

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: 09th Nov 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. 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 08.11.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 08-नवम्बर-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 08th Nov 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-Nov-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)	41751	44237	38398	18288	2354	145028
Peak Shortage (MW)	375	0	0	0	39	414
Energy Met (MU)	838	988	870	345	43	3085
Hydro Gen (MU)	137	34	122	54	12	360
Wind Gen (MU)	39	68	13			119
Solar Gen (MU)*	28.65	19.27	69.04	1.42	0.03	118
Energy Shortage (MU)	5.3	0.0	0.0	0.0	0.5	5.8
Maximum Demand Met during the day	42043	45515	40134	18177	2537	148006
(MW) & time (from NLDC SCADA)	18:26	18:32	18:33	17:54	17:54	18:25

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 0.027 70.56

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	5305	0	99.0	49.5	-1.6	32	0.0
	Harvana	5857	0	114.7	112.4	1.0	234	0.0
	Rajasthan	10914	0	210.7	42.3	-3.4	731	0.0
	Delhi	3393	0	64.9	49.5	-0.4	277	0.0
NR	UP	14260	0	265.7	124.4	0.4	498	0.9
	Uttarakhand	1707	0	34.0	19.4	-0.5	84	0.0
	HP	1451	0	27.2	18.1	-0.8	84	0.0
	J&K	1090	192	18.9	16.9	-5.5	201	4.5
	Chandigarh	188	0	3.4	3.2	0.2	42	0.0
	Chhattisgarh	3388	0	73.8	28.1	-0.1	263	0.0
	Gujarat	13204	0	285.4	51.5	-3.0	708	0.0
	MP	9318	0	196.2	132.3	-2.0	278	0.0
WR	Maharashtra	17899	0	387.1	127.9	-3.0	601	0.0
WK	Goa	541	0	12.6	12.2	-0.2	261	0.0
	DD	331	0	7.4	6.6	0.7	59	0.0
	DNH	766	0	17.9	18.0	-0.1	53	0.0
	Essar steel	428	0	7.5	7.4	0.2	308	0.0
	Andhra Pradesh	7823	0	171.0	77.8	1.2	516	0.0
	Telangana	7673	0	161.8	61.2	0.7	356	0.0
SR	Karnataka	8507	0	168.5	38.2	1.8	568	0.0
3K	Kerala	3521	0	71.5	52.8	1.3	242	0.0
	Tamil Nadu	13922	0	289.9	146.3	-1.8	398	0.0
	Pondy	382	0	7.6	7.8	-0.3	26	0.0
	Bihar	4355	0	74.6	72.3	-1.6	100	0.0
	DVC	2958	0	62.1	-30.2	1.2	230	0.0
ER	Jharkhand	1261	0	23.9	16.3	-1.4	34	0.0
LIV	Odisha	3567	0	66.3	5.2	-0.2	450	0.0
	West Bengal	6535	0	117.2	37.3	5.1	550	0.0
	Sikkim	100	0	1.3	1.4	-0.2	20	0.0
	Arunachal Pradesh	113	2	2.1	1.7	0.2	40	0.0
	Assam	1523	26	24.8	19.2	0.0	111	0.5
	Manipur	155	3	2.4	2.3	0.1	27	0.0
NER	Meghalaya	335	0	6.0	2.6	0.3	51	0.0
	Mizoram	97	1	2.0	0.9	0.5	12	0.0
	Nagaland	127	2	2.2	2.0	0.0	28	0.0
	Tripura	227	4	3.8	2.8	-0.6	19	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	13.6	-0.3	-17.9
Day peak (MW)	693.2	-110.0	-903.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	194.6	-186.4	84.9	-93.5	0.8	0.4
Actual(MU)	160.6	-191.9	114.2	-84.6	2.1	0.2
O/D/U/D(MU)	-34.1	-5.5	29.2	9.0	1.3	-0.2

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	5603	18211	8682	965	563	34024
