



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

Power Supply Position in Northern Region For 22-Sep-2018

Date of Reporting:23-Sep-2018

1. Regional Availability/Demand:

Evening Peak (20:00) 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
43,204	524	43,728	50.01	43,055	247	43,302	50.03	982	10.05

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	58.72	11.6	0	1.92	0	8.3	80.54	88.58	86.85	-1.73	167.39	0	167.39
HARYANA	18.7	0.61	0	0.02	0	0.37	19.7	101.5	101.96	0.46	121.69	0.03	121.66
RAJASTHAN	112.96	0.52	2.91	10.48	22.78	4.05	153.7	50.27	50.48	0.21	204.18	0	204.18
DELHI	6.57	0	15.41	0	0	0.86	22.85	70.27	68.95	-1.32	91.95	0.15	91.8
UTTAR PRADESH	133.85	20.61	0	1.27	0	1.2	156.92	133.34	132.78	-0.56	289.7	0	289.7
UTTARAKHAND	0	20.44	0	0.3	0	0	20.74	18.32	15.66	-2.66	36.4	0	36.4
HIMACHAL PRADESH	0	14.12	0	0	0	8.67	22.79	6.94	4.58	-2.36	27.37	0	27.37
JAMMU & KASHMIR	0	15.3	0	0	0	0	15.3	30.57	24.12	-6.45	49.29	9.87	39.42
CHANDIGARH	0	0	0	0	0	0	0	5.23	4.11	-1.12	4.11	0	4.11
Region	330.8	83.2	18.32	13.99	22.78	23.45	492.54	505.02	489.49	-15.53	992.08	10.05	982.03

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

State	Evening Peak (20:00) MW				Off-Peak (03:00) MW			
	Demand Met	Shortage(-)/Surplus(+)	UI	STOA/PX Transaction	Demand Met	Shortage(-)/Sur ..	UI	STOA/PX Transaction
PUNJAB	4,916	0	-350	326	8,678	0	32	1,032
HARYANA	5,798	0	214	1,268	5,914	0	132	1,746
RAJASTHAN	8,203	0	-450	-1,340	8,980	0	159	-52
DELHI	4,187	0	16	-573	3,776	24	-60	-318
UTTAR PRADESH	14,775	0	-202	1,758	11,855	0	45	1,969
UTTARAKHAND	1,849	0	-12	215	1,369	0	-19	343
HIMACHAL PRADESH	1,191	0	-16	-1,404	1,047	0	-32	-478
JAMMU & KASHMIR	2,096	524	-58	-113	1,263	223	-185	-498
CHANDIGARH	190	0	-59	-40	173	0	4	0
Region	43,205	524	-917	97	43,055	247	76	3,744

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	8,988	1:00	0	8,988	8,988	1:00	0	8,988
HARYANA	7,118	1:00	0	7,118	7,118	1:00	0	7,118
RAJASTHAN	9,680	8:00	0	9,680	9,680	8:00	0	9,680
DELHI	4,253	1:00	0	4,253	4,253	1:00	0	4,253
UP	14,775	20:00	0	14,775	14,775	20:00	0	14,775
UTTARAKHAND	1,939	19:00	0	1,939	1,939	19:00	0	1,939
HP	1,337	10:00	0	1,337	1,337	10:00	0	1,337
J&K	2,143	7:00	536	2,678	2,678	7:00	536	2,143
CHANDIGARH	191	19:00	0	191	191	19:00	0	191
NR	47,333	1:00	231	47,565	47,565	1:00	231	47,333

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)	
BADARPUR TPS(2 * 210 + 3 * 100)	705	313	310	0		6.57	274
RAJGHAT TPS(2 * 67.5)	135	0	0	0			
Total THERMAL	840	313	310			6.57	274
BAWANA GPS(2 * 253 + 4 * 216)	1,370	431	434	0		10.81	450
DELHI GAS TURBINES(3 * 34 + 6 * 30)	282	40	40	0		0.91	38
PRAGATI GAS TURBINES(1 * 121.2 + 2 * 104.6)	331	149	151	0		3.69	154
RITHALA GPS(3 * 36)	108	0	0	0			
Total GAS/NAPHTHA/DIESEL	2,091	620	625			15.41	642
WIND	0	0	0	0			
BIOMASS(1 * 16)	16	26	32	0		0.86	36
SOLAR(1 * 2)	2	0	0	0			
Total DELHI	2,949	959	967			22.84	952

