POWER SYSTEM OPERATION CORPORATION LIMITED
NORTHERN REGIONAL LOAD DESPATCH CENTRE
DAILY OPERATION REPORT OF NORTHERN REGION

Power Supply Position in Northern Region For 01-May-2020

Date of Reporting:02-May-2020

1. Regional Availability/Demand:

Evening Peak (20:00) MW				Off-Peak (03:00) MW				Day Energy(Net MU)	
Demand Met	Shortage	Requirement	Freq (Hz)	Demand Met	Shortage	Requirement	Freq (Hz)	Demand Met	Shortage
39,939	519	40,457	50.14	36,788	263	37,051	49.96	842	9.79

2(A)State's Load Deails (At State Periphery) in MU:

State	State's Control Area Generation (Net MU)							Drawal Sch	Act Drawal	UI	Requirement	Shortage	Consumption
	Thermal	Hydro	Gas/Naptha/ Diesel	Solar	Wind	OthersBiomass/Small Hyd/Co-gen etc.)	Total	(Net MU)	(Net MU)	(Net MU)	(Net MU)	(Net MU)	(Net MU)
PUNJAB	0	18.1	0	3.85	0	3.32	25.27	84.54	83.76	-0.78	109.03	0	109.03
HARYANA	15.03	0.99	0	0.16	0	1.32	17.49	95.42	96.89	1.47	114.38	0	114.38
RAJASTHAN	86.51	0	2	19.01	35.49	0.81	143.82	55.08	54.54	-0.54	198.36	0	198.36
DELHI	0	0	11.09	0	0	1.04	12.13	60.51	57.44	-3.07	69.57	0	69.57
UTTAR PRADESH	113.12	9.62	0	5.35	0	14.4	142.49	127.43	126.09	-1.34	268.58	0	268.58
UTTARAKHAND	0	15.32	0	0.76	0	0.44	16.52	5.24	5.15	-0.09	21.67	0	21.67
HIMACHAL PRADESH	0	9.36	0	0	0	10.56	19.92	-4.07	-4	0.07	15.92	0	15.92
J&K(UT) & Ladakh(UT)	0	17.81	0	0	0	0	17.81	23.81	23.54	-0.27	51.14	9.79	41.35
CHANDIGARH	0	0	0	0	0	0	0	3.16	3.12	-0.04	3.12	0	3.12
Region	214.66	71.2	13.09	29.13	35.49	31.89	395.45	451.12	446.53	-4.59	851.77	9.79	841.98

2(B)State Demand Met (Peak and off-peak Hrs)

State	Evening Peak (20:00) MW				Off-Peak (03:00) MW			
	Demand Met	Shortage	UI	STOA/PX Transaction	Demand Met	Shortage	UI	STOA/PX Transaction
PUNJAB	4,851	0	-143	191	5,072	0	45	1,377
HARYANA	5,615	0	76	66	5,697	0	204	310
RAJASTHAN	7,644	0	-89	-146	7,416	0	-118	-242
DELHI	2,738	0	-336	129	3,005	0	-104	146
UTTAR PRADESH	14,975	0	-603	1,327	12,760	0	-314	1,593
UTTARAKHAND	1,150	0	139	-411	785	0	2	-395
HIMACHAL PRADESH	729	0	53	-1,411	449	0	-37	-1,138
J&K(UT) & Ladakh(UT)	2,075	519	134	-435	1,493	263	152	-738
CHANDIGARH	161	0	-6	-100	112	0	-2	-91
Region	39,938	519	-775	-790	36,789	263	-172	822

2(C)State's Demand Met in MWs (Maximum Demand Met and Maximum requirement of the day details)

State	Maximum Demand, corresponding shortage and requirement details for the day				Maximum requirement, corresponding shortage and demand details for the day					
	Maximum Demand Met of the day	Time	Shortage during at maximum demand	Requirement at the max demand met of the day	Maximum Requirement of the day	Time	Shortage during at maximum Requirement	Demand Met at maximum requiremnet	Min Demand Met	Time
PUNJAB	5,473	23:00	0	5,473	5,473	23:00	0	5,473	3,488	15:00
HARYANA	6,729	23:00	0	6,729	6,729	23:00	0	6,729	3,007	12:00
RAJASTHAN	9,581	9:00	0	9,581	9,581	9:00	0	9,581	6,863	19:00
DELHI	3,461	24:00	0	3,461	3,461	24:00	0	3,461	2,607	10:00
UP	15,462	21:00	0	15,462	15,462	21:00	0	15,462	6,637	7:00
UTTARAKHAND	1,150	20:00	0	1,150	1,150	20:00	0	1,150	714	1:00
HP	879	10:00	0	879	879	10:00	0	879	449	3:00
J&K(UT)&Ladak ..	2,075	20:00	519	2,594	2,594	20:00	519	2,075	1,178	24:00
CHANDIGARH	161	20:00	0	161	161	20:00	0	161	112	3:00
NR	41,763	23:00	376	42,139	42,139	23:00	376	41,763	31,090	7:00

