

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: 22th Dec 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. 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.,29 , रेस कोर्स क्रॉस रोड, बंगलुरु -560009 Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 21.12.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 21-दिसम्बर-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 21th Dec 2019, is available at the NLDC website.

धन्यवाद,

Report for previous day

A. Power Supply Position at All India and Regional level

Date of Reporting 22-Dec-19

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 1900	46872	48058	38839	17878	2405	154052
hrs; from RLDCs)	40072	40050	30037	1/0/0	2403	134032
Peak Shortage (MW)	632	0	0	0	34	666
Energy Met (MU)	932	1136	932	341	41	3381
Hydro Gen (MU)	124	45	76	37	8	290
Wind Gen (MU)	20	39	48			107
Solar Gen (MU)*	28.12	20.70	74.46	1.53	0.02	125
Energy Shortage (MU)	12.8	0.0	0.0	0.0	0.7	13.5
Maximum Demand Met during the day (MW) & time	47168	54736	45235	18112	2535	162031
(from NLDC SCADA)	19:09	10:59	07:56	18:45	18:03	09:25

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	0.028	0.00	0.00	3.04	3.04	79.40	17.56

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	5985	0	114.7	54.3	-1.5	18	0.0
	Haryana	6517	0	124.1	87.5	0.5	169	0.1
	Rajasthan	13112	0	233.4	57.6	-3.7	284	0.0
	Delhi	4120	0	70.7	55.0	-0.4	227	0.0
NR	UP	14418	0	267.8	109.6	0.1	836	1.4
	Uttarakhand	2093	0	38.5	21.1	0.2	121	0.0
	HP	1679	0	30.3	23.7	-0.7	191	0.0
	J&K(UT) and Ladakh(UT)	2526	632	48.0	39.7	0.5	426	11.4
	Chandigarh	256	0	4.3	4.1	0.2	41	0.0
	Chhattisgarh	3553	0	77.0	19.4	-0.6	322	0.0
	Gujarat	15713	0	329.7	94.9	0.1	475	0.0
	MP	13110	0	239.5	127.7	-4.0	328	0.0
WR	Maharashtra	21645	0	443.6	142.5	0.3	567	0.0
WK	Goa	587	0	12.7	11.9	0.2	31	0.0
	DD	330	0	7.3	6.9	0.4	73	0.0
	DNH	803	0	18.7	18.7	0.0	44	0.0
	Essar steel	348	0	7.2	7.0	0.2	247	0.0
	Andhra Pradesh	8163	0	167.4	68.3	0.8	742	0.0
	Telangana	10694	0	216.1	106.1	0.3	467	0.0
SR	Karnataka	11275	0	202.6	51.0	-0.6	819	0.0
3K	Kerala	3431	0	70.0	56.1	1.1	224	0.0
	Tamil Nadu	13029	0	268.8	148.1	-0.4	559	0.0
	Pondy	337	0	6.9	7.3	-0.4	31	0.0
	Bihar	4037	0	71.5	70.9	-0.8	200	0.0
	DVC	3543	0	63.5	-32.4	-0.2	300	0.0
ER	Jharkhand	1227	0	25.2	16.1	-0.3	50	0.0
LIN	Odisha	3855	0	65.8	10.5	0.4	140	0.0
	West Bengal	6123	0	112.6	30.4	1.1	150	0.0
	Sikkim	131	0	1.9	1.7	0.2	30	0.0
	Arunachal Pradesh	123	3	2.2	1.9	0.2	40	0.0
	Assam	1368	21	22.1	18.2	0.6	128	0.5
	Manipur	202	3	2.6	3.1	-0.5	28	0.0
NER	Meghalaya	351	1	6.2	3.0	0.5	73	0.1
	Mizoram	108	2	1.9	1.2	0.4	24	0.0
	Nagaland	129	2	2.2	2.3	-0.3	10	0.0
	Tripura	239	10	3.5	1.5	0.4	69	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	5.5	-6.9	-8.6
Day peak (MW)	314.9	-378.8	-744.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	223.4	-228.7	117.1	-112.4	0.7	0.0
Actual(MU)	213.7	-245.3	141.9	-113.7	2.2	-1.1
O/D/U/D(MU)	-9.7	-16.6	24.8	-1.3	1.6	-1.2

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	5894	14773	8252	870	597	30385
State Sector	11380	18269	8770	6550	11	44980
Total	17274	33041	17022	7420	608	75365

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	454	1200	452	437	12	2556
Lignite	22	16	47	0	0	85
Hydro	124	45	76	37	8	290
Nuclear	29	28	44	0	0	102
Gas, Naptha & Diesel	31	33	17	0	22	103
RES (Wind, Solar, Biomass & Others)	78	68	166	2	0	313
Total	739	1389	802	476	43	3448
		•			•	

