

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

दिनांक: 29th Apr 2020

Ref: POSOCO/NLDC/SO/Daily PSP Report

To,

- 1. कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के.,14 , गोल्फ क्लब रोड , कोलकाता 700033 Executive Director, ERLDC, 14 Golf Club Road, Tollygunge, Kolkata, 700033
- 2. कार्यकारी निदेशक, ऊ. क्षे. भा. प्रे. के., 18/ ए , शहीद जीत सिंह सनसनवाल मार्ग, नई दिल्ली 110016 Executive Director, NRLDC, 18-A, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi – 110016
- 3. कार्यकारी निदेशक, प .क्षे .भा .प्रे .के., एफ3-, एम आई डी सी क्षेत्र , अंधेरी, मुंबई -400093 Executive Director, WRLDC, F-3, M.I.D.C. Area, Marol, Andheri (East), Mumbai-400093
- 4. कार्यकारी निदेशक, ऊ. पू. क्षे. भा. प्रे. के., डोंगतिएह, लोअर नोंग्रह, लापलंग, शिलोंग 793006 Executive Director, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
- 5. कार्यकारी निदेशक , द .क्षे .भा .प्रे .के.,२९ , रेस कोर्स क्रॉस रोड, बंगलुरु -560009 Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 28.04.2020.

महोदय/Dear Sir.

आई॰ई॰जी॰सी॰-२०१० की धारा स.-५.५.१ के प्रावधान के अनुसार, दिनांक 28-अप्रैल-२०२० 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 28th Apr 2020, 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: 29-Apr-2020

A. Power Supply Position at All India and Regional level						
	NR	WR	SR	ER	NER	TOTAL
Demand Met during Evening Peak hrs(MW) (at 2000 hrs; from RLDCs)	37150	38668	32150	14420	2078	124466
Peak Shortage (MW)	541	0	0	0	81	622
Energy Met (MU)	751	968	804	276	35	2835
Hydro Gen (MU)	216	50	78	66	5	416
Wind Gen (MU)	14	38	32	-		84
Solar Gen (MU)*	36.37	27.56	85.31	4.64	0.02	154
Energy Shortage (MU)	9.8	0.0	0.0	0.0	0.8	10.7
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	38418	42190	37752	15414	2117	128222
Time Of Maximum Demand Met (From NLDC SCADA)	22:21	15:44	14:30	23:52	18:56	22:41
B. Frequency Profile (%)						-
D	. 40 5	40.7 40.0	40.0 40.0	. 40.0	40.0 50.05	. 50.05

 Region
 FVI
 < 49.7</th>
 49.7 - 49.8
 49.8 - 49.9
 < 49.9</th>
 49.9 - 50.05
 > 50.05