State Sector	14251	19738	9263	5440	11	48703
Total	19854	37949	17945	6405	575	82727

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	421	991	407	397	10	2226
Lignite	13	14	49	0	0	76
Hydro	137	34	122	54	12	360
Nuclear	22	24	55	0	0	100
Gas, Naptha & Diesel	29	34	16	0	23	102
RES (Wind, Solar, Biomass & Others)	74	103	113	1	0	292
Total	697	1200	761	453	46	3156

Share of RES in total generation (%)	10.69	8.57	14.88	0.32	0.07	9.25
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%)	33.49	13.42	38.03	12.29	26.83	23.81

H. Diversity Factor All India Demand Diversity Factor

1.003 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 :	9-Nov-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	608	0.0	7.0	-7.0
3	705KV	SASARAM-FATEHPUR GAYA-BALIA	S/C S/C	42 0	335 415	0.0	3.3 6.0	-3.3 -6.0
4	HVDC	ALIPURDUAR-AGRA	-	0	300	0.0	0.2	-0.2
5	HVDC	PUSAULI B/B	S/C	0	198	0.0	4.8	-4.8
6		PUSAULI-VARANASI	S/C	0	168	0.0	3.2	-3.2
7	_	PUSAULI -ALLAHABAD	S/C	0	113	0.0	1.4	-1.4
8	400 kV	MUZAFFARPUR-GORAKHPUR PATNA-BALIA	D/C Q/C	0	783 1044	0.0	8.8 16.2	-8.8 -16.2
10	400 K	BIHARSHARIFF-BALIA	D/C	0	330	0.0	4.2	-4.2
11		MOTIHARI-GORAKHPUR	D/C	0	7	0.0	0.0	0.0
12		BIHARSHARIFF-VARANASI	D/C	93	219	0.0	0.8	-0.8
13	220 kV	PUSAULI-SAHUPURI	S/C	7	64	0.0	0.6	-0.6
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	0.0	0.0	0.0
Import/E	Export of	ER (With WR)			ER-NR	0.4	56.5	-56.1
-	Aport Ol	1		0.10		16.2	0.0	10.5
18	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	940	0	18.2	0.0	18.2
19 20		NEW RANCHI-DHARAMJAIGARH JHARSUGUDA-DURG	D/C D/C	702 99	352 171	5.9 0.0	0.0	5.9 -0.5
21		JHARSUGUDA-DURG JHARSUGUDA-RAIGARH	Q/C	143	281	0.0	2.2	-0.3
22	400 kV	RANCHI-SIPAT	D/C	144	26	1.7	0.0	1.7
23	220 kV	BUDHIPADAR-RAIGARH	S/C	30	49	0.0	0.5	-0.5
24	220 KV	BUDHIPADAR-KORBA	D/C	109	0	1.4	0.0	1.4
					ER-WR	27.2	3.2	24.0
	_	ER (With SR)	1					
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	2173.0	0.0	37.2	-37.2
26 27	HVDC LINK	JEYPORE-GAZUWAKA B/B TALCHER-KOLAR BIPOLE	D/C D/C	0.0	527.0 1979.0	0.0	12.2 36.4	-12.2 -36.4
28	400 kV	TALCHER-I/C	D/C	574.0	1000.0	0.0	5.2	-5.2
29	220 kV	BALIMELA-UPPER-SILERRU	S/C	1.0	0.0	0.0	0.0	0.0
		•		**	ER-SR	0.0	85.7	-85.7
Import/E	Export of	ER (With NER)						
30	400 kV	BINAGURI-BONGAIGAON	D/C	93	260	0.0	0.3	0
31		ALIPURDUAR-BONGAIGAON	D/C	44	319	0.0	1.5	-1
32	220 kV	ALIPURDUAR-SALAKATI	D/C	5	77 ER-NER	0.0	0.5	-1
Import/F	Export of	NER (With NR)			EK-NEK	0.0	2.4	-2.4
33	HVDC	BISWANATH CHARIALI-AGRA	-	0	300	0.0	0.7	-0.7
		•			NER-NR	0.0	0.7	-0.7
Import/E	Export of	WR (With NR)						
34		CHAMPA-KURUKSHETRA	D/C	0	752	0.0	15.0	-15.0
35	HVDC	V'CHAL B/B	D/C	452	0	12.1	0.0	12.1
36		APL -MHG	D/C	0	1460	0.0	36.4	-36.4
