

National Load Despatch Centre राष्ट्रीय भार प्रेषण केंद्र GRID CONTROLLER OF INDIA LIMITED ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड

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

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 25th October 2023

To,

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

Sub: Daily PSP Report for the date 24.10.2023.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 24-अक्टूबर-2023 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 24th October 2023, is available at the NLDC website.

धन्यवाद,

ग्रिड कंट्रलर ऑफ इंडिया लिमिटेड राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली



Report for previous day

A. Power Supply Position at All India and Regional level

Date of Reporting: 25-Oct-2023

	NR	WR	SR	ER	NER	TOTAL
Demand Met during Evening Peak hrs(MW) (at 20:00 hrs; from RLDCs)	45392	55136	48078	18827	2458	169891
Peak Shortage (MW)	0	0	0	0	0	0
Energy Met (MU)	1079	1425	1151	442	45	4142
Hydro Gen (MU)	164	37	48	45	20	314
Wind Gen (MU)	9	36	26	-	-	70
Solar Gen (MU)*	119.36	63.34	124.41	5.70	0.65	313
Energy Shortage (MU)	0.17	0.00	0.00	0.00	0.00	0.17
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	51412	65714	56665	19704	2494	192544
Time Of Maximum Demand Met	09:53	11:02	12:29	18:08	18:16	10:55

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	0.024	0.00	0.00	1.57	1.57	81.01	17.42

C. Power Supply Position in States

	C4-4	Max.Demand	Shortage during maximum	Energy Met	Drawal Schedule	OD(+)/UD(-)	Max OD	Energy Shareta as (MII)
Region	States	Met during the day (MW)	Demand (MW)	(MU)	(MU)	(MU)	(MW)	Shortage (MU)
	Punjab	6354	0	122.5	37.7	-1.9	137	0.00
	Haryana	6580	0	136.0	83.4	-1.6	88	0.00
	Rajasthan	14314	0	281.6	85.7	-4.1	239	0.00
	Delhi	3480	0	69.9	60.6	-0.2	179	0.00
NR	UP	16406	0	348.7	135.8	-1.4	760	0.00
	Uttarakhand	1711	0	33.8	21.9	-0.3	107	0.00
	HP	1596	0	28.6	18.0	-0.5	81	0.00
	J&K(UT) & Ladakh(UT)	2381	0	51.0	41.1	1.8	351	0.17
	Chandigarh	160	0	3.1	3.3	-0.2	11	0.00
	Railways_NR ISTS	167	0	3.6	3.7	-0.1	21	0.00
	Chhattisgarh	4843	0	103.9	44.2	-1.4	225	0.00
	Gujarat	19641	0	408.3	190.1	-0.4	563	0.00
	MP	14357	0	295.7	184.9	-5.0	369	0.00
WR	Maharashtra	24710	0	551.8	246.3	-3.5	864	0.00
	Goa	647	0	12.0	12.3	-0.8	36	0.00
	DNHDDPDCL	1163	0	23.0	23.5	-0.5	10	0.00
	AMNSIL	802	0	18.1	9.9	-0.4	257	0.00
	BALCO	522	0	12.4	12.6	-0.2	8	0.00
	Andhra Pradesh	12235	0	228.6	95.5	-1.3	827	0.00
	Telangana	12259	0	260.1	138.8	-1.2	514	0.00
\mathbf{SR}	Karnataka	13812	0	248.2	95.0	-2.8	918	0.00
	Kerala	3989	0	78.1	64.8	0.8	203	0.00
	Tamil Nadu	15850	0	326.5	198.3	-0.5	894	0.00
	Puducherry	434	0	9.4	9.2	-0.4	28	0.00
	Bihar	4525	0	99.8	90.3	-1.0	256	0.00
	DVC	2991	0	64.9	-32.7	0.2	275	0.00
	Jharkhand	1485	0	28.5	22.4	-2.5	147	0.00
ER	Odisha	4582	0	107.3	35.7	-1.6	318	0.00
	West Bengal	6553	0	140.2	11.2	-2.4	110	0.00
	Sikkim	56	0	0.7	0.7	0.0	14	0.00
	Railways_ER ISTS	16	0	0.2	0.2	0.0	0	0.00
	Arunachal Pradesh	148	0	2.4	2.3	-0.1	20	0.00
	Assam	1422	0	25.4	18.4	-0.3	269	0.00
	Manipur	188	0	2.6	2.6	-0.1	22	0.00
NER	Meghalaya	335	0	5.9	4.4	-0.3	120	0.00
	Mizoram	123	0	1.8	1.5	-0.3	12	0.00
	Nagaland	143	0	2.4	2.3	-0.1	7	0.00
	Tripura	266	0	4.9	4.2	-0.2	15	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	8.5	18.7	-24.8	-23.0
Day Peak (MW)	392.0	861.0	-1060.0	-1124.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	131.6	-153.9	162.4	-126.9	-13.2	0.0
Actual(MU)	123.0	-119.4	182.5	-178.0	-8.2	-0.1
O/D/U/D(MU)	-8.6	34.4	20.1	-51.1	5.0	-0.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	5484	7775	3718	3626	235	20837	48
State Sector	5236	10180	4881	2480	121	22897	52
Total	10720	17954	8599	6106	356	43734	100

