



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

Power Supply Position in Northern Region For 25-Sep-2018

Date of Reporting:26-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
43,958	623	44,580	49.88	34,620	258	34,878	49.99	915	10.59

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	21.59	19.43	0	4.29	0	8.3	53.6	59.17	58.56	-0.61	112.16	0	112.16
HARYANA	9.73	0.07	0	0.09	0	0.38	10.27	100.39	100.22	-0.17	110.49	0	110.49
RAJASTHAN	118.92	0	3	12.42	15.34	4.03	153.71	35.73	38.39	2.66	192.1	0	192.1
DELHI	6.64	0	11.96	0	0	0.93	19.52	62.85	61.45	-1.4	81.73	0.76	80.97
UTTAR PRADESH	142.6	21.6	0	3.1	0	1.2	168.5	146.46	146.34	-0.12	314.84	0	314.84
UTTARAKHAND	0	16.2	0	0.37	0	0	16.57	16.43	18.05	1.62	34.85	0.23	34.62
HIMACHAL PRADESH	0	12.41	0	0	0	8.51	20.92	5.23	4.72	-0.51	25.64	0	25.64
JAMMU & KASHMIR	0	22.07	0	0	0	0	22.07	22.83	18.84	-3.99	50.51	9.6	40.91
CHANDIGARH	0	0	0	0	0	0	0	4.26	3.76	-0.5	3.76	0	3.76
Region	299.48	91.78	14.96	20.27	15.34	23.35	465.16	453.35	450.33	-3.02	926.08	10.59	915.49

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	4,276	0	-228	-1,128	3,168	0	3	-396
HARYANA	6,181	0	-110	793	3,989	0	104	281
RAJASTHAN	8,789	0	162	-781	7,167	0	38	-1,882
DELHI	3,965	8	86	-598	2,884	0	195	-844
UTTAR PRADESH	15,732	140	-144	1,486	13,875	0	10	1,783
UTTARAKHAND	1,715	0	13	24	1,156	0	43	-210
HIMACHAL PRADESH	1,210	0	65	-1,370	807	0	-66	-1,230
JAMMU & KASHMIR	1,898	475	-30	15	1,464	258	93	-529
CHANDIGARH	192	0	-61	-50	109	0	-41	-100
Region	43,958	623	-247	-1,609	34,619	258	379	-3,127

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	4,904	17:00	0	4,904	4,904	17:00	0	4,904
HARYANA	6,181	20:00	0	6,181	6,181	20:00	0	6,181
RAJASTHAN	8,789	20:00	0	8,789	8,789	20:00	0	8,789
DELHI	3,965	20:00	8	3,973	3,973	20:00	8	3,965
UP	15,732	20:00	140	15,872	15,872	20:00	140	15,732
UTTARAKHAND	1,737	19:00	80	1,817	1,817	19:00	80	1,737
HP	1,297	9:00	0	1,297	1,297	9:00	0	1,297
J&K	1,898	20:00	475	2,373	2,373	20:00	475	1,898
CHANDIGARH	201	19:00	0	201	201	19:00	0	201
NR	43,958	20:00	623	44,580	44,580	20:00	623	43,958

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	308	308	0		6.64	277
RAJGHAT TPS(2 * 67.5)	135	0	0	0			
Total THERMAL	840	308	308			6.64	277
BAWANA GPS(2 * 253 + 4 * 216)	1,370	295	313	0		7.38	308
DELHI GAS TURBINES(3 * 34 + 6 * 30)	282	35	40	0		0.85	35
PRAGATI GAS TURBINES(1 * 121.2 + 2 * 104.6)	331	151	152	0		3.73	155
RITHALA GPS(3 * 36)	108	0	0	0			
Total GAS/NAPHTHA/DIESEL	2,091	481	505			11.96	498
WIND	0	0	0	0			
BIOMASS(1 * 16)	16	35	32	0		0.93	39
SOLAR(1 * 2)	2	0	0	0			
Total DELHI	2,949	824	845			19.53	814

