

## **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: 03<sup>nd</sup> Aug 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 02.08.2020.

महोदय/Dear Sir.

आई॰ई॰जी॰सी॰-२०१० की धारा स.-५.५.१ के प्रावधान के अनुसार, दिनांक ०२-अगस्त-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 02<sup>st</sup> August 2020, is available at the NLDC website.

धन्यवाद.

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



Date of Reporting: 03-Aug-2020 Report for previous day 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)	56514	43648	30795	22809	2720	156486
Peak Shortage (MW)	927	0	0	138	113	1178
Energy Met (MU)	1293	1060	764	468	53	3638
Hydro Gen (MU)	348	18	67	147	31	610
Wind Gen (MU)	13	33	157	-	-	203
Solar Gen (MU)*	39.59	22.10	69.67	4.40	0.03	136
Energy Shortage (MU)	10.2	0.0	0.0	0.4	0.8	11.4
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	62434	45397	36665	22847	2740	160986
Time Of Maximum Demand Met (From NLDC SCADA)	22:27	14:45	11:01	23:02	19:19	22:27

B. Frequency Profile (%) Region All India FVI 0.034 0.09

		Max.Demand	Shortage during	Energy Met	Drawal	OD(+)/UD(-)	Max OD	Energy
Region	States	Met during the day(MW)	maximum Demand(MW)	(MU)	Schedule (MU)	(MU)	(MW)	Shortag (MU)
	Punjab	10702	0	234.7	136.9	-1.0	54	0.0
	Haryana	8722	0	186.2	164.7	1.6	350	0.0
	Rajasthan	10986	0	242.0	85.4	0.3	393	0.0
	Delhi	5449	0	101.6	87.2	-2.0	56	0.0
NR	UP	21687	0	415.3	199.0	2.0	547	0.2
	Uttarakhand	1711	0	37.7	18.3	1.7	234	0.0
	HP	1259	0	28.9	-5.8	-0.4	16	0.0
	J&K(UT) & Ladakh(UT)	2032	508	41.5	18.4	0.2	265	9.9
	Chandigarh	273	0	4.9	5.1	-0.2	7	0.0
	Chhattisgarh	4392	0	107.0	40.3	-0.1	250	0.0
	Gujarat	14236	0	311.3	106.3	1.4	486	0.0
	MP	9737	0	222.8	127.2	-3.2	327	0.0
WR	Maharashtra	16710	0	374.7	143.0	-3.1	476	0.0
	Goa	407	0	9.0	8.6	-0.2	37	0.0
	DD	217	0	4.9	4.8	0.1	20	0.0
	DNH	588	0	13.6	13.7	-0.1	31	0.0
	AMNSIL	769	0	17.1	6.4	-0.2	240	0.0
	Andhra Pradesh	7278	0	155.1	42.6	-0.5	445	0.0
	Telangana	9569	0	187.8	74.5	-2.0	781	0.0
SR	Karnataka	7520	0	140.7	44.6	-1.2	559	0.0
	Kerala	2556	0	54.6	42.7	0.2	202	0.0
	Tamil Nadu	10169	0	219.5	65.6	-6.2	673	0.0
	Puducherry	309	0	6.5	7.0	-0.5	52	0.0
	Bihar	5834	0	115.1	106.5	1.0	298	0.0
	DVC	3078	0	64.2	-29.2	0.3	244	0.0
	Jharkhand	1552	138	27.4	20.5	-1.5	162	0.4
ER	Odisha	4212	0	88.1	10.2	0.1	396	0.0
	West Bengal	8981	0	172.3	51.7	2.1	409	0.0
	Sikkim	80	0	0.9	0.9	-0.1	25	0.0
	Arunachal Pradesh	91	1	1.7	1.4	0.3	35	0.0
	Assam	1797	98	34.3	29.6	0.7	105	0.8
	Manipur	184	1	2.8	2.5	0.3	26	0.0
NER	Meghalaya	282	0	5.1	0.1	-0.4	36	0.0
	Mizoram	86	1	1.6	1.2	0.2	10	0.0
	Nagaland	123	1	2.3	2.4	-0.4	13	0.0
	Tripura	286	0	5.0	6.0	-0.2	44	0.0

D. Transnational Exchanges (MU) - Import(+ve)/Export(-ve)								
	Bhutan	Nepal	Bangladesh					
Actual (MU)	53.1	-1.9	-25.7					
Day Pook (MW)	2214.0	146.0	1006.0					

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	304.9	-234.5	48.0	-113.5	-4.8	0.0
Actual(MU)	307.3	-234.3	28.0	-99.8	-5.1	-3.9
O/D/U/D(MU)	2.4	0.2	-20.0	13.8	-0.3	-3.9

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	5096	13837	13312	2345	610	35199
State Sector	11589	20002	13898	6172	47	51708
Total	16685	33839	27210	8517	656	86907

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	509	1126	345	458	7	2444
Lignite	20	12	19	0	0	51
Hydro	348	18	67	147	31	610
Nuclear	21	33	24	0	0	78
Gas, Naptha & Diesel	39	62	12	0	25	139
RES (Wind, Solar, Biomass & Others)	73	63	288	4	0	429
Total	1010	1314	755	609	63	3751
Share of RES in total generation (%)	7.24	4.82	38.15	0.73	0.05	11.44
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation(%)	43.80	8.66	50.20	24.86	48.86	29.79

H.	All	India	Demand	Diversity	Factor

Based on Regional Max Demands	1.057
Based on State Max Demands	1.080

Dasset on State Siza Demanus

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

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

## INTER-REGIONAL EXCHANGES

Import=(+ve) /Export =(-ve) for NET (MU)

