



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

Power Supply Position in Northern Region For 28-Nov-2018

Date of Reporting:29-Nov-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
42,717	496	43,213	50	31,452	301	31,753	50.07	922	10.84

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	69.81	13.72	0	4.21	0	7.99	95.73	30.25	30.48	0.23	126.21	0	126.21
HARYANA	48.38	0.49	0	0.11	0	1.02	50.01	72.07	72.66	0.59	123.16	0.49	122.67
RAJASTHAN	126.76	4.25	1.73	12.39	9.05	4.42	158.59	71.83	72.91	1.08	231.5	0	231.5
DELHI	0	0	15.69	0	0	1.1	16.8	46.14	45.7	-0.44	62.51	0.01	62.5
UTTAR PRADESH	126.38	5.77	0	2.02	0	21.6	155.76	110.32	111.72	1.4	267.48	0	267.48
UTTARAKHAND	0	8.39	2.44	0.4	0	0.52	11.74	23.47	24.22	0.75	35.96	0	35.96
HIMACHAL PRADESH	0	4.77	0	0	0	3.45	8.22	20.46	20.64	0.18	28.94	0.08	28.86
JAMMU & KASHMIR	0	6.42	0	0	0	0	6.42	39.54	37.06	-2.48	53.74	10.26	43.48
CHANDIGARH	0	0	0	0	0	0	0	2.88	3.28	0.4	3.28	0	3.28
Region	371.33	43.81	19.86	19.13	9.05	40.1	503.27	416.96	418.67	1.71	932.78	10.84	921.94

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	5,205	0	-44	-1,581	3,777	0	25	-1,041
HARYANA	6,258	25	27	-732	4,077	0	-24	-690
RAJASTHAN	10,048	0	-13	-324	8,304	0	464	-32
DELHI	3,309	0	136	-1,123	1,591	0	8	-1,574
UTTAR PRADESH	12,631	0	-163	81	9,966	0	54	99
UTTARAKHAND	1,787	0	87	494	1,172	0	-1	418
HIMACHAL PRADESH	1,419	0	56	-113	891	20	-47	321
JAMMU & KASHMIR	1,885	471	-159	455	1,595	281	-176	653
CHANDIGARH	174	0	27	-51	80	0	7	-30
Region	42,716	496	-46	-2,894	31,453	301	310	-1,876

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	5,579	8:00	0	5,579	5,579	8:00	0	5,579	3,777	3:00
HARYANA	6,258	19:00	25	6,283	6,283	19:00	25	6,258	4,009	2:00
RAJASTHAN	11,688	9:00	0	11,688	11,688	9:00	0	11,688	7,529	5:00
DELHI	3,309	19:00	0	3,309	3,309	19:00	0	3,309	1,552	4:00
UP	12,631	19:00	0	12,631	12,631	19:00	0	12,631	9,966	3:00
UTTARAKHAND	1,897	8:00	0	1,897	1,897	8:00	0	1,897	1,172	3:00
HP	1,585	9:00	0	1,585	1,585	9:00	0	1,585	882	2:00
J&K	2,048	21:00	512	2,559	2,559	21:00	512	2,048	1,587	4:00
CHANDIGARH	189	8:00	0	189	189	8:00	0	189	80	2:00
NR	42,717	19:00	496	43,213	43,213	19:00	496	42,717	31,298	4:00

3(A) State Entities Generation:

CHANDIGARH						
Station/Constituents	Inst. Capacity	N/A	N/A	Day Peak		Day Energy
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)
NIL						
Total	0	0	0			0
Total	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	427	428	639		11.06	461
DELHI GAS TURBINES(3 * 34 + 6 * 30)	282	40	39	40.66		0.9	38
PRAGATI GAS TURBINES(1 * 121.2 + 2 * 104.6)	331	153	150	158.05		3.74	156
RITHALA GPS(3 * 36)	108	0	0	0			
Total GAS/NAPHTHA/DIESEL	2,091	620	617			15.7	655
WIND	0	0	0	0			
BIOMASS(1 * 16)	16	40	39	44.7		1.1	46
SOLAR(1 * 2)	2	0	0	0			
Total DELHI	2,949	660	656			16.8	701

