



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

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

Date of Reporting:01-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
42,642	519	43,161	49.99	31,022	285	31,307	50.06	919	11.18

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	64.72	13.97	0	4.21	0	7.99	90.89	32.33	32.62	0.29	123.51	0	123.51
HARYANA	54.64	0.55	2.83	0.11	0	1.15	59.29	62.49	65.4	2.91	125.02	0.33	124.69
RAJASTHAN	128.79	3.31	1.71	12.59	5.48	4.21	156.09	69.42	74.67	5.25	230.76	0	230.76
DELHI	0	0	17.48	0	0	1.09	18.57	45.17	45.6	0.43	64.17	0	64.17
UTTAR PRADESH	129.2	5.9	0	2.1	0	21.2	158.4	106.3	105.05	-1.25	263.45	0	263.45
UTTARAKHAND	0	8.28	2.44	0.42	0	0.53	11.66	22.67	23.84	1.17	35.69	0.19	35.5
HIMACHAL PRADESH	0	4.79	0	0	0	3.29	8.08	19.88	20.55	0.67	28.63	0	28.63
JAMMU & KASHMIR	0	7.82	0	0	0	0	7.82	36.75	37.33	0.58	55.81	10.66	45.15
CHANDIGARH	0	0	0	0	0	0	0	3.24	3.41	0.17	3.41	0	3.41
Region	377.35	44.62	24.46	19.43	5.48	39.46	510.8	398.25	408.47	10.22	930.45	11.18	919.27

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	5,113	0	-40	-1,581	3,788	0	54	-893
HARYANA	6,406	0	256	-874	4,030	0	40	-733
RAJASTHAN	9,900	0	501	-612	8,288	0	329	-35
DELHI	3,234	0	-2	-1,406	1,597	0	35	-1,568
UTTAR PRADESH	12,532	0	-41	91	9,563	0	6	99
UTTARAKHAND	1,734	0	5	487	1,203	0	69	378
HIMACHAL PRADESH	1,450	0	99	-117	864	0	-15	307
JAMMU & KASHMIR	2,074	519	-75	495	1,612	285	-39	643
CHANDIGARH	199	0	3	0	78	0	-6	-25
Region	42,642	519	706	-3,517	31,023	285	473	-1,827

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	5,542	13:00	0	5,542	5,542	13:00	0	5,542	3,788	3:00
HARYANA	6,406	19:00	0	6,406	6,406	19:00	0	6,406	3,980	2:00
RAJASTHAN	11,741	9:00	0	11,741	11,741	9:00	0	11,741	7,607	5:00
DELHI	3,571	11:00	0	3,571	3,571	11:00	0	3,571	1,552	5:00
UP	12,532	19:00	0	12,532	12,532	19:00	0	12,532	9,563	3:00
UTTARAKHAND	1,860	8:00	0	1,860	1,860	8:00	0	1,860	1,187	2:00
HP	1,538	8:00	0	1,538	1,538	8:00	0	1,538	850	5:00
J&K	2,178	20:00	545	2,723	2,723	20:00	545	2,178	1,612	3:00
CHANDIGARH	199	19:00	0	199	199	19:00	0	199	78	3:00
NR	43,018	8:00	717	43,735	43,735	8:00	717	43,018	31,022	3:00

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	429	639		11.22	468
DELHI GAS TURBINES(3 * 34 + 6 * 30)	282	104	74	108.57		2.53	105
PRAGATI GAS TURBINES(1 * 121.2 + 2 * 104.6)	331	153	145	158.71		3.74	156
RITHALA GPS(3 * 36)	108	0	0	0			
Total GAS/NAPHTHA/DIESEL	2,091	684	648			17.49	729
WIND	0	0	0	0			
BIOMASS(1 * 16)	16	39	37	43.69		1.09	45
SOLAR(1 * 2)	2	0	0	0			
Total DELHI	2,949	723	685			18.58	774

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	285	250	292	09:00	6.1	254
JHAJJAR(CLP)(2 * 660)	1,320	614	368	618	17:00	12.4	517
MAGNUM DIESEL (IPP)(4 * 6.3)	25	0	0	0			
PANIPAT TPS(2 * 210 + 2 * 250)	920	639	576	649	12:00	14.83	618
RGTPP(KHEDAR)(2 * 600)	1,200	1,043	788	1,130	13:00	21.32	888
Total THERMAL	4,065	2,581	1,982			54.65	2,277
FARIDABAD GPS(1 * 156.07 + 2 * 137.75)	432	201	0	203	13:00	2.83	118
Total GAS/NAPHTHA/DIESEL	432	201	0			2.83	118
TOTAL HYDRO HARYANA(1 * 62)	62	9	20	23	22:00	0.55	23
Total HYDEL	62	9	20			0.55	23
WIND	0	0	0	0			
BIOMASS(1 * 106)	106	0	0	0		1.15	48
SOLAR(1 * 50)	50	0	0	0		0.11	5
Total HARYANA	4,715	2,791	2,002			59.29	2,471