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	0	0	00:00	0	0
JHAJJAR(CLP)(2 * 660)	1,320	606	373	606	20:00	9.73	405
MAGNUM DIESEL (IPP)(4 * 6.3)	25	0	0	0			
PANIPAT TPS(2 * 210 + 2 * 250)	920	0	0	0	00:00	0	0
RGTPP(KHEDAR)(2 * 600)	1,200	0	0	0	00:00	0	0
Total THERMAL	4,065	606	373			9.73	405
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	36	0	36	20:00	0.07	3
Total HYDEL	62	36	0			0.07	3
WIND	0	0	0	0			
BIOMASS(1 * 106)	106	0	0	0		0.38	16
SOLAR(1 * 50)	50	0	0	0		0.09	4
Total HARYANA	4,715	642	373			10.27	428

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	230	200	300	16:00	5.36	223
MALANA (IPP) HPS(2 * 43)	86	99	98	99	23:00	2.3	96
OTHER HYDRO HP(1 * 372)	372	262	150	270	23:00	4.75	198
Total HYDEL	758	591	448			12.41	517
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO(1 * 486)	486	505	236	505	23:00	8.51	355
Total SMALL HYDRO	486	505	236			8.51	355
Total HP	1,244	1,096	684			20.92	872

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	737	797	0		17.83	743
OTHER HYDRO/IPP J&K(1 * 308)	308	183	181	0		4.24	177
Total HYDEL	1,208	920	978			22.07	920
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	920	978			22.07	920

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	90	145		0.85	35
GURU GOBIND SINGH TPS (ROPAR)(6 * 210)	1,260	0	0	0		-0.14	-6
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)(2 * 210 + 2 * 250)	920	0	0	0		-0.15	-6
GURU NANAK DEV TPS (BHATINDA)(4 * 110)	460	0	0	0		-0.02	-1
RAJPURA(NPL) TPS(2 * 700)	1,400	660	330	660		12	500
TALWANDI SABO TPS(3 * 660)	1,980	739	0	1,228		9.04	377
Total THERMAL	6,560	1,399	420			21.58	899
TOTAL HYDRO PUNJAB(1 * 1000)	1,000	803	842	842		19.43	810
Total HYDEL	1,000	803	842			19.43	810
WIND	0	0	0	0			
BIOMASS(1 * 303)	303	0	0	0		8.3	346
SOLAR(1 * 859)	859	0	0	479		4.29	179
Total PUNJAB	8,722	2,202	1,262			53.6	2,234

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	0	0	0			
CHHABRA TPS(1 * 660 + 4 * 250)	1,660	958	1,162	0		21.99	916
GIRAL (IPP) LTPS(2 * 125)	250	0	0	0			
KALISINDH TPS(2 * 600)	1,200	501	455	0		11.17	465
KAWAI TPS(2 * 660)	1,320	1,202	1,182	0		26.91	1,121
KOTA TPS(2 * 110 + 2 * 195 + 3 * 210)	1,240	845	752	0		20.04	835
RAJWEST (IPP) LTPS(8 * 135)	1,080	779	831	0		19.64	818
SURATGARH TPS(6 * 250)	1,500	946	708	0		19.17	799
VSLPP (IPP)(1 * 135)	135	0	0	0			
Total THERMAL	8,635	5,231	5,090			118.92	4,954
DHOLPUR GPS(3 * 110)	330	0	0	0			
RAMGARH GPS(1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5)	271	125	125	0		3	125
Total GAS/NAPHTHA/DIESEL	601	125	125			3	125
RAPS-A(1 * 100 + 1 * 200)	300	162	163	0		3.8	158
Total NUCLEAR	300	162	163			3.8	158
TOTAL HYDRO RAJASTHAN(1 * 550)	550	0	0	0			
Total HYDEL	550	0	0			0	0
WIND	4,292	295	882	0		15.34	639
BIOMASS(1 * 102)	102	10	10	0		0.24	10
SOLAR(1 * 1995)	1,995	41	0	0		12.42	518
Total RAJASTHAN	16,475	5,864	6,270			153.72	6,404