Share of RES in total generation (%)	10.53	4.87	20.71	0.33	0.05	9.08
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%)	31.31	10.08	35.72	8.00	19.57	20.43

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.036
Based on State Max Demands	1.081

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

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

		IN	TER-REGI	ONAL EXCH	ANGES	Date of 1	Reporting :	22-Dec-19
								Import=(+ve) /Export =(-ve)
Sl No	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	for NET (MU) NET (MU)
Import/F		ER (With NR)						
5	HVDC	ALIPURDUAR-AGRA PUSAULI B/B	S/C	0	0 297	0.0	7.4	-7.4
1		GAYA-VARANASI	D/C	0	1068	0.0	14.2	-14.2
2	765kV	SASARAM-FATEHPUR	S/C	0	417	0.0	6.0	-6.0
3		GAYA-BALIA	S/C	0	576	0.0	8.9	-8.9
6 7	-	PUSAULI-VARANASI PUSAULI -ALLAHABAD	S/C S/C	0	191 189	0.0	3.7	-3.7 -3.4
8	1	MUZAFFARPUR-GORAKHPUR	D/C	0	881	0.0	11.2	-11.2
9	400 kV	PATNA-BALIA	Q/C	0	1184	0.0	19.7	-19.7
10		BIHARSHARIFF-BALIA	D/C	0	534	0.0	8.3	-8.3
11		MOTIHARI-GORAKHPUR	D/C	0	5	0.0	0.0	0.0
12		BIHARSHARIFF-VARANASI	D/C	0	387	0.0	4.5	-4.5
13 14	220 kV	PUSAULI-SAHUPURI SONE NAGAR-RIHAND	S/C S/C	0	77	0.0	0.0	-1.0 0.0
15	1	GARWAH-RIHAND	S/C	30	0	0.4	0.0	0.4
16	132 kV	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
					ER-NR	0.4	80.8	-80.4
_	Export of	ER (With WR)						
18	765137	JHARSUGUDA-DHARAMJAIGARH	Q/C	1259	92	17.7	0.0	17.7
19	765 kV	NEW RANCHI-DHARAMJAIGARH	D/C	483	161	3.2	0.0	3.2
20		JHARSUGUDA-DURG JHARSUGUDA-RAIGARH	D/C Q/C	102 322	141 103	0.0 1.6	0.7	-0.7 1.6
22	400 kV	RANCHI-SIPAT	D/C	203	40	1.0	0.0	1.0
23	220 kV	BUDHIPADAR-RAIGARH	S/C	0	108	0.0	1.3	-1.3
24	220 KV	BUDHIPADAR-KORBA	D/C	196	0	2.5	0.0	2.5
T 40T		ED (W'd CD)			ER-WR	26.1	2.1	24.0
1mport/E	export of	ER (With SR) JEYPORE-GAZUWAKA B/B	D/C	0.0	679.0	0.0	11.8	-11.8
27	HVDC	TALCHER-KOLAR BIPOLE	D/C	0.0	2474.0	0.0	51.2	-51.2
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	2273.0	0.0	43.2	-43.2
28	400 kV	TALCHER-I/C	D/C	0.0	969.0	0.0	9.5	-9.5
29	220 kV	BALIMELA-UPPER-SILERRU	S/C	1.0	0.0	0.0	0.0	0.0
T	?	ED (WALNED)			ER-SR	0.0	106.2	-106.2
30	Export of	ER (With NER) BINAGURI-BONGAIGAON	D/C	265	56	2.9	0.0	3
31	400 kV	ALIPURDUAR-BONGAIGAON	D/C	298	41	3.4	0.0	3
32	220 kV	ALIPURDUAR-SALAKATI	D/C	54	34	0.4	0.0	0
					ER-NER	6.7	0.0	6.7
		NER (With NR)	1					T
33	HVDC	BISWANATH CHARIALI-AGRA	-	483	0 NER-NR	9.4 9.4	0.0	9.4 9.4
Import/F	Export of	WR (With NR)			NEK-IIK	7.4	0.0	9.4
34		CHAMPA-KURUKSHETRA	D/C	0	1357	0.0	23.5	-23.5
35	HVDC	V'CHAL B/B	D/C	449	103	3.1	1.3	1.8
36		APL -MHG	D/C	0	1918	0.0	31.9	-31.9
37	1	GWALIOR-AGRA	D/C	0	2937	0.0	47.1	-47.1
38 39	1	PHAGI-GWALIOR JABALPUR-ORAI	D/C D/C	0	1280 1013	0.0	17.7 27.5	-17.7 -27.5
40	765 kV	GWALIOR-ORAI	S/C	602	0	9.8	0.0	9.8
41	1	SATNA-ORAI	S/C	0	1569	0.0	30.7	-30.7
42	1	CHITTORGARH-BANASKANTHA	D/C	431	579	1.8	3.4	-1.6
74		CHITTOROAKIFBANASKANTHA	D/C		319	1.0		1.8
43		ZERDA-KANKROLI	S/C	212	72	1.8	0.0	
43 44	400 kV	ZERDA-KANKROLI ZERDA -BHINMAL	S/C S/C	212 278	72 185	1.8 1.4	0.0	1.4
43 44 45	- 400 kV	ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND	S/C S/C S/C	212 278 969	72 185 0	1.8 1.4 22.1	0.0	1.4 22.1
