

## 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: 05<sup>th</sup> July 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 04.07.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 04-जुलाई-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 04<sup>rd</sup> July 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 5-Jul-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)	56715	43858	42025	19006	2846	164450
Peak Shortage (MW)	387	9	0	0	149	545
Energy Met (MU)	1439	994	957	454	55	3898
Hydro Gen (MU)	377	12	33	91	19	532
Wind Gen (MU)	45	125	192			363
Solar Gen (MU)*	27.52	12.01	73.58	1.93	0.03	115
Energy Shortage (MU)	10.9	0.2	0.0	0.0	0.8	11.8
Maximum Demand Met during the day	66135	45431	42408	22013	2901	171313
(MW) & time (from NLDC SCADA)	00:06	19:48	19:37	20:51	19:58	21:39

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 60.54 28.44

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	12900	0	289.9	141.7	-1.9	85	0.0
	Haryana	10748	0	208.2	150.9	-3.0	251	0.0
	Rajasthan	11049	0	237.3	57.2	-2.2	543	0.0
	Delhi	6877	0	139.2	115.2	0.2	330	0.1
NR	UP	20770	0	441.2	215.0	-0.1	979	0.0
	Uttarakhand	2051	0	45.2	19.2	0.7	257	0.0
	HP	1403	0	30.0	2.0	-0.8	73	0.0
	J&K	2177	544	41.6	19.8	-3.2	350	10.8
	Chandigarh	313	0	6.1	7.4	-1.2	0	0.0
	Chhattisgarh	3544	0	79.8	22.6	-1.0	295	0.0
	Gujarat	13988	0	318.1	55.5	3.1	632	0.0
	MP	7484	0	161.1	77.5	0.0	408	0.0
WR	Maharashtra	17761	7	392.8	94.1	1.8	623	0.2
WK	Goa	541	0	10.0	11.3	-1.9	46	0.0
	DD	336	0	7.5	6.8	0.8	65	0.0
	DNH	810	0	18.8	18.9	-0.1	65	0.0
	Essar steel	292	0	5.3	5.0	0.4	348	0.0
	Andhra Pradesh	8564	0	179.4	3.3	0.6	555	0.0
	Telangana	7240	0	152.5	52.4	0.3	487	0.0
SR	Karnataka	10006	0	195.4	57.4	-1.6	487	0.0
3N	Kerala	3659	0	73.4	60.8	2.5	289	0.0
	Tamil Nadu	15850	0	346.7	160.3	1.1	1203	0.0
	Pondy	457	0	9.4	9.2	0.2	79	0.0
	Bihar	5542	0	106.2	99.4	3.2	350	0.0
	DVC	3157	0	66.3	-40.6	0.3	300	0.0
ER	Jharkhand	1000	0	22.7	17.6	-0.3	100	0.0
LIN	Odisha	3864	0	81.6	25.7	0.7	250	0.0
	West Bengal	8796	0	176.1	55.6	5.1	500	0.0
	Sikkim	94	0	1.2	1.4	-0.1	20	0.0
	Arunachal Pradesh	139	0	2.4	2.5	-0.1	67	0.0
	Assam	1797	81	35.0	30.0	1.4	528	0.7
	Manipur	154	2	2.5	2.4	0.1	27	0.0
NER	Meghalaya	332	0	5.9	2.4	0.0	201	0.0
	Mizoram	94	1	1.7	1.4	0.2	26	0.0
	Nagaland	137	2	2.5	2.5	-0.2	20	0.0
	Tripura	287	2	5.1	3.7	-0.5	34	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	19.5	-10.4	-24.8
Day peak (MW)	1166.7	-534.8	-1065.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	316.9	-284.7	32.9	-62.0	-3.0	0.1
Actual(MU)	304.3	-289.8	42.1	-61.1	-1.0	-5.7
O/D/U/D(MU)	-12.7	-5.1	9.2	0.9	2.0	-5.8

#### F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	4630	17235	8392	2170	56	32483
State Sector	6110	15934	7380	3270	50	32744
Total	10740	33169	15772	5440	106	65227
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G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	617	1061	474	440	14	2605
Lignite	18	15	48	0	0	81
Hydro	377	12	33	91	19	532
Nuclear	27	26	55	0	0	108
Gas, Naptha & Diesel	34	39	13	0	29	114
RES (Wind, Solar, Biomass & Others)	88	145	299	2	0	534
Total	1160	1298	921	532	62	3973

