

# 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: 09<sup>th</sup> Oct 2019

To,

- 1. कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के.,14, गोल्फ क्लब रोड, कोलकाता ७०००३३ 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 ७९३००६ Executive Director, 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 08.10.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-२०१० की धारा स.-5.5.१ के प्रावधान के अनुसार, दिनांक ०८-अक्टूबर-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 08<sup>th</sup> Oct 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 9-Oct-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 1900 hrs; from RLDCs)	42153	39610	36059	16472	2056	136350
Peak Shortage (MW)	441	0	0	0	321	762
Energy Met (MU)	931	937	821	356	40	3085
Hydro Gen (MU)	199	98	131	109	19	556
Wind Gen (MU)	4	14	8			26
Solar Gen (MU)*	34.01	22.2	72.48	1.97	0.03	131
Energy Shortage (MU)	8.4	0.0	0.0	0.0	4.1	12.5
Maximum Demand Met during the day	43034	40763	36551	17299	2086	137714
(MW) & time (from NLDC SCADA)	19:14	06:49	19:30	00:06	19:17	19:30

B. Frequency Profile (%) Region FVI <49.7 49.7-49.8 49.8-49.9 <49.9 49.9-50.05 > 50.05 All India 0.034

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	6470	0	133.1	66.2	-1.2	75	0.0
	Haryana	6138	0	135.6	94.0	1.7	156	0.0
	Rajasthan	8485	0	184.7	54.4	1.4	268	0.0
	Delhi	3346	0	73.1	57.1	-0.5	83	0.0
NR	UP	15900	0	311.2	135.8	0.1	332	0.0
	Uttarakhand	1499	0	32.2	11.1	-0.3	186	0.0
	HP	1197	0	22.4	7.2	-0.6	108	0.0
	J&K	1907	477	35.2	29.2	-4.3	65	8.4
	Chandigarh	178	0	3.5	3.9	-0.4	19	0.0
	Chhattisgarh	3410	0	79.6	34.8	-1.5	264	0.0
	Gujarat	12258	0	281.6	67.8	1.4	554	0.0
	MP	7620	0	167.8	88.6	-3.2	225	0.0
WR	Maharashtra	16943	0	371.3	129.4	2.3	719	0.0
WK	Goa	541	0	11.2	11.1	-0.5	38	0.0
	DD	274	0	4.6	4.2	0.4	37	0.0
	DNH	705	0	14.6	14.7	-0.1	72	0.0
	Essar steel	356	0	6.6	5.9	0.7	381	0.0
	Andhra Pradesh	6868	0	154.8	76.0	1.1	366	0.0
	Telangana	7836	0	164.0	39.8	-0.8	300	0.0
SR	Karnataka	6997	0	137.1	38.4	-0.5	704	0.0
3N	Kerala	3415	0	68.7	49.2	2.0	198	0.0
	Tamil Nadu	13691	0	288.2	134.8	2.3	708	0.0
	Pondy	387	0	7.8	8.0	-0.2	38	0.0
	Bihar	4751	0	86.3	87.4	-4.9	350	0.0
	DVC	2371	0	51.2	-14.8	1.4	300	0.0
ER	Jharkhand	979	0	20.5	13.8	-2.1	0	0.0
LIX	Odisha	3743	0	77.2	12.5	8.3	500	0.0
	West Bengal	6087	0	120.5	30.1	-0.2	250	0.0
	Sikkim	37	0	0.3	1.1	-0.8	0	0.0
	Arunachal Pradesh	115	1	2.0	1.7	-0.1	51	0.0
	Assam	1450	186	22.0	13.5	2.3	148	4.0
	Manipur	152	3	2.3	2.2	0.1	32	0.0
NER	Meghalaya	292	0	5.1	-0.9	0.5	83	0.0
	Mizoram	87	1	1.7	0.2	0.4	23	0.0
	Nagaland	117	2	2.1	2.0	-0.2	47	0.0
	Tripura	257	3	4.5	2.7	-0.2	96	0.0

## $\textbf{D. Transnational Exchanges} \ \ (\textbf{MU}) \ \textbf{- Import} (+\textbf{ve}) / \textbf{Export} (-\textbf{ve})$

