6 1.3 0.9 0.0 40.8	0.0 80.6 0.0 1.2 1.2 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0 0.0 0.1 0.0 0.0 145.9	0.0 -80.6  0 4 -1 3.0 -51.3 4.7 -23.8 -45.6 -22.7 5.6 3.7 22.6 -2 1.3 0.5 1.3 0.9 0.0 -105.1
28  port/E 29 30 31  port/E 32  port/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46  port/E 47 48	220 kV  xport of 400 kV  220 kV  xport of 1  HVDC  765 kV  400 kV  220 kV  xport of 1  xport of 1  xport of 1	ER (With NER) BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MBG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUALPUR BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B 176.42	D/C   S/C   S/C	0.0  0  0  0  0  0  0  0  250  0  484  307  278  972  0  102  64  110  65  0  0	0.0  ER-SR  858  697  0  ER-NER  495  NER-NR  1105  0  1010  2658  1188  0  0  1  0  1  0  WR-NR	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 0.0 5.6 3.7 22.6 0 1.3 0.6 1.3 0.9 0.0 40.8	0.0 80.6 0.0 1.2 1.2 1.2 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0 0.0 0.0 0.0 145.9	0.0 -80.6  0 4 -1 3.0 -51.3 4.7 -23.8 -45.6 -22.7 5.6 3.7 -5.6 3.7 -1.3 0.5 -1.3 -1.0 -105.1
28  port/E 29 30 31 31  port/E 32  port/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46  47 48 49	220 kV  Export of 400 kV  220 kV  Export of 1  HVDC  Approx of 1  HVDC  765 kV  400 kV  220 kV  132kV  Export of 1  HVDC	ER (With NER)  BINAGURI-BONGAIGAON  ALIPURDUAR-SONGAIGAON  ALIPURDUAR-SALAKATI  NER (With NR)  BISWANATH CHARIALI-AGRA  WR (With NR)  CHAMPA-KURUKSHETRA  VCHAL B/B  GWALIOR-AGRA  PHAGI-GWALIOR  ZERDA-BHINMAL  VCHAL -RIHAND  RAPP-SHUJAHUR  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR  WR (With SR)  BHADRAWATI B/B  176.42  SOLAPUR-RAICHUR	D/C   S/C   S/C	0.0  0  0  0  0  0  0  0  0  691  0  484  307  278  972  0  102  64  110  65  0  0  0  0  620	0.0  ER-SR  858  697  0  ER-NER  495  NER-NR  1105  0  1010  2658  1188  0  0  1  0  WR-NR  1000  0  11000	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 0.0 0.0 5.6 3.7 22.6 0 1.3 0.6 1.3 0.9 0.0 40.8	0.0 80.6 0.0 1.2 1.2 1.2 3.4 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 -80.6  0 4 -1 3.0 -51.3 -51.3 -45.6 -22.7 -5.6 3.7 -22.6 -2 1.3 0.5 1.3 0.9 -105.1
28  29 30 31 31  port/E 32  port/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46  port/E 47 48 49 50	220 kV  xport of 400 kV  220 kV  xport of 1  HVDC  765 kV  400 kV  220 kV  400 kV  LINK  765 kV	ER (With NER)  BINAGURI-BONGAIGAON  ALIPURDUAR-BONGAIGAON  ALIPURDUAR-SALAKATI  NER (With NR)  BISWANATH CHARIALI-AGRA  WR (With NR)  CHAMPA-KURUKSHETRA  VCHAMPA-KURUKSHETRA  VCHAMPA-KURUKSHETRA  PHAGI-GWALIOR  ZERDA-BHINMAL  VCHAL-RIHAND  RAPP-SHUJALPUR  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR  WR (With SR)  BHADRAWATI B/B  B176.42  SOLAPUR-RAICHUR  WARDHA-NIZAMABAD	D/C   S/C   S/C	0.0  0 0 0 0 0 0 0 0 250 0 0 484 307 278 972 0 102 64 110 65 0 0 0 620 0	0.0  ER-SR  858  697  0  ER-NER  495  NER-NR  1105  0  1010  2658  1188  0  0  0  1  0  WR-NR  1000  0  11000  0  11009  1870	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.3 0.9 0.0 40.8	0.0 80.6 0.0 1.2 1.2 1.2 3.4 3.4 3.4 51.3 0.0 0.2 23.8 45.6 22.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 -80.6  0 4 -1 3.0 -51.3 4.7 -23.8 -45.6 -22.7 5.6 3.7 22.6 -2 1.3 0.5 1.3 0.9 0.0 -105.1
