

# National Load Despatch Centre राष्ट्रीय भार प्रेषण केंद्र

## POWER SYSTEM OPERATION CORPORATION LIMITED पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

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

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 04<sup>th</sup>Aug 2019

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. मुख्य महाप्रबंधक, ऊ. पू. क्षे. भा. प्रे. के., डोंगतिएह, लोअर नोंग्रह , लापलंग, शिलोंग 793006 Chief General Manager, 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 03.08.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 03-अगस्त-2019 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा॰भा॰प्रे॰के॰ की वेबसाइट पर उप्लब्ध है |

As per article 5.5.1 of the Indian Electricity Grid Code, the daily report pertaining power supply position of All India Power System for the date 3<sup>rd</sup> August 2019, is available at the NLDC website.

धन्यवाद,

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

Date of Reporting Report for previous day 4-Aug-19

#### 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)	54130	42290	37586	21630	2842	158478
Peak Shortage (MW)	1569	37	0	400	160	2166
Energy Met (MU)	1215	951	869	474	54	3564
Hydro Gen (MU)	332	23	61	137	30	583
Wind Gen (MU)	16	131	191			339
Solar Gen (MU)*	20.69	13.4	49.06	2.17	0.05	85
Energy Shortage (MU)	13.7	0.1	0.0	1.2	1.1	16.1
Maximum Demand Met during the day	56989	43587	38239	22541	2899	160836
(MW) & time (from NLDC SCADA)	22:18	19:33	09:26	23:18	19:50	19:32

B. Frequency Profile (%)
Region
All India FVI <49.7 49.7-49.8 49.8-49.9 <49.9 49.9-50.05 > 50.05 0.035 12.12

Region	States	Max. Demand Met during the day (MW)	Shortage during maximum Demand (MW)	Energy Met (MU)	Drawal Schedule (MU)	OD(+)/UD(-) (MU)	Max OD (MW)	Energy Shortage (MU
	Punjab	9118	0	207.1	135.0	-1.7	72	0.0
	Haryana	8534	0	182.9	152.1	-0.8	134	0.0
	Rajasthan	8419	0	189.7	60.6	-2.5	414	0.0
	Delhi	5444	0	112,2	94.2	0.9	322	0.0
NR	UP	20726	0	407.9	195.1	-0.7	916	3.8
	Uttarakhand	1783	0	39.8	15.1	0.0	143	0.0
	HP	1423	0	28.8	-2.5	-0.2	114	0.0
	J&K	2073	518	41.7	19.4	2.7	348	10.0
	Chandigarh	242	0	5.2	5.6	-0.5	42	0.0
	Chhattisgarh	3818	0	87.5	23.5	0.5	278	0.1
	Gujarat	12557	0	276.7	42.3	1.1	390	0.0
	MP	8335	0	187.9	94.5	0.4	634	0.0
WR	Maharashtra	16601	0	356.6	97.0	0.2	534	0.0
WK	Goa	541	0	11.8	10.5	0.7	42	0.0
	DD	309	0	7.1	6.8	0.3	35	0.0
	DNH	771	0	17.9	18.1	-0.2	36	0.0
	Essar steel	319	0	6.0	6.0	0.0	332	0.0
	Andhra Pradesh	6796	0	153.3	2.4	-1.0	392	0.0
	Telangana	6898	0	144.5	54.3	0.8	541	0.0
SR	Karnataka	9539	0	179.9	28.7	-0.6	516	0.0
3K	Kerala	3511	0	72.1	59.7	3.2	295	0.0
	Tamil Nadu	13742	0	311.5	139.4	1.3	715	0.0
	Pondy	374	0	8.0	8.1	-0.1	42	0.0
	Bihar	5592	0	109.1	106.2	0.0	100	0.0
	DVC	2901	0	62.3	-33.1	-0.9	200	0.0
ER	Jharkhand	1173	0	24.8	16.4	0.0	120	0.0
LIX	Odisha	4648	0	97.6	37.5	8.9	650	1.2
	West Bengal	8752	0	178.9	82.2	0.8	250	0.0
	Sikkim	76	0	0.8	1.3	-0.4	5	0.0
	Arunachal Pradesh	130	3	2,2	3.0	-0.7	36	0.0
	Assam	1800	102	34.3	28.1	1.0	187	1.0
	Manipur	171	3	2.7	2.4	0.3	29	0.1
NER	Meghalaya	313	0	5.7	0.4	-0.3	69	0.0
	Mizoram	88	1	1.8	1.2	0.3	42	0.0
	Nagaland	132	2	2.3	2.1	-0.2	45	0.0
	Tripura	285	7	5.4	4.4	0.2	57	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	42.5	-4.2	-26.0
Day peak (MW)	1924.9	-367.5	-1132.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	296.3	-291.6	12.9	-10.1	-6.9	0.7
Actual(MU)	297.3	-316.0	20.1	3.3	-6.1	-1.4
O/D/U/D(MU)	1.0	-24.4	7.2	13.4	0.8	-2.1