G. Sourcewise generation (Gross) (MU)

G. Sourcewise generation (Gross) (MU)							
	NR	WR	SR	ER	NER	All India	% Share
Coal	675	1463	684	628	12	3461	77
Lignite	25	17	56	0	0	98	2
Hydro	164	37	48	45	20	314	7
Nuclear	20	53	71	0	0	144	3
Gas, Naptha & Diesel	10	12	6	0	28	56	1
RES (Wind, Solar, Biomass & Others)	134	101	178	7	1	421	9
Total	1029	1684	1043	680	60	4496	100
							•
Share of RES in total generation (%)	13.05	5.98	17.10	1.09	1.09	9.37	
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	30.94	11.34	28.50	7.73	34.65	19.57	

H. A	All India	a Demand Diversity Fac	ctor
D	l D		

Based on Regional Max Demands	1.017
Based on State Max Demands	1.045

I. All India Peak	Demand	and	shortage	at Solar	and l	Non-Solar Hour
		1	- 117			

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	192544	10:55	0
Non-Solar hr	176890	18:31	0

 $Diversity\ factor = Sum\ of\ regional\ or\ state\ maximum\ demands\ /\ All\ India\ maximum\ demand$

^{**}Note: All generation MU figures are gross
***Godda (Jharkhand) -> Bangladesh power exchange is through the radial connection (isolated from Indian Grid)