Share of RES in total generation (%)	7.55	11.17	32.46	0.36	0.05	13.43
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%)	42.36	14.15	41.93	17.42	31.41	29.53

H. Diversity Factor All India Demand Diversity Factor

All India Demand Diversity Factor 1.044

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

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

		<u>IN</u> '	TER-REGI	ONAL EXCH	ANGES	Date of 1	Reporting :	5-Jul-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	78	481	0.0	6.5	-6.5
3	705KV	SASARAM-FATEHPUR GAYA-BALIA	S/C S/C	402 0	657	5.8	0.0 12.4	5.8 -12.4
4	HVDC	ALIPURDUAR-AGRA	-	0	1304	0.0	29.8	-29.8
5	HVDC	PUSAULI B/B	S/C	0	346	0.0	8.7	-8.7
6	4	PUSAULI-VARANASI	S/C	0	292	0.0	6.5	-6.5
7	-	PUSAULI -ALLAHABAD	S/C	0	118	0.0	2.0	-2.0
9	400 kV	MUZAFFARPUR-GORAKHPUR PATNA-BALIA	D/C O/C	0	512 1099	0.0	6.8 20.4	-6.8 -20.4
10	400 K	BIHARSHARIFF-BALIA	D/C	0	391	0.0	6.2	-6.2
11		MOTIHARI-GORAKHPUR	D/C	309	0	6.1	0.0	6.1
12		BIHARSHARIFF-VARANASI	D/C	292	14	3.2	0.0	3.2
13	220 kV	PUSAULI-SAHUPURI	S/C	0	188	0.0	3.8	-3.8
14		SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	30	0	0.6	0.0	0.6
16		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
Import/E	vnort of	ER (With WR)			ER-NR	15.7	103.0	-87.4
_	Aport Of		6.00	1510		10.0	0.0	10.2
18	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1543	0	18.3	0.0	18.3
19	, 02 KY	NEW RANCHI-DHARAMJAIGARH	D/C	1241	0	21.4	0.0	21.4
20		JHARSUGUDA-DURG JHARSUGUDA-RAIGARH	D/C Q/C	275 481	13	3.4 7.1	0.0	3.4 7.1
22	400 kV	RANCHI-SIPAT	D/C	491	0	9.3	0.0	9.3
23	220 1 17	BUDHIPADAR-RAIGARH	S/C	0	80	0.0	0.9	-0.9
24	220 kV	BUDHIPADAR-KORBA	D/C	221	0	3.7	0.0	3.7
					ER-WR	63.3	0.9	62.4
	_	ER (With SR)				1		_
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	1642.0	0.0	20.7	-20.7
26	HVDC LINK	JEYPORE-GAZUWAKA B/B	D/C	0.0	310.0	0.0	7.2	-7.2
27		TALCHER-KOLAR BIPOLE	D/C	0.0 285.0	1788.0 821.0	0.0	35.9 5.7	-35.9 -5.7
28	400 kV 220 kV	TALCHER-I/C BALIMELA-UPPER-SILERRU	D/C S/C	1.0	0.0	0.0	0.0	0.0
- 27	220 K Y	BALIMELY OF FER-SILERKO	5/0	1.0	ER-SR	0.0	63.8	-63.8
Import/E	Export of	ER (With NER)						
30	400 kV	BINAGURI-BONGAIGAON	D/C	0	645	0.0	10.0	-10
31	400 K Y	ALIPURDUAR-BONGAIGAON	D/C	312	205	1.4	0.0	1
32	220 kV	ALIPURDUAR-SALAKATI	D/C	0	104	0.0	1.4	-1
T	·	NED (WALNE)			ER-NER	1.4	11.4	-10.0
33 33	HVDC	NER (With NR) BISWANATH CHARIALI-AGRA		0	503	0.0	12.1	-12.1
33	пурс	BISWANATH CHARLALFAGRA		0	NER-NR	0.0	12.1	-12.1
Import/E	Export of	WR (With NR)						
34		CHAMPA-KURUKSHETRA	D/C	0	3010	0.0	64.7	-64.7
35	HVDC	V'CHAL B/B	D/C	96	490	0.0	5.3	-5.3
36		APL -MHG	D/C	0	1915	0.0	45.5	-45.5
37		GWALIOR-AGRA	D/C	0	2543	0.0	50.3	-50.3
38	1	PHAGI-GWALIOR	D/C	0	1041	0.0	18.7	-18.7