 All India
 0.026
 0.00
 0.00
 2.41
 2.41
 79.50
 18.09

		Max.Demand	Shortage during	Energy Met	Drawal	OD(+)/UD(-)	Max OD	Energy
Region	States	Met during the	maximum	(MU)	Schedule	(MU)	(MW)	Shortag
		dav(MW)	Demand(MW)	(MC)	(MU)	(MC)	(1111)	(MU)
	Punjab	4661	0	89.6	66.4	-1.0	83	0.0
	Haryana	5688	0	93.4	81.4	0.8	247	0.0
	Rajasthan	8431	0	180.1	65.1	1.4	527	0.0
	Delhi	2947	0	58.4	48.4	-2.1	0	0.0
NR	UP	13956	0	249.0	121.0	-0.5	709	0.0
	Uttarakhand	1113	0	21.6	5.2	0.9	149	0.0
	HP	841	0	14.7	-2.2	-1.0	74	0.0
	J&K(UT) & Ladakh(UT)	2163	541	41.5	26.7	-1.2	169	9.8
	Chandigarh	138	0	2.6	2.8	-0.3	14	0.0
	Chhattisgarh	2966	0	67.5	16.1	-1.5	742	0.0
	Gujarat	13114	0	291.0	78.8	5.0	667	0.0
	MP	8355	0	182.2	104.9	-1.8	384	0.0
WR	Maharashtra	18629	0	408.1	174.7	3.7	450	0.0
	Goa	469	0	9.3	9.7	-0.7	46	0.0
	DD	156	0	3.3	3.2	0.1	23	0.0
	DNH	234	0	5.1	5.2	-0.1	34	0.0
	AMNSIL	301	0	1.6	1.5	0.0	114	0.0
	Andhra Pradesh	7649	0	155.8	84.9	0.3	584	0.0
	Telangana	6469	0	131.8	53.1	-0.4	382	0.0
SR	Karnataka	10301	0	206.8	59.6	0.8	918	0.0
	Kerala	3416	0	68.5	45.3	1.0	211	0.0
	Tamil Nadu	10205	0	236.3	172.4	1.4	462	0.0
	Puducherry	278	0	5.4	5.6	-0.2	99	0.0
	Bihar	3893	0	67.1	67.2	-0.7	249	0.0
	DVC	1499	0	30.1	-20.1	0.2	281	0.0
	Jharkhand	1214	0	20.3	15.9	-1.3	201	0.0
ER	Odisha	3682	0	66.1	-11.8	0.1	753	0.0
	West Bengal	4758	0	91.6	28.4	-1.9	219	0.0
	Sikkim	105	0	1.3	1.5	-0.2	20	0.0
	Arunachal Pradesh	106	0	1.5	1.1	0.4	42	0.0
	Assam	1270	53	19.9	16.7	0.2	111	0.7
	Manipur	163	3	2.1	2.3	-0.1	36	0.0
NER	Meghalaya	263	0	4.2	2.8	-0.2	56	0.1
	Mizoram	95	1	1.4	1.3	-0.1	16	0.0
	Nagaland	119	0	2.1	2.0	-0.1	9	0.0
	Trinura	213	6	3.4	3.1	-0.6	63	0.0

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	14.2	-0.4	-12.4
Day Peak (MW)	895.8	-105.9	-952.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	129.3	-167.3	138.3	-101.2	-1.0	-1.9
Actual(MU)	107.7	-160.1	153.8	-109.8	-1.0	-9.5
O/D/U/D(MU)	-21.6	7.1	15.5	-8.5	0.0	-7.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	7235	20906	8732	2230	712	39815
State Sector	20653	22015	14528	7632	11	64839
Total	27888	42920	23260	9862	723	104654

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	288	902	333	336	6	1866
Lignite	20	14	39	0	0	72
Hydro	216	50	78	66	5	416
Nuclear	28	36	51	0	0	115
Gas, Naptha & Diesel	23	58	21	0	28	130
RES (Wind, Solar, Biomass & Others)	81	76	146	5	0	308
Total	656	1137	667	407	40	2907
Share of RES in total generation (%)	12.37	6.72	21.90	1.14	0.05	10.61
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation(%)	49.57	14.31	41.22	17.35	13.46	28.86