Notice   Property	SI								
DIRECTOR OF STATE				N. 461 II				l .	N. P. P. C. ST. D.
1   DIVICE   AMERICAN ACRES   2	No	-		No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
1	Impor	rt/Export of ER (V	With NR)						
1	1			2			0.0		-42.3
1				-	0	399	0.0	9.7	-9.7
S				2					
Second Color				1					
1				1					
1				1					
9									
STATE									
1									
10   100									
10   1924   PEANITEAN				2					
14   122   123	13			1	0	119		2.2	-2.2
10   123   124   124   124   125		132 kV		1					
17   121   17   17   17   17   17   17	15	132 kV	GARWAH-RIHAND	1	30	0	0.4	0.0	0.4
INCOMPANY   1,000				1					
	17	132 kV	KARMANASA-CHANDAULI	1	0				
1   76 SEV   BIARRICHO-MORRADHAGARIN   4   1011   0   12.2   0.0   12.3	_	ADD 4	****			ER-NR	3.8	113.0	-109.2
2   156   157   158				1	1				1
1	_		JHARSUGUDA-DHARAMJAIGARH	4		0	12.3	0.0	12.3
1	2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1515	0	24.7	0.0	24.7
\$\frac{1}{2} \text{   \$00 \text{   \$\frac{1}{2} \text{   \$00 \text{   \$\frac{1}{2} \text{   \$00 \text{   \$\frac{1}{2}    \$\f	3	765 kV	JHARSUGUDA-DURG	2	244	124	2.3	0.0	2.3
S   400 AV   RANCHESTAT	4			4					
S   2204									
Total   Diditara   D									
ERUNE   S11									
	7	220 kV	BUDHIPADAR-KORBA	2	196				
I HYPC				-		ER-WR	51.1	1.4	49.8
The continue of the continue	Impo				1				· · ·
1	1								
A   400 NO   TALCHER-ICE   2   240   1012   0.0   2.6   -2.6   -2.6									
S   29   NALIMETA-IPPERSILERIN   1									
FR-SR									
	5	220 kV	BALIMELA-UPPER-SILERRU	1	1				
1	Imec	rt/Evnert of FD A	Vith NER)			EK-SR	0.0	80./	-80./
2				1 2	Δ.	E12	0.0	6.3	(1
3   29 INV   ALPIPERUAR-SALAKATI   2   0   54   0.0   1.7   1.7   1.7									
ImportFaport of NER (With NR)									
Import Face   NER (With NR)		220 K	AEH CRECAR-SAEARATI	·					
I Hype   Biswanth Charlalalagra   2	Impor	rt/Export of NER	(With NR)				0.0	/18	-7.2
Import   Superior   Will   Wish   NS				2	0	704	0.0	17.1	-17.1
Import_Paper of WR (With NR)						NER-NR	0.0	17.1	-17.1
A	Impo								
3   IVDC   MINDRAMOHINDERCARR   2   0   1917   0.0   24.9   24.9   24.0   4   7654X   CWALIDRAGRA   2   0   1516   0.0   27.4   27.4   5   7654X   PHAGI-GWALIOR   2   0   1516   0.0   27.4   27.4   7   7554X   CWALIDRAGRA   1   409   10   3.6   0.0   3.6   7   7   7554X   CWALIDRAGRA   1   409   10   3.6   0.0   3.6   7   8   7   8   7   8   7   8   7   7   7   7   7   7   7   7   7   8   7   9   7   7   7   7   7   7   8   7   10   400 kV   ZERDA-RINSHANNANANHA   1   777   189   0.0   1.1   -1.1   11   400 kV   ZERDA-RINSHA   1   965   0   22.5   0.0   22.5   12   400 kV   VINDIYACHAL-RINAD   1   965   0   22.5   0.0   22.5   13   400 kV   VINDIYACHAL-RINAD   1   965   0   22.5   0.0   22.5   14   220 kV   BHANYUK-KANNORAN   1   11   0   0   0   1.5   1.5   15   220 kV   BHANYUK-KANNORAN   1   10   10   10   10   10   1.5   1.5   16   220 kV   BHANYUK-KANNORAN   1   10   10   10   10   10   1.5   1.5   1.5   18   131 kV   GWALIOR-SWAU   1   772   20   0   0   0   0   0   0   19   132 kV   ROWALIOR-SWAU   1   772   20   0   0   0   0   0   0   0   19   132 kV   ROWALIOR-SWAU   1   772   20   0   0   0   0   0   0   0   0	1			2		1249	0.0	26.2	-26.2
4   765 KV   GWALIOR-AGRA   2   0   2960   0.0   49.5   4-9.5     5   765 KV   PHIAGICAWALIOR   2   0   11516   0.0   27.4   -27.4     6   765 KV   JABALPURORAI   2   0   1194   0.0   41.9   41.9     7   765 KV   CWALIOR-AGRA   1   409   10   8.6   0.0   3.5     9   765 KV   CWALIOR-AGRA   1   409   10   8.6   0.0   13.1   33.1     10   4400 KV   ZERDA-SANKOLI   1   777   189   0.0   1.1   -1.1     11   4400 KV   ZERDA-SANKOLI   1   588   2.66   0.0   2.0   2.2.0     24   400 KV   ZERDA-SANKOLI   1   777   189   0.0   1.1   -1.1     11   4400 KV   ZERDA-SANKOLI   1   778   189   0.0   1.1   -1.1     12   4400 KV   ZERDA-SANKOLI   1   965   0.0   2.2.5   0.0   22.5     13   4400 KV   ZERDA-SANKOLI   1   965   0.0   0.0   7.8   7.7     14   20 KV   ZERDA-SANKOLI   1   965   0.0   0.0   7.8   7.7     15   220 KV   MILHAURLAR RANFUR   1   1   1   1   1   1   1   1     17   220 KV   MILHAURLAR RANFUR   1   1   1   1   1   1   1   1   1     18   2.20 KV   MILHAURLAR RANFUR   1   1   1   1   1   1   1   1   1				-					