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	1,326	1,167	0		31.3	1,304
ANPARA-C TPS(2 * 600)	1,200	842	606	0		18.3	763
ANPARA-D TPS(2 * 500)	1,000	943	943	0		21.6	900
BAJAJ ENERGY PVT LTD (IPP) TPS(10 * 45)	450	112	112	0		2.4	100
BARA PPGCL TPS(3 * 660)	1,980	900	678	0		18.1	754
HARDUAGANJ TPS(1 * 105 + 1 * 60 + 2 * 250)	665	440	250	0		7.5	313
LALITPUR TPS(3 * 660)	1,980	0	0	0			
OBRA TPS (2 * 94 + 5 * 200)	1,188	513	326	0		9.8	408
PANKI TPS(2 * 105)	210	0	0	0			
PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)	1,160	498	470	0		12.3	513
ROSA TPS(4 * 300)	1,200	931	587	0		16	667
TANDA TPS(4 * 110)	440	287	162	0		5.3	221
Total THERMAL	13,103	6,792	5,301			142.6	5,943
ALAKHANDA HEP(4 * 82.5)	330	347	346	0		8.3	346
VISHNUPARYAG HPS(4 * 110)	440	427	427	0		10.3	429
OTHER HYDRO UP(1 * 527)	527	187	166	0		3	125
Total HYDEL	1,297	961	939			21.6	900
WIND	0	0	0	0			
BIOMASS(1 * 26)	26	0	0	0			
SOLAR(1 * 472)	472	0	0	0		3.1	129
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	7,803	6,290			168.5	7,022

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	877	545	885	22:00	16.2	675			
Total HYDEL	1,250	877	545			16.2	675			
WIND	0	0	0	0						
BIOMASS(1 * 127)	127	0	0	0						
SOLAR(1 * 100)	100	0	0	55	14:00	0.37	15			
SMALL HYDRO(1 * 180)	180	0	0	0						
Total SMALL HYDRO	180	0	0			0	0			
Total UTTARAKHAND	2,107	877	545			16.57	690			