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	0	246	246	03:00	1.1	46
JHAJJAR(CLP)(2 * 660)	1,320	380	378	402	04:00	8.96	373
MAGNUM DIESEL (IPP)(4 * 6.3)	25	0	0	0			
PANIPAT TPS(2 * 210 + 2 * 250)	920	0	203	204	04:00	1.8	75
RGTPP(KHEDAR)(2 * 600)	1,200	0	795	795	03:00	6.84	285
Total THERMAL	4,065	380	1,622			18.7	779
FARIDABAD GPS(1 * 156.07 + 2 * 137.75)	432	0	0	0	00:00	0	0
Total GAS/NAPHTHA/DIESEL	432	0	0			0	0
TOTAL HYDRO HARYANA(1 * 62)	62	41	29	42	16:00	0.61	25
Total HYDEL	62	41	29			0.61	25
WIND	0	0	0	0			
BIOMASS(1 * 106)	106	0	0	0		0.37	15
SOLAR(1 * 50)	50	0	0	0		0.02	1
Total HARYANA	4,715	421	1,651			19.7	820

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	280	220	281	23:00	5.48	228
MALANA (IPP) HPS(2 * 43)	86	46	47	96	23:00	1.08	45
OTHER HYDRO HP(1 * 372)	372	401	224	450	23:00	7.57	315
Total HYDEL	758	727	491			14.13	588
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO(1 * 486)	486	346	323	350	23:00	8.67	361
Total SMALL HYDRO	486	346	323			8.67	361
Total HP	1,244	1,073	814			22.8	949

JAMMU & KASHMIR							
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/NAPHTHA/DIESEL	190	0	0			0	0
BAGLIHAR (IPP) HPS(6 * 150)	900	530	530	0		12.72	530
OTHER HYDRO/IPP J&K(1 * 308)	308	129	105	0		2.58	108
Total HYDEL	1,208	659	635			15.3	638
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	659	635			15.3	638

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	246	246		3.17	132
GURU GOBIND SINGH TPS (ROPAR)(6 * 210)	1,260	0	576	576		6.77	282
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)(2 * 210 + 2 * 250)	920	0	854	859		9.98	416
GURU NANAK DEV TPS (BHATINDA)(4 * 110)	460	0	0	0		-0.02	-1
RAJPURA(NPL) TPS(2 * 700)	1,400	330	660	660		11.21	467
TALWANDI SABO TPS(3 * 660)	1,980	924	1,841	1,841		27.61	1,150
Total THERMAL	6,560	1,254	4,177			58.72	2,446
TOTAL HYDRO PUNJAB(1 * 1000)	1,000	253	644	711		11.6	483
Total HYDEL	1,000	253	644			11.6	483
WIND	0	0	0	0			
BIOMASS(1 * 303)	303	0	0	0		8.3	346
SOLAR(1 * 859)	859	0	0	217		1.92	80
Total PUNJAB	8,722	1,507	4,821			80.54	3,355

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	62	63	0		1.35	56
CHHABRA TPS(1 * 660 + 4 * 250)	1,660	1,292	1,168	0		27.49	1,145
GIRAL (IPP) LTPS(2 * 125)	250	0	0	0			
KALISINDH TPS(2 * 600)	1,200	403	394	0		10.13	422
KAWAI TPS(2 * 660)	1,320	1,006	893	0		22.3	929
KOTA TPS(2 * 110 + 2 * 195 + 3 * 210)	1,240	562	664	0		15.58	649
RAJWEST (IPP) LTPS(8 * 135)	1,080	838	834	0		17.01	709
SURATGARH TPS(6 * 250)	1,500	709	879	0		19.1	796
VSLPP (IPP)(1 * 135)	135	0	0	0			
Total THERMAL	8,635	4,872	4,895			112.96	4,706
DHOLPUR GPS(3 * 110)	330	0	0	0			
RAMGARH GPS(1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5)	271	115	128	0		2.91	121
Total GAS/NAPHTHA/DIESEL	601	115	128			2.91	121
RAPS-A(1 * 100 + 1 * 200)	300	156	154	0		3.6	150
Total NUCLEAR	300	156	154			3.6	150
TOTAL HYDRO RAJASTHAN(1 * 550)	550	37	0	0		0.52	22
Total HYDEL	550	37	0			0.52	22
WIND	4,292	1,322	818	0		22.78	949
BIOMASS(1 * 102)	102	18	18	0		0.44	18
SOLAR(1 * 1995)	1,995	34	0	0		10.48	437
Total RAJASTHAN	16,475	6,554	6,013			153.69	6,403