H. All India Demand Diversity Factor

Based on Regional Wax Demands	1.000
Based on State Max Demands	1.091

INTER-REGIONAL EXCHANGES

Import=(+ve) /Export =(-ve) for NET (MU) Date of Reporting: 29-Apr-2020

SI							Date of Reporting:	29-Apr-2020
	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
Impo	ort/Export of ER (With NR)			• • • •			
1		ALIPURDUAR-AGRA	-	0	0	0.0	0.0	0.0
2	HVDC	PUSAULI B/B	S/C	0	249	0.0	6.1	-6.1
3		GAYA-VARANASI	D/C	0	556	0.0	7.2	-7.2
4		SASARAM-FATEHPUR	S/C	102	224	0.0	0.7	-0.7
5		GAYA-BALIA	S/C	0	447	0.0	3.2	-3.2 -3.7
7		PUSAULI-VARANASI PUSAULI -ALLAHABAD	S/C S/C	0	187 162	0.0	3.7 2.3	-2.3
8		MUZAFFARPUR-GORAKHPUR	D/C	0	807	0.0	10.6	-10.6
9		PATNA-BALIA	Q/C	Ö	811	0.0	11.7	-11.7
10		BIHARSHARIFF-BALIA	D/C	0	378	0.0	4.8	-4.8
11		MOTIHARI-GORAKHPUR	D/C	0	225	0.0	3.4	-3.4
12		BIHARSHARIFF-VARANASI	D/C	115	323	0.0	1.6	-1.6
13		PUSAULI-SAHUPURI	S/C	0	139	0.0	2.5	-2.5
14	132 kV	SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15		GARWAH-RIHAND	S/C	30	0	0.5	0.0	0.5
16 17		KARMANASA-SAHUPURI KARMANASA-CHANDAULI	S/C S/C	0	0	0.0	0.0	0.0 0.0
1/	132 K V	KARMANASA-CHANDACLI	S/C	U	ER-NR	0.5	57.9	-57.4
Impo	ort/Export of ER (With WR)				Visi		-57.4
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	870	0	12.5	0.0	12.5
2	765 kV	NEW RANCHI-DHARAMJAIGARH	D/C	330	375	0.9	0.0	0.9
3	765 kV	JHARSUGUDA-DURG	D/C	0	482	0.0	6.4	-6.4
					190			
4	400 kV	JHARSUGUDA-RAIGARH	Q/C	101		0.0	1.2	-1.2
5		RANCHI-SIPAT	D/C	215	162	1.7	0.0	1.7
6		BUDHIPADAR-RAIGARH	S/C	0	122	0.0	1.9	-1.9
7	220 kV	BUDHIPADAR-KORBA	D/C	183	0	2.4	0.0	2.4
					ER-WR	17.5	9.5	8.1
	ort/Export of ER (
1		JEYPORE-GAZUWAKA B/B	D/C	0	645	0.0	8.3	-8.3
2		TALCHER-KOLAR BIPOLE	D/C	0	1996	0.0	48.0	-48.0 56.4
3		ANGUL-SRIKAKULAM	D/C	0	2711	0.0	56.4	-56.4 14.5
5		TALCHER-I/C BALIMELA-UPPER-SILERRU	D/C S/C	0	994 0	0.0	14.5 0.0	-14.5 0.0
1-3	220 kV	DALIMELA-UFFER-SILEKKU	5/C	1 1	ER-SR	0.0	112.7	-112.7
Impo	ort/Export of ER (With NER)			EA-3K	v.v	114./	-114./
1		BINAGURI-BONGAIGAON	D/C	386	0	5.7	0.0	5.7
2		ALIPURDUAR-BONGAIGAON	D/C	446	Ö	6.2	0.0	6.2
3	220 kV	ALIPURDUAR-SALAKATI	D/C	95	0	1.2	0.0	1.2
					ER-NER	13.0	0.0	13.0
Impo	ort/Export of NER	(With NR)						
1	HVDC	BISWANATH CHARIALI-AGRA		486	0	11.5	0.0	11.5
T		TUM ND			NER-NR	11.5	0.0	11.5
1mpo	ort/Export of WR (CHAMPA-KURUKSHETRA	D/C	0	0	0.0	5.0	5.3
2		V'CHAL B/B	D/C	445	0	0.0 12.1	5.2 0.0	-5.2 12.1
3		APL -MHG	D/C	0	1125	0.0	27.9	-27.9
4		GWALIOR-AGRA	D/C	Ŏ	2238	0.0	35.2	-35.2
5		PHAGI-GWALIOR	D/C	0	1060	0.0	16.9	-16.9
6		JABALPUR-ORAI	D/C	0	736	0.0	20.2	-20.2
7		GWALIOR-ORAI	S/C	576	0	10.5	0.0	10.5
- 8		SATNA-ORAI	S/C	0	1274	0.0	24.9	-24.9
9		CHITORGARH-BANASKANTHA	D/C	887	465	3.8	0.0	3.8
10		ZERDA-KANKROLI	S/C	284	18	3.1	0.0	3.1
11 12		ZERDA -BHINMAL V'CHAL -RIHAND	S/C S/C	394 963	30	3.9 22.0	0.0	3.9 22.0
				296		0.9	0.0	0.9
			D/C					0.7
13	400 kV	RAPP-SHUJALPUR RHANPURA-RANPUR	D/C S/C		164 64			-0.7
14	400 kV 220 kV	BHANPURA-RANPUR	S/C	43	64	0.0	0.7	-0.7 -1.2
	400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK						-0.7 -1.2 1.4
14 15	400 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR	S/C S/C	43	64 68	0.0 0.0	0.7 1.2	-1.2
14 15 16	400 kV 220 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA	S/C S/C S/C	43 0 109	64 68 0 1	0.0 0.0 1.4 0.7 0.0	0.7 1.2 0.0 0.0 0.0	-1.2 1.4 0.7 0.0
14 15 16 17 18	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	S/C S/C S/C S/C	43 0 109 77	64 68 0	0.0 0.0 1.4 0.7	0.7 1.2 0.0 0.0	-1.2 1.4 0.7
14 15 16 17 18 Impo	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALLOR-SAWAI MADHOPUR With SR)	S/C S/C S/C S/C	43 0 109 77 0	64 68 0 1 0 WR-NR	0.0 0.0 1.4 0.7 0.0 58.5	0.7 1.2 0.0 0.0 0.0 132.1	-1.2 1.4 0.7 0.0 -73.6
14 15 16 17 18 Impo	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV ort/Export of WR (BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B	S/C S/C S/C S/C S/C	43 0 109 77 0	64 68 0 1 0 WR-NR	0.0 0.0 1.4 0.7 0.0 58.5	0.7 1.2 0.0 0.0 0.0 132.1	-1.2 1.4 0.7 0.0 -73.6
