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

Power Supply Position in Northern Region For 23-Dec-2018

Date of Reporting:24-Dec-2018

1. Regional Availability/Demand:

Evening Peak (19:00) MW				Off-Peak (03:00) MW				Day Energy(Net MU)	
Demand Met	Shortage(-)/Surplus(+)	Requirement	Freq (Hz)	Demand Met	Shortage(-)/Surplus ..	Requirement	Freq (Hz)	Demand Met	Shortage
43,124	578	43,702	50.03	31,484	327	31,811	50.01	918	11.15

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	70.5	12.45	0	3.8	0	1.07	87.82	24.94	24.23	-0.71	112.05	0	112.05
HARYANA	52.69	0.56	0	0.09	0	1.21	54.55	63.98	64.55	0.57	119.1	0	119.1
RAJASTHAN	131.54	3.51	1.86	16.6	9.97	4.46	167.94	60.58	61.16	0.58	229.1	0	229.1
DELHI	0	0	14.05	0	0	0	14.05	49.16	49.29	0.13	63.36	0.02	63.34
UTTAR PRADESH	142.1	7.4	0	2.3	0	21.6	173.4	106.2	106.69	0.49	280.09	0	280.09
UTTARAKHAND	0	9.64	2.46	0.52	0	0.69	13.31	23.13	22.52	-0.61	35.83	0	35.83
HIMACHAL PRADESH	0	3.62	0	0	0	2.25	5.87	21.33	22.03	0.7	27.91	0.01	27.9
JAMMU & KASHMIR	0	1.62	4.28	0	0	0	5.9	43.09	41.52	-1.57	58.54	11.12	47.42
CHANDIGARH	0	0	0	0	0	0	0	2.96	3.2	0.24	3.2	0	3.2
Region	396.83	38.8	22.65	23.31	9.97	31.28	522.84	395.37	395.19	-0.18	929.18	11.15	918.03

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

State	Evening Peak (19:00) MW				Off-Peak (03:00) MW			
	Demand Met	Shortage(-)/Surplus(+)	UI	STOA/PX Transaction	Demand Met	Shortage(-)/Sur ..	UI	STOA/PX Transaction
PUNJAB	5,639	0	19	-1,686	3,466	0	21	-1,191
HARYANA	5,910	0	-62	-854	4,236	0	61	-873
RAJASTHAN	9,234	0	144	-1,473	8,214	0	102	-70
DELHI	3,134	0	-63	-704	1,529	0	85	-1,662
UTTAR PRADESH	13,541	0	-144	46	9,965	0	59	46
UTTARAKHAND	1,822	0	55	543	1,252	0	20	563
HIMACHAL PRADESH	1,363	0	50	517	887	0	-5	437
JAMMU & KASHMIR	2,312	578	96	1,106	1,852	327	13	710
CHANDIGARH	169	0	-6	0	83	0	5	-25
Region	43,124	578	89	-2,505	31,484	327	361	-2,065

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(-) /Surplus(+) during at maximum demand	Requirement at the max demand met of the day	Maximum Requirement of the day	Time	Shortage(-) /Surplus(+) during at maximum Requirement	Demand Met at maximum requiremnet	Min Demand Met	Time
PUNJAB	5,639	19:00	0	5,639	5,639	19:00	0	5,639	3,463	4:00
HARYANA	5,910	19:00	0	5,910	5,910	19:00	0	5,910	4,045	24:00
RAJASTHAN	12,660	10:00	0	12,660	12,660	10:00	0	12,660	7,592	5:00
DELHI	3,901	12:00	0	3,901	3,901	12:00	0	3,901	1,447	4:00
UP	13,541	19:00	0	13,541	13,541	19:00	0	13,541	9,965	3:00
UTTARAKHAND	1,927	9:00	0	1,927	1,927	9:00	0	1,927	1,218	24:00
HP	1,511	10:00	0	1,511	1,511	10:00	0	1,511	823	24:00
J&K	2,312	19:00	578	2,890	2,890	19:00	578	2,312	1,637	6:00
CHANDIGARH	202	9:00	0	202	202	9:00	0	202	83	3:00
NR	43,713	10:00	827	44,540	44,540	10:00	827	43,713	31,481	4:00

