



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

Power Supply Position in Northern Region For 24-Oct-2018

Date of Reporting:25-Oct-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
43,221	1,640	44,862	50.06	35,303	235	35,538	49.98	949	9.33

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

State	State's Control Area Generation (Net MU)							Drawal Sch (Net MU)	Act Drawal (Net MU)	UI (Net MU)	Requirement (Net MU)	Shortage (Net MU)	Consumption (Net MU)
	Thermal	Hydro	Gas/Naptha/Diesel	Solar	Wind	OthersBiomass/Small Hyd/Co-gen etc.)	Total						
PUNJAB	64.57	13.67	0	3.64	0	8.3	90.18	32.12	32.25	0.13	122.43	0	122.43
HARYANA	37.14	0.99	0	0.13	0	0.44	38.7	95.16	96.02	0.86	134.72	0	134.72
RAJASTHAN	152.79	2.35	2.13	14.3	7.11	4.47	183.15	34.8	36.18	1.38	219.33	0	219.33
DELHI	0	0	17.74	0	0	0.96	18.7	55.05	55.11	0.06	73.83	0.02	73.81
UTTAR PRADESH	159.4	12.5	0	2.9	0	2.4	177.2	115.72	115.77	0.05	292.97	0	292.97
UTTARAKHAND	0	12.01	7.12	0.67	0	0	19.8	14.77	16.11	1.34	35.91	0	35.91
HIMACHAL PRADESH	0	6.92	0	0	0	4.65	11.57	14.64	16.33	1.69	27.96	0.06	27.9
JAMMU & KASHMIR	0	7.96	0	0	0	0	7.96	35.83	31.07	-4.76	48.28	9.25	39.03
CHANDIGARH	0	0	0	0	0	0	0	2.79	3.28	0.49	3.28	0	3.28
Region	413.9	56.4	26.99	21.64	7.11	21.22	547.26	400.88	402.12	1.24	958.71	9.33	949.38

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	5,163	0	78	-1,751	4,109	0	39	-1,852
HARYANA	6,509	0	-32	-912	5,088	0	100	74
RAJASTHAN	8,932	0	-154	-1,746	8,300	0	373	-1,986
DELHI	3,729	0	-72	-964	2,252	0	28	-1,534
UTTAR PRADESH	13,598	1,160	-45	190	12,063	0	-21	558
UTTARAKHAND	1,801	0	-41	15	1,205	0	53	-15
HIMACHAL PRADESH	1,395	0	56	-675	867	0	48	36
JAMMU & KASHMIR	1,920	480	-133	339	1,334	235	-144	300
CHANDIGARH	175	0	-1	-96	85	0	29	-30
Region	43,222	1,640	-344	-5,600	35,303	235	505	-4,449

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 requirement
PUNJAB	5,879	11:00	0	5,879	5,879	11:00	0	5,879
HARYANA	6,509	19:00	0	6,509	6,509	19:00	0	6,509
RAJASTHAN	11,026	8:00	0	11,026	11,026	8:00	0	11,026
DELHI	3,761	13:00	0	3,761	3,761	13:00	0	3,761
UP	13,726	21:00	0	13,726	13,726	21:00	0	13,726
UTTARAKHAND	1,801	19:00	0	1,801	1,801	19:00	0	1,801
HP	1,455	9:00	0	1,455	1,455	9:00	0	1,455
J&K	2,130	7:00	532	2,662	2,662	7:00	532	2,130
CHANDIGARH	175	19:00	0	175	175	19:00	0	175
NR	43,221	19:00	1,640	44,862	44,862	19:00	1,640	43,221

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	538	512	600		12.98	541
DELHI GAS TURBINES(3 * 34 + 6 * 30)	282	35	31	36.75		0.91	38
PRAGATI GAS TURBINES(1 * 121.2 + 2 * 104.6)	331	156	157	158.94		3.86	161
RITHALA GPS(3 * 36)	108	0	0	0			
Total GAS/NAPHTHA/DIESEL	2,091	729	700			17.75	740
WIND	0	0	0	0			
BIOMASS(1 * 16)	16	36	35	38.04		0.96	40
SOLAR(1 * 2)	2	0	0	0			
Total DELHI	2,949	765	735			18.71	780