#### F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	5376	18018	9422	3125	365	36306
State Sector	10675	20013	9780	6810	50	47327
Total	16051	38030	19202	9935	415	83633

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	483	1007	390	353	8	2241
Lignite	14	12	50	0	0	76
Hydro	332	23	61	137	30	583
Nuclear	27	31	60	0	0	119
Gas, Naptha & Diesel	30	39	16	0	29	113
RES (Wind, Solar, Biomass & Others)	53	155	280	2	0	490
Total	940	1266	857	493	66	3622

Share of RES in total generation (%)	5.67	12.22	32.61	0.44	0.08	13.52
Share of Non-fossil fuel (Hydro, Nuclear and	12 97	16.53	46.79	29.27	44.98	32.90
RES) in total generation (%)	43.87	10.55	46.78	20.27	44.98	32.90

H. Diversity Factor All India Demand Diversity Factor

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

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

		<u>IN</u>	TER-REGI	ONAL EXCHA	ANGES	Date of I	Reporting :	4-Aug-19
								Import=(+ve) /Export =(-ve) for NET (MU)
Sl No	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
Import/I		ER (With NR)						
1	765kV	GAYA-VARANASI	D/C	258	100	1.4	0.0	1.4
3	/03KV	SASARAM-FATEHPUR GAYA-BALIA	S/C S/C	312 0	386	4.1 0.0	5.8	4.1 -5.8
4	HVDC	ALIPURDUAR-AGRA	-	0	1703	0.0	40.5	-40.5
5	HVDC	PUSAULI B/B	S/C	0	397	0.0	7.6	-7.6
6		PUSAULI-VARANASI	S/C	0	304	0.0	5.6	-5.6
7	-	PUSAULI -ALLAHABAD	S/C	0	141	0.0	1.8	-1.8
9	400 kV	MUZAFFARPUR-GORAKHPUR PATNA-BALIA	D/C O/C	69	483 582	0.0	4.5	-4.5 -11.1
10	400 K	BIHARSHARIFF-BALIA	D/C	0	294	0.0	4.2	-4.2
11	1	MOTIHARI-GORAKHPUR	D/C	0	213	0.0	3.8	-3.8
12	1	BIHARSHARIFF-VARANASI	D/C	257	0	3.5	0.0	3.5
13	220 kV	PUSAULI-SAHUPURI	S/C	33	184	0.0	3.2	-3.2
14		SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	30	0	0.4	0.0	0.4
16		KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0
17		KARMANASA-CHANDAULI	S/C	0	0	0.0	0.0	0.0
Import/I	Export of	ER (With WR)			ER-NR	9.4	88.1	-78.7
-	Aport Ol			***				
18	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	2384	0	40.6	0.0	40.6
19	, 05 RV	NEW RANCHI-DHARAMJAIGARH	D/C	1494	0	28.4	0.0	28.4
20		JHARSUGUDA-DURG JHARSUGUDA-RAIGARH	D/C Q/C	503 577	0	8.7 8.9	0.0	8.7 8.9
22	400 kV	RANCHI-SIPAT	D/C	543	0	10.4	0.0	10.4
23	220 1 77	BUDHIPADAR-RAIGARH	S/C	30	56	0.0	0.4	-0.4
24	220 kV	BUDHIPADAR-KORBA	D/C	264	0	5.3	0.0	5.3
					ER-WR	102.2	0.4	101.8
_	· -	ER (With SR)						_