	Bhutan	Nepal	Bangladesh
Actual(MU)	32.3	1.2	-24.7
Day peak (MW)	1942.4	-122.0	-1089.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	181.6	-185.9	84.5	-69.1	-11.3	-0.1
Actual(MU)	175.1	-191.1	97.2	-76.9	-7.3	-3.0
O/D/U/D(MU)	-6.5	-5.2	12.7	-7.9	4.0	-3.0

#### F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	4474	15428	8012	1570	910	30394
State Sector	9386	19263	9290	6150	11	44100
Total	13860	34691	17302	7720	922	74494

G. Sourcewise generation (MU)

NR	WR	SR	ER	NER	All India
459	882	365	337	10	2052
14	8	41	0	0	63
199	98	131	109	19	556
28	29	60	0	0	117
32	62	16	0	23	133
49	44	114	2	0	209
780	1122	728	447	51	3129
	459 14 199 28 32 49	459 882 14 8 199 98 28 29 32 62 49 44	459         882         365           14         8         41           199         98         131           28         29         60           32         62         16           49         44         114	459         882         365         337           14         8         41         0           199         98         131         109           28         29         60         0           32         62         16         0           49         44         114         2	459         882         365         337         10           14         8         41         0         0           199         98         131         109         19           28         29         60         0         0           32         62         16         0         23           49         44         114         2         0

Share of RES in total generation (%)	6.30	3.88	15.72	0.45	0.06	6.68
Share of Non-fossil fuel (Hydro, Nuclear and	35.31	15 21	42.04	24.73	36.81	28.18
RES) in total generation (%)	33.31	13.21	42.04	24.75	50.01	20.10