43 44	- 400 kV	ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR	S/C S/C S/C D/C	212 278 969 269	72 185 0 239	1.8 1.4 22.1 0	0.0 0.0 0	1.4
43 44 45 46	-	ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND	S/C S/C S/C	212 278 969	72 185 0	1.8 1.4 22.1	0.0	1.4 22.1 0
43 44 45 46 47	400 kV	ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR	S/C S/C S/C D/C S/C	212 278 969 269 32	72 185 0 239 84	1.8 1.4 22.1 0 0.5	0.0 0.0 0 0.1	1.4 22.1 0 0.4
43 44 45 46 47 48	-	ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK	S/C S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C	212 278 969 269 32 42 91	72 185 0 239 84 112	1.8 1.4 22.1 0 0.5 0.2 1.0	0.0 0.0 0 0.1 0.7 0.0 0.2	1.4 22.1 0 0.4 -0.6 1.0
43 44 45 46 47 48 49	-	ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA	S/C S/C S/C D/C S/C S/C S/C	212 278 969 269 32 42 91	72 185 0 239 84 112 0 25	1.8 1.4 22.1 0 0.5 0.2 1.0 0.1	0.0 0.0 0 0.1 0.7 0.0 0.2 0.0	1.4 22.1 0 0.4 -0.6 1.0 -0.1
43 44 45 46 47 48 49 50	220 kV	ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	S/C S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C	212 278 969 269 32 42 91	72 185 0 239 84 112 0 25	1.8 1.4 22.1 0 0.5 0.2 1.0	0.0 0.0 0 0.1 0.7 0.0 0.2	1.4 22.1 0 0.4 -0.6 1.0
43 44 45 46 47 48 49 50 51	220 kV 132kV	ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUIALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR)	S/C S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C	212 278 969 269 32 42 91 43 0	72 185 0 239 84 112 0 25 0 WR-NR	1.8 1.4 22.1 0 0.5 0.2 1.0 0.1 0.0 41.8	0.0 0.0 0 0.1 0.7 0.0 0.2 0.0 184.4	1.4 22.1 0 0.4 -0.6 1.0 -0.1 0.0 -142.7
43 44 45 46 47 48 49 50	220 kV	ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	S/C S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C	212 278 969 269 32 42 91	72 185 0 239 84 112 0 25	1.8 1.4 22.1 0 0.5 0.2 1.0 0.1	0.0 0.0 0 0.1 0.7 0.0 0.2 0.0	1.4 22.1 0 0.4 -0.6 1.0 -0.1
43 44 45 46 47 48 49 50 51 Import/E	220 kV 132kV Export of HVDC	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 S/C S/C D/C S/C S/C S/C S/C S/C S/C	212 278 969 269 32 42 91 43 0	72 185 0 239 84 112 0 25 0 WR-NR	1.8 1.4 22.1 0 0.5 0.2 1.0 0.1 0.0 41.8	0.0 0.0 0.1 0.7 0.0 0.2 0.0 184.4	1.4 22.1 0 0.4 -0.6 1.0 -0.1 0.0 -142.7
43 44 45 46 47 48 49 50 51 Import/E 52	220 kV 132kV	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 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	212 278 969 269 32 42 91 43 0	72 185 0 239 84 112 0 25 0 WR-NR	1.8 1.4 22.1 0 0.5 0.2 1.0 0.1 0.0 41.8	0.0 0.0 0 0.1 0.7 0.0 0.2 0.0 184.4	1.4 22.1 0 0.4 -0.6 1.0 -0.1 0.0 -142.7
43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56	220 kV 132kV Export of HVDC	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	S/C	212 278 969 269 32 42 91 43 0	72 185 0 239 84 112 0 25 0 WR-NR	1.8 1.4 22.1 0 0.5 0.2 1.0 0.1 0.0 41.8 0.0 0.0 0.1 0.0 9.5	0.0 0.0 0.1 0.7 0.0 0.2 0.0 184.4 12.1 0.0 29.3 48.7 0.0	1.4 22.1 0 0.4 -0.6 1.0 -0.1 0.0 -142.7 -12.1 0.0 -29.2 -48.7 9.5
