



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

Power Supply Position in Northern Region For 30-Dec-2018

Date of Reporting:31-Dec-2018

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
43,833	558	44,390	50.05	30,756	342	31,098	50.08	941	11.76

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	63.74	12.73	0	3.8	0	1.07	81.34	25.2	24.72	-0.48	106.06	0	106.06
HARYANA	46.35	0.46	2.95	0.13	0	1.03	50.93	67.21	69.39	2.18	120.32	0	120.32
RAJASTHAN	137.97	3.93	1.36	15.46	5.24	3.63	167.59	69.16	69.41	0.25	237	0	237
DELHI	-0.01	0	15.61	0	0	1.03	16.63	50.01	49.86	-0.15	66.49	0	66.49
UTTAR PRADESH	149.2	7	0	2.6	0	21.6	180.4	111.46	111.06	-0.4	291.46	0	291.46
UTTARAKHAND	0	9.61	4.67	0.5	0	0.89	15.67	21.77	21.4	-0.37	37.07	0	37.07
HIMACHAL PRADESH	0	3.39	0	0	0	2	5.38	23.7	23.82	0.12	29.2	0	29.2
JAMMU & KASHMIR	0	5.1	0	0	0	0	5.1	45.3	44.78	-0.52	61.64	11.76	49.88
CHANDIGARH	0	0	0	0	0	0	0	3.12	3.2	0.08	3.2	0	3.2
Region	397.25	42.22	24.59	22.49	5.24	31.25	523.04	416.93	417.64	0.71	952.44	11.76	940.68

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	4,892	0	54	-1,692	3,495	0	195	-1,495
HARYANA	5,985	0	132	-930	4,266	0	35	-881
RAJASTHAN	9,479	0	-155	-982	8,212	0	-4	77
DELHI	3,247	0	81	-644	1,657	0	46	-1,415
UTTAR PRADESH	14,449	0	15	111	8,943	0	-46	112
UTTARAKHAND	1,943	0	34	363	1,266	0	19	447
HIMACHAL PRADESH	1,461	0	71	677	891	0	13	446
JAMMU & KASHMIR	2,231	558	-107	1,151	1,937	342	88	707
CHANDIGARH	147	0	-33	0	87	0	-10	-30
Region	43,834	558	92	-1,946	30,754	342	336	-2,032

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	5,396	9:00	0	5,396	5,396	9:00	0	5,396	3,288	24:00
HARYANA	5,985	19:00	0	5,985	5,985	19:00	0	5,985	4,169	24:00
RAJASTHAN	12,649	10:00	0	12,649	12,649	10:00	0	12,649	7,426	5:00
DELHI	4,120	12:00	0	4,120	4,120	12:00	0	4,120	1,573	5:00
UP	14,449	19:00	0	14,449	14,449	19:00	0	14,449	8,943	3:00
UTTARAKHAND	1,965	8:00	0	1,965	1,965	8:00	0	1,965	1,256	2:00
HP	1,596	11:00	0	1,596	1,596	11:00	0	1,596	881	4:00
J&K	2,554	8:00	638	3,192	3,192	8:00	638	2,554	1,828	6:00
CHANDIGARH	206	9:00	0	206	206	9:00	0	206	87	3:00
NR	45,403	10:00	1,024	46,427	46,427	10:00	1,024	45,403	30,756	3:00

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		-0.01	0
RAJGHAT TPS(2 * 67.5)	135	0	0	0			
Total THERMAL	840	0	0			-0.01	0
BAWANA GPS(2 * 253 + 4 * 216)	1,370	450	451	0		10.74	448
DELHI GAS TURBINES(3 * 34 + 6 * 30)	282	42	82	0		0.93	39
PRAGATI GAS TURBINES(1 * 121.2 + 2 * 104.6)	331	164	164	0		3.94	164
RITHALA GPS(3 * 36)	108	0	0	0			
Total GAS/NAPHTHA/DIESEL	2,091	656	697			15.61	651
WIND	0	0	0	0			
BIOMASS(1 * 16)	16	44	32	0		1.03	43
SOLAR(1 * 2)	2	0	0	0			
Total DELHI	2,949	700	729			16.63	694