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	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BADARPUR TPS(2 * 210 + 3 * 100)	705	0	0	0			
RAJGHAT TPS(2 * 67.5)	135	0	0	0			
Total THERMAL	840	0	0			0	0
BAWANA GPS(2 * 253 + 4 * 216)	1,370	438	250	505	18:00	8.57	357
DELHI GAS TURBINES(3 * 34 + 6 * 30)	282	43	40	119	17:00	1.91	80
PRAGATI GAS TURBINES(1 * 121.2 + 2 * 104.6)	331	164	164	165	01:00	3.56	148
RITHALA GPS(3 * 36)	108	0	0	0			
Total GAS/NAPTHA/DIESEL	2,091	645	454			14.04	585
WIND	0	0	0	0			
BIOMASS(1 * 16)	16	0	0	0			
SOLAR(1 * 2)	2	0	0	0			
Total DELHI	2,949	645	454			14.04	585

HARIYANA

Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
DCRTPP (YAMUNA NAGAR)(2 * 300)	600	474	492	0		11.61	484
JHAJJAR(CLP)(2 * 660)	1,320	1,135	738	0		22.26	928
MAGNUM DIESEL (IPP)(4 * 6.3)	25	0	0	0			
PANIPAT TPS(2 * 210 + 2 * 250)	920	407	405	0		9.83	410
RGTPP(KHEDAR)(2 * 600)	1,200	381	387	0		8.99	375
Total THERMAL	4,065	2,397	2,022			52.69	2,197
FARIDABAD GPS(1 * 156.07 + 2 * 137.75)	432	0	0	0			
Total GAS/NAPTHA/DIESEL	432	0	0			0	0
TOTAL HYDRO HARYANA(1 * 62)	62	14	20	0		0.56	23
Total HYDEL	62	14	20			0.56	23
WIND	0	0	0	0			
BIOMASS(1 * 106)	106	0	0	0		1.21	50
SOLAR(1 * 50)	50	0	0	0		0.09	4
Total HARYANA	4,715	2,411	2,042			54.55	2,274

HIMACHAL PRADESH

Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BASPA (IPP) HPS(3 * 100)	300	31	31	0		1.04	43
MALANA (IPP) HPS(2 * 43)	86	47	0	0		0.3	13
OTHER HYDRO HP(1 * 372)	372	170	72	0		2.28	95
Total HYDEL	758	248	103			3.62	151
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO(1 * 486)	486	136	51	0		2.25	94
Total SMALL HYDRO	486	136	51			2.25	94
Total HP	1,244	384	154			5.87	245

JAMMU & KASHMIR

Station/Constituents	Inst. Capacity	19:00	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	148	148	0		4.28	178
Total GAS/NAPTHA/DIESEL	190	148	148			4.28	178
BAGLIHAR (IPP) HPS(6 * 150)	900	0	0	0			
OTHER HYDRO/IPP J&K(1 * 308)	308	104	50	0		1.62	68
Total HYDEL	1,208	104	50			1.62	68
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO(1 * 98)	98	0	0	0			
Total SMALL HYDRO	98	0	0			0	0
Total J&K	1,496	252	198			5.9	246

PUNJAB

Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
GOINDWAL(GVK)(2 * 270)	540	290	290	420		7.32	305
GURU GOBIND SINGH TPS (ROPAR)(6 * 210)	1,260	0	0	0		-0.12	-5
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)(2 * 210 + 2 * 250)	920	172	184	187		4.12	172
GURU NANAK DEV TPS (BHATINDA)(4 * 110)	460	0	0	0		-0.09	-4
RAJPURA(NPL) TPS(2 * 700)	1,400	1,320	740	1,320		26.61	1,109
TALWANDI SABO TPS(3 * 660)	1,980	1,600	924	1,841		32.66	1,361
Total THERMAL	6,560	3,382	2,138			70.5	2,938
TOTAL HYDRO PUNJAB(1 * 1000)	1,000	459	428	465		12.45	519
Total HYDEL	1,000	459	428			12.45	519
WIND	0	0	0	0			
BIOMASS(1 * 303)	303	0	0	0		1.07	45
SOLAR(1 * 859)	859	0	0	415		3.8	158
Total PUNJAB	8,722	3,841	2,566			87.82	3,660