S									
6									
7   756 KV   SATINA-ORAL									
8									
9   765 kV   CHITORCARH-BANASKANTHA  2   0   1156   0.0   13.1   -13.1     10   400 kV   ZERDA-KANKROLI   1   77   189   0.0   1.1   -1.1     11   400 kV   ZERDA-KANKROLI   1   58   266   0.0   2.0   -2.0     12   400 kV   ZERDA-BHINMAL   1   58   266   0.0   2.2   5.0     13   400 kV   XERDA-KANKROLI   1   965   0   22.5   0.0   22.5     13   400 kV   XERDA-KANKROLI   1   965   0   0   22.5   0.0   22.5     14   200 kV   XINDINACHAL - RIHIADD   1   965   0   0   22.5   0.0   22.5     15   200 kV   BHANNEKARANKA   1   0   0   5   0.0   1.5   -1.5     15   220 kV   BHANNEKARANKA   1   107   0   0   7   0.0   1.5   -1.5     16   220 kV   MELGAON-AURAVA   1   107   0   0   7   0.0   0.7     17   220 kV   MALANPIRALIVA   1   107   0   0   0.7   0.0   0.7     18   132 kV   GWALJORS-AWAM MADHOFUR   1   0   0   0   0.0   0.0   0.0     19   132 kV   RAGIGATA-LAUTPUR   2   0   0   0   0.0   0.0   0.0     19   132 kV   RAGIGATA-LAUTPUR   2   0   0   0   0.0   0.0   0.0     10   10   10   10   10   10   10									
10   400 kV   ZERDA-KANKROLL									
11   400 kV   ZERDA_BHINNAL									
12   400 kV   VINDITYACHAL-RIHAND   1   965   0   22.5   0.0   22.5     13   400 kV   RAPP-RIUJALPUR   2   0   568   0.0   7.8   -7.8     14   120 kV   RAPP-RIUJALPUR   1   11   0   0.0   0.0   1.5   -1.5     15   120 kV   BHANPURA-RASPUR   1   11   0   0.0   0.0   1.8   -1.8     16   220 kV   BHANPURA-RASPUR   1   107   0   0.7   0.0   0.7     17   220 kV   BHANPURA-RASPUR   1   107   0   0.7   0.0   0.7     17   220 kV   MALANPURA-RASPUR   1   107   0   0.7   0.0   0.7     18   132 kV   GWALIOR-SAWAH MADHOPUR   1   0   0   0   0.0   0.0   0.0     19   132 kV   RAGIGIAT-ALITPUR   2   0   0   0.0   0.0   0.0   0.0     19   132 kV   RAGIGIAT-ALITPUR   2   0   0   0.0   0.0   0.0   0.0     10   10   10   10   10   10   10									
13   400 kV   RAPPSHUJALPUR   2   0   568   0.0   7.8   -7.8   -7.8   14   220 kV   BHANPURA-RANPUR   1   11   0   0.0   0.1.5   -1.5				1					
14   220 kV   BHANPURA-RANPUR   1   11   0   0.0   1.5   -1.5     15   220 kV   BHANPURA-MORAK   1   0   105   0.0   1.8   -1.8     16   220 kV   BHANPURA-MORAK   1   107   0   0.7   0.0   0.7     17   220 kV   MEHGAON-AURHYA   1   172   20   1.4   0.0   1.4     18   132 kV   GWALIOR-SAWAI MADHOPUR   1   0   0   0   0.0   0.0   0.0     19   132 kV   RAUGHAT-LALIPUR   2   0   0   0   0.0   0.0   0.0     19   132 kV   RAUGHAT-LALIPUR   2   0   0   0   0.0   0.0   0.0     19   132 kV   RAUGHAT-LALIPUR   2   0   0   0   0   0.0   0.0     19   132 kV   RAUGHAT-LALIPUR   2   0   0   0   0   0.0   0.0     19   132 kV   RAUGHAT-LALIPUR   2   0   0   0   0   0   0.0     19   10   10   10   10   10   10   10				2					
15   220 kV   BHANPURA-MORAK									
16   220 kV   WEHGAON-AURAIYA				1	1 11				
17   220 kV   MALANPUR-AURAIYA		220 kV	BHANPURA-RANPUR			0	0.0	1.5	-1.5
18			BHANPURA-RANPUR BHANPURA-MORAK		0	0 105	0.0 0.0	1.5 1.8	-1.5 -1.8
19   132 kV   RAJGHAT-LALITPUR   2   0   0   0.0   0.0   0.0	16 17	220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA	1 1 1	0 107	0 105 0	0.0 0.0 0.7	1.5 1.8 0.0	-1.5 -1.8 0.7
Import/Export of WR (With SR)   1   I WDC   BHADRAWATI B/B   -   0   816   0.0   15.4   -15.4	16 17 18	220 kV 220 kV 132 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	1 1 1	0 107 72 0	0 105 0 20	0.0 0.0 0.7 1.4 0.0	1.5 1.8 0.0 0.0 0.0	-1.5 -1.8 0.7 1.4 0.0
1	16 17 18	220 kV 220 kV 132 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	1 1 1	0 107 72 0	0 105 0 20 0	0.0 0.0 0.7 1.4 0.0	1.5 1.8 0.0 0.0 0.0 0.0	-1.5 -1.8 0.7 1.4 0.0
2	16 17 18 19	220 kV 220 kV 132 kV 132 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR	1 1 1	0 107 72 0	0 105 0 20 0	0.0 0.0 0.7 1.4 0.0	1.5 1.8 0.0 0.0 0.0 0.0	-1.5 -1.8 0.7 1.4 0.0