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	287	253	0		6.26	261
JHAJJAR(CLP)(2 * 660)	1,320	609	370	0		12.82	534
MAGNUM DIESEL (IPP)(4 * 6.3)	25	0	0	0			
PANIPAT TPS(2 * 210 + 2 * 250)	920	851	591	0		17.66	736
RGTPP(KHEDAR)(2 * 600)	1,200	549	375	0		11.64	485
Total THERMAL	4,065	2,296	1,589			48.38	2,016
FARIDABAD GPS(1 * 156.07 + 2 * 137.75)	432	0	0	0			
Total GAS/NAPHTHA/DIESEL	432	0	0			0	0
TOTAL HYDRO HARYANA(1 * 62)	62	9	15	0		0.49	20
Total HYDEL	62	9	15			0.49	20
WIND	0	0	0	0			
BIOMASS(1 * 106)	106	0	0	0		1.02	43
SOLAR(1 * 50)	50	0	0	0		0.11	5
Total HARYANA	4,715	2,305	1,604			50	2,084

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	53	53	116		1.44	60
MALANA (IPP) HPS(2 * 43)	86	49	0	49		0.39	16
OTHER HYDRO HP(1 * 372)	372	159	91	0		2.95	123
Total HYDEL	758	261	144			4.78	199
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO(1 * 486)	486	181	88	0		3.45	144
Total SMALL HYDRO	486	181	88			3.45	144
Total HP	1,244	442	232			8.23	343

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	147	147	0		3.54	148
OTHER HYDRO/IPP J&K(1 * 308)	308	141	119	0		2.89	120
Total HYDEL	1,208	288	266			6.43	268
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	288	266			6.43	268

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	350	290	400		8.92	372
GURU GOBIND SINGH TPS (ROPAR)(6 * 210)	1,260	0	0	0		-0.03	-1
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)(2 * 210 + 2 * 250)	920	774	647	860		18.61	775
GURU NANAK DEV TPS (BHATINDA)(4 * 110)	460	0	0	0		-0.01	0
RAJPURA(NPL) TPS(2 * 700)	1,400	660	610	660		15.62	651
TALWANDI SABO TPS(3 * 660)	1,980	1,228	616	1,228		26.7	1,113
Total THERMAL	6,560	3,012	2,163			69.81	2,910
TOTAL HYDRO PUNJAB(1 * 1000)	1,000	564	418	565		13.72	572
Total HYDEL	1,000	564	418			13.72	572
WIND	0	0	0	0			
BIOMASS(1 * 303)	303	0	0	0		7.99	333
SOLAR(1 * 859)	859	0	0	440		4.21	175
Total PUNJAB	8,722	3,576	2,581			95.73	3,990

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	221	222	0		5.15	215
CHHABRA TPS(1 * 660 + 4 * 250)	1,660	1,476	1,212	0		33.39	1,391
GIRAL (IPP) LTPS(2 * 125)	250	0	0	0			
KALISINDH TPS(2 * 600)	1,200	556	397	0		12	500
KAWAI TPS(2 * 660)	1,320	593	439	0		14.18	591
KOTA TPS(2 * 110 + 2 * 195 + 3 * 210)	1,240	1,031	816	0		21.95	915
RAJWEST (IPP) LTPS(8 * 135)	1,080	719	520	0		15.22	634
SURATGARH TPS(6 * 250)	1,500	1,108	893	0		22.4	933
VSLPP (IPP)(1 * 135)	135	106	105	0		2.47	103
Total THERMAL	8,635	5,810	4,604			126.76	5,282
DHOLPUR GPS(3 * 110)	330	0	0	0			
RAMGARH GPS(1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5)	271	71	73	0		1.73	72
Total GAS/NAPHTHA/DIESEL	601	71	73			1.73	72
RAPS-A(1 * 100 + 1 * 200)	300	161	160	0		3.74	156
Total NUCLEAR	300	161	160			3.74	156
TOTAL HYDRO RAJASTHAN(1 * 550)	550	215	141	0		4.25	177
Total HYDEL	550	215	141			4.25	177
WIND	4,292	312	522	0		9.05	377
BIOMASS(1 * 102)	102	28	28	0		0.68	28
SOLAR(1 * 1995)	1,995	9	0	0		12.39	516
Total RAJASTHAN	16,475	6,606	5,528			158.6	6,608