28  29 30 31 31  29 32  29 30 31 31  32  33 34 35 36 37 38 39 40 41 42 43 44 45 46  47 48 49 50 51	220 kV  Export of 400 kV  220 kV  Export of 1  HVDC  Approved to 400 kV  220 kV  400 kV  220 kV  132kV  Export of 1  HVDC  LINK	ER (With NER)  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  ZERDA-KANKROLI  ZERDA -BHINMAL  V'CHAL-RIHAND  RAPP-SHUJALPUR  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR  WR (With SR)  BHADRAWATI B/B  176.42  SOLAPUR-RAICHUR  WARDHA-NIZAMABAD  KOLHAPUR-KUDGI	D/C   D/C   D/C   D/C   D/C   D/C   D/C   D/C   S/C   S/C	0.0  0  0  0  0  0  250  0  484  307  278  972  0  102  64  110  65  0  0  0  620  0  544	0.0  ER-SR  858  697  0  ER-NER  495  NER-NR  1105  0  1010  2658  1188  0  0  0  1  0  WR-NR  1000  0  1109  1870  62	0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 5.6 3.7 22.6 0 1.3 0.6 1.3 0.9 0.0 40.8	0.0 80.6 0.0 1.2 1.2 3.4 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0 0.0 0.0 1.2 24.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 -80.6  0 4 -1 3.0 -51.3 4.7 -23.8 -45.6 -22.7 5.6 3.7 22.6 -2 1.3 0.5 1.3 0.9 0.0 -105.1  -24.0 0.0 -9.2 -30.9 7.8
28  port/E 32  port/E 32  port/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46  47 48 49 50 51 52	220 kV  Export of 400 kV  220 kV  Export of 1  HVDC  Approved to 400 kV  220 kV  400 kV  220 kV  132kV  Export of 1  HVDC  Approved to 400 kV  400 kV  400 kV  400 kV	ER (With NER) BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHALA B'B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKOLI ZERDA-KANKOLI ZERDA-BHINNAL VCHAL-RIHAND RAPP-SHUJALPUR BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B'B 176.42 SOLAPUR-RAICHUR WARDIHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	D/C   D/C   D/C   D/C   D/C   S/C   S/C	0.0  0  0  0  0  0  250  0  0  484  307  278  972  0  102  64  110  65  0  0  0  0  544  0	0.0  ER-SR  858 697 0  ER-NER  495  NER-NR  1105 0 1010 2658 1188 0 0 0 1 0 0 WR-NR  1000 0 1100 0 1100 0 1100 0 0 1100 0 0 0 1100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0 0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 0.0 5.6 3.7 22.6 0 1.3 0.6 1.3 0.6 40.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 80.6 0.0 1.2 1.2 1.2 3.4 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0 0.0 1.2 23.8 45.6 22.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 -80.6  0 4 -1 3.0 -51.3 4.7 -23.8 -45.6 -22.7 5.6 3.7 22.6 -2 1.3 0.5 1.3 0.9 0.0 -105.1  -24.0 0.0 -9.2 -30.9 7.8 0.0
28  apport/E 32  apport/E 32  apport/E 33  apport/E 33  apport/E 34 44 45 44 45 46  apport/E 47 48 49 50 51 52 53	220 kV  xport of 400 kV  220 kV  xport of 1  HVDC  765 kV  400 kV  220 kV  400 kV  LINK  765 kV	ER (With NER) 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 ZERDA-KANKROLI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B 176.42 SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI	D/C   D/C   D/C   D/C   D/C   S/C   D/C   D/C   S/C   S/C	0.0  0  0  0  0  0  0  0  250  0  0  484  307  278  972  0  102  64  110  65  0  0  620  0  544  0  0	0.0  ER-SR  858 697 0  ER-NER  495  NER-NR  1105 0 1010 2658 1188 0 0 0 1 0 WR-NR  1000 0 1109 1870 62 0 0	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 0.0 5.6 3.7 22.6 0 1.3 0.6 1.3 0.9 0.0 40.8	0.0 80.6  1.2 1.2 1.2  3.4 3.4 3.4  51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0 0.0 145.9  24.0 0.0 9.2 30.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 -80.6  0 4 -1 3.0 -51.3 4.7 -23.8 -45.6 -22.7 5.6 3.7 22.6 -2 1.3 0.5 1.3 0.9 0.0 -105.1  -24.0 0.0 -9.2 -30.9 7.8 0.0 0.0
28  apport/E 32  apport/E 32  apport/E 33 34 35 36 37 38 40 41 42 43 44 45 46  47 48 49 50 51 52	220 kV  Export of 400 kV  220 kV  Export of 1  HVDC  Approved to 400 kV  220 kV  400 kV  220 kV  132kV  Export of 1  HVDC  Approved to 400 kV  400 kV  400 kV  400 kV	ER (With NER) BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHALA B'B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKOLI ZERDA-KANKOLI ZERDA-BHINNAL VCHAL-RIHAND RAPP-SHUJALPUR BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B'B 176.42 SOLAPUR-RAICHUR WARDIHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	D/C   D/C   D/C   D/C   D/C   S/C   S/C	0.0  0  0  0  0  0  250  0  0  484  307  278  972  0  102  64  110  65  0  0  0  0  544  0	0.0  ER-SR  858 697 0  ER-NER  495  NER-NR  1105 0 1010 2658 1188 0 0 0 1 0 0 WR-NR  1000 0 1100 0 1100 0 1100 0 0 1100 0 0 0 1100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0 0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 0.0 5.6 3.7 22.6 0 1.3 0.6 1.3 0.6 40.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 80.6 0.0 1.2 1.2 1.2 3.4 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0 0.0 1.2 23.8 45.6 22.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 -80.6  0 4 -1 3.0 -51.3 4.7 -23.8 -45.6 -22.7 5.6 3.7 22.6 -2 1.3 0.5 1.3 0.9 0.0 -105.1  -24.0 0.0 -9.2 -30.9 7.8 0.0
