



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

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

Date of Reporting:25-Aug-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
54,173	954	55,127	0	47,912	193	48,105	0	1,170	9.51

2(A)State's Load Deals (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	73.53	13.29	0	5.8	0	0	92.62	136.78	136.73	-0.05	229.35	0	229.35
HARYANA	34.88	0.61	0	0.15	0	0	35.64	136.25	138.3	2.05	173.94	0	173.94
RAJASTHAN	94.01	0.4	2.34	12.16	47.23	0.47	156.61	55.26	55.57	0.31	212.18	0	212.18
DELHI	6.61	0	15.95	0	0	0	22.56	90.48	89.31	-1.17	111.91	0.04	111.87
UTTAR PRADESH	144.2	19.15	0	1.02	0	1.2	165.56	170.8	171.32	0.52	336.88	0	336.88
UTTARAKHAND	0	15.71	0	0.35	0	0	16.07	24.39	23.42	-0.97	39.49	0	39.49
HIMACHAL PRADESH	0	14.55	0	0	0	0	14.55	1.89	6.19	4.3	20.74	0	20.74
JAMMU & KASHMIR	0	25	0	0	0	0	25	20.58	14.71	-5.87	49.18	9.47	39.71
CHANDIGARH	0	0	0	0	0	0	0	6.08	5.62	-0.46	5.62	0	5.62
Region	353.23	88.71	18.29	19.48	47.23	1.67	528.61	642.51	641.17	-1.34	1,179.29	9.51	1,169.78

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

State	Evening Peak (20:00) MW				Off-Peak (03:00) MW			
	Demand Met	Shortage(-)/Surpl ..	UI	STOA/PX Transaction	Demand Met	Shortage(-)/Surpl ..	UI	STOA/PX Transaction
PUNJAB	10,191	0	-59	1,603	8,276	0	-11	2,106
HARYANA	8,338	0	-41	2,000	7,285	0	230	2,134
RAJASTHAN	8,743	0	-147	-223	8,473	0	-10	-227
DELHI	4,890	0	-149	12	4,569	0	83	156
UTTAR PRADESH	16,616	460	-59	1,671	15,449	0	-40	2,385
UTTARAKHAND	1,828	0	-65	329	1,548	0	-13	123
HIMACHAL PRADESH	1,330	0	369	-1,910	1,031	0	139	-1,807
JAMMU & KASHMIR	1,976	494	-75	-554	1,092	193	-428	-1,229
CHANDIGARH	261	0	-41	-30	189	0	-15	-60
Region	54,173	954	-267	2,898	47,912	193	-65	3,581

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	Demand Met at maximum requiremnet	Time	Shortage(-)/Surplus(+) during at maximum Requirement	Maximum Requirement of the day
PUNJAB	10,481	17:00	0	10,481	10,481	17:00	0	10,481
HARYANA	8,575	21:00	0	8,575	8,575	21:00	0	8,575
RAJASTHAN	9,721	24:00	0	9,721	9,721	24:00	0	9,721
DELHI	5,453	24:00	0	5,453	5,453	24:00	0	5,453
UP	16,616	20:00	460	17,076	16,616	20:00	460	17,076
UTTARAKHAND	1,828	20:00	0	1,828	1,828	20:00	0	1,828
HP	1,437	8:00	0	1,437	1,437	8:00	0	1,437
J&K	1,976	20:00	494	2,470	1,976	20:00	494	2,470
CHANDIGARH	291	15:00	0	291	291	15:00	0	291
NR	54,423	21:00	478	54,902	54,423	21:00	478	54,902

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	303	298	0		6.61	275
RAJGHAT TPS(2 * 67.5)	135	0	0	0		0	0
Total THERMAL	840	303	298			6.61	275
BAWANA GPS(2 * 253 + 4 * 216)	1,370	431	430	0		10.56	440
DELHI GAS TURBINES(3 * 34 + 6 * 30)	282	75	75	0		1.84	77
PRAGATI GAS TURBINES(1 * 121.2 + 2 * 104.6)	331	143	146	0		3.55	148
RITHALA GPS(3 * 36)	108	0	0	0		0	0
Total GAS/NAPHTHA/DIESEL	2,091	649	651			15.95	665
WIND	0	0	0	0		0	0
BIOMASS(1 * 16)	16	0	0	0			
SOLAR(1 * 2)	2	0	0	0		0	0
Total DELHI	2,949	952	949			22.56	940