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	493	499	0		12.08	503
JHAJJAR(CLP)(2 * 660)	1,320	761	384	0		14.21	592
MAGNUM DIESEL (IPP)(4 * 6.3)	25	0	0	0			
PANIPAT TPS(2 * 210 + 2 * 250)	920	403	404	0		10.18	424
RGTPP(KHEDAR)(2 * 600)	1,200	394	389	0		9.89	412
Total THERMAL	4,065	2,051	1,676			46.36	1,931
FARIDABAD GPS(1 * 156.07 + 2 * 137.75)	432	76	61	0		2.95	123
Total GAS/NAPHTHA/DIESEL	432	76	61			2.95	123
TOTAL HYDRO HARYANA(1 * 62)	62	12	17	0		0.46	19
Total HYDEL	62	12	17			0.46	19
WIND	0	0	0	0			
BIOMASS(1 * 106)	106	0	0	0		1.03	43
SOLAR(1 * 50)	50	0	0	0		0.13	5
Total HARYANA	4,715	2,139	1,754			50.93	2,121

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	33	33	119	08:00	1.11	46
MALANA (IPP) HPS(2 * 43)	86	41	0	46	09:00	0.25	10
OTHER HYDRO HP(1 * 372)	372	132	8	0		2.02	84
Total HYDEL	758	206	41			3.38	140
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	10.8146	13:00	0	0
SMALL HYDRO(1 * 486)	486	140	51	0		2	83
Total SMALL HYDRO	486	140	51			2	83
Total HP	1,244	346	92			5.38	223

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/NAPHTHA/DIESEL	190	0	0			0	0
BAGLIHAR (IPP) HPS(6 * 150)	900	148	147	0		3.5	146
OTHER HYDRO/IPP J&K(1 * 308)	308	95	55	0		1.6	67
Total HYDEL	1,208	243	202			5.1	213
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	243	202			5.1	213

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	290		7.07	295
GURU GOBIND SINGH TPS (ROPAR)(6 * 210)	1,260	0	146	146		2.54	106
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)(2 * 210 + 2 * 250)	920	161	162	162		3.23	135
GURU NANAK DEV TPS (BHATINDA)(4 * 110)	460	0	0	0		-0.01	0
RAJPURA(NPL) TPS(2 * 700)	1,400	1,290	660	1,320		24.99	1,041
TALWANDI SABO TPS(3 * 660)	1,980	924	924	1,683		25.92	1,080
Total THERMAL	6,560	2,665	2,182			63.74	2,657
TOTAL HYDRO PUNJAB(1 * 1000)	1,000	471	449	507		12.73	530
Total HYDEL	1,000	471	449			12.73	530
WIND	0	0	0	0			
BIOMASS(1 * 303)	303	0	0	0		1.07	45
SOLAR(1 * 859)	859	0	0	510		3.8	158
Total PUNJAB	8,722	3,136	2,631			81.34	3,390

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	224	223	0		5.28	220
CHHABRA TPS(1 * 660 + 4 * 250)	1,660	1,878	1,608	0		43.44	1,810
GIRAL (IPP) LTPS(2 * 125)	250	0	0	0			
KALISINDH TPS(2 * 600)	1,200	1,119	808	0		23.22	968
KAWAI TPS(2 * 660)	1,320	1,149	848	0		25.08	1,045
KOTA TPS(2 * 110 + 2 * 195 + 3 * 210)	1,240	807	906	0		20.99	875
RAJWEST (IPP) LTPS(8 * 135)	1,080	658	426	0		14.33	597
SURATGARH TPS(6 * 250)	1,500	178	180	0		4.55	190
VSLPP (IPP)(1 * 135)	135	45	46	0		1.08	45
Total THERMAL	8,635	6,058	5,045			137.97	5,750
DHOLPUR GPS(3 * 110)	330	0	0	0			
RAMGARH GPS(1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5)	271	55	55	0		1.36	57
Total GAS/NAPHTHA/DIESEL	601	55	55			1.36	57
RAPS-A(1 * 100 + 1 * 200)	300	135	134	0		3.15	131
Total NUCLEAR	300	135	134			3.15	131
TOTAL HYDRO RAJASTHAN(1 * 550)	550	129	192	0		3.93	164
Total HYDEL	550	129	192			3.93	164
WIND	4,292	144	272	0		5.24	218
BIOMASS(1 * 102)	102	20	20	0		0.48	20
SOLAR(1 * 1995)	1,995	2	0	0		15.46	644
Total RAJASTHAN	16,475	6,543	5,718			167.59	6,984