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	1,350	818	0		24.74	1,031
ANPARA-C TPS(2 * 600)	1,200	615	597	0		14.59	608
ANPARA-D TPS(2 * 500)	1,000	954	941	0		17.53	730
BAJAJ ENERGY PVT LTD (IPP) TPS(10 * 45)	450	89	89	0		2.09	87
BARA PPGCL TPS(3 * 660)	1,980	811	681	0		16.74	698
HARDUAGANJ TPS(1 * 105 + 1 * 60 + 2 * 250)	665	288	254	0		6.31	263
LALITPUR TPS(3 * 660)	1,980	352	688	0		12.33	514
OBRA TPS(2 * 94 + 5 * 200)	1,188	444	315	0		8.02	334
PANKI TPS(2 * 105)	210	0	0	0			
PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)	1,160	488	463	0		11.52	480
ROSA TPS(4 * 300)	1,200	582	587	0		15.24	635
TANDA TPS(4 * 110)	440	208	187	0		4.75	198
Total THERMAL	13,103	6,181	5,620			133.86	5,578
ALAKHANDA HEP(4 * 82.5)	330	346	300	0		7.97	332
VISHNUPARYAG HPS(4 * 110)	440	427	427	0		10.29	429
OTHER HYDRO UP(1 * 527)	527	105	113	0		2.35	98
Total HYDEL	1,297	878	840			20.61	859
WIND	0	0	0	0			
BIOMASS(1 * 26)	26	0	0	0			
SOLAR(1 * 472)	472	0	0	0		1.27	53
CO-GENERATION(1 * 1360)	1,360	50	50	0		1.2	50
Total OTHERs	1,360	50	50			1.2	50
Total UP	16,258	7,109	6,510			156.94	6,540

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(1 * 450)	450	0	0	0						
Total GAS/NAPHTHA/DIESEL	450	0	0			0	0			
OTHER HYDRO UK(1 * 1250)	1,250	937	731	939	16:00	20.44	852			
Total HYDEL	1,250	937	731			20.44	852			
WIND	0	0	0	0						
BIOMASS(1 * 127)	127	0	0	0						
SOLAR(1 * 100)	100	0	0	40	13:00	0.3	13			
SMALL HYDRO(1 * 180)	180	0	0	0						
Total SMALL HYDRO	180	0	0			0	0			
Total UTTARAKHAND	2,107	937	731			20.74	865			