RAJASTHAN

Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BARSINGSAR (IPP) LTPS(2 * 125)	250	222	148	0		4.74	198
CHHABRA TPS(1 * 660 + 4 * 250)	1,660	1,185	1,072	0		30.04	1,252
GIRAL (IPP) LTPS(2 * 125)	250	0	0	0			
KALISINDH TPS(2 * 600)	1,200	1,125	812	0		22.53	939
KAWAI TPS(2 * 660)	1,320	1,151	855	0		25.07	1,045
KOTA TPS(2 * 110 + 2 * 195 + 3 * 210)	1,240	884	997	0		22.52	938
RAJWEST (IPP) LTPS(8 * 135)	1,080	312	324	0		10.91	455
SURATGARH TPS (6 * 250)	1,500	558	537	0		13.23	551
VSLPP (IPP)(1 * 135)	135	105	106	0		2.5	104
Total THERMAL	8,635	5,542	4,851			131.54	5,482
DHOLPUR GPS(3 * 110)	330	0	0	0			
RAMGARH GPS(1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5)	271	77	77	0		1.86	78
Total GAS/NAPTHA/DIESEL	601	77	77			1.86	78
RAPS-A(1 * 100 + 1 * 200)	300	161	159	0		3.72	155
Total NUCLEAR	300	161	159			3.72	155
TOTAL HYDRO RAJASTHAN(1 * 550)	550	126	114	0		3.51	146
Total HYDEL	550	126	114			3.51	146
WIND	4,292	251	448	0		9.97	415
BIOMASS(1 * 102)	102	31	31	0		0.74	31
SOLAR(1 * 1995)	1,995	43	0	0		16.6	692
Total RAJASTHAN	16,475	6,231	5,680			167.94	6,999

UTTAR PRADESH

Station/Constituents	Inst. Capacity	19:00	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	1,434	1,461	0		34	1,417
ANPARA-C TPS(2 * 600)	1,200	1,087	574	0		25.1	1,046
ANPARA-D TPS(2 * 500)	1,000	943	956	0		21.9	913
BAJAJ ENERGY PVT LTD (IPP) TPS(10 * 45)	450	0	0	0			
BARA PPGCL TPS(3 * 660)	1,980	1,051	675	0		23.3	971
HARDUAGANJ TPS(1 * 105 + 1 * 60 + 2 * 250)	665	441	251	0		9.5	396
LALITPUR TPS(3 * 660)	1,980	0	0	0			
MEJA TPS(1 * 660)	660	0	0	0			
OBRA TPS (2 * 94 + 5 * 200)	1,188	339	221	0		7.3	304
PANKI TPS(2 * 105)	210	0	0	0			
PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)	1,160	605	344	0		12.8	533
ROSA TPS(4 * 300)	1,200	0	0	0			
TANDA TPS(4 * 110)	440	338	215	0		8.2	342
Total THERMAL	13,763	6,238	4,697			142.1	5,922
ALAKHANDA HEP(4 * 82.5)	330	83	140	0		1.4	58
VISHNUPARYAG HPS(4 * 110)	440	83	83	0		2	83
OTHER HYDRO UP(1 * 527)	527	129	165	0		4	167
Total HYDEL	1,297	295	388			7.4	308
WIND	0	0	0	0			
BIOMASS(1 * 26)	26	0	0	0			
SOLAR(1 * 472)	472	0	0	0		2.3	96
CO-GENERATION(1 * 1360)	1,360	900	900	0		21.6	900
Total OTHERs	1,360	900	900			21.6	900
Total UP	16,918	7,433	5,985			173.4	7,226

