



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

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

Date of Reporting:02-Apr-2019

1. Regional Availability/Demand:

Evening Peak (19:00) MW				Off-Peak (03:00) MW				Day Energy(Net MU)	
Demand Met	Shortage(-)/Surplus(+)	Requirement	Freq (Hz)	Demand Met	Shortage(-)/Surplus ..	Requirement	Freq (Hz)	Demand Met	Shortage
42,598	527	43,125	49.93	35,741	298	36,039	50.11	946	11.05

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	60.53	7.9	0	4.45	0	2.51	75.38	51	48.95	-2.05	124.33	0	124.33
HARYANA	38.72	0.81	0	0.19	0	1.11	40.83	78.4	77.06	-1.34	118.32	0.43	117.89
RAJASTHAN	125.38	0.85	2.08	18.9	5.38	4.94	157.54	58.11	56.22	-1.89	213.76	0	213.76
DELHI	0	0	3.58	0	0	0	3.58	69.65	68.4	-1.25	71.99	0.01	71.98
UTTAR PRADESH	153.82	6.76	0	4.35	0	19.2	184.14	127.76	126.96	-0.8	311.1	0	311.1
UTTARAKHAND	0	15.45	6.01	0.86	0	0.72	23.05	10.62	11.09	0.47	34.14	0	34.14
HIMACHAL PRADESH	0	6.54	0	0	0	7.19	13.73	10.42	11.2	0.78	24.93	0	24.93
JAMMU & KASHMIR	0	13.67	0	0	0	0	13.67	31.8	30.86	-0.94	55.14	10.61	44.53
CHANDIGARH	0	0	0	0	0	0	0	3.74	3.34	-0.4	3.34	0	3.34
Region	378.45	51.98	11.67	28.75	5.38	35.67	511.92	441.5	434.08	-7.42	957.05	11.05	946

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

State	Evening Peak (19:00) MW				Off-Peak (03:00) MW			
	Demand Met	Shortage(-)/Surplus(+)	UI	STOA/PX Transaction	Demand Met	Shortage(-)/Sur ..	UI	STOA/PX Transaction
PUNJAB	5,252	0	-209	-1,063	4,544	0	-69	-1,365
HARYANA	6,079	0	-83	361	4,106	0	-54	-119
RAJASTHAN	7,766	0	112	-219	7,865	0	191	-114
DELHI	3,366	0	-161	-296	2,337	0	3	-672
UTTAR PRADESH	15,185	0	-300	543	13,042	0	-55	697
UTTARAKHAND	1,601	0	71	5	1,316	0	108	-265
HIMACHAL PRADESH	1,072	0	72	-535	743	0	65	-254
JAMMU & KASHMIR	2,108	527	192	-47	1,691	298	-63	-33
CHANDIGARH	169	0	-37	-25	96	0	6	-35
Region	42,598	527	-343	-1,276	35,740	298	132	-2,160

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	5,898	13:00	0	5,898	5,898	13:00	0	5,898	4,440	5:00
HARYANA	6,132	20:00	0	6,132	6,132	20:00	0	6,132	4,053	4:00
RAJASTHAN	9,783	12:00	0	9,783	9,783	12:00	0	9,783	7,450	5:00
DELHI	3,505	20:00	0	3,505	3,505	20:00	0	3,505	2,233	5:00
UP	16,608	20:00	0	16,608	16,608	20:00	0	16,608	10,977	9:00
UTTARAKHAND	1,603	20:00	0	1,603	1,603	20:00	0	1,603	1,283	2:00
HP	1,336	8:00	0	1,336	1,336	8:00	0	1,336	743	3:00
J&K	2,176	20:00	544	2,720	2,720	20:00	544	2,176	1,544	14:00
CHANDIGARH	170	20:00	0	170	170	20:00	0	170	95	2:00
NR	45,558	20:00	544	46,102	46,102	20:00	544	45,558	34,826	4:00

