

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: 10th July 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. 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 -560009 Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 09.07.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 09-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 09th 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 10-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)	54594	45581	40625	19591	2632	163023
Peak Shortage (MW)	469	0	99	0	190	758
Energy Met (MU)	1258	1035	963	416	48	3721
Hydro Gen (MU)	341	16	36	124	28	545
Wind Gen (MU)	64	153	205			422
Solar Gen (MU)*	22.31	19.2	66.78	1.71	0.01	110
Energy Shortage (MU)	9.9	0.0	0.0	0.0	2.2	12.1
Maximum Demand Met during the day	60124	47140	41991	20852	2648	167482
(MW) & time (from NLDC SCADA)	00:12	19:46	06:54	20:34	19:41	20:14

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 0.039

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	12446	0	268.9	149.9	-2.3	27	0.0
	Haryana	9675	0	207.9	159.9	0.9	281	0.0
	Rajasthan	10437	0	225.8	52.6	-1.1	272	0.0
	Delhi	6172	0	113.4	103.9	-0.1	193	0.0
NR	UP	16908	0	325.6	158.9	-1.4	820	0.0
	Uttarakhand	1933	0	41.9	14.0	-0.3	96	0.0
	HP	1289	0	28.2	-0.8	-0.6	25	0.1
	J&K	2033	508	40.8	18.9	0.4	248	9.7
	Chandigarh	284	0	6.0	7.0	-1.1	25	0.0
	Chhattisgarh	3755	0	83.4	23.5	-0.6	268	0.0
	Gujarat	15026	0	340.4	73.6	5.6	1115	0.0
	MP	7822	0	165.3	63.4	0.0	723	0.0
WR	Maharashtra	18266	0	402.8	114.9	4.2	430	0.0
WK	Goa	541	0	11.6	11.5	-0.5	35	0.0
	DD	335	0	7.6	7.0	0.6	92	0.0
	DNH	788	0	18.6	18.9	-0.3	121	0.0
	Essar steel	359	0	5.6	5.8	-0.2	333	0.0
	Andhra Pradesh	9063	0	188.4	8.4	1.1	704	0.0
	Telangana	7522	0	164.2	65.8	0.8	619	0.0
SR	Karnataka	10380	0	195.2	54.2	0.6	500	0.0
3N	Kerala	3326	0	68.6	58.2	2.7	279	0.0
	Tamil Nadu	15018	0	338.4	147.9	1.2	673	0.0
	Pondy	403	0	8.3	8.5	-0.2	50	0.0
	Bihar	4348	0	69.9	67.4	-1.3	325	0.0
	DVC	2986	0	65.5	-41.9	-0.2	345	0.0
ER	Jharkhand	1097	0	23.2	16.0	-1.0	185	0.0
LIN	Odisha	3974	0	85.1	31.9	1.9	402	0.0
	West Bengal	8036	0	170.8	68.3	5.0	435	0.0
	Sikkim	92	0	1.3	1.3	-0.1	20	0.0
	Arunachal Pradesh	121	2	2.3	3.1	-0.9	19	0.0
	Assam	1663	134	28.7	22.3	1.1	115	2.1
	Manipur	163	3	2.5	2.5	0.1	29	0.0
NER	Meghalaya	321	0	6.0	1.2	-0.1	88	0.0
	Mizoram	92	2	1.8	1.4	0.2	12	0.0
	Nagaland	128	1	2.3	2.2	0.0	33	0.0
	Tripura	246	1	4.6	3.6	0.2	61	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	43.7	-5.0	-25.6
Day peak (MW)	1933.1	-355.0	-1107.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	281.3	-272.4	65.6	-66.2	-10.1	-1.9
Actual(MU)	262.8	-265.6	93.3	-82.1	-10.8	-2.3
O/D/U/D(MU)	-18.5	6.8	27.8	-15.8	-0.7	-0.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	5510	17971	9652	2420	56	35608
State Sector	8675	18284	7720	4460	50	39189
Total	14185	36255	17372	6880	106	74797

G. Sourcewise generation (MU)

NR	WR	SR	ER	NER	All India
503	1016	429	397	8	2353
18	14	33	0	0	65
341	17	36	124	28	545
27	29	23	0	0	79
20	40	15	0	28	103
102	180	309	2	0	593
1010	1296	845	523	64	3738
	503 18 341 27 20 102	503 1016 18 14 341 17 27 29 20 40 102 180	503 1016 429 18 14 33 341 17 36 27 29 23 20 40 15 102 180 309	503 1016 429 397 18 14 33 0 341 17 36 124 27 29 23 0 20 40 15 0 102 180 309 2	503 1016 429 397 8 18 14 33 0 0 341 17 36 124 28 27 29 23 0 0 20 40 15 0 28 102 180 309 2 0

