

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, क़त्ब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 29th July 2018

Τо

- 1. कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के.,14, गोल्फ क्लब रोड, कोलकाता ७०००३३ Executive Director, ERLDC, 14 Golf Club Road, Tolleygunge, Kolkata, 700033
- 2. महाप्रबंधक, ऊ. क्षे. भा. प्रे. के., 18/ ए, शहीद जीत सिंह सनसनवाल मार्ग, नई दिल्ली 110016 General Manager, 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. महाप्रबंधक , द .क्षे .भा .प्रे .के., २९ , रेस कोर्स क्रॉस रोड, बंगलुरु -560009 General Manager, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 28.07.2018.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 28-जुलाई-2018 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा०भा०प्रे०के० 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 28th July 2018, is available at the NLDC website.

धन्यवाद,

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

Report for previous day **Date of Reporting** 29-Jul-18

A. Maximum Demand

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 2000 hrs; from RLDCs)	47143	43440	42367	20106	2663	155720
Peak Shortage (MW)	1257	0	0	100	165	1522
Energy Met (MU)	1020	979	970	418	52	3439
Hydro Gen (MU)	295	25	123	107	24	574
Wind Gen (MU)	36	151	195			382
Solar Gen (MU)*	13.27	15.04	44.74	0.38	0.01	73
Energy Shortage (MU)	10.5	0.0	0.0	0.3	1.2	12.0
Maximum Demand Met during the day	49455	45483	43822	21346	2755	160074
(MW) & time (from NLDC SCADA)	20:45	19:44	07:22	21:09	18:58	20:17

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	0.046	0.00	0.58	12.14	12.72	80.71	6.57

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	9316	0	209.0	135.0	-0.7	91	0.0
	Haryana	7139	0	142.3	125.9	1.4	273	0.0
	Rajasthan	8746	0	188.1	66.2	0.5	431	0.0
	Delhi	4424	0	95.1	81.6	0.5	313	0.1
NR	UP	15140	0	286.1	148.5	0.7	305	0.0
	Uttarakhand	1530	0	32.5	27.2	0.7	299	1.4
	HP	1164	0	24.2	4.3	4.0	355	0.0
	J&K	2024	506	38.1	16.5	-4.0	22	9.1
	Chandigarh	232	0	4.7	5.7	-1.0	0	0.0
	Chhattisgarh	3546	0	82.9	12.1	0.3	251	0.0
	Gujarat	13140	0	290.0	68.7	3.4	607	0.0
	MP	7656	0	161.5	67.2	0.8	681	0.0
WR	Maharashtra	17917	0	402.4	113.4	5.5	894	0.0
WK	Goa	444	0	8.9	8.7	-0.4	61	0.0
	DD	309	0	7.0	5.9	1.0	89	0.0
	DNH	699	0	16.2	15.8	0.5	74	0.0
	Essar steel	496	0	9.8	10.0	-0.2	260	0.0
	Andhra Pradesh	8250	0	182.0	30.9	2.1	682	0.0
	Telangana	9528	0	208.2	102.9	0.6	420	0.0
SR	Karnataka	8856	0	180.4	52.1	0.6	543	0.0
SK	Kerala	3273	0	64.8	25.3	-0.1	173	0.0
	Tamil Nadu	14762	0	328.1	100.0	-1.0	407	0.0
	Pondy	367	0	6.8	6.9	-0.1	56	0.0
	Bihar	4609	0	80.0	80.1	-0.3	200	0.0
	DVC	3499	0	66.9	-34.3	-0.5	220	0.0
ER	Jharkhand	1178	0	22.3	18.8	-0.6	80	0.0
EK	Odisha	4896	0	90.2	48.6	2.2	250	0.3
	West Bengal	7988	0	157.3	44.7	1.1	225	0.0
	Sikkim	90	0	1.4	1.3	0.1	15	0.0
	Arunachal Pradesh	106	4	2.2	2.1	0.1	55	0.0
	Assam	1745	76	33.8	27.9	1.8	178	1.1
	Manipur	167	1	2.1	2.4	-0.2	20	0.0
NER	Meghalaya	312	0	5.9	1.2	-0.2	24	0.0
	Mizoram	84	0	1.2	0.7	0.0	8	0.0
	Nagaland	108	4	2.2	1.7	0.1	9	0.0
	Tripura	247	3	4.4	5.7	0.1	40	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	32.1	-5.4	-14.7
Day peak (MW)	1567.2	-264.5	-658.2

