



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

Power Supply Position in Northern Region For 01-Aug-2019

Date of Reporting:02-Aug-2019

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
55,338	1,381	56,719	49.9	54,160	203	54,363	50.09	1,304	9.22

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

State	State's Control Area Generation (Net MU)							Drawal Sch	Act Drawal	UI	Requirement	Shortage	Consumption
	Thermal	Hydro	Gas/Naptha/Diesel	Solar	Wind	OthersBiomass/Small Hyd/Co-gen etc.)	Total	(Net MU)	(Net MU)	(Net MU)	(Net MU)	(Net MU)	(Net MU)
PUNJAB	78.28	14.57	0	0	2.86	2	97.71	133.87	132.11	-1.76	229.82	0	229.82
HARYANA	36.3	0.8	0	0.13	0	0.6	37.82	162.97	164	1.03	201.82	0	201.82
RAJASTHAN	97.81	0.52	2.06	13.42	30.84	4.3	148.94	52.94	48.67	-4.27	197.61	0	197.61
DELHI	0	0	16.58	0	0	0.51	17.09	104.37	104.8	0.43	121.9	0.01	121.89
UTTAR PRADESH	209.51	21.37	0	4.12	0	1.2	236.21	203.66	201.66	-2	437.87	0	437.87
UTTARAKHAND	0	18.5	6.72	0.61	0	0	25.83	14.79	16.58	1.79	42.41	0	42.41
HIMACHAL PRADESH	0	20.36	0	0	0	11.4	31.76	-2.77	-3.05	-0.28	28.71	0	28.71
JAMMU & KASHMIR	0	19.27	0	0	0	0	19.27	15.69	19.27	3.58	47.75	9.21	38.54
CHANDIGARH	0	0	0	0	0	0	0	5.85	5.3	-0.55	5.3	0	5.3
Region	421.9	95.39	25.36	18.28	33.7	20.01	614.63	691.37	689.34	-2.03	1,313.19	9.22	1,303.97

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(-)/Surplus(+)	UI	STOA/PX Transaction
PUNJAB	9,182	0	-91	1,063	9,047	0	-97	1,892
HARYANA	8,720	0	-200	2,486	8,254	0	100	2,640
RAJASTHAN	7,416	0	-366	-56	8,508	0	118	-261
DELHI	5,127	0	-49	1,120	4,893	0	122	1,057
UTTAR PRADESH	19,504	890	8	2,907	19,498	0	-624	2,747
UTTARAKHAND	1,923	0	184	-92	1,650	0	91	-250
HIMACHAL PRADESH	1,252	0	-33	-1,643	984	0	-30	-1,762
JAMMU & KASHMIR	1,966	491	249	-536	1,151	203	52	-530
CHANDIGARH	248	0	-24	-65	175	0	-21	-40
Region	55,338	1,381	-322	5,184	54,160	203	-289	5,493

2(C)State's Demand Met in MWs (Maximum Demand Met and Maximum requirement of the day details)

State	Maximum Demand, corresponding shortage and requirement details for the day				Maximum requirement, corresponding shortage and demand details for the day					
	Maximum Demand Met of the day	Time	Shortage(-) /Surplus(+) during at maximum demand	Requirement at the max demand met of the day	Maximum Requirement of the day	Time	Shortage(-) /Surplus(+) during at maximum Requirement	Demand Met at maximum requiremnet	Min Demand Met	Time
PUNJAB	10,096	15:00	0	10,096	10,096	15:00	0	10,096	8,791	5:00
HARYANA	9,243	15:00	0	9,243	9,243	15:00	0	9,243	7,361	8:00
RAJASTHAN	9,042	1:00	0	9,042	9,042	1:00	0	9,042	6,866	19:00
DELHI	5,918	24:00	0	5,918	5,918	24:00	0	5,918	4,132	7:00
UP	21,186	23:00	410	21,596	21,596	23:00	410	21,186	16,061	10:00
UTTARAKHAND	1,924	16:00	0	1,924	1,924	16:00	0	1,924	1,596	4:00
HP	1,391	10:00	0	1,391	1,391	10:00	0	1,391	968	4:00
J&K	2,075	21:00	519	2,594	2,594	21:00	519	2,075	1,103	1:00
CHANDIGARH	254	22:00	0	254	254	22:00	0	254	165	5:00
NR	58,381	23:00	789	59,170	59,170	23:00	789	58,381	50,895	6:00