Share of RES in total generation (%)	10.05	13.92	36.58	0.33	0.02	15.86
Share of Non-fossil fuel (Hydro, Nuclear and	46.48	17.44	43.49	24.00	44.27	32.56
RES) in total generation (%)		· ·				

H. Diversity Factor All India Demand Diversity Factor

All India Demand Diversity Factor 1.031

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

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

		<u>IN'</u>	ΓER-REGI	ONAL EXCH	ANGES	Date of I	Reporting :	10-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	0	515	0.0	4.6	-4.6
3	705KV	SASARAM-FATEHPUR GAYA-BALIA	S/C S/C	139	192 381	0.0	5.1	0.0 -5.1
4	HVDC	ALIPURDUAR-AGRA	-	0	1851	0.0	39.0	-39.0
5	HVDC	PUSAULI B/B	S/C	0	346	0.0	8.0	-8.0
6	4	PUSAULI-VARANASI	S/C	0	254	0.0	5.2	-5.2
7		PUSAULI -ALLAHABAD	S/C	0	167	0.0	2.8	-2.8
9	400 kV	MUZAFFARPUR-GORAKHPUR PATNA-BALIA	D/C O/C	0	644 897	0.0	9.2	-9.2 -14.7
10	400 K	BIHARSHARIFF-BALIA	D/C	0	276	0.0	4.2	-4.2
11	1	MOTIHARI-GORAKHPUR	D/C	112	241	0.0	0.2	-0.2
12		BIHARSHARIFF-VARANASI	D/C	97	151	0.1	0.0	0.1
13	220 kV	PUSAULI-SAHUPURI	S/C	0	158	0.0	2.1	-2.1
14		SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	30	0	0.4	0.0	0.4
16		KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0
17		KARMANASA-CHANDAULI	S/C	0	0 ED ND	0.0	0.0	0.0
Import/E	vnert of	FR (With WP)			ER-NR	0.5	95.3	-94.8
-	Aport of	ER (With WR)	1			ı		T
18	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1809	0	35.7	0.0	35.7
19	/05 KV	NEW RANCHI-DHARAMJAIGARH	D/C	878	106	13.3	0.0	13.3
20		JHARSUGUDA-DURG JHARSUGUDA-RAIGARH	D/C Q/C	301 460	0	4.8 6.7	0.0	4.8 6.7
22	400 kV	RANCHI-SIPAT	D/C	366	0	5.3	0.0	5.3
23		BUDHIPADAR-RAIGARH	S/C	0	69	0.0	0.9	-0.9
24	220 kV	BUDHIPADAR-KORBA	D/C	239	0	4.6	0.0	4.6
					ER-WR	70.2	0.9	69.3
Import/E	Export of	ER (With SR)						
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	1706.0	0.0	19.4	-19.4
26	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0.0	415.0	0.0	9.9	-9.9
27	LINK	TALCHER-KOLAR BIPOLE	D/C	0.0	1985.0	0.0	47.9	-47.9
28	400 kV	TALCHER-I/C BALIMELA-UPPER-SILERRU	D/C S/C	1.0	1451.0 0.0	0.0	27.8	-27.8
29	220 kV	BALIMELA-UFFER-SILERRU	3/C	1.0	ER-SR	0.0	77.2	0.0 -77.2
Import/E	Export of	ER (With NER)				0.0		
30		BINAGURI-BONGAIGAON	D/C	0	618	0.0	8.8	-9
31	400 kV	ALIPURDUAR-BONGAIGAON	D/C	391	174	4.5	0.0	5
32	220 kV	ALIPURDUAR-SALAKATI	D/C	0	106	0.0	1.1	-1
					ER-NER	4.5	10.0	-5.5
		NER (With NR)	1		1000		40.5	10.5
33	HVDC	BISWANATH CHARIALI-AGRA	-	0	1003	0.0	18.5	-18.5
Import/F	export of	WR (With NR)			NER-NR	0.0	18.5	-18.5
34	Aport or	CHAMPA-KURUKSHETRA	D/C	18383	2503	0.0	36.2	-36.2
35	HVDC	V'CHAL B/B	D/C	0	398	0.0	7.9	-7.9
36		APL -MHG	D/C	0	1546	0.0	31.8	-31.8
37		GWALIOR-AGRA	D/C	0	2025	0.0	35.5	-35.5
38]	PHAGI-GWALIOR	D/C	0	1056	0.0	20.2	-20.2
39	765 kV	JABALPUR-ORAI	D/C	0	805	0.0	28.8	-28.8
40	1	GWALIOR-ORAI	S/C	388	0	6.3	0.0	6.3
41	-	SATNA-ORAI	S/C	0	1260	0.0	26.3	-26.3