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	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BADARPUR TPS( 2 * 210 + 3 * 100 )	705	0	0	0			
RAJGHAT TPS( 2 * 67.5 )	135	0	0	0			
Total THERMAL	840	0	0			0	0
BAWANA GPS( 2 * 253 + 4 * 216 )	1,370	0	0	0			
DELHI GAS TURBINES( 3 * 34 + 6 * 30 )	282	39	41	41	03:00	0.9	38
PRAGATI GAS TURBINES( 1 * 121.2 + 2 * 104.6 )	331	146	52	148	22:00	2.69	112
RITHALA GPS( 3 * 36 )	108	0	0	0			
Total GAS/NAPTHA/DIESEL	2,091	185	93			3.59	150
WIND	0	0	0	0			
BIOMASS( 1 * 16 )	16	0	0	0			
SOLAR( 1 * 2 )	2	0	0	0			
Total DELHI	2,949	185	93			3.59	150

HARIYANA							
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
DCRTPP (YAMUNA NAGAR)( 2 * 300 )	600	479	497	0		11.35	473
JHAJJAR(CLP)( 2 * 660 )	1,320	742	739	0		17.85	744
MAGNUM DIESEL (IPP)( 4 * 6.3 )	25	0	0	0			
PANIPAT TPS( 2 * 210 + 2 * 250 )	920	395	395	0		9.53	397
RGTPP( KHEDAR)( 2 * 600 )	1,200	0	0	0			
Total THERMAL	4,065	1,616	1,631			38.73	1,614
FARIDABAD GPS( 1 * 156.07 + 2 * 137.75 )	432	0	0	0			
Total GAS/NAPTHA/DIESEL	432	0	0			0	0
TOTAL HYDRO HARYANA( 1 * 62 )	62	34	25	0		0.81	34
Total HYDEL	62	34	25			0.81	34
WIND	0	0	0	0			
BIOMASS( 1 * 106 )	106	0	0	0		1.11	46
SOLAR( 1 * 50 )	50	0	0	0		0.19	8
Total HARYANA	4,715	1,650	1,656			40.84	1,702

HIMACHAL PRADESH							
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BASPA (IPP) HPS( 3 * 100 )	300	72	0	0		1.14	48
MALANA (IPP) HPS( 2 * 43 )	86	36	10	0		0.68	28
OTHER HYDRO HP( 1 * 372 )	372	257	173	0		4.71	196
Total HYDEL	758	365	183			6.53	272
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO( 1 * 486 )	486	312	309	0		7.19	300
Total SMALL HYDRO	486	312	309			7.19	300
Total HP	1,244	677	492			13.72	572

JAMMU & KASHMIR							
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
GAS/DIESEL/OTHERS J&K( 1 * 190 )	190	0	0	0			
Total GAS/NAPTHA/DIESEL	190	0	0			0	0
BAGLIHAR (IPP) HPS( 6 * 150 )	900	442	442	0		10.61	442
OTHER HYDRO/IPP J&K( 1 * 308 )	308	181	96	0		3.05	127
Total HYDEL	1,208	623	538			13.66	569
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	623	538			13.66	569

PUNJAB							
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
GOINDWAL(GVK)( 2 * 270 )	540	290	290	320		7.1	296
GURU GOBIND SINGH TPS (ROPAR)( 6 * 210 )	1,260	0	0	0		-0.08	-3
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)( 2 * 210 + 2 * 250 )	920	175	177	179		4.15	173
GURU NANAK DEV TPS (BHATINDA)( 4 * 110 )	460	0	0	0		-0.01	0
RAJPURA(NPL) TPS( 2 * 700 )	1,400	660	648	660		15.78	658
TALWANDI SABO TPS( 3 * 660 )	1,980	1,125	1,700	1,831		33.59	1,400
Total THERMAL	6,560	2,250	2,815			60.53	2,524
TOTAL HYDRO PUNJAB( 1 * 1000 )	1,000	382	261	441		7.9	329
Total HYDEL	1,000	382	261			7.9	329
WIND	0	0	0	0			
BIOMASS( 1 * 303 )	303	0	0	0		2.51	105
SOLAR( 1 * 859 )	859	0	0	584		4.45	185
Total PUNJAB	8,722	2,632	3,076			75.39	3,143

