

## 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: 31<sup>th</sup> May 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 30.05.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-२०१० की धारा स.-5.5.१ के प्रावधान के अनुसार, दिनांक ३०-मई-२०१९ 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 30<sup>th</sup> May 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 31-May-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)	56513	51494	43549	20641	2601	174798
Peak Shortage (MW)	560	0	0	0	168	728
Energy Met (MU)	1347	1263	1018	472	46	4145
Hydro Gen (MU)	276	19	52	75	15	435
Wind Gen (MU)	14	104	74			192
Solar Gen (MU)*	25.05	25.42	75.67	1.13	0.04	127
Energy Shortage (MU)	11.7	0.0	0.0	0.0	1.9	13.6
Maximum Demand Met during the day	60393	57102	45295	21868	2570	182610
(MW) & time (from NLDC SCADA)	22:23	14:59	14:58	00:00	20:13	14:58

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 0.043

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	8115	0	183.6	83.4	-1.2	61	0.0
	Haryana	8803	20	185.9	118.6	0.4	159	0.6
	Rajasthan	11668	0	250.0	67.0	-1.1	206	0.0
	Delhi	6207	0	128.1	106.5	0.7	290	0.1
NR	UP	21493	0	469.0	210.6	0.7	839	0.0
	Uttarakhand	2101	0	46.7	22.9	0.2	327	0.0
	HP	1391	0	30.3	7.1	0.8	214	0.0
	J&K	2247	562	47.0	25.7	0.5	439	11.0
	Chandigarh	308	0	6.0	6.7	-0.7	95	0.0
	Chhattisgarh	3927	0	88.6	38.6	-1.3	285	0.0
	Gujarat	18062	0	394.1	90.4	5.8	513	0.0
	MP	9782	0	226.4	104.8	0.0	335	0.0
WR	Maharashtra	22774	0	509.6	130.5	-5.5	473	0.0
WK	Goa	541	0	12.3	11.5	0.3	29	0.0
	DD	344	0	7.5	7.2	0.3	39	0.0
	DNH	759	0	17.8	17.6	0.1	74	0.0
	Essar steel	334	0	6.4	6.4	0.1	180	0.0
	Andhra Pradesh	9026	0	183.2	56.0	0.8	628	0.0
	Telangana	8344	0	177.5	57.6	0.4	682	0.0
SR	Karnataka	10632	0	213.1	55.9	1.0	673	0.0
3N	Kerala	4216	0	85.1	61.0	1.8	331	0.0
	Tamil Nadu	15718	0	349.5	168.9	1.2	586	0.0
	Pondy	437	0	9.3	9.3	0.0	45	0.0
	Bihar	4734	0	92.4	89.8	-2.7	500	0.0
	DVC	3138	0	72.0	-42.7	4.2	400	0.0
ER	Jharkhand	1156	0	26.3	22.8	-1.9	150	0.0
LIV	Odisha	4629	0	91.6	34.8	0.7	415	0.0
	West Bengal	8932	0	189.0	68.1	1.4	320	0.0
	Sikkim	80	0	1.0	1.2	-0.2	40	0.0
	Arunachal Pradesh	116	1	2.1	1.9	0.2	47	0.0
	Assam	1618	112	27.0	22.4	0.9	130	1.5
	Manipur	179	1	2.5	2.0	0.5	37	0.0
NER	Meghalaya	313	0	4.9	3.0	0.0	65	0.3
	Mizoram	94	2	1.7	1.4	0.3	19	0.0
	Nagaland	124	2	2,2	2.1	-0.1	23	0.0
	Tripura	291	4	5.3	4.9	0.6	74	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	9.4	-8.4	-27.1
Day peak (MW)	583.1	-448.3	-1147.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	234.6	-284.5	90.1	-35.7	-4.5	-0.1
Actual(MU)	255.8	-300.3	97.5	-45.2	-3.2	4.7
O/D/U/D(MU)	21.2	-15.7	7.4	-9.5	1.3	4.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	3830	12566	6222	1950	327	24895
State Sector	6910	11295	3980	4090	50	26325
Total	10740	23861	10202	6040	377	51220

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	684	1320	580	477	11	3073