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	1,369	1,160	0		33.55	1,398
ANPARA-C TPS(2 * 600)	1,200	1,092	1,037	0		25.85	1,077
ANPARA-D TPS(2 * 500)	1,000	951	946	0		21.76	907
BAJAJ ENERGY PVT LTD (IPP) TPS(10 * 45)	450	0	0	0			
BARA PPGCL TPS(3 * 660)	1,980	867	684	0		22.09	920
HARDUAGANJ TPS(1 * 105 + 1 * 60 + 2 * 250)	665	360	256	0		8.57	357
LALITPUR TPS(3 * 660)	1,980	0	0	0			
MEJA TPS(1 * 660)	660	0	0	0			
OBRA TPS (2 * 94 + 5 * 200)	1,188	343	216	0		6.87	286
PANKI TPS(2 * 105)	210	0	0	0			
PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)	1,160	0	0	0			
ROSA TPS(4 * 300)	1,200	0	0	0			
TANDA TPS(4 * 110)	440	282	237	0		7.7	321
Total THERMAL	13,763	5,264	4,536			126.39	5,266
ALAKHANDA HEP(4 * 82.5)	330	82	83	0		1.97	82
VISHNUPARYAG HPS(4 * 110)	440	103	103	0		2.5	104
OTHER HYDRO UP(1 * 527)	527	68	42	0		1.29	54
Total HYDEL	1,297	253	228			5.76	240
WIND	0	0	0	0			
BIOMASS(1 * 26)	26	0	0	0			
SOLAR(1 * 472)	472	0	0	0		2.02	84
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	6,417	5,664			155.77	6,490

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	95	95	95	01:00	2.44	102			
Total GAS/NAPHTHA/DIESEL	450	95	95			2.44	102			
OTHER HYDRO UK(1 * 1250)	1,250	402	229	571	08:00	8.39	350			
Total HYDEL	1,250	402	229			8.39	350			
WIND	0	0	0	0						
BIOMASS(1 * 127)	127	23	23	24	06:00	0.52	22			
SOLAR(1 * 100)	100	0	0	69	12:00	0.4	17			
SMALL HYDRO(1 * 180)	180	0	0	0						
Total SMALL HYDRO	180	0	0			0	0			
Total UTTARAKHAND	2,107	520	347			11.75	491			