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	0	0	0			
JHAJJAR(CLP)(2 * 660)	1,320	616	374	616	11:00	12.14	506
MAGNUM DIESEL (IPP)(4 * 6.3)	25	0	0	0			
PANIPAT TPS(2 * 210 + 2 * 250)	920	213	201	213	19:00	4.93	205
RGTPP(KHEDAR)(2 * 600)	1,200	1,031	795	1,038	11:00	20.07	836
Total THERMAL	4,065	1,860	1,370			37.14	1,547
FARIDABAD GPS(1 * 156.07 + 2 * 137.75)	432	0	0	0			
Total GAS/NAPHTHA/DIESEL	432	0	0			0	0
TOTAL HYDRO HARYANA(1 * 62)	62	25	30	30	01:00	0.99	41
Total HYDEL	62	25	30			0.99	41
WIND	0	0	0	0			
BIOMASS(1 * 106)	106	0	0	0		0.44	18
SOLAR(1 * 50)	50	0	0	0		0.13	5
Total HARYANA	4,715	1,885	1,400			38.7	1,611

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	68	98	0		2.02	84
MALANA (IPP) HPS(2 * 43)	86	75	0	0		0.55	23
OTHER HYDRO HP(1 * 372)	372	241	157	0		4.35	181
Total HYDEL	758	384	255			6.92	288
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO(1 * 486)	486	213	186	0		4.65	194
Total SMALL HYDRO	486	213	186			4.65	194
Total HP	1,244	597	441			11.57	482

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	0	0	0			
Total GAS/NAPHTHA/DIESEL	190	0	0			0	0
BAGLIHAR (IPP) HPS(6 * 150)	900	256	257	0		6.15	256
OTHER HYDRO/IPP J&K(1 * 308)	308	103	62	0		1.81	75
Total HYDEL	1,208	359	319			7.96	331
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	359	319			7.96	331

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	160	160	160		3.87	161
GURU GOBIND SINGH TPS (ROPAR)(6 * 210)	1,260	55	0	220		0.29	12
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)(2 * 210 + 2 * 250)	920	0	0	98		-0.17	-7
GURU NANAK DEV TPS (BHATINDA)(4 * 110)	460	0	0	0		-0.01	0
RAJPURA(NPL) TPS(2 * 700)	1,400	660	1,320	1,320		23.35	973
TALWANDI SABO TPS(3 * 660)	1,980	1,550	1,550	1,550		37.25	1,552
Total THERMAL	6,560	2,425	3,030			64.58	2,691
TOTAL HYDRO PUNJAB(1 * 1000)	1,000	620	620	634		13.67	570
Total HYDEL	1,000	620	620			13.67	570
WIND	0	0	0	0			
BIOMASS(1 * 303)	303	0	0	0		8.3	346
SOLAR(1 * 859)	859	0	0	580		3.64	152
Total PUNJAB	8,722	3,045	3,650			90.19	3,759

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	188	187	0		4.35	181
CHHABRA TPS(1 * 660 + 4 * 250)	1,660	1,509	1,515	0		36.05	1,502
GIRAL (IPP) LTPS(2 * 125)	250	0	0	0			
KALISINDH TPS(2 * 600)	1,200	558	557	0		13.49	562
KAWAI TPS(2 * 660)	1,320	1,249	1,255	0		29.63	1,235
KOTA TPS(2 * 110 + 2 * 195 + 3 * 210)	1,240	645	885	0		21.06	878
RAJWEST (IPP) LTPS(8 * 135)	1,080	850	843	0		19.97	832
SURATGARH TPS(6 * 250)	1,500	1,097	1,079	0		28.24	1,177
VSLPP (IPP)(1 * 135)	135	0	0	0			
Total THERMAL	8,635	6,096	6,321			152.79	6,367
DHOLPUR GPS(3 * 110)	330	0	0	0			
RAMGARH GPS(1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5)	271	83	92	0		2.13	89
Total GAS/NAPHTHA/DIESEL	601	83	92			2.13	89
RAPS-A(1 * 100 + 1 * 200)	300	165	173	0		3.89	162
Total NUCLEAR	300	165	173			3.89	162
TOTAL HYDRO RAJASTHAN(1 * 550)	550	129	60	0		2.35	98
Total HYDEL	550	129	60			2.35	98
WIND	4,292	514	207	0		7.11	296
BIOMASS(1 * 102)	102	24	24	0		0.58	24
SOLAR(1 * 1995)	1,995	265	0	0		14.3	596
Total RAJASTHAN	16,475	7,276	6,877			183.15	7,632