3(A) State Entities Generation:

CHANDIGARH							
Station/Constituents	Inst. Capacity	N/A	N/A	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
NIL							
Total	0	0	0			0	0
Total	0	0	0			0	0

DELHI							
Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
RAJGHAT TPS(2 * 67.5)	135	0	0	0			
Total THERMAL	135	0	0			0	0
BAWANA GPS(2 * 253 + 4 * 216)	1,370	484	466	0		12.27	511
DELHI GAS TURBINES(3 * 34 + 6 * 30)	282	37	38	0		0.84	35
PRAGATI GAS TURBINES(1 * 121.2 + 2 * 104.6)	452	138	144	0		3.47	145
RITHALA GPS(3 * 36)	108	0	0	0			
Total GAS/NAPTHA/DIESEL	2,212	659	648			16.58	691
WIND	0	0	0	0			
BIOMASS(16)	16	32	34	0		0.51	21
SOLAR(2)	2	0	0	0			
Total DELHI	2,365	691	682			17.09	712

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	495	470	0		11.91	496
JHAJJAR(CLP)(2 * 660)	1,320	1,152	825	0		24.38	1,016
MAGNUM DIESEL (IPP)(4 * 6.3)	25	0	0	0			
PANIPAT TPS(2 * 210 + 2 * 250)	920	0	0	0			
RGTPP(KHEDAR)(2 * 600)	1,200	0	0	0			
Total THERMAL	4,065	1,647	1,295			36.29	1,512
FARIDABAD GPS(1 * 156.07 + 2 * 137.75)	432	0	0	0			
Total GAS/NAPTHA/DIESEL	432	0	0			0	0
TOTAL HYDRO HARYANA(64.8)	65	29	26	0		0.8	33
Total HYDEL	65	29	26			0.8	33
WIND	0	0	0	0			
BIOMASS(106)	106	0	0	0		0.6	25
SOLAR(55.8)	56	0	0	0		0.13	5
Total HARYANA	4,724	1,676	1,321			37.82	1,575

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		7.92	330
MALANA (IPP) HPS(2 * 43)	86	103	103	0		2.5	104
OTHER HYDRO HP(372)	372	423	385	0		9.94	414
Total HYDEL	758	856	818			20.36	848
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO(486)	486	439	633	0		11.4	475
Total SMALL HYDRO	486	439	633			11.4	475
Total HP	1,244	1,295	1,451			31.76	1,323

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/NAPTHA/DIESEL	190	0	0			0	0
BAGLIHAR (IPP) HPS(6 * 150)	900	734	735	0		17.34	723
OTHER HYDRO/IPP J&K(308)	308	95	83	0		1.94	81
Total HYDEL	1,208	829	818			19.28	804
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO(98)	98	0	0	0			
Total SMALL HYDRO	98	0	0			0	0
Total J&K	1,496	829	818			19.28	804

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	290	290	345		7.05	294
GURU GOBIND SINGH TPS (ROPAR)(4 * 210)	840	293	293	384		7.18	299
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)(2 * 210 + 2 * 250)	920	156	157	162		3.65	152
RAJPURA(NPL) TPS(2 * 700)	1,400	1,305	1,313	1,320		30.91	1,288
TALWANDI SABO TPS(3 * 660)	1,980	1,153	1,021	1,795		29.5	1,229
Total THERMAL	5,680	3,197	3,074			78.29	3,262
ANANADPUR SAHIB HYDRO PLANT(2 * 33.5 + 2 * 33.5)	134	0	0	0			
MUKERIAN HYDRO PLANT(6 * 15 + 6 * 19.5 + 2 * 9)	225	0	0	0			
RANJIT SAGAR POWER PLANT (4 * 150)	600	0	0	0			
SHANAN(4 * 15 + 1 * 50)	110	0	0	0			
UBDC(3 * 15 + 3 * 15.5)	92	0	0	0			
OTHER HYDRO PUNJAB	0	587	588	657		14.57	607
Total HYDEL	1,161	587	588			14.57	607
WIND	0	116	0	0		2.86	119
BIOMASS(303)	303	86	0	0		2	83
SOLAR(859)	859	0	0	414		0	0
Total PUNJAB	8,003	3,986	3,662			97.72	4,071