HARYANA							
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	481	481	488	01:00	11.14	464
JHAJJAR(CLP)(2 * 660)	1,320	987	736	1,003	21:00	18.83	785
MAGNUM DIESEL (IPP)(4 * 6.3)	25	0	0	0		0	0
PANIPAT TPS(2 * 210 + 2 * 250)	920	198	200	200	01:00	4.91	205
RGTPP(KHEDAR)(2 * 600)	1,200	0	0	0		0	0
Total THERMAL	4,065	1,666	1,417			34.88	1,454
FARIDABAD GPS(1 * 156.07 + 2 * 137.75)	432	0	0	0		0	0
Total GAS/NAPHTHA/DIESEL	432	0	0			0	0
TOTAL HYDRO HARYANA(1 * 62)	62	17	23	23	03:00	0.61	25
Total HYDEL	62	17	23			0.61	25
WIND	0	0	0	0		0	0
BIOMASS(1 * 106)	106	0	0	0			
SOLAR(1 * 50)	50	0	0	0		0.15	6
Total HARYANA	4,715	1,683	1,440			35.64	1,485

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	330	330	0		4.04	168
MALANA (IPP) HPS(2 * 43)	86	86	86	0		1.97	82
OTHER HYDRO HP(1 * 372)	372	379	376	0		8.53	355
Total HYDEL	758	795	792			14.54	605
WIND	0	0	0	0		0	0
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0		0	0
SMALL HYDRO(1 * 486)	486	0	0	0			
Total SMALL HYDRO	486	0	0			0	0
Total HP	1,244	795	792			14.54	605

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		0	0
Total GAS/NAPHTHA/DIESEL	190	0	0			0	0
BAGLIHAR (IPP) HPS(6 * 150)	900	441	441	0		21.17	882
OTHER HYDRO/IPP J&K(1 * 308)	308	177	153	0		3.83	160
Total HYDEL	1,208	618	594			25	1,042
WIND	0	0	0	0		0	0
BIOMASS	0	0	0	0			
SOLAR	0	0	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	618	594			25	1,042

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	246	145	246		4.58	191
GURU GOBIND SINGH TPS (ROPAR)(6 * 210)	1,260	366	293	371		7.44	310
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)(2 * 210 + 2 * 250)	920	568	530	626		11.83	493
GURU NANAK DEV TPS (BHATINDA)(4 * 110)	460	0	0	0		-0.02	-1
RAJPURA(NPL) TPS(2 * 700)	1,400	1,320	775	1,320		27.21	1,134
TALWANDI SABO TPS(3 * 660)	1,980	1,210	616	1,210		22.49	937
Total THERMAL	6,560	3,710	2,359			73.53	3,064
TOTAL HYDRO PUNJAB(1 * 1000)	1,000	491	480	550		13.29	554
Total HYDEL	1,000	491	480			13.29	554
WIND	0	0	0	0		0	0
BIOMASS(1 * 303)	303	0	0	0			
SOLAR(1 * 859)	859	0	0	525		5.8	242
Total PUNJAB	8,722	4,201	2,839			92.62	3,860

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	113	112	0		2.56	107
CHHABRA TPS(1 * 660 + 4 * 250)	1,660	912	653	0		19.99	833
GIRAL (IPP) LTPS(2 * 125)	250	0	0	0		0	0
KALISINDH TPS(2 * 600)	1,200	416	407	0		10.02	418
KAWAI TPS(2 * 660)	1,320	440	440	0		10.57	440
KOTA TPS(2 * 110 + 2 * 195 + 3 * 210)	1,240	675	665	0		15.8	658
RAJWEST (IPP) LTPS(8 * 135)	1,080	738	702	0		16.03	668
SURATGARH TPS (6 * 250)	1,500	760	722	0		17.12	713
VSLPP (IPP)(1 * 135)	135	100	73	0		1.93	80
Total THERMAL	8,635	4,154	3,774			94.02	3,917
DHOLPUR GPS(3 * 110)	330	0	0	0		0	0
RAMGARH GPS(1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5)	271	92	121	0		2.34	98
Total GAS/NAPHTHA/DIESEL	601	92	121			2.34	98
RAPS-A(1 * 100 + 1 * 200)	300	0	0	0		0	0
Total NUCLEAR	300	0	0			0	0
TOTAL HYDRO RAJASTHAN(1 * 550)	550	0	0	0		0.4	17
Total HYDEL	550	0	0			0.4	17
WIND	4,292	1,918	1,874	0		47.23	1,968
BIOMASS(1 * 102)	102	19	19	0		0.47	20
SOLAR(1 * 1995)	1,995	40	0	0		12.16	507
Total RAJASTHAN	16,475	6,223	5,788			156.62	6,527