Solar Hours -> 06:00 to 18:00hrs and rest are Non-Solar Hours

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

INTER-REGIONAL EXCHANGES

Import=(+ve) /Export =(-ve) for NET (MU)
Date of Reporting: 25-Oct-2023

Sl No	Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
	t/Export of ER (
2	HVDC HVDC	ALIPURDUAR-AGRA PUSAULI B/B	2	0	701 48	0.0	16.9 1.2	-16.9 -1.2
3	765 kV 765 kV	GAYA-VARANASI SASARAM-FATEHPUR	2	125 0	690 438	0.0	7.4 7.3	-7.4 -7.3
5	765 kV 400 kV	GAYA-BALIA	1	0 24	492 44	0.0	8.3 0.2	-8.3 -0.2
7	400 kV	PUSAULI-VARANASI PUSAULI -ALLAHABAD	1	0	72	0.0	0.9	-0.9
9	400 kV 400 kV	MUZAFFARPUR-GORAKHPUR PATNA-BALIA	2 2	0	549 412	0.0	8.7 6.4	-8.7 -6.4
10 11	400 kV 400 kV	NAUBATPUR-BALIA BIHARSHARIFF-BALIA	2 2	0 64	426 205	0.0	6.3 2.0	-6.3 -2.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	287	0.0	4.3	-4.3
13 14	400 kV 220 kV	BIHARSHARIFF-VARANASI SAHUPURI-KARAMNASA	2	70	272 94	0.0	2.8 1.4	-2.8 -1.4
15 16	132 kV 132 kV	NAGAR UNTARI-RIHAND GARWAH-RIHAND	1	0 30	0	0.1 0.4	0.0	0.1 0.4
17	132 kV	KARMANASA-SAHUPURI	1	66	0	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0 ER-NR	0.0	0.0 74.1	0.0 -73.6
Impor	t/Export of ER (1	470		2.5	
2	765 kV 765 kV	JHARSUGUDA-DHARAMJAIGARH NEW RANCHI-DHARAMJAIGARH	4 2	376 46	470 851	0.0 0.0	2.5 6.8	-2.5 -6.8
4	765 kV 400 kV	JHARSUGUDA-DURG JHARSUGUDA-RAIGARH	2 4	0	736 717	0.0	14.5 10.3	-14.5 -10.3
5	400 kV 220 kV	RANCHI-SIPAT BUDHIPADAR-RAIGARH	2	0	307 153	0.0	3.5 2.2	-3.5 -2.2
7	220 kV 220 kV	BUDHIPADAR-KAIGAKH	2	135	34	1.0	0.0	1.0
Impor	t/Export of ER (With SD)			ER-WR	1.0	39.7	-38.7
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	556	0.0	12.6	-12.6
3	HVDC 765 kV	TALCHER-KOLAR BIPOLE ANGUL-SRIKAKULAM	2 2	0	1637 2637	0.0	36.6 53.7	-36.6 -53.7
5	400 kV 220 kV	TALCHER-I/C	2	406 0	0	8.4	0.0	8.4
		BALIMELA-UPPER-SILERRU		U	ER-SR	0.0	102.9	0.0 -102.9
_	t/Export of ER (274	0.0	(2	
2	400 kV 400 kV	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON	2 2	0 306	374 253	0.0 0.0	6.2 1.6	-6.2 -1.6
3	220 kV	ALIPURDUAR-SALAKATI	2	40	67 ER-NER	0.0 0.0	0.7 8.5	-0.7 -8.5
Impor	t/Export of NER					U.U		=0.5
1		BISWANATH CHARIALI-AGRA	2	0	705 NER-NR	0.0	16.9 16.9	-16.9 -16.9
Impor	t/Export of WR (With NR)			NEK-NK	υ.υ	10.9	-10.9
1 2	HVDC HVDC	CHAMPA-KURUKSHETRA VINDHYACHAL B/B	2	5	0 54	0.0	0.0 1.2	0.0 -1.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1170	0.0	28.0	-28.0
5	765 kV 765 kV	GWALIOR-AGRA GWALIOR-PHAGI	2 2	206 137	794 1309	0.0	7.1 19.5	-7.1 -19.4
6 7	765 kV 765 kV	JABALPUR-ORAI GWALIOR-ORAI	2	0 718	539	0.0 13.8	13.8 0.0	-13.8 13.8
8	765 kV	SATNA-ORAI	1	0	882	0.0	17.6	-17.6
9 10	765 kV 765 kV	BANASKANTHA-CHITORGARH VINDHYACHAL-VARANASI	2 2	2305	0 1795	34.4 0.0	0.0 32.8	34.4 -32.8
11	400 kV	ZERDA-KANKROLI	1				0.0	
1.2	400 1-37	ZEDDA DIHMMAI	i	311	0	5.5		5.5
12 13	400 kV 400 kV	ZERDA -BHINMAL VINDHYACHAL -RIHAND	1 1	683 954	0	7.7 21.4	0.0	7.7 21.4
13 14	400 kV 400 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR		683	0 0 43	7.7	0.0	7.7 21.4 4.2
13 14 15 16	400 kV 400 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK	1	683 954 549 0	0 0 43 135 30	7.7 21.4 4.2 0.0 0.0	0.0 0.0 0.0 2.4 1.9	7.7 21.4 4.2 -2.4 -1.9
13 14 15 16 17 18	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA	1 2 1	683 954 549 0 0 101 76	0 0 43 135 30 0	7.7 21.4 4.2 0.0 0.0 1.9 1.3	0.0 0.0 0.0 2.4 1.9 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9
13 14 15 16 17	400 kV 400 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA	1 2 1 1 1	683 954 549 0 0	0 0 43 135 30 0	7.7 21.4 4.2 0.0 0.0	0.0 0.0 0.0 2.4 1.9	7.7 21.4 4.2 -2.4 -1.9 1.9
13 14 15 16 17 18 19 20	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR	1 2 1 1 1 1 1	683 954 549 0 0 101 76	0 0 43 135 30 0	7.7 21.4 4.2 0.0 0.0 1.9 1.3 0.0	0.0 0.0 0.0 2.4 1.9 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0
13 14 15 16 17 18 19 20	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR	1 2 1 1 1 1 1	683 954 549 0 0 101 76	0 0 43 135 30 0 0	7.7 21.4 4.2 0.0 0.0 1.9 1.3 0.0	0.0 0.0 0.0 2.4 1.9 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 0.0
13 14 15 16 17 18 19 20 Impor	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR	1 2 1 1 1 1 1 1 2	683 954 549 0 0 101 76 0 0	0 0 43 135 30 0 0 0 WR-NR	7.7 21.4 4.2 0.0 0.0 1.9 1.3 0.0 0.0 90.2	0.0 0.0 2.4 1.9 0.0 0.0 0.0 0.0 124.2	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0
13 14 15 16 17 18 19 20 Impor 1 2 3 4	400 kV 400 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC HVDC 765 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WARIYA MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD	1 2 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2	683 954 549 0 0 101 76 0 0 0	0 0 43 135 30 0 0 0 0 WR-NR	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 90.2	0.0 0.0 0.0 2.4 1.9 0.0 0.0 0.0 124.2	7.7 21.4 4.2 -2.4 -1.9 1.3 0.0 -34.0 -14.3 -74.2 5.9 -30.6
13 14 15 16 17 18 19 20 Impor 1 2 3	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPUR-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR	1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2	683 954 549 0 0 101 76 0 0 0	0 0 43 135 30 0 0 0 0 WR-NR	7.7 21.4 4.2 0.0 0.0 1.9 1.3 0.0 90.2	0.0 0.0 0.0 2.4 1.9 0.0 0.0 0.0 124.2	7.7 21.4 4.2 -2.4 -1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9