H. Diversity Factor All India Demand Diversity Factor

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

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

		IN	FER-REGIO	ONAL EXCH	ANGES	Date of l	Reporting :	9-Oct-1
								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)			1			
2	765kV	GAYA-VARANASI	D/C S/C	131 156	312 158	0.0	0.0	-2.9 0.2
3	703KV	SASARAM-FATEHPUR GAYA-BALIA	S/C	0	257	0.2	4.5	-4.5
4	HVDC	ALIPURDUAR-AGRA	-	0	701	0.0	17.1	-17.1
5	HVDC	PUSAULI B/B	S/C	0	198	0.0	4.8	-4.8
6		PUSAULI-VARANASI	S/C	0	200	0.0	3.8	-3.8
7		PUSAULI -ALLAHABAD	S/C	0	77	0.0	0.8	-0.8
9	400 kV	MUZAFFARPUR-GORAKHPUR PATNA-BALIA	D/C O/C	0	850 696	0.0	13.3 16.7	-13.3 -16.7
10	400 K V	BIHARSHARIFF-BALIA	D/C	0	276	0.0	3.8	-3.8
11		MOTIHARI-GORAKHPUR	D/C	0	10	0.0	0.0	0.0
12		BIHARSHARIFF-VARANASI	D/C	160	158	0.4	0.0	0.4
13	220 kV	PUSAULI-SAHUPURI	S/C	0	137	0.0	2.5	-2.5
14		SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	30	0	0.4	0.0	0.4
16	102111	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
	Symposis A	ED (With WP)			ER-NR	0.9	70.1	-69.2
	export of	ER (With WR)						
18	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1661	0	25.8	0.0	25.8
19	765 KV	NEW RANCHI-DHARAMJAIGARH	D/C	617	71	7.5	0.0	7.5
20		JHARSUGUDA-DURG JHARSUGUDA-RAIGARH	D/C Q/C	232 171	45 141	2.2 0.7	0.0	2.2 0.7
22	400 kV	RANCHI-SIPAT	D/C	211	51	1.6	0.0	1.6
23		BUDHIPADAR-RAIGARH	S/C	0	65	0.0	0.8	-0.8
24	220 kV	BUDHIPADAR-KORBA	D/C	60	15	0.9	0.0	0.9
					ER-WR	38.7	0.8	37.9
Import/E	Export of	ER (With SR)						-
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	1846.0	0.0	32.7	-32.7
26	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0.0	680.0	0.0	11.7	-11.7
27	LINK	TALCHER-KOLAR BIPOLE	D/C	0.0	1483.0	0.0	23.4	-23.4
28	400 kV	TALCHER-I/C	D/C	1024.0	503.0	2.9	0.0	2.9
29	220 kV	BALIMELA-UPPER-SILERRU	S/C	1.0	0.0 ER-SR	0.0	0.0	0.0
Import/F	export of	ER (With NER)			ER-SK	0.0	67.8	-67.8
30	Aport or	BINAGURI-BONGAIGAON	D/C	0	373	0.0	5.2	-5
31	400 kV	ALIPURDUAR-BONGAIGAON	D/C	146	223	0.0	0.2	0
32	220 kV	ALIPURDUAR-SALAKATI	D/C	0	83	0.0	1.0	-1
	•		•		ER-NER	0.0	6.4	-6.4
Import/E	Export of	NER (With NR)						
33	HVDC	BISWANATH CHARIALI-AGRA	-	0	703	0.0	16.6	-16.6
		AND AND			NER-NR	0.0	16.6	-16.6
_	export of	WR (With NR)	D/G	0	204	0.0	0.0	0.0
34 35	HWDC	CHAMPA-KURUKSHETRA V'CHAL B/B	D/C D/C	0 449	304 0	0.0	9.9	-9.9 12.0
36	HVDC	V CHAL B/B	D/C				0.0	
		APL -MHG	D/C	Ω		12.0	0.0	
37		APL -MHG GWALJOR-AGRA	D/C D/C	0	1366	0.0	27.1	-27.1
37 38		GWALIOR-AGRA	D/C	0	1366 1693	0.0	27.1 29.8	-27.1 -29.8
37 38 39	_		_		1366 1693 952	0.0 0.0 0.0	27.1 29.8 15.7	-27.1 -29.8 -15.7
38	765 kV	GWALIOR-AGRA PHAGI-GWALIOR	D/C D/C	0	1366 1693	0.0	27.1 29.8	-27.1 -29.8
38 39	- 765 kV	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI	D/C D/C D/C	0 0 0	1366 1693 952 579	0.0 0.0 0.0 0.0	27.1 29.8 15.7 21.5	-27.1 -29.8 -15.7 -21.5
38 39 40	765 kV	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI	D/C D/C D/C S/C	0 0 0 361	1366 1693 952 579 0	0.0 0.0 0.0 0.0 6.7	27.1 29.8 15.7 21.5 0.0	-27.1 -29.8 -15.7 -21.5 6.7
38 39 40 41	765 kV	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI	D/C D/C D/C S/C S/C	0 0 0 361 0	1366 1693 952 579 0 1277	0.0 0.0 0.0 0.0 6.7 0.0	27.1 29.8 15.7 21.5 0.0 24.8	-27.1 -29.8 -15.7 -21.5 6.7 -24.8
38 39 40 41 42		GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA	D/C D/C D/C S/C S/C D/C	0 0 0 361 0 118	1366 1693 952 579 0 1277 673	0.0 0.0 0.0 0.0 6.7 0.0 0.4	27.1 29.8 15.7 21.5 0.0 24.8 5.0	-27.1 -29.8 -15.7 -21.5 6.7 -24.8 -4.6