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	834	1,336	0		24.71	1,030
ANPARA-C TPS(2 * 600)	1,200	634	1,092	0		16.76	698
ANPARA-D TPS(2 * 500)	1,000	528	933	0		15.5	646
BAJAJ ENERGY PVT LTD (IPP) TPS(10 * 45)	450	401	294	0		6.18	258
BARA PPGCL TPS(3 * 660)	1,980	870	666	0		18.01	750
HARDUAGANJ TPS(1 * 105 + 1 * 60 + 2 * 250)	665	539	306	0		9.01	375
LALITPUR TPS(3 * 660)	1,980	608	344	0		9.35	390
OBRA TPS (2 * 94 + 5 * 200)	1,188	515	448	0		9.36	390
PANKI TPS(2 * 105)	210	0	0	0		0	0
PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)	1,160	576	481	0		11.89	495
ROSA TPS(4 * 300)	1,200	1,078	592	0		16.69	695
TANDA TPS(4 * 110)	440	384	245	0		6.75	281
Total THERMAL	13,103	6,967	6,737			144.21	6,008
ALAKHANDA HEP(4 * 82.5)	330	345	392	0		7.51	313
VISHNUPARYAG HPS(4 * 110)	440	435	435	0		10.48	437
OTHER HYDRO UP(1 * 527)	527	65	68	0		1.16	48
Total HYDEL	1,297	845	895			19.15	798
WIND	0	0	0	0		0	0
BIOMASS(1 * 26)	26	0	0	0			
SOLAR(1 * 472)	472	0	0	0		1.02	43
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	7,862	7,682			165.58	6,899

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		0	0
Total GAS/NAPTHA/DIESEL	450	0	0			0	0
OTHER HYDRO UK(1 * 1250)	1,250	740	747	791	08:00	15.71	655
Total HYDEL	1,250	740	747			15.71	655
WIND	0	0	0	0		0	0
BIOMASS(1 * 127)	127	0	0	0			
SOLAR(1 * 100)	100	0	0	82	13:00	0.35	15
SMALL HYDRO(1 * 180)	180	0	0	0			
Total SMALL HYDRO	180	0	0			0	0
Total UTTARAKHAND	2,107	740	747			16.06	670