39	765 kV	JABALPUR-ORAI	D/C	0	936	0.0 7.4	37.7	-37.7
40	1	GWALIOR-ORAI	S/C	383	0	7.4	0.0	7.4
41		SATNA-ORAI	0/0	Λ			20.0	
41		SATNA-ORAI CHITTORGARH-BANASKANTHA	S/C D/C	348	1414	0.0	29.9	-29.9 1.0
41 42 43		SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI	S/C D/C S/C	348 144			29.9 3.1 0.1	-29.9 1.0 1.6
42		CHITTORGARH-BANASKANTHA	D/C	348	1414 507	0.0 2.1	3.1	1.0
42 43	400 kV	CHITTORGARH-BANASKANTHA ZERDA-KANKROLI	D/C S/C	348 144	1414 507 42	0.0 2.1 1.7	3.1 0.1	1.0 1.6
42 43 44	400 kV	CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL	D/C S/C S/C	348 144 372	1414 507 42 0	0.0 2.1 1.7 5.5	3.1 0.1 0.0	1.0 1.6 5.5
42 43 44 45	400 kV	CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND	D/C S/C S/C S/C	348 144 372 979	1414 507 42 0	0.0 2.1 1.7 5.5 22.4	3.1 0.1 0.0 0.0	1.0 1.6 5.5 22.4
42 43 44 45 46 47 48	-	CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK	D/C S/C S/C S/C S/C S/C S/C D/C S/C S/C	348 144 372 979 49 9	1414 507 42 0 0 291 46 81	0.0 2.1 1.7 5.5 22.4 0 0.0	3.1 0.1 0.0 0.0 2 0.4 1.1	1.0 1.6 5.5 22.4 -2 -0.4 -1.1
42 43 44 45 46 47 48 49	400 kV	CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA	D/C S/C S/C S/C D/C S/C S/C S/C S/C S/C S/C	348 144 372 979 49 9 0 36	1414 507 42 0 0 291 46 81	0.0 2.1 1.7 5.5 22.4 0 0.0 0.0 0.1	3.1 0.1 0.0 0.0 2 0.4 1.1 0.3	1.0 1.6 5.5 22.4 -2 -0.4 -1.1 -0.2
42 43 44 45 46 47 48 49 50	220 kV	CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA	D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	348 144 372 979 49 9 0 36	1414 507 42 0 0 291 46 81 17 55	0.0 2.1 1.7 5.5 22.4 0 0.0 0.0 0.1	3.1 0.1 0.0 0.0 2 0.4 1.1 0.3 0.8	1.0 1.6 5.5 22.4 -2 -0.4 -1.1 -0.2 -0.8
42 43 44 45 46 47 48 49	-	CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA	D/C S/C S/C S/C D/C S/C S/C S/C S/C S/C S/C	348 144 372 979 49 9 0 36	1414 507 42 0 0 291 46 81 17 55 0	0.0 2.1 1.7 5.5 22.4 0 0.0 0.0 0.1 0.0	3.1 0.1 0.0 0.0 2 0.4 1.1 0.3 0.8 0.0	1.0 1.6 5.5 22.4 -2 -0.4 -1.1 -0.2 -0.8 0.0
42 43 44 45 46 47 48 49 50	220 kV	CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	348 144 372 979 49 9 0 36	1414 507 42 0 0 291 46 81 17 55	0.0 2.1 1.7 5.5 22.4 0 0.0 0.0 0.1	3.1 0.1 0.0 0.0 2 0.4 1.1 0.3 0.8	1.0 1.6 5.5 22.4 -2 -0.4 -1.1 -0.2 -0.8
42 43 44 45 46 47 48 49 50	220 kV 132kV Export of	CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-WANDUR BHANPURA-WANDUR BHANPURA-WANDUR GWALIOR-SAWAI MADHOPUR WR (With SR)	D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	348 144 372 979 49 9 0 36 0	1414 507 42 0 0 291 46 81 17 55 0 WR-NR	0.0 2.1 1.7 5.5 22.4 0 0.0 0.0 0.1 0.0 39.2	3.1 0.1 0.0 0.0 2 0.4 1.1 0.3 0.8 0.0	1.0 1.6 5.5 22.4 -2 -0.4 -1.1 -0.2 -0.8 0.0 -218.5