RAJASTHAN							
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BARSINGSAR (IPP) LTPS( 2 * 125 )	250	218	220	0		5.25	219
CHHABRA TPS( 1 * 660 + 4 * 250 )	1,660	1,862	1,687	0		44.99	1,875
GIRAL (IPP) LTPS( 2 * 125 )	250	0	0	0			
KALISINDH TPS( 2 * 600 )	1,200	879	900	0		22.27	928
KAWAI TPS( 2 * 660 )	1,320	1,008	866	0		22.23	926
KOTA TPS( 2 * 110 + 2 * 195 + 3 * 210 )	1,240	480	435	0		11.16	465
RAJWEST (IPP) LTPS( 8 * 135 )	1,080	492	391	0		12.6	525
SURATGARH TPS ( 6 * 250 )	1,500	176	162	0		5.25	219
VSLPP (IPP)( 1 * 135 )	135	67	68	0		1.64	68
Total THERMAL	8,635	5,182	4,729			125.39	5,225
DHOLPUR GPS( 3 * 110 )	330	0	0	0			
RAMGARH GPS( 1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5 )	271	85	90	0		2.08	87
Total GAS/NAPTHA/DIESEL	601	85	90			2.08	87
RAPS-A( 1 * 100 + 1 * 200 )	300	178	181	0		4.29	179
Total NUCLEAR	300	178	181			4.29	179
TOTAL HYDRO RAJASTHAN( 1 * 550 )	550	43	21	0		0.85	35
Total HYDEL	550	43	21			0.85	35
WIND	4,292	237	389	0		5.38	224
BIOMASS( 1 * 102 )	102	27	27	0		0.66	28
SOLAR( 1 * 1995 )	1,995	115	0	0		18.9	788
Total RAJASTHAN	16,475	5,867	5,437			157.55	6,566

UTTAR PRADESH							
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
ANPARA TPS( 2 * 500 + 3 * 210 )	1,630	1,422	1,420	0		30.55	1,273
ANPARA-C TPS( 2 * 600 )	1,200	1,098	1,067	0		19.57	815
ANPARA-D TPS( 2 * 500 )	1,000	937	926	0		21.55	898
BAJAJ ENERGY PVT LTD (IPP) TPS( 10 * 45 )	450	0	0	0			
BARA PPGCL TPS( 3 * 660 )	1,980	926	667	0		18.01	750
HARDUAGANJ TPS( 1 * 105 + 1 * 60 + 2 * 250 )	665	429	2,346	0		7.08	295
LALITPUR TPS( 3 * 660 )	1,980	763	679	0		18.36	765
MEJA TPS( 1 * 660 )	660	0	0	0			
OBRA TPS ( 2 * 94 + 5 * 200 )	1,188	498	440	0		8.83	368
PANKI TPS( 2 * 105 )	210	0	0	0			
PARICHA TPS( 2 * 110 + 2 * 210 + 2 * 250 )	1,160	313	246	0		6.97	290
ROSA TPS( 4 * 300 )	1,200	810	592	0		16.72	697
TANDA TPS( 4 * 110 )	440	308	215	0		6.18	258
Total THERMAL	13,763	7,504	8,598			153.82	6,409
ALAKHANDA HEP( 4 * 82.5 )	330	165	83	0		2.61	109
VISHNUPARYAG HPS( 4 * 110 )	440	88	88	0		2.11	88
OTHER HYDRO UP( 1 * 527 )	527	122	87	0		2.04	85
Total HYDEL	1,297	375	258			6.76	282
WIND	0	0	0	0			
BIOMASS( 1 * 26 )	26	0	0	0			
SOLAR( 1 * 472 )	472	0	0	0		4.35	181
CO-GENERATION( 1 * 1360 )	1,360	800	800	0		19.2	800
Total OTHERs	1,360	800	800			19.2	800
Total UP	16,918	8,679	9,656			184.13	7,672