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	386.57	603	338	603	20:00	9.28	9.38	391	0.1
DEHAR HPS(6 * 165)	990	110	420	0	420	20:00	2.64	2.82	118	0.18
PONG HPS(6 * 66)	396	260	264	264	264	20:00	6.24	6.27	261	0.03
Sub-Total	2,765	756.57	1,287	602	-	-	18.16	18.47	770	0.31
NHPC										
BAIRASIUL HPS(3 * 60)	180	0	0	0	0	-	0	0	0	0
CHAMERA HPS(3 * 180)	540	526.93	544	542	549	14:00	12.65	12.93	539	0.28
CHAMERA II HPS(3 * 100)	300	0	0	0	0	-	0	0	0	0
CHAMERA III HPS(3 * 77)	231	12.83	76	0	127	23:59	0.31	0.54	23	0.23
DHAULIGANGA HPS(4 * 70)	280	278.44	289	277	292	04:00	6.64	6.76	282	0.12
DULHASTI HPS(3 * 130)	390	387.16	407	399	409	22:00	9.29	9.49	395	0.2
KISHANGANGA(2 * 110)	220	103.08	174	84	174	20:00	2.47	2.51	105	0.04
PARBATI III HEP(4 * 130)	520	331.1	348	361	369	-	7.95	7.85	327	-0.1
SALAL HPS(6 * 115)	690	607.88	706	629	706	20:00	14.59	15.24	635	0.65
SEWA-II HPS(3 * 40)	120	130	132	132	133	17:00	3.12	3.14	131	0.02
TANAKPUR HPS(1 * 31.42 + 2 * 31.4)	94	32.35	39	10	39	20:00	0.78	0.86	36	0.08
URI HPS(4 * 120)	480	226.98	229	149	364	17:00	5.45	5.94	248	0.49
URI-II HPS(4 * 60)	480	129.06	125	124	181	10:00	3.1	3.21	134	0.11
Sub-Total	4,525	2,765.81	3,069	2,707	-	-	66.35	68.47	2,855	2.12
NPCL										
NAPS(2 * 220)	440	384	430	424	430	20:00	9.22	9.36	390	0.14
RAPS-B(2 * 220)	440	378	420	423	425	04:00	9.07	9.11	380	0.04
RAPS-C(2 * 220)	440	205	231	231	231	20:00	4.92	4.88	203	-0.04
Sub-Total	1,320	967	1,081	1,078	-	-	23.21	23.35	973	0.14
NTPC										
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	145.52	251	174	251	20:00	4.7	4.54	189	-0.16
AURAIYA GPS(2 * 109.3 + 4 * 111.19)	663	315.5	316	186	323	23:00	5.19	5.32	222	0.13
DADRI GPS(2 * 154.51 + 4 * 130.19)	830	400	380	225	380	20:00	5.96	5.83	243	-0.13
DADRI SOLAR(1 * 5)	5	0.52	0	0	0	-	0.01	0	0	-0.01
DADRI-I TPS(4 * 210)	840	780.67	616	360	616	20:00	10.81	10.36	432	-0.45
DADRI-II TPS(2 * 490)	980	928.55	842	579	842	20:00	16.72	17.09	712	0.37
ISTPP (JHAJJAR)(3 * 500)	1,500	1,421.25	1,375	913	1,508	08:58	26.49	26.4	1,100	-0.09
KOLDAM HPS(4 * 200)	800	872	871	873	874	11:00	20.93	20.83	868	-0.1
RIHAND-I STPS(2 * 500)	1,000	730	785	792	785	20:00	17.39	17.41	725	0.02
RIHAND-II STPS(2 * 500)	1,000	942.5	1,014	961	1,014	20:00	22.36	22.3	929	-0.06
RIHAND-III STPS(2 * 500)	1,000	471.25	486	489	486	20:00	11.1	11.15	465	0.05
SINGRAULI STPS(2 * 500 + 5 * 200)	2,000	1,807.71	1,811	1,740	1,811	20:00	42.79	42.82	1,784	0.03
SINGRAULI SOLAR(1 * 15)	15	2.52	0	0	0	-	0.06	0.07	3	0.01
UNCHAHAHAR II TPS(2 * 210)	420	382.2	411	285	411	20:00	8.03	8.66	361	0.63
UNCHAHAHAR III TPS(1 * 210)	210	151.39	121	128	121	20:00	3.17	3.35	140	0.18
UNCHAHAHAR IV TPS(1 * 500)	500	0	0	0	0	-	0	-	-	0
UNCHAHAHAR SOLAR(1 * 10)	10	2.22	0	0	0	-	0.05	0.05	2	0
UNCHAHAHAR TPS(2 * 210)	420	364.22	287	245	287	20:00	7.28	7.77	324	0.49
Sub-Total	12,612	9,718.02	9,566	7,950	-	-	203.04	203.95	8,499	0.91
SJVNL										
NATHPA-JHAKRI HPS(6 * 250)	1,500	1,507.62	1,477	1,348	1,477	20:00	32.89	32.94	1,373	0.05
RAMPUR HEP(6 * 68.67)	412	442	419	371	447	19:00	9.12	9.47	395	0.35
Sub-Total	1,912	1,949.62	1,896	1,719	-	-	42.01	42.41	1,768	0.4
THDC										
KOTESHWAR HPS(4 * 100)	400	272.92	409	360	409	20:00	6.55	6.62	276	0.07
TEHRI HPS(4 * 250)	1,000	1,064	983	1,069	1,070	05:00	19.99	20.11	838	0.12
Sub-Total	1,400	1,336.92	1,392	1,429	-	-	26.54	26.73	1,114	0.19
Total	24,534	17,493.94	18,291	15,485			379.31	383.38	15,979	4.07