13 14 15 16 17 18 19 20 Impor 1 2 3 4 5 6 7	400 kV 400 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC HVDC 565 kV 765 kV 765 kV 400 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WARIYA MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	1 2 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2	683 954 549 0 0 101 76 0 0 0 0 0 0 1208	0 0 43 135 30 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 90.2	0.0 0.0 0.0 2.4 1.9 0.0 0.0 0.0 1.24.2 14.3 74.2 2.1 30.6 36.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.3 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0
13 14 15 16 17 18 19 20 Impor 1 2 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 765 kV 400 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPUR-RANPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI	1 1 2 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2	683 954 549 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114	7.7 21.4 4.2 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 22.9 0.0 0.0 0.0 2.3	0.0 0.0 0.0 0.0 0.0 2.4 1.9 0.0 0.0 0.0 0.0 124.2 14.3 74.2 2.1 30.6 36.0 0.0 0.0 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	1 1 2 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 1 1 1 1	683 954 549 0 0 101 76 0 0 0 0 0 0 1208 0 0	0 0 43 135 30 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0	7.7 21.4 4.2 0.0 0.0 1.9 1.3 0.0 0.0 90.2	0.0 0.0 0.0 2.4 1.9 0.0 0.0 0.0 0.0 124.2 14.3 74.2 2.1 30.6 36.0 0.0 0.0 0.0 0.0 157.1	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	1	683 954 549 0 0 101 76 0 0 0 0 0 1208 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR	7.7 21.4 4.2 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 0.0 22.9 0.0 0.0 2.3 33.1	0.0 0.0 0.0 0.0 2.4 1.9 0.0 0.0 0.0 0.0 124.2 14.3 74.2 2.1 30.6 36.0 0.0 0.0 0.0 157.1 Import(7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	1	683 954 549 0 0 101 76 0 0 0 0 0 1208 0 0 0 0 1208 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114	7.7 21.4 4.2 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 22.9 0.0 0.0 0.0 2.3	0.0 0.0 0.0 2.4 1.9 0.0 0.0 0.0 0.0 124.2 14.3 74.2 2.1 30.6 36.0 0.0 0.0 0.0 0.0 157.1	7.7 21.4 4.2 -2.4 -1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve)
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	1	683 954 549 0 0 101 76 0 0 0 0 0 1208 0 0 1208 0 0 ALIPURDUAR 1,2&3 i.e.	0 0 43 135 30 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR	7.7 21.4 4.2 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 0.0 22.9 0.0 0.0 2.3 33.1	0.0 0.0 0.0 0.0 2.4 1.9 0.0 0.0 0.0 0.0 124.2 14.3 74.2 2.1 30.6 36.0 0.0 0.0 0.0 157.1 Import(7.7 21.4 4.2 -2.4 -1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI IN Region	1	683 954 549 0 0 101 76 0 0 0 0 0 0 1208 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 2.9 0.0 0.0 22.9 0.0 0.0 2.3 33.1	0.0 0.0 0.0 0.0 0.0 2.4 1.9 0.0 0.0 0.0 0.0 124.2 14.3 74.2 2.1 30.6 36.0 0.0 0.0 0.0 157.1 Import(Avg (MW)	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU)
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI IN Region	1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 2.9 0.0 0.0 22.9 0.0 0.0 2.3 33.1	0.0 0.0 0.0 0.0 0.0 2.4 1.9 0.0 0.0 0.0 0.0 124.2 14.3 74.2 2.1 30.6 36.0 0.0 0.0 0.0 157.1 Import(Avg (MW)	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU)
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI IN Region ER	1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 8.0 0.0 0.0 22.9 0.0 0.0 2.3 33.1 Min (MW)	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU) 2.47
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI IN Region ER	1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1208 0 0 0 1208 0 0 0 1208 0 1208 0 1208 1208	0 0 43 135 30 0 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 2.9 0.0 0.0 2.3 33.1 Min (MW)	0.0 0.0 0.0 0.0 0.0 0.0 2.4 1.9 0.0 0.0 0.0 0.0 124.2 14.3 74.2 2.1 30.6 36.0 0.0 0.0 0.0 157.1 Import(Avg (MW)	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU) 2.47
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI IN Region ER ER	1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR Max (MW) 128	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 8.0 0.0 0.0 22.9 0.0 0.0 2.3 33.1 Min (MW)	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU) 2.47 8.18
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI IN Region ER	1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 8.0 0.0 0.0 22.9 0.0 0.0 2.3 33.1 Min (MW)	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU) 2.47
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI IN Region ER ER	1 2 1 1 1 1 1 1 1 1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR Max (MW) 128 307 -130	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 8.0 0.0 22.9 0.0 0.0 2.3 33.1 Min (MW) 79 262	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU) 2.47 8.18 -2.61
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI IN Region ER ER	1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR Max (MW) 128	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 8.0 0.0 22.9 0.0 0.0 2.3 33.1 Min (MW)	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU) 2.47 8.18
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI IN Region ER ER	1 2 1 1 1 1 1 1 1 1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR Max (MW) 128 307 -130	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 8.0 0.0 22.9 0.0 0.0 2.3 33.1 Min (MW) 79 262	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU) 2.47 8.18 -2.61