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	1562.0	0.0	21.9	-21.9
26	HVDC LINK	JEYPORE-GAZUWAKA B/B	D/C	497.0	0.0	10.7	0.0	10.7
27	1	TALCHER-KOLAR BIPOLE	D/C	0.0	991.0 427.0	0.0	0.0	-15.1 0.3
28	400 kV 220 kV	TALCHER-I/C BALIMELA-UPPER-SILERRU	D/C S/C	427.0 1.0	0.0	0.0	0.0	0.0
2)	220 K Y	BALIMELY OF FER-SILERKO	5/0	1.0	ER-SR	10.7	37.0	-26.4
Import/I	Export of	ER (With NER)						
30	400 kV	BINAGURI-BONGAIGAON	D/C	0	845	0.0	13.1	-13
31	400 K V	ALIPURDUAR-BONGAIGAON	D/C	211	270	0.5	0.0	0
32	220 kV	ALIPURDUAR-SALAKATI	D/C	0	104	0.0	1.0	-1
T /T	? <b>6</b>	NED (WALNE)			ER-NER	0.5	14.1	-13.7
33	HVDC	NER (With NR) BISWANATH CHARIALI-AGRA		0	1004	0.0	22.6	-22.6
33	HVDC	BISWANATH CHARLALFAGRA		0	NER-NR	0.0	22.6	-22.6
Import/I	Export of	WR (With NR)						
34		CHAMPA-KURUKSHETRA	D/C	0	2503	0.0	47.3	-47.3
35	HVDC	V'CHAL B/B	D/C	452	0	0.0	0.0	0.0
36		APL -MHG	D/C	0	1734	0.0	37.7	-37.7
37		GWALIOR-AGRA	D/C	0	2539	0.0	43.6	-43.6
38	1	PHAGI-GWALIOR	D/C	0	1005	0.0	17.0	-17.0
39	765 kV	JABALPUR-ORAI	D/C	242	1028	0.0	36.9	-36.9
40	1	GWALIOR-ORAI SATNA-ORAI	S/C S/C	342 0	1340	6.8 0.0	0.0 27.5	6.8 -27.5
	1	CHITTORGARH-BANASKANTHA	D/C	0	969	0.0	8.9	-27.5 8.9
42			S/C	43		0.0	1.8	-1.7
42		ZERDA-KANKROLI			192			-2.8
		ZERDA-KANKROLI ZERDA -BHINMAL	S/C	232	261	0.2	2.9	
43	400 kV			232 479	+		2.9 0.0	11.2
43 44	400 kV	ZERDA -BHINMAL	S/C		261	0.2		
43 44 45	400 kV	ZERDA -BHINMAL V'CHAL -RIHAND	S/C S/C	479	261 0	0.2 11.2	0.0	11.2
43 44 45 46	-	ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR	S/C S/C D/C	479 160	261 0 337	0.2 11.2 0	0.0	11.2 -1
43 44 45 46 47 48 49	400 kV	ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA	S/C S/C D/C S/C S/C S/C	479 160 59 6 93	261 0 337 68 128	0.2 11.2 0 0.1 0.0 1.0	0.0 1 0.5 1.2 0.0	11.2 -1 -0.4 -1.2 1.0
43 44 45 46 47 48 49 50	- 220 kV	ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA	S/C S/C D/C S/C S/C S/C S/C	479 160 59 6 93 55	261 0 337 68 128 0	0.2 11.2 0 0.1 0.0 1.0 0.3	0.0 1 0.5 1.2 0.0 0.1	11.2 -1 -0.4 -1.2 1.0
43 44 45 46 47 48 49	-	ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA	S/C S/C D/C S/C S/C S/C	479 160 59 6 93	261 0 337 68 128 0 20	0.2 11.2 0 0.1 0.0 1.0 0.3	0.0 1 0.5 1.2 0.0 0.1 0.0	11.2 -1 -0.4 -1.2 1.0 0.2 0.0
43 44 45 46 47 48 49 50 51	220 kV	ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	S/C S/C D/C S/C S/C S/C S/C	479 160 59 6 93 55	261 0 337 68 128 0	0.2 11.2 0 0.1 0.0 1.0 0.3	0.0 1 0.5 1.2 0.0 0.1	11.2 -1 -0.4 -1.2 1.0