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	232	231	232	20:00	4.58	5.51	230	0.93
BUDHIL HPS (IPP)(2 * 35)	70	0	70	70	70	14:00	0.92	1.66	69	0.74
KARCHAM WANGTOO HPS(4 * 250)	1,000	0	1,000	750	1,000	19:00	17.51	17.78	741	0.27
MALANA2(2 * 50)	100	0	111	111	111	20:00	2.3	2.62	109	0.32
SAINJ HEP(2 * 50)	50	0	110	110	110	00:00	2.06	2.6	108	0.54
SHREE CEMENT (IPP) TPS(2 * 150)	300	0	299	202	299	20:00	6.83	6.74	281	-0.09
Sub-Total	1,712	0	1,822	1,474	-	-	34.2	36.91	1,538	2.71
Total	1,712	0	1,822	1,474	-	-	34.2	36.91	1,538	2.71

Summary Section					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Total State Control Area Generation	53,966	20,228	17,247	465.18	19,383
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		6,159	4,734	57.38	3,464
Total Regional Availability(Gross)	80,212	46,500	38,940	942.85	40,359

Total Hydro Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Hydro	12,814	10,038	8,602	207.08	8,628
State Control Area Hydro	6,125	4,188	3,752	91.78	3,824
Total Regional Hydro	18,939	14,226	12,354	298.86	12,452

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	886	1,160	53.97	2,249
Total Regional Renewable	9,244	886	1,160	54.09	2,254

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	0	0
3	132KV-Rihand-Sonnagar(PG)	-	-	-	-	0	0.7	-0.7
4	220KV-Pusauli(PG)-Sahupuri(UP)	197	174	197	0	4.23	0	4.23
5	400KV-Biharsharif(PG)-Baliala(PG)	-64	-111	19	133	0	1.5	-1.5
6	400KV-Biharsharif(PG)-Varanasi(P..	299	390	0	390	0	7.26	-7.26
7	400KV-Fatehpur(UP)-Sasaram	-	-	-	-	-	-	-
8	400KV-Motihari(DMT)-Gorakhpur ..	-272	-202	0	296	0	5.66	-5.66
9	400KV-Muzaffarpur(PG)-Gorakhp ..	121	-42	255	89	1.2	0	1.2
10	400KV-Patna(PG)-Baliala(PG)	369	26	392	3	3.72	0	3.72
11	400KV-Sasaram-Allahabad(PG)	70	67	97	0	1.69	0	1.69
12	400KV-Sasaram-Varanasi(PG)	70	316	322	0	7.55	0	7.55
13	765KV-Fatehpur(PG)-Sasaram.	-450	-554	0	554	0	10.44	-10.44
14	765KV-Gaya(PG)-Baliala(PG)	89	11	135	41	0.5	0	0.5
15	765KV-Gaya(PG)-Varanasi(PG)	258	506	0	557	0	8.63	-8.63
16	HVDC800KV-Alipurduar-Agra(PG)	500	1,000	1,000	0	19.85	0	19.85
Sub-Total EAST REGION		1,187	1,581	2,417	2,063	38.74	34.19	4.55
Import/Export between NORTH_EAST REGION and NORTH REGION								
1	HVDC800KV-BiswanathCharialli- ..	500	700	700	0	14.85	0	14.85
Sub-Total NORTH_EAST REGION		500	700	700	0	14.85	0	14.85
Import/Export between WEST REGION and NORTH REGION								
1	220KV-Auraiya(NT)-Malanpur(PG)	-101	-102	-	168	0	2.86	-2.86
2	220KV-Badod(MP)-Kota(PG)	-89	-83	-	156	0	3.19	-3.19
3	220KV-Badod(MP)-Modak(RJ)	-	-	-	-	-	-	-
4	400KV-RAPS C(NP)-Sujalpur	-290	-396	-	411	0	6.39	-6.39
5	400KV-Vindhyachal(PG)-Rihand(N ..	453	456	-	475	0	11.15	-11.15
6	400KV-Zerda(PG)-Bhinmal(PG)	-149	-449	0	551	0	7.72	-7.72
7	400KV-Zerda(PG)-Kankroli(RJ)	-213	-472	0	582	0	10.45	-10.45
8	765KV-0rai-Gwalior(PG)	-302	-110	0	393	0	6.03	-6.03
9	765KV-0rai-Jabalpur	362	198	444	0	2.02	0	2.02
10	765KV-0rai-Satna	1,323	1,094	1,363	0	29	0	29
11	765KV-Gwalior(PG)-Agra(PG)	1,228	434	1,268	0	13.24	0	13.24
12	765KV-Phagi(RJ)-Gwalior(PG)	602	-165	602	185	5.27	0	5.27
13	HVDC500KV-Mundra(JH)-Mohind..	1,498	1,498	1,504	0	35.14	0	35.14
14	HVDC500KV-Vindhyachal(PG)-Vindhaychal B/B	-250	250	0	250	0	6.01	-6.01
15	HVDC800KV-Champa(PG)-Kuruku..	400	300	400	0	7.11	0	7.11
Sub-Total WEST REGION		4,472	2,453	5,581	3,171	91.78	53.8	37.98
TOTAL IR EXCHANGE		6,159	4,734	8,698	5,234	145.37	87.99	57.38