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	666.98	1,199	539	1,199	20:00	16.01	16.08	670	0.07
DEHAR HPS(6 * 165)	990	590.42	975	495	975	20:00	14.17	14.32	597	0.15
PONG HPS(6 * 66)	396	102.92	198	132	198	20:00	2.47	2.49	104	0.02
Sub-Total	2,765	1,360.32	2,372	1,166	-	-	32.65	32.89	1,371	0.24
NHPC										
BAIRASIUL HPS(3 * 60)	180	75.45	181	21	181	20:00	1.81	1.89	79	0.08
CHAMERA HPS(3 * 180)	540	534.33	537	537	542	14:15	12.8	12.9	538	0.1
CHAMERA II HPS(3 * 100)	300	296.85	301	303	304	01:00	7.12	7.22	301	0.1
CHAMERA III HPS(3 * 77)	231	215.61	231	234	236	23:59	5.14	5.21	217	0.07
DHAULIGANGA HPS(4 * 70)	280	187.66	280	0	289	10:00	4.5	4.56	190	0.06
DULHASTI HPS(3 * 130)	390	380	389	389	393	18:00	9.12	9.15	381	0.03
KISHANGANGA(2 * 110)	220	0	0	0	0	-	0	0	0	0
PARBATI III HEP(4 * 130)	520	280.91	498	122	504	19:00	6.74	6.79	283	0.05
SALAL HPS(6 * 115)	690	688.25	708	708	708	01:00	16.52	17.19	716	0.67
SEWA-II HPS(3 * 40)	120	119.54	118	124	118	20:00	2.35	2.47	103	0.12
TANAKPUR HPS(1 * 31.42 + 2 * 31.4)	94	59.97	63	65	65	10:00	1.44	1.46	61	0.02
URI HPS(4 * 120)	480	388.47	413	363	481	13:00	9.32	9.69	404	0.37
URI-II HPS(4 * 60)	480	211.57	234	243	244	02:00	5.08	5.22	218	0.14
Sub-Total	4,525	3,438.61	3,953	3,109	-	-	81.94	83.75	3,491	1.81
NPCL										
NAPS(2 * 220)	440	218.84	212	212	212	20:00	5.25	4.25	177	-1
RAPS-B(2 * 220)	440	354	398	398	398	20:00	8.5	8.55	356	0.05
RAPS-C(2 * 220)	440	405	0	0	0	-	9.72	9.8	408	0.08
Sub-Total	1,320	977.84	610	610	-	-	23.47	22.6	941	-0.87
NTPC										
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	401.46	0	0	0	-	0	0.02	1	0.02
AURAIYA GPS(2 * 109.3 + 4 * 111.19)	663	368.04	0	219	259	-	3.42	3.32	138	-0.1
DADRI GPS(2 * 154.51 + 4 * 130.19)	830	605.47	114	118	114	20:00	3.04	3.05	127	0.01
DADRI SOLAR(1 * 5)	5	0.65	0	0	0	-	0.02	0.01	0	-0.01
DADRI-I TPS(4 * 210)	840	768.6	797	465	797	20:00	12.41	12.23	510	-0.18
DADRI-II TPS(2 * 490)	980	928.5	935	888	935	20:00	17.03	17.2	717	0.17
ISTPP (JHAJJAR)(3 * 500)	1,500	1,421.25	1,245	867	1,479	20:45	21.87	22.45	935	0.58
KOLDAM HPS(4 * 200)	800	872	871	857	871	20:00	20.93	20.92	872	-0.01
RIHAND-I STPS(2 * 500)	1,000	922.5	1,006	982	1,006	-	21.1	20.92	872	-0.18
RIHAND-II STPS(2 * 500)	1,000	942.5	1,006	993	1,006	-	21.66	21.51	896	-0.15
RIHAND-III STPS(2 * 500)	1,000	942.5	985	1,009	1,009	-	21	21.26	886	0.26
SINGRAULI STPS(2 * 500 + 5 * 200)	2,000	1,754.95	1,914	1,911	1,914	20:00	40.9	41.02	1,709	0.12
SINGRAULI SOLAR(1 * 15)	15	1.48	0	0	12	-	0.04	0.06	3	0.02
UNCHAHAHAR II TPS(2 * 210)	420	382.2	373	342	412	-	7.84	8.11	338	0.27
UNCHAHAHAR III TPS(1 * 210)	210	191.1	194	174	209	-	3.78	3.88	162	0.1
UNCHAHAHAR IV TPS(1 * 500)	500	0	0	0	0	-	0	0	0	0
UNCHAHAHAR SOLAR(1 * 10)	10	0.95	0	0	0	-	0.02	0	0	-0.02
UNCHAHAHAR TPS(2 * 210)	420	191.1	207	181	213	-	3.86	4.17	174	0.31
Sub-Total	12,612	10,695.25	9,647	9,006	-	-	198.92	200.13	8,340	1.21
SJVNL										
NATHPA-JHAKRI HPS(6 * 250)	1,500	535	1,630	0	1,641	18:00	11.77	11.82	493	0.05
RAMPUR HEP(6 * 68.67)	412	135.88	448	0	449	19:00	3.26	3.29	137	0.03
Sub-Total	1,912	670.88	2,078	0	-	-	15.03	15.11	630	0.08
THDC										
KOTESHWAR HPS(4 * 100)	400	312.08	405	370	407	19:00	7.49	7.57	315	0.08
TEHRI HPS(4 * 250)	1,000	1,064	1,063	732	1,065	07:00	21.82	22.49	937	0.67
Sub-Total	1,400	1,376.08	1,468	1,102	-	-	29.31	30.06	1,252	0.75
Total	24,534	18,518.98	20,128	14,993			381.32	384.54	16,025	3.22