Lignite	24	14	45	0	0	83
Hydro	276	19	52	75	15	435
Nuclear	27	31	58	0	0	116
Gas, Naptha & Diesel	53	50	15	0	29	146
RES (Wind, Solar, Biomass & Others)	56	138	183	1	0	378
Total	1120	1572	932	553	55	4232

Share of RES in total generation (%)	5.01	8.80	19.59	0.21	0.07	8.94
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%)	32.04	11.95	31.34	13.69	27.40	21.96

H. Diversity Factor All India Demand Diversity Factor

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

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

		IN	TER-REGI	ONAL EXCH	ANGES			
						Date of 1	Reporting :	31-May-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)
	Export of	ER (With NR)	D/C	104	224	0.0	0.6	0.6
2	765kV	GAYA-VARANASI SASARAM-FATEHPUR	D/C S/C	104	324 158	0.0	0.6	-0.6 0.2
3	1	GAYA-BALIA	S/C	0	384	0.0	6.4	-6.4
4	HVDC	ALIPURDUAR-AGRA	-	0	504	0.0	12.4	-12.4
5		PUSAULI B/B	S/C	0	49	0.0	1.3	-1.3
7	_	PUSAULI-VARANASI PUSAULI-ALLAHABAD	S/C S/C	64	0	0.0	0.0	-2.0 1.1
- 8		MUZAFFARPUR-GORAKHPUR	D/C	0	704	0.0	10.0	-10.0
9	400 kV	PATNA-BALIA	Q/C	0	843	0.0	15.3	-15.3
10		BIHARSHARIFF-BALIA	D/C	0	373	0.0	7.3	-7.3
11		MOTIHARI-GORAKHPUR	D/C	0	395	0.0	6.8	-6.8
12		BIHARSHARIFF-VARANASI	D/C	134	98	0.0	0.1	-0.1
13	220 kV	PUSAULI-SAHUPURI	S/C	0	177	0.0	3.1	-3.1
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 KARMANASA-CHANDAULI	S/C S/C	0	0	0.0	0.0	0.0
17		KARMANASA-CHANDAULI	S/C	U	ER-NR	0.0 1.8	0.0	63.6
Import/F	Export of	ER (With WR)			rk-NK	1.0	65.3	-63.6
	-F 3. 4 OI	JHARSUGUDA-DHARAMJAIGARH	O/C	1000	0	20.2	0.0	20.2
18	765 kV		Q/C	1909		30.3	0.0	30.3
19 20		NEW RANCHI-DHARAMJAIGARH JHARSUGUDA-DURG	D/C D/C	1035 214	0	16.0 2.9	0.0	16.0 2.9
20	1	JHARSUGUDA-DURG JHARSUGUDA-RAIGARH	Q/C	450	0	7.9	0.0	7.9
22	400 kV	RANCHI-SIPAT	D/C	357	0	5.7	0.0	5.7
23	220 kV	BUDHIPADAR-RAIGARH	S/C	9	76	0.0	0.7	-0.7
24	220 KV	BUDHIPADAR-KORBA	D/C	180	0	3.2	0.0	3.2
					ER-WR	66.0	0.7	65.3
_	_	ER (With SR)						T
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	1821.0	0.0	26.2	-26.2
26 27	HVDC LINK	JEYPORE-GAZUWAKA B/B	D/C	0.0	428.0 1987.0	0.0	9.9 47.3	-9.9 -47.3
28	400 kV	TALCHER-KOLAR BIPOLE TALCHER-I/C	D/C D/C	312.0	336.0	0.0	5.4	-47.3
29	220 kV	BALIMELA-UPPER-SILERRU	S/C	1.0	0.0	0.0	0.0	0.0
					ER-SR	0.0	83.4	-83.4
Import/E	Export of	ER (With NER)			<u> </u>			.1
30	400 kV	BINAGURI-BONGAIGAON	D/C	0	412	0.0	5.6	-6
31	400 K Y	ALIPURDUAR-BONGAIGAON	D/C	225	153	0.4	0.0	0
32	220 kV	ALIPURDUAR-SALAKATI	D/C	30	78	0.0	0.7	-1
Immout/E	Ermout of	NER (With NR)			ER-NER	0.4	6.3	-5.9
33	HVDC	BISWANATH CHARIALI-AGRA	- 1	0	403	0.0	9.7	-9.7
33	пурс	DISWANATH CHARIALFAGRA		0	NER-NR	0.0	9.7	-9.7
Import/F	Export of	WR (With NR)						.1
34		CHAMPA-KURUKSHETRA	D/C	0	2506	0.0	47.3	-47.3
35	HVDC	V'CHAL B/B	D/C	362	0	8.9	0.0	8.9
36		APL -MHG	D/C	0	1637	0.0	0.00	27.0
37		GWALIOR-AGRA	D/C	0			37.9	-37.9
38	1	IDITACT CIVALION			2634	0.0	46.9	-46.9
	1	PHAGI-GWALIOR	D/C	0	988	0.0	46.9 18.1	-46.9 -18.1
