

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

दिनांक: 23rd June 2020

Ref: POSOCO/NLDC/SO/Daily PSP Report

To.

1. कार्यकारी निदेशक, पृ.क्षे.भा.प्रे.के., १४, 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. 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., २९ , रेस कोर्स क्रॉस रोड, बंगलुरु –५६०००९ Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 22.06.2020.

महोदय/Dear Sir.

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 22-जून-2020 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 22nd June 2020, is available at the NLDC website.

धन्यवाद,

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



Report for previous day
A. Power Supply Position at All India and Regional level

Date of Reporting: 23-Jun-2020

	NR	WR	SR	ER	NER	TOTAL
Demand Met during Evening Peak hrs(MW) (at 2000 hrs; from RLDCs)	57128	40537	36830	20046	2777	157318
Peak Shortage (MW)	480	0	0	0	6	486
Energy Met (MU)	1294	980	881	419	52	3626
Hydro Gen (MU)	367	69	80	143	22	680
Wind Gen (MU)	20	80	162	-	-	262
Solar Gen (MU)*	42.10	22.70	62.50	4.69	0.03	132
Energy Shortage (MU)	13.6	0.0	0.0	0.0	0.0	13.6
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	62468	44320	40920	20874	2812	162236
Time Of Maximum Demand Met (From NLDC SCADA)	22:35	10:17	09:19	21:15	19:04	22:23

B. Frequency Profile (%) FVI 49.9 - 50.05 Region < 49.7 49.7 - 49.8 49.8 - 49.9 < 49.9 > 50.05 All India 0.030 0.00 0.14 7.00 83.24 9.62 7.14

	Ty 1 obtain in States	Max.Demand	Shortage during	Energy Met	Drawal	OD(+)/UD(-)	Max OD	Energy
Region	States	Met during the	maximum	(MU)	Schedule	(MU)	(MW)	Shortage
		day(MW)	Demand(MW)	` ′	(MU)	· · ·	(1 V1 VV)	(MU)
	Punjab	12430	0	249.1	142.0	-4.3	95	0.0
	Haryana	8968	0	180.6	129.9	-0.5	354	0.0
	Rajasthan	11746	0	253.9	87.8	2.5	464	0.0
	Delhi	5351	0	101.9	88.5	-1.8	187	0.0
NR	UP	20100	270	390.1	196.7	1.1	390	3.0
	Uttarakhand	1865	0	40.0	17.6	0.2	120	0.0
	HP	1297	0	27.9	-1.6	-0.3	44	0.0
	J&K(UT) & Ladakh(UT)	2156	539	44.5	20.1	1.4	282	10.6
	Chandigarh	291	0	5.5	6.2	-0.6	17	0.0
	Chhattisgarh	2921	0	65.1	16.2	-6.0	194	0.0
	Gujarat	14532	0	306.1	107.7	2.5	613	0.0
	MP	7804	0	176.5	104.9	-2.3	593	0.0
WR	Maharashtra	17788	0	388.6	152.2	1.0	740	0.0
	Goa	436	0	8.9	8.3	0.1	50	0.0
	DD	231	0	4.6	4.4	0.2	34	0.0
	DNH	559	0	12.5	12.3	0.2	117	0.0
	AMNSIL	872	0	17.3	5.9	0.1	231	0.0
	Andhra Pradesh	8278	0	169.7	44.5	0.1	366	0.0
	Telangana	7471	0	157.6	97.2	3.1	799	0.0
SR	Karnataka	9860	0	190.7	61.0	-0.8	515	0.0
	Kerala	2975	0	61.8	40.7	-0.1	312	0.0
	Tamil Nadu	13072	0	293.4	123.6	-1.6	558	0.0
	Puducherry	380	0	7.8	8.1	-0.3	20	0.0
	Bihar	5298	0	99.0	94.8	-1.2	290	0.0
	DVC	2707	0	56.8	-30.3	-1.6	220	0.0
	Jharkhand	1327	0	25.2	18.2	-1.3	130	0.0
ER	Odisha	3928	0	83.5	5.2	-0.2	190	0.0
	West Bengal	7881	0	153.4	49.0	-0.4	240	0.0
	Sikkim	83	0	1.2	1.3	-0.1	15	0.0
	Arunachal Pradesh	108	1	2.0	2.0	-0.1	42	0.0
	Assam	1760	17	33.3	27.9	0.9	140	0.0
	Manipur	181	0	2.5	2.3	0.2	22	0.0
NER	Meghalaya	336	0	5.7	0.3	-0.1	44	0.0
	Mizoram	94	1	1.6	1.4	0.0	21	0.0
	Nagaland	139	2	2.2	2.2	-0.4	9	0.0
	Tripura	286	5	4.8	5.1	-0.4	54	0.0

