

National Load Despatch Centre राष्ट्रीय भार प्रेषण केंद्र

POWER SYSTEM OPERATION CORPORATION LIMITED पाँवर 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: 27th June 2019

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. मुख्य महाप्रबंधक, ऊ. पू. क्षे. भा. प्रे. के., डोंगतिएह, लोअर नोंग्रह, लापलंग, शिलोंग ७९३००६ Chief General Manager, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
- 5. कार्यकारी निदेशक , द .क्षे .भा .प्रे .के., २९ , रेस कोर्स क्रॉस रोड, बंगलुरु –५६०००९ Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 26.06.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 26-जून-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 26th June 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 27-Jun-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)	60446	47082	40660	21073	2608	171869
Peak Shortage (MW)	842	0	0	0	251	1093
Energy Met (MU)	1423	1118	952	470	47	4011
Hydro Gen (MU)	358	10	32	93	18	511
Wind Gen (MU)	19	54	171			244
Solar Gen (MU)*	27.79	19.29	67.37	1.97	0.03	116
Energy Shortage (MU)	10.9	0.0	0.0	0.0	4.6	15.4
Maximum Demand Met during the day	63809	50199	41038	22826	2620	177100
(MW) & time (from NLDC SCADA)	22:28	12:22	19:50	03:30	19:12	22:28

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 0.034 30.91

C.	Power	Supply	Position	in States

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	12478	0	274.1	134.3	-2.3	180	0.0
	Haryana	10029	0	219.4	151.8	0.2	211	0.0
	Rajasthan	11164	0	248.5	74.0	0.9	463	0.0
	Delhi	6553	0	135.1	114.5	-0.3	245	0.0
NR	UP	19963	1130	416.9	187.8	2.4	570	0.0
	Uttarakhand	2115	0	46.5	16.5	1.0	150	0.0
	HP	1489	3	30.8	1.9	-0.2	64	0.0
	J&K	2151	538	45.8	21.2	-0.9	203	10.8
	Chandigarh	343	0	6.5	7.1	-0.6	-7	0.0
	Chhattisgarh	3883	0	90.5	37.5	-2.3	367	0.0
	Gujarat	14926	0	330.8	66.6	5.1	437	0.0
	MP	8395	0	192.8	103.4	-0.1	480	0.0
WR	Maharashtra	20395	0	458.8	133.7	0.4	909	0.0
WK	Goa	541	0	12.4	11.1	0.6	60	0.0
	DD	345	0	7.7	7.4	0.4	103	0.0
	DNH	812	0	18.9	19.1	-0.2	150	0.0
	Essar steel	330	0	6.0	5.9	0.1	287	0.0
	Andhra Pradesh	8246	0	179.0	19.0	-0.1	491	0.0
	Telangana	7316	0	162.2	41.7	-0.1	732	0.0
SR	Karnataka	10260	0	198.1	64.3	1.7	789	0.0
SK	Kerala	3730	0	74.2	61.3	2.0	339	0.0
	Tamil Nadu	14038	0	330.3	138.2	1.7	685	0.0
	Pondy	411	0	8.6	8.9	-0.3	(MW) 180 211 463 2245 570 150 64 203 -7 367 437 480 909 60 103 150 287 491 732 789 339 685 53 450 200 150 400 300 50 53 101 25 139 9	0.0
	Bihar	5399	0	99.1	97.1	-2.0	450	0.0
	DVC	3029	0	66.1	-42.8	0.6	200	0.0
ED	Jharkhand	1000	0	24.3	17.1	-1.7	150	0.0
EN	Odisha	5055	0	97.7	42.6	1.8	400	0.0
	West Bengal	9147	0	181.6	74.5	-0.6	300	0.0
	Sikkim	92	0	1.2	1.2	-0.1	50	0.0
	Arunachal Pradesh	132	2	2.3	2.6	-0.3	53	0.0
	Assam	1634	186	27.7	22.9	0.6	101	4.5
	Manipur	139	2	2.4	2.3	0.1	25	0.0
NER	Meghalaya	319	0	5.3	2.1	0.2	139	0.0
	Mizoram	95	0	1.8	1.5	0.1	9	0.0
ER NER	Nagaland	129	2	2.5	2.5	-0.1	26	0.0
	Tripura	283	1	5.1	4.7	0.2	89	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	21.8	-8.9	-26.1
Day peak (MW)	1545.3	-461.8	-1113.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	292.5	-282.0	-0.3	-9.0	-1.1	0.2
Actual(MU)	300.2	-282.0	8.7	-20.6	-2.0	4.3
O/D/U/D(MU)	7.8	0.0	8.9	-11.6	-1.0	4.1