3   765 kV   SOLAPUR-RAICHUR   2   1839   366   17.4   0.0   17.4     4   765 kV   WARDHA-NIZAMBAD   2   2   545   1340   0.0   8.2   8.2     5   400 kV   KOLHAPUR-KUDGI   2   960   0   14.8   0.0   14.8     6   220 kV   KOLHAPUR-CHIKODI   2   0   0   0.0   0.0   0.0     7   220 kV   FONDA-MBEWADI   1   0   0   0.0   0.0   0.0     8   220 kV   VELDEM-AMBEWADI   1   1   0   0   0.0   0.0   0.0     8   220 kV   XELDEM-AMBEWADI   1   1   0   0   0.0   0.0   0.0     9   WR-SR   32.2   23.7   8.5      INTERNATIONAL EXCHANGES      INTERNATIONAL EXCHANGES      INTERNATIONAL EXCHANGES	16 17 18 19	220 kV 220 kV 132 kV 132 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR)	1 1 1	0 107 72 0	0 105 0 20 0 WR-NR	0.0 0.0 0.7 1.4 0.0 0.0 36.9	1.5 1.8 0.0 0.0 0.0 0.0 229.4	-1.5 -1.8 0.7 1.4 0.0 0.0 -192.4
4   765 kV   WARDHA-NIZAMABAD   2   545   1340   0.0   8.2   -8.2	16 17 18 19 Impor	220 kV 220 kV 132 kV 132 kV 14Export of WR (	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B	1 1 1 1 2	0 107 72 0 0	0 105 0 20 0 WR-NR	0.0 0.0 0.7 1.4 0.0 0.0 36.9	1.5 1.8 0.0 0.0 0.0 0.0 229.4	-1.5 -1.8 0.7 1.4 0.0 0.0 -192.4
S	16 17 18 19 Import 1 2	220 kV 220 kV 132 kV 132 kV 14/Export of WR ( HVDC HVDC	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARI-PUGALUR	1 1 1 1 1 2	0 107 72 0 0	0 105 0 20 0 WR-NR	0.0 0.0 0.7 1.4 0.0 0.0 36.9	1.5 0.0 0.0 0.0 0.0 229.4	-1.5 -1.8 0.7 1.4 0.0 0.0 -192.4
Color	16 17 18 19 Import 1 2 3	220 kV 220 kV 132 kV 132 kV 14/Export of WR ( HVDC HVDC 765 kV	BHANPURA-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 2	0 107 72 0 0 0	0 105 0 20 0 WR-NR	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 0.0	1.5 1.8 0.0 0.0 0.0 0.0 229.4 15.4 0.0	-1.5 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4 -15.4 -0.0 -17.4
Toleran	16 17 18 19 Impor 1 2 3 4	220 kV 220 kV 132 kV 132 kV 17/Export of WR ( HVDC HVDC 765 kV 765 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD	1 1 1 1 1 2	0 107 72 0 0 0	0 105 0 20 0 WR-NR 816 0 366 1340	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 0.0 17.4 0.0	1.5 1.8 0.0 0.0 0.0 0.0 229,4 15.4 0.0 0.0 8.2	-1.5 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4 -15.4 -0.0 -17.4 -8.2
State   Region   Line Name   Max (MW)   Min (MW)   Avg (MW)   Energy Exchange (MII)	16 17 18 19 Impor 1 2 3 4 5	220 kV 220 kV 132 kV 132 kV 14/Export of WR ( HVDC HVDC 765 kV 400 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA WITH SAIGHAT-LALITPUR WITH SRI BHADRAWATI B/B RAIGARH-PIGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI	1 1 1 1 2 2 2 2 2 2 2	0 107 72 0 0 0 0 1839 545 960	0 105 0 20 0 0 WR-NR 816 0 366 1340	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 17.4 0.0	1.5 1.8 0.0 0.0 0.0 0.0 229.4 15.4 0.0 0.0 0.0 0.0 0.0 229.4	-1.5 -1.8 0.7 1.4 0.0 0.0 -192.4 -15.4 0.0 17.4 -8.2 14.8
State   Region   Line Name   Max (MW)   Min (MW)   Avg (MW)   Energy Exchange (MII)	16 17 18 19 Impor 1 2 3 4 5 6	220 kV 220 kV 132 kV 132 kV rt/Export of WR ( HVDC HVDC 765 kV 765 kV 400 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI	1 1 1 1 2 2 2 2 2 2 2 2 2 2	0 107 72 0 0 0 1839 545 960 0	0 105 0 20 0 WR-NR 816 0 366 1340 0	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 0.0 17.4 0.0	1.5 1.8 0.0 0.0 0.0 0.0 229.4 15.4 0.0 0.0 8.2 0.0	-1.5 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4 -15.4 -0.0 -17.4 -8.2 -14.8 -0.0
State   Region   Line Name   Max (MW)   Min (MW)   Avg (MW)   Energy Exchange (MII)	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV rt/Export of WR ( HVDC HVDC 765 kV 765 kV 400 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	1 1 1 1 2 2 2 2 2 2 2 2 2 2	0 107 72 0 0 0 1839 545 960 0	0 105 0 20 0 WR-NR 816 0 366 1340 0 0	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 0.0 17.4 0.0 14.8 0.0	1.5 1.8 0.0 0.0 0.0 0.0 0.0 229,4  15.4 0.0 0.0 8.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1.5 -1.8 -1.7 -1.8 -1.7 -1.4 -1.0 -1.0 -1.0 -1.0 -1.5.4 -1.5.4 -1.7 -1.7 -1.7 -1.7 -1.8 -1.0 -1.0 -1.0 -1.0 -1.0 -1.0 -1.0 -1.0
State   Region   Line Name   Max (MW)   Min (MW)   Avg (MW)   Energy Exchange (MII)	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV rt/Export of WR ( HVDC HVDC 765 kV 765 kV 400 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	1 1 1 1 2 2 2 2 2 2 2 2 2 2	0 107 72 0 0 0 1839 545 960 0	0 105 0 20 0 WR-NR 816 0 366 1340 0 0	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 0.0 17.4 0.0 14.8 0.0 0.0	1.5 1.8 0.0 0.0 0.0 0.0 229.4 15.4 0.0 0.0 8.2 0.0 0.0 0.0	-1.5 -1.8 -0.7 -1.4 -0.0 -192.4 -15.4 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0