43 44 45 46 47 48 49 50 51	220 kV 132kV Export of	ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR)	S/C S/C D/C S/C S/C S/C S/C	479 160 59 6 93 55 0	261 0 337 68 128 0 20 0 WR-NR	0.2 11.2 0 0.1 0.0 1.0 0.3 0.0 19.5	0.0 1 0.5 1.2 0.0 0.1 0.0 226.9	11.2 -1 -0.4 -1.2 1.0 0.2 0.0 -189.5
43 44 45 46 47 48 49 50 51	220 kV	ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B	S/C S/C D/C S/C S/C S/C S/C S/C	479 160 59 6 93 55	261 0 337 68 128 0 20	0.2 11.2 0 0.1 0.0 1.0 0.3	0.0 1 0.5 1.2 0.0 0.1 0.0	11.2 -1 -0.4 -1.2 1.0 0.2 0.0
43 44 45 46 47 48 49 50 51 <b>Import/F</b>	220 kV 132kV Export of HVDC LINK	ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR)	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C -	479 160 59 6 93 55 0	261 0 337 68 128 0 20 0 WR-NR	0.2 11.2 0 0.1 0.0 1.0 0.3 0.0 19.5	0.0 1 0.5 1.2 0.0 0.1 0.0 226.9	11.2 -1 -0.4 -1.2 1.0 0.2 0.0 -189.5
43 44 45 46 47 48 49 50 51 <b>Import/F</b> 52 53	220 kV 132kV Export of HVDC	ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU	S/C S/C D/C S/C S/C S/C S/C S/C S/C	479 160 59 6 93 55 0	261 0 337 68 128 0 20 0 WR-NR	0.2 11.2 0 0.1 0.0 1.0 0.3 0.0 19.5	0.0 1 0.5 1.2 0.0 0.1 0.0 226.9	11.2 -1 -0.4 -1.2 1.0 0.2 0.0 -189.5
43 44 45 46 47 48 49 50 51  Import/F 52 53 54	220 kV 132kV Export of HVDC LINK	ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C	479 160 59 6 93 55 0	261 0 337 68 128 0 20 0 WR-NR 207 0 1207	0.2 11.2 0 0.1 0.0 1.0 0.3 0.0 19.5	0.0 1 0.5 1.2 0.0 0.1 0.0 226.9	11.2 -1 -0.4 -1.2 1.0 0.2 0.0 -189.5 0.0 0.0 -0.9
43 44 45 46 47 48 49 50 51  Import/F 52 53 54 55	220 kV 132kV Export of HVDC LINK - 765 kV	ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	479 160 59 6 93 55 0 0 0 696 696 0 743 0	261 0 337 68 128 0 20 0 WR-NR 207 0 1207 1350 0	0.2 11.2 0 0.1 0.0 1.0 0.3 0.0 19.5 0.0 0.0 0.0 0.0 0.0 0.0	0.0 1 0.5 1.2 0.0 0.1 0.0 226.9 0.0 0.0 4.3	11.2 -1 -0.4 -1.2 1.0 0.2 0.0 -189.5 0.0 0.0 -0.9 -14.4 10.0 0.0
43 44 45 46 47 48 49 50 51  Import/R 52 53 54 55	220 kV 132kV Export of HVDC LINK - 765 kV	ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	479 160 59 6 93 55 0 0 0 696 0 743	261 0 337 68 128 0 20 0 WR-NR	0.2 11.2 0 0.1 0.0 1.0 0.3 0.0 19.5 0.0 0.0 3.3 0.0 10.0	0.0 1 0.5 1.2 0.0 0.1 0.0 226.9 0.0 0.0 4.3 14.4 0.0	11.2 -1 -0.4 -1.2 1.0 0.2 0.0 -189.5  0.0 0.0 -0.9 -14.4 10.0