28  pport/E 32  pport/E 32  pport/E 33 33 34 35 36 37 38 40 41 42 43 44 45 46  pport/E 50 51 52 53	220 kV  Export of 400 kV  220 kV  Export of 1  HVDC  Approved to 400 kV  220 kV  400 kV  220 kV  132kV  Export of 1  HVDC  Approved to 400 kV  400 kV  400 kV  400 kV	ER (With NER) 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 ZERDA-KANKROLI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B 176.42 SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI	D/C   D/C   D/C   D/C   D/C   S/C   D/C   D/C   S/C   S/C	0.0  0  0  0  0  0  0  0  250  0  0  484  307  278  972  0  102  64  110  65  0  0  620  0  544  0  0	0.0  ER-SR  858 697 0  ER-NER  495  NER-NR  1105 0 1010 2658 1188 0 0 0 1 0 WR-NR  1000 0 1109 1870 62 0 0	0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 0.0 5.6 3.7 22.6 0 1.3 0.6 1.3 0.9 0.0 40.8	0.0 80.6  1.2 1.2 1.2  3.4 3.4 3.4  51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0 0.0 145.9  24.0 0.0 9.2 30.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 -80.6  0 4 -1 3.0 -51.3 4.7 -23.8 -45.6 -22.7 5.6 -2.1 1.3 0.5 1.3 0.9 0.0 -105.1  -24.0 0.0 -9.2 -30.9 7.8 0.0 0.0
28  port/E 29 30 31  port/E 32  port/E 32  33 34 35 36 37 38 39 40 41 42 43 44 45 46  port/E 47 48 49 55 51 55 53	220 kV  Export of 400 kV  220 kV  Export of 1  HVDC  Approved to 400 kV  220 kV  400 kV  220 kV  132kV  Export of 1  HVDC  Approved to 400 kV  400 kV  400 kV  400 kV	ER (With NER) 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 ZERDA-ASHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B 176.42 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  0  0  0  0  0  0  250  0  0  484  307  278  972  0  102  64  110  65  0  0  620  0  544  0  0	0.0  ER-SR  858 697 0  ER-NER  495  NER-NR  1105 0 1010 2658 1188 0 0 0 1 1 0 19 0 WR-NR  1000 0 1109 1870 62 0 0 WR-SR	0.0 0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 0.0 5.6 3.7 22.6 0 1.3 0.6 1.3 0.9 0.0 40.8	0.0 80.6 0.0 1.2 1.2 1.2 3.4 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0 145.9 24.0 0.0 9.2 30.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 -80.6  0 4 -1 3.0 -51.3 4.7 -23.8 -45.6 -22.7 5.6 -22.7 5.6 -1.3 0.5 1.3 0.9 0.0 -105.1  -24.0 0.0 -9.2 -30.9 7.8 0.0 0.0 -2.2
28  port/E 32  port/E 32  port/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46  port/E 47 48 49 50 51 52 53	220 kV  Export of 400 kV  220 kV  Export of 1  HVDC  Approved to 400 kV  220 kV  400 kV  220 kV  132kV  Export of 1  HVDC  Approved to 400 kV  400 kV  400 kV  400 kV	ER (With NER) 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 ZERDA-ASHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B 176.42 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  0  0  0  0  0  0  0  250  0  0  484  307  278  972  0  102  64  110  65  0  0  620  0  0  109	0.0  ER-SR  858 697 0  ER-NER  495  NER-NR  1105 0 1010 2658 1188 0 0 0 1 1 0 19 0 WR-NR  1000 0 1109 1870 62 0 0 WR-SR	0.0 0.0 0.0 0.3 3.9 0.0 4.2 9.5 9.5 9.5 0.0 4.7 0.0 0.0 0.0 5.6 3.7 22.6 0 1.3 0.6 1.3 0.9 0.0 40.8	0.0 80.6 0.0 1.2 1.2 1.2 3.4 3.4 3.4 51.3 0.0 23.8 45.6 22.7 0.0 0.0 0.0 145.9 24.0 0.0 9.2 30.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 -80.6  0 4 -1 3.0 -51.3 4.7 -23.8 -45.6 -22.7 5.6 -22.7 5.6 -1.3 0.5 1.3 0.9 0.0 -105.1  -24.0 0.0 -9.2 -30.9 7.8 0.0 0.0 -2.2