UTTARAKHAND							
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
TOTAL GAS UK(1 * 450)	450	102	95	105	09:00	2.46	103
Total GAS/NAPTHA/DIESEL	450	102	95			2.46	103
OTHER HYDRO UK(1 * 1250)	1,250	602	261	602	19:00	9.64	402
Total HYDEL	1,250	602	261			9.64	402
WIND	0	0	0	0			
BIOMASS(1 * 127)	127	29	28	29	09:00	0.69	29
SOLAR(1 * 100)	100	0	0	80	13:00	0.52	22
SMALL HYDRO(1 * 180)	180	0	0	0			
Total SMALL HYDRO	180	0	0			0	0
Total UTTARAKHAND	2,107	733	384			13.31	556

3(B) Regional Entities Generation

Station/Constituents	Inst. Capacity	Declared Capacity	19:00	03:00	Day Peak		Day Energy		AVG. MW	UI
	(MW)	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	SCHD (MU)	ACT (MU)		
BBMB										
BHAKRA HPS(2 * 108 + 3 * 126 + 5 * 157)	1,379	679.67	1,090	542	1,090	19:00	16.31	16.45	685	0.14
DEHAR HPS(6 * 165)	990	152.92	495	0	495	19:00	3.67	3.77	157	0.1
PONG HPS(6 * 66)	396	295.21	330	264	330	19:00	7.08	7.09	295	0.01
Sub-Total	2,765	1,127.8	1,915	806	-	-	27.06	27.31	1,137	0.25
NHPC										
BAIRASIUL HPS(3 * 60)	180	0	0	0	0	-	0	-	-	0
CHAMERA HPS(3 * 180)	540	535.58	0	0	557	07:15	2.5	2.6	108	0.1
CHAMERA II HPS(3 * 100)	300	185	202	25	202	18:00	1.34	1.5	63	0.16
CHAMERA III HPS(3 * 77)	231	153	127	0	160	07:00	0.69	0.76	32	0.07
DHAULIGANGA HPS(4 * 70)	280	281.38	281	0	289	18:00	0.98	1.03	43	0.05
DULHASTI HPS(3 * 130)	390	386.9	389	0	392	07:00	3.05	3.16	132	0.11
KISHANGANGA(2 * 110)	220	43.19	0	0	0	-	1.04	1.04	43	0
PARBATI III HEP(4 * 130)	520	0	0	0	0	-	0	0	0	0
SALAL HPS(6 * 115)	690	109.79	345	35	345	19:00	2.64	2.98	124	0.34
SEWA-II HPS(3 * 40)	120	120.2	60	0	128	07:00	0.39	0.4	17	0.01
TANAKPUR HPS(1 * 31.42 + 2 * 31.4)	94	28.01	30	22	64	15:00	0.67	0.68	28	0.01
URI HPS(4 * 120)	480	138.02	350	68	360	07:00	3.31	3.71	155	0.4
URI-II HPS(4 * 60)	480	81.43	183	80	184	20:00	1.95	2.04	85	0.09
Sub-Total	4,525	2,062.5	1,967	230	-	-	18.56	19.9	830	1.34
NPCL										
NAPS(2 * 220)	440	414	452	456	460	05:00	9.94	9.95	415	0.01
RAPS-B(2 * 220)	440	182	205	208	208	03:00	4.37	4.31	180	-0.06
RAPS-C(2 * 220)	440	430	476	474	476	12:00	10.32	10.28	428	-0.04
Sub-Total	1,320	1,026	1,133	1,138	-	-	24.63	24.54	1,023	-0.09
NTPC										
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	413.25	0	0	0	-	0	0.02	1	0.02
AURAIYA GPS(2 * 109.3 + 4 * 111.19)	663	646.5	0	0	0	-	0	-	-	0
DADRI GPS(2 * 154.51 + 4 * 130.19)	830	416.04	226	225	395	-	6.05	5.93	247	-0.12
DADRI SOLAR(1 * 5)	5	0.68	0	0	3	12:53	0.02	0.02	1	0
DADRI-I TPS(4 * 210)	840	576.45	255	213	255	19:00	7.09	7.01	292	-0.08
DADRI-II TPS(2 * 490)	980	928.55	797	621	797	19:00	18.22	18.85	785	0.63
ISTPP (JHAJJAR)(3 * 500)	1,500	1,367.13	1,446	838	1,515	19:30	23.37	23.1	963	-0.27
KOLDAM HPS(4 * 200)	800	872	502	0	655	07:00	2.62	2.64	110	0.02
RIHAND-I STPS(2 * 500)	1,000	685.16	892	500	892	19:00	15.99	16.91	705	0.92
RIHAND-II STPS(2 * 500)	1,000	566.64	830	505	830	19:00	13.37	20.53	855	7.16
RIHAND-III STPS(2 * 500)	1,000	942.5	983	999	983	19:00	21.94	23.59	983	1.65
SINGRAULI STPS(2 * 500 + 5 * 200)	2,000	1,855.99	1,978	2,010	1,978	19:00	43.73	43.79	1,825	0.06
SINGRAULI SOLAR(1 * 15)	15	2.4	0	0	0	-	0.06	0.06	3	0
UNCHAHAR II TPS(2 * 210)	420	382.2	336	235	336	19:00	7.38	8.04	335	0.66
UNCHAHAR III TPS(1 * 210)	210	191.1	169	116	169	19:00	3.59	3.74	156	0.15
UNCHAHAR IV TPS(1 * 500)	500	134.48	259	0	259	19:00	3.22	3.04	127	-0.18
UNCHAHAR SOLAR(1 * 10)	10	1.75	0	0	0	-	0.04	0.04	2	0
UNCHAHAR TPS(2 * 210)	420	335.57	284	240	284	19:00	6.44	6.96	290	0.52
Sub-Total	12,612	10,318.39	8,957	6,502	-	-	173.13	184.27	7,680	11.14
SJVNL										
NATHPA-JHAKRI HPS(6 * 250)	1,500	999.5	1,087	0	1,087	19:00	6.8	6.91	288	0.11
RAMPUR HEP(6 * 68.67)	412	278.12	294	0	295	18:00	1.88	1.93	80	0.05
Sub-Total	1,912	1,277.62	1,381	0	-	-	8.68	8.84	368	0.16
THDC										
KOTESHWAR HPS(4 * 100)	400	106.88	90	90	90	19:00	2.56	2.57	107	0.01
TEHRI HPS(4 * 250)	1,000	1,064	969	0	1,001	07:00	7.5	7.56	315	0.06
Sub-Total	1,400	1,170.88	1,059	90	-	-	10.06	10.13	422	0.07
Total	24,534	16,983.19	16,412	8,766			262.12	274.99	11,460	12.87