14 15 16 17 18 Impo	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV Port/Export of WR (HVDC HVDC	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BARSUR-L-SILERU	S/C S/C S/C S/C S/C	43 0 109 77 0	64 68 0 1 0 WR-NR	0.0 0.0 1.4 0.7 0.0 58.5	0.7 1.2 0.0 0.0 0.0 132.1	-1.2 1.4 0.7 0.0 -73.6 -12.2 0.0
14 15 16 17 18 Impo 1 2 3	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV ort/Export of WR (HVDC HVDC 765 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BARSUR-L-SILERU SOLAPUR-RAICHUR	S/C S/C S/C S/C S/C S/C	43 0 109 77 0	64 68 0 1 0 WR-NR	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5	-1.2 1.4 0.7 0.0 -73.6 -12.2 0.0
14 15 16 17 18 Impo	400 kV 220 kV 220 kV 220 kV 220 kV 223 kV 132 kV ort/Export of WR (HVDC HVDC 765 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPURA-URAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BARSUR-L-SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD	S/C S/C S/C S/C S/C	43 0 109 77 0	64 68 0 1 0 WR-NR 515 0 1755 1960	0.0 0.0 1.4 0.7 0.0 58.5	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2	-1.2 1.4 0.7 0.0 -73.6 -12.2 0.0
14 15 16 17 18 Impo 1 2 3 4 5	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV ort/Export of WR (HVDC HVDC HVDC 765 kV 400 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPURA-URAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRAWATI B/B BARSUR-L-SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	S/C D/C D/C	43 0 109 77 0	64 68 0 1 0 WR-NR 515 0 1755 1960 218	0.0 0.0 1.4 0.7 0.0 58.5	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5	-1.2 1.4 0.7 0.0 -73.6 -12.2 0.0 -27.5 -37.2
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14VDC 765 kV 400 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BARSUR-LSILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	S/C D/C D/C D/C D/C D/C S/C S/C	43 0 109 77 0 0 0 0 0 0 0 0 229 0	64 68 0 1 0 WR-NR 515 0 1755 1960 218 0 73	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0	0.7 1.2 0.0 0.0 132.1 12.2 0.0 0.0 27.5 37.2 1.0 0.0	-1.2 -1.4 0.7 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6
14 15 16 17 18 Impo 1 2 3 4 5	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14VDC 765 kV 400 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPURA-URAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRAWATI B/B BARSUR-L-SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	S/C D/C D/C	43 0 109 77 0 0 0 0 0 0 0 229 0	64 68 0 1 0 WR-NR 515 0 1755 1960 218 0 73 62	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 1.6	-1.2 1.4 0.7 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14VDC 765 kV 400 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BARSUR-LSILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	S/C S/C	43 0 109 77 0 0 0 0 0 0 0 0 0 0 0 0	64 68 0 1 1 0 WR-NR 515 0 1755 1960 218 0 0 73 62 WR-SR	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0	0.7 1.2 0.0 0.0 132.1 12.2 0.0 0.0 27.5 37.2 1.0 0.0	-1.2 -1.4 0.7 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14VDC 765 kV 400 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BARSUR-LSILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	S/C S/C	43 0 109 77 0 0 0 0 0 0 0 0 229 0	64 68 0 1 1 0 WR-NR 515 0 1755 1960 218 0 0 73 62 WR-SR	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 1.6	-1.2 1.4 0.7 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6 -1.2 -78.2
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 17Export of WR HVDC 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRAWATI B/B BARSUR-I-SILERU SOI-APUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	S/C D/C D/C D/C D/C S/C S/C S/C INTER	43 0 109 77 0 0 0 0 0 0 229 0 0 0	64 68 0 1 1 0 WR-NR 515 0 1755 1960 218 0 73 62 WR-SR	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 1.2 1.2	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 0.0 1.6 0.0	-1.2 1.4 0.7 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6 1.2 -78.2