UTTARAKHAND							
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
TOTAL GAS UK( 1 * 450 )	450	285	298	299	04:00	6.01	250
Total GAS/NAPTHA/DIESEL	450	285	298			6.01	250
OTHER HYDRO UK( 1 * 1250 )	1,250	653	618	691	00:00	15.45	644
Total HYDEL	1,250	653	618			15.45	644
WIND	0	0	0	0			
BIOMASS( 1 * 127 )	127	30	31	31	08:00	0.72	30
SOLAR( 1 * 100 )	100	0	0	103	12:00	0.86	36
SMALL HYDRO( 1 * 180 )	180	0	0	0			
Total SMALL HYDRO	180	0	0			0	0
Total UTTARAKHAND	2,107	968	947			23.04	960

3(B) Regional Entities Generation										
Station/Constituents	Inst. Capacity	Declared Capacity	19:00	03:00	Day Peak		Day Energy		AVG. MW	UI
	(MW)	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	SCHD (MU)	ACT (MU)		
BBMB										
BHAKRA HPS( 2 * 108 + 3 * 126 + 5 * 157 )	1,379	614.61	1,157	434	1,157	19:00	14.75	14.8	617	0.05
DEHAR HPS( 6 * 165 )	990	469.32	645	330	645	19:00	11.26	11.49	479	0.23
PONG HPS( 6 * 66 )	396	20.34	132	0	132	19:00	0.49	0.51	21	0.02
Sub-Total	2,765	1,104.27	1,934	764	-	-	26.5	26.8	1,117	0.3
NHPC										
BAIRASIUL HPS( 3 * 60 )	180	0	0	0	0	-	0	0	0	0
CHAMERA HPS( 3 * 180 )	540	536.2	543	324	551	14:30	10.7	10.72	447	0.02
CHAMERA II HPS( 3 * 100 )	300	296.85	301	182	304	21:00	3.96	4.03	168	0.07
CHAMERA III HPS( 3 * 77 )	231	232.12	236	155	236	19:00	2.54	2.51	105	-0.03
DHAULIGANGA HPS( 4 * 70 )	280	180.92	144	68	145	21:00	1.97	1.99	83	0.02
DULHASTI HPS( 3 * 130 )	390	260	261	253	269	00:00	6.06	6.08	253	0.02
KISHANGANGA( 2 * 110 )	220	225	249	221	257	06:00	5.4	5.41	225	0.01
PARBATI III HEP( 4 * 130 )	520	0	0	0	0	-	0	0	0	0
SALAL HPS( 6 * 115 )	690	474.22	440	570	575	15:00	11.38	11.65	485	0.27
SEWA-II HPS( 3 * 40 )	120	125.62	132	130	132	19:00	3.02	3.04	127	0.02
TANAKPUR HPS( 1 * 31.42 + 2 * 31.4 )	94	38.1	39	42	57	13:00	0.91	0.94	39	0.03
URI HPS( 4 * 120 )	480	479.38	480	480	484	05:00	11.5	11.53	480	0.03
URI-II HPS( 4 * 60 )	480	242.1	246	245	247	21:00	5.81	5.83	243	0.02
Sub-Total	4,525	3,090.51	3,071	2,670	-	-	63.25	63.73	2,655	0.48
NPCL										
NAPS( 2 * 220 )	440	396	431	439	446	07:00	9.5	9.57	399	0.07