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	1,426	1,226	0		33.8	1,408
ANPARA-C TPS(2 * 600)	1,200	1,092	611	0		24.2	1,008
ANPARA-D TPS(2 * 500)	1,000	943	930	0		21.7	904
BAJAJ ENERGY PVT LTD (IPP) TPS(10 * 45)	450	0	0	0			
BARA PPGCL TPS(3 * 660)	1,980	1,078	663	0		23	958
HARDUAGANJ TPS(1 * 105 + 1 * 60 + 2 * 250)	665	445	250	0		8.8	367
LALITPUR TPS(3 * 660)	1,980	627	343	0		11.8	492
MEJA TPS(1 * 660)	660	0	0	0			
OBRA TPS (2 * 94 + 5 * 200)	1,188	348	217	0		7.4	308
PANKI TPS(2 * 105)	210	0	0	0			
PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)	1,160	519	341	0		10.7	446
ROSA TPS(4 * 300)	1,200	0	0	0			
TANDA TPS(4 * 110)	440	344	216	0		7.8	325
Total THERMAL	13,763	6,822	4,797			149.2	6,216
ALAKHANDA HEP(4 * 82.5)	330	83	82	0		1.3	54
VISHNUPARYAG HPS(4 * 110)	440	78	78	0		1.9	79
OTHER HYDRO UP(1 * 527)	527	130	130	0		3.8	158
Total HYDEL	1,297	291	290			7	291
WIND	0	0	0	0			
BIOMASS(1 * 26)	26	0	0	0			
SOLAR(1 * 472)	472	0	0	0		2.6	108
CO-GENERATION(1 * 1360)	1,360	900	900	0		21.6	900
Total OTHERs	1,360	900	900			21.6	900
Total UP	16,918	8,013	5,987			180.4	7,515

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	190	190	190	01:00	4.67	195			
Total GAS/NAPHTHA/DIESEL	450	190	190			4.67	195			
OTHER HYDRO UK(1 * 1250)	1,250	635	222	685	20:00	9.61	400			
Total HYDEL	1,250	635	222			9.61	400			
WIND	0	0	0	0						
BIOMASS(1 * 127)	127	38	36	38	10:00	0.89	37			
SOLAR(1 * 100)	100	0	0	79	12:00	0.5	21			
SMALL HYDRO(1 * 180)	180	0	0	0						
Total SMALL HYDRO	180	0	0			0	0			
Total UTTARAKHAND	2,107	863	448			15.67	653			