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)		
BBMB										
BHAKRA HPS(2 * 108 + 3 * 126 + 5 * 157)	1,379	650.67	1,008	540	1,008	20:00	15.62	15.9	663	0.28
DEHAR HPS(6 * 165)	990	503.04	725	430	725	20:00	12.07	12.24	510	0.17
PONG HPS(6 * 66)	396	173.33	264	198	264	20:00	4.16	4.17	174	0.01
Sub-Total	2,765	1,327.04	1,997	1,168	-	-	31.85	32.31	1,347	0.46
NHPC										
BAIRASIUL HPS(3 * 60)	180	53.65	138	52	139	22:00	1.29	1.39	58	0.1
CHAMERA HPS(3 * 180)	540	534.33	535	0	544	19:00	5.68	5.88	245	0.2
CHAMERA II HPS(3 * 100)	300	296.85	302	102	306	23:00	4.3	4.4	183	0.1
CHAMERA III HPS(3 * 77)	231	133.9	237	76	240	21:00	3.21	3.31	138	0.1
DHAULIGANGA HPS(4 * 70)	280	250.34	283	208	286	06:00	5.97	6.07	253	0.1
DULHASTI HPS(3 * 130)	390	387.16	407	406	412	18:00	9.29	9.54	398	0.25
KISHANGANGA(2 * 110)	220	80.62	82	82	88	22:00	1.94	2	83	0.06
PARBATI III HEP(4 * 130)	520	142.56	371	0	381	19:00	3.42	3.43	143	0.01
SALAL HPS(6 * 115)	690	352.92	456	244	631	06:00	8.47	9.3	388	0.83
SEWA-II HPS(3 * 40)	120	119.54	116	0	121	17:00	1.5	1.51	63	0.01
TANAKPUR HPS(1 * 31.42 + 2 * 31.4)	94	92.91	74	97	99	19:00	2.23	2.3	96	0.07
URI HPS(4 * 120)	480	252.6	327	236	368	15:00	6.06	6.76	282	0.7
URI-II HPS(4 * 60)	480	145.99	136	123	182	10:00	3.5	3.71	155	0.21
Sub-Total	4,525	2,843.37	3,464	1,626	-	-	56.86	59.6	2,485	2.74
NPCL										
NAPS(2 * 220)	440	380	427	429	429	03:00	9.12	9.26	386	0.14
RAPS-B(2 * 220)	440	379	423	423	424	23:00	9.1	9.07	378	-0.03
RAPS-C(2 * 220)	440	205	230	230	230	20:00	4.92	4.93	205	0.01
Sub-Total	1,320	964	1,080	1,082	-	-	23.14	23.26	969	0.12
NTPC										
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	273.77	0	149	150	05:00	1.14	1.5	63	0.36
AURAIYA GPS(2 * 109.3 + 4 * 111.19)	663	469.94	0	186	186	03:00	1.36	1.89	79	0.53
DADRI GPS(2 * 154.51 + 4 * 130.19)	830	495.83	118	226	118	20:00	3.63	3.94	164	0.31
DADRI SOLAR(1 * 5)	5	0.5	0	0	0	-	0.01	0.01	0	0
DADRI-I TPS(4 * 210)	840	746.75	452	476	452	20:00	10.39	10.54	439	0.15
DADRI-II TPS(2 * 490)	980	928.55	625	566	625	20:00	14.33	14.51	605	0.18
ISTPP (JHAJJAR)(3 * 500)	1,500	1,421.25	1,333	975	1,436	20:23	23.36	23.47	978	0.11
KOLDAM HPS(4 * 200)	800	872	732	0	828	18:00	11	11.14	464	0.14
RIHAND-I STPS(2 * 500)	1,000	722.34	766	697	766	20:00	14.1	15.76	657	1.66
RIHAND-II STPS(2 * 500)	1,000	942.5	998	967	998	20:00	17.69	19.04	793	1.35
RIHAND-III STPS(2 * 500)	1,000	942.5	965	780	965	20:00	16.13	18.1	754	1.97
SINGRAULI STPS(2 * 500 + 5 * 200)	2,000	1,810.94	1,939	1,536	1,939	20:00	30.05	30.77	1,282	0.72
SINGRAULI SOLAR(1 * 15)	15	1.41	0	0	0	-	0.03	0.04	2	0.01
UNCHAHAH II TPS(2 * 210)	420	382.2	250	291	250	20:00	5.26	5.52	230	0.26
UNCHAHAH III TPS(1 * 210)	210	191.1	121	119	121	20:00	2.62	2.55	106	-0.07
UNCHAHAH IV TPS(1 * 500)	500	0	0	0	0	-	0	-	-	0
UNCHAHAH SOLAR(1 * 10)	10	1.32	0	0	8	09:55	0.03	0.02	1	-0.01
UNCHAHAH TPS(2 * 210)	420	382.2	294	235	294	20:00	5.32	5.34	223	0.02
Sub-Total	12,612	10,585.1	8,593	7,203	-	-	156.45	164.14	6,840	7.69
SJVNL										
NATHPA-JHAKRI HPS(6 * 250)	1,500	1,497.38	1,529	255	1,586	18:00	23.25	23.8	992	0.55
RAMPUR HEP(6 * 68.67)	412	442	424	135	433	18:00	6.43	6.81	284	0.38
Sub-Total	1,912	1,939.38	1,953	390	-	-	29.68	30.61	1,276	0.93
THDC										
KOTESHWAR HPS(4 * 100)	400	155.1	400	91	406	19:00	3.72	3.67	153	-0.05
TEHRI HPS(4 * 250)	1,000	1,064	996	0	1,023	21:00	10.94	11.14	464	0.2
Sub-Total	1,400	1,219.1	1,396	91	-	-	14.66	14.81	617	0.15
Total	24,534	18,877.99	18,483	11,560			312.64	324.73	13,534	12.09