RAPS-B( 2 * 220 )	440	355	398	406	398	19:00	8.52	8.63	360	0.11
RAPS-C( 2 * 220 )	440	210	233	235	238	02:00	5.04	4.92	205	-0.12
Sub-Total	1,320	961	1,062	1,080	-	-	23.06	23.12	964	0.06
NTPC										
ANTA GPS( 1 * 153.2 + 3 * 88.71 )	419	404.71	0	0	0	-	0	0.02	1	0.02
AURAIYA GPS( 2 * 109.3 + 4 * 111.19 )	663	639.84	0	0	0	-	0	0.03	1	0.03
DADRI GPS( 2 * 154.51 + 4 * 130.19 )	830	379.17	227	226	318	-	5.43	5.37	224	-0.06
DADRI SOLAR( 1 * 5 )	5	1.02	0	0	3	11:56	0.02	0.02	1	0
DADRI-I TPS( 4 * 210 )	840	768.6	515	421	515	19:00	10.18	10.36	432	0.18
DADRI-II TPS( 2 * 490 )	980	464.27	305	276	305	19:00	6.41	6.77	282	0.36
ISTPP (JHAJJAR)( 3 * 500 )	1,500	1,421.25	288	370	288	19:00	7.9	7.25	302	-0.65
KOLDAM HPS( 4 * 200 )	800	872	874	0	874	19:00	5.75	5.96	248	0.21
RIHAND-I STPS( 2 * 500 )	1,000	922.5	985	946	985	19:00	20.25	20.83	868	0.58
RIHAND-II STPS( 2 * 500 )	1,000	942.5	1,009	957	1,009	19:00	22.03	22.11	921	0.08
RIHAND-III STPS( 2 * 500 )	1,000	942.5	971	930	971	19:00	19.83	20.86	869	1.03
SINGRAULI STPS( 2 * 500 + 5 * 200 )	2,000	1,830	1,982	1,947	1,995	23:00	35.77	39.01	1,625	3.24
SINGRAULI SOLAR( 1 * 15 )	15	2.97	0	0	0	-	0.07	0.08	3	0.01
UNCHAHAH II TPS( 2 * 210 )	420	382.2	259	230	259	19:00	5.26	5.82	243	0.56
UNCHAHAH III TPS( 1 * 210 )	210	191.1	132	119	132	19:00	2.63	2.83	118	0.2
UNCHAHAH IV TPS( 1 * 500 )	500	471.25	359	275	359	19:00	6.89	7.35	306	0.46
UNCHAHAH SOLAR( 1 * 10 )	10	2.48	0	0	0	-	0.06	0.05	2	-0.01
UNCHAHAH TPS( 2 * 210 )	420	382.2	250	233	250	19:00	5.22	5.73	239	0.51
Sub-Total	12,612	11,020.56	8,156	6,930	-	-	153.7	160.45	6,685	6.75
SJVNL										
NATHPA-JHAKRI HPS( 6 * 250 )	1,500	1,497.38	1,539	0	1,539	19:00	10.7	10.65	444	-0.05
RAMPUR HEP( 6 * 68.67 )	412	412.25	441	0	441	19:00	2.98	3.01	125	0.03
Sub-Total	1,912	1,909.63	1,980	0	-	-	13.68	13.66	569	-0.02
THDC										
KOTESHWAR HPS( 4 * 100 )	400	136.21	310	92	310	19:00	3.27	3.3	138	0.03
TEHRI HPS( 4 * 250 )	1,000	555	568	0	573	10:00	7.7	7.72	322	0.02
Sub-Total	1,400	691.21	878	92	-	-	10.97	11.02	460	0.05
Total	24,534	18,777.18	17,081	11,536			291.16	298.78	12,450	7.62