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	47.3	-1.6	-24.6
Day Peak (MW)	1889.0	-206.6	-1129.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	272.4	-261.1	102.7	-110.5	-3.6	0.0
Actual(MU)	257.7	-268.9	113.2	-108.9	-3.0	-9.8
O/D/U/D(MU)	-14.7	-7.8	10.5	1.6	0.6	-9.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	4387	15229	11122	2120	344	33201
State Sector	8290	25977	14753	4962	11	53993
Total	12677	41206	25875	7082	355	87194

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	515	955	324	417	10	2222
Lignite	28	15	44	0	0	87
Hydro	367	69	80	143	22	680
Nuclear	30	36	47	0	0	113
Gas, Naptha & Diesel	35	77	16	0	28	158
RES (Wind, Solar, Biomass & Others)	81	110	269	5	0	464
Total	1056	1262	780	565	60	3723
Share of RES in total generation (%)	7.65	8.68	34.51	0.84	0.05	12.47
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation(%)	45.24	17.02	50.73	26.09	35.90	33.77

H. All India Demand Diversity Factor

11. All Illula Delliallu D	iversity ractor	
Based on Regional Max	x Demands	1.056
Based on State Max De	mands	1.082

Diversity factor = Sum of regional or state maximum demands / All India maximum demand
*Source: RLDCs for solar connected to ISTS; SLDCs for embedded solar. Limited visibility of embedded solar data.

INTER-REGIONAL EXCHANGES

Import=(+ve) /Export =(-ve) for NET (MU)