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14VDC 765 kV 400 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BARSUR-LSILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	S/C D/C D/C D/C D/C S/C S/C S/C INTER	43 0 109 77 0 0 0 0 0 0 0 0 0 0 0 0	64 68 0 1 1 0 WR-NR 515 0 1755 1960 218 0 0 73 62 WR-SR	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 1.6	-1.2 1.4 0.7 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 17Export of WR HVDC 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRAWATI B/B BHADRIW-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region	S/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C Line	43 0 109 77 0 0 0 0 0 229 0 0 0 0	64 68 0 1 0 WR-NR 515 0 1755 1960 218 0 0 WR-SR WR-SR	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 0.0 13.2 1.0 0.0 0.0 27.5 1.0 0.0 0.0 4.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	-1.2 1.4 0.7 0.0 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6 1.2 -78.2 Energy Exchange (MU)
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 17Export of WR HVDC 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRAWATI B/B BARSUR-I-SILERU SOI-APUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	S/C D/C D/C D/C D/C S/C S/C S/C INTER	43 0 109 77 0 0 0 0 0 229 0 0 0 0	64 68 0 1 1 0 WR-NR 515 0 1755 1960 218 0 73 62 WR-SR	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 1.2 1.2	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 0.0 1.6 0.0	-1.2 1.4 0.7 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6 1.2 -78.2
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 17Export of WR HVDC 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRAWATI B/B BHADRIW-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region	S/C D/C D/C D/C D/C S/C S/C INTER Line DAGACHU (2 * 63	43 0 109 77 0 0 0 0 0 229 0 0 0 0	64 68 0 1 0 WR-NR 515 0 1755 1960 218 0 0 WR-SR WR-SR	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 0.0 13.2 1.0 0.0 0.0 27.5 1.0 0.0 0.0 4.0 0.0 27.5 37.2 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-1.2 1.4 0.7 0.0 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6 1.2 -78.2 Energy Exchange (MU)
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR . HVDC HVDC T65 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRUR-SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER	S/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C C/C C/C	43 0 109 77 0 0 0 0 0 0 0 0 0 0	64 68 0 0 WR-NR 515 0 1755 1960 218 0 0 73 62 WR-SR NGES Max (MW)	0.0 0.0 1.4 0.7 9.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 0.0 1.6 0.0 79.4	-1.2 1.4 0.7 0.0 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6 1.2 -78.2 Energy Exchange (MU) 0.0
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 17Export of WR HVDC 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRUR-SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER	S/C D/C D/C D/C D/C D/C S/C S/C S/C S/C C C C C C C C C C	43 0 109 77 0 0 0 0 0 0 0 0 0	64 68 0 0 WR-NR 515 0 1755 1960 218 0 0 73 62 WR-SR NGES Max (MW)	0.0 0.0 1.4 0.7 9.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 0.0 1.6 0.0 79.4	-1.2 1.4 0.7 0.0 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6 1.2 -78.2 Energy Exchange (MU) 0.0
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR . HVDC HVDC T65 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BARSUR-I.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER	S/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C CHUKA (4 * 84) B MANGDECHHU (4 ALIPURDUAR REC	43 0 109 77 0 0	64 68 0 1 0 WR-NR 515 0 1755 1960 218 0 73 62 WR-SR NGES Max (MW) 0 86 365	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 0.0 132.1 12.2 1.0 0.0 1.6 0.0 1.6 0.0 79.4 Avg (MW) 0 43 274	-1.2 1.4 0.7 0.7 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6 1.2 -78.2 Energy Exchange (MU) 0.0 1.0 6.6