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	255.6	-238.7	57.1	-72.9	-1.4	-0.3
Actual(MU)	240.5	-238.7	65.3	-66.1	-1.8	-0.8
O/D/U/D(MU)	-15.0	0.0	8.2	6.8	-0.4	-0.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	5107	17649	8692	1210	179	32837
State Sector	14050	19298	9160	6735	50	49293
Total	19157	36947	17852	7945	229	82130

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Thermal (Coal & Lignite)	410	963	443	402	8	2226
Hydro	295	26	124	107	24	576
Nuclear	27	30	57	0	0	115
Gas, Naptha & Diesel	11	38	25	0	25	99
RES (Wind, Solar, Biomass & Others)	62	166	277	1	0	506
Total	806	1222	926	510	58	3521

Share of RES in total generation (%)	7.73	13.57	29.93	0.13	0.05	14.37
Share of Non-fossil fuel (Hydro, Nuclear and	47.72	18.10	49.50	21.19	41.65	33.97
RES) in total generation (%)	47.73	10.10	49.50	21.19	41.05	33.97

H. Diversity Factor
All India Demand Diversity Factor
1.017
Diversity factor = Sum of regional maximum demands / All India maximum demand

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

						Date of I	Reporting :	: 29-Jul	
								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)						T	
2	765kV	GAYA-VARANASI SASARAM-FATEHPUR	D/C S/C	135	540 140	0.0	8.7 0.0	-8.7 0.4	
3	7038 1	GAYA-BALIA	S/C	0	393	0.0	6.5	-6.5	
4	HVDC	ALIPURDUAR-AGRA	-	0	439	0.0	9.5	-9.5	
5	HVDC	PUSAULI B/B	S/C	0	147	0.0	3.6	-3.6	
6	4	PUSAULI-VARANASI	S/C	0	126	0.0	0.0	0.0	
7	4	PUSAULI -ALLAHABAD	S/C	0	82	0.0	0.0	0.0	
9	400 kV	MUZAFFARPUR-GORAKHPUR PATNA-BALIA	D/C O/C	0	909 998	0.0	17.4	-17.4 -19.1	
10	400 KV	BIHARSHARIFF-BALIA	D/C	0	463	0.0	8.1	-19.1	
11	1	MOTIHARI-GORAKHPUR	D/C	283	14	4.1	0.0	4.1	
12	1	BIHARSHARIFF-VARANASI	D/C	808	0	0.0	4.8	-4.8	
13	220 kV	PUSAULI-SAHUPURI	S/C	0	152	0.0	2.9	-2.9	
14		SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0	
15	132 kV	GARWAH-RIHAND	S/C	35	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	
port/E	Export of	ER (With WR)			ER-NR	5.0	80.4	-75.5	
18	765 kV	JHARSUGUDA-DHARAMJAIGARH S/C	D/C	1047	0	28.7	0.0	28.7	
19	1	NEW RANCHI-DHARAMJAIGARH	D/C	524	78	11.6	0.0	11.6	
20	400 kV	JHARSUGUDA-RAIGARH	Q/C	921	0	15.5	0.0	15.5	
21	-	RANCHI-SIPAT	D/C S/C	304 159	5	5.2 2.8	0.0	5.2 2.8	
23	220 kV	BUDHIPADAR-RAIGARH BUDHIPADAR-KORBA	D/C	378	0	3.9	0.0	3.9	
		l	D/C	376	ER-WR	67.7	0.0	67.7	
	· •	ER (With SR)	D/C	0.0	1212.0	0.0	12.7	12.7	
24	765 kV	ANGUL-SRIKAKULAM JEYPORE-GAZUWAKA B/B	D/C D/C	0.0	1213.8 515.0	0.0	13.7	-13.7 -12.1	