3(A) State Entities Generation:

CHANDIGARH

Station/Constituents	Inst. Capacity	N/A	N/A	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
NIL							
Total	0	0	0			0	0
Total	0	0	0			0	0

DELHI

Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BAWANA GPS(2 * 253 + 4 * 216)	1,370	269	274	0		6.73	280
DELHI GAS TURBINES(3 * 34 + 6 * 30)	282	37	37	0		0.84	35
PRAGATI GAS TURBINES(1 * 121.2 + 2 * 104.6)	452	142	146	0		3.52	147
RITHALA GPS(3 * 36)	108	0	0	0			
Total GAS/NAPTHA/DIESEL	2,212	448	457			11.09	462
WIND	0	0	0	0			
BIOMASS(52)	52	36	34	0		1.04	43
SOLAR(2)	2	0	0	0			
Total DELHI	2,266	484	491			12.13	505

HARIYANA

Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
DCRTPP (YAMUNA NAGAR)(2 * 300)	600	347	560	0		10.19	425
JHAJJAR(CLP)(2 * 660)	1,320	0	0	0			
MAGNUM DIESEL (IPP)(4 * 6.3)	25	0	0	0			
PANIPAT TPS(1 * 210 + 2 * 250)	710	196	209	0		4.85	202
RGTPP(KHEDAR)(2 * 600)	1,200	0	0	0			
Total THERMAL	3,855	543	769			15.04	627
FARIDABAD GPS(1 * 156.07 + 2 * 137.75)	432	0	0	0			
Total GAS/NAPTHA/DIESEL	432	0	0			0	0
TOTAL HYDRO HARYANA(64.8)	65	34	27	0		0.99	41
Total HYDEL	65	34	27			0.99	41
WIND	0	0	0	0			
BIOMASS(106)	106	0	0	0		1.32	55
SOLAR(55.8)	56	0	0	0		0.16	7
Total HARYANA	4,514	577	796			17.51	730

HIMACHAL PRADESH

Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BASPA (IPP) HPS(3 * 100)	300	118	107	0		2.52	105
MALANA (IPP) HPS(2 * 43)	86	22	44	0		0.78	33
OTHER HYDRO HP(372)	372	265	255	0		6.05	252
Total HYDEL	758	405	406			9.35	390
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR(1 * 18.9)	19	0	0	0			
SMALL HYDRO(486)	486	469	464	0		10.56	440
Total SMALL HYDRO	486	469	464			10.56	440
Total HP	1,263	874	870			19.91	830

J&K(UT) & LADAKH(UT)

Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
GAS/DIESEL/OTHERS J&K(1 * 190)	190	0	0	0			
Total GAS/NAPTHA/DIESEL	190	0	0			0	0
BAGLIHAR (IPP) HPS(6 * 150)	900	592	736	0		15.96	665
OTHER HYDRO/IPP J&K(308)	308	112	53	0		1.85	77
Total HYDEL	1,208	704	789			17.81	742
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO(98)	98	0	0	0			
Total SMALL HYDRO	98	0	0			0	0
Total J&K(UT)&Ladakh(UT)	1,496	704	789			17.81	742

PUNJAB

Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
GOINDWAL(GVK)(2 * 270)	540	0	0	0			
GURU GOBIND SINGH TPS (ROPAR)(4 * 210)	840	0	0	0		0	0
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)(2 * 210 + 2 * 250)	920	0	0	0		0	0
RAJPURA(NPL) TPS(2 * 700)	1,400	0	0	0		0	0
TALWANDI SABO TPS(3 * 660)	1,980	0	0	0			
Total THERMAL	5,680	0	0			0	0
ANANADPUR SAHIB HYDRO PLANT(2 * 33.5 + 2 * 33.5)	134	115	115	116		2.79	116
MUKERIAN HYDRO PLANT(6 * 15 + 6 * 19.5 + 2 * 9)	225	177	197	197		4.35	181
RANJIT SAGAR POWER PLANT (4 * 150)	600	300	300	300		4.95	206
SHANAN(4 * 15 + 1 * 50)	110	110	110	110		2.45	102
UBDC(3 * 15 + 3 * 15.5)	92	46	54	60		1.2	50
OTHER HYDRO PUNJAB	0	0	0	0		2.38	99
Total HYDEL	1,161	748	776			18.12	754
WIND	0	0	0	0			
BIOMASS(303)	303	0	0	0		3.32	138
SOLAR(859)	859	0	0	537		3.85	160
Total PUNJAB	8,003	748	776			25.29	1,052