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	84	225	0		4.45	185
CHHABRA TPS(1 * 660 + 4 * 250)	1,660	1,565	1,939	0		39.77	1,657
GIRAL (IPP) LTPS(2 * 125)	250	0	0	0			
KALISINDH TPS(2 * 600)	1,200	450	427	0		10.33	430
KAWAI TPS(2 * 660)	1,320	450	440	0		10.45	435
KOTA TPS(2 * 110 + 2 * 195 + 3 * 210)	1,240	578	538	0		13.55	565
RAJWEST (IPP) LTPS(8 * 135)	1,080	455	436	0		10.78	449
SURATGARH TPS (6 * 250)	1,500	353	350	0		8.48	353
VSLPP (IPP)(1 * 135)	135	0	0	0			
Total THERMAL	8,635	3,935	4,355			97.81	4,074
DHOLPUR GPS(3 * 110)	330	0	0	0			
RAMGARH GPS(1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5)	271	84	69	0		2.06	86
Total GAS/NAPTHA/DIESEL	601	84	69			2.06	86
RAPS-A(1 * 100 + 1 * 200)	300	166	164	0		3.93	164
Total NUCLEAR	300	166	164			3.93	164
TOTAL HYDRO RAJASTHAN(550)	550	29	29	0		0.52	22
Total HYDEL	550	29	29			0.52	22
WIND	4,292	1,710	1,254	0		30.84	1,285
BIOMASS(102)	102	16	16	0		0.37	15
SOLAR(3045)	3,045	17	0	0		13.42	559
Total RAJASTHAN	17,525	5,957	5,887			148.95	6,205

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	1,419	1,429	0		33.64	1,402
ANPARA-C TPS(2 * 600)	1,200	1,082	1,068	0		25.74	1,073
ANPARA-D TPS(2 * 500)	1,000	944	939	0		21.39	891
BAJAJ ENERGY PVT LTD (IPP) TPS(10 * 45)	450	39	39	0		0.94	39
BARA PPGCL TPS(3 * 660)	1,980	967	932	0		23.34	973
HARDUAGANJ TPS(1 * 105 + 1 * 60 + 2 * 250)	665	516	513	0		12.55	523
LALITPUR TPS(3 * 660)	1,980	1,243	1,778	0		32.16	1,340
MEJA TPS(1 * 660)	660	0	0	0		0	0
OBRA TPS (2 * 94 + 5 * 200)	1,188	476	392	0		10.57	440
PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)	1,380	608	657	0		14.58	608
ROSA TPS(4 * 300)	1,200	1,065	1,028	0		25.55	1,065
TANDA TPS(4 * 110)	440	375	375	0		9.05	377
TANDA TPS STAGE-II(1 * 660)	660	0	0	0		0	0
Total THERMAL	14,433	8,734	9,150			209.51	8,731
ALAKHANANDA HEP(4 * 82.5)	330	343	336	0		8.15	340
VISHNUPARYAG HPS(4 * 110)	440	436	436	0		10.48	437
OTHER HYDRO UP(527)	527	105	103	0		2.74	114
Total HYDEL	1,297	884	875			21.37	891
WIND	0	0	0	0		0	0
BIOMASS(26)	26	0	0	0		0	0
SOLAR(798)	798	0	0	0		4.12	172
CO-GENERATION(1360)	1,360	50	50	0		1.2	50
Total OTHERs	1,360	50	50			1.2	50
Total UP	17,914	9,668	10,075			236.2	9,844