38 39 40 41 42 43 44 45	- 765 kV - 400 kV	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA - BHINMAL V'CHAL - RIHAND	D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C	0 0 0 361 0 118 72 11	1366 1693 952 579 0 1277 673 99 256	0.0 0.0 0.0 0.0 6.7 0.0 0.4 0.5 0.0 22.3	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2	-27.1 -29.8 -15.7 -21.5 6.7 -24.8 -4.6 0.1 -2.2 22.3
38 39 40 41 42 43 44 45		GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR	D/C D/C D/C S/C S/C S/C S/C S/C D/C S/C S/C D/C S/C D/C	0 0 0 361 0 118 72 11 964 70	1366 1693 952 579 0 1277 673 99 256 0	0.0 0.0 0.0 0.0 6.7 0.0 0.4 0.5 0.0 22.3	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2	-27.1 -29.8 -15.7 -21.5 6.7 -24.8 -4.6 0.1 -2.2 22.3 -2
38 39 40 41 42 43 44 45 46 47		GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA - BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR	D/C D/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 0 0 361 0 118 72 11 964 70 4	1366 1693 952 579 0 1277 673 99 256 0 163 56	0.0 0.0 0.0 0.0 6.7 0.0 0.4 0.5 0.0 22.3 0	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2	-27.1 -29.8 -15.7 -21.5 6.7 -24.8 -4.6 0.1 -2.2 22.3 -2 -0.8
38 39 40 41 42 43 44 45 46 47 48		GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK	D/C 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 0 361 0 118 72 11 964 70 4	1366 1693 952 579 0 1277 673 99 256 0 163 56	0.0 0.0 0.0 0.0 6.7 0.0 0.4 0.5 0.0 22.3 0 0.0	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2 0.8	-27.1 -29.8 -15.7 -21.5 -6.7 -24.8 -4.6 -0.1 -2.2 -22.3 -2 -0.8 -1.5
38 39 40 41 42 43 44 45 46 47 48 49	400 kV	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA	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 0 361 0 118 72 11 964 70 4 0	1366 1693 952 579 0 1277 673 99 256 0 163 56 93	0.0 0.0 0.0 0.0 6.7 0.0 0.4 0.5 0.0 22.3 0 0.0 0.0	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2 0.8 1.5	-27.1 -29.8 -15.7 -21.5 6.7 -24.8 -4.6 0.1 -2.2 22.3 -2 -0.8 -1.5
38 39 40 41 42 43 44 45 46 47 48 49 50	400 kV - 220 kV	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA	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 0 361 0 118 72 11 964 70 4 0 77	1366 1693 952 579 0 1277 673 99 256 0 163 56 93 0	0.0 0.0 0.0 0.0 6.7 0.0 0.4 0.5 0.0 22.3 0 0.0 1.1	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2 0.8 1.5 0.0	-27.1 -29.8 -15.7 -21.5 6.7 -24.8 -4.6 0.1 -2.2 22.3 -2 -0.8 -1.5 1.1
38 39 40 41 42 43 44 45 46 47 48 49	400 kV	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA	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 0 361 0 118 72 11 964 70 4 0	1366 1693 952 579 0 1277 673 99 256 0 163 56 93	0.0 0.0 0.0 0.0 6.7 0.0 0.4 0.5 0.0 22.3 0 0.0 0.0 1.1	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2 0.8 1.5 0.0 0.0	-27.1 -29.8 -15.7 -21.5 -6.7 -24.8 -4.6 -0.1 -2.2 -22.3 -2 -0.8 -1.5 -1.1 -0.4 -0.0
38 39 40 41 42 43 44 45 46 47 48 49 50 51	400 kV 220 kV	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA	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 0 361 0 118 72 11 964 70 4 0 77	1366 1693 952 579 0 1277 673 99 256 0 163 56 93 0	0.0 0.0 0.0 0.0 6.7 0.0 0.4 0.5 0.0 22.3 0 0.0 1.1	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2 0.8 1.5 0.0	-27.1 -29.8 -15.7 -21.5 6.7 -24.8 -4.6 0.1 -2.2 22.3 -2 -0.8 -1.5 1.1
38 39 40 41 42 43 44 45 46 47 48 49 50 51	400 kV 220 kV	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA - BHINMAL V'CHAL - RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	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 0 361 0 118 72 11 964 70 4 0 77	1366 1693 952 579 0 1277 673 99 256 0 163 56 93 0	0.0 0.0 0.0 0.0 6.7 0.0 0.4 0.5 0.0 22.3 0 0.0 0.0 1.1	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2 0.8 1.5 0.0 0.0	-27.1 -29.8 -15.7 -21.5 -6.7 -24.8 -4.6 -0.1 -2.2 -22.3 -2 -0.8 -1.5 -1.1 -0.4 -0.0