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	44.2	33.48	-48.36	29.32	4.55	-24.77

NR-WR	128.28	44.66	-114.11	58.83	37.98	-20.85
Total	172.48	78.14	-162.47	88.15	57.38	-30.77

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)	-27.99	-11.2		28		0.4503	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	.5	13.3	56.3	76.8	8.8	1.1	0	9.9

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

Maximum		Minimum		Average	Freq Variation	Standard	Freq. in 15 mnt blk		Freq Dev Index
Frequency	Time	Frequency	Time				Frequency	Index	
50.18	13:09:00	49.78	16:16:50	49.98	0.045	0.064	50.11	49.83	23.2

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	426	06:00	410	19:00	0	0	40.28	0	40.28
Abdullapur(PG) - 400KV	426	06:00	410	19:00	0	0	40.28	0	40.28
Amritsar(PG) - 400KV	427	04:00	413	20:35	0	0	35.76	0	35.76
Ballabgarh(PG) - 400KV	421	04:00	403	18:55	0	0	3.47	0	3.47
Bareilly II(PG) - 400KV	416	13:05	398	18:25	0	0	0	0	0
Bareilly(UP) - 400KV	415	08:00	401	19:35	0	0	0	0	0
Baspa(HP) - 400KV	425	04:05	413	18:40	0	0	30.9	0	30.9
Bassi(PG) - 400KV	421	04:00	403	18:55	0	0	.35	0	.35
Bawana(DTL) - 400KV	422	04:00	407	19:10	0	0	15.63	0	15.63
Dadri HVDC(PG) - 400KV	420	04:00	406	18:55	0	0	1.74	0	1.74
Gorakhpur(PG) - 400KV	413	08:00	393	18:15	0	0	0	0	0
Hisar(PG) - 400KV	421	04:00	404	18:55	0	0	2.43	0	2.43
Kanpur(PG) - 400KV	417	13:15	404	18:25	0	0	0	0	0
Kashipur(UT) - 400KV	402	00:00	402	00:00	0	0	0	0	0
Kishenpur(PG) - 400KV	421	02:50	410	20:35	0	0	14.58	0	14.58
Moga(PG) - 400KV	419	03:35	406	18:55	0	0	0	0	0
Nallagarh(PG) - 400KV	425	04:05	413	18:40	0	0	30.9	0	30.9
Rihand HVDC(PG) - 400KV	412	13:15	412	13:15	.69	.69	0	0	.69
Rihand(NT) - 400KV	410	13:15	400	19:10	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	796	03:40	782	11:00	0	0	0	0	0
Balia(PG) - 765KV	776	15:05	746	18:25	0	0	0	0	0
Bareilly II(PG) - 765KV	789	08:00	763	19:35	0	0	0	0	0
Bhiwani(PG) - 765KV	802	03:25	777	18:30	0	0	7.29	0	7.29
Fatehpur(PG) - 765KV	770	13:10	742	18:25	0	.35	0	0	0
Jhatikara(PG) - 765KV	797	04:00	769	18:55	0	0	0	0	0
Lucknow II(PG) - 765KV	784	13:10	752	18:25	0	0	0	0	0
Meerut(PG) - 765KV	799	04:00	770	18:55	0	0	0	0	0
Moga(PG) - 765KV	789	04:00	764	18:55	0	0	0	0	0