42 43 44 45 46 47 48 49 50 51	220 kV	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	D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	348 144 372 979 49 9 0 36	1414 507 42 0 0 291 46 81 17 55 0	0.0 2.1 1.7 5.5 22.4 0 0.0 0.0 0.1 0.0	3.1 0.1 0.0 0.0 2 0.4 1.1 0.3 0.8 0.0	1.0 1.6 5.5 22.4 -2 -0.4 -1.1 -0.2 -0.8 0.0
42 43 44 45 46 47 48 49 50 51 <b>Import/E</b>	220 kV 132kV Export of HVDC LINK	CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-WANDUR BHANPURA-WANDUR BHANPURA-WANDUR GWALIOR-SAWAI MADHOPUR WR (With SR)	D/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	348 144 372 979 49 9 0 36 0	1414 507 42 0 0 291 46 81 17 55 0 WR-NR	0.0 2.1 1.7 5.5 22.4 0 0.0 0.0 0.1 0.0 39.2	3.1 0.1 0.0 0.0 2 0.4 1.1 0.3 0.8 0.0 259.6	1.0 1.6 5.5 22.4 -2 -0.4 -1.1 -0.2 -0.8 0.0 -218.5
42 43 44 45 46 47 48 49 50 51 <b>Import/E</b> 52	220 kV 132kV Export of HVDC	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 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	348 144 372 979 49 9 0 36 0 0	1414 507 42 0 0 291 46 81 17 555 0 WR-NR	0.0 2.1 1.7 5.5 22.4 0 0.0 0.0 0.0 0.0 39.2	3.1 0.1 0.0 0.0 2 0.4 1.1 0.3 0.8 0.0 259.6	1.0 1.6 5.5 22.4 -2 -0.4 -1.1 -0.2 -0.8 0.0 -218.5
42 43 44 45 46 47 48 49 50 51 <b>Import/E</b> 52 53	220 kV 132kV Export of HVDC LINK	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 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	348 144 372 979 49 9 0 36 0 0 94 0 1257	1414 507 42 0 0 291 46 81 17 55 0 WR-NR	0.0 2.1 1.7 5.5 22.4 0 0.0 0.0 0.1 0.0 0.0 39.2	3.1 0.1 0.0 0.0 2 0.4 1.1 0.3 0.8 0.0 259.6	1.0 1.6 5.5 22.4 -2 -0.4 -1.1 -0.2 -0.8 0.0 -218.5
42 43 44 45 46 47 48 49 50 51 <b>Import/E</b> 52 53 54	220 kV  132kV  Export of HVDC LINK  765 kV	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	D/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	348 144 372 979 49 9 0 36 0 0 9 49 9 0 1257 602	1414 507 42 0 0 291 46 81 17 55 0 WR-NR 502 0 1216 1583	0.0 2.1 1.7 5.5 22.4 0 0.0 0.0 0.1 0.0 39.2 0.0 0.0 5.3 0.0	3.1 0.1 0.0 0.0 2 0.4 1.1 0.3 0.8 0.0 259.6 5.1 0.0 8.5	1.0 1.6 5.5 22.4 -2 -0.4 -1.1 -0.2 -0.8 0.0 -218.5  -5.1 0.0 -3.2 -15.2
42 43 44 45 46 47 48 49 50 51 <b>Import/E</b> 52 53 54 55	220 kV  132kV  Export of HVDC LINK  765 kV	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) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	348 144 372 979 49 9 0 36 0 0 94 0 1257 602 1149	1414 507 42 0 0 291 46 81 17 55 0 WR-NR 502 0 1216 1583 0	0.0 2.1 1.7 5.5 22.4 0 0.0 0.0 0.1 0.0 0.0 39.2  0.0 5.3 0.0 12.8	3.1 0.1 0.0 0.0 2 0.4 1.1 0.3 0.8 0.0 259.6 5.1 0.0 8.5 15.2 0.0	1.0 1.6 5.5 22.4 -2 -0.4 -1.1 -0.2 -0.8 0.0 -218.5  -5.1 0.0 -3.2 -15.2 12.8