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(675)	675	284	286	290	11:00	6.72	280
Total GAS/NAPTHA/DIESEL	675	284	286			6.72	280
OTHER HYDRO UK(1250)	1,250	741	810	818	16:00	18.5	771
Total HYDEL	1,250	741	810			18.5	771
WIND	0	0	0	0			
BIOMASS(127)	127	0	0	0			
SOLAR(100)	100	0	0	101	11:00	0.61	25
SMALL HYDRO(180)	180	0	0	0			
Total SMALL HYDRO	180	0	0			0	0
Total UTTARAKHAND	2,332	1,025	1,096			25.83	1,076

(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)		
Aravali Power Company Private Ltd										
ISTPP (JHAJJAR)(3 * 500)	1,500	1,413.75	822	549	822	20:00	11.87	13.33	555	1.46
Sub-Total	1,500	1,413.75	822	549	-	-	11.87	13.33	555	1.46
BBMB										
BHAKRA HPS(2 * 108 + 3 * 126 + 5 * 157)	1,379	1,359	1,386	558	1,386	20:00	21.14	21.35	890	0.21
DEHAR HPS(6 * 165)	990	900	975	495	975	20:00	13.84	14.2	592	0.36
PONG HPS(6 * 66)	396	191	198	66	198	20:00	1.69	1.73	72	0.04
Sub-Total	2,765	2,450	2,559	1,119	-	-	36.67	37.28	1,554	0.61
NHPC										
BAIRASIUL HPS(3 * 60)	180	20	50	0	62	22:00	0.19	0.24	10	0.05
CHAMERA HPS(3 * 180)	540	555	553	543	556	19:30	13	13.1	546	0.1
CHAMERA II HPS(3 * 100)	300	303	306	303	308	18:00	7.21	7.27	303	0.06
CHAMERA III HPS(3 * 77)	231	235	228	227	228	16:00	5.43	5.43	226	0
DHAULIGANGA HPS(4 * 70)	280	292	286	278	290	06:00	6.64	6.83	285	0.19
DULHASTI HPS(3 * 130)	390	328	329	323	330	19:00	7.51	7.4	308	-0.11
KISHANGANGA(3 * 110)	330	215	220	110	220	20:00	3.12	3.22	134	0.1
PARBATI III HEP(4 * 130)	520	510	269	256	521	11:15	6.37	6.29	262	-0.08
SALAL HPS(6 * 115)	690	690	722	720	722	18:00	16.52	17.01	709	0.49
SEWA-II HPS(3 * 40)	120	130	120	117	129	18:00	2.85	2.92	122	0.07
TANAKPUR HPS(1 * 31.42 + 2 * 31.4)	94	90	97	98	98	09:00	2.15	2.26	94	0.11
URI HPS(4 * 120)	480	360	360	240	360	20:00	7.06	7.24	302	0.18
URI-II HPS(4 * 60)	240	200	204	155	208	19:00	4.34	4.42	184	0.08
Sub-Total	4,395	3,928	3,744	3,370	-	-	82.39	83.63	3,485	1.24
NPCL										
NAPS(2 * 220)	440	379	417	420	423	15:00	9.1	9.15	381	0.05
RAPS-B(2 * 220)	440	340	0	0	0	-	8.16	8.21	342	0.05
RAPS-C(2 * 220)	440	413	458	453	459	21:00	9.91	9.84	410	-0.07
Sub-Total	1,320	1,132	875	873	-	-	27.17	27.2	1,133	0.03
NTPC										
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	0	0	0	0	-	0	0.03	1	0.03
AURAIYA GPS(2 * 109.3 + 4 * 111.19)	663	225	305	186	306	22:00	5.23	5.19	216	-0.04
DADRI GPS(2 * 154.51 + 4 * 130.19)	830	785	0	0	0	-	0	0.04	2	0.04
DADRI SOLAR(5)	5	0	0	0	4	12:36	0.02	0.02	1	0
DADRI-I TPS(4 * 210)	840	768.6	200	226	200	20:00	5.08	4.99	208	-0.09
DADRI-II TPS(2 * 490)	980	928.55	614	516	614	20:00	12.38	13.14	548	0.76
KOLDAM HPS(4 * 200)	800	872	868	875	876	04:00	20.93	20.87	870	-0.06
RIHAND-I STPS(2 * 500)	1,000	900	978	915	978	20:00	20.79	20.04	835	-0.75
RIHAND-II STPS(2 * 500)	1,000	471.25	515	511	515	20:00	11.3	11.15	465	-0.15
RIHAND-III STPS(2 * 500)	1,000	942.5	1,007	992	1,007	20:00	22.62	22.59	941	-0.03
SINGRAULI STPS(2 * 500 + 5 * 200)	2,000	1,710	1,806	1,843	1,806	20:00	41.14	41.11	1,713	-0.03
SINGRAULI SOLAR(15)	15	0	0	0	0	-	0.03	0.03	1	0
UNCHAHAH I(2 * 210)	420	382.2	402	255	402	20:00	6.22	7.23	301	1.01
UNCHAHAH II TPS(2 * 210)	420	382.2	325	307	325	20:00	6.08	7.56	315	1.48
UNCHAHAH III TPS(1 * 210)	210	191.1	180	118	180	20:00	3.11	3.49	145	0.38
UNCHAHAH IV TPS(1 * 500)	500	0	0	0	0	-	0	-	-	0
UNCHAHAH SOLAR(10)	10	0	0	0	0	-	0.04	0.05	2	0.01
Sub-Total	11,112	8,558.4	7,200	6,744	-	-	154.97	157.53	6,564	2.56
SJVNL										
NATHPA-JHAKRI HPS(6 * 250)	1,500	1,605	1,617	1,593	1,632	19:00	38.52	38.45	1,602	-0.07
RAMPUR HEP(6 * 68.67)	412	442	446	431	450	19:00	10.58	10.65	444	0.07
Sub-Total	1,912	2,047	2,063	2,024	-	-	49.1	49.1	2,046	0
THDC										
KOTESHWAR HPS(4 * 100)	400	100	103	73	103	20:00	2.24	2.25	94	0.01
TEHRI HPS(4 * 250)	1,000	784	761	159	780	23:00	5.34	5.42	226	0.08
Sub-Total	1,400	884	864	232	-	-	7.58	7.67	320	0.09
Total	24,404	20,413.15	18,127	14,911			369.75	375.74	15,657	5.99