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	1,156	1,164	0		28.7	1,196
ANPARA-C TPS(2 * 600)	1,200	1,087	1,092	0		25.9	1,079
ANPARA-D TPS(2 * 500)	1,000	955	953	0		21.7	904
BAJAJ ENERGY PVT LTD (IPP) TPS(10 * 45)	450	0	0	0			
BARA PPGCL TPS(3 * 660)	1,980	1,007	1,023	0		23.7	988
HARDUAGANJ TPS(1 * 105 + 1 * 60 + 2 * 250)	665	313	314	0		6.8	283
LALITPUR TPS(3 * 660)	1,980	612	352	0		11.8	492
MEJA TPS(1 * 660)	660	0	0	0			
OBRA TPS (2 * 94 + 5 * 200)	1,188	0	0	0			
PANKI TPS(2 * 105)	210	0	0	0			
PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)	1,160	878	875	0		19.5	813
ROSA TPS(4 * 300)	1,200	713	793	0		17.1	713
TANDA TPS(4 * 110)	440	177	178	0		4.2	175
Total THERMAL	13,763	6,898	6,744			159.4	6,643
ALAKHANDA HEP(4 * 82.5)	330	82	83	0		2.8	117
VISHNUPARYAG HPS(4 * 110)	440	167	166	0		3.8	158
OTHER HYDRO UP(1 * 527)	527	292	231	0		5.9	246
Total HYDEL	1,297	541	480			12.5	521
WIND	0	0	0	0			
BIOMASS(1 * 26)	26	0	0	0			
SOLAR(1 * 472)	472	0	0	0		2.9	121
CO-GENERATION(1 * 1360)	1,360	100	100	0		2.4	100
Total OTHERs	1,360	100	100			2.4	100
Total UP	16,918	7,539	7,324			177.2	7,385

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	293	301	302	07:00	7.12	297			
Total GAS/NAPHTHA/DIESEL	450	293	301			7.12	297			
OTHER HYDRO UK(1 * 1250)	1,250	719	476	719	19:00	12.01	500			
Total HYDEL	1,250	719	476			12.01	500			
WIND	0	0	0	0						
BIOMASS(1 * 127)	127	0	0	0						
SOLAR(1 * 100)	100	0	0	87	11:00	0.67	28			
SMALL HYDRO(1 * 180)	180	0	0	0						
Total SMALL HYDRO	180	0	0			0	0			
Total UTTARAKHAND	2,107	1,012	777			19.8	825			