State   Region   Line Name   Max (MW)   Min (MW)   Avg (MW)   (MU)	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV rt/Export of WR ( HVDC HVDC 765 kV 765 kV 400 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	1 1 1 1 2 2 2 2 2 2 2 2 2 1 1	0 107 72 0 0 0 1839 545 960 0 0	0 105 0 20 0 WR-NR 816 0 366 1340 0 0 0	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 0.0 17.4 0.0 14.8 0.0 0.0	1.5 1.8 0.0 0.0 0.0 0.0 229.4 15.4 0.0 0.0 8.2 0.0 0.0 0.0	-1.5 -1.8 -0.7 -1.4 -0.0 -192.4 -15.4 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0
ER	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA WITH SAMAI MADHOPUR RAJGHAT-LALITPUR WITH SR BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	1 1 1 1 1 1 2 2 2 2 2 2 2 2 1 1 1 1 1 1	0 107 72 0 0 0 1839 545 960 0 0	0 105 0 20 0 WR-NR 816 0 366 1340 0 0 0 WR-SR	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 17.4 0.0 14.8 0.0 0.0 32.2	1.5 1.8 0.0 0.0 0.0 0.0 229.4 15.4 0.0 0.0 8.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1.5 -1.8 -0.7 -1.4 -0.0 -0.0 -192,4 -15,4 -0.0 -17,4 -8.2 -14,8 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0.
ER	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA WITH SAMAI MADHOPUR RAJGHAT-LALITPUR WITH SR BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	1 1 1 1 1 1 2 2 2 2 2 2 2 2 1 1 1 1 1 1	0 107 72 0 0 0 1839 545 960 0 0	0 105 0 20 0 WR-NR 816 0 366 1340 0 0 0 WR-SR	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 17.4 0.0 14.8 0.0 0.0 32.2	1.5 1.8 0.0 0.0 0.0 0.0 229.4 15.4 0.0 0.0 8.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1.5 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4 -15.4 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0
MANGDECHU HEP 4*180MW)	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA WITH SAMAI MADHOPUR RAJGHAT-LALITPUR WITH SR BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	1	0 107 72 0 0 0 1839 545 960 0 0 1	0 105 0 20 0 WR-NR 816 0 366 1340 0 0 0 WR-SR	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 17.4 0.0 14.8 0.0 0.0 32.2	1.5 1.8 0.0 0.0 0.0 0.0 229.4 15.4 0.0 0.0 8.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1.5 -1.8 0.7 1.4 0.0 0.0 -192.4 -15.4 0.0 17.4 -8.2 14.8 0.0 0.0 0.0 8.5
Hold Hard Hard Hard Hard Hard Hard Hard Har	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region	1	0   107   72   0   0   0   1839   545   960   0   0   1	0 105 0 20 0 WR-NR 816 0 366 1340 0 0 WR-SR NGES	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 0.0 17.4 0.0 14.8 0.0 0.0 32.2	1.5 1.8 0.0 0.0 0.0 0.0 229.4  15.4 0.0 0.0 8.2 0.0 0.0 0.0 23.7	-1.5 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4 -15.4 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0
RECEIPT (from TALA HEP (6*170MW)   220kV CHUKHA-BIRPARA 1&2 (& 220kV   MALBASE - BIRPARA)   250kV CHUKHA-BIRPARA 1&2 (& 220kV   MALBASE - BIRPARA)   353   0   321   7.7     7.7	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region	1	0 107 72 0 0 0 0 1839 545 960 0 1 1 NATIONAL EXCHA Name UU-ALIPURDUAR 1&2 CEIPT (from ±180MW)	0 105 0 20 0 WR-NR 816 0 366 1340 0 0 WR-SR NGES	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 0.0 17.4 0.0 14.8 0.0 0.0 32.2	1.5 1.8 0.0 0.0 0.0 0.0 229.4  15.4 0.0 0.0 8.2 0.0 0.0 0.0 23.7	-1.5 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4 -15.4 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0
BHUTAN   ER	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region	1	0   107   72   0   0   0   1839   545   960   0   0   1   1   NATIONAL EXCHA   Name   U-ALIPURDUAR 1&2   CEEPT (from   1811,24(& 400kV	0 105 0 20 0 WR-NR 816 0 366 1340 0 0 WR-SR NGES	0.0 0.0 0.7 1.4 0.0 0.0 0.0 0.0 17.4 0.0 14.8 0.0 0.0 0.0 17.4 0.0 14.8 14.8 14.8 15.0 16.0 17.0 16.0 17.0 17.0 17.0 18.0 1	1.5 1.8 0.0 0.0 0.0 0.0 229.4  15.4 0.0 0.0 8.2 0.0 0.0 0.0 23.7	-1.5 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4 -15.4 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0