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	229	231	231	03:00	5	5.39	225	0.39
BUDHIL HPS (IPP)(2 * 35)	70	0	71	70	71	21:00	1.68	1.69	70	0.01
KARCHAM WANGTOO HPS(4 * 250)	1,000	0	1,100	1,100	1,100	19:00	26.08	26.39	1,100	0.31
MALANA2(2 * 50)	100	0	115	115	115	08:00	2.58	2.75	115	0.17
SAINJ HEP(2 * 50)	100	0	0	110	110	11:00	2.59	1.97	82	-0.62
SHREE CEMENT (IPP) TPS(2 * 150)	300	0	133	80	146	22:00	2.57	2.45	102	-0.12
Sub-Total	1,762	0	1,648	1,706	-	-	40.5	40.64	1,694	0.14
SOLAR IPP										
AZURE POWER INDIA PVT LTD.(4 * 50)	200	0	0	0	99	11:30	0.8	0.7	29	-0.1
RENEW SOLAR POWER PVT LTD(50)	50	0	0	0	45	12:05	0.29	0.31	13	0.02
SB ENERGY FOUR PVT LTD(2 * 100)	200	0	0	0	192	11:41	1.16	1.18	49	0.02
Sub-Total	450	0	0	0	-	-	2.25	2.19	91	-0.06
Total	2,212	0	1,648	1,706			42.75	42.83	1,785	0.08
Summary Section										
	Inst. Capacity		PEAK	OFF-PEAK			Day Energy		Day AVG.	
Total State Control Area Generation	55,603		25,127	24,992			614.65		25,610	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			12,993	14,161			291.29		3,355	
Total Regional Availability(Gross)	82,219		57,895	55,770			1,324.51		46,406	
Total Hydro Generation										
	Inst. Capacity		PEAK	OFF-PEAK			Day Energy		Day AVG.	
Regional Entities Hydro	12,734		11,613	9,246			236.74		9,864	
State Control Area Hydro	6,289		3,955	3,964			95.4		3,975	
Total Regional Hydro	19,023		15,568	13,210			332.14		13,839	
Total Renewable Generation										
	Inst. Capacity		PEAK	OFF-PEAK			Day Energy		Day AVG.	
Regional Entities Renewable	480		0	0			2.29		95	
State Control Area Renewable	10,596		2,416	1,937			66.86		2,786	
Total Regional Renewable	11,076		2,416	1,937			69.15		2,881	
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(UP)	-	-	-	-	0.96	0	0.96		
3	132KV-Rihand-Sonnagar (PG)	-	-	-	-	0	0.44	-0.44		
4	220KV-Pusauli (PG)-Sahupuri(UP)	124	129	158	0	2.96	0	2.96		
5	400KV-Biharsharif (PG)-Baliala(PG)	218	260	0	262	5.65	0	5.65		
6	400KV-Biharsharif (PG)-Varanasi(PG)	55	132	0	186	0	2.58	-2.58		
7	400KV-Motihari (DMT)-Gorakhpur(UP)	144	198	232	0	4.19	0	4.19		
8	400KV-Muzaffarpur (PG)-Gorakhpur(UP)	84	352	606	0	7.57	0	7.57		
9	400KV-Patna (PG)-Baliala(PG)	474	619	0	619	12.57	0	12.57		
10	400KV-Sasaram-Allahabad (PG)	-37	144	134	41	1.95	0	1.95		
11	400KV-Sasaram-Varanasi (PG)	40	278	294	0	5.68	0	5.68		
12	765KV-Fatehpur (PG)-Sasaram.	-152	-276	0	320	0	4.27	-4.27		
13	765KV-Gaya (PG)-Baliala(PG)	313	311	0	377	6.3	0	6.3		
14	765KV-Gaya (PG)-Varanasi(PG)	-91	49	-129	216	0	1.2	-1.2		
15	HVDC800KV-Alipurduar-Agra (PG)	1,600	1,600	0	1,600	38.71	0	38.71		
Sub-Total EAST REGION		2,772	3,796	1,295	3,621	86.54	8.49	78.05		
Import/Export between NORTH_EAST REGION and NORTH REGION										
1	HVDC800KV-BiswanathCharialli-Agra (PG)	800	900	0	900	20.24	0	20.24		
Sub-Total NORTH_EAST REGION		800	900	0	900	20.24	0	20.24		
Import/Export between WEST REGION and NORTH REGION										
1	220KV-Auraiya (NT)-Malanpur(PG)	-39	-46	-	135	0	1.44	-1.44		
2	220KV-Bhanpur-Modak	31	68	90	-	1.28	0	1.28		
3	220KV-Ranpur-Bhanpur	9	48	72	-	0.79	0	0.79		
4	400KV-RAPS C (NP)-Sujalpur	134	206	310	90	2.53	0	2.53		
5	400KV-Vindhyachal (PG)-Rihand(NT)	961	922	-	971	0	22.59	-22.59		
6	400KV-Zerda (PG)-Bhinmal(PG)	-160	91	157	316	0	1.51	-1.51		
7	400KV-Zerda (PG)-Kankroli(RJ)	-21	96	137	-78	0.32	0	0.32		