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	532.84	929	407	929	19:00	12.79	12.87	536	0.08
DEHAR HPS(6 * 165)	990	287.08	645	165	645	19:00	6.89	7.09	295	0.2
PONG HPS(6 * 66)	396	267.77	330	198	330	19:00	6.43	6.45	269	0.02
Sub-Total	2,765	1,087.69	1,904	770	-	-	26.11	26.41	1,100	0.3
NHPC										
BAIRASIUL HPS(3 * 60)	180	0	0	0	0	-	0	-	-	0
CHAMERA HPS(3 * 180)	540	356.5	363	0	366	21:15	3.5	3.66	153	0.16
CHAMERA II HPS(3 * 100)	300	130	200	31	201	22:00	2.63	2.8	117	0.17
CHAMERA III HPS(3 * 77)	231	87.34	232	0	232	19:00	1.98	2.14	89	0.16
DHAULIGANGA HPS(4 * 70)	280	97.37	138	142	143	04:00	2.32	2.34	98	0.02
DULHASTI HPS(3 * 130)	390	386.9	396	0	398	17:00	5.6	5.74	239	0.14
KISHANGANGA(2 * 110)	220	79.79	186	67	186	19:00	1.92	1.93	80	0.01
PARBATI III HEP(4 * 130)	520	41.61	372	0	391	18:45	1	0.97	40	-0.03
SALAL HPS(6 * 115)	690	174.58	255	140	255	19:00	4.19	4.8	200	0.61
SEWA-II HPS(3 * 40)	120	119.54	121	0	121	19:00	0.55	0.57	24	0.02
TANAKPUR HPS(1 * 31.42 + 2 * 31.4)	94	59.17	66	93	94	10:00	1.42	1.49	62	0.07
URI HPS(4 * 120)	480	158.23	145	150	356	22:00	3.8	4.45	185	0.65
URI-II HPS(4 * 60)	480	96.15	85	86	182	09:00	2.31	2.46	103	0.15
Sub-Total	4,525	1,787.18	2,559	709	-	-	31.22	33.35	1,390	2.13
NPCL										
NAPS(2 * 220)	440	397	432	432	441	10:00	9.53	9.52	397	-0.01
RAPS-B(2 * 220)	440	197	217	218	220	06:00	4.73	4.63	193	-0.1
RAPS-C(2 * 220)	440	420	462	461	462	19:00	10.08	10.11	421	0.03
Sub-Total	1,320	1,014	1,111	1,111	-	-	24.34	24.26	1,011	-0.08
NTPC										
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	0	253	251	253	19:00	6.26	6.1	254	-0.16
AURAIYA GPS(2 * 109.3 + 4 * 111.19)	663	0	553	369	629	07:00	10.07	10.13	422	0.06
DADRI GPS(2 * 154.51 + 4 * 130.19)	830	0	459	482	727	-	12.18	12.02	501	-0.16
DADRI SOLAR(1 * 5)	5	0.87	0	0	3	11:36	0.02	0.02	1	0
DADRI-I TPS(4 * 210)	840	576.45	594	359	594	19:00	11.46	11.31	471	-0.15
DADRI-II TPS(2 * 490)	980	928.55	957	922	957	19:00	20.69	21.25	885	0.56
ISTPP (JHAJJAR)(3 * 500)	1,500	947.5	990	950	990	19:00	22.28	21.94	914	-0.34
KOLDAM HPS(4 * 200)	800	872	781	0	781	19:00	4.75	4.63	193	-0.12
RIHAND-I STPS(2 * 500)	1,000	922.5	1,018	1,004	1,018	19:00	22.12	22.89	954	0.77
RIHAND-II STPS(2 * 500)	1,000	942.5	999	1,005	999	19:00	22.57	22.52	938	-0.05
RIHAND-III STPS(2 * 500)	1,000	471.25	504	507	504	19:00	11.3	11.34	473	0.04
SINGRAULI STPS(2 * 500 + 5 * 200)	2,000	1,805.62	1,959	1,974	1,959	19:00	43.34	43.43	1,810	0.09
SINGRAULI SOLAR(1 * 15)	15	2.63	0	0	0	-	0.06	0.08	3	0.02
UNCHAHAH II TPS(2 * 210)	420	363.74	370	370	370	19:00	8.5	8.42	351	-0.08
UNCHAHAH III TPS(1 * 210)	210	191.1	206	204	206	19:00	4.25	4.31	180	0.06
UNCHAHAH IV TPS(1 * 500)	500	0	0	0	0	-	0	-	-	0
UNCHAHAH SOLAR(1 * 10)	10	1.88	0	0	0	-	0.05	0.05	2	0
UNCHAHAH TPS(2 * 210)	420	382.2	409	316	409	19:00	8.69	8.79	366	0.1
Sub-Total	12,612	8,408.79	10,052	8,713	-	-	208.59	209.23	8,718	0.64
SJVNL										
NATHPA-JHAKRI HPS(6 * 250)	1,500	1,497.38	1,481	0	1,481	19:00	12.15	12.13	505	-0.02
RAMPUR HEP(6 * 68.67)	412	442	420	0	420	19:00	3.38	3.38	141	0
Sub-Total	1,912	1,939.38	1,901	0	-	-	15.53	15.51	646	-0.02
THDC										
KOTESHWAR HPS(4 * 100)	400	73.75	103	69	104	20:00	1.77	1.78	74	0.01
TEHRI HPS(4 * 250)	1,000	1,064	972	0	972	19:00	5.61	5.68	237	0.07
Sub-Total	1,400	1,137.75	1,075	69	-	-	7.38	7.46	311	0.08
Total	24,534	15,374.79	18,602	11,372			313.17	316.22	13,176	3.05