RAJASTHAN

Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BARSINGSAR (IPP) LTPS(2 * 125)	250	219	221	0		5.25	219
CHHABRA TPS(2 * 660 + 4 * 250)	2,320	1,565	1,553	0		38.69	1,612
GIRAL (IPP) LTPS(2 * 125)	250	0	0	0			
KALISINDH TPS(2 * 600)	1,200	0	0	0			
KAWAI TPS(2 * 660)	1,320	863	856	0		21.36	890
KOTA TPS(2 * 110 + 2 * 195 + 3 * 210)	1,240	79	75	0		1.93	80
RAJWEST (IPP) LTPS(8 * 135)	1,080	629	680	0		16.8	700
SURATGARH TPS (6 * 250)	1,500	0	0	0			
VSLPP (IPP)(1 * 135)	135	103	105	0		2.48	103
Total THERMAL	9,295	3,458	3,490			86.51	3,604
DHOLPUR GPS(3 * 110)	330	0	0	0			
RAMGARH GPS(1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5)	271	80	84	0		2	83
Total GAS/NAPTHA/DIESEL	601	80	84			2	83
RAPS-A(1 * 100 + 1 * 200)	300	0	0	0			
Total NUCLEAR	300	0	0			0	0
TOTAL HYDRO RAJASTHAN(550)	550	0	0	0			
Total HYDEL	550	0	0			0	0
WIND	4,292	1,282	2,070	0		35.49	1,479
BIOMASS(102)	102	34	34	0		0.81	34
SOLAR(3045)	3,045	1	0	0		19.01	792
Total RAJASTHAN	18,185	4,855	5,678			143.82	5,992

UTTAR PRADESH

Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
ANPARA TPS(2 * 500 + 3 * 210)	1,630	1,299	1,306	0		25.63	1,068
ANPARA-C TPS(2 * 600)	1,200	1,036	1,082	0		18.64	777
ANPARA-D TPS(2 * 500)	1,000	467	467	0		8.53	355
BAJAJ ENERGY PVT LTD (IPP) TPS(10 * 45)	450	0	40	0		0.37	15
BARA PPGCL TPS(3 * 660)	1,980	1,078	719	0		18.72	780
HARDUAGANJ TPS(1 * 105 + 1 * 60 + 2 * 250)	665	177	126	0		3.21	134
LALITPUR TPS(3 * 660)	1,980	456	335	0		8.11	338
MEJA TPS(1 * 660)	660	0	0	0			
OBRA TPS (2 * 94 + 5 * 200)	1,188	474	312	0		8.18	341
PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)	1,380	365	255	0		6.33	264
ROSA TPS(4 * 300)	1,200	855	614	0		15.41	642
TANDA TPS(4 * 110)	440	0	0	0			
Total THERMAL	13,773	6,207	5,256			113.13	4,714
ALAKHANANDA HEP(4 * 82.5)	330	160	164	0		3.67	153
VISHNUPARYAG HPS(4 * 110)	440	142	137	0		3.27	136
OTHER HYDRO UP(527)	527	162	105	0		2.69	112
Total HYDEL	1,297	464	406			9.63	401
WIND	0	0	0	0			
BIOMASS(26)	26	0	0	0			
SOLAR(798)	798	0	0	0		5.35	223
CO-GENERATION(1360)	1,360	600	600	0		14.4	600
Total OTHERs	1,360	600	600			14.4	600
Total UP	17,254	7,271	6,262			142.51	5,938

UTTARAKHAND

Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
TOTAL GAS UK(675)	675	0	0	0			
Total GAS/NAPTHA/DIESEL	675	0	0			0	0
OTHER HYDRO UK(1250)	1,250	672	607	675	21:00	15.32	638
Total HYDEL	1,250	672	607			15.32	638
WIND	0	0	0	0			
BIOMASS(127)	127	17	19	21	10:00	0.44	18
SOLAR(100)	100	0	0	103	12:00	0.76	32
SMALL HYDRO(180)	180	0	0	0			
Total SMALL HYDRO	180	0	0			0	0
Total UTTARAKHAND	2,332	689	626			16.52	688