42	-	CHITTORGARH-BANASKANTHA	D/C	63	780	0.0	4.6	4.6
43		ZERDA-KANKROLI	S/C	143	45	1.6	0.0	1.5 5.7
44		ZERDA -BHINMAI	9/0	372		57	0.0	3.1
44 45	400 kV	ZERDA -BHINMAL V'CHAL -RIHAND	S/C S/C	372 965	0	5.7	0.0	22.2
44 45 46	400 kV	ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR	S/C S/C D/C	965	0	5.7 22.2 0	0.0	22.2
45	400 kV	V'CHAL -RIHAND	S/C		0	22.2	0.0	
45 46	-	V'CHAL -RIHAND RAPP-SHUJALPUR	S/C D/C	965 73	0 0 248	22.2 0	0.0	-1
45 46 47	400 kV	V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR	S/C D/C S/C	965 73 48	0 0 248 65	22.2 0 0.2	0.0 1 0.4	-1 -0.2
45 46 47 48	-	V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK	S/C D/C S/C S/C	965 73 48 0	0 0 248 65 152	22.2 0 0.2 0.0	0.0 1 0.4 2.3	-1 -0.2 -2.3
45 46 47 48 49	-	V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA	S/C D/C S/C S/C S/C	965 73 48 0 63	0 0 248 65 152 2 28 0	22.2 0 0.2 0.0 0.5 0.1 0.0	0.0 1 0.4 2.3 0.0 0.1 0.0	-1 -0.2 -2.3 0.5 0.0 0.0
45 46 47 48 49 50 51	220 kV	V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	S/C D/C S/C S/C S/C S/C S/C	965 73 48 0 63 40	0 0 248 65 152 2 28	22.2 0 0.2 0.0 0.5 0.1	0.0 1 0.4 2.3 0.0 0.1	-1 -0.2 -2.3 -0.5 -0.0
45 46 47 48 49 50 51	220 kV 132kV Export of	V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR)	S/C D/C S/C S/C S/C S/C S/C S/C	965 73 48 0 63 40 0	0 0 248 65 152 2 28 0 WR-NR	22.2 0 0.2 0.0 0.5 0.1 0.0 36.6	0.0 1 0.4 2.3 0.0 0.1 0.0 195.2	-1 -0.2 -2.3 -0.5 -0.0 -149.4
45 46 47 48 49 50 51 Import/E	220 kV 132kV Export of HVDC	V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B	S/C D/C S/C S/C S/C S/C S/C S/C -	965 73 48 0 63 40 0	0 0 248 65 152 2 28 0 WR-NR	22.2 0 0.2 0.0 0.5 0.1 0.0 36.6	0.0 1 0.4 2.3 0.0 0.1 0.0 195.2	-1 -0.2 -2.3 -0.5 -0.0 -149.4
45 46 47 48 49 50 51 Import/E 52 53	220 kV 132kV Export of	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	S/C D/C S/C S/C S/C S/C S/C S/C	965 73 48 0 63 40 0	0 0 248 65 152 2 28 0 WR-NR	22.2 0 0.2 0.0 0.5 0.1 0.0 36.6	0.0 1 0.4 2.3 0.0 0.1 0.0 195.2	-1 -0.2 -2.3 0.5 0.0 0.0 -149.4
45 46 47 48 49 50 51 Import/E 52 53	220 kV 132kV Export of HVDC	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	S/C D/C S/C S/C S/C S/C S/C	965 73 48 0 63 40 0	0 0 248 65 152 2 28 0 WR-NR	22.2 0 0.2 0.0 0.5 0.1 0.0 36.6	0.0 1 0.4 2.3 0.0 0.1 0.0 195.2 18.6 0.0 5.3	-1 -0.2 -2.3 0.5 0.0 0.0 -149.4 -18.6 0.0 -5.3
45 46 47 48 49 50 51 Import/E 52 53 54 55	220 kV 132kV Export of HVDC LINK 765 kV	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	S/C D/C S/C S/C S/C S/C S/C D/C S/C D/C D/C	965 73 48 0 63 40 0 0 0 0 796 55	0 0 248 65 152 2 28 0 WR-NR 999 0 1439 2166	22.2 0 0.2 0.0 0.5 0.1 0.0 36.6 0.0 0.0 0.0	0.0 1 0.4 2.3 0.0 0.1 0.0 195.2 18.6 0.0 5.3 18.9	-1 -0.2 -2.3 0.5 0.0 0.0 -149.4 -18.6 0.0 -5.3 -18.9