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	231	55	232	23:00	1.95	2.7	113	0.75
BUDHIL HPS (IPP)(2 * 35)	70	0	39	35	39	20:00	0.92	0.9	38	-0.02
KARCHAM WANGTOO HPS(4 * 250)	1,000	0	1,000	420	1,000	19:00	12.83	13.13	547	0.3
MALANA2(2 * 50)	100	0	105	35	111	00:00	1.22	1.32	55	0.1
SAINJ HEP(2 * 50)	50	0	110	75	110	20:00	1.51	2.05	85	0.54
SHREE CEMENT (IPP) TPS(2 * 150)	300	0	299	295	299	20:00	6.96	6.88	287	-0.08
Sub-Total	1,712	0	1,784	915	-	-	25.39	26.98	1,125	1.59
Total	1,712	0	1,784	915	-	-	25.39	26.98	1,125	1.59

Summary Section					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Total State Control Area Generation	53,966	19,219	22,142	492.55	20,523
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		9,307	10,442	159.21	8,933
Total Regional Availability(Gross)	80,212	48,793	45,059	1,003.47	44,111

Total Hydro Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Hydro	12,814	11,027	3,895	168.57	7,024
State Control Area Hydro	6,125	3,532	3,370	83.21	3,467
Total Regional Hydro	18,939	14,559	7,265	251.78	10,491

Total Renewable Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Renewable	30	0	0	0.07	3
State Control Area Renewable	9,214	1,746	1,191	55.41	2,309
Total Regional Renewable	9,244	1,746	1,191	55.48	2,312

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	-	-	-	-	-	-	-
2	132KV-Karmnasa(PG)-Sahupuri(U ..	-	-	-	-	0.96	0	0.96
3	132KV-Rihand-Sonnagar(PG)	-	-	-	1	0	0	0
4	220KV-Pusauli(PG)-Sahupuri(UP)	176	142	182	0	3.57	0	3.57
5	400KV-Biharsharif(PG)-Baliala(PG)	106	41	115	0	0.48	0	0.48
6	400KV-Biharsharif(PG)-Varanasi(P..	-367	-114	0	367	0	3.17	-3.17
7	400KV-Fatehpur(UP)-Sasaram	-	-	-	-	-	-	-
8	400KV-Motihari(DMT)-Gorakhpur ..	246	148	-	330	0	4.27	-4.27
9	400KV-Muzaffarpur(PG)-Gorakhp ..	219	175	371	-	4.2	0	4.2
10	400KV-Patna(PG)-Baliala(PG)	188	419	536	0	9.73	0	9.73
11	400KV-Sasaram-Allahabad(PG)	87	123	140	0	2.82	0	2.82
12	400KV-Sasaram-Varanasi(PG)	299	265	311	0	6.67	0	6.67
13	765KV-Fatehpur(PG)-Sasaram.	-489	-288	0	509	0	6.86	-6.86
14	765KV-Gaya(PG)-Baliala(PG)	145	205	262	0	3.52	0	3.52
15	765KV-Gaya(PG)-Varanasi(PG)	241	103	143	280	0.29	0	0.29
16	HVDC800KV-Alipurduar-Agra(PG)	1,200	1,200	1,200	-	28.55	0	28.55
Sub-Total EAST REGION		2,051	2,419	3,260	1,487	60.79	14.3	46.49
Import/Export between NORTH_EAST REGION and NORTH REGION								
1	HVDC800KV-BiswanathCharialli- ..	700	700	700	-	16.09	0	16.09
Sub-Total NORTH_EAST REGION		700	700	700	0	16.09	0	16.09
Import/Export between WEST REGION and NORTH REGION								
1	220KV-Auraiya(NT)-Malanpur(PG)	19	6	-	82	0	0.24	-0.24
2	220KV-Badod(MP)-Kota(PG)	45	46	46	51	0.04	0	0.04
3	220KV-Badod(MP)-Modak(RJ)	-	-	-	-	-	-	-
4	400KV-RAPS C(NP)-Sujalpur	64	191	-	320	0	2.44	-2.44
5	400KV-Vindhyachal(PG)-Rihand(N ..	889	624	-	995	0	17.22	-17.22
6	400KV-Zerda(PG)-Bhinmal(PG)	-95	10	38	340	0	2.71	-2.71
7	400KV-Zerda(PG)-Kankroli(RJ)	-156	-123	0	406	0	5.22	-5.22
8	765KV-0rai-Gwalior(PG)	-223	-305	0	506	0	9.81	-9.81
9	765KV-0rai-Jabalpur	551	984	1,145	0	14.35	0	14.35
10	765KV-0rai-Satna	1,597	1,585	1,775	0	37.22	0	37.22
11	765KV-Gwalior(PG)-Agra(PG)	1,639	1,840	1,910	-	33.78	0	33.78
12	765KV-Phagi(RJ)-Gwalior(PG)	1,278	714	1,294	-	22.26	0	22.26
13	HVDC500KV-Mundra(JH)-Mohind..	698	1,001	1,202	0	18.51	0	18.51
14	HVDC500KV-Vindhyachal(PG)-Vindhaychal B/B	-250	-250	0	-250	0	5.3	-5.3
15	HVDC800KV-Champa(PG)-Kuruku..	500	1,000	1,500	0	13.41	0	13.41
Sub-Total WEST REGION		6,556	7,323	8,910	2,450	139.57	42.94	96.63
TOTAL IR EXCHANGE		9,307	10,442	12,870	3,937	216.45	57.24	159.21