3(B) Regional Entities Generation

Station/Constituents	Inst. Capacity	Declared Capacity	20:00	03:00	Day Peak		Day Energy		AVG. MW	UI
	(MW)	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	SCHD (MU)	ACT (MU)		
Aravali Power Company Private Ltd										
ISTPP (JHAJJAR)(3 * 500)	1,500	1,414	0	0	0	-	0	-	-	0
Sub-Total	1,500	1,414	0	0	-	-	0	0	0	0
BBMB										
BHAKRA HPS(2 * 108 + 3 * 126 + 5 * 157)	1,379	1,154	1,174	688	1,174	20:00	20.03	20.07	836	0.04
DEHAR HPS(6 * 165)	990	640	810	330	810	20:00	11.4	11.65	485	0.25
PONG HPS(6 * 66)	396	304	310	66	310	20:00	5.62	5.72	238	0.1
Sub-Total	2,765	2,098	2,294	1,084	-	-	37.05	37.44	1,559	0.39
NHPC										
BAIRASIUL HPS(3 * 60)	180	120	119	119	120	14:00	2.67	2.82	118	0.15
CHAMERA HPS(3 * 180)	540	555	536	535	537	09:00	10.11	10.17	424	0.06
CHAMERA II HPS(3 * 100)	300	100	100	100	101	09:00	2.35	2.38	99	0.03
CHAMERA III HPS(3 * 77)	231	240	222	157	233	21:00	3.73	3.77	157	0.04
DHAULIGANGA HPS(4 * 70)	280	292	272	0	281	21:00	2.86	2.93	122	0.07
DULHASTI HPS(3 * 130)	390	405	392	399	403	13:00	9.2	9.29	387	0.09
KISHANGANGA(3 * 110)	330	222	222	110	223	22:00	3.2	3.25	135	0.05
PARBATI III HEP(4 * 130)	520	520	499	0	525	19:45	1.61	1.63	68	0.02
PARBATI-II(2 * 400)(Infirm)	800	-	64	39	64	20:00	-	1.02	43	1.02
SALAL HPS(6 * 115)	690	630	671	570	701	09:00	14.28	14.95	623	0.67
SEWA-II HPS(3 * 40)	120	131	126	125	129	21:00	2.88	2.94	123	0.06
TANAKPUR HPS(1 * 31.42 + 2 * 31.4)	94	65	70	63	93	12:00	1.4	1.61	67	0.21
URI HPS(4 * 120)	480	475	477	477	484	07:00	11.43	11.52	480	0.09
URI-II HPS(4 * 60)	240	237	245	185	246	08:00	5.11	5.21	217	0.1
Sub-Total	5,195	3,992	4,015	2,879	-	-	70.83	73.49	3,063	2.66
NPCL										
NAPS(2 * 220)	440	381	412	417	426	07:00	9.14	9.1	379	-0.04
RAPS-B(2 * 220)	440	358	404	407	412	06:00	8.59	8.65	360	0.06
RAPS-C(2 * 220)	440	410	450	447	450	20:00	9.84	9.81	409	-0.03
Sub-Total	1,320	1,149	1,266	1,271	-	-	27.57	27.56	1,148	-0.01
NTPC										
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	400	0	0	0	-	0	0	0	0
AURAIYA GPS(2 * 109.3 + 4 * 111.19)	663	330	254	185	274	07:00	4.34	5.45	227	1.11
DADRI GPS(2 * 154.51 + 4 * 130.19)	830	403	273	228	297	-	5.4	6.01	250	0.61
DADRI SOLAR(5)	5	0	0	0	3	-	0.02	0.02	1	0
DADRI-I TPS(4 * 210)	840	769	0	0	0	-	0	-	-	0
DADRI-II TPS(2 * 490)	980	924	389	252	389	20:00	6.28	6.01	250	-0.27
KOLDAM HPS(4 * 200)	800	872	547	654	873	23:00	7	7.37	307	0.37
RIHAND-I STPS(2 * 500)	1,000	920	958	950	958	20:00	21.92	21.19	883	-0.73
RIHAND-II STPS(2 * 500)	1,000	460	467	497	467	20:00	11.86	11.52	480	-0.34
RIHAND-III STPS(2 * 500)	1,000	938	952	996	952	20:00	22.44	22.15	923	-0.29
SINGRAULI STPS(2 * 500 + 5 * 200)	2,000	1,670	1,632	1,820	1,632	20:00	39.86	39.16	1,632	-0.7
SINGRAULI SOLAR(15)	15	0	0	0	0	-	0.07	0.07	3	0
TANDA TPS STAGE-II(1 * 660)	660	622	523	657	523	20:00	8.94	8.06	336	-0.88
UNCHAHAR I(2 * 210)	420	382	0	0	0	-	0	-	-	0
UNCHAHAR II TPS(2 * 210)	420	382	0	0	0	-	0	-	-	0
UNCHAHAR III TPS(1 * 210)	210	191	120	122	120	20:00	2.52	2.95	123	0.43
UNCHAHAR IV TPS(1 * 500)	500	471	277	285	277	20:00	6.23	6.66	278	0.43
UNCHAHAR SOLAR(10)	10	0	0	0	0	-	0.05	0.05	2	0
Sub-Total	11,772	9,734	6,392	6,646	-	-	136.93	136.67	5,695	-0.26
SJVNL										
NATHPA-JHAKRI HPS(6 * 250)	1,500	1,605	1,485	612	1,510	21:00	18.49	18.49	770	0
RAMPUR HEP(6 * 68.67)	412	442	387	195	416	21:00	5.15	5.39	225	0.24
Sub-Total	1,912	2,047	1,872	807	-	-	23.64	23.88	995	0.24
THDC										
KOTESHWAR HPS(4 * 100)	400	390	318	93	397	21:00	2.88	2.9	121	0.02
TEHRI HPS(4 * 250)	1,000	720	712	537	725	22:00	6.48	6.48	270	0
Sub-Total	1,400	1,110	1,030	630	-	-	9.36	9.38	391	0.02
Total	25,864	21,544	16,869	13,317			305.38	308.42	12,851	3.04