45 46 47 48 49 50 51 Import/E 52 53 54 55	220 kV 132kV Export of HVDC LINK	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 D/C S/C S/C S/C S/C S/C D/C D/C D/C D/C	965 73 48 0 63 40 0 0 796 55 744	0 0 248 65 152 2 28 0 WR-NR 999 0 1439 2166	22.2 0 0.2 0.0 0.5 0.1 0.0 36.6 0.0 0.0 0.0 0.0 7.8	0.0 1 0.4 2.3 0.0 0.1 0.0 195.2 18.6 0.0 5.3 18.9 0.0	-1 -0.2 -2.3 0.5 0.0 0.0 -149.4 -18.6 0.0 -5.3 -18.9 7.8
45 46 47 48 49 50 51 Import/E 52 53 54 55 56	220 kV 132kV Export of HVDC LINK 765 kV	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	S/C D/C S/C S/C S/C S/C S/C D/C D/C D/C D/C D/C D/C	965 73 48 0 63 40 0 0 0 0 796 55	0 0 248 65 152 2 28 0 WR-NR 999 0 1439 2166	22.2 0 0.2 0.0 0.5 0.1 0.0 36.6 0.0 0.0 0.0	0.0 1 0.4 2.3 0.0 0.1 0.0 195.2 18.6 0.0 5.3 18.9	-1 -0.2 -2.3 0.5 0.0 0.0 -149.4 -18.6 0.0 -5.3 -18.9
45 46 47 48 49 50 51 Import/E 52 53 54 55	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	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 D/C S/C S/C S/C S/C S/C D/C D/C D/C D/C	965 73 48 0 63 40 0 0 0 796 55 744 0	0 0 248 65 152 2 28 0 WR-NR 999 0 1439 2166 107	22.2 0 0.2 0.0 0.5 0.1 0.0 36.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 1 0.4 2.3 0.0 0.1 0.0 195.2 18.6 0.0 5.3 18.9 0.0	-1 -0.2 -2.3 0.5 0.0 0.0 -149.4 -18.6 0.0 -5.3 -18.9 7.8 0.0
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	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	S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	965 73 48 0 63 40 0 0 796 55 744 0 0	0 0 248 65 152 2 28 0 WR-NR 999 0 1439 2166 107 0	22.2 0 0.2 0.0 0.5 0.1 0.0 36.6 0.0 0.0 0.0 0.0 0.0 0.0	0.0 1 0.4 2.3 0.0 0.1 0.0 195.2 18.6 0.0 5.3 18.9 0.0 0.0 1.5	-1 -0.2 -2.3 0.5 0.0 0.0 -149.4 -18.6 0.0 -5.3 -18.9 7.8 0.0 -1.5
45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	965 73 48 0 63 40 0 0 796 55 744 0 0 0	0 0 248 65 152 2 28 0 WR-NR 999 0 1439 2166 1107 0 77 44 WR-SR	22.2 0 0.2 0.0 0.5 0.1 0.0 36.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 1 0.4 2.3 0.0 0.1 10.0 195.2 18.6 0.0 5.3 18.9 0.0 0.0 1.5 0.0	-1 -0.2 -2.3 0.5 0.0 0.0 -149.4 -18.6 0.0 -5.3 -18.9 7.8 0.0 -1.5
45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	965 73 48 0 63 40 0 0 796 55 744 0 0	0 0 248 65 152 2 28 0 WR-NR 999 0 1439 2166 1107 0 77 44 WR-SR	22.2 0 0.2 0.0 0.5 0.1 0.0 36.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 1 0.4 2.3 0.0 0.1 10.0 195.2 18.6 0.0 5.3 18.9 0.0 0.0 1.5 0.0	-1 -0.2 -2.3 0.5 0.0 0.0 -149.4 -18.6 0.0 -5.3 -18.9 7.8 0.0 -1.5
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	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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	965 73 48 0 63 40 0 0 796 55 744 0 0 0	0 0 248 65 152 2 28 0 WR-NR 999 0 1439 2166 1107 0 77 44 WR-SR	22.2 0 0.2 0.0 0.5 0.1 0.0 36.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 1 0.4 2.3 0.0 0.1 10.0 195.2 18.6 0.0 5.3 18.9 0.0 0.0 1.5 0.0	-1 -0.2 -2.3 0.5 0.0 0.0 -149.4 -18.6 0.0 -5.3 -18.9 7.8 0.0 -1.5 0.9 -35.6