BHUTAN   ER   MALBASE - BIRPARA   353   0   321   7.7	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA WITH SAN BHADRAWATI B/B BHADRAWATI B/B BHADRAWATI B/B SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region  ER	1	0 107 72 0 0 0 0 1839 545 960 0 0 1 1 NATIONAL EXCHA Name UI-ALIPURDUAR 1&2 CELEPT (from t*180MW)	0 105 0 20 0 WR-NR 816 0 366 1340 0 0 0 WR-SR Max (MW)	0.0 0.0 0.7 1.4 0.0 0.0 0.0 0.0 17.4 0.0 14.8 0.0 0.0 0.0 17.4 0.0 14.8 14.8 14.8 15.0 16.0 17.0 16.0 17.0 17.0 17.0 18.0 1	1.5 1.8 0.0 0.0 0.0 0.0 0.0 229.4  15.4 0.0 0.0 0.0 8.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 723.7	-1.5 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4 -15.4 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0
NER   132KV-GEYLEGPHU - SALAKATI   64   49   -52   -1.2     NER   132kV Motanga-Rangia   71   57   -61   -1.5     NR   132kV-TANAKPUR(NH) -	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA WITH SAN BHADRAWATI B/B BHADRAWATI B/B BHADRAWATI B/B SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region  ER	1	0 107 72 0 0 0 0 1839 1839 1845 1960 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 105 0 20 0 WR-NR 816 0 366 1340 0 0 0 WR-SR Max (MW)	0.0 0.0 0.7 1.4 0.0 0.0 0.0 0.0 17.4 0.0 14.8 0.0 0.0 0.0 17.4 0.0 14.8 14.8 14.8 15.0 16.0 17.0 16.0 17.0 17.0 17.0 18.0 1	1.5 1.8 0.0 0.0 0.0 0.0 0.0 229.4  15.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1.5 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4 -15.4 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0
NER   132KV-GEYLEGPHU - SALAKATI   64   49   -52   -1.2     NER   132kV Motanga-Rangia   71   57   -61   -1.5     NR   132kV-TANAKPUR(NH) -	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA WITH SAMAH MADHOPUR RAJGHAT-LALITPUR WITH SRI BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region  ER  ER	1	0 107 72 0 0 0 0 0 1 107 107 107 107 10 10 10 10 10 10 10 10 10 10 10 10 10	0 105 0 20 0 WR-NR 816 0 366 1340 0 0 0 WR-SR NGES Max (MW)	0.0 0.0 0.7 1.4 0.0 0.0 0.0 36.9 0.0 17.4 0.0 14.8 0.0 0.0 32.2  Min (MW)	1.5 1.8 0.0 0.0 0.0 0.0 0.0 229.4  15.4 0.0 0.0 0.0 8.2 0.0 0.0 0.0 0.0 23.7  Avg (MW)	-1.5 -1.8 -1.8 -1.7 -1.8 -1.9 -1.9 -1.4 -1.0 -1.9 -1.9 -1.5.4 -1.
NER   132kV Motanga-Rangia   71   57   -61   -1.5	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA WITH SAMAH MADHOPUR RAJGHAT-LALITPUR WITH SRI BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region  ER  ER	1	0 107 72 0 0 108 1839 545 960 0 1 1 NATIONAL EXCHA Name  IU-ALIPURDUAR 1&2 CEIPT (from p*180MV) URB 1,2,4 (& 400KV RB) i.e. BIBNAGURI A HEP (6*170MW) PARA 1&2 (& 220KV	0 105 0 20 0 WR-NR 816 0 366 1340 0 0 0 WR-SR NGES Max (MW)	0.0 0.0 0.7 1.4 0.0 0.0 0.0 36.9 0.0 17.4 0.0 14.8 0.0 0.0 32.2  Min (MW)	1.5 1.8 0.0 0.0 0.0 0.0 0.0 229.4  15.4 0.0 0.0 0.0 8.2 0.0 0.0 0.0 0.0 23.7  Avg (MW)	-1.5 -1.8 -1.8 -1.7 -1.8 -1.9 -1.9 -1.4 -1.0 -1.9 -1.9 -1.5.4 -1.
NER	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA WITH SAMAH MADHOPUR RAJGHAT-LALITPUR WITH SRI BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region  ER  ER	1	0 107 72 0 0 108 1839 545 960 0 1 1 NATIONAL EXCHA Name  IU-ALIPURDUAR 1&2 CEIPT (from p*180MV) URB 1,2,4 (& 400KV RB) i.e. BIBNAGURI A HEP (6*170MW) PARA 1&2 (& 220KV	0 105 0 20 0 WR-NR 816 0 366 1340 0 0 0 WR-SR NGES Max (MW)	0.0 0.0 0.7 1.4 0.0 0.0 0.0 36.9 0.0 17.4 0.0 14.8 0.0 0.0 32.2  Min (MW)	1.5 1.8 0.0 0.0 0.0 0.0 0.0 229.4  15.4 0.0 0.0 0.0 8.2 0.0 0.0 0.0 0.0 23.7  Avg (MW)	-1.5 -1.8 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4  -15.4 -15.4 -8.2 -14.8 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0
NR 132KV-TANAKPUR(NH)58 0 -33 -0.8  NEPAL ER 132KV-BIHAR - NEPAL 79 6 8 0.2  ED 220KV-MUZAFFARPUR - DHALKEBAR 168 3 .55 1.3	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI  Region  ER  ER	1	0 107 72 0 0 0 1839 545 960 0 1 1 NATIONAL EXCHA Name UL-ALIPURDUAR 1&2 CELIPT (from by 180MW) DIRI 1,2,4 (& 400kV RI) RI) i.e. BINAGURI A HEP (6*170MW) PARA 1&2 (& 220kV A) i.e. BIRPARA	0 105 0 20 0 WR-NR 16 1340 0 0 0 WR-SR NGES Max (MW) 765	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 17.4 0.0 14.8 0.0 0.0 32.2  Min (MW) 581	1.5 1.8 0.0 0.0 0.0 0.0 0.0 229.4  15.4 0.0 0.0 8.2 0.0 0.0 0.0 23.7  Avg (MW)  723	-1.5 -1.8 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4  -15.4 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -0.0 -17.4 -8.5  Energy Exchange (MII) -17.4 -25.3