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR . HVDC HVDC T65 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BARSUR-LSILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER	S/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C CHUKA (4 * 84) B MANGDECHHU (4 ALIPURDUAR REC	43 0 109 77 0 0 0 0 0 0 0 0 0	64 68 0 1 0 WR-NR 515 0 1755 1960 218 0 73 62 WR-SR NGES Max (MW) 0 86	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.7 1.2 0.0 0.0 0.0 132.1 12.2 12.2 12.2 1.0 0.0 27.5 37.2 1.0 0.0 1.6 0.0 79.4 Avg (MW) 0 43	-1.2 -1.4 -0.7 -0.0 -73.6 -12.2 -0.0 -27.5 -37.2 -1.0 -0.0 -1.6 -1.2 -78.2
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR . HVDC HVDC T65 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRAWATI B/B BARSUR-L-SILIERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER ER	S/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C Line DAGACHU (2 * 63 CHUKA (4 * 84) B MANGDECHHU (4 ALIPURDUAR RECONSTRUCTION ALIPURDUAR RECONSTRUCTION CANADA CHUKA (6 * 170) BI	43 0 109 77 0 0 0 0 0 0 0 0 0	64 68 0 1 0 WR-NR 515 0 1755 1960 218 0 73 62 WR-SR WR-SR 0 365 486 365	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.2 1.2 1.2 Min (MW) 0 21 363	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 1.6 0.0 79.4 Avg (MW) 0 43 274 236	-1.2 -1.4 -0.7 -0.0 -7.3.6 -12.2 -0.0 -27.5 -37.2 -1.0 -0.0 -1.6 -1.2 -78.2 -78.2 -1.0 -0.0 -1.6 -1.5 -78.2 -1.0 -1.6 -1.6 -1.5 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR . HVDC HVDC T65 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BARSUR-I.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER	S/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C CHUKA (4 * 84) B MANGDECHHU (4 ALIPURDUAR REC	43 0 109 77 0 0 0 0 0 0 0 0 0	64 68 0 1 0 WR-NR 515 0 1755 1960 218 0 73 62 WR-SR NGES Max (MW) 0 86 365	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 0.0 132.1 12.2 1.0 0.0 1.6 0.0 1.6 0.0 79.4 Avg (MW) 0 43 274	-1.2 1.4 0.7 0.7 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6 -1.2 -78.2 Energy Exchange (MU) 0.0 1.0 6.6
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR . HVDC HVDC T65 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRAWATI B/B BHASUR-I.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER ER ER	S/C D/C D/C D/C D/C S/C S/C	43 0 109 77 0 0 0 0 0 0 0 0 0	64 68 0 1 0 WR-NR 515 0 1755 1960 218 0 73 62 WR-SR WR-SR 0 365 486 365 289	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.2 1.2 Min (MW) 0 21 363 93	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 1.6 0.0 79.4 Avg (MW) 0 43 274 236	-1.2 1.4 0.7 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6 1.2 -78.2 Energy Exchange (MU) 0.0 1.0 6.6 5.7
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR . HVDC HVDC T65 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRAWATI B/B BARSUR-L-SILIERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER ER	S/C D/C D/C D/C D/C D/C S/C S/C	43 0 109 77 0 0 0 0 0 0 0 0 0	64 68 0 1 0 WR-NR 515 0 1755 1960 218 0 73 62 WR-SR WR-SR 0 365 486 365	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.2 1.2 1.2 Min (MW) 0 21 363	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 1.6 0.0 79.4 Avg (MW) 0 43 274 236	-1.2 -1.4 -0.7 -0.0 -7.3.6 -12.2 -0.0 -27.5 -37.2 -1.0 -0.0 -1.6 -1.2 -78.2 -78.2 -1.0 -0.0 -1.6 -1.5 -78.2 -1.0 -1.6 -1.6 -1.5 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2 -78.2