IPP/JV

Station/Constituents	Inst. Capacity	Declared Capacity	19:00	03:00	Day Peak		Day Energy		AVG. MW	UI
	(MW)	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	SCHD (MU)	ACT (MU)		
IPP										
ADHPL(IPP) HPS( 2 * 96 )	192	0	74	0	82	22:00	1.05	0.83	35	-0.22
BUDHIL HPS (IPP)( 2 * 35 )	70	0	34	34	35	01:00	0.82	0.76	32	-0.06
KARCHAM WANGTOO HPS( 4 * 250 )	1,000	0	1,000	0	1,000	06:00	5.93	5.91	246	-0.02
MALANA2( 2 * 50 )	100	0	0	20	105	12:00	0.52	0.55	23	0.03
SAINJ HEP( 2 * 50 )	50	0	0	0	0	-	0	0	0	0
SHREE CEMENT (IPP) TPS( 2 * 150 )	300	0	290	177	295	21:00	5.55	5.46	228	-0.09
Sub-Total	1,712	0	1,398	231	-	-	13.87	13.51	564	-0.36
Total	1,712	0	1,398	231			13.87	13.51	564	-0.36

Summary Section					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Total State Control Area Generation	54,626	21,281	21,895	511.92	21,330
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		5,961	5,270	145.67	8,631
Total Regional Availability(Gross)	80,872	45,721	38,932	969.88	42,973

Total Hydro Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Hydro	12,814	9,845	3,580	129.22	5,384
State Control Area Hydro	6,125	2,475	1,904	51.96	2,165
Total Regional Hydro	18,939	12,320	5,484	181.18	7,549

Total Renewable Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Renewable	30	0	0	0.15	6
State Control Area Renewable	9,214	721	756	46.32	1,930
Total Regional Renewable	9,244	721	756	46.47	1,936

4(A) INTER-REGIONAL EXCHANGES (Import=(+ve) /Export =(-ve))								
SL.No.	Element	19:00	03:00	Maximum Interchange (MW)		Import in MU	Export in MU	NET
		(MW)	MW	Import (MW)	Export (MW)			
Import/Export between EAST REGION and NORTH REGION								
1	132KV-Garhwa-Rihand	-	-	-	-	0	0.61	-0.61
2	132KV-Karmnasa(PG)-Sahupuri(U ..	-	-	-	-	0.96	0	0.96
3	132KV-Rihand-Sonnagar(PG)	-	-	-	-	-	-	-
4	220KV-Pusauli(PG)-Sahupuri(UP)	123	158	168	0	3.65	0	3.65
5	400KV-Biharsharif(PG)-Balia(PG)	224	180	273	0	4.84	0	4.84
6	400KV-Biharsharif(PG)-Varanasi(P..	-4	-26	180	0	2.19	0	2.19
7	400KV-Fatehpur(UP)-Sasaram	-	-	-	-	-	-	-
8	400KV-Motihari(DMT)-Gorakhpur ..	196	162	286	0	5.42	0	5.42
9	400KV-Muzaffarpur(PG)-Gorakhp ..	394	550	802	0	11.42	0	11.42
10	400KV-Patna(PG)-Balia(PG)	671	454	834	0	14.32	0	14.32
11	400KV-Sasaram-Allahabad(PG)	8	14	42	0	0.52	0	0.52
12	400KV-Sasaram-Varanasi(PG)	55	-28	55	0	0.92	0	0.92
13	765KV-Fatehpur(PG)-Sasaram.	91	44	260	0	3.6	0	3.6
14	765KV-Gaya(PG)-Balia(PG)	183	152	215	0	3.7	0	3.7
15	765KV-Gaya(PG)-Varanasi(PG)	74	143	374	0	5.69	0	5.69
16	HVDC PUSAULI B/B	-	-	-	-	-	-	-
17	HVDC800KV-Alipurduar-Agra(PG)	-	-	-	-	-	-	-
Sub-Total EAST REGION		2,015	1,803	3,489	0	57.23	0.61	56.62

Import/Export between NORTH_EAST REGION and NORTH REGION								
1	HVDC800KV-BiswanathCharialli- ..	-700	-700	0	700	0	16.38	-16.38
Sub-Total NORTH_EAST REGION		-700	-700	0	700	0	16.38	-16.38