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	406.02	496	370	496	19:00	9.74	9.89	412	0.15
DEHAR HPS(6 * 165)	990	232.55	480	0	480	19:00	5.58	5.75	240	0.17
PONG HPS(6 * 66)	396	250.62	330	132	330	19:00	6.02	6.07	253	0.05
Sub-Total	2,765	889.19	1,306	502	-	-	21.34	21.71	905	0.37
NHPC										
BAIRASIUL HPS(3 * 60)	180	0	0	0	0	-	0	0	0	0
CHAMERA HPS(3 * 180)	540	535.58	503	0	548	18:30	2.52	2.74	114	0.22
CHAMERA II HPS(3 * 100)	300	189.67	201	100	201	19:00	2.64	2.68	112	0.04
CHAMERA III HPS(3 * 77)	231	70.08	162	71	162	19:00	1.67	1.78	74	0.11
DHAULIGANGA HPS(4 * 70)	280	58.71	274	0	284	07:00	1.37	1.42	59	0.05
DULHASTI HPS(3 * 130)	390	386.9	373	0	389	18:00	4.26	4.48	187	0.22
KISHANGANGA(2 * 110)	220	0	0	0	0	-	0	0	0	0
PARBATI III HEP(4 * 130)	520	26.66	266	0	267	18:45	0.64	0.68	28	0.04
SALAL HPS(6 * 115)	690	129.69	169	145	382	08:00	3.11	3.6	150	0.49
SEWA-II HPS(3 * 40)	120	120.2	82	0	83	18:00	0.39	0.41	17	0.02
TANAKPUR HPS(1 * 31.42 + 2 * 31.4)	94	36.58	41	33	65	00:45	0.88	0.94	39	0.06
URI HPS(4 * 120)	480	179.27	355	221	360	09:00	4.3	4.95	206	0.65
URI-II HPS(4 * 60)	480	111.41	82	118	183	01:00	2.67	2.76	115	0.09
Sub-Total	4,525	1,844.75	2,508	688	-	-	24.45	26.44	1,101	1.99
NPCL										
NAPS(2 * 220)	440	406	442	443	450	05:00	9.74	9.65	402	-0.09
RAPS-B(2 * 220)	440	193	216	221	222	04:00	4.63	4.67	195	0.04
RAPS-C(2 * 220)	440	420	475	472	475	19:00	10.08	10.21	425	0.13
Sub-Total	1,320	1,019	1,133	1,136	-	-	24.45	24.53	1,022	0.08
NTPC										
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	403.8	0	0	0	-	0	0	0	0
AURAIYA GPS(2 * 109.3 + 4 * 111.19)	663	164.9	323	184	323	19:00	5.7	5.8	242	0.1
DADRI GPS(2 * 154.51 + 4 * 130.19)	830	402.08	384	230	384	19:00	7.22	7.31	305	0.09
DADRI SOLAR(1 * 5)	5	0.72	0	0	0	-	0.02	0.01	0	-0.01
DADRI-I TPS(4 * 210)	840	576.45	0	0	0	-	9.34	9.39	391	0.05
DADRI-II TPS(2 * 490)	980	928.55	0	0	0	-	17.05	17.95	748	0.9
ISTPP (JHAJJAR)(3 * 500)	1,500	947.5	988	646	1,018	08:28	19.46	19.28	803	-0.18
KOLDAM HPS(4 * 200)	800	872	689	0	790	07:00	3.24	3.23	135	-0.01
RIHAND-I STPS(2 * 500)	1,000	461.25	495	481	495	19:00	11.07	10.95	456	-0.12
RIHAND-II STPS(2 * 500)	1,000	942.5	993	992	993	19:00	22.6	22.53	939	-0.07
RIHAND-III STPS(2 * 500)	1,000	855.51	1,001	503	1,001	19:00	20.45	20.7	863	0.25
SINGRAULI STPS(2 * 500 + 5 * 200)	2,000	1,862.5	2,043	2,029	2,043	19:00	44.66	45.03	1,876	0.37
SINGRAULI SOLAR(1 * 15)	15	2.47	0	0	0	-	0.06	0.06	3	0
UNCHAHAH II TPS(2 * 210)	420	382.2	383	223	383	19:00	7.13	7.33	305	0.2
UNCHAHAH III TPS(1 * 210)	210	191.1	192	116	192	19:00	3.56	3.82	159	0.26
UNCHAHAH IV TPS(1 * 500)	500	0	0	0	0	-	0	-	-	0
UNCHAHAH SOLAR(1 * 10)	10	1.31	0	0	0	-	0.03	0	0	-0.03
UNCHAHAH TPS(2 * 210)	420	382.2	415	241	415	19:00	6.76	7.34	306	0.58
Sub-Total	12,612	9,377.04	7,906	5,645	-	-	178.35	180.73	7,531	2.38
SJVNL										
NATHPA-JHAKRI HPS(6 * 250)	1,500	1,249.38	1,254	0	1,257	20:00	8.8	8.98	374	0.18
RAMPUR HEP(6 * 68.67)	412	346.5	354	0	354	19:00	2.45	2.55	106	0.1
Sub-Total	1,912	1,595.88	1,608	0	-	-	11.25	11.53	480	0.28
THDC										
KOTESHWAR HPS(4 * 100)	400	91.25	100	89	101	18:00	2.19	2.23	93	0.04
TEHRI HPS(4 * 250)	1,000	1,064	1,003	0	1,009	18:00	6.8	6.94	289	0.14
Sub-Total	1,400	1,155.25	1,103	89	-	-	8.99	9.17	382	0.18
Total	24,534	15,881.11	15,564	8,060			268.83	274.11	11,421	5.28