F. Generation Outage(MW)

3	NR	WR	SR	ER	NER	Total
Central Sector	4451	14959	6792	2375	189	28766
State Sector	5945	13244	6120	3140	50	28499
Total	10396	28203	12912	5515	238	57265

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	638	1210	535	417	11	2811
Lignite	22	15	48	0	0	85
Hydro	358	10	32	93	18	511
Nuclear	27	31	54	0	0	112
Gas, Naptha & Diesel	36	52	13	0	28	128
RES (Wind, Solar, Biomass & Others)	63	79	276	2	0	420
Total	1143	1396	958	512	56	4066

Share of RES in total generation (%)	5.48	5.65	28.84	0.39	0.05	10.32
Share of Non-fossil fuel (Hydro, Nuclear and	39.15	8,59	37.83	18.55	31.24	25.64
RES) in total generation (%)	39.15	8.39	37.83	16.55	31.24	25.04

H. Diversity Factor
All India Demand Diversity Factor
Diversity factor = Sum of regional maximum demands / All India maximum demand

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

		<u>IN</u> ′	ΓER-REGI	ONAL EXCH	ANGES	Date of I	Reporting :	27-Jun-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/E		ER (With NR)						
1	765kV	GAYA-VARANASI	D/C	0	431	0.0	5.3	-5.3
3	705KV	SASARAM-FATEHPUR GAYA-BALIA	S/C S/C	0	116 445	0.0	1.8 8.3	-1.8 -8.3
4	HVDC	ALIPURDUAR-AGRA	-	0	703	0.0	16.0	-16.0
5	HVDC	PUSAULI B/B	S/C	0	198	0.0	4.8	-4.8
6		PUSAULI-VARANASI	S/C	0	205	0.0	3.9	-3.9
7		PUSAULI -ALLAHABAD	S/C	0	74	0.0	0.8	-0.8
9	400 kV	MUZAFFARPUR-GORAKHPUR PATNA-BALIA	D/C Q/C	0	800 804	0.0	11.3	-11.3 -11.7
10	400 K	BIHARSHARIFF-BALIA	D/C	1669	296	0.0	5.5	-5.5
11		MOTIHARI-GORAKHPUR	D/C	307	0	5.0	0.0	5.0
12		BIHARSHARIFF-VARANASI	D/C	341	103	0.9	0.0	0.9
13	220 kV	PUSAULI-SAHUPURI	S/C	0	204	0.0	3.5	-3.5
14		SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	30	0	0.5	0.0	0.5
16		KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0
17	I	KARMANASA-CHANDAULI	S/C	0	0 ER-NR	0.0 6.3	0.0	0.0
Import/F	xport of	ER (With WR)			rk-NK	6.3	72.8	-66.4
_		1	0/0	1,407	0	10.5	0.0	10.5
18	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1497	0	19.5	0.0	19.5
19 20		NEW RANCHI-DHARAMJAIGARH JHARSUGUDA-DURG	D/C D/C	1631 274	5	24.1 3.0	0.0	24.1 3.0
20	40.7	JHARSUGUDA-DURG JHARSUGUDA-RAIGARH	Q/C	621	0	8.6	0.0	8.6
22	400 kV	RANCHI-SIPAT	D/C	573	0	10.0	0.0	10.0
23	220 kV	BUDHIPADAR-RAIGARH	S/C	47	72	0.0	0.8	-0.8
24	220 KV	BUDHIPADAR-KORBA	D/C	244	0	4.0	0.0	4.0
					ER-WR	69.0	0.8	68.2
	· -	ER (With SR)	1					T
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	1387.0	0.0	15.1	-15.1
26 27	HVDC LINK	JEYPORE-GAZUWAKA B/B TALCHER-KOLAR BIPOLE	D/C D/C	0.0	576.0 1190.0	0.0	7.5 25.6	-7.5 -25.6
28	400 kV	TALCHER-I/C	D/C	785.0	0.0	6.0	0.0	6.0
29	220 kV	BALIMELA-UPPER-SILERRU	S/C	1.0	0.0	0.0	0.0	0.0
		•		**	ER-SR	0.0	48.2	-48.2
Import/E	xport of	ER (With NER)						
30	400 kV	BINAGURI-BONGAIGAON	D/C	0	461	0.0	6.7	-7
31	****	ALIPURDUAR-BONGAIGAON	D/C	186	237	0.0	0.7	-1
32	220 kV	ALIPURDUAR-SALAKATI	D/C	0	110 ER-NER	0.0	1.5 8.8	-1 -8.8
Import/F	xport of	NER (With NR)			ER-IVER	0.0	0.0	-0.0