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	749.34	1,173	543	1,173	19:00	17.98	18.02	751	0.04
DEHAR HPS(6 * 165)	990	137.4	495	0	495	19:00	3.3	3.4	142	0.1
PONG HPS(6 * 66)	396	260	264	264	264	19:00	6.24	6.29	262	0.05
Sub-Total	2,765	1,146.74	1,932	807	-	-	27.52	27.71	1,155	0.19
NHPC										
BAIRASIUL HPS(3 * 60)	180	0	0	0	0	-	0	-	-	0
CHAMERA HPS(3 * 180)	540	535.58	181	0	556	06:45	1.8	1.89	79	0.09
CHAMERA II HPS(3 * 100)	300	178.78	202	30	202	19:00	1.07	1.35	56	0.28
CHAMERA III HPS(3 * 77)	231	153	147	0	156	07:00	0.6	0.67	28	0.07
DHAULIGANGA HPS(4 * 70)	280	281.38	280	0	284	07:00	1.03	1.06	44	0.03
DULHASTI HPS(3 * 130)	390	386.9	390	0	391	07:00	2.9	3.01	125	0.11
KISHANGANGA(2 * 110)	220	29.44	0	0	0	-	0.71	0.7	29	-0.01
PARBATI III HEP(4 * 130)	520	0	0	0	0	-	0	-	-	0
SALAL HPS(6 * 115)	690	115.21	350	30	350	19:00	2.94	2.83	118	-0.11
SEWA-II HPS(3 * 40)	120	120.2	42	0	121	07:00	0.39	0.38	16	-0.01
TANAKPUR HPS(1 * 31.42 + 2 * 31.4)	94	28.97	23	22	65	02:00	0.64	0.66	28	0.02
URI HPS(4 * 120)	480	122.29	336	123	342	07:00	2.84	3.2	133	0.36
URI-II HPS(4 * 60)	480	78.3	79	40	182	09:00	1.88	1.94	81	0.06
Sub-Total	4,525	2,030.05	2,030	245	-	-	16.8	17.69	737	0.89
NPCL										
NAPS(2 * 220)	440	205	224	228	229	21:00	4.92	4.89	204	-0.03
RAPS-B(2 * 220)	440	207.48	206	208	333	23:55	4.98	4.32	180	-0.66
RAPS-C(2 * 220)	440	430	430	430	430	19:00	10.32	10	417	-0.32
Sub-Total	1,320	842.48	860	866	-	-	20.22	19.21	801	-1.01
NTPC										
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	418.17	0	0	0	-	0	0.03	1	0.03
AURAIYA GPS(2 * 109.3 + 4 * 111.19)	663	646.59	0	0	0	-	0	-	-	0
DADRI GPS(2 * 154.51 + 4 * 130.19)	830	413.96	226	231	317	18:00	5.51	5.5	229	-0.01
DADRI SOLAR(1 * 5)	5	0.68	0	0	2	11:13	0.02	0.01	0	-0.01
DADRI-I TPS(4 * 210)	840	576.45	422	317	422	19:00	9.48	9.32	388	-0.16
DADRI-II TPS(2 * 490)	980	928.55	764	655	764	19:00	17.29	18.36	765	1.07
ISTPP (JHAJJAR)(3 * 500)	1,500	947.5	976	563	976	19:00	17.86	18.87	786	1.01
KOLDAM HPS(4 * 200)	800	872	555	0	757	18:00	2.62	2.64	110	0.02
RIHAND-I STPS(2 * 500)	1,000	907.4	995	947	995	19:00	21.64	21.68	903	0.04
RIHAND-II STPS(2 * 500)	1,000	942.5	1,006	985	1,006	19:00	22.55	22.75	948	0.2
RIHAND-III STPS(2 * 500)	1,000	942.5	1,009	861	1,009	19:00	21.87	22.45	935	0.58
SINGRAULI STPS(2 * 500 + 5 * 200)	2,000	1,862.5	2,021	1,984	2,021	19:00	44.02	44.27	1,845	0.25
SINGRAULI SOLAR(1 * 15)	15	2.55	0	0	0	-	0.06	0.07	3	0.01
UNCHAHAH II TPS(2 * 210)	420	382.2	319	213	319	19:00	7.08	7.4	308	0.32
UNCHAHAH III TPS(1 * 210)	210	191.1	136	117	136	19:00	3.43	3.6	150	0.17
UNCHAHAH IV TPS(1 * 500)	500	471.25	483	302	483	19:00	7.92	9	375	1.08
UNCHAHAH SOLAR(1 * 10)	10	1.65	0	0	0	-	0.04	0	0	-0.04
UNCHAHAH TPS(2 * 210)	420	333.6	167	236	167	19:00	6.35	6.6	275	0.25
Sub-Total	12,612	10,841.15	9,079	7,411	-	-	187.74	192.55	8,021	4.81
SJVNL										
NATHPA-JHAKRI HPS(6 * 250)	1,500	1,249.38	929	0	1,336	07:00	6.8	6.83	285	0.03
RAMPUR HEP(6 * 68.67)	412	320.05	279	0	371	18:00	1.77	1.81	75	0.04
Sub-Total	1,912	1,569.43	1,208	0	-	-	8.57	8.64	360	0.07
THDC										
KOTESHWAR HPS(4 * 100)	400	132	401	90	401	19:00	3.17	3.21	134	0.04
TEHRI HPS(4 * 250)	1,000	1,064	988	0	1,031	08:00	9.2	9.27	386	0.07
Sub-Total	1,400	1,196	1,389	90	-	-	12.37	12.48	520	0.11
Total	24,534	17,625.85	16,498	9,419			273.22	278.28	11,594	5.06