IPP/JV

Station/Constituents	Inst. Capacity	Declared Capacity	19:00	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	95	0	102	08:00	0.52	0.54	23	0.02
BUDHIL HPS (IPP)(2 * 35)	70	0	0	0	0	-	0.24	-	-	-0.24
KARCHAM WANGTOO HPS(4 * 250)	1,000	0	900	0	900	18:00	3.56	3.5	146	-0.06
MALANA2(2 * 50)	100	0	0	0	98	10:00	0.28	0.3	13	0.02
SAINJ HEP(2 * 50)	50	0	100	13	100	00:00	0.41	0.43	18	0.02
SHREE CEMENT (IPP) TPS(2 * 150)	300	0	148	123	149	08:00	3.27	3.21	134	-0.06
Sub-Total	1,712	0	1,243	136	-	-	8.28	7.98	334	-0.3
Total	1,712	0	1,243	136			8.28	7.98	334	-0.3

Summary Section					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Total State Control Area Generation	54,626	21,930	17,463	522.83	21,785
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		7,350	7,973	149.13	7,804
Total Regional Availability(Gross)	80,872	46,935	34,338	954.93	41,379

Total Hydro Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Hydro	12,814	7,919	1,139	73.59	3,066
State Control Area Hydro	6,125	1,848	1,364	38.8	1,617
Total Regional Hydro	18,939	9,767	2,503	112.39	4,683

Total Renewable Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Renewable	30	0	0	0.12	5
State Control Area Renewable	9,214	490	558	39.24	1,635
Total Regional Renewable	9,244	490	558	39.36	1,640