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR . HVDC HVDC T65 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRAWATI B/B BARSUR-I.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER ER ER NER	S/C D/C D/C D/C D/C S/C S/C	43 0 109 77 0 0 0 0 0 0 0 0 0 0	64 68 0 1 1 0 WR-NR 515 0 1755 1960 218 73 62 WR-SR NGES Max (MW) 0 86 365 289 7	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.2 1.2 Min (MW) 0 21 363 93 0	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 1.6 0.0 79.4 Avg (MW) 0 43 274 236 -1	-1.2 1.4 0.7 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6 1.2 -78.2 Energy Exchange (MU) 0.0 1.0 6.6 5.7 0.0 0.5
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR . HVDC HVDC T65 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRAWATI B/B BHASUR-I.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER ER ER	S/C D/C D/C D/C D/C D/C S/C S/C	43 0 109 77 0 0 0 0 0 0 0 0 0 0	64 68 0 1 0 WR-NR 515 0 1755 1960 218 0 73 62 WR-SR WR-SR 0 365 486 365 289	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.2 1.2 Min (MW) 0 21 363 93	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 1.6 0.0 79.4 Avg (MW) 0 43 274 236	-1.2 1.4 0.7 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6 1.2 -78.2 Energy Exchange (MU) 0.0 1.0 6.6 5.7
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV HVDC HVDC HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRAWATI B/B BHADRAWATI B/B BARSUR-I-SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI Region ER ER ER ER NER NER	S/C D/C D/C D/C D/C S/C S/C	43 0 109 77 0 0 0 0 0 0 0 0 0 0	64 68 0 0 WR-NR 515 10 1755 1960 218 0 73 62 WR-SR NGES Max (MW) 0 86 365 289 7 0	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 1.6 0.0 79.4 Avg (MW) 0 43 274 236 -1 20 0	-1.2 -1.4 -0.7 -0.0 -73.6 -12.2 -0.0 -27.5 -37.2 -1.0 -0.0 -1.6 -1.2 -78.2 Energy Exchange (MU) -0.0 -1.0 -0.0 -1.0 -0.0 -0.0 -0.0 -0.0
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV rt/Export of WR . HVDC HVDC T65 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRAWATI B/B BARSUR-I.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER ER ER NER	S/C D/C D/C D/C D/C S/C S/C	43 0 109 77 0 0 0 0 0 0 0 0 0	64 68 0 1 1 0 WR-NR 515 0 1755 1960 218 73 62 WR-SR NGES Max (MW) 0 86 365 289 7	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.2 1.2 Min (MW) 0 21 363 93 0	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 1.6 0.0 79.4 Avg (MW) 0 43 274 236 -1	-1.2 1.4 0.7 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6 1.2 -78.2 Energy Exchange (MU) 0.0 1.0 6.6 5.7 0.0 0.5
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV HVDC HVDC HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RAPPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRURA-SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI REGION ER ER ER ER ER ER ER ER ER NER NER	S/C D/C D/C D/C D/C D/C S/C S/C	43 0 109 77 0 0 0 0 0 0 0 0 0	64 68 0 0 WR-NR 515 10 1755 1960 218 0 73 62 WR-SR Max (MW) 0 86 365 289 7 0 0 -10	0.0 0.0 1.4 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.7 1.2 0.0 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 1.6 0.0 79.4 Avg (MW) 0 43 274 236 -1 20 0 -7	-1.2 -1.4 -0.7 -0.0 -73.6 -12.2 -0.0 -27.5 -37.2 -1.0 -0.0 -1.6 -1.2 -78.2 -1.0 -0.0 -1.0 -1.6 -1.2 -78.2 -1.0 -1.0 -1.0 -1.0 -1.0 -1.0 -1.0 -1.0
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV HVDC HVDC HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRAWATI B/B BHADRAWATI B/B BARSUR-I-SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI Region ER ER ER ER NER NER	S/C D/C D/C D/C D/C S/C S/C	43 0 109 77 0 0 0 0 0 0 0 0 0	64 68 0 0 WR-NR 515 10 1755 1960 218 0 73 62 WR-SR NGES Max (MW) 0 86 365 289 7 0	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 1.6 0.0 79.4 Avg (MW) 0 43 274 236 -1 20 0	-1.2 -1.4 -0.7 -0.0 -73.6 -12.2 -0.0 -27.5 -37.2 -1.0 -0.0 -1.6 -1.2 -78.2 Energy Exchange (MU) -0.0 -1.0 -0.0 -1.0 -0.0 -0.0 -0.0 -0.0