39	765 kV	JABALPUR-ORAI	D/C D/C	0	988 899	0.0	46.9 18.1 30.9	-46.9 -18.1 -30.9
40	765 kV	JABALPUR-ORAI GWALIOR-ORAI	D/C D/C S/C	0 0 376	988 899 0	0.0 0.0 7.5	46.9 18.1 30.9 0.0	-46.9 -18.1 -30.9 7.5
40 41	765 kV	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI	D/C D/C S/C S/C	0 0 376 0	988 899 0 1495	0.0 0.0 7.5 0.0	46.9 18.1 30.9 0.0 30.0	-46.9 -18.1 -30.9 7.5 -30.0
40 41 42	765 kV	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA	D/C D/C S/C S/C D/C	0 0 376 0	988 899 0 1495 507	0.0 0.0 7.5 0.0 0.0	46.9 18.1 30.9 0.0 30.0 5.2	-46.9 -18.1 -30.9 7.5 -30.0 5.2
40 41	-	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI	D/C D/C S/C S/C S/C S/C S/C D/C	0 0 376 0 0 75	988 899 0 1495 507 45	0.0 0.0 7.5 0.0 0.0 0.5	46.9 18.1 30.9 0.0 30.0 5.2 0.1	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4
40 41 42 43	765 kV	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA	D/C D/C S/C S/C D/C	0 0 376 0	988 899 0 1495 507	0.0 0.0 7.5 0.0 0.0	46.9 18.1 30.9 0.0 30.0 5.2	-46.9 -18.1 -30.9 7.5 -30.0 5.2
40 41 42 43 44	-	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL	D/C D/C S/C S/C D/C S/C S/C S/C S/C	0 0 376 0 0 75 205	988 899 0 1495 507 45 91	0.0 0.0 7.5 0.0 0.0 0.5 0.6	46.9 18.1 30.9 0.0 30.0 5.2 0.1	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6
40 41 42 43 44 45	-	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND	D/C D/C S/C S/C D/C S/C S/C S/C S/C S/C S/C	0 0 376 0 0 75 205 903	988 899 0 1495 507 45 91	0.0 0.0 7.5 0.0 0.0 0.5 0.6 22.4	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6 22.4
40 41 42 43 44 45 46	400 kV	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR	D/C D/C S/C S/C D/C S/C S/C D/C S/C S/C D/C	0 0 376 0 0 75 205 903 70	988 899 0 1495 507 45 91 0 214	0.0 0.0 7.5 0.0 0.0 0.5 0.6 22.4	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0 0.0	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6 22.4 -1
40 41 42 43 44 45 46 47	-	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-KOTA	D/C D/C S/C S/C D/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	0 0 376 0 0 75 205 903 70 21	988 899 0 1495 507 45 91 0 214 44	0.0 0.0 7.5 0.0 0.0 0.5 0.6 22.4 0	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0 0.0 1 0.3	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6 22.4 -1 -0.2
40 41 42 43 44 45 46 47 48	400 kV	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-KOTA BHANPURA-MORAK	D/C D/C S/C S/C D/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 0 376 0 0 75 205 903 70 21 0	988 899 0 1495 507 45 91 0 214 44 102	0.0 0.0 7.5 0.0 0.0 0.5 0.6 22.4 0 0.1 0.0	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0 0.0 1 0.3 1.4	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6 22.4 -1 -0.2 -1.4