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	0	0	0	-	0	0	0	0
BUDHIL HPS (IPP)(2 * 35)	70	0	69	0	69	19:00	0.31	0.3	13	-0.01
KARCHAM WANGTOO HPS(4 * 250)	1,000	0	1,000	0	1,000	19:00	4.74	4.81	200	0.07
MALANA2(2 * 50)	100	0	0	0	0	-	0	-	-	0
SAINJ HEP(2 * 50)	50	0	100	0	100	03:00	0.64	0.65	27	0.01
SHREE CEMENT (IPP) TPS(2 * 150)	300	0	145	85	146	11:00	2.87	2.76	115	-0.11
Sub-Total	1,712	0	1,314	85	-	-	8.56	8.52	355	-0.04
Total	1,712	0	1,314	85	-	-	8.56	8.52	355	-0.04

Summary Section					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Total State Control Area Generation	54,626	20,814	16,878	503.31	20,971
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		5,854	5,451	161.81	9,282
Total Regional Availability(Gross)	80,872	43,546	30,474	947.75	42,030

Total Hydro Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Hydro	12,814	8,383	1,279	77.84	3,243
State Control Area Hydro	6,125	1,992	1,441	43.82	1,826
Total Regional Hydro	18,939	10,375	2,720	121.66	5,069

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	593	700	42.94	1,789
Total Regional Renewable	9,244	593	700	43.01	1,792

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 ..	-	-	-	-	0.48	0	0.48
3	132KV-Rihand-Sonnagar(PG)	-32	-30	-	28	0	0.67	-0.67
4	220KV-Pusauli(PG)-Sahupuri(UP)	113	86	119	0	2.35	0	2.35
5	400KV-Biharsharif(PG)-Baliala(PG)	19	72	188	0	2.82	0	2.82
6	400KV-Biharsharif(PG)-Varanasi(P..	-169	-88	88	169	0	0.47	-0.47
7	400KV-Fatehpur(UP)-Sasaram	-	-	-	-	-	-	-
8	400KV-Motihari(DMT)-Gorakhpur ..	178	268	320	0	6.72	0	6.72
9	400KV-Muzaffarpur(PG)-Gorakhp ..	-122	-80	184	142	0	0.02	-0.02
10	400KV-Patna(PG)-Baliala(PG)	414	565	851	0	14.05	0	14.05
11	400KV-Sasaram-Allahabad(PG)	76	30	106	0	0.94	0	0.94
12	400KV-Sasaram-Varanasi(PG)	-21	-30	41	7	0	0.52	-0.52
13	765KV-Fatehpur(PG)-Sasaram.	24	94	237	5	2.91	0	2.91
14	765KV-Gaya(PG)-Baliala(PG)	102	166	233	0	4.2	0	4.2
15	765KV-Gaya(PG)-Varanasi(PG)	39	-375	455	53	4.89	0	4.89
16	HVDC800KV-Alipurduar-Agra(PG)	300	300	300	-	6.78	0	6.78
Sub-Total EAST REGION		921	978	3,122	404	46.14	1.68	44.46
Import/Export between NORTH_EAST REGION and NORTH REGION								
1	HVDC800KV-BiswanathCharialli- ..	650	650	650	-	15.28	0	15.28
Sub-Total NORTH_EAST REGION		650	650	650	0	15.28	0	15.28
Import/Export between WEST REGION and NORTH REGION								
1	220KV-Auraiya(NT)-Malanpur(PG)	-150	-91	-	208	0	2.93	-2.93
2	220KV-Badod(MP)-Kota(PG)	-91	-4	35	151	0	0.98	-0.98
3	220KV-Badod(MP)-Modak(RJ)	-	-	-	-	-	-	-
4	400KV-RAPS C(NP)-Sujalpur	-196	-40	169	204	0	1.25	-1.25
5	400KV-Vindhyachal(PG)-Rihand(N ..	-804	-808	-	976	0	20.7	-20.7
6	400KV-Zerda(PG)-Bhinmal(PG)	-203	-56	193	228	0	1.82	-1.82
7	400KV-Zerda(PG)-Kankroli(RJ)	-306	-208	0	326	0	5.35	-5.35
8	765KV-0rai-Gwalior(PG)	-185	-325	0	496	0	8.09	-8.09
9	765KV-0rai-Jabalpur	246	32	731	246	5.77	0	5.77
10	765KV-0rai-Satna	1,553	1,516	1,609	0	38.51	0	38.51
11	765KV-Gwalior(PG)-Agra(PG)	832	1,368	1,616	-	26.22	0	26.22
12	765KV-Phagi(RJ)-Gwalior(PG)	637	988	1,443	-	23.12	0	23.12
13	HVDC500KV-Mundra(JH)-Mohind..	1,200	801	1,203	0	24.05	0	24.05
14	HVDC500KV-Vindhyachal(PG)-Vindhaychal B/B	-250	-250	0	250	0	6.04	-6.04
15	HVDC800KV-Champa(PG)-Kuruku..	2,000	900	2,000	0	31.56	0	31.56
Sub-Total WEST REGION		4,283	3,823	8,999	3,085	149.23	47.16	102.07
TOTAL IR EXCHANGE		5,854	5,451	12,771	3,489	210.65	48.84	161.81