IPP/JV

Station/Constituents	Inst. Capacity	Declared Capacity	20:00	03:00	Day Peak		Day Energy		AVG. MW	UI
	(MW)	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	SCHD (MU)	ACT (MU)		
IPP										
ADHPL(IPP) HPS(2 * 96)	192	0	67	0	188	23:00	1.41	1.44	60	0.03
BUDHIL HPS (IPP)(2 * 35)	70	0	71	26	71	19:00	0.77	0.8	33	0.03
KARCHAM WANGTOO HPS(4 * 250)	1,000	0	1,000	250	1,000	20:00	9.87	9.87	411	0
MALANA2(2 * 50)	100	0	31	45	101	23:59	0	0.72	30	0.72
SAINJ HEP(2 * 50)	100	0	35	25	100	05:30	0.89	1.09	45	0.2
SHREE CEMENT (IPP) TPS(2 * 150)	300	0	0	0	0	-	0	-	-	0
Sub-Total	1,762	0	1,204	346	-	-	12.94	13.92	579	0.98
SOLAR IPP										
ACME CHITTORGARH SOLAR ENERGY PVT LTD(1 * 250)	250	0	0	0	200	13:05	1.41	1.57	65	0.16
ADANI RENEWABLE ENERGY RJ LIMITED (ARERJL)(1 * 200)	200	0	0	0	212	12:15	1.63	1.64	68	0.01
AZURE POWER INDIA PVT LTD.(4 * 50)	200	0	0	0	189	12:30	1.28	1.43	60	0.15
AZURE POWER THIRTY FOUR PRIVATE LTD(1 * 130)	130	0	0	0	128	11:40	0.93	1.02	43	0.09
CLEAN SOLAR POWER (BHADLA) PVT LTD(1 * 300)	300	0	0	0	300	13:06	2.06	2.23	93	0.17
M/S KILAJ SOLAR (MAHARASHTRA) PRIVATE LIMITED(1 * 50)	50	0	0	0	0	-	0.29	0.28	12	-0.01
RENEW SOLAR POWER PVT LTD(50)	50	0	0	0	50	13:20	0.39	0.42	18	0.03
RENEW SOLAR POWER PVT LTD. BIKANER(1 * 250)	250	0	0	0	252	12:00	1.85	1.96	82	0.11
SB ENERGY FOUR PVT LTD(2 * 100)	200	0	0	0	200	13:04	1.56	1.61	67	0.05
TATA POWER RENEWABLE ENERGY LTD(1 * 150)	150	0	0	0	0	-	1.16	1.18	49	0.02
Sub-Total	1,780	0	0	0	-	-	12.56	13.34	557	0.78
Total	3,542	0	1,204	346			25.5	27.26	1,136	1.76

Summary Section

	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Total State Control Area Generation	55,313	16,202	16,288	395.5	16,477
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		7,307	8,731	130.75	9,058
Total Regional Availability(Gross)	84,719	41,582	38,682	861.93	39,522

Total Hydro Generation

	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Hydro	13,534	10,962	6,400	165.48	6,894
State Control Area Hydro	6,289	3,027	3,011	71.22	2,966
Total Regional Hydro	19,823	13,989	9,411	236.7	9,860

Total Renewable Generation

	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Renewable	1,810	0	0	13.48	563
State Control Area Renewable	10,651	1,839	2,621	82.11	3,421
Total Regional Renewable	12,461	1,839	2,621	95.59	3,984

4(A) INTER-REGIONAL EXCHANGES (Import=(+ve) /Export =(-ve))