26	HVDC LINK	TALCHER-KOLAR BIPOLE	D/C	0.0	1485.6	0.0	34.8	-12.1	
27	400 kV	TALCHER-I/C	D/C	835.6	0.8	0.0	12.9	-12.9	
28	220 kV	BALIMELA-UPPER-SILERRU	S/C	0.0	0.0	0.0	0.0	0.0	
nort/F	Export of	ER (With NER)			ER-SR	0.0	60.6	-60.6	
29	Τ.	BINAGURI-BONGAIGAON	D/C	0	412	0.0	6.6	-7	
30	400 kV	ALIPURDUAR-BONGAIGAON	D/C	61	238	0.0	2.7	-3	
31	220 kV	ALIPURDUAR-SALAKATI	D/C	0	124	0.0	2.0	-2	
mort/I	Export of	NER (With NR)			ER-NER	0.0	11.2	-11.2	
32	· -	BISWANATH CHARIALI-AGRA	-	0	600	0.0	14.4	-14.4	
				-	NER-NR	0.0	14.4	-14.4	
iport/I	Export of	WR (With NR)							
33		CHAMPA-KURUKSHETRA	D/C	0	2005	0.0	21.9	-21.9	
34	HVDC	V'CHAL B/B	D/C	241	0	6.1	0.0	6.1	
35	ļ	APL -MHG	D/C	0	1163	0.0	18.9	-18.9	
36	4	GWALIOR-AGRA	D/C	0	1253	0.0	47.3	-47.3	
	765 kV	PHAGI-GWALIOR JABALPUR-ORAI	D/C D/C	0	1475 620	0.0	28.5	-28.5 -21.8	
37		LIGHAL ELIB-LIB AL		U		0.0	0.0	-21.8 8.6	
38	705 KV		_	452		8.6		1	
38 39	765 KV	GWALIOR-ORAI	S/C	452 0	0	8.6 0.0		-37.8	
38	765 KV	GWALIOR-ORAI SATNA-ORAI	_	452 0 161		8.6 0.0 0.0	37.8 0.8	-37.8 -0.8	
38 39 40		GWALIOR-ORAI	S/C S/C	0	0 1762	0.0	37.8	1	
38 39 40 41	765 KV	GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI	S/C S/C S/C	0 161	0 1762 186	0.0	37.8 0.8	-0.8	
38 39 40 41 42		GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL	S/C S/C S/C S/C	0 161 162	0 1762 186 187	0.0 0.0 0.0	37.8 0.8 0.7	-0.8 -0.7	
38 39 40 41 42 43		GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND	S/C S/C S/C S/C	0 161 162 970	0 1762 186 187	0.0 0.0 0.0 19.1	37.8 0.8 0.7 0.0	-0.8 -0.7 19.1	
38 39 40 41 42 43 44 45 46	- 400 kV	GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK	S/C	0 161 162 970 45	0 1762 186 187 0 345	0.0 0.0 0.0 19.1 0	37.8 0.8 0.7 0.0 3	-0.8 -0.7 19.1 -3	
38 39 40 41 42 43 44 45		GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA	S/C S/C S/C S/C S/C S/C S/C S/C S/C	0 161 162 970 45 13 0	0 1762 186 187 0 345 55 138	0.0 0.0 0.0 19.1 0 0.0 0.0	37.8 0.8 0.7 0.0 3 1.4 2.1 0.1	-0.8 -0.7 19.1 -3 -1.4 -2.1 0.1	
38 39 40 41 42 43 44 45 46 47 48	- 400 kV - 220 kV	GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA	S/C	0 161 162 970 45 13 0 46 25	0 1762 186 187 0 345 55 138 20 32	0.0 0.0 0.0 19.1 0 0.0 0.0 0.1	37.8 0.8 0.7 0.0 3 1.4 2.1 0.1 0.3	-0.8 -0.7 19.1 -3 -1.4 -2.1 0.1 -0.3	
38 39 40 41 42 43 44 45 46 47	- 400 kV	GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA	S/C	0 161 162 970 45 13 0	0 1762 186 187 0 345 55 138	0.0 0.0 0.0 19.1 0 0.0 0.0	37.8 0.8 0.7 0.0 3 1.4 2.1 0.1	-0.8 -0.7 19.1 -3 -1.4 -2.1 0.1	