Import/Export between WEST REGION and NORTH REGION								
1	220KV-Auraiya(NT)-Malanpur(PG)	-31	-59	-	100	0	1.09	-1.09
2	220KV-Badod(MP)-Modak(RJ)	-	-	-	-	-	-	-
3	220KV-Ranpur-Bhanpur	2	23	81	-	0.97	0	0.97
4	220KV-Ranpur-Modak	34	53	110	-	1.62	0	1.62
5	400KV-RAPS C(NP)-Sujalpur	148	120	196	20	2.68	0	2.68
6	400KV-Vindhyachal(PG)-Rihand(N ..	-922	-884	-	957	0	20.86	-20.86
7	400KV-Zerda(PG)-Bhinmal(PG)	87	-18	108	103	0.25	0	0.25
8	400KV-Zerda(PG)-Kankroli(RJ)	-40	-110	0	197	0	2.69	-2.69
9	765KV-0rai-Gwalior(PG)	-324	-387	0	451	0	9.32	-9.32
10	765KV-0rai-Jabalpur	771	728	1,150	0	18.91	0	18.91
11	765KV-0rai-Satna	1,168	1,064	1,291	0	27.01	0	27.01
12	765KV-Chittorgarh-Banaskata D/C	-	-	-	-	-	-	-
13	765KV-Gwalior(PG)-Agra(PG)	1,902	1,502	1,968	0	36.32	0	36.32
14	765KV-Phagi(RJ)-Gwalior(PG)	303	587	814	-	14.1	0	14.1
15	HVDC500KV-Mundra(JH)-Mohind..	1,198	1,198	1,602	0	29.86	0	29.86
16	HVDC500KV-Vindhyachal(PG)-Vindhaychal B/B	-200	-200	0	200	0	4.84	-4.84
17	HVDC800KV-Champa(PG)-Kuruks..	550	550	550	0	12.51	0	12.51
Sub-Total WEST REGION		4,646	4,167	7,870	2,028	144.23	38.8	105.43
TOTAL IR EXCHANGE		5,961	5,270	11,359	2,728	201.46	55.79	145.67

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	56.1	-26.82	-0.15	29.13	56.62	27.49
NR-WR	144.55	14.86	-32.97	126.44	105.43	-21.01
Total	200.65	-11.96	-33.12	155.57	145.67	-9.9

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	-25		33		0.6198	-0.6198

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	.3	1.2	11.4	52.4	69	15.5	4.1	.1	19.6

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

Maximum		Minimum		Average	Freq Variation	Standard	Freq. in 15 mnt blk		Freq Dev Index
Frequency	Time	Frequency	Time				Max.	Min.	
50.21	13:02:30	0	16:01:30	49.97	11.629	1.078	50.11	48.82	31

6.Voltage Profile: 400kV

	Maximum		Minimum		Voltage (in %)				Voltage Deviation Index (% of time)
STATION	VOLTAGE	TIME	VOLTAGE	TIME	< 380	< 390	> 420	> 430	
Abdullapur(PG) - 400KV	425	02:20	407	18:55	0	0	18.06	0	18.06
Amritsar(PG) - 400KV					0	0	14.24	0	14.24
Ballabgarh(PG) - 400KV	423	02:20	408	19:30	0	0	18.06	0	18.06
Bareilly II(PG) - 400KV	420	08:00	401	19:20	0	0	.69	0	.69
Bareilly(UP) - 400KV	421	07:55	402	19:20	0	0	2.08	0	2.08
Baspa(HP) - 400KV					0	0	18.4	0	18.4
Bassi(PG) - 400KV	415	04:00	396	22:35	0	0	0	0	0
Bawana(DTL) - 400KV	428	02:20	410	18:55	0	0	41.32	0	41.32
Dadri HVDC(PG). - 400KV					0	0	32.29	0	32.29
Gorakhpur(PG) - 400KV					0	0	0	0	0
Hisar(PG) - 400KV	423	02:25	406	18:55	0	0	4.51	0	4.51
Kanpur(PG) - 400KV					0	0	2.08	0	2.08
Kashipur(UT) - 400KV					0	0	0	0	0
Kishenpur(PG) - 400KV					0	0	0	0	0
Moga(PG) - 400KV					0	0	0	0	0
Nallagarh(PG) - 400KV					0	0	18.4	0	18.4
Rihand HVDC(PG) - 400KV					.35	.35	0	0	.35
Rihand(NT) - 400KV					.35	.35	0	0	.35