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	0	0	0	-	0	0	0	0
BUDHIL HPS (IPP)(2 * 35)	70	0	0	0	0	-	1.58	0	0	-1.58
KARCHAM WANGTOO HPS(4 * 250)	1,000	0	1,100	0	1,100	19:00	17.53	15.9	663	-1.63
MALANA2(2 * 50)	100	0	111	110	111	20:00	2.49	2.62	109	0.13
SAINJ HEP(2 * 50)	50	0	110	110	110	00:00	2.59	2.61	109	0.02
SHREE CEMENT (IPP) TPS(2 * 150)	300	0	270	142	296	21:00	4.41	4.28	178	-0.13
Sub-Total	1,712	0	1,591	362	-	-	28.6	25.41	1,059	-3.19
Total	1,712	0	1,591	362	-	-	28.6	25.41	1,059	-3.19

Summary Section					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Total State Control Area Generation	53,966	23,074	20,831	528.62	22,026
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		13,257	14,743	256.12	13,362
Total Regional Availability(Gross)	80,212	58,050	50,929	1,194.69	52,469

Total Hydro Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Hydro	12,814	12,063	6,454	203.86	8,494
State Control Area Hydro	6,125	3,506	3,531	88.7	3,696
Total Regional Hydro	18,939	15,569	9,985	292.56	12,190

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	1,977	1,893	67.18	2,799
Total Regional Renewable	9,244	1,977	1,893	67.25	2,802

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	13	29	-	33	0	0.57	-0.57
2	132KV-Karmnasa(PG)-Sahupuri(UP)	-	-	-	-	0.96	0	0.96
3	132KV-Rihand-Sonnagar(PG)	-	-	-	-	0	0	0
4	220KV-Pusauli(PG)-Sahupuri(UP)	152	140	164	0	3.55	0	3.55
5	400KV-Biharsharif(PG)-Baliala(PG)	165	96	165	0	2.65	0	2.65
6	400KV-Biharsharif(PG)-Varanasi(PG)	15	78	99	123	0	0.03	-0.03
7	400KV-Fatehpur(UP)-Sasaram	-	-	-	-	-	-	-
8	400KV-Motihari(DMT)-Gorakhpur(UP)	302	170	0	324	0	4.4	-4.4
9	400KV-Muzaffarpur(PG)-Gorakhpur(UP)	311	408	615	0	9.89	0	9.89
10	400KV-Patna(PG)-Baliala(PG)	789	941	1,172	0	22.22	0	22.22
11	400KV-Sasaram-Allahabad(PG)	2	115	147	0	2.41	0	2.41
12	400KV-Sasaram-Varanasi(PG)	144	268	307	0	6.02	0	6.02
13	765KV-Fatehpur(PG)-Sasaram.	-203	-261	0	354	0	5.14	-5.14
14	765KV-Gaya(PG)-Baliala(PG)	311	110	311	0	3.12	0	3.12
15	765KV-Gaya(PG)-Varanasi(PG)	245	70	245	137	1.61	0	1.61
16	HVDC800KV-Alipurduar-Agra(PG)	700	700	700	0	16.05	0	16.05
Sub-Total EAST REGION		2,946	2,864	3,925	971	68.48	10.14	58.34
Import/Export between NORTH_EAST REGION and NORTH REGION								
1	HVDC800KV-BiswanathCharialli-Agra(PG)	700	700	700	0	16.37	0	16.37
Sub-Total NORTH_EAST REGION		700	700	700	0	16.37	0	16.37
Import/Export between WEST REGION and NORTH REGION								
1	220KV-Auraiya(NT)-Malanpur(PG)	-53	4	-	72	0.54	0	0.54
2	220KV-Badod(MP)-Kota(PG)	-58	95	120	-	1.75	0	1.75
3	220KV-Badod(MP)-Modak(RJ)	-	-	-	-	-	-	-
4	400KV-RAPS C(NP)-Sujalpur	-	-	-	-	2.02	0	2.02
5	400KV-Vindhyachal(PG)-Rihand(NT)	943	925	-	968	0	21.26	-21.26
6	400KV-Zerda(PG)-Bhinmal(PG)	136	-23	192	145	0.81	0	0.81
7	400KV-Zerda(PG)-Kankroli(RJ)	-27	75	145	125	0.26	0	0.26
8	765KV-Orai-Gwalior(PG)	-378	-310	0	378	0	7.69	-7.69
9	765KV-Orai-Jabalpur	1,170	1,019	1,170	0	24.5	0	24.5
10	765KV-Orai-Satna	1,821	1,697	1,821	0	40.49	0	40.49
11	765KV-Gwalior(PG)-Agra(PG)	2,384	2,566	2,716	0	51.83	0	51.83
12	765KV-Phagi(RJ)-Gwalior(PG)	1,125	1,480	1,480	-	29.45	0	29.45
13	HVDC500KV-Mundra(JH)-Mohindergarh(JH)	1,198	1,701	2,002	0	29.05	0	29.05
14	HVDC500KV-Vindhyachal(PG)-Vindhyachal B/B	-250	-50	0	250	0	4.21	-4.21
15	HVDC800KV-Champa(PG)-Kurukshetra(PG)(PG)	1,600	2,000	2,000	0	33.87	0	33.87
Sub-Total WEST REGION		9,611	11,179	11,646	1,938	214.57	33.16	181.41
TOTAL IR EXCHANGE		13,257	14,743	16,271	2,909	299.42	43.3	256.12