Date of Reporting: 23-Jun-2020

CI	T				ı		Date of Reporting:	23-Jun-2020
Sl No	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
	rt/Export of ER (\							
1		ALIPURDUAR-AGRA	- 9/0	0	1001	0.0	24.4	-24.4
3		PUSAULI B/B GAYA-VARANASI	S/C D/C	0 119	399 544	0.0	9.7 5.1	-9.7 -5.1
4		SASARAM-FATEHPUR	S/C	164	127	0.8	0.0	0.8
5	765 kV	GAYA-BALIA	S/C	34	497	0.0	6.2	-6.2
6		PUSAULI-VARANASI	S/C	0	308	0.0	6.8	-6.8
8		PUSAULI -ALLAHABAD MUZAFFARPUR-GORAKHPUR	S/C D/C	0	151 774	0.0 0.0	2.8 12.9	-2.8 -12.9
9		PATNA-BALIA	O/C	0	1092	0.0	17.5	-12.9 -17.5
10		BIHARSHARIFF-BALIA	D/C	0	350	0.0	4.5	-4.5
11	400 kV	MOTIHARI-GORAKHPUR	D/C	0	329	0.0	5.1	-5.1
12		BIHARSHARIFF-VARANASI	D/C	89	192	0.0	0.6	-0.6
13 14		PUSAULI-SAHUPURI SONE NAGAR-RIHAND	S/C S/C	0	87	0.0 0.0	1.5 0.0	-1.5 0.0
15		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	132 kV	KARMANASA-CHANDAULI	S/C	0	0	0.0	0.0	0.0
T		WAL WD)			ER-NR	1.2	97.2	-96.0
1 1 1	rt/Export of ER (V 765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1319	0	18.4	0.0	18.4
2		NEW RANCHI-DHARAMJAIGARH	D/C	803	0	12.1	0.0	12.1
3		JHARSUGUDA-DURG	D/C	78	97	0.3	0.0	0.3
4		JHARSUGUDA-RAIGARH	Q/C	238	51	2.1	0.0	2.1
5		RANCHI-SIPAT	D/C	349	0	5.2	0.0	5.2
6		BUDHIPADAR-RAIGARH	S/C	2	122	0.0	1.2	-1.2
7	220 kV	BUDHIPADAR-KORBA	D/C	202	0	3.2	0.0	3.2
Impor	rt/Export of ER (V	With SR)			ER-WR	41.2	1.2	40.0
1mpo		JEYPORE-GAZUWAKA B/B	D/C	0	411	0.0	9.3	-9.3
2	HVDC	TALCHER-KOLAR BIPOLE	D/C	0	1852	0.0	37.2	-37.2
3	765 kV	ANGUL-SRIKAKULAM	D/C	0	2435	0.0	43.8	-43.8
4		TALCHER-I/C	D/C	839	993	0.0	0.0	0.0
5	220 kV	BALIMELA-UPPER-SILERRU	S/C	1	0 ER-SR	0.0 0.0	0.0 90.3	0.0 -90.3
Impo	rt/Export of ER (V	With NER)	·		EN-SK	U• U	70.3	*70.3
1	400 kV	BINAGURI-BONGAIGAON	D/C	0	378	0.0	3.8	-3.8
2	400 kV	ALIPURDUAR-BONGAIGAON	D/C	162	397	0.0	2.4	-2.4
3	220 kV	ALIPURDUAR-SALAKATI	D/C	0	114 ED NED	0.0	1.4	-1.4 7.6
Impor	rt/Export of NER	(With NR)			ER-NER	0.0	7.6	-7.6
1111po		BISWANATH CHARIALI-AGRA	-	0	503	0.0	12.3	-12.3
				-	NER-NR	0.0	12.3	-12.3
Impo	rt/Export of WR (~					
1 2		CHAMPA-KURUKSHETRA V'CHAL B/B	D/C D/C	0 48	1754 483	0.0 1.1	33.4	-33.4 0.2
3		APL -MHG	D/C D/C	0	1731	0.0	28.8	-28.8
4		GWALIOR-AGRA	D/C	0	2703	0.0	42.4	-42.4
5		PHAGI-GWALIOR	D/C	0	1394	0.0	20.3	-20.3
6		JABALPUR-ORAI	D/C	0	1044	0.0	31.0	-31.0
7		GWALIOR-ORAI	S/C	486	0	7.8	0.0	7.8
9		SATNA-ORAI CHITORGARH-BANASKANTHA	S/C D/C	509	1637 1109	0.0	31.0 4.1	-31.0 -4.1
10		ZERDA-KANKROLI	S/C	193	195	0.8	0.0	0.8
11		ZERDA -BHINMAL	S/C	195	325	0.0	0.9	-0.9
12		V'CHAL -RIHAND	S/C	968	0	22.4	0.0	22.4
13		RAPP-SHUJALPUR	D/C	142	545	0.0	2.4	-2.4
14 15		BHANPURA-RANPUR BHANPURA-MORAK	S/C S/C	11	98	0.0 0.0	1.4 1.6	-1.4 -1.6
16		MEHGAON-AURAIYA	S/C	172	0	0.0	0.0	0.0
17		MALANPUR-AURAIYA	S/C	0	4	3.4	0.0	3.4
18	132 kV	GWALIOR-SAWAI MADHOPUR	S/C	0	0	0.0	0.0	0.0
19	132 kV	RAJGHAT-LALITPUR	D/C	0	0	0.0	0.0	0.0
Impo	ut/Eumout of WD (With CD			WR-NR	35.5	197.9	-162.4
Impoi	rt/Export of WR (HVDC					33.3		
2	44 1 20 0	IBHADRAWATI B/B	-	0	999			-16.5
3	HVDC	BHADRAWATI B/B BARSUR-L.SILERU	-	0	999	0.0	16.5 0.0	-16.5 0.0
, , T	HVDC	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR	D/C	0	0	0.0 0.0 0.0	16.5 0.0 0.0	0.0 0.0
4	HVDC 765 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR	D/C D/C	0 0 382	0 0 1954	0.0 0.0 0.0 0.5	16.5 0.0 0.0 20.3	0.0 0.0 -19.7