Phagi(RJ) - 765KV	798	02:05	779	18:30	0	0	0	0	0
Unnao(UP) - 765KV	769	13:10	741	18:25	0	.69	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	1,519.51	-1,915.71	0	1,392.86	-2,520.67	0	69.65	35.9	-46.38	59.17
HARYANA	1,441.36	-1,084.52	-75.81	868.67	0	-75.81	92.08	25.2	-16.9	100.39
RAJASTHAN	-52.11	-1,829.64	0	-52.11	-728.48	0	74.62	-1.25	-37.63	35.73
DELHI	542.68	-1,386.91	0	520.46	-1,118.37	0	76.09	13.16	-26.41	62.85
UTTAR PRADESH	1,880.48	-97.14	0	1,693.56	-207.97	0	127.44	39.12	-20.09	146.46
UTTARAKHAND	168.46	-378.6	0	16.84	7.09	0	18.08	2.52	-4.17	16.43
HIMACHAL PRADESH	-752.18	-477.59	0	-752.97	-616.93	0	34.83	-17.66	-11.94	5.23
JAMMU & KASHMIR	-677.52	148.4	0	-677.52	692.51	0	28.91	-16.26	10.18	22.83
CHANDIGARH	0	-99.87	0	0	-50.29	0	5.87	0	-1.6	4.26
TOTAL	4,070.68	-7,121.58	-75.81	3,009.79	-4,543.11	-75.81	527.57	80.73	-154.94	453.35

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	3,529.92	2,141.8	1,549.12	1,345.29	-1,714.06	-2,520.67	0	0
HARYANA	4,671.37	2,926.44	1,441.36	760.87	0.59	-1,111.31	-75.81	-75.81
RAJASTHAN	4,060.23	2,730.19	-52.11	-52.11	-399.67	-2,634.53	0	0
DELHI	3,609.96	2,651.55	677.59	393.35	-403.71	-1,537.77	0	0
UTTAR PRADESH	6,275.16	4,189.52	1,898.67	1,477.94	12.76	-1,523.93	0	0
UTTARAKHAND	1,017.77	601.81	198.09	16.84	7.97	-409.31	0	0
HIMACHAL PRADESH	1,613.58	1,173.43	-651.91	-854.82	-404.16	-751.27	0	0
JAMMU & KASHMIR	1,733.64	961.45	-677.52	-677.52	692.51	0	0	0
CHANDIGARH	288.69	181.96	0	0	-30.17	-99.87	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	505.9	1,353	508.79	1,485	1,347.37	239.02
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	423.88	1,082	420.97	931	3,424.98	350.53
RPS	343.81	352.8	-	-	-	-	-	0
RSD	487.91	527.91	526.4	11	519.95	7	3,868.61	515.79
Rihand	252.98	268.22	264.35	582	263.8	532	-	0
Tehri	740.04	829.79	825.65	1,122	824.45	1,096	370.17	436
TOTAL	-	-	-	4,150	-	4,051	9,011.13	1,541.34

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	4	30
DELHI	2	24
HARYANA	1	17
HIMACHAL PRADESH	5	38
JAMMU & KASHMIR	4	26
PUNJAB	2	16
RAJASTHAN	3	23
UTTAR PRADESH	1	14
UTTARAKHAND	3	16

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