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	51.36	38.92	-26.11	64.17	74.71	10.54
NR-WR	148.6	61.75	-7.54	202.81	181.41	-21.4

Total	199.96	100.67	-33.65	266.98	256.12	-10.86
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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)	-14.45	-0.05	0	18	0	0.1069	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	.9	7.1	58.9	84.6	8	.6	0	8.2

<-----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.	
50.15	12:02:50	49.67	19:18:20	49.98	0.03	0.056	50.07	49.79	0.00

6. Voltage Profile: 400kV

STATION	Maximum		Minimum		Voltage (in %)				Voltage Deviation Index (% of time)
	VOLTAGE	TIME	VOLTAGE	TIME	N/A	N/A	N/A	N/A	
Abdullapur(PG) - 400KV	420	05:25	398	19:15	N/A	N/A	N/A	N/A	N/A
Abdullapur(PG) - 400KV	420	05:25	398	19:15	N/A	N/A	N/A	N/A	N/A
Amritsar(PG) - 400KV	414	03:55	397	14:45	N/A	N/A	N/A	N/A	N/A
Ballabgarh(PG) - 400KV	415	07:05	395	14:35	N/A	N/A	N/A	N/A	N/A
Bareilly II(PG) - 400KV	413	07:05	395	19:15	N/A	N/A	N/A	N/A	N/A
Bareilly(UP) - 400KV	415	07:05	399	00:15	N/A	N/A	N/A	N/A	N/A
Baspa(HP) - 400KV	419	05:55	398	19:25	N/A	N/A	N/A	N/A	N/A
Bassi(PG) - 400KV	418	04:00	400	19:20	N/A	N/A	N/A	N/A	N/A
Bawana(DTL) - 400KV	416	07:05	397	19:15	N/A	N/A	N/A	N/A	N/A
Dadri HVDC(PG). - 400KV	414	07:05	397	14:40	N/A	N/A	N/A	N/A	N/A
Gorakhpur(PG) - 400KV	415	05:45	395	19:10	N/A	N/A	N/A	N/A	N/A
Hisar(PG) - 400KV	412	06:30	391	14:40	N/A	N/A	N/A	N/A	N/A
Kanpur(PG) - 400KV	419	07:05	404	19:15	N/A	N/A	N/A	N/A	N/A
Kashipur(UT) - 400KV	402	00:00	402	00:00	N/A	N/A	N/A	N/A	N/A
Kishenpur(PG) - 400KV	415	04:00	403	19:15	N/A	N/A	N/A	N/A	N/A
Moga(PG) - 400KV	411	06:30	394	14:40	N/A	N/A	N/A	N/A	N/A
Nallagarh(PG) - 400KV	419	05:55	398	19:25	N/A	N/A	N/A	N/A	N/A
Rihand HVDC(PG) - 400KV	408	13:00	408	13:00	N/A	N/A	N/A	N/A	N/A
Rihand(NT) - 400KV	407	13:00	400	19:15	N/A	N/A	N/A	N/A	N/A