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	30	61	111		1.51	63
MALANA (IPP) HPS(2 * 43)	86	30	0	43		0.34	14
OTHER HYDRO HP(1 * 372)	372	176	111	0		2.94	123
Total HYDEL	758	236	172			4.79	200
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO(1 * 486)	486	172	125	0		3.29	137
Total SMALL HYDRO	486	172	125			3.29	137
Total HP	1,244	408	297			8.08	337

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	236	237	0		5.69	237
OTHER HYDRO/IPP J&K(1 * 308)	308	74	109	0		2.14	89
Total HYDEL	1,208	310	346			7.83	326
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	310	346			7.83	326

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	145	290	290		5.45	227
GURU GOBIND SINGH TPS (ROPAR)(6 * 210)	1,260	0	0	0		-0.09	-4
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)(2 * 210 + 2 * 250)	920	860	650	893		18.28	762
GURU NANAK DEV TPS (BHATINDA)(4 * 110)	460	0	0	0		-0.09	-4
RAJPURA(NPL) TPS(2 * 700)	1,400	660	560	660		15.58	649
TALWANDI SABO TPS(3 * 660)	1,980	1,228	616	1,228		25.59	1,066
Total THERMAL	6,560	2,893	2,116			64.72	2,696
TOTAL HYDRO PUNJAB(1 * 1000)	1,000	619	381	619		13.97	582
Total HYDEL	1,000	619	381			13.97	582
WIND	0	0	0	0			
BIOMASS(1 * 303)	303	0	0	0		7.99	333
SOLAR(1 * 859)	859	0	0	560		4.21	175
Total PUNJAB	8,722	3,512	2,497			90.89	3,786

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	222	223	0		5.25	219
CHHABRA TPS(1 * 660 + 4 * 250)	1,660	1,466	1,211	0		31.36	1,307
GIRAL (IPP) LTPS(2 * 125)	250	0	0	0			
KALISINDH TPS(2 * 600)	1,200	0	433	0		8.73	364
KAWAI TPS(2 * 660)	1,320	622	577	0		14.1	588
KOTA TPS(2 * 110 + 2 * 195 + 3 * 210)	1,240	1,119	821	0		24.83	1,035
RAJWEST (IPP) LTPS(8 * 135)	1,080	722	526	0		16.32	680
SURATGARH TPS(6 * 250)	1,500	1,114	901	0		25.8	1,075
VSLPP (IPP)(1 * 135)	135	104	105	0		2.4	100
Total THERMAL	8,635	5,369	4,797			128.79	5,368
DHOLPUR GPS(3 * 110)	330	0	0	0			
RAMGARH GPS(1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5)	271	67	71	0		1.71	71
Total GAS/NAPHTHA/DIESEL	601	67	71			1.71	71
RAPS-A(1 * 100 + 1 * 200)	300	164	166	0		3.78	158
Total NUCLEAR	300	164	166			3.78	158
TOTAL HYDRO RAJASTHAN(1 * 550)	550	246	156	0		3.31	138
Total HYDEL	550	246	156			3.31	138
WIND	4,292	148	376	0		5.48	228
BIOMASS(1 * 102)	102	18	18	0		0.43	18
SOLAR(1 * 1995)	1,995	9	0	0		12.59	525
Total RAJASTHAN	16,475	6,021	5,584			156.09	6,506

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	1,359	1,158	0		33.4	1,392
ANPARA-C TPS(2 * 600)	1,200	1,092	611	0		25.5	1,063
ANPARA-D TPS(2 * 500)	1,000	945	947	0		21.8	908
BAJAJ ENERGY PVT LTD (IPP) TPS(10 * 45)	450	0	0	0			
BARA PPGCL TPS(3 * 660)	1,980	1,094	671	0		23.8	992
HARDUAGANJ TPS(1 * 105 + 1 * 60 + 2 * 250)	665	288	254	0		9.1	379
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	228	0		7.7	321
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	245	215	0		7.9	329
Total THERMAL	13,763	5,366	4,084			129.2	5,384
ALAKHANDA HEP(4 * 82.5)	330	83	82	0		2.2	92
VISHNUPARYAG HPS(4 * 110)	440	103	98	0		2.4	100
OTHER HYDRO UP(1 * 527)	527	35	35	0		1.3	54
Total HYDEL	1,297	221	215			5.9	246
WIND	0	0	0	0			
BIOMASS(1 * 26)	26	0	0	0			
SOLAR(1 * 472)	472	0	0	0		2.1	88
CO-GENERATION(1 * 1360)	1,360	900	900	0		21.2	883
Total OTHERs	1,360	900	900			21.2	883
Total UP	16,918	6,487	5,199			158.4	6,601