NR 132KV-TANAKPUR(NH)58 0 -33 -0.8  NEPAL ER 132KV-BIHAR - NEPAL 79 6 8 0.2  ED 220KV-MUZAFFARPUR - DHALKEBAR 168 3 .55 1.3	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI  Region  ER  ER	1	0 107 72 0 0 0 1839 545 960 0 1 1 NATIONAL EXCHA Name UL-ALIPURDUAR 1&2 CELIPT (from by 180MW) DIRI 1,2,4 (& 400kV RI) RI) i.e. BINAGURI A HEP (6*170MW) PARA 1&2 (& 220kV A) i.e. BIRPARA	0 105 0 20 0 WR-NR 16 1340 0 0 0 WR-SR NGES Max (MW) 765	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 17.4 0.0 14.8 0.0 0.0 32.2  Min (MW) 581	1.5 1.8 0.0 0.0 0.0 0.0 0.0 229.4  15.4 0.0 0.0 8.2 0.0 0.0 0.0 23.7  Avg (MW)  723	-1.5 -1.8 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4  -15.4 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -0.0 -17.4 -8.5  Energy Exchange (MII) -17.4 -25.3
NR MAHENDRANAGAR(PG) -58 0 -33 -0.8  NEPAL ER 132KV-BIHAR - NEPAL 79 6 8 0.2  ED 220KV-MUZAFFARPUR - DHALKEBAR 168 2 55 1.3	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR RAJGHAT-LALITPUR With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI  Region  ER  ER	1	0 107 72 0 0 0 1839 545 960 0 1 1 NATIONAL EXCHA Name UL-ALIPURDUAR 1&2 CELIPT (from by 180MW) DIRI 1,2,4 (& 400kV RI) RI) i.e. BINAGURI A HEP (6*170MW) PARA 1&2 (& 220kV A) i.e. BIRPARA	0 105 0 20 0 WR-NR 16 1340 0 0 0 WR-SR NGES Max (MW) 765	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 17.4 0.0 14.8 0.0 0.0 32.2  Min (MW) 581	1.5 1.8 0.0 0.0 0.0 0.0 0.0 229.4  15.4 0.0 0.0 8.2 0.0 0.0 0.0 23.7  Avg (MW)  723	-1.5 -1.8 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4  -15.4 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -0.0 -17.4 -8.5  Energy Exchange (MII) -17.4 -25.3
NR MAHENDRANAGAR(PG) -58 0 -33 -0.8  NEPAL ER 132KV-BIHAR - NEPAL 79 6 8 0.2  ED 220KV-MUZAFFARPUR - DHALKEBAR 168 2 55 1.3	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA With SR) BHANRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI  Region  ER  ER  ER  NER	1	0 107 72 0 0 108 1839 545 960 0 1 1 NATIONAL EXCHA Name  IU-ALIPURDUAR 1&2 CEIPT (from 9*180MV) URI 1;2,4 (& 400kV RR) & 400kV RR) RAP (6*170MW) PARA 1&2 (& 220kV A) i.e. BIRPAR (A) i.e. BIRPAR (KHA HEP 4*84MW) 1- SALAKATI	0 105 0 20 0 0 WR-NR 16 1340 0 0 0 0 0 WR-SR NGES Max (MW) 765 1061 353	0.0 0.0 0.7 1.4 0.0 0.0 0.0 36.9 0.0 17.4 0.0 14.8 0.0 0.0 32.2  Min (MW) 581	1.5 1.8 0.0 0.0 0.0 0.0 0.0 1.5.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1.5 -1.8 -1.7 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4 -15.4 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -0.0 -0.0 -17.4 -5.2 -7.7 -7.7
NR MAHENDRANAGAR(PG) -58 0 -33 -0.8  NEPAL ER 132KV-BIHAR - NEPAL 79 6 8 0.2  ED 220KV-MUZAFFARPUR - DHALKEBAR 168 2 55 1.3	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA With SR) BHANRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI  Region  ER  ER  ER  NER	1	0 107 72 0 0 108 1839 545 960 0 1 1 NATIONAL EXCHA Name  IU-ALIPURDUAR 1&2 CEIPT (from 9*180MV) URI 1;2,4 (& 400kV RR) & 400kV RR) RAP (6*170MW) PARA 1&2 (& 220kV A) i.e. BIRPAR (A) i.e. BIRPAR (KHA HEP 4*84MW) 1- SALAKATI	0 105 0 20 0 0 WR-NR 16 1340 0 0 0 0 0 WR-SR NGES Max (MW) 765 1061 353	0.0 0.0 0.7 1.4 0.0 0.0 0.0 36.9 0.0 17.4 0.0 14.8 0.0 0.0 32.2  Min (MW) 581	1.5 1.8 0.0 0.0 0.0 0.0 0.0 1.5.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1.5 -1.8 -1.7 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4 -15.4 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -0.0 -0.0 -17.4 -5.2 -7.7 -7.7
NEPAL ER 132KV-BIHAR - NEPAL 79 6 8 0.2  ED 220KV-MUZAFFARPUR - DHALKEBAR 168 3 55 1.3	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA WITH SRI BHANRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-KUDGI ROLHAPUR-CHIKODI PONDA-AMBEWADI REGION ER ER ER  ER  NER	1	0	0 105 0 20 0 0 WR-NR 816 0 0 366 1340 0 0 0 0 0 WR-SR NGES Max (MW) 765 1061 353 64	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 17.4 0.0 14.8 0.0 0.0 32.2  Min (MW) 581	1.5 1.8 0.0 0.0 0.0 0.0 0.0 1.5.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1.5 -1.8 -1.8 -1.7 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4 -15.4 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -0.0 -0.0 -17.4 -8.2 -1.4 -8.2 -1.5 -1.2 -1.5