43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55	220 kV 132kV Export of HVDC 765 kV	ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BHASUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI	S/C	212 278 969 269 32 42 91 43 0 0 0 185 0	72 185 0 239 84 112 0 25 0 WR-NR 515 0 2138 2621 0 0	1.8 1.4 22.1 0 0.5 0.2 1.0 0.1 0.0 41.8 0.0 0.0 0.1 0.0 9.5 0.0	0.0 0.0 0.1 0.7 0.0 0.2 0.0 184.4 12.1 0.0 29.3 48.7 0.0 0.0	1.4 22.1 0 0.4 -0.6 1.0 -0.1 0.0 -142.7 -12.1 0.0 -29.2 -48.7 9.5 0.0
43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	220 kV 132kV Export of HVDC - 765 kV	ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR 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	212 278 969 269 32 42 91 43 0 0 0 185 0 758 0	72 185 0 239 84 112 0 25 0 WR-NR 515 0 2138 2621 0 0 77	1.8 1.4 22.1 0 0.5 0.2 1.0 0.1 0.0 41.8 0.0 0.1 0.0 0.1 0.0 0.1 0.0 0.1 0.0	0.0 0.0 0.1 0.7 0.0 0.2 0.0 184.4 12.1 0.0 29.3 48.7 0.0 0.0 1.5	1.4 22.1 0 0.4 -0.6 1.0 -0.1 0.0 -142.7 -12.1 0.0 -29.2 -48.7 9.5 0.0 -1.5
43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55	220 kV 132kV Export of HVDC 765 kV	ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BHASUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI	S/C	212 278 969 269 32 42 91 43 0 0 0 185 0	72 185 0 239 84 112 0 25 0 WR-NR 515 0 2138 2621 0 0 77 87	1.8 1.4 22.1 0 0.5 0.2 1.0 0.1 0.0 41.8 0.0 0.1 0.0 0.1 1.7	0.0 0.0 0.1 0.7 0.0 0.2 0.0 184.4 12.1 0.0 29.3 48.7 0.0 0.0 1.5 0.0	1.4 22.1 0 0.4 -0.6 1.0 -0.1 0.0 -142.7 -12.1 0.0 -29.2 -48.7 9.5 0.0 -1.5 1.7
43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	220 kV 132kV Export of HVDC 765 kV	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	212 278 969 269 32 42 91 43 0 0 0 185 0 758 0 0	72 185 0 239 84 112 0 25 0 WR-NR 515 0 2138 2621 0 0 77 87 WR-SR	1.8 1.4 22.1 0 0.5 0.2 1.0 0.1 0.0 41.8 0.0 0.1 0.0 0.1 0.0 0.1 0.0 0.1 0.0	0.0 0.0 0.1 0.7 0.0 0.2 0.0 184.4 12.1 0.0 29.3 48.7 0.0 0.0 1.5	1.4 22.1 0 0.4 -0.6 1.0 -0.1 0.0 -142.7 -12.1 0.0 -29.2 -48.7 9.5 0.0 -1.5
43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	220 kV 132kV Export of HVDC 765 kV	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	212 278 969 269 32 42 91 43 0 0 0 185 0 758 0	72 185 0 239 84 112 0 25 0 WR-NR 515 0 2138 2621 0 0 77 87 WR-SR	1.8 1.4 22.1 0 0.5 0.2 1.0 0.1 0.0 41.8 0.0 0.1 0.0 0.1 1.7	0.0 0.0 0.1 0.7 0.0 0.2 0.0 184.4 12.1 0.0 29.3 48.7 0.0 0.0 1.5 0.0	1.4 22.1 0 0.4 -0.6 1.0 -0.1 0.0 -142.7 -12.1 0.0 -29.2 -48.7 9.5 0.0 -1.5 1.7
43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	220 kV 132kV Export of HVDC 765 kV	ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUIALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WARIYA 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	212 278 969 269 32 42 91 43 0 0 0 185 0 758 0 0	72 185 0 239 84 112 0 25 0 WR-NR 515 0 2138 2621 0 0 77 87 WR-SR	1.8 1.4 22.1 0 0.5 0.2 1.0 0.1 0.0 41.8 0.0 0.1 0.0 0.1 1.7	0.0 0.0 0.1 0.7 0.0 0.2 0.0 184.4 12.1 0.0 29.3 48.7 0.0 0.0 1.5 0.0	1.4 22.1 0 0.4 -0.6 1.0 -0.1 0.0 -142.7 -12.1 0.0 -29.2 -48.7 9.5 0.0 -1.5 1.7 -80.3