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	39.27	35.52	-19.7	55.09	46.49	-8.6

NR-WR	117.64	53.43	-32.67	138.4	96.63	-41.77
Total	156.91	88.95	-52.37	193.49	159.21	-34.28

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)	20.26	0.05		21		0.0829	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	.1	1.1	5.3	52.4	85.3	8.4	1	0	9.4

<-----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.	
50.2	13:03:00	49.67	18:22:30	49.99	0.033	0.056	50.1	49.76	14.7

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	23:55	408	00:20	0	0	18.75	0	18.75
Abdullapur(PG) - 400KV	424	23:55	408	00:20	0	0	18.75	0	18.75
Amritsar(PG) - 400KV	426	23:55	404	00:10	0	0	9.38	0	9.38
Ballabgarh(PG) - 400KV	419	04:00	405	19:05	0	0	0	0	0
Bareilly II(PG) - 400KV	417	13:05	402	19:05	0	0	0	0	0
Bareilly(UP) - 400KV	418	13:00	403	19:05	0	0	0	0	0
Baspa(HP) - 400KV	423	23:55	406	00:25	0	0	5.21	0	5.21
Bassi(PG) - 400KV	419	04:00	407	19:05	0	0	0	0	0
Bawana(DTL) - 400KV	420	05:00	408	00:10	0	0	.69	0	.69
Dadri HVDC(PG) - 400KV	418	05:00	409	00:00	0	0	0	0	0
Gorakhpur(PG) - 400KV	416	10:00	394	18:25	0	0	0	0	0
Hisar(PG) - 400KV	417	23:50	402	00:20	0	0	0	0	0
Kanpur(PG) - 400KV	422	13:00	409	18:25	0	0	19.1	0	19.1
Kashipur(UT) - 400KV	402	00:00	402	00:00	0	0	0	0	0
Kishenpur(PG) - 400KV	421	23:55	408	14:30	0	0	.69	0	.69
Moga(PG) - 400KV	419	23:55	402	00:10	0	0	0	0	0
Nallagarh(PG) - 400KV	423	23:55	406	00:25	0	0	5.21	0	5.21
Rihand HVDC(PG) - 400KV	415	13:00	415	13:00	6.94	6.94	0	0	6.94
Rihand(NT) - 400KV	413	13:00	408	20:30	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	798	04:05	781	00:00	0	0	0	0	0
Balia(PG) - 765KV	784	13:00	756	18:25	0	0	0	0	0
Bareilly II(PG) - 765KV	796	13:00	767	19:10	0	0	0	0	0
Bhiwani(PG) - 765KV	801	04:05	781	00:00	0	0	2.43	0	2.43
Fatehpur(PG) - 765KV	775	04:00	743	18:20	0	0	0	0	0
Jhatikara(PG) - 765KV	796	04:00	774	19:05	0	0	0	0	0
Lucknow II(PG) - 765KV	789	04:00	761	18:25	0	0	0	0	0
Meerut(PG) - 765KV	806	05:00	775	18:20	0	0	13.19	0	13.19
Moga(PG) - 765KV	789	04:00	772	19:05	0	0	0	0	0
Phagi(RJ) - 765KV	800	04:00	781	00:00	0	0	0	0	0