38 39 40 41 42 43 44 45 46 47 48 49 50 51	400 kV 220 kV 132kV	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI 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)	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 0 361 0 118 72 11 964 70 4 0 77 43	1366 1693 952 579 0 1277 673 99 256 0 163 56 93 0 1 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.4 0.5 0.0 22.3 0 0.0 0.0 1.1 0.4 0.0 43.5	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2 0.8 1.5 0.0 0.4	-27.1 -29.8 -15.7 -21.5 -6.7 -24.8 -4.6 -0.1 -2.2 -22.3 -2 -0.8 -1.5 -1.1 -0.4 -0.0 -96.9
38 39 40 41 42 43 44 45 46 47 48 49 50 51	- 400 kV - 220 kV - 132kV - Export of - HVDC - LINK	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI 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	D/C 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 0 361 0 118 72 11 964 70 4 0 77 43 0	1366 1693 952 579 0 1277 673 99 256 0 163 56 93 0 1 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.4 0.5 0.0 22.3 0 0.0 0.0 1.1 0.4 0.0 43.5	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2 0.8 1.5 0.0 0.0 140.4	-27.1 -29.8 -15.7 -21.5 -6.7 -24.8 -4.6 -0.1 -2.2 -22.3 -2 -0.8 -1.5 1.1 -0.4 -0.0 -96.9
38 39 40 41 42 43 44 45 46 47 48 49 50 51 *** ** ** ** ** ** ** ** ** ** ** ** *	400 kV  220 kV  132kV  Export of HVDC	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI 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	D/C 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 0 361 0 118 72 11 964 70 4 0 77 43 0	1366 1693 952 579 0 1277 673 99 256 0 163 56 93 0 1 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.4 0.5 0.0 0.0 0.0 1.1 0.4 0.0 43.5	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2 0.8 1.5 0.0 0.0 140.4	-27.1 -29.8 -15.7 -21.5 -6.7 -24.8 -4.6 -0.1 -2.2 -2.3 -2 -0.8 -1.5 1.1 -0.4 -96.9
38 39 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 - LINK	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI 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	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 0 361 0 118 72 11 964 70 4 0 77 43 0	1366 1693 952 579 0 1277 673 99 256 0 163 56 93 0 1 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.4 0.5 0.0 0.0 0.0 0.0 1.1 0.4 0.0 43.5	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2 0.8 1.5 0.0 0.0 1.5 0.0 1.5 0.0 0.1 1.5 0.0 0.1 1.5 0.0 0.0 1.5 0.0 0.0 0.0 1.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-27.1 -29.8 -15.7 -21.5 -6.7 -24.8 -4.6 -0.1 -2.2 -22.3 -2 -0.8 -1.5 -1.1 -0.4 -96.9 -13.1 -0.0 -16.3
38 39 40 41 42 43 44 45 46 47 48 49 50 51 (mport/E) 52 53 54 55	- 400 kV - 220 kV - 132kV Export of HVDC LINK - 765 kV 400 kV	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WALIANA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RICHMER WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	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 0 361 0 118 72 11 964 70 4 0 77 43 0	1366 1693 952 579 0 1277 673 99 256 0 163 56 93 0 1 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.7 0.0 0.4 0.5 0.0 22.3 0 0.0 0.0 1.1 0.4 0.0 43.5	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2 0.8 1.5 0.0 0.0 140.4 13.1 0.0 0.0 16.3 33.4 0.0	-27.1 -29.8 -15.7 -21.5 -6.7 -24.8 -4.6 -0.1 -2.2 -22.3 -2 -0.8 -1.5 -1.1 -0.4 -0.0 -96.9 -13.1 -0.0 -16.3 -33.4 -5.2 -0.0