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	99	0	99	19:00	0.43	0.45	19	0.02
BUDHIL HPS (IPP)(2 * 35)	70	0	34	0	35	13:00	0.24	0.17	7	-0.07
KARCHAM WANGTOO HPS(4 * 250)	1,000	0	825	0	825	19:00	3.44	3.44	143	0
MALANA2(2 * 50)	100	0	0	0	84	10:00	0.24	0.25	10	0.01
SAINJ HEP(2 * 50)	50	0	100	0	375	03:45	0.39	0.38	16	-0.01
SHREE CEMENT (IPP) TPS(2 * 150)	300	0	125	127	148	08:00	3.25	3.19	133	-0.06
Sub-Total	1,712	0	1,183	127	-	-	7.99	7.88	328	-0.11
Total	1,712	0	1,183	127	-	-	7.99	7.88	328	-0.11

Summary Section					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Total State Control Area Generation	54,626	21,983	17,561	523.04	21,793
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		6,423	6,700	154.95	8,625
Total Regional Availability(Gross)	80,872	46,087	33,807	964.15	42,342

Total Hydro Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Hydro	12,814	8,172	1,142	73.85	3,077
State Control Area Hydro	6,125	1,987	1,413	42.21	1,759
Total Regional Hydro	18,939	10,159	2,555	116.06	4,836

Total Renewable Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Renewable	30	0	0	0.08	3
State Control Area Renewable	9,214	388	411	34.23	1,426
Total Regional Renewable	9,244	388	411	34.31	1,429

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	-	-	-	-	-	-	-
2	132KV-Karmnasa(PG)-Sahupuri(U ..	-	-	-	-	0.01	0	0.01
3	132KV-Rihand-Sonnagar(PG)	-	-	-	-	0	0.67	-0.67
4	220KV-Pusauli(PG)-Sahupuri(UP)	-135	-93	135	0	2.6	0	2.6
5	400KV-Biharsharif(PG)-Baliala(PG)	165	111	257	0	4.28	0	4.28
6	400KV-Biharsharif(PG)-Varanasi(P..	-65	-36	169	6	1.89	0	1.89
7	400KV-Fatehpur(UP)-Sasaram	-	-	-	-	-	-	-
8	400KV-Motihari(DMT)-Gorakhpur ..	-246	-288	392	0	7.02	0	7.02
9	400KV-Muzaffarpur(PG)-Gorakhp ..	-312	-172	392	0	6.04	0	6.04
10	400KV-Patna(PG)-Baliala(PG)	648	648	808	0	16.74	0	16.74
11	400KV-Sasaram-Allahabad(PG)	-40	-56	64	0	1.26	0	1.26
12	400KV-Sasaram-Varanasi(PG)	-100	-86	107	0	3.25	0	3.25
13	765KV-Fatehpur(PG)-Sasaram.	18	45	235	0	2.5	0	2.5
14	765KV-Gaya(PG)-Baliala(PG)	213	139	275	0	4.6	0	4.6
15	765KV-Gaya(PG)-Varanasi(PG)	-348	-206	533	0	7.96	0	7.96
16	HVDC800KV-Alipurduar-Agra(PG)	0	0	150	0	0.16	0	0.16
Sub-Total EAST REGION		-202	6	3,517	6	58.31	0.67	57.64
Import/Export between NORTH_EAST REGION and NORTH REGION								
1	HVDC800KV-BiswanathCharialli- ..	500	500	0	500	0	10.37	-10.37
Sub-Total NORTH_EAST REGION		500	500	0	500	0	10.37	-10.37
Import/Export between WEST REGION and NORTH REGION								
1	220KV-Auraiya(NT)-Malanpur(PG)	-42	-59	-	138	0	2.2	-2.2
2	220KV-Badod(MP)-Kota(PG)	45	31	141	45	1.74	0	1.74
3	220KV-Badod(MP)-Modak(RJ)	-	-	-	-	-	-	-
4	400KV-RAPS C(NP)-Sujalpur	-	-	-	-	-	-	-
5	400KV-Vindhyachal(PG)-Rihand(N ..	958	801	-	983	0	22.45	-22.45
6	400KV-Zerda(PG)-Bhinmal(PG)	99	100	354	5	3.12	0	3.12
7	400KV-Zerda(PG)-Kankroli(RJ)	-22	-59	151	118	0	0.42	-0.42
8	765KV-0rai-Gwalior(PG)	-530	-294	0	777	0	12.87	-12.87
9	765KV-0rai-Jabalpur	569	267	943	0	9.37	0	9.37
10	765KV-0rai-Satna	938	1,349	1,524	0	30.66	0	30.66
11	765KV-Gwalior(PG)-Agra(PG)	1,797	1,358	1,940	0	35.86	0	35.86
12	765KV-Phagi(RJ)-Gwalior(PG)	363	650	572	-	18.24	0	18.24
13	HVDC500KV-Mundra(JH)-Mohind..	1,700	1,700	1,705	0	40.83	0	40.83
14	HVDC500KV-Vindhyachal(PG)-Vindhaychal B/B	-250	-250	0	250	0	6.03	-6.03
15	HVDC800KV-Champa(PG)-Kuruku..	500	600	600	0	11.83	0	11.83
Sub-Total WEST REGION		6,125	6,194	7,930	2,316	151.65	43.97	107.68
TOTAL IR EXCHANGE		6,423	6,700	11,447	2,822	209.96	55.01	154.95