33	HVDC	BISWANATH CHARIALI-AGRA	-	0	503	0.0	12.3	-12.3
		•			NER-NR	0.0	12.3	-12.3
Import/E	xport of	WR (With NR)						
34		CHAMPA-KURUKSHETRA	D/C	0	2510	0.0	59.7	-59.7
35	HVDC	V'CHAL B/B	D/C	228	253	1.1	2.5	-1.4
36		APL -MHG	D/C	0	1546	0.0	38.7	-38.7
37 38		GWALIOR-AGRA PHAGI-GWALIOR	D/C D/C	0	3036 1431	0.0	54.0 27.0	-54.0 -27.0
39		JABALPUR-ORAI	D/C D/C	0	1140	0.0	41.6	-27.0 -41.6
40	765 kV							
		GWALIOR-ORAI	S/C	694	0	10.8	0.0	10.8
41		SATNA-ORAI	S/C S/C	694				10.8 -32.1
41 42					0	10.8	0.0	
		SATNA-ORAI	S/C D/C S/C	0 146 75	0 1569 486 108	10.8 0.0 0.2 0.4	0.0 32.1 4.0 0.2	-32.1 3.8 0.2
42 43 44	400 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL	S/C D/C S/C S/C	0 146 75 170	0 1569 486 108 140	10.8 0.0 0.2 0.4 0.8	0.0 32.1 4.0 0.2 0.3	-32.1 3.8 0.2 0.5
42 43 44 45	400 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND	S/C D/C S/C S/C S/C	0 146 75 170 969	0 1569 486 108 140	10.8 0.0 0.2 0.4 0.8 22.1	0.0 32.1 4.0 0.2 0.3 0.0	-32.1 3.8 0.2 0.5 22.1
42 43 44 45 46	400 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR	S/C D/C S/C S/C S/C D/C	0 146 75 170 969 0	0 1569 486 108 140 0 454	10.8 0.0 0.2 0.4 0.8 22.1	0.0 32.1 4.0 0.2 0.3 0.0 3	-32.1 3.8 0.2 0.5 22.1
42 43 44 45 46 47	400 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR	S/C D/C S/C S/C S/C S/C S/C S/C S/C D/C S/C	0 146 75 170 969 0 30	0 1569 486 108 140 0 454	10.8 0.0 0.2 0.4 0.8 22.1 0	0.0 32.1 4.0 0.2 0.3 0.0 3 0.7	-32.1 3.8 0.2 0.5 22.1 -3 -0.6
42 43 44 45 46 47 48	400 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK	S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 146 75 170 969 0 30	0 1569 486 108 140 0 454 69	10.8 0.0 0.2 0.4 0.8 22.1 0 0.0 0.0	0.0 32.1 4.0 0.2 0.3 0.0 3 0.7 1.5	-32.1 3.8 0.2 0.5 22.1 -3 -0.6 -1.5
42 43 44 45 46 47		SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR	S/C D/C S/C S/C S/C S/C S/C S/C S/C D/C S/C	0 146 75 170 969 0 30	0 1569 486 108 140 0 454	10.8 0.0 0.2 0.4 0.8 22.1 0	0.0 32.1 4.0 0.2 0.3 0.0 3 0.7	-32.1 3.8 0.2 0.5 22.1 -3 -0.6
42 43 44 45 46 47 48 49		SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA	S/C D/C S/C S/C S/C S/C S/C D/C S/C S/C S/C S/C S/C	0 146 75 170 969 0 30 0	0 1569 486 108 140 0 454 69 106 32	10.8 0.0 0.2 0.4 0.8 22.1 0 0.0 0.0 0.1	0.0 32.1 4.0 0.2 0.3 0.0 3 0.7 1.5	-32.1 3.8 0.2 0.5 22.1 -3 -0.6 -1.5 0.0
42 43 44 45 46 47 48 49 50	220 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 146 75 170 969 0 30 0 38 8	0 1569 486 108 140 0 454 69 106 32 60	10.8 0.0 0.2 0.4 0.8 22.1 0 0.0 0.0 0.1	0.0 32.1 4.0 0.2 0.3 0.0 3 0.7 1.5 0.2	-32.1 3.8 0.2 0.5 22.1 -3 -0.6 -1.5 0.0 -0.7
42 43 44 45 46 47 48 49 50 51	220 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WARAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR)	S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 146 75 170 969 0 30 0 38 8 0	0 1569 486 108 140 0 454 69 106 32 60 0 WR-NR	10.8 0.0 0.2 0.4 0.8 22.1 0 0.0 0.0 0.1 0.0 0.0 35.6	0.0 32.1 4.0 0.2 0.3 0.0 3 0.7 1.5 0.2 0.7 0.0 266.0	-32.1 3.8 0.2 0.5 22.1 -3 -0.6 -1.5 0.0 -0.7 0.0 -222.8