38 39 40 41 42 43 44 45 46 47 48 49	400 kV 220 kV	GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA	S/C	0 161 162 970 45 13 0 46 25	0 1762 186 187 0 345 55 138 20 32	0.0 0.0 0.0 19.1 0 0.0 0.0 0.1 0.1	37.8 0.8 0.7 0.0 3 1.4 2.1 0.1 0.3 0.0	-0.8 -0.7 19.1 -3 -1.4 -2.1 0.1 -0.3 0.0	
38 39 40 41 42 43 44 45 46 47 48 49	220 kV 132kV Export of HVDC	GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B	S/C	0 161 162 970 45 13 0 46 25 0	0 1762 186 187 0 345 55 138 20 32 0 WR-NR	0.0 0.0 0.0 19.1 0 0.0 0.0 0.1 0.1 0.0 34.0	37.8 0.8 0.7 0.0 3 1.4 2.1 0.1 0.3 0.0 184.2	-0.8 -0.7 19.1 -3 -1.4 -2.1 -0.1 -0.3 -0.0 -150.2	
38 39 40 41 42 43 44 45 46 47 48 49 aport/F 50 51	400 kV 220 kV 132kV	GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU	S/C	0 161 162 970 45 13 0 46 25 0	0 1762 186 187 0 345 55 138 20 32 0 WR-NR	0.0 0.0 0.0 19.1 0 0.0 0.1 0.1 0.0 34.0	37.8 0.8 0.7 0.0 3 1.4 2.1 0.1 0.3 0.0 184.2	-0.8 -0.7 19.1 -3 -1.4 -2.1 -0.3 -0.0 -150.2	
38 39 40 41 42 43 44 45 46 47 48 49 port/F 50 51 52	220 kV 132kV Export of HVDC	GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR	S/C	0 161 162 970 45 13 0 46 25 0	0 1762 186 187 0 345 55 138 20 32 0 WR-NR	0.0 0.0 0.0 19.1 0 0.0 0.1 0.1 0.0 34.0	37.8 0.8 0.7 0.0 3 1.4 2.1 0.1 0.3 0.0 184.2 11.4 0.0 0.0	-0.8 -0.7 19.1 -3 -1.4 -2.1 0.1 -0.3 0.0 -150.2	
38 39 40 41 42 43 44 45 46 47 48 49 50 50 51 52 53	220 kV 132kV Export of HVDC LINK - 765 kV	GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD	S/C	0 161 162 970 45 13 0 46 25 0	0 1762 186 187 0 345 55 138 20 32 0 WR-NR	0.0 0.0 0.0 19.1 0 0.0 0.1 0.1 0.0 34.0 0.0 0.0 0.0	37.8 0.8 0.7 0.0 3 1.4 2.1 0.1 0.3 0.0 184.2	-0.8 -0.7 19.1 -3 -1.4 -2.1 0.1 -0.3 -0.0 -150.2	
38 39 40 41 42 43 44 45 46 47 48 49 50 50 51 52 53 54	400 kV 220 kV 132kV Export of HVDC LINK	GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-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	0 161 162 970 45 13 0 46 25 0	0 1762 186 187 0 345 55 138 20 32 0 WR-NR 502 0 1037 2102	0.0 0.0 0.0 19.1 0 0.0 0.1 0.1 0.0 34.0 0.0 0.0 0.0 0.0 34.0	37.8 0.8 0.7 0.0 3 1.4 2.1 0.1 0.3 0.0 184.2 11.4 0.0 0.0 27.4 0.0	-0.8 -0.7 19.1 -3 -1.4 -2.1 0.1 -0.3 0.0 -150.2 -11.4 0.0 4.4 -27.4 7.8	