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	56.49	-23.06	11.19	44.62	44.46	-0.16

NR-WR	153.44	-36	1.32	118.76	102.07	-16.69
Total	209.93	-59.06	12.51	163.38	161.81	-1.57

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)	-22.86	-9.79		24		0.3116	-0.3116

5. Frequency Profile

RANGE(Hz)	< 49.2	< 49.7	< 49.8	< 49.9	< 50.0	>= 49.9 - <= 50.05	> 50.05 - <= 50.1	> 50.1 - <= 50.2	> 50.2	> 50.05
%	0	0	.1	4.2	53	81.9	11.5	2.4	0	13.9

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

Maximum		Minimum		Average	Freq Variation	Standard	Freq. in 15 mnt blk		Freq Dev Index
Frequency	Time	Frequency	Time				Frequency	Index	
50.17	13:03:30	49.78	05:15:00	49.99	0.03	0.054	50.1	49.9	18.1

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	429	02:00	410	11:20	0	0	40.28	0	40.28
Amritsar(PG) - 400KV	428	02:00	412	07:20	0	0	40.97	0	40.97
Ballabgarh(PG) - 400KV	426	02:00	407	10:40	0	0	30.56	0	30.56
Bareilly II(PG) - 400KV	420	03:00	403	10:35	0	0	0	0	0
Bareilly(UP) - 400KV	421	03:00	404	10:35	0	0	6.94	0	6.94
Baspa(HP) - 400KV	431	02:05	410	07:25	0	0	45.83	.69	45.83
Bassi(PG) - 400KV	419	20:25	397	07:15	0	0	0	0	0
Bawana(DTL) - 400KV	427	02:00	411	10:35	0	0	35.76	0	35.76
Dadri HVDC(PG) - 400KV	428	02:00	415	10:35	0	0	51.04	0	51.04
Gorakhpur(PG) - 400KV	419	03:00	407	17:50	0	0	0	0	0
Hisar(PG) - 400KV	423	20:25	423	20:25	35.07	35.07	20.14	0	55.21
Kanpur(PG) - 400KV	424	03:00	412	09:10	0	0	22.57	0	22.57
Kashipur(UT) - 400KV	402	00:00	402	00:00	0	0	0	0	0
Kishenpur(PG) - 400KV	419	02:00	405	18:10	0	0	0	0	0
Moga(PG) - 400KV	421	20:20	405	06:50	0	0	1.04	0	1.04
Nallagarh(PG) - 400KV	431	02:05	410	07:25	0	0	45.83	.69	45.83
Rihand HVDC(PG) - 400KV	405	03:00	405	03:00	.69	.69	0	0	.69
Rihand(NT) - 400KV	404	03:00	400	09:10	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	797	20:35	775	07:20	0	0	0	0	0
Balia(PG) - 765KV	784	03:00	766	18:20	0	0	0	0	0
Bareilly II(PG) - 765KV	800	03:00	769	10:35	0	0	0	0	0
Bhiwani(PG) - 765KV	807	20:15	775	06:55	0	0	13.19	0	13.19
Fatehpur(PG) - 765KV	787	19:25	755	06:50	0	0	0	0	0
Jhatikara(PG) - 765KV	805	20:25	774	10:35	0	0	6.6	0	6.6
Lucknow II(PG) - 765KV	794	03:00	769	10:35	0	0	0	0	0
Meerut(PG) - 765KV	810	20:25	774	06:50	0	0	6.6	0	6.6