40 41 42 43 44 45 46 47 48 49	400 kV	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-KOTA BHANPURA-MORAK MEHGAON-AURAIYA	D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 376 0 0 75 205 903 70 21 0	988 899 0 1495 507 45 91 0 214 44 102 0 13	0.0 0.0 7.5 0.0 0.0 0.5 0.6 22.4 0 0.1 0.0 1.0 0.3 0.0	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0 0.0 1 0.3 1.4 0.0 0.0 0.0	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6 22.4 -1 -0.2 -1.4 1.0 0.2 0.0
40 41 42 43 44 45 46 47 48 49 50 51	- 400 kV - 220 kV	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-KOTA BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	D/C D/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 0 376 0 0 75 205 903 70 21 0	988 899 0 1495 507 45 91 0 214 44 102 0 13	0.0 0.0 7.5 0.0 0.0 0.5 0.6 22.4 0 0.1 0.0 1.0	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0 0.0 1 0.3 1.4 0.0 0.0	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6 22.4 -1 -0.2 -1.4 1.0 0.2
40 41 42 43 44 45 46 47 48 49 50 51	400 kV - 220 kV - 132kV	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BHANPURA-KOTA BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR)	D/C D/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 0 376 0 0 75 205 903 70 21 0 72 45	988 899 0 1495 507 45 91 0 214 44 102 0 13 0 WR-NR	0.0 0.0 7.5 0.0 0.5 0.6 22.4 0 0.1 0.0 1.0 0.3 0.0 41.1	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0 0.0 1 0.3 1.4 0.0 0.0 0.0 0.0 1.4	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6 22.4 -1 -0.2 -1.4 1.0 0.2 0.0 -167.5
40 41 42 43 44 45 46 47 48 49 50 51	400 kV  220 kV  132kV  Export of HVDC	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-KOTA BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B	D/C D/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 0 376 0 0 75 205 903 70 21 0 72 45 0	988 899 0 1495 507 45 91 0 214 44 102 0 13 0 WR-NR	0.0 0.0 7.5 0.0 0.5 0.6 22.4 0 0.1 0.0 1.0 0.3 0.0 41.1	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0 0.0 1 0.3 1.4 0.0 0.0 219.0	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6 22.4 -1 -0.2 -1.4 1.0 0.2 0.0 -167.5
40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53	400 kV - 220 kV - 132kV	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-KOTA BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU	D/C D/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 0 376 0 0 75 205 903 70 21 0 72 45 0	988 899 0 1495 507 45 91 0 214 44 102 0 13 0 WR-NR	0.0 0.0 7.5 0.0 0.0 0.5 0.6 22.4 0 0.1 0.0 1.0 0.3 0.0 41.1	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0 0.0 1 0.3 1.4 0.0 0.0 219.0	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6 22.4 -1 -0.2 -1.4 1.0 0.2 0.0 -167.5
40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54	400 kV  220 kV  132kV  Export of HVDC	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-KOTA BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR	D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 376 0 0 75 205 903 70 21 0 72 45 0	988 899 0 1495 507 45 91 0 214 44 102 0 13 0 WR-NR	0.0 0.0 7.5 0.0 0.0 0.5 0.6 22.4 0 0.1 0.0 1.0 0.3 0.0 41.1	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0 0.0 1 0.3 1.4 0.0 0.0 219.0	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6 22.4 -1 -0.2 -1.4 1.0 0.2 0.0 -167.5