6.1 Voltage Profile: 765kV

	Maximum		Minimum		Voltage (in %)				Voltage Deviation Index (% of time)
STATION	VOLTAGE	TIME	VOLTAGE	TIME	< 728	< 742	> 800	> 820	
Anta RS(RJ) - 765KV	784	02:25	765	22:40	0	0	0	0	0
Balia(PG) - 765KV	785	07:55	750	19:20	0	0	0	0	0
Bareilly II(PG) - 765KV	799	07:55	763	19:20	0	0	0	0	0
Bhiwani(PG) - 765KV	800	02:20	776	18:55	0	0	0	0	0
Fatehpur(PG) - 765KV	775	08:00	747	19:20	0	0	0	0	0
Jhatikara(PG) - 765KV	801	02:35	771	19:20	0	0	1.04	0	1.04
Lucknow II(PG) - 765KV	-	-	-	-	0	0	0	0	0
Meerut(PG) - 765KV	-	-	-	-	0	0	1.74	0	1.74
Moga(PG) - 765KV	-	-	-	-	0	0	0	0	0
Phagi(RJ) - 765KV	794	02:25	770	19:20	0	0	0	0	0
Unnao(UP) - 765KV	-	-	-	-	0	17.71	0	0	0

7(A). Short-Term Open Access Details:

State	Off- Peak Hours (03:00)			Peak Hours (19:00)			Day Energy (MU)			
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	ISGS / (LT+MT) Schedule	BILT Schedule	PX Schedule	Total (MU)
PUNJAB	-1,364.97	0	0	-1,062.76	0	0	77.13	-27.62	1.49	51
HARYANA	178.73	-297.45	0	318.78	42.27	0	73.28	5.18	-0.06	78.4
RAJASTHAN	-130.02	15.58	0	-130.02	-89.06	0	67.73	-3.12	-6.49	58.11
DELHI	-96.16	-576.21	0	-95.67	-199.9	0	77.06	-2.31	-5.1	69.65
UTTAR PRADESH	811.22	-113.77	0	626.61	-83.64	0	118.15	16.03	-6.42	127.76
UTTARAKHAND	191.2	-456.37	0	191.2	-185.93	0	13.04	4.59	-7	10.62
HIMACHAL PRADESH	-27.02	-227.47	0	-27.52	-507	0	18.58	-0.77	-7.39	10.42
JAMMU & KASHMIR	-33.34	0	0	-33.34	-13.33	0	32.85	-0.8	-0.25	31.8
CHANDIGARH	0	-35.26	0	0	-25.18	0	4.3	0	-0.55	3.74
TOTAL	-470.36	-1,690.95	0	-212.72	-1,061.77	0	482.12	-8.82	-31.77	441.5

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	3,906.39	2,786.16	-1,062.76	-1,364.97	397.08	0	0	0
HARYANA	4,242.57	2,194.39	318.78	143.64	131.66	-559.17	0	0
RAJASTHAN	3,748.33	1,988.31	-130.02	-130.02	292.49	-1,620.8	0	0
DELHI	3,593.55	2,773.54	-95.67	-96.31	109.2	-671.9	0	0
UTTAR PRADESH	6,703.39	3,391.94	811.22	527.47	-73.87	-1,218.89	0	0
UTTARAKHAND	895.06	316.51	191.2	191.2	-159.18	-456.37	0	0
HIMACHAL PRADESH	1,473.55	355.23	-26.87	-69.14	187.45	-1,024.94	0	0
JAMMU & KASHMIR	1,697.54	1,141.45	-33.34	-33.34	0	-13.33	0	0
CHANDIGARH	264.75	119.01	0	0	0	-60.44	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	492.55	818	472.25	303	406.35	418.47
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	408.43	445	394.06	112	131.98	29.42
RPS	343.81	352.8	-	-	-	-	-	0
RSD	487.91	527.91	519.59	5	495.8	1	311.93	191.77
Rihand	252.98	268.22	-	-	-	-	-	0
Tehri	740.04	829.79	773	241	765.25	165	100.44	222
TOTAL	-	-	-	1,509	-	581	950.7	861.66

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 15 in a day)	Maximum number of continuous blocks without sign change
CHANDIGARH	9	23
DELHI	9	19
HARYANA	4	9
HIMACHAL PRADESH	0	6
JAMMU & KASHMIR	5	13
PUNJAB	2	11
RAJASTHAN	0	6
UTTAR PRADESH	1	10
UTTARAKHAND	5	17

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