SL.No.	Element	20:00	03:00	Maximum Interchange (MW)		Import in MU	Export in MU	NET
		(MW)	MW	Import (MW)	Export (MW)			
Import/Export between EAST REGION and NORTH REGION								
1	132KV-Garhwa-Rihand	-26	-27	-	27	0	0.58	-0.58
2	132KV-Karmnasa (PG)-Sahupuri(UP)	-	-	-	-	0.48	0	0.48
3	132KV-Rihand-Sonnagar (PG)	-26	-27	-	27	0	0.58	-0.58
4	220KV-Pusauli (PG)-Sahupuri(UP)	160	150	160	0	2.89	0	2.89
5	400KV-Biharsharif (PG)-Balia(PG)	201	314	345	0	5.04	0	5.04
6	400KV-Biharsharif (PG)-Varanasi(PG)	-73	-192	306	36	2.63	0	2.63
7	400KV-Motihari (DMT)-Gorakhpur(UP)	100	185	188	-	3.63	0	3.63
8	400KV-Muzaffarpur (PG)-Gorakhpur(UP)	266	766	792	-	11.59	0	11.59
9	400KV-Patna (PG)-Balia(PG)	530	699	776	0	12.09	0	12.09
10	400KV-Sasaram-Allahabad (PG)	89	107	119	0	2.16	0	2.16
11	400KV-Sasaram-Varanasi (PG)	-162	-138	176	0	5.53	0	5.53
12	765KV-Fatehpur (PG)-Sasaram.	-74	124	237	74	2.3	0	2.3
13	765KV-Gaya (PG)-Balia(PG)	330	331	363	0	5.58	0	5.58
14	765KV-Gaya (PG)-Varanasi(PG)	-444	-569	803	0	9.27	0	9.27
15	HVDC800KV-Alipurduar-Agra (PG)	-	-	-	-	-	-	-
Sub-Total EAST REGION		871	1,723	4,265	164	63.19	1.16	62.03
Import/Export between NORTH_EAST REGION and NORTH REGION								
1	HVDC800KV-BiswanathCharialli-Agra (PG)	500	500	0	500	0	12.05	-12.05
Sub-Total NORTH_EAST REGION		500	500	0	500	0	12.05	-12.05

Import/Export between WEST REGION and NORTH REGION								
1	220KV-Auraiya (NT)-Malanpur(PG)	-45	-38	-	166	0	1.86	-1.86
2	220KV-Bhanpur-Modak	75	60	97	-	1.65	0	1.65
3	220KV-Ranpur-Bhanpur	32	45	59	-	1.03	0	1.03
4	400KV-RAPS C (NP)-Sujalpur	-	-	-	-	0	1.69	-1.69
5	400KV-Vindhyachal (PG)-Rihand(NT)	875	949	-	949	0	22.15	-22.15
6	400KV-Zerda (PG)-Bhinmal(PG)	-148	-333	0	537	0	7.56	-7.56
7	400KV-Zerda (PG)-Kankroli(RJ)	-19	-120	0	286	0	3.73	-3.73
8	765KV-0rai-Gwalior (PG)	-475	-399	0	-584	0	10.3	-10.3
9	765KV-0rai-Jabalpur	664	1,303	1,384	0	19.83	0	19.83
10	765KV-0rai-Satna	1,053	1,261	1,327	0	25.32	0	25.32
11	765KV-Chittorgarh-Banaskata D/C	-250	-129	480	762	0	3.16	-3.16
12	765KV-Gwalior (PG)-Agra(PG)	2,170	1,980	2,194	0	37.49	0	37.49
13	765KV-Phagi (RJ)-Gwalior(PG)	741	866	963	-	16.64	0	16.64
14	HVDC500KV-Mundra (JH)-Mohindergarh(JH)	1,148	1,148	1,154	0	27.86	0	27.86
15	HVDC500KV-Vindhyachal (PG)-Vindhaychal B/B	-50	-250	0	250	0	2.22	-2.22
16	HVDC800KV-Champa (PG)-Kurukshetra(PG)(PG)	165	165	165	0	3.62	0	3.62
Sub-Total WEST REGION		5,936	6,508	7,823	2,366	133.44	52.67	80.77
TOTAL IR EXCHANGE		7,307	8,731	12,088	3,030	196.63	65.88	130.75

4(B) Inter Regional Schedule & Actual Exchange (Import=(+ve) /Export =(-ve)) in MU

	ISGS/(LT+MT) Schedule	BILT Schedule	PX Schedule	Total IR Schedule	Total IR Actual	NET IR UI
NR-ER	38.38	-7.17	0.63	31.84	62.03	30.19
NR-WR	134.7	13.73	-29.26	119.17	80.77	-38.4
Total	173.08	6.56	-28.63	151.01	130.75	-20.26