Import/Export between WEST REGION and NORTH REGION								
8	765KV-0rai-Gwalior (PG)	-266	-250	0	288	0	6.29	-6.29
9	765KV-0rai-Jabalpur	1,926	1,756	1,994	0	36.99	0	36.99
10	765KV-0rai-Satna	1,311	1,153	1,343	0	27.12	0	27.12
11	765KV-Chittorgarh-Banaskata D/C	-298	-867	993	0	11.51	0	11.51
12	765KV-Gwalior (PG)-Agra(PG)	2,384	2,110	0	2,480	43.28	0	43.28
13	765KV-Phagi (RJ)-Gwalior(PG)	648	580	881	-	14.45	0	14.45
14	HVDC500KV-Mundra (JH)-Mohindergarh(JH)	1,501	1,798	2,006	0	43.07	0	43.07
15	HVDC500KV-Vindhyachal (PG)-Vindhaychal B/B	-200	-200	0	200	0	4.94	-4.94
16	HVDC800KV-Champa (PG)-Kurukshetra(PG)(PG)	1,500	2,000	3,000	0	48.43	0	48.43
Sub-Total WEST REGION		9,421	9,465	10,983	4,402	229.77	36.77	193
TOTAL IR EXCHANGE		12,993	14,161	12,278	8,923	336.55	45.26	291.29