6.1 Voltage Profile: 765kV

STATION	Maximum		Minimum		Voltage (in %)				Voltage Deviation Index (% of time)
	VOLTAGE	TIME	VOLTAGE	TIME	N/A	N/A	N/A	N/A	
Anta RS(RJ) - 765KV	796	05:25	777	14:40	-	-	-	-	N/A
Balia(PG) - 765KV	783	07:55	754	19:15	-	-	-	-	N/A
Bareilly II(PG) - 765KV	789	07:05	759	00:15	-	-	-	-	N/A
Bhiwani(PG) - 765KV	796	05:25	766	19:15	-	-	-	-	N/A
Fatehpur(PG) - 765KV	777	22:00	739	19:15	-	-	-	-	N/A
Jhatikara(PG) - 765KV	791	07:05	757	19:20	-	-	-	-	N/A
Lucknow II(PG) - 765KV	790	16:45	754	19:15	-	-	-	-	N/A
Meerut(PG) - 765KV	803	07:05	766	19:15	-	-	-	-	N/A
Moga(PG) - 765KV	788	07:05	755	14:35	-	-	-	-	N/A
Phagi(RJ) - 765KV	0	00:00	0	00:00	-	-	-	-	N/A
Unnao(UP) - 765KV	779	07:55	750	00:15	-	-	-	-	N/A

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	2,106.01	0	0	2,106.01	-503.07	0	88.51	50.54	-2.26	136.78
CHANDIGARH	0	-60.37	0	0	-30.18	0	6.79	0	-0.71	6.08
UTTARAKHAND	39.15	84.3	0	233.41	95.98	0	19.13	3.68	1.57	24.39
UTTAR PRADESH	2,345.37	39.16	0	1,671.3	0	0	124.76	47.02	-0.97	170.8
DELHI	575.47	-419.56	0	721.12	-709.33	0	83.2	18.76	-11.48	90.48
RAJASTHAN	153.2	-380.38	0	-130.15	-93.06	0	64.38	1.98	-11.09	55.26
HIMACHAL PRADESH	-1,576.49	-230.92	0	-1,627.24	-282.96	0	42.12	-35.84	-4.39	1.89
HARYANA	2,183.78	-49.71	0	2,302.95	-302.6	0	99.16	44.86	-7.76	136.25
JAMMU & KASHMIR	-1,047.39	-182.02	0	-1,047.39	493.2	0	38.59	-25.14	7.13	20.58
TOTAL	4,779.1	-1,199.5	0	4,230.01	-1,332.02	0	566.64	105.86	-29.96	642.51

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	4,456.76	2,800.63	2,106.01	2,105.57	0	-503.07	0	0
CHANDIGARH	354.84	241.9	0	0	0	-70.43	0	0
UTTARAKHAND	1,123.17	543.7	233.42	39.15	153.88	-63.92	0	0
UTTAR PRADESH	7,143.02	3,577.29	2,372.65	1,349.61	39.16	-805.98	0	0
DELHI	4,093.38	2,982.02	1,008.02	424.35	-90.9	-946.78	0	0
RAJASTHAN	3,364.58	1,849.46	170.04	-130.15	82.01	-1,410.17	0	0
HIMACHAL PRADESH	2,021.49	1,483.46	-1,393.55	-1,805.1	85.76	-282.96	0	0
HARYANA	4,898.79	3,345.58	2,461.93	1,003.7	141.81	-978.62	0	0
JAMMU & KASHMIR	1,819.41	1,261.51	-1,047.39	-1,047.39	542.52	-202.24	0	0

8. Major Reservoir Particulars

RESERVOIR	Parameters			Present Parameters		LAST YEAR		LAST DAY	
	MDDL (Mts)	FRL (Mts)	Energy (MU)	Level (Mts)	Energy (MU)	Level (Mts)	Energy (MU)	Inflow (m3/s)	Usage (m3/s)
Bhakra	445.62	513.59	653	-	-	-	-	-	0
Chamera-I	748.75	760	0	-	-	-	-	-	0
Gandhisagar	295.78	295.78	0	-	-	-	-	-	0
Jawahar Sagar	295.78	298.7	0	-	-	-	-	-	0
Koteshwar	598.5	612.5	5	-	-	-	-	-	0
Pong	384.05	426.72	138	-	-	-	-	-	0
RPS	343.81	352.8	0	-	-	-	-	-	0
RSD	487.91	527.91	1	-	-	-	-	-	0
Rihand	252.98	268.22	0	2,260.36	325	263.8	832	20.91	0
Tehri	740.04	829.79	787	815.4	910	812.1	844	524.81	514
TOTAL	-	-	1,584	-	1,235	-	1,676	545.72	514

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	3.47
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	4	34
DELHI	5	24
HARYANA	0	0
HIMACHAL PRADESH	5	33
JAMMU & KASHMIR	2	21
PUNJAB	0	0
RAJASTHAN	1	17
UTTAR PRADESH	0	0
UTTARAKHAND	3	35

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