Moga(PG) - 765KV	801	20:25	759	06:50	0	0	.69	0	.69
Phagi(RJ) - 765KV	801	20:25	770	07:15	0	0	2.78	0	2.78
Unnao(UP) - 765KV	748	00:00	748	00:00	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	-1,681.87	641.36	0	-1,580.53	0	0	62.51	-38.74	6.48	30.25
HARYANA	-852.49	162.74	0	-844.57	112.31	0	89.1	-20.01	2.97	72.07
RAJASTHAN	-96.51	64.09	0	-96.51	-227.74	0	62.91	-0.85	9.76	71.83
DELHI	-1,026.84	-547.18	0	-1,038.77	-84.02	0	77.68	-26.15	-5.39	46.14
UTTAR PRADESH	99.44	0	0	80.59	0	0	115.41	-4.34	-0.75	110.32
UTTARAKHAND	426.38	-8.5	0	459.19	34.95	0	12.45	10.2	0.83	23.47
HIMACHAL PRADESH	321.68	-1.13	0	143.12	-256	0	14.57	7.26	-1.37	20.46
JAMMU & KASHMIR	505.36	148	0	505.36	-50.67	0	25.24	12.13	2.18	39.54
CHANDIGARH	0	-30.4	0	0	-50.67	0	3.74	0	-0.86	2.88
TOTAL	-2,304.85	428.98	0	-2,372.12	-521.84	0	463.61	-60.5	13.85	416.96

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	3,295.39	2,207	-1,580.53	-1,681.87	641.36	0	0	0
HARYANA	4,396.35	3,079.59	-468.39	-1,035.86	368.18	0.59	0	0
RAJASTHAN	3,402.2	2,194.85	148.77	-96.51	2,026.1	-393.88	0	0
DELHI	3,879.67	2,499.45	-894.45	-1,206.1	246.7	-741.77	0	0
UTTAR PRADESH	6,246.32	4,039.64	99.44	-476.37	31.17	-719.98	0	0
UTTARAKHAND	802.57	380.99	459.19	400.98	181.28	-131.13	0	0
HIMACHAL PRADESH	1,464.14	249.25	409.72	142.96	289.84	-543.67	0	0
JAMMU & KASHMIR	1,596.37	750.07	505.36	505.36	315.74	-283.77	0	0
CHANDIGARH	253.81	102.05	0	0	0	-99.93	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	507.98	1,456	504.62	1,299	206.32	261.42
Chamera-I	748.75	760	756.42	-	-	-	91.79	74.2
Gandhisagar	295.78	295.78	-	-	-	-	-	0
Jawahar Sagar	295.78	298.7	-	-	-	-	-	0
Koteshwar	598.5	612.5	609.66	4	611.18	5	152	146.8
Pong	384.05	426.72	419.52	862	414.59	656	85.12	351.5
RPS	343.81	352.8	-	-	-	-	-	0
RSD	487.91	527.91	521.47	5	509.31	3	97.68	136.99
Rihand	252.98	268.22	261.98	417	262.25	434	0	0
Tehri	740.04	829.79	822.2	1,049	818.8	978	116.58	152
TOTAL	-	-	-	3,793	-	3,375	749.49	1,122.91

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	4	54
DELHI	3	18
HARYANA	2	14
HIMACHAL PRADESH	2	15
JAMMU & KASHMIR	1	13
PUNJAB	1	13
RAJASTHAN	1	16
UTTAR PRADESH	1	14
UTTARAKHAND	3	31

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