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	140	0	140	19:00	1.15	1.09	45	-0.06
BUDHIL HPS (IPP)(2 * 35)	70	0	0	0	0	-	0.51	0.48	20	-0.03
KARCHAM WANGTOO HPS(4 * 250)	1,000	0	1,000	0	1,000	18:30	6.52	6.65	277	0.13
MALANA2(2 * 50)	100	0	30	10	105	21:00	0.48	0.51	21	0.03
SAINJ HEP(2 * 50)	50	0	0	0	0	-	0.82	-	-	-0.82
SHREE CEMENT (IPP) TPS(2 * 150)	300	0	295	295	296	04:00	7.16	6.94	289	-0.22
Sub-Total	1,712	0	1,465	305	-	-	16.64	15.67	652	-0.97
Total	1,712	0	1,465	305	-	-	16.64	15.67	652	-0.97

Summary Section					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Total State Control Area Generation	54,626	22,478	21,523	547.28	22,803
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		2,490	3,107	88.94	4,068
Total Regional Availability(Gross)	80,872	45,035	36,307	968.11	40,700

Total Hydro Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Hydro	12,814	9,390	1,558	96.09	4,004
State Control Area Hydro	6,125	2,777	2,240	56.4	2,350
Total Regional Hydro	18,939	12,167	3,798	152.49	6,354

Total Renewable Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Renewable	30	0	0	0.15	6
State Control Area Renewable	9,214	1,052	452	43.68	1,820
Total Regional Renewable	9,244	1,052	452	43.83	1,826

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	-29	-32	-	36	0	0.69	-0.69
2	132KV-Karmnasa(PG)-Sahupuri(U ..	-	-	-	-	-	-	-
3	132KV-Rihand-Sonnagar(PG)	-	-	-	-	-	-	-
4	220KV-Pusauli(PG)-Sahupuri(UP)	125	146	146	0	3.11	0	3.11
5	400KV-Biharsharif(PG)-Baliala(PG)	-113	-84	7	168	0	1.73	-1.73
6	400KV-Biharsharif(PG)-Varanasi(P..	-278	-277	0	378	0	5.7	-5.7
7	400KV-Fatehpur(UP)-Sasaram	-	-	-	-	-	-	-
8	400KV-Motihari(DMT)-Gorakhpur ..	266	220	268	0	5.4	0	5.4
9	400KV-Muzaffarpur(PG)-Gorakhp ..	-205	-100	112	361	0	1.68	-1.68
10	400KV-Patna(PG)-Baliala(PG)	207	297	487	0	8.35	0	8.35
11	400KV-Sasaram-Allahabad(PG)	70	104	123	0	2.41	0	2.41
12	400KV-Sasaram-Varanasi(PG)	311	283	315	0	6.92	0	6.92
13	765KV-Fatehpur(PG)-Sasaram.	-380	-328	0	460	0	6.92	-6.92
14	765KV-Gaya(PG)-Baliala(PG)	9	11	98	49	0.68	0	0.68
15	765KV-Gaya(PG)-Varanasi(PG)	-445	-273	50	497	0	4.52	-4.52
16	HVDC800KV-Alipurduar-Agra(PG)	375	375	375	0	8.77	0	8.77
Sub-Total EAST REGION		-87	342	1,981	1,949	35.64	21.24	14.4
Import/Export between NORTH_EAST REGION and NORTH REGION								
1	HVDC800KV-BiswanathCharialli- ..	700	700	700	0	16.55	0	16.55
Sub-Total NORTH_EAST REGION		700	700	700	0	16.55	0	16.55
Import/Export between WEST REGION and NORTH REGION								
1	220KV-Auraiya(NT)-Malanpur(PG)	-194	-167	-	241	0	4.16	-4.16
2	220KV-Badod(MP)-Kota(PG)	-214	40	64	173	0	1.09	-1.09
3	220KV-Badod(MP)-Modak(RJ)	-	-	-	-	-	-	-
4	400KV-RAPS C(NP)-Sujalpur	-413	-429	-	514	0	8.98	-8.98
5	400KV-Vindhyachal(PG)-Rihand(N ..	-448	-478	-	487	0	11.36	-11.36
6	400KV-Zerda(PG)-Bhinmal(PG)	-293	-196	82	-369	0	4.32	-4.32
7	400KV-Zerda(PG)-Kankroli(RJ)	0	-244	0	395	0	3.72	-3.72
8	765KV-0rai-Gwalior(PG)	-229	-275	0	392	0	6.27	-6.27
9	765KV-0rai-Jabalpur	-263	-63	443	602	0	0.47	-0.47
10	765KV-0rai-Satna	1,447	1,510	1,677	0	37.29	0	37.29
11	765KV-Gwalior(PG)-Agra(PG)	815	1,039	1,271	0	23.45	0	23.45
12	765KV-Phagi(RJ)-Gwalior(PG)	518	527	581	-	15.26	0	15.26
13	HVDC500KV-Mundra(JH)-Mohind..	601	601	603	0	14.59	0	14.59
14	HVDC500KV-Vindhyachal(PG)-Vindhaychal B/B	-250	-250	0	250	0	6.03	-6.03
15	HVDC800KV-Champa(PG)-Kuruku..	800	450	1,300	0	13.8	0	13.8
Sub-Total WEST REGION		1,877	2,065	6,021	2,685	104.39	46.4	57.99
TOTAL IR EXCHANGE		2,490	3,107	8,702	4,634	156.58	67.64	88.94