42 43 44 45 46 47 48 49 50 51 Import/E	220 kV 132kV Export of HVDC	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI 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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 146 75 170 969 0 30 0 38 8 0	0 1569 486 108 140 0 454 69 106 32 60 0 WR-NR	10.8 0.0 0.2 0.4 0.8 22.1 0 0.0 0.0 0.1 0.0 0.0 35.6	0.0 32.1 4.0 0.2 0.3 0.0 3 0.7 1.5 0.2 0.7 0.0 266.0	-32.1 3.8 0.2 0.5 22.1 -3 -0.6 -1.5 0.0 -0.7 0.0 -222.8
42 43 44 45 46 47 48 49 50 51 Import/E 52	220 kV 132kV Export of	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI 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 D/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	0 146 75 170 969 0 30 0 38 8 0	0 1569 486 108 140 0 454 69 106 32 60 0 WR-NR	10.8 0.0 0.2 0.4 0.8 22.1 0 0.0 0.0 0.1 0.0 0.0 35.6	0.0 32.1 4.0 0.2 0.3 0.0 3 0.7 1.5 0.2 0.7 0.0 266.0	-32.1 3.8 0.2 0.5 22.1 -3 -0.6 -1.5 0.0 -0.7 0.0 -222.8
42 43 44 45 46 47 48 49 50 51 Import/E 52 53	220 kV 132kV Export of HVDC	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI 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	S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 146 75 170 969 0 30 0 38 8 0	0 1569 486 108 140 0 454 69 106 32 60 0 WR-NR	10.8 0.0 0.2 0.4 0.8 22.1 0 0.0 0.0 0.1 0.0 0.0 0.0 0.0	0.0 32.1 4.0 0.2 0.3 0.0 3 0.7 1.5 0.2 0.7 0.0 266.0	-32.1 3.8 0.2 0.5 22.1 -3 -0.6 -1.5 0.0 -0.7 0.0 -222.8
42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54	220 kV 132kV Export of HVDC LINK 765 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI 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	S/C D/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	0 146 75 170 969 0 30 0 38 8 0	0 1569 486 108 140 0 454 69 106 32 60 0 WR-NR	10.8 0.0 0.2 0.4 0.8 22.1 0 0.0 0.0 0.0 0.1 0.0 0.0 35.6	0.0 32.1 4.0 0.2 0.3 0.0 3 0.7 1.5 0.2 0.7 0.0 266.0	-32.1 3.8 0.2 0.5 22.1 -3 -0.6 -1.5 0.0 -0.7 0.0 -222.8 -7.9 0.0 8.7 -4.1
42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55	220 kV 132kV Export of HVDC LINK	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI 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 KOLHAPUR-KUDGI	S/C D/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	0 146 75 170 969 0 30 0 38 8 0	0 1569 486 108 140 0 454 69 106 32 60 0 WR-NR	10.8 0.0 0.2 0.4 0.8 22.1 0 0.0 0.0 0.1 0.0 0.0 35.6	0.0 32.1 4.0 0.2 0.3 0.0 3 0.7 1.5 0.2 0.7 0.0 266.0 7.9 0.0 1.8 7.8	-32.1 3.8 0.2 0.5 22.1 -3 -0.6 -1.5 0.0 -0.7 0.0 -222.8 -7.9 0.0 8.7 -4.1 20.4
42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54	220 kV 132kV Export of HVDC LINK 765 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI 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	S/C D/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	0 146 75 170 969 0 30 0 38 8 0	0 1569 486 108 140 0 454 69 106 32 60 0 WR-NR	10.8 0.0 0.2 0.4 0.8 22.1 0 0.0 0.0 0.0 0.1 0.0 0.0 35.6	0.0 32.1 4.0 0.2 0.3 0.0 3 0.7 1.5 0.2 0.7 0.0 266.0	-32.1 3.8 0.2 0.5 22.1 -3 -0.6 -1.5 0.0 -0.7 0.0 -222.8 -7.9 0.0 8.7 -4.1