37 38	-	GWALIOR-AGRA PHAGI-GWALIOR	D/C D/C	0	2295 1010	0.0	37.5 12.7	-37.5 -12.7
39	1	JABALPUR-ORAI	D/C D/C	0	773	0.0	23.8	-12.7
40	765 kV	GWALIOR-ORAI	S/C	426		7.6	0.0	7.6
					0	7.0	0.0	
41		SATNA-ORAI	S/C	0	1340	0.0	26.4	-26.4
41 42			S/C D/C	0 425				-26.4 -2.6
42 43		SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI	D/C S/C	425 115	1340 486 39	0.0 0.0 0.5	26.4 2.6 0.1	-2.6 0.4
42 43 44	- 400 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL	D/C S/C S/C	425 115 357	1340 486 39 109	0.0 0.0 0.5 3.0	26.4 2.6 0.1 0.2	-2.6 0.4 2.8
42 43 44 45	400 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND	D/C S/C S/C S/C	425 115 357 988	1340 486 39 109	0.0 0.0 0.5 3.0 22.6	26.4 2.6 0.1 0.2 0.0	-2.6 0.4 2.8 22.6
42 43 44 45 46	400 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR	D/C S/C S/C S/C D/C	425 115 357 988 269	1340 486 39 109 0 245	0.0 0.0 0.5 3.0 22.6 2	26.4 2.6 0.1 0.2 0.0	-2.6 0.4 2.8 22.6 2
42 43 44 45 46 47	400 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR	D/C S/C S/C S/C D/C S/C	425 115 357 988 269 33	1340 486 39 109 0 245 41	0.0 0.0 0.5 3.0 22.6 2	26.4 2.6 0.1 0.2 0.0 0	-2.6 0.4 2.8 22.6 2 -0.2
42 43 44 45 46 47 48	400 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -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	425 115 357 988 269 33	1340 486 39 109 0 245 41	0.0 0.0 0.5 3.0 22.6 2 0.0 0.0	26.4 2.6 0.1 0.2 0.0 0 0 0.3	-2.6 0.4 2.8 22.6 2 -0.2 -0.5
42 43 44 45 46 47	-	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR	D/C S/C S/C S/C D/C S/C	425 115 357 988 269 33	1340 486 39 109 0 245 41	0.0 0.0 0.5 3.0 22.6 2	26.4 2.6 0.1 0.2 0.0 0	-2.6 0.4 2.8 22.6 2 -0.2
42 43 44 45 46 47 48 49	-	SATNA-ORAI 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 S/C S/C S/C S/C S/C S/C S	425 115 357 988 269 33 11	1340 486 39 109 0 245 41 73 0	0.0 0.0 0.5 3.0 22.6 2 0.0 0.0 1.2	26.4 2.6 0.1 0.2 0.0 0 0.3 0.5 0.0	-2.6 0.4 2.8 22.6 2 -0.2 -0.5 1.2
42 43 44 45 46 47 48 49 50	220 kV	SATNA-ORAI 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 D/C S/C S/C S/C S/C S/C S/C S/C	425 115 357 988 269 33 11 114 75	1340 486 39 109 0 245 41 73 0 25	0.0 0.0 0.5 3.0 22.6 2 0.0 0.0 1.2 0.3	26.4 2.6 0.1 0.2 0.0 0 0.3 0.5 0.0	-2.6 0.4 2.8 22.6 2 -0.2 -0.5 1.2 0.2
42 43 44 45 46 47 48 49 50 51	220 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK MEHGAON-AURAIYA MALANPUR-AURAIYA 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	425 115 357 988 269 33 11 114 75 0	1340 486 39 109 0 245 41 73 0 25 0 WR-NR	0.0 0.0 0.5 3.0 22.6 2 0.0 0.0 1.2 0.3 0.0 49.2	26.4 2.6 0.1 0.2 0.0 0 0.3 0.5 0.0 0.1	-2.6 0.4 2.8 22.6 2 -0.2 -0.5 1.2 0.2 0.0 -106.4