ED 220KV-MUZAFFARPUR - DHALKEBAR 168 2 55 13	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA WITH SRI BHANRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-KUDGI ROLHAPUR-CHIKODI PONDA-AMBEWADI REGION ER ER ER  ER  NER	1	0	0 105 0 20 0 0 WR-NR 816 0 0 366 1340 0 0 0 0 0 WR-SR NGES Max (MW) 765 1061 353 64	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 17.4 0.0 14.8 0.0 0.0 32.2  Min (MW) 581	1.5 1.8 0.0 0.0 0.0 0.0 0.0 1.5.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1.5 -1.8 -1.8 -1.7 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4 -15.4 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -0.0 -0.0 -17.4 -8.2 -1.4 -8.2 -1.5 -1.2 -1.5
ED 220KV-MUZAFFARPUR - DHALKEBAR 168 2 55 13	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 765 kV 400 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA WITH SRI BHANRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-KUDGI ROLHAPUR-CHIKODI PONDA-AMBEWADI REGION ER ER ER  ER  NER	1	0	0 105 0 20 0 0 WR-NR 816 0 0 366 1340 0 0 0 0 0 WR-SR NGES Max (MW) 765 1061 353 64	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 17.4 0.0 14.8 0.0 0.0 32.2  Min (MW) 581	1.5 1.8 0.0 0.0 0.0 0.0 0.0 1.5.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1.5 -1.8 -1.8 -1.7 -1.8 -0.7 -1.4 -0.0 -0.0 -192.4 -15.4 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -0.0 -0.0 -17.4 -5.2 -1.5 -1.2 -1.5
	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI  Region  ER  ER  ER  NER  NER	I I I I I I I I I I I I I I I I I I I	0	0 105 0 20 0 0 WR-NR 816 0 366 1340 0 0 0 0 0 WR-SR NGES Max (MW) 765 1061 353 64 7158	0.0 0.0 0.7 1.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 17.4 0.0 17.4 0.0 0.0 32.2  Min (MW)  581  1053	1.5 1.8 0.0 0.0 0.0 0.0 0.0 229.4  15.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 23.7  Avg (MW)  723  1056  321 -52 -61	-1.5 -1.8 -1.8 -1.7 -1.8 -1.7 -1.8 -0.7 -1.4 -0.0 -192.4 -15.4 -15.4 -8.2 -15.4 -8.2 -14.8 -0.0 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -17.4 -1.2 -1.5 -0.8
	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI  Region  ER  ER  ER  NER  NER	I I I I I I I I I I I I I I I I I I I	0	0 105 0 20 0 0 WR-NR 816 0 366 1340 0 0 0 0 0 WR-SR NGES Max (MW) 765 1061 353 64 7158	0.0 0.0 0.7 1.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 17.4 0.0 17.4 0.0 0.0 32.2  Min (MW)  581  1053	1.5 1.8 0.0 0.0 0.0 0.0 0.0 229.4  15.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 23.7  Avg (MW)  723  1056  321 -52 -61	-1.5 -1.8 -1.8 -1.7 -1.8 -1.7 -1.8 -0.7 -1.4 -0.0 -192.4 -15.4 -15.4 -8.2 -15.4 -8.2 -14.8 -0.0 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -17.4 -1.2 -1.5 -0.8
	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI  Region  ER  ER  ER  NER  NER	I I I I I I I I I I I I I I I I I I I	0	0 105 0 20 0 0 WR-NR 816 0 366 1340 0 0 0 0 0 WR-SR NGES Max (MW) 765 1061 353 64 7158	0.0 0.0 0.7 1.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 17.4 0.0 17.4 0.0 0.0 32.2  Min (MW)  581  1053	1.5 1.8 0.0 0.0 0.0 0.0 0.0 229.4  15.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 23.7  Avg (MW)  723  1056  321 -52 -61	-1.5 -1.8 -1.8 -1.7 -1.8 -1.7 -1.8 -0.7 -1.4 -0.0 -192.4 -15.4 -15.4 -8.2 -15.4 -8.2 -14.8 -0.0 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -17.4 -1.2 -1.5 -0.8
	16 17 18 19 Import 1 2 3 4 5 6 7	220 kV 220 kV 132 kV 132 kV 132 kV 14/Export of WR ( HVDC 765 kV 400 kV 220 kV 220 kV 220 kV	BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA MALANPUR-AURAIYA With SR) BHADRAWATI B/B RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI ROLHAPUR-AMBEWADI  Region  ER  ER  NER  NER  NER	I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	0 105 0 20 0 WR-NR 105 0 0 0 WR-NR 166 1340 0 0 0 WR-SR NGES Max (MW) 765 1061 353 64 71	0.0 0.0 0.7 1.4 0.0 0.0 36.9 0.0 0.0 17.4 0.0 14.8 0.0 0.0 32.2  Min (MW)  581  1053  0  49	1.5 1.8 0.0 0.0 0.0 0.0 0.0 229.4  15.4 0.0 0.0 8.2 0.0 0.0 0.0 0.0 23.7  Avg (MW)  723  1056  321  -52  -61	-1.5 -1.8 -1.8 -1.7 -1.8 -1.7 -1.4 -0.0 -192.4 -15.4 -0.0 -17.4 -8.2 -14.8 -0.0 -0.0 -17.4 -8.5  Energy Exchange (MII) -17.4 -25.3 -7.7 -1.2 -1.5 -0.8

	ER	BHERAMARA HVDC(BANGLADESH)	-956	-950	-952	-22.8
BANGLADESH	NED	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-1	65	0	-60	-1.4
	NED	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-2	65	0	-60	-1.4