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	48.73	-17.83	5.01	35.91	57.64	21.73

NR-WR	158.84	-30.15	-3.58	125.11	107.68	-17.43
Total	207.57	-47.98	1.43	161.02	154.95	-6.07

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)	28.01	27.14		30		0.655	-0.655

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	.7	6.3	56.6	79.5	11.9	2.2	0	14.2

<-----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.	
50.18	18:02:30	49.67	07:54:40	49.99	0.039	0.061	50.12	49.79	20.5

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	427	01:55	414	11:10	0	0	69.1	0	69.1
Amritsar(PG) - 400KV	426	23:55	413	10:20	0	0	63.89	0	63.89
Ballabgarh(PG) - 400KV	425	04:00	407	09:35	0	0	31.6	0	31.6
Bareilly II(PG) - 400KV	419	01:55	401	12:40	0	0	0	0	0
Bareilly(UP) - 400KV	420	01:55	402	12:40	0	0	.35	0	.35
Baspa(HP) - 400KV	430	03:05	416	11:15	0	0	77.08	0	77.08
Bassi(PG) - 400KV	417	20:15	392	09:35	0	0	0	0	0
Bawana(DTL) - 400KV	428	01:55	413	11:15	0	0	66.32	0	66.32
Dadri HVDC(PG) - 400KV	424	01:55	411	11:40	0	0	37.5	0	37.5
Gorakhpur(PG) - 400KV	416	03:00	402	09:30	0	0	0	0	0
Hisar(PG) - 400KV	422	04:00	409	09:40	0	0	20.14	0	20.14
Kanpur(PG) - 400KV	421	01:55	409	11:10	0	0	6.6	0	6.6
Kashipur(UT) - 400KV	402	00:00	402	00:00	0	0	0	0	0
Kishenpur(PG) - 400KV	418	03:55	406	11:45	0	0	0	0	0
Moga(PG) - 400KV	407	01:55	394	10:40	0	0	0	0	0
Nallagarh(PG) - 400KV	430	03:05	416	11:15	0	0	77.08	0	77.08
Rihand HVDC(PG) - 400KV	406	04:00	406	04:00	.35	.35	0	0	.35
Rihand(NT) - 400KV	405	03:45	400	11:10	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	791	04:05	765	09:20	0	0	0	0	0
Balia(PG) - 765KV	783	03:00	760	09:35	0	0	0	0	0
Bareilly II(PG) - 765KV	798	01:55	765	12:40	0	0	0	0	0
Bhiwani(PG) - 765KV	803	17:05	778	06:30	0	0	.69	0	.69
Fatehpur(PG) - 765KV	782	18:00	755	06:25	0	0	0	0	0
Jhatikara(PG) - 765KV	802	01:55	773	09:35	0	0	1.39	0	1.39
Lucknow II(PG) - 765KV	794	01:55	765	12:40	0	0	0	0	0
Meerut(PG) - 765KV	801	17:00	774	06:25	0	0	2.78	0	2.78
Moga(PG) - 765KV	795	17:00	770	22:15	0	0	0	0	0
Phagi(RJ) - 765KV	794	15:15	762	09:35	0	0	0	0	0
Unnao(UP) - 765KV	775	03:00	745	11:10	0	0	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	-1,692.21	197.18	0	-1,692.21	0	0	63.39	-40.61	2.42	25.2
HARYANA	-995.77	114.67	0	-1,018.54	88.84	0	91.66	-25.67	1.23	67.21
RAJASTHAN	-40.58	117.16	0	-40.58	-941.32	0	65.28	3.59	0.3	69.16
DELHI	-772.56	-642.05	0	-623.33	-20.29	0	71.03	-18.35	-2.68	50.01
UTTAR PRADESH	112.09	0	0	111.41	0	0	117.87	-4.39	-2.03	111.46
UTTARAKHAND	523.87	-77	0	416.07	-53.1	0	11.65	11.04	-0.92	21.77
HIMACHAL PRADESH	444.54	1.75	0	266.32	410.77	0	12.34	11.71	-0.36	23.7
JAMMU & KASHMIR	608.59	98.59	0	608.59	542.24	0	26.06	14.6	4.64	45.3
CHANDIGARH	0	-30.43	0	0	0	0	3.83	0	-0.71	3.12
TOTAL	-1,812.03	-220.13	0	-1,972.27	27.14	0	463.11	-48.08	1.89	416.93