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV HVDC HVDC HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RAPPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRURA-SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI REGION ER ER ER ER ER ER ER ER ER NER NER	S/C D/C D/C D/C D/C D/C S/C S/C	43 0 109 1	64 68 0 0 WR-NR 515 0 1755 1960 218 0 0 73 62 WR-SR Max (MW) 0 86 365 289 7 0 0 -10	0.0 0.0 1.4 0.7 9.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.7 1.2 0.0 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 1.6 0.0 79.4 Avg (MW) 43 274 236 -1 20 0 -7 -11	-1.2 1.4 0.7 0.7 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6 -1.2 -78.2 Energy Exchange (MU) 0.0 -6.6 5.7 0.0 0.5 0.0 -0.5
14 15 16 17 18 Impo 1 2 3 4 5 6	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV HVDC HVDC HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RAPPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPURA-URAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRURAISHIERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI REGION ER NER	S/C D/C D/C D/C D/C D/C S/C S/C	43	64 68 0 0 WR-NR 515 10 1755 1960 218 0 73 62 WR-SR Max (MW) 0 86 365 289 7 0 0 -10	0.0 0.0 1.4 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.7 1.2 0.0 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 1.6 0.0 79.4 Avg (MW) 0 43 274 236 -1 20 0 -7	-1.2 -1.4 -0.7 -0.0 -73.6 -12.2 -0.0 -27.5 -37.2 -1.0 -0.0 -1.6 -1.2 -78.2 -1.0 -0.0 -1.0 -1.6 -1.2 -78.2 -1.0 -1.0 -1.0 -1.0 -1.0 -1.0 -1.0 -1.0
14 15 16 17 18 1 19 19 19 19 19 19 19 19 19 19 19 19 1	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV HVDC HVDC HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RAPPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPURA-URAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRURAISHIERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI REGION ER NER	S/C D/C D/C D/C D/C S/C S/C	43 0 109 77 0 0 0 0 0 0 0 0 0 0	64 68 0 0 WR-NR 515 0 1755 1960 218 0 0 73 62 WR-SR Max (MW) 0 86 365 289 7 0 0 -10	0.0 0.0 1.4 0.7 9.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.7 1.2 0.0 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 1.6 0.0 79.4 Avg (MW) 43 274 236 -1 20 0 -7 -11	-1.2 1.4 0.7 0.7 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6 -1.2 -78.2 Energy Exchange (MU) 0.0 -6.6 5.7 0.0 0.5 0.0 -0.5
14 15 16 17 18 1 19 19 19 19 19 19 19 19 19 19 19 19 1	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV ort/Export of WR c HVDC HVDC HVDC 1765 kV 220 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRAWATI B/B BHASURI-SILIERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI XELDEM-AMBEWADI RER ER ER ER ER ER ER ER ER ER NER NER	S/C D/C D/C D/C D/C D/C S/C S/C	43	64 68 0 1 1 0 WR-NR 515 0 1755 1960 218 0 73 62 WR-SR WR-SR 0 365 289 7 0 0 -10 -96 -844	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.2 1.2 Min (MW) 0 21 363 93 0 0 -4 -2 -256	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 1.6 0.0 79.4 Avg (MW) 0 43 274 236 -1 20 0 -7 -11 -423 -47	1.12 1.4 0.7 0.0 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6 1.2 -78.2 Energy Exchange (MU) 0.0 1.0 6.6 5.7 0.0 0.5 0.0 -0.2 -0.3 -10.2 -10.2
144 15 16 17 18 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV ort/Export of WR c HVDC HVDC HVDC 1765 kV 220 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPURA-URAIYA GWALIOR-SAWAI MADHOPUR With SR) BHADRAWATI B/B BHADRURAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-KUDGI REGION ER	S/C D/C D/C D/C D/C S/C S/C	43	64 68 0 1 1 0 WR-NR 515 0 1755 1960 218 0 73 62 WR-SR WGES Max (MW) 0 86 365 289 7 0 0 -10 -96 -844	0.0 0.0 1.4 0.7 0.0 58.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.2 1.2 1.2 Min (MW) 0 21 363 93 0 0 0 -4 -2 -256	0.7 1.2 0.0 0.0 0.0 132.1 12.2 0.0 27.5 37.2 1.0 0.0 1.6 0.0 79.4 Avg (MW) 0 43 274 236 -1 20 0 -7 -11 -423	1.12 1.14 0.7 0.7 0.0 0.0 -73.6 -12.2 0.0 -27.5 -37.2 -1.0 0.0 -1.6 1.2 -78.2 Energy Exchange (MU) 0.0 1.0 6.6 5.7 0.0 0.5 0.0 -0.5