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

SL.No.	Element	19:00	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	50	105	-	105	0	2.04	-2.04
2	132KV-Karmnasa(PG)-Sahupuri(U ..	-	-	-	-	-	-	-
3	132KV-Rihand-Sonnagar(PG)	-	-	-	-	-	-	-
4	220KV-Pusauli(PG)-Sahupuri(UP)	-121	-79	122	0	2.44	0	2.44
5	400KV-Biharsharif(PG)-Balia(PG)	103	133	202	0	3.62	0	3.62
6	400KV-Biharsharif(PG)-Varanasi(P..	65	-66	130	66	1.4	0	1.4
7	400KV-Fatehpur(UP)-Sasaram	-	-	-	-	-	-	-
8	400KV-Motihari(DMT)-Gorakhpur ..	190	296	320	0	7	0	7
9	400KV-Muzaffarpur(PG)-Gorakhp ..	280	121	516	0	7.62	0	7.62
10	400KV-Patna(PG)-Balia(PG)	621	705	801	0	17.04	0	17.04
11	400KV-Sasaram-Allahabad(PG)	-28	-53	57	0	0.9	0	0.9
12	400KV-Sasaram-Varanasi(PG)	-123	-90	130	0	3.8	0	3.8
13	765KV-Fatehpur(PG)-Sasaram.	4	141	235	0	3.57	0	3.57
14	765KV-Gaya(PG)-Balia(PG)	151	151	215	0	3.77	0	3.77
15	765KV-Gaya(PG)-Varanasi(PG)	-85	-293	471	0	7	0	7
16	HVDC800KV-Alipurduar-Agra(PG)	-	-	-	-	-	-	-
Sub-Total EAST REGION		1,107	1,071	3,199	171	58.16	2.04	56.12
Import/Export between NORTH_EAST REGION and NORTH REGION								
1	HVDC800KV-BiswanathCharialli- ..	500	500	0	500	0	12.1	-12.1
Sub-Total NORTH_EAST REGION		500	500	0	500	0	12.1	-12.1
Import/Export between WEST REGION and NORTH REGION								
1	220KV-Auraiya(NT)-Malanpur(PG)	-74	-43	-	120	0	1.91	-1.91
2	220KV-Badod(MP)-Kota(PG)	-12	-4	78	53	0	0.21	-0.21
3	220KV-Badod(MP)-Modak(RJ)	-	-	-	-	-	-	-
4	400KV-RAPS C(NP)-Sujalpur	-	-	-	-	-	-	-
5	400KV-Vindhyachal(PG)-Rihand(N ..	938	956	0	410	0	22.43	-22.43
6	400KV-Zerda(PG)-Bhinmal(PG)	82	10	337	182	2.35	0	2.35
7	400KV-Zerda(PG)-Kankroli(RJ)	-35	-108	146	209	0	0.88	-0.88
8	765KV-0rai-Gwalior(PG)	-391	-365	0	555	0	10.48	-10.48
9	765KV-0rai-Jabalpur	-50	295	682	86	6.88	0	6.88
10	765KV-0rai-Satna	1,462	1,557	1,617	0	36.38	0	36.38
11	765KV-Gwalior(PG)-Agra(PG)	1,568	1,538	1,810	0	36.43	0	36.43
12	765KV-Phagi(RJ)-Gwalior(PG)	557	817	568	-	19.22	0	19.22
13	HVDC500KV-Mundra(JH)-Mohind..	998	999	1,003	0	24.28	0	24.28
14	HVDC500KV-Vindhyachal(PG)-Vindhaychal B/B	0	50	-	50	0	0.68	-0.68
15	HVDC800KV-Champa(PG)-Kuruks..	700	700	700	0	16.16	0	16.16
Sub-Total WEST REGION		5,743	6,402	6,941	1,665	141.7	36.59	105.11
TOTAL IR EXCHANGE		7,350	7,973	10,140	2,336	199.86	50.73	149.13

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	48.67	-16.37	2.82	35.12	56.12	21

NR-WR	155.21	-35.51	-9.19	110.51	105.11	-5.4
Total	203.88	-51.88	-6.37	145.63	149.13	3.5

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)	17.75	0		30		0.4908	-0.4908

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	.1	6.9	48.4	76	14.4	2.5	.1	17.1