5	HVDC 765 kV 765 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD	D/C D/C D/C	0 0 382 0	0 0 1954 2319	0.0 0.0 0.0 0.5 0.0	16.5 0.0 0.0 20.3 35.0	0.0 0.0 -19.7 -35.0
	HVDC 765 kV 765 kV 400 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI	D/C D/C	0 0 382	0 0 1954	0.0 0.0 0.0 0.5	16.5 0.0 0.0 20.3	0.0 0.0 -19.7
5 6 7 8	HVDC 765 kV 765 kV 400 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	D/C D/C D/C D/C D/C S/C	0 0 382 0 742 0	0 0 1954 2319 0 0	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0	16.5 0.0 0.0 20.3 35.0 0.0 0.0	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0
5 6 7	HVDC 765 kV 765 kV 400 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	D/C D/C D/C D/C D/C D/C	0 0 382 0 742	0 0 1954 2319 0 0 0	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6
5 6 7 8	HVDC 765 kV 765 kV 400 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	D/C D/C D/C D/C D/C S/C S/C	0 0 382 0 742 0 1	0 0 1954 2319 0 0 0 0 90 WR-SR	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0	16.5 0.0 0.0 20.3 35.0 0.0 0.0	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0
5 6 7 8	HVDC 765 kV 765 kV 400 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	D/C D/C D/C D/C D/C S/C S/C	0 0 382 0 742 0	0 0 1954 2319 0 0 0 0 90 WR-SR	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0
5 6 7 8	HVDC 765 kV 765 kV 400 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	- D/C D/C D/C D/C D/C S/C S/C INTER	0 0 382 0 742 0 1	0 0 1954 2319 0 0 0 0 90 WR-SR	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0
5 6 7 8	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C D/C D/C D/C D/C S/C S/C INTER	0 0 382 0 742 0 1 0 RNATIONAL EXCHAI	0 0 1954 2319 0 0 0 90 WR-SR	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 71.7	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU)
5 6 7 8	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	- D/C D/C D/C D/C D/C S/C S/C INTER	0 0 382 0 742 0 1 0 RNATIONAL EXCHAI	0 0 1954 2319 0 0 0 0 WR-SR	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 71.7	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0
5 6 7 8	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER	D/C D/C D/C D/C D/C S/C S/C S/C S/C DAGACHU (2 * 63	0 0 382 0 742 0 1 0 2 RNATIONAL EXCHAI	0 0 1954 2319 0 0 0 90 WR-SR NGES Max (MW)	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 71.7	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0
5 6 7 8	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C D/C D/C D/C D/C S/C S/C S/C S/C CHUKA (4 * 84) H	0 0 382 0 742 0 1 1 0 RNATIONAL EXCHAI e Name	0 0 1954 2319 0 0 0 90 WR-SR	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 71.7	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU)
5 6 7 8 9	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C INTER Line DAGACHU (2 * 63) CHUKA (4 * 84) H MANGDECHHU (4	0 0 382 0 742 0 1 0 2 RNATIONAL EXCHAI e Name 3) BIRPARA RECEIPT 4 x 180)	0 0 1954 2319 0 0 0 90 WR-SR NGES Max (MW)	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8 Min (MW)	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 71.7 Avg (MW)	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0 5.9
5 6 7 8 9	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER	D/C D/C D/C D/C D/C S/C S/C S/C S/C CHUKA (4 * 84) H	0 0 382 0 742 0 1 0 2 RNATIONAL EXCHAI e Name 3) BIRPARA RECEIPT 4 x 180)	0 0 1954 2319 0 0 0 90 WR-SR NGES Max (MW)	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 71.7	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0