42 43 44 45 46 47 48 49 50 51 Import/E	220 kV 132kV Export of HVDC	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RAPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B	D/C S/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	425 115 357 988 269 33 11 114 75 0	1340 486 39 109 0 245 41 73 0 25 0 WR-NR	0.0 0.0 0.5 3.0 22.6 2 0.0 0.0 1.2 0.3 0.0 49.2	26.4 2.6 0.1 0.2 0.0 0 0.3 0.5 0.0 0.1 0.0 155.6	-2.6 0.4 2.8 22.6 2 -0.2 -0.5 1.2 0.2 0.0 -106.4
42 43 44 45 46 47 48 49 50 51 Import/E 52	220 kV 132kV Export of	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 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	425 115 357 988 269 33 11 114 75 0	1340 486 39 109 0 245 41 73 0 25 0 WR-NR	0.0 0.0 0.5 3.0 22.6 2 0.0 0.0 1.2 0.3 0.0 49.2	26.4 2.6 0.1 0.2 0.0 0 0 0.3 0.5 0.0 0.1 0.0 155.6	-2.6 0.4 2.8 22.6 2 -0.2 -0.5 1.2 0.2 0.0 -106.4
42 43 44 45 46 47 48 49 50 51 Import/E 52 53	220 kV 132kV Export of HVDC	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	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	425 115 357 988 269 33 11 114 75 0	1340 486 39 109 0 245 41 73 0 25 0 WR-NR	0.0 0.0 0.5 3.0 22.6 2 0.0 0.0 1.2 0.3 0.0 49.2	26.4 2.6 0.1 0.2 0.0 0 0.3 0.5 0.0 0.1 155.6	-2.6 0.4 2.8 22.6 2 -0.2 -0.5 1.2 0.2 0.0 -106.4
42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54	220 kV 132kV Export of HVDC LINK - 765 kV	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 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	425 115 357 988 269 33 11 114 75 0	1340 486 39 109 0 245 41 73 0 25 0 WR-NR 1009 0 1686 2277	0.0 0.0 0.5 3.0 22.6 2 0.0 0.0 1.2 0.3 0.0 49.2	26.4 2.6 0.1 0.2 0.0 0 0 0.3 0.5 0.0 0.1 0.0 155.6 13.1 0.0 19.0 37.2	-2.6 0.4 2.8 22.6 2 -0.2 -0.5 1.2 0.2 0.0 -106.4 -13.1 0.0 -18.7 -37.2
42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55	220 kV 132kV Export of HVDC LINK	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	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	425 115 357 988 269 33 11 114 75 0 287 0 279 0 715	1340 486 39 109 0 245 41 73 0 25 0 WR-NR	0.0 0.0 0.5 3.0 22.6 2 0.0 0.0 1.2 0.3 0.0 49.2	26.4 2.6 0.1 0.2 0.0 0 0 0.3 0.5 0.0 0.1 0.0 155.6 13.1 0.0 19.0 37.2 0.0	-2.6 0.4 2.8 22.6 2 -0.2 -0.5 1.2 0.2 0.0 -106.4 -13.1 0.0 -18.7 -37.2 7.8
42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54	220 kV 132kV Export of HVDC LINK - 765 kV	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 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	425 115 357 988 269 33 11 114 75 0	1340 486 39 109 0 245 41 73 0 25 0 WR-NR 1009 0 1686 2277	0.0 0.0 0.5 3.0 22.6 2 0.0 0.0 1.2 0.3 0.0 49.2	26.4 2.6 0.1 0.2 0.0 0 0 0.3 0.5 0.0 0.1 0.0 155.6 13.1 0.0 19.0 37.2	-2.6 0.4 2.8 22.6 2 -0.2 -0.5 1.2 0.2 0.0 -106.4 -13.1 0.0 -18.7 -37.2