<----------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	14:03:30	49.79	07:36:50	50	0.037	0.061	50.15	49.84	24

6.Voltage Profile: 400kV

	Maximum		Minimum		Voltage (in %)				Voltage Deviation Index
STATION	VOLTAGE	TIME	VOLTAGE	TIME	N/A	N/A	N/A	N/A	(% of time)

6.1 Voltage Profile: 765kV

	Maximum		Minimum		Voltage (in %)				Voltage Deviation Index
STATION	VOLTAGE	TIME	VOLTAGE	TIME	N/A	N/A	N/A	N/A	(% of time)

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

State	Off- Peak Hours (03:00)			Peak Hours (19:00)			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	-1,685.71	494.85	0	-1,685.71	0	0	62.14	-40.46	3.26	24.94
HARYANA	-1,042.06	169.43	0	-982.91	128.67	0	89.25	-26.94	1.67	63.98
RAJASTHAN	-106.83	37.26	0	-106.83	-1,366.08	0	63.06	2.02	-4.49	60.58
DELHI	-768.75	-893.2	0	-620.04	-83.86	0	74.75	-18.18	-7.41	49.16
UTTAR PRADESH	19.9	26.38	0	9.27	37.13	0	112.15	-6.8	0.86	106.2
UTTARAKHAND	628.84	-65.35	0	530.54	12.22	0	10.23	13.62	-0.72	23.13
HIMACHAL PRADESH	445.78	-8.47	0	266.82	250.29	0	12.42	11.26	-2.35	21.33
JAMMU & KASHMIR	611	98.97	0	611	494.85	0	24.1	14.66	4.33	43.09
CHANDIGARH	0	-25.26	0	0	0	0	3.7	0	-0.74	2.96
TOTAL	-1,897.83	-165.39	0	-1,977.86	-526.78	0	451.8	-50.82	-5.59	395.37

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	3,480.08	2,209.44	-1,685.71	-1,685.71	692.79	-101.04	0	0
HARYANA	4,742.15	2,942.34	-982.91	-1,374.93	171.39	-392.86	0	0
RAJASTHAN	3,573.06	1,311.63	741.66	-106.83	1,165.68	-1,714.99	0	0
DELHI	3,929.11	2,313.94	-589.34	-901.25	494.85	-1,113.47	0	0
UTTAR PRADESH	6,187.44	3,449.88	19.9	-890.25	97.72	-274.66	0	0
UTTARAKHAND	735.42	277.19	628.84	530.54	206.09	-266.86	0	0
HIMACHAL PRADESH	1,164.06	217.54	646.95	266.82	300.96	-702.46	0	0
JAMMU & KASHMIR	1,547.57	695.15	611	611	544.34	-252.6	0	0
CHANDIGARH	275.74	102.97	0	0	0	-99.93	0	0

8.Major Reservoir Particulars

RESERVOIR	Parameters		Present Parameters		LAST YEAR		LAST DAY	
	MDDL (Mts)	FRL (Mts)	Level (Mts)	Energy (MU)	Level (Mts)	Energy (MU)	Inflow (m3/s)	Usage (m3/s)
Bhakra	445.62	513.59	505.96	1,353	500.62	1,114	165.68	438.94
Chamera-I	748.75	760	-	-	-	-	-	0
Gandhisagar	295.78	295.78	-	-	-	-	-	0
Jawahar Sagar	295.78	298.7	-	-	-	-	-	0
Koteshwar	598.5	612.5	-	-	-	-	-	0
Pong	384.05	426.72	416.39	731	411.35	545	71.56	428.66
RPS	343.81	352.8	-	-	-	-	-	0
RSD	487.91	527.91	517.59	3	506.05	4	74.85	124.36
Rihand	252.98	268.22	261.15	369	261.43	385	-	10,978.85
Tehri	740.04	829.79	815.97	922	813.15	865	49.52	172
TOTAL	-	-	-	3,378	-	2,913	361.61	12,142.81

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

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

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

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

10. Zero Crossing Violations

State	No. of violations(Maximum 8 in a day)	Maximum number of continuous blocks without sign change

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 :

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