5.Inter National Exchange with Nepal [Import (+ve)/Export(-ve)] [Linkwise]

Element	Peak	Off-Peak	Maximum Interchange(MW)		Energy (MU)		Net Energy
	MW	MW	Import	Export	Import	Export	(MU)
132KV-Tanakpur(NH)-Mahendranagar(PG)	0	0	0	0	0	0	0

5.Frequency Profile

RANGE(Hz)	< 49.2	< 49.7	< 49.8	< 49.9	< 50.0	>= 49.9 - <= 50.05	> 50.05 - <= 50.1	> 50.1 - <= 50.2	> 50.2	> 50.05
%	0	0	0	2.2	38.3	73.2	18.7	5.8	.1	24.6

<----------Frequency (Hz)---------->

Maximum		Minimum		Average	Freq Variation	Standard	Freq. in 15 mnt blk		Freq Dev Index
Frequency	Time	Frequency	Time	Frequency	Index	Deviation	Max.	Min.	(% of Time)
50.22	19:02:20	49.84	01:36:10	50.01	0.034	0.056	50.12	49.91	26.8

6.Voltage Profile: 400kV

	Maximum		Minimum		Voltage (in %)				Voltage Deviation Index
					< 380	< 390	> 420	> 430	(% of time)
Abdullapur(PG) - 400KV	420	14:35	394	22:20	0	0	.35	0	.35
Amritsar(PG) - 400KV	418	14:35	394	22:20	0	0	0	0	0
Ballabgarh(PG) - 400KV	418	14:30	391	22:20	0	0	0	0	0
Bareilly II(PG) - 400KV	420	06:35	397	22:20	0	0	.35	0	.35
Bareilly(UP) - 400KV	422	06:35	399	22:20	0	0	10.42	0	10.42
Baspa(HP) - 400KV	409	06:05	393	22:10	0	0	0	0	0
Bassi(PG) - 400KV	418	17:00	392	22:20	0	0	0	0	0
Bawana(DTL) - 400KV	419	17:00	392	22:20	0	0	0	0	0
Dadri HVDC(PG). - 400KV	420	17:05	398	22:20	0	0	0	0	0
Gorakhpur(PG) - 400KV	424	11:00	400	22:20	0	0	26.39	0	26.39
Hisar(PG) - 400KV	420	14:35	388	22:20	0	.69	0	0	0
Kanpur(PG) - 400KV	419	11:00	398	22:20	0	0	0	0	0
Kashipur(UT) - 400KV	421	06:35	409	22:20	0	0	5.9	0	5.9
Kishenpur(PG) - 400KV	416	06:00	408	20:15	0	0	0	0	0
Moga(PG) - 400KV	405	14:15	381	22:20	0	24.65	0	0	0
Nallagarh(PG) - 400KV	409	06:05	393	22:10	0	0	0	0	0
Rihand HVDC(PG) - 400KV	410	11:00	403	00:15	.35	.35	0	0	.35

Rihand(NT) - 400KV	409	11:00	401	00:15	0	0	0	0	0

6.1 Voltage Profile: 765kV

	Maximum		Minimum		Voltage (in %)				Voltage Deviation Index
					< 728	< 742	> 800	> 820	
Anta RS(RJ) - 765KV	791	17:10	763	22:20	0	0	0	0	0
Balia(PG) - 765KV	795	11:00	758	22:20	0	0	0	0	0
Bareilly II(PG) - 765KV	802	06:35	759	22:20	0	0	9.38	0	9.38
Bhiwani(PG) - 765KV	796	13:35	750	22:20	0	0	0	0	0
Fatehpur(PG) - 765KV	782	11:00	741	22:20	0	.35	0	0	0
Jhatikara(PG) - 765KV	794	14:35	744	22:20	0	0	0	0	0
Lucknow II(PG) - 765KV	800	11:00	757	22:20	0	0	.35	0	.35
Meerut(PG) - 765KV	794	17:00	748	22:20	0	0	0	0	0
Moga(PG) - 765KV	787	17:00	745	22:20	0	0	0	0	0
Phagi(RJ) - 765KV	793	17:05	752	22:20	0	0	0	0	0
Unnao(UP) - 765KV	782	11:00	741	22:20	0	.35	0	0	0

7(A). Short-Term Open Access Details:

State	Off- Peak Hours (03:00)			Peak Hours (20:00)			Day Energy (MU)			
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	ISGS /(LT+MT) Schedule	BILT Schedule	PX Schedule	Total (MU)
PUNJAB	-302.82	1,679.94	0	-302.82	494.1	0	72.83	-7.27	18.97	84.54
HARYANA	48.21	261.43	0	55.09	10.72	0	89.96	1.82	3.64	95.42
RAJASTHAN	-156.1	-85.82	0	-156.1	9.73	0	59.38	-3.75	-0.55	55.08
DELHI	183.69	-37.5	0	153.27	-23.79	0	55.84	7.67	-3	60.51
UTTAR PRADESH	1,644.08	-51.17	0	1,131.8	195.04	0	119.76	15.58	-7.91	127.43
UTTARAKHAND	0	-394.66	0	0	-411.18	0	13.32	0	-8.08	5.24
HIMACHAL PRADESH	-304.06	-833.95	0	-270.36	-1,140.87	0	19.57	-6.52	-17.13	-4.07
J&K(UT) & Ladakh(UT)	-56.55	-681.34	0	-56.55	-378.52	0	35.79	-1.32	-10.66	23.81
CHANDIGARH	0	-90.62	0	0	-99.98	0	4.67	0	-1.51	3.16
TOTAL	1,056.45	-233.69	0	554.33	-1,344.75	0	471.12	6.21	-26.23	451.12

7(B). Short-Term Open Access Details

State	ISGS/(LT+MT) Schedule		Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
PUNJAB	3,975.97	2,586.59	-302.82	-302.82	1,778.76	0	0	0
HARYANA	4,857.69	2,491.94	157.34	48.21	1,092.83	-310.68	0	0
RAJASTHAN	3,367.73	1,448.86	-156.1	-156.1	13.43	-357.32	0	0
DELHI	2,596.89	2,118.25	527.23	88.1	226.05	-411.95	0	0
UTTAR PRADESH	7,405.6	3,424.31	1,644.08	48.93	484.54	-2,172.04	0	0
UTTARAKHAND	854.05	434.61	0	0	-71.85	-491.94	0	0
HIMACHAL PRADESH	1,349.16	581.12	-164.5	-449.82	-440.42	-1,297.81	0	0
J&K(UT) & Ladakh(UT)	1,867.59	1,284.97	-51.71	-56.55	0	-958.92	0	0
CHANDIGARH	269.59	152.96	0	0	0	-99.98	0	0

8.Major Reservoir Particulars

RESERVOIR	Parameters			Present Parameters		LAST YEAR		LAST DAY	
	MDDL (Mts)	FRL (Mts)	Energy Content at FRL	Level (Mts)	Energy (MU)	Level (Mts)	Energy (MU)	Inflow (m3/s)	Usage (m3/s)
Bhakra	445.62	513.59	1,728.8	484.14	561	494.89	903	529.75	689.63
Chamera-I	748.75	760	753.95	-	-	-	-	-	0
Gandhisagar	381	399.9	725	-	-	-	-	-	0
Jawahar Sagar	295.78	298.7	2.01	-	-	-	-	-	0
Koteshwar	598.5	612.5	610.73	610.35	5	610.58	5	191	191.73
Pong	384.05	426.72	1,084	413.55	622	408.98	464	175.42	357.05
RPS	343.81	352.8	175.66	-	-	-	-	-	0
RSD	487.91	527.91	390.3	511.22	230	522.18	332	260.8	222.09
Rihand	252.98	268.22	860.5	-	-	-	-	-	0
Tehri	740.04	829.79	1,291.49	768.57	195	761.91	137	126.18	191
TOTAL	-	-	-	-	1,613	-	1,841	1,283.15	1,651.5

9. System Reliability Indices(Violation of TTC and ATC):

(i)%age of times N-1 Criteria was violated in the inter - regional corridors

WR	0
ER	0
Simultaneous	0

ii)%age of times ATC violated on the inter-regional corridors

WR	0
ER	0
Simultaneous	0

iii)%age of times Angular Difference on Important Buses was beyond permissible limits(40 deg.)

Rihand-Dadri	0

10. Zero Crossing Violations

State	No. of violations(Maximum 8 in a day)	Maximum number of continuous blocks without sign change
CHANDIGARH	1	17
DELHI	0	1
HARYANA	2	16
HIMACHAL PRADESH	6	73
J&K(UT) & Ladakh(UT)	3	28
PUNJAB	2	14
RAJASTHAN	1	14
UTTAR PRADESH	2	18
UTTARAKHAND	4	56

11.Significant events (If any):

12.Grid Disturbance / Any Other Significant Event:

13.Weather Conditions :

14.Synchronisation of new generating units :

15.Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :

16.Tripping of lines in pooling stations :

17.Complete generation loss in a generating station :

18.Remarks :

No Records Found

Note: Data(regarding drawal,generation, shortage , inter-regional flows and reservoir levels)of the constituents filled in the report are as per last furnished data by the respective state/constituent to NRLDC.

Shift In Charge