42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-LSILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 146 75 170 969 0 30 0 38 8 0	0 1569 486 108 140 0 454 69 106 32 60 0 WR-NR	10.8 0.0 0.2 0.4 0.8 22.1 0 0.0 0.0 0.1 0.0 0.0 35.6	0.0 32.1 4.0 0.2 0.3 0.0 3 0.7 1.5 0.2 0.7 0.0 266.0 7.9 0.0 1.8 7.8 0.0 0.0	-32.1 3.8 0.2 0.5 22.1 -3 -0.6 -1.5 0.0 -0.7 0.0 -222.8 -7.9 0.0 8.7 -4.1 20.4 0.0
42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI 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 D/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	0 146 75 170 969 0 30 0 38 8 0	0 1569 486 108 140 0 454 69 106 32 60 0 WR-NR 502 0 812 1242 1318 0	10.8 0.0 0.2 0.4 0.8 22.1 0 0.0 0.0 0.0 0.1 0.0 0.0 35.6	0.0 32.1 4.0 0.2 0.3 0.0 3 0.7 1.5 0.2 0.7 0.0 266.0 7.9 0.0 1.8 7.8 0.0 0.0 1.2	-32.1 3.8 0.2 0.5 22.1 -3 -0.6 -1.5 0.0 -0.7 0.0 -222.8 -7.9 0.0 8.7 -4.1 20.4 0.0 -1.2
42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI 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 D/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	0 146 75 170 969 0 30 0 38 8 0	0 1569 486 108 140 0 454 69 106 32 60 0 WR-NR 502 0 812 1242 1318 0 75 42 WR-SR	10.8 0.0 0.2 0.4 0.8 22.1 0 0.0 0.0 0.0 0.1 0.0 0.0 35.6 0.0 0.0 10.5 3.7 20.5 0.0 0.0 0.7	0.0 32.1 4.0 0.2 0.3 0.0 3 0.7 1.5 0.2 0.7 0.0 266.0 7.9 0.0 1.8 7.8 0.0 0.0 1.2 0.0	-32.1 3.8 0.2 0.5 22.1 -3 -0.6 -1.5 0.0 -0.7 0.0 -222.8 -7.9 0.0 8.7 -4.1 20.4 0.0 -1.2 0.7
42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI 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 D/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	0 146 75 170 969 0 30 0 38 8 0 0 0 1493 976 1391 0 0	0 1569 486 108 140 0 454 69 106 32 60 0 WR-NR 502 0 812 1242 1318 0 75 42 WR-SR	10.8 0.0 0.2 0.4 0.8 22.1 0 0.0 0.0 0.0 0.1 0.0 0.0 35.6 0.0 0.0 10.5 3.7 20.5 0.0 0.0 0.7	0.0 32.1 4.0 0.2 0.3 0.0 3 0.7 1.5 0.2 0.7 0.0 266.0 7.9 0.0 1.8 7.8 0.0 0.0 1.2 0.0	-32.1 3.8 0.2 0.5 22.1 -3 -0.6 -1.5 0.0 -0.7 0.0 -222.8 -7.9 0.0 8.7 -4.1 20.4 0.0 -1.2 0.7
42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI 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 KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	S/C D/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	0 146 75 170 969 0 30 0 38 8 0 0 0 1493 976 1391 0 0	0 1569 486 108 140 0 454 69 106 32 60 0 WR-NR 502 0 812 1242 1318 0 75 42 WR-SR	10.8 0.0 0.2 0.4 0.8 22.1 0 0.0 0.0 0.0 0.1 0.0 0.0 35.6 0.0 0.0 10.5 3.7 20.5 0.0 0.0 0.7	0.0 32.1 4.0 0.2 0.3 0.0 3 0.7 1.5 0.2 0.7 0.0 266.0 7.9 0.0 1.8 7.8 0.0 0.0 1.2 0.0	-32.1 3.8 0.2 0.5 22.1 -3 -0.6 -1.5 0.0 -0.7 0.0 -222.8 -7.9 0.0 8.7 -4.1 20.4 0.0 -1.2 0.7 16.6