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	68.22	10.37	0	78.59	78.05	-0.54
NR-WR	142.5	81.13	-2.67	220.96	193	-27.96
Total	210.72	91.5	-2.67	299.55	291.29	-8.26

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)	23.49	16.27		24		0.3573	-0.3573

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	1.3	12.5	48.4	66.9	16.1	4.5	.1	20.6

<-----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.	
50.21	13:01:40	49.68	20:41:00	49.99	0.057	0.075	50.11	49.76	33.1

6.Voltage Profile: 400kV

	Maximum		Minimum		Voltage (in %)				Voltage Deviation Index (% of time)
					< 380	< 390	> 420	> 430	
Ballabgarh(PG) - 400KV	413	08:00	390	20:40	0	0	0	0	0
Bareilly II(PG) - 400KV	416	05:25	389	20:35	0	1.04	0	0	0
Bareilly(UP) - 400KV	418	05:25	390	20:35	0	0	0	0	0
Abdullapur(PG) - 400KV	407	18:15	392	22:40	0	0	0	0	0
Bassi(PG) - 400KV	418	08:00	400	20:35	0	0	0	0	0
Bawana(DTL) - 400KV	414	08:00	397	22:35	0	0	0	0	0
Hisar(PG) - 400KV	412	18:15	396	20:35	0	0	0	0	0
Rihand(NT) - 400KV	405	12:25	405	12:25	2.78	2.78	0	0	2.78
Moga(PG) - 400KV	409	18:15	398	14:15	0	0	0	0	0
Gorakhpur(PG) - 400KV	416	05:30	389	20:30	0	.35	0	0	0
Nallagarh(PG) - 400KV	406	02:35	398	11:20	0	0	0	0	0
Kanpur(PG) - 400KV	415	05:25	394	20:35	0	0	0	0	0
Kashipur(UT) - 400KV					0	0	0	0	0
Amritsar(PG) - 400KV	407	04:00	397	10:20	0	0	0	0	0
Baspa(HP) - 400KV	406	02:35	398	11:20	0	0	0	0	0
Kishenpur(PG) - 400KV	408	04:00	398	10:20	0	0	0	0	0
Rihand HVDC(PG) - 400KV	405	05:25	405	05:25	26.74	26.74	0	0	26.74
Dadri HVDC(PG). - 400KV	415	08:00	415	08:00	2.08	2.08	0	0	2.08

6.1 Voltage Profile: 765kV

	Maximum		Minimum		Voltage (in %)				Voltage Deviation Index
					< 728	< 742	> 800	> 820	
Anta RS(RJ) - 765KV	794	18:05	775	20:35	0	0	0	0	0
Balia(PG) - 765KV	788	05:30	745	20:35	0	0	0	0	0