42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR MALANPUR-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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	425 115 357 988 269 33 11 114 75 0 287 0 279 0 715 0	1340 486 39 109 0 245 41 73 0 25 0 WR-NR	0.0 0.0 0.5 3.0 22.6 2 0.0 0.0 1.2 0.3 0.0 49.2 0.0 0.0 0.0 0.0 7.8	26.4 2.6 0.1 0.2 0.0 0 0 0.3 0.5 0.0 0.1 0.0 155.6 13.1 0.0 19.0 37.2 0.0 0.0	-2.6 0.4 2.8 22.6 2 -0.2 -0.5 1.2 0.2 0.0 -106.4 -13.1 0.0 -18.7 -37.2 7.8 0.0
42 43 44 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	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 WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	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	425 115 357 988 269 33 11 114 75 0 287 0 279 0 715 0	1340 486 39 109 0 245 41 73 0 25 0 WR-NR	0.0 0.0 0.5 3.0 22.6 2 0.0 0.0 1.2 0.3 0.0 49.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	26.4 2.6 0.1 0.2 0.0 0 0 0.3 0.5 0.0 0.1 0.0 155.6 13.1 0.0 19.0 37.2 0.0 0.0 1.3	-2.6 0.4 2.8 22.6 2 -0.2 -0.5 1.2 0.2 0.0 -106.4 -13.1 0.0 -18.7 -37.2 7.8 0.0 -1.3
42 43 44 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	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 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	425 115 357 988 269 33 11 114 75 0 287 0 279 0 715 0	1340 486 39 109 0 245 41 73 0 25 0 WR-NR 1009 0 1686 2277 0 0 69 40 WR-SR	0.0 0.0 0.5 3.0 22.6 2 0.0 0.0 1.2 0.3 0.0 49.2 0.0 0.0 0.3 0.0 7.8 0.0 0.0 0.7	26.4 2.6 0.1 0.2 0.0 0 0 0.3 0.5 0.0 0.1 0.0 155.6 13.1 0.0 19.0 37.2 0.0 0.0 1.3 0.0	-2.6 0.4 2.8 22.6 2 -0.2 -0.5 1.2 0.0 -106.4 -13.1 0.0 -18.7 -37.2 7.8 0.0 -1.3 0.7
42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	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 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	425 115 357 988 269 33 11 114 75 0 287 0 279 0 715 0 0	1340 486 39 109 0 245 41 73 0 25 0 WR-NR 1009 0 1686 2277 0 0 69 40 WR-SR	0.0 0.0 0.5 3.0 22.6 2 0.0 0.0 1.2 0.3 0.0 49.2 0.0 0.0 0.3 0.0 7.8 0.0 0.0 0.7	26.4 2.6 0.1 0.2 0.0 0 0 0.3 0.5 0.0 0.1 0.0 155.6 13.1 0.0 19.0 37.2 0.0 0.0 1.3 0.0	-2.6 0.4 2.8 22.6 2 -0.2 -0.5 1.2 0.0 -106.4 -13.1 0.0 -18.7 -37.2 7.8 0.0 -1.3 0.7
42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	220 kV 132kV Export of HVDC LINK 765 kV 400 kV	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-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	425 115 357 988 269 33 11 114 75 0 287 0 279 0 715 0 0	1340 486 39 109 0 245 41 73 0 25 0 WR-NR 1009 0 1686 2277 0 0 69 40 WR-SR	0.0 0.0 0.5 3.0 22.6 2 0.0 0.0 1.2 0.3 0.0 49.2 0.0 0.0 0.3 0.0 7.8 0.0 0.0 0.7	26.4 2.6 0.1 0.2 0.0 0 0 0.3 0.5 0.0 0.1 0.0 155.6 13.1 0.0 19.0 37.2 0.0 0.0 1.3 0.0	-2.6 0.4 2.8 22.6 2 -0.2 -0.5 1.2 0.0 -106.4 -13.1 0.0 -18.7 -37.2 7.8 0.0 -1.3 0.7 -61.7