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	43.12	-2.38	-29.98	10.76	14.4	3.64

NR-WR	153.83	-4.74	-42.5	106.59	57.99	-48.6
Total	196.95	-7.12	-72.48	117.35	88.94	-28.41

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)	-23.45	-0.05	0	24	0	1.7247	-1.7247

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	.6	9.9	68.4	82	6.9	1.2	0	8

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

Maximum		Minimum		Average Frequency	Freq Variation Index	Standard Deviation	Freq. in 15 mnt blk		Freq Dev Index (% of Time)
Frequency	Time	Frequency	Time				Max.	Min.	
50.19	12:02:10	49.76	18:24:40	49.97	0.044	0.06	50.07	49.83	18

6. Voltage Profile: 400kV

STATION	Maximum		Minimum		Voltage (in %)				Voltage Deviation Index (% of time)
	VOLTAGE	TIME	VOLTAGE	TIME	< 380	< 390	> 420	> 430	
Abdullapur(PG) - 400KV	424	13:05	408	09:40	0	0	37.5	0	37.5
Abdullapur(PG) - 400KV	424	13:05	408	09:40	0	0	37.5	0	37.5
Amritsar(PG) - 400KV	422	04:00	407	09:40	0	0	16.32	0	16.32
Ballabgarh(PG) - 400KV	421	04:00	399	09:40	0	0	4.51	0	4.51
Bareilly II(PG) - 400KV	414	13:05	399	09:40	0	0	0	0	0
Bareilly(UP) - 400KV	415	13:05	400	09:40	0	0	0	0	0
Baspa(HP) - 400KV	423	13:10	410	09:45	0	0	26.39	0	26.39
Bassi(PG) - 400KV	408	00:00	408	00:00	0	0	0	0	0
Bawana(DTL) - 400KV	422	04:00	405	09:40	0	0	15.97	0	15.97
Dadri HVDC(PG) - 400KV	420	04:00	406	09:40	0	0	.35	0	.35
Gorakhpur(PG) - 400KV	413	04:00	399	18:25	0	0	0	0	0
Hisar(PG) - 400KV	419	13:05	401	09:40	0	0	0	0	0
Kanpur(PG) - 400KV	419	13:10	408	09:45	0	0	0	0	0
Kashipur(UT) - 400KV	402	00:00	402	00:00	0	0	0	0	0
Kishenpur(PG) - 400KV	420	00:00	407	18:15	0	0	50	0	50
Moga(PG) - 400KV	418	13:05	400	09:40	0	0	0	0	0
Nallagarh(PG) - 400KV	423	13:10	410	09:45	0	0	26.39	0	26.39
Rihand HVDC(PG) - 400KV	408	13:10	403	08:35	0	0	0	0	0
Rihand(NT) - 400KV	407	13:10	402	15:10	0	0	0	0	0