Unnao(UP) - 765KV	782	02:55	754	19:10	0	0	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	1,637.45	-605.39	0	1,536.47	-1,210.78	0	69.02	38.88	-19.32	88.58
HARYANA	1,801.14	-55.37	0	1,369.14	-101.15	0	75.17	32.87	-6.54	101.5
RAJASTHAN	-52.15	0	0	-52.15	-1,288.27	0	69.12	-1.25	-17.6	50.27
DELHI	561.58	-879.63	0	449.49	-1,022.54	0	79.78	13.39	-22.9	70.27
UTTAR PRADESH	1,953.8	14.72	0	1,757.54	0	0	92.48	40.75	0.11	133.34
UTTARAKHAND	208.49	134.16	0	56.76	158.65	0	9.75	3.47	5.1	18.32
HIMACHAL PRADESH	-842.93	364.78	0	-1,099.98	-303.54	0	24.34	-20.93	3.53	6.94
JAMMU & KASHMIR	-654.63	156.69	0	-654.63	541.85	0	36.34	-15.71	9.95	30.57
CHANDIGARH	0	0	0	0	-40.26	0	5.16	0	0.06	5.23
TOTAL	4,612.75	-870.04	0	3,362.64	-3,266.04	0	461.16	91.47	-47.61	505.02

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	3,520.87	2,140.65	1,692.6	1,488.91	-605.39	-1,210.78	0	0
HARYANA	4,191.65	2,089.68	1,801.14	1,034.1	5.89	-1,011.53	0	0
RAJASTHAN	3,468.94	2,431.45	-52.15	-52.15	292.08	-2,399.24	0	0
DELHI	3,777.54	2,916.72	691.22	449.49	-476.05	-1,459.34	0	0
UTTAR PRADESH	6,196	2,572.96	1,986.73	1,531.94	19.62	0	0	0
UTTARAKHAND	729.21	251.88	238.1	56.76	391.08	74.75	0	0
HIMACHAL PRADESH	1,499.84	654.36	-742.11	-1,123.95	532.97	-303.54	0	0
JAMMU & KASHMIR	1,758.32	1,216.14	-654.63	-654.63	581	156.69	0	0
CHANDIGARH	299.15	162.46	0	0	48.68	-50.32	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	503.61	1,246	508.44	1,470	1,013.71	436.79
Chamera-I	748.75	760	753.13	-	-	-	146.23	159.42
Gandhisagar	295.78	295.78	-	-	-	-	-	0
Jawahar Sagar	295.78	298.7	-	-	-	-	-	0
Koteshwar	598.5	612.5	610.66	5	610.78	5	242	242.61
Pong	384.05	426.72	419.58	876	420.82	931	265.1	241.6
RPS	343.81	352.8	-	-	-	-	-	0
RSD	487.91	527.91	520.16	4	520.05	7	132.76	246.26
Rihand	252.98	268.22	264.29	576	-	-	-	0
Tehri	740.04	829.79	825.2	1,112	824.3	1,093	228.2	242
TOTAL	-	-	-	3,819	-	3,506	2,028	1,568.68

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	5	60
DELHI	3	22
HARYANA	0	10
HIMACHAL PRADESH	4	40
JAMMU & KASHMIR	3	23
PUNJAB	1	24
RAJASTHAN	2	20
UTTAR PRADESH	1	16
UTTARAKHAND	7	73

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