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WARIYA MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI IN Region ER ER NER	1 2 1 1 1 1 1 1 1 1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR Max (MW) 128 307 -130	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 8.0 0.0 22.9 0.0 0.0 2.3 33.1 Min (MW) 79 262 -80	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU) 2.47 8.18 -2.61
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WARIYA MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI IN Region ER ER NER	1 2 1 1 1 1 1 1 1 1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR Max (MW) 128 307 -130	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 8.0 0.0 22.9 0.0 0.0 2.3 33.1 Min (MW) 79 262 -80	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU) 2.47 8.18 -2.61
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 765 kV 220 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WARIYA MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-AMBEWADI XELDEM-AMBEWADI IN Region ER ER NER	1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR Max (MW) 128 307 -130 -16	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 8.0 0.0 22.9 0.0 0.0 2.3 33.1 Min (MW) 79 262 -80	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU) 2.47 8.18 -2.61 -0.07
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 765 kV 220 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WARIYA MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-AMBEWADI XELDEM-AMBEWADI IN Region ER ER NER	1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR Max (MW) 128 307 -130 -16	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 8.0 0.0 22.9 0.0 0.0 2.3 33.1 Min (MW) 79 262 -80	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU) 2.47 8.18 -2.61 -0.07
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 765 kV 220 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WARIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI IN Region ER ER NER NER NER ER ER	1 2 1 1 1 1 1 1 1 1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR Max (MW) 128 307 -130 -16 29 0	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 8.0 0.0 0.0 22.9 0.0 0.0 2.3 33.1 Min (MW) 79 262 -80 3	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU) 2.47 8.18 -2.61 -0.07 0.48
13 14 15 16 17 18 19 20 Impor 1 2 3 3 4 5 6	400 kV 400 kV 220 kV 220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 765 kV 220 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WARIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-AMBEWADI XELDEM-AMBEWADI IN Region ER ER NER NER NER	1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR Max (MW) 128 307 -130 -16	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 8.0 0.0 0.0 22.9 0.0 0.0 2.3 33.1 Min (MW) 79 262 -80 3	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU) 2.47 8.18 -2.61 -0.07 0.48
13 14 15 16 17 18 19 20 Impor 1 2 3 4 5 6 7 8 9	400 kV 400 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 765 kV 220 kV 220 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WARIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI ER ER ER ER ER ER ER ER	1 2 1 1 1 1 1 1 1 1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR Max (MW) 128 307 -130 -16 29 0 0 861	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 8.0 0.0 0.0 22.9 0.0 0.0 2.3 33.1 Min (MW) 79 262 -80 3	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU) 2.47 8.18 -2.61 -0.07 0.48 1.63 0.00 17.09
13 14 15 16 17 18 19 20 Impor 1 2 3 4 5 6 7 8 9	400 kV 400 kV 220 kV 220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 765 kV 220 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMBADD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI IN Region ER ER NER NER NER ER ER	1 2 1 1 1 1 1 1 1 1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR Max (MW) 128 307 -130 -16 29 0	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 8.0 0.0 0.0 22.9 0.0 0.0 2.3 33.1 Min (MW) 79 262 -80 3	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU) 2.47 8.18 -2.61 -0.07 0.48
13 14 15 16 17 18 19 20 Impor 1 2 3 4 5 6 7 8 9	400 kV 400 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 765 kV 220 kV 220 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WARIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI ER ER ER ER ER ER ER ER	1 2 1 1 1 1 1 1 1 1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR Max (MW) 128 307 -130 -16 29 0 0 861	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 8.0 0.0 0.0 22.9 0.0 0.0 2.3 33.1 Min (MW) 79 262 -80 3	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU) 2.47 8.18 -2.61 -0.07 0.48 1.63 0.00 17.09
13 14 15 15 16 17 18 19 20 Impor 1 2 3 4 5 6 6 7 8 9	400 kV 400 kV 220 kV 220 kV 220 kV 132 kV 132 kV 14/Export of WR (HVDC HVDC 765 kV 765 kV 220 kV 220 kV 220 kV 220 kV 220 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WARIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR WARDHA-NIZAMABAD WARORA-WARANGAL(NEW) KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI ER ER ER NER NER NER NER ER ER	1 2 1 1 1 1 1 1 1 1	683 954 549 0 0 0 101 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 43 135 30 0 0 0 0 WR-NR 1004 4010 705 1879 2129 0 0 0 114 WR-SR Max (MW) 128 307 -130 -16 29 0 0 861 -921	7.7 21.4 4.2 0.0 0.0 0.0 1.9 1.3 0.0 0.0 90.2 0.0 0.0 0.0 0.0 22.9 0.0 0.0 23.3 33.1 Min (MW) 79 262 -80 3 11 0 0 512 -917	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7.7 21.4 4.2 -2.4 -1.9 1.9 1.3 0.0 0.0 -34.0 -14.3 -74.2 5.9 -30.6 -36.0 22.9 0.0 0.0 2.3 -123.9 +ve)/Export(-ve) Energy Exchange (MU) 2.47 8.18 -2.61 -0.07 0.48 1.63 0.00 17.09 -22.09