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 400 kV	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	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	348 144 372 979 49 9 0 36 0 0 94 0 1257 602 1149	1414 507 42 0 0 291 46 81 17 55 0 WR-NR 502 0 1216 1583 0 0	0.0 2.1 1.7 5.5 22.4 0 0.0 0.0 0.1 0.0 39.2  0.0 0.0 12.8 0.0	3.1 0.1 0.0 0.0 2 0.4 1.1 0.3 0.8 0.0 259.6 5.1 0.0 8.5 15.2 0.0	1.0 1.6 5.5 22.4 -2 -0.4 -1.1 -0.2 -0.8 0.0 -218.5  -5.1 0.0 -3.2 -15.2 12.8 0.0
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 400 kV	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) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	348 144 372 979 49 9 0 36 0 0 1257 602 1149 0 0	1414 507 42 0 0 291 46 81 17 55 0 WR-NR 502 0 1216 1583 0 0 66	0.0 2.1 1.7 5.5 22.4 0 0.0 0.0 0.1 0.0 39.2  0.0 0.0 12.8 0.0 0.0 0.0	3.1 0.1 0.0 0.0 2 0.4 1.1 0.3 0.8 0.0 259.6 5.1 0.0 8.5 15.2 0.0 0.0	1.0 1.6 5.5 22.4 -2 -0.4 -1.1 -0.2 -0.8 0.0 -218.5  -5.1 0.0 -3.2 -15.2 12.8 0.0 -1.3
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 400 kV	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) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	348 144 372 979 49 9 0 36 0 0 1257 602 1149 0 0	1414 507 42 0 0 291 46 81 17 55 0 WR-NR  502 0 1216 1583 0 0 66 38 WR-SR	0.0 2.1 1.7 5.5 22.4 0 0.0 0.0 0.1 0.0 39.2  0.0 0.0 12.8 0.0 0.0 0.7	3.1 0.1 0.0 0.0 2 0.4 1.1 0.3 0.8 0.0 259.6 5.1 0.0 8.5 15.2 0.0 0.0	1.0 1.6 5.5 22.4 -2 -0.4 -1.1 -0.2 -0.8 0.0 -218.5  -5.1 0.0 -3.2 -15.2 12.8 0.0 -1.3 0.7
42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	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-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI ZELDEM-AMBEWADI BHUTAN	D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	348 144 372 979 49 9 0 36 0 0 1257 602 1149 0 0	1414 507 42 0 0 291 46 81 17 55 0 WR-NR  502 0 1216 1583 0 0 66 38 WR-SR	0.0 2.1 1.7 5.5 22.4 0 0.0 0.0 0.1 0.0 39.2  0.0 0.0 12.8 0.0 0.0 0.7	3.1 0.1 0.0 0.0 2 0.4 1.1 0.3 0.8 0.0 259.6 5.1 0.0 8.5 15.2 0.0 0.0	1.0 1.6 5.5 22.4 -2 -0.4 -1.1 -0.2 -0.8 0.0 -218.5  -5.1 0.0 -3.2 -15.2 12.8 0.0 -1.3 0.7 -11.2
42 43 44 45 46 47 48 49 50 51 <b>Import/E</b> 52 53 54 55 56 57 58 59	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WARAYA MALANPUR-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 S/C S/C S/C S/C S/C S/C S/C S/C S/C S	348 144 372 979 49 9 0 36 0 0 1257 602 1149 0 0	1414 507 42 0 0 291 46 81 17 55 0 WR-NR  502 0 1216 1583 0 0 66 38 WR-SR	0.0 2.1 1.7 5.5 22.4 0 0.0 0.0 0.1 0.0 39.2  0.0 0.0 12.8 0.0 0.0 0.7	3.1 0.1 0.0 0.0 2 0.4 1.1 0.3 0.8 0.0 259.6 5.1 0.0 8.5 15.2 0.0 0.0	1.0 1.6 5.5 22.4 -2 -0.4 -1.1 -0.2 -0.8 0.0 -218.5  -5.1 0.0 -3.2 -15.2 12.8 0.0 -1.3 0.7 -11.2