5 6 7 8 9	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C INTER Line DAGACHU (2 * 63 CHUKA (4 * 84) I MANGDECHHU (ALIPURDUAR RE	0 0 382 0 742 0 1 0 2 RNATIONAL EXCHAI e Name 3) BIRPARA RECEIPT 4 x 180)	0 0 1954 2319 0 0 0 90 WR-SR NGES Max (MW)	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8 Min (MW)	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 71.7 Avg (MW)	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0 5.9
5 6 7 8 9	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER ER	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C INTER Line DAGACHU (2 * 63 CHUKA (4 * 84) H MANGDECHHU (ALIPURDUAR RE TALA (6 * 170) B	O O O O O O O O O O O O O O O O O O O	0 0 1954 2319 0 0 0 90 WR-SR WR-SR NGES Max (MW) 0 295 585 1009	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8 Min (MW) 0 249 581 997	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 71.7 Avg (MW) 0 244 599 1044	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0 5.9 14.4 25.1
5 6 7 8 9	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C INTER Line DAGACHU (2 * 63 CHUKA (4 * 84) I MANGDECHHU (ALIPURDUAR RE	O O O O O O O O O O O O O O O O O O O	0 0 1954 2319 0 0 0 90 WR-SR NGES Max (MW) 0 295	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8 Min (MW)	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 71.7 Avg (MW)	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0 5.9
5 6 7 8 9	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER ER NER	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C INTER Line DAGACHU (2 * 63 CHUKA (4 * 84) H MANGDECHHU (ALIPURDUAR RE TALA (6 * 170) B 132KV-SALAKATI	O O O O O O O O O O O O O O O O O O O	0 0 1954 2319 0 0 0 90 WR-SR NGES Max (MW) 0 295 585 1009	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8 Min (MW) 0 249 581 997	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 71.7 Avg (MW) 0 244 599 1044 43	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0 5.9 14.4 25.1 1.0
5 6 7 8 9	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER ER	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C INTER Line DAGACHU (2 * 63 CHUKA (4 * 84) H MANGDECHHU (4 ALIPURDUAR RE TALA (6 * 170) B 132KV-SALAKAT 132KV-RANGIA - 1	O O O O O O O O O O O O O O O O O O O	0 0 1954 2319 0 0 0 90 WR-SR WR-SR NGES Max (MW) 0 295 585 1009	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8 Min (MW) 0 249 581 997	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 71.7 Avg (MW) 0 244 599 1044	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0 5.9 14.4 25.1
5 6 7 8 9	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI ER ER ER ER NER	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C INTER Line DAGACHU (2 * 63 CHUKA (4 * 84) H MANGDECHHU (4 ALIPURDUAR RE TALA (6 * 170) B 132KV-SALAKATI 132KV-RANGIA - 1 132KV-Tanakpur(1)	O O O O O O O O O O O O O O O O O O O	0 0 1954 2319 0 0 0 90 WR-SR NGES Max (MW) 0 295 585 1009 0	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8 Min (MW) 0 249 581 997 0	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 71.7 Avg (MW) 0 244 599 1044 43	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0 5.9 14.4 25.1 1.0