6.1 Voltage Profile: 765kV

STATION	Maximum		Minimum		Voltage (in %)				Voltage Deviation Index (% of time)
	VOLTAGE	TIME	VOLTAGE	TIME	< 728	< 742	> 800	> 820	
Anta RS(RJ) - 765KV	789	13:10	766	07:20	0	0	0	0	0
Balia(PG) - 765KV	778	13:05	758	18:25	0	0	0	0	0
Bareilly II(PG) - 765KV	790	13:05	763	09:40	0	0	0	0	0
Bhiwani(PG) - 765KV	804	13:05	767	09:00	0	0	4.86	0	4.86
Fatehpur(PG) - 765KV	765	13:05	745	08:55	0	0	0	0	0
Jhatikara(PG) - 765KV	796	04:00	762	09:40	0	0	0	0	0
Lucknow II(PG) - 765KV	786	13:05	765	18:25	0	0	0	0	0
Meerut(PG) - 765KV	807	13:05	764	09:40	0	0	5.9	0	5.9
Moga(PG) - 765KV	800	13:05	755	09:40	0	0	.35	0	.35
Phagi(RJ) - 765KV	797	20:40	764	08:20	0	0	0	0	0
Unnao(UP) - 765KV	771	00:00	771	00:00	0	0	0	0	0

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	-741.32	-1,110.21	0	-539.46	-1,211.14	0	63.2	-13.96	-17.12	32.12
HARYANA	149.88	-75.8	0	-254.29	-657.7	0	96.06	3.52	-4.42	95.16
RAJASTHAN	-16.36	-1,969.85	0	-16.36	-1,729.43	0	67.07	-0.43	-31.85	34.8
DELHI	-290.37	-1,243.33	0	-279.93	-683.58	0	79.61	-8.55	-16.01	55.05
UTTAR PRADESH	557.64	0	0	169.73	20.6	0	110.46	5	0.26	115.72
UTTARAKHAND	61.74	-76.43	0	120.44	-105.89	0	12.24	1.92	0.62	14.77
HIMACHAL PRADESH	59.26	-23.14	0	59.18	-734.2	0	17.09	3.1	-5.55	14.64
JAMMU & KASHMIR	141.41	158.13	0	141.41	197.66	0	24.04	3.4	8.39	35.83
CHANDIGARH	0	-30.2	0	0	-95.64	0	3.44	0	-0.65	2.79
TOTAL	-78.12	-4,370.83	0	-599.28	-4,999.32	0	473.21	-6	-66.33	400.88

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	3,571.39	2,263.18	-539.46	-741.32	-302.79	-1,312.07	0	0
HARYANA	4,910.06	3,520.74	328.72	-254.29	0.59	-830.04	0	0
RAJASTHAN	3,505.29	2,201.49	-16.36	-20.45	-32.81	-2,573.95	0	0
DELHI	3,790	2,690.86	-278.34	-475.71	-75.51	-1,246.35	0	0
UTTAR PRADESH	6,301.91	3,547.74	557.64	68.94	64.73	-75.32	0	0
UTTARAKHAND	877.06	400.49	120.44	61.74	304.63	-125.74	0	0
HIMACHAL PRADESH	1,432.26	295.77	246.83	57.54	-22.33	-776	0	0
JAMMU & KASHMIR	1,683.26	696.66	141.41	141.41	642.4	0	0	0
CHANDIGARH	258.46	84.85	0	0	0	-95.64	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	506.56	1,382	507.33	1,411	287.73	320.8
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	422.65	1,021	417.9	795	126.18	361.97
RPS	343.81	352.8	-	-	-	-	-	0
RSD	487.91	527.91	525.78	6	515.02	3	107.17	256.15
Rihand	252.98	268.22	263.07	484	262.71	461	0	15,309.87
Tehri	740.04	829.79	827.15	1,154	824	1,087	64.2	122
TOTAL	-	-	-	4,047	-	3,757	585.28	16,370.79

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
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10. Zero Crossing Violations

State	No. of violations (Maximum 8 in a day)	Maximum number of continuous blocks without sign change
CHANDIGARH	6	67
DELHI	3	29
HARYANA	0	9
HIMACHAL PRADESH	5	25
JAMMU & KASHMIR	3	19
PUNJAB	1	22
RAJASTHAN	4	22
UTTAR PRADESH	0	8
UTTARAKHAND	4	30

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