Bareilly II(PG) - 765KV	804	05:25	744	20:35	0	0	1.74	0	1.74
Bhiwani(PG) - 765KV	794	08:00	763	20:35	0	0	0	0	0
Fatehpur(PG) - 765KV	788	08:00	749	20:35	0	0	0	0	0
Jhatikara(PG) - 765KV	794	08:00	755	20:35	0	0	0	0	0
Lucknow II(PG) - 765KV	801	05:25	744	20:35	0	0	.69	0	.69
Meerut(PG) - 765KV	795	05:25	756	20:35	0	0	0	0	0
Moga(PG) - 765KV	783	08:00	757	20:35	0	0	0	0	0
Phagi(RJ) - 765KV	798	08:05	768	20:25	0	0	0	0	0
Unnao(UP) - 765KV	778	05:25	738	20:35	0	2.08	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	1,891.71	0	0	1,667.41	-604.78	0	91	45.06	-2.19	133.87
HARYANA	2,458.07	182.32	0	2,450.02	36.33	0	106.03	53.94	3.01	162.97
RAJASTHAN	-177.9	-83.34	0	-59.99	4.16	0	54.58	-2.15	0.52	52.94
DELHI	1,056.72	0	0	1,072.03	47.5	0	76.22	23.89	4.26	104.37
UTTAR PRADESH	851.45	1,895.62	0	1,017.79	1,889.63	0	169.34	14.08	20.23	203.66
UTTARAKHAND	-250.33	0.78	0	-249.55	157.91	0	18.89	-6	1.89	14.79
HIMACHAL PRADESH	-1,233.5	-528.95	0	-1,030.38	-612.53	0	36.58	-25.69	-13.65	-2.77
JAMMU & KASHMIR	-530.29	0	0	-531.3	-4.24	0	28.46	-12.74	-0.03	15.69
CHANDIGARH	0	-40.22	0	0	-65.35	0	6.47	0	-0.61	5.85
TOTAL	4,065.93	1,426.21	0	4,336.03	848.63	0	587.57	90.39	13.43	691.37

7(B). Short-Term Open Access Details

State	ISGS/(LT+MT) Schedule		Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
PUNJAB	4,271.22	3,570.77	1,955.89	1,663	0	-604.78	0	0
HARYANA	5,025.14	3,652.03	2,458.07	2,103.42	210.45	-458.45	0	0
RAJASTHAN	3,165.39	1,336.8	-59.99	-177.9	124.48	-376.59	0	0
DELHI	3,607.78	2,661.49	1,331.89	609.15	450.27	-23.12	0	0
UTTAR PRADESH	8,249.01	6,231	1,712.63	172.56	2,674.32	-112.23	0	0
UTTARAKHAND	987.58	662.48	-249.55	-250.33	196.8	0.78	0	0
HIMACHAL PRADESH	1,655.54	1,394.47	-876.96	-1,233.5	-470.71	-753.61	0	0
JAMMU & KASHMIR	1,653.64	792.25	-530.29	-531.31	0	-4.24	0	0
CHANDIGARH	360.28	218.65	0	0	44.08	-95.52	0	0

8.Major Reservoir Particulars

RESERVOIR	Parameters			Present Parameters		LAST YEAR		LAST DAY	
	MDDL (Mts)	FRL (Mts)	Energy Content at FRL	Level (Mts)	Energy (MU)	Level (Mts)	Energy (MU)	Inflow (m3/s)	Usage (m3/s)
Bhakra	445.62	513.59	1,728.8	503.51	1,246	478.16	421	1,785.26	619.15
Chamera-I	748.75	760	753.95	-	-	-	-	-	0
Gandhisagar	381	399.9	725	-	-	-	-	-	0
Jawahar Sagar	295.78	298.7	2.01	-	-	-	-	-	0
Koteshwar	598.5	612.5	610.73	611.16	5	610.25	5	152	148.82
Pong	384.05	426.72	1,084	409.88	494	399.73	210	1,233.06	113.41
RPS	343.81	352.8	175.66	-	-	-	-	-	0
RSD	487.91	527.91	390.3	515.75	6	509.95	6	395.72	273.79
Rihand	252.98	268.22	860.5	255.57	99	257.95	199	-	0
Tehri	740.04	829.79	1,291.49	779.7	317	794.95	528	561.84	152
TOTAL	-	-	-	-	2,167	-	1,369	4,127.88	1,307.17

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	2	17

DELHI	2	20
HARYANA	2	16
HIMACHAL PRADESH	0	12
JAMMU & KASHMIR	2	20
PUNJAB	2	21
RAJASTHAN	2	22
UTTAR PRADESH	0	9
UTTARAKHAND	6	52

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 :

1. 765 KV bay No. 709 at Ajmer S/S of 765 KV Ajmer- Chittorgarh line charged at 15:57 Hrs.
2. 400 KV bay No. 403 and 402 at Nehtaur S/S UP charged at 16:10 and 16:30 Hrs respectively.

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