40 41 42 43 44 45 46 47 48 49 50 51 <b>Import/E</b> 52 53 54	400 kV  220 kV  132kV  Export of HVDC LINK  765 kV	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-KOTA BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD	D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 376 0 0 75 205 903 70 21 0 72 45 0	988 899 0 1495 507 45 91 0 214 44 102 0 13 0 WR-NR	0.0 0.0 7.5 0.0 0.0 0.5 0.6 22.4 0 0.1 0.0 1.0 0.3 0.0 41.1	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0 0.0 1 0.3 1.4 0.0 0.0 219.0	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6 22.4 -1 -0.2 -1.4 1.0 0.2 0.0 -167.5
40 41 42 43 44 45 46 47 48 49 50 51 <b>Import/E</b> 52 53 54 55	- 400 kV - 220 kV - 132kV - Export of - HVDC - LINK	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-KOTA BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI	D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 376 0 0 75 205 903 70 21 0 72 45 0	988 899 0 1495 507 45 91 0 214 44 102 0 13 0 WR-NR	0.0 0.0 7.5 0.0 0.0 0.5 0.6 22.4 0 0.1 0.0 1.0 0.3 0.0 41.1	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0 0.0 1 0.3 1.4 0.0 0.0 219.0 23.7 0.0 20.1 27.7 0.0	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6 22.4 -1 -0.2 -1.4 1.0 0.2 0.0 -167.5
40 41 42 43 44 45 46 47 48 49 50 51 <b>Import/E</b> 52 53 54	400 kV  220 kV  132kV  Export of HVDC LINK  765 kV	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-KOTA BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD	D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 376 0 0 75 205 903 70 21 0 72 45 0	988 899 0 1495 507 45 91 0 214 44 102 0 13 0 WR-NR 995 0 1988 2017 742	0.0 0.0 7.5 0.0 0.0 0.5 0.6 22.4 0 0.1 0.0 1.0 0.3 0.0 41.1 0.0 0.0 0.0 0.0 0.0	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0 0.0 1 0.3 1.4 0.0 0.0 219.0 23.7 0.0 20.1 27.7 0.0 0.0	-46.9 -18.1 -30.9 -7.5 -30.0 -5.2 -0.4 -0.6 -22.4 -1 -0.2 -1.4 -1.0 -0.2 -0.0 -167.5 -23.7 -0.0 -20.1 -27.7 -12.8
40 41 42 43 44 45 46 47 48 49 50 51 <b>Import/E</b> 52 53 54 55 56 57	220 kV 132kV Export of HVDC LINK 765 kV	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-KOTA 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	D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 376 0 0 75 205 903 70 21 0 72 45 0	988 899 0 1495 507 45 91 0 214 44 102 0 13 0 WR-NR	0.0 0.0 7.5 0.0 0.0 0.5 0.6 22.4 0 0.1 0.0 1.0 0.3 0.0 41.1 0.0 0.0 0.0 12.8	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0 0.0 1 0.3 1.4 0.0 0.0 219.0 23.7 0.0 20.1 27.7 0.0	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6 22.4 -1 -0.2 -1.4 1.0 0.2 0.0 -167.5  -23.7 0.0 -20.1 -27.7 12.8 0.0