5 6 7 8 9	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER ER NER	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C INTER Line DAGACHU (2 * 63 CHUKA (4 * 84) H MANGDECHHU (4 ALIPURDUAR RE TALA (6 * 170) B 132KV-SALAKAT 132KV-RANGIA - 1	O O O O O O O O O O O O O O O O O O O	0 0 1954 2319 0 0 0 90 WR-SR NGES Max (MW) 0 295 585 1009	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8 Min (MW) 0 249 581 997	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 71.7 Avg (MW) 0 244 599 1044 43	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0 5.9 14.4 25.1 1.0
5 6 7 8 9	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 220 kV	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI ER ER ER ER NER	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C INTER Line DAGACHU (2 * 63 CHUKA (4 * 84) H MANGDECHHU (4 ALIPURDUAR RE TALA (6 * 170) B 132KV-SALAKATI 132KV-RANGIA - 1 132KV-Tanakpur(1)	O O O O O O O O O O O O O O O O O O O	0 0 1954 2319 0 0 0 90 WR-SR NGES Max (MW) 0 295 585 1009 0	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8 Min (MW) 0 249 581 997 0	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 71.7 Avg (MW) 0 244 599 1044 43	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0 5.9 14.4 25.1 1.0
5 6 7 8 9	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 221 kV State	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER ER NER NER NER	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C INTER Line DAGACHU (2 * 63 CHUKA (4 * 84) H MANGDECHHU (4 ALIPURDUAR RE TALA (6 * 170) B 132KV-SALAKATI 132KV-RANGIA - 1 132KV-Tanakpur(N Mahendranagar (PC) 132KV-BIHAR - N	O O O O O O O O O O O O O O O O O O O	0 0 1954 2319 0 0 0 90 WR-SR NGES Max (MW) 0 295 585 1009 0	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8 Min (MW) 0 249 581 997 0 0	16.5 0.0 0.0 0.0 20.3 35.0 0.0 0.0 0.0 0.0 71.7 Avg (MW) 0 244 599 1044 43 42 -5 -9	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0 5.9 14.4 25.1 1.0 1.0 -0.1 -0.2
5 6 7 8 9	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 221 kV State	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER ER NER NER	D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C INTER Line DAGACHU (2 * 63 CHUKA (4 * 84) H MANGDECHHU (4 ALIPURDUAR RE TALA (6 * 170) B 132KV-SALAKATI 132KV-RANGIA - 1 132KV-Tanakpur (1 Mahendranagar (PC) 132KV-BIHAR - NI 220KV-MUZAFFA	O O O O O O O O O O O O O O O O O O O	0 0 1954 2319 0 0 0 90 WR-SR NGES Max (MW) 0 295 585 1009 0	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8 Min (MW) 0 249 581 997 0	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 0.0 71.7 Avg (MW) 0 244 599 1044 43 42 -5	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0 5.9 14.4 25.1 1.0 1.0
5 6 7 8 9	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 221 kV State	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER NER NER NER NER ER ER	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C INTER Line DAGACHU (2 * 63 CHUKA (4 * 84) H MANGDECHHU (4 ALIPURDUAR RE TALA (6 * 170) B 132KV-SALAKATI 132KV-RANGIA - 1 132KV-Tanakpur (1 Mahendranagar (PC) 132KV-BIHAR - NI 220KV-MUZAFFA DHALKEBAR DC	O O O O O O O O O O O O O O O O O O O	0 0 1954 2319 0 0 0 90 WR-SR NGES Max (MW) 0 295 585 1009 0 0 -22 -27 -158	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8 Min (MW) 0 249 581 997 0 0 -1	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 0.0 71.7 Avg (MW) 0 244 599 1044 43 42 -5 -9 -52	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0 5.9 14.4 25.1 1.0 1.0 -0.1 -0.2 -1.3