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	3,552.53	2,181.32	-1,692.21	-1,692.21	492.95	0	0	0
HARYANA	5,137.47	2,858.5	-850.04	-1,297.42	117.11	-349.62	0	0
RAJASTHAN	3,697.36	1,779.73	804.59	-40.58	1,185.06	-1,201.92	0	0
DELHI	3,586.41	2,155.93	-592.7	-906.07	893.23	-904.76	0	0
UTTAR PRADESH	6,430.58	3,920.6	121.6	-791.76	51.59	-1,459.53	0	0
UTTARAKHAND	846.07	327.59	523.87	416.07	234.49	-231.35	0	0
HIMACHAL PRADESH	1,275.7	248.45	742.4	266.32	465.93	-639.69	0	0
JAMMU & KASHMIR	1,620.84	858.54	608.59	608.59	542.24	-253.58	0	0
CHANDIGARH	284.6	96.52	0	0	0	-99.91	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	504.81	1,299	499.06	153	183.75	497.55
Chamera-I	748.75	760	755.27	-	-	-	50.9	50.9
Gandhisagar	295.78	295.78	-	-	-	-	-	0
Jawahar Sagar	295.78	298.7	-	-	-	-	-	0
Koteshwar	598.5	612.5	611.01	5	610.37	5	213	212.16
Pong	384.05	426.72	415.48	693	410.22	504	68.1	380.58
RPS	343.81	352.8	-	-	-	-	-	0
RSD	487.91	527.91	516.63	3	504.59	4	54.61	132.29
Rihand	252.98	268.22	260.88	354	261.15	369	-	0
Tehri	740.04	829.79	813.41	870	810	802	51.84	213
TOTAL	-	-	-	3,224	-	1,837	622.2	1,486.48

9. System Reliability Indices (Violation of TTC and ATC):

(i)%age of times N-1 Criteria was violated in the inter - regional corridors

WR	0
ER	0
Simultaneous	0

ii)%age of times ATC violated on the inter-regional corridors

WR	0
ER	0
Simultaneous	0

iii)%age of times Angular Difference on Important Buses was beyond permissible limits(40 deg.)

Rihand-Dadri	0
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10. Zero Crossing Violations

State	No. of violations(Maximum 8 in a day)	Maximum number of continuous blocks without sign change
CHANDIGARH	3	25
DELHI	3	21
HARYANA	0	12
HIMACHAL PRADESH	0	10
JAMMU & KASHMIR	5	25
PUNJAB	0	10
RAJASTHAN	1	16
UTTAR PRADESH	0	11
UTTARAKHAND	2	24

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