38 39 40 41 42 43 44 45 46 47 48 49 50 51 (mport/E 52 53 54 55 56 57 58	- 400 kV - 220 kV - 132kV Export of HVDC LINK - 765 kV 400 kV	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI 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-CHIKODI PONDA-AMBEWADI	D/C D/C D/C 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	0 0 0 361 0 118 72 11 964 70 4 0 77 43 0	1366 1693 952 579 0 1277 673 99 256 0 163 56 93 0 1 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.4 0.5 0.0 0.0 0.0 1.1 0.4 0.0 43.5	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2 0.8 1.5 0.0 0.0 0.0 140.4	-27.1 -29.8 -15.7 -21.5 -6.7 -24.8 -4.6 -0.1 -2.2 -22.3 -2 -0.8 -1.5 -1.1 -0.4 -0.0 -96.9 -13.1 -0.0 -16.3 -33.4 -5.2 -0.0 -1.1
38 39 40 41 42 43 44 45 46 47 48 49 50 51 (mport/E) 52 53 54 55 56 57	- 400 kV - 220 kV - 132kV Export of HVDC LINK - 765 kV 400 kV	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WALIANA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RICHMER WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C D/C S/C S/C D/C S/C D/C S/C D/C S/C D/C S/C D/C S/C D/C D/C D/C D/C D/C D/C D/C D/C D/C	0 0 0 361 0 118 72 11 964 70 4 0 77 43 0	1366 1693 952 579 0 1277 673 99 256 0 163 56 93 0 1 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.7 0.0 0.4 0.5 0.0 22.3 0 0.0 0.0 1.1 0.4 0.0 43.5	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2 0.8 1.5 0.0 0.0 140.4 13.1 0.0 0.0 16.3 33.4 0.0	-27.1 -29.8 -15.7 -21.5 -6.7 -24.8 -4.6 -0.1 -2.2 -22.3 -2 -0.8 -1.5 -1.1 -0.4 -0.0 -96.9 -13.1 -0.0 -16.3 -33.4 -5.2 -0.0
38 39 40 41 42 43 44 45 46 47 48 49 50 51 <b>mport/E</b> 52 53 54 55 56 57 58	- 400 kV - 220 kV - 132kV Export of HVDC LINK - 765 kV 400 kV	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI 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-CHIKODI PONDA-AMBEWADI	D/C D/C D/C 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	0 0 0 361 0 118 72 11 964 70 4 0 77 43 0	1366 1693 952 579 0 1277 673 99 256 0 163 56 93 0 1 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.4 0.5 0.0 0.0 0.0 1.1 0.4 0.0 43.5	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2 0.8 1.5 0.0 0.0 0.0 140.4	-27.1 -29.8 -15.7 -21.5 -6.7 -24.8 -4.6 -0.1 -2.2 -22.3 -2 -0.8 -1.5 -1.1 -0.4 -0.0 -96.9 -13.1 -0.0 -16.3 -33.4 -5.2 -0.0 -1.1
38 39 40 41 42 43 44 45 46 47 48 49 50 51 <b>mport/E</b> 52 53 54 55 56 57 58	- 400 kV - 220 kV - 132kV Export of HVDC LINK - 765 kV 400 kV	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI 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-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C D/C D/C 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	0 0 0 361 0 118 72 11 964 70 4 0 77 43 0	1366 1693 952 579 0 1277 673 99 256 0 163 56 93 0 1 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.4 0.5 0.0 0.0 0.0 1.1 0.4 0.0 43.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2 0.8 1.5 0.0 0.0 140.4 13.1 0.0 16.3 33.4 0.0 0.0 1.1 0.0	-27.1 -29.8 -15.7 -21.5 -6.7 -24.8 -4.6 -0.1 -2.2 -22.3 -2 -0.8 -1.5 -1.1 -0.4 -0.0 -96.9 -13.1 -0.0 -16.3 -33.4 -5.2 -0.0 -1.1 -0.6
38 39 40 41 42 43 44 45 46 47 48 49 50 51 <b>mport/E</b> 52 53 54 55 56 57 58	- 400 kV - 220 kV - 132kV Export of HVDC LINK - 765 kV 400 kV	GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI 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-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C D/C D/C 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	0 0 0 361 0 118 72 11 964 70 4 0 77 43 0	1366 1693 952 579 0 1277 673 99 256 0 163 56 93 0 1 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.4 0.5 0.0 0.0 0.0 1.1 0.4 0.0 43.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	27.1 29.8 15.7 21.5 0.0 24.8 5.0 0.4 2.2 0.0 2 0.8 1.5 0.0 0.0 140.4 13.1 0.0 16.3 33.4 0.0 0.0 1.1 0.0	-27.1 -29.8 -15.7 -21.5 -6.7 -24.8 -4.6 -0.1 -2.2 -22.3 -2 -0.8 -1.5 -1.1 -0.4 -0.0 -96.9 -13.1 -0.0 -16.3 -33.4 -5.2 -0.0 -1.1 -0.6