40 41 42 43 44 45 46 47 48 49 50 51 <b>Import/E</b> 52 53 54 55 56	220 kV 132kV Export of HVDC LINK 765 kV	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-KOTA BHANPURA-MORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 376 0 0 75 205 903 70 21 0 72 45 0	988 899 0 1495 507 45 91 0 214 44 102 0 13 0 WR-NR	0.0 0.0 7.5 0.0 0.0 0.5 0.6 22.4 0 0.1 0.0 1.0 0.3 0.0 41.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0 0.0 1 0.3 1.4 0.0 0.0 219.0 23.7 0.0 20.1 27.7 0.0 0.0 0.0	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6 22.4 -1 -0.2 -1.4 1.0 0.2 0.0 -167.5  -23.7 0.0 -20.1 -27.7 12.8 0.0 0.0
40 41 42 43 44 45 46 47 48 49 50 51 <b>Import/E</b> 52 53 54 55 56	220 kV 132kV Export of HVDC LINK 765 kV	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-KOTA BHANPURA-MORAK MEHGAON-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	D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 376 0 0 75 205 903 70 21 0 72 45 0	988 899 0 1495 507 45 91 0 214 44 102 0 13 0 WR-NR	0.0 0.0 7.5 0.0 0.0 0.5 0.6 22.4 0 0.1 0.0 1.0 0.3 0.0 41.1 0.0 0.0 0.0 0.0 0.0 0.0 12.8 0.0 0.0 1.1	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0 0.0 1 0.3 1.4 0.0 0.0 219.0 23.7 0.0 20.1 27.7 0.0 0.0 0.0 0.0	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6 22.4 -1 -0.2 -1.4 1.0 0.2 0.0 -167.5  -23.7 0.0 -20.1 -27.7 12.8 0.0 0.0 1.1
40 41 42 43 44 45 46 47 48 49 50 51 <b>Import/E</b> 52 53 54 55 56 57	220 kV 132kV Export of HVDC LINK 765 kV	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-KOTA BHANPURA-MORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHANDEN-BANDEN WARDHANDEN-BANDEN SOLAPUR-RAICHUR WORDHANDEN WORDHANDEN WERT WARDHANIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 376 0 0 75 205 903 70 21 0 72 45 0	988 899 0 1495 507 45 91 0 214 44 102 0 13 0 WR-NR	0.0 0.0 7.5 0.0 0.0 0.5 0.6 22.4 0 0.1 0.0 1.0 0.3 0.0 41.1 0.0 0.0 0.0 0.0 0.0 0.0 12.8 0.0 0.0 1.1	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0 0.0 1 0.3 1.4 0.0 0.0 219.0 23.7 0.0 20.1 27.7 0.0 0.0 0.0 0.0	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6 22.4 -1 -0.2 -1.4 1.0 0.2 0.0 -167.5  -23.7 0.0 -20.1 -27.7 12.8 0.0 0.0 1.1 -57.6
40 41 42 43 44 45 46 47 48 49 50 51 <b>Import/E</b> 52 53 54 55 56	220 kV 132kV Export of HVDC LINK 765 kV	JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-KOTA BHANPURA-MORAK MEHGAON-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	D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 376 0 0 75 205 903 70 21 0 72 45 0	988 899 0 1495 507 45 91 0 214 44 102 0 13 0 WR-NR	0.0 0.0 7.5 0.0 0.0 0.5 0.6 22.4 0 0.1 0.0 1.0 0.3 0.0 41.1 0.0 0.0 0.0 0.0 0.0 0.0 12.8 0.0 0.0 1.1	46.9 18.1 30.9 0.0 30.0 5.2 0.1 0.0 0.0 1 0.3 1.4 0.0 0.0 219.0 23.7 0.0 20.1 27.7 0.0 0.0 0.0 0.0	-46.9 -18.1 -30.9 7.5 -30.0 5.2 0.4 0.6 22.4 -1 -0.2 -1.4 1.0 0.2 0.0 -167.5  -23.7 0.0 -20.1 -27.7 12.8 0.0 0.0 1.1