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 25-Oct-2023

Export From India (in MU)

Export From II	luia (in ivie)								1	
		T-GNA								
Country	GNA (ISGS/PPA)		COLLECTIVE							
		BILATERAL TOTAL	IDAM			RTM			TOTAL	
			IEX	PXIL	HPX	IEX	PXIL	HPX		
Bhutan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Nepal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Bangladesh	21.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.97	
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total Export	21.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.97	

Import by India(in MU)

	T-GNA								
	GNA (ISGA/PPA)	COLLECTIVE							
Country		BILATERAL TOTAL	IDAM			RTM			TOTAL
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	7.65	0.00	1.12	0.00	0.00	0.00	0.00	0.00	8.77
Nepal	2.63	0.00	12.51	0.00	0.00	0.00	0.00	0.00	15.14
Bangladesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Import	10.28	0.00	13.63	0.00	0.00	0.00	0.00	0.00	23.91

Net from India(in MU) -ve : Export / +ve : Import T-GNA COLLECTIVE **GNA** (ISGS/PPA) IDAM BILATERAL RTM TOTAL Country TOTAL IEX PXIL HPX IEX PXIL HPX 7.65 0.00 1.12 0.00 0.000.00 8.77 Bhutan 0.000.002.63 0.00 12.51 0.00 0.00 0.000.00 0.0015.14 Nepal -21.97 Bangladesh 0.000.000.000.000.000.000.00-21.97 0.00 0.000.00 0.000.000.000.00 0.00 0.00 Myanmar **Total Net** -11.69 0.0013.63 0.00 0.000.000.001.94 0.00