5 6 7 8 9	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 221 kV State	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER ER NER NER NER	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	O O O O O O O O O O O O O O O O O O O	0 0 1954 2319 0 0 0 90 WR-SR NGES Max (MW) 0 295 585 1009 0	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8 Min (MW) 0 249 581 997 0 0	16.5 0.0 0.0 0.0 20.3 35.0 0.0 0.0 0.0 0.0 71.7 Avg (MW) 0 244 599 1044 43 42 -5 -9	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0 5.9 14.4 25.1 1.0 1.0 -0.1 -0.2
5 6 7 8 9	HVDC 765 kV 400 kV 220 kV 220 kV 220 kV State BHUTAN	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER ER NER NER NER NER ER	D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C INTER Line DAGACHU (2 * 63 CHUKA (4 * 84) H MANGDECHHU (4 ALIPURDUAR RE TALA (6 * 170) B 132KV-SALAKAT 132KV-RANGIA - 1 132KV-RANGIA - 1 132KV-BIHAR - N 220KV-MUZAFFA DHALKEBAR DC Bheramara HVDC (1 132KV-SURAJMA)	O O O O O O O O O O O O O O O O O O O	0 0 1954 2319 0 0 0 90 WR-SR NGES Max (MW) 0 295 585 1009 0 0 -22 -27 -158 -962	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8 Min (MW) 0 249 581 997 0 0 0 -1 -2 -954	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 0.0 71.7 Avg (MW) 0 244 599 1044 43 42 -5 -9 -52 -913	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0 5.9 14.4 25.1 1.0 1.0 -0.1 -0.2 -1.3 -21.9
5 6 7 8 9	HVDC 765 kV 765 kV 400 kV 220 kV 220 kV 221 kV State	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER NER NER NER NER ER ER	D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C INTER Line DAGACHU (2 * 63 CHUKA (4 * 84) H MANGDECHHU (4 ALIPURDUAR RE TALA (6 * 170) B 132KV-SALAKAT 132KV-RANGIA - 1 132KV-RANGIA - 1 132KV-BIHAR - N 220KV-MUZAFFA DHALKEBAR DC Bheramara HVDC (1 132KV-SURAJMA) COMILLA (BANG)	O O O O O O O O O O O O O O O O O O O	0 0 1954 2319 0 0 0 90 WR-SR NGES Max (MW) 0 295 585 1009 0 0 -22 -27 -158	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8 Min (MW) 0 249 581 997 0 0 -1	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 0.0 71.7 Avg (MW) 0 244 599 1044 43 42 -5 -9 -52	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0 5.9 14.4 25.1 1.0 1.0 -0.1 -0.2 -1.3
5 6 7 8 9	HVDC 765 kV 400 kV 220 kV 220 kV 220 kV State BHUTAN	BARSUR-L.SILERU HVDC-RAIGARH-PUGALUR SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI Region ER ER ER ER NER NER NER NER ER	D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C INTER Line DAGACHU (2 * 63 CHUKA (4 * 84) H MANGDECHHU (4 ALIPURDUAR RE TALA (6 * 170) B 132KV-SALAKAT 132KV-RANGIA - 1 132KV-RANGIA - 1 132KV-BIHAR - N 220KV-MUZAFFA DHALKEBAR DC Bheramara HVDC (1 132KV-SURAJMA)	O O O O O O O O O O O O O O O O O O O	0 0 1954 2319 0 0 0 90 WR-SR NGES Max (MW) 0 295 585 1009 0 0 -22 -27 -158 -962	0.0 0.0 0.0 0.5 0.0 8.6 0.0 0.0 1.6 10.8 Min (MW) 0 249 581 997 0 0 0 -1 -2 -954	16.5 0.0 0.0 20.3 35.0 0.0 0.0 0.0 0.0 71.7 Avg (MW) 0 244 599 1044 43 42 -5 -9 -52 -913	0.0 0.0 -19.7 -35.0 8.6 0.0 0.0 1.6 -61.0 Energy Exchange (MU) 0.0 5.9 14.4 25.1 1.0 1.0 -0.1 -0.2 -1.3 -21.9