38 39 40 41 42 43 44 45 46 47 48 49 49 50 51 52 53 54 55	220 kV 132kV Export of HVDC LINK 765 kV	GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-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	0 161 162 970 45 13 0 46 25 0	0 1762 186 187 0 345 55 138 20 32 0 WR-NR 502 0 1037 2102 0 0	0.0 0.0 0.0 19.1 0 0.0 0.0 0.0 0.1 0.1 0.1 0.0 34.0 0.0 0.0 4.4 0.0 7.8	37.8 0.8 0.7 0.0 3 1.4 2.1 0.1 0.3 0.0 184.2 11.4 0.0 0.0 27.4 0.0 0.0	-0.8 -0.7 19.1 -3 -1.4 -2.1 0.1 -0.3 0.0 -150.2 -11.4 0.0 4.4 -27.4 7.8 0.0	
38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56	220 kV 132kV Export of HVDC LINK 765 kV	GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-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	0 161 162 970 45 13 0 46 25 0	0 1762 186 187 0 345 55 138 20 32 0 WR-NR 502 0 1037 2102	0.0 0.0 0.0 19.1 0 0.0 0.0 0.0 0.1 0.1 0.0 34.0 0.0 0.0 4.4 0.0 7.8 0.0 0.0	37.8 0.8 0.7 0.0 3 1.4 2.1 0.1 0.3 0.0 184.2 11.4 0.0 0.0 27.4 0.0 0.0 0.0	-0.8 -0.7 19.1 -3 -1.4 -2.1 0.1 -0.3 0.0 -150.2 -11.4 0.0 4.4 -27.4 7.8 0.0 0.0	
38 39 40 41 42 43 44 45 46 47 48 49 49 49 50 51 52 53 54 55	220 kV 132kV Export of HVDC LINK 765 kV	GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-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	0 161 162 970 45 13 0 46 25 0	0 1762 186 187 0 345 55 138 20 32 0 WR-NR	0.0 0.0 0.0 19.1 0 0.0 0.0 0.0 0.1 0.1 0.1 0.0 34.0 0.0 0.0 4.4 0.0 7.8	37.8 0.8 0.7 0.0 3 1.4 2.1 0.1 0.3 0.0 184.2 11.4 0.0 0.0 27.4 0.0 0.0	-0.8 -0.7 19.1 -3 -1.4 -2.1 0.1 -0.3 0.0 -150.2 -11.4 0.0 4.4 -27.4 7.8 0.0	
38 39 40 41 42 43 44 45 46 47 48 49 49 50 51 52 53 54 55 56	220 kV 132kV Export of HVDC LINK 765 kV	GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-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	0 161 162 970 45 13 0 46 25 0	0 1762 186 187 0 345 55 138 20 32 0 WR-NR 502 0 1037 2102 0 0 0 WR-SR	0.0 0.0 0.0 19.1 0 0.0 0.0 0.0 0.1 0.1 0.0 34.0 0.0 4.4 0.0 7.8 0.0 0.0 0.0	37.8 0.8 0.7 0.0 3 1.4 2.1 0.1 0.3 0.0 184.2 11.4 0.0 0.0 27.4 0.0 0.0 0.0 0.0	-0.8 -0.7 19.1 -3 -1.4 -2.1 0.1 -0.3 0.0 -150.2 -11.4 0.0 4.4 -27.4 7.8 0.0 0.0 0.0	
38 39 40 41 42 43 44 45 46 47 48 49 49 50 51 52 53 54 55 56	220 kV 132kV Export of HVDC LINK 765 kV	GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-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	0 161 162 970 45 13 0 46 25 0 0 0 1113 0 689 0	0 1762 186 187 0 345 55 138 20 32 0 WR-NR 502 0 1037 2102 0 0 0 WR-SR	0.0 0.0 0.0 19.1 0 0.0 0.0 0.0 0.1 0.1 0.0 34.0 0.0 4.4 0.0 7.8 0.0 0.0 0.0	37.8 0.8 0.7 0.0 3 1.4 2.1 0.1 0.3 0.0 184.2 11.4 0.0 0.0 27.4 0.0 0.0 0.0 0.0	-0.8 -0.7 19.1 -3 -1.4 -2.1 0.1 -0.3 0.0 -150.2 -11.4 0.0 4.4 -27.4 7.8 0.0 0.0 0.0	