43 44 45 46 47 48 49 50 51  Import/F 52 53 54 55 56 57	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	479 160 59 6 93 55 0 0 0 696 696 0 743 0	261 0 337 68 128 0 20 0 WR-NR 207 0 1207 1350 0	0.2 11.2 0 0.1 0.0 1.0 0.3 0.0 19.5 0.0 0.0 0.0 0.0 0.0 0.0	0.0 1 0.5 1.2 0.0 0.1 0.0 226.9 0.0 0.0 4.3 14.4 0.0 0.0	11.2 -1 -0.4 -1.2 1.0 0.2 0.0 -189.5 0.0 0.0 -0.9 -14.4 10.0 0.0
43 44 45 46 47 48 49 50 51 <b>Import/F</b> 52 53 54 55 56 57	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	479 160 59 6 93 55 0 0 0 696 0 743 0	261 0 337 68 128 0 20 0 WR-NR  207 0 1207 1350 0 0 53	0.2 11.2 0 0.1 0.0 1.0 0.3 0.0 19.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 1 0.5 1.2 0.0 0.1 0.0 226.9 0.0 0.0 4.3 14.4 0.0 0.0 1.1	11.2 -1 -0.4 -1.2 1.0 0.2 0.0 -189.5 0.0 0.0 -0.9 -14.4 10.0 0.0 -1.1
43 44 45 46 47 48 49 50 51 <b>Import/F</b> 52 53 54 55 56 57	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	479 160 59 6 93 55 0 0 0 696 0 743 0	261 0 337 68 128 0 20 0 WR-NR  207 0 1207 0 1207 1350 0 0 WR-SR	0.2 11.2 0 0.1 0.0 1.0 0.3 0.0 19.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 1 0.5 1.2 0.0 0.1 0.0 226.9 0.0 0.0 4.3 14.4 0.0 0.0 1.1	11.2 -1 -0.4 -1.2 1.0 0.2 0.0 -189.5 0.0 0.0 -0.9 -14.4 10.0 0.0 -1.1
43 44 45 46 47 48 49 50 51 <b>Import/F</b> 52 53 54 55 56 57 58 59	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L-SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI BHUTAN	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	479 160 59 6 93 55 0 0 0 696 0 743 0 0	261 0 337 68 128 0 20 0 WR-NR  207 0 1207 0 1207 1350 0 0 WR-SR	0.2 11.2 0 0.1 0.0 1.0 0.3 0.0 19.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 1 0.5 1.2 0.0 0.1 0.0 226.9 0.0 0.0 4.3 14.4 0.0 0.0 1.1	11.2 -1 -0.4 -1.2 1.0 0.2 0.0 -189.5 0.0 0.0 -0.9 -14.4 10.0 0.0 -1.1 0.6 -5.8
43 44 45 46 47 48 49 50 51 <b>Import/E</b> 52 53 54 55 56 57 58 59	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	479 160 59 6 93 55 0 0 0 696 0 743 0 0	261 0 337 68 128 0 20 0 WR-NR  207 0 1207 0 1207 1350 0 0 WR-SR	0.2 11.2 0 0.1 0.0 1.0 0.3 0.0 19.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 1 0.5 1.2 0.0 0.1 0.0 226.9 0.0 0.0 4.3 14.4 0.0 0.0 1.1	11.2 -1 -0.4 -1.2 1.0 0.2 0.0 -189.5 0.0 0.0 -0.9 -14.4 10.0 0.0 -1.1 0.6 -5.8