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	396	233	572	10:00	8.28	345			
Total HYDEL	1,250	396	233			8.28	345			
WIND	0	0	0	0						
BIOMASS(1 * 127)	127	20	19	22	08:00	0.53	22			
SOLAR(1 * 100)	100	0	0	82	13:00	0.42	18			
SMALL HYDRO(1 * 180)	180	0	0	0						
Total SMALL HYDRO	180	0	0			0	0			
Total UTTARAKHAND	2,107	511	347			11.67	487			

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	405.62	496	370	496	19:00	9.74	9.82	409	0.08
DEHAR HPS(6 * 165)	990	178.23	480	0	480	19:00	4.28	4.43	185	0.15
PONG HPS(6 * 66)	396	230.89	330	132	330	19:00	5.54	5.56	232	0.02
Sub-Total	2,765	814.74	1,306	502	-	-	19.56	19.81	826	0.25
NHPC										
BAIRASIUL HPS(3 * 60)	180	0	0	0	0	-	0	0	0	0
CHAMERA HPS(3 * 180)	540	535.58	502	0	552	06:30	2.5	2.83	118	0.33
CHAMERA II HPS(3 * 100)	300	174.15	203	0	204	18:00	1.69	1.95	81	0.26
CHAMERA III HPS(3 * 77)	231	44.48	156	0	161	07:00	0.93	1.09	45	0.16
DHAULIGANGA HPS(4 * 70)	280	70.12	286	0	291	07:00	1.44	1.53	64	0.09
DULHASTI HPS(3 * 130)	390	382.59	306	0	393	07:00	3.73	3.85	160	0.12
KISHANGANGA(2 * 110)	220	0	0	0	0	-	0	0	0	0
PARBATI III HEP(4 * 130)	520	30.7	261	0	261	19:00	0.74	0.77	32	0.03
SALAL HPS(6 * 115)	690	147.6	345	98	355	07:00	3.54	4.17	174	0.63
SEWA-II HPS(3 * 40)	120	120.2	119	0	119	19:00	0.39	0.45	19	0.06
TANAKPUR HPS(1 * 31.42 + 2 * 31.4)	94	34.86	43	33	67	13:00	0.84	0.88	37	0.04
URI HPS(4 * 120)	480	171.67	345	155	360	11:00	4.12	4.72	197	0.6
URI-II HPS(4 * 60)	480	105.56	87	82	182	01:00	2.53	2.66	111	0.13
Sub-Total	4,525	1,817.51	2,653	368	-	-	22.45	24.9	1,038	2.45
NPCL										
NAPS(2 * 220)	440	402	445	452	452	03:00	9.65	9.77	407	0.12
RAPS-B(2 * 220)	440	194	221	200	221	19:00	4.66	4.7	196	0.04
RAPS-C(2 * 220)	440	420	473	472	474	10:00	10.08	10.24	427	0.16
Sub-Total	1,320	1,016	1,139	1,124	-	-	24.39	24.71	1,030	0.32
NTPC										
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	403.8	0	0	0	-	0	0.03	1	0.03
AURAIYA GPS(2 * 109.3 + 4 * 111.19)	663	408.65	0	185	186	05:00	1.03	0.96	40	-0.07
DADRI GPS(2 * 154.51 + 4 * 130.19)	830	409.79	373	219	408	10:00	7.43	7.17	299	-0.26
DADRI SOLAR(1 * 5)	5	0.86	0	0	3	12:04	0.02	0.02	1	0
DADRI-I TPS(4 * 210)	840	768.6	428	356	428	19:00	9.78	9.85	410	0.07
DADRI-II TPS(2 * 490)	980	928.55	838	534	838	19:00	19.2	19.85	827	0.65
ISTPP (JHAJJAR)(3 * 500)	1,500	1,021.18	1,031	564	1,237	20:28	20.31	20.23	843	-0.08
KOLDAM HPS(4 * 200)	800	872	869	0	872	07:00	3.3	3.66	153	0.36
RIHAND-I STPS(2 * 500)	1,000	461.25	512	510	512	19:00	11.06	11.93	497	0.87
RIHAND-II STPS(2 * 500)	1,000	942.5	1,020	1,000	1,020	19:00	22.55	23.23	968	0.68
RIHAND-III STPS(2 * 500)	1,000	942.5	1,039	1,007	1,039	19:00	22.44	23.42	976	0.98
SINGRAULI STPS(2 * 500 + 5 * 200)	2,000	1,862.5	2,050	2,026	2,050	19:00	44.7	45.63	1,901	0.93
SINGRAULI SOLAR(1 * 15)	15	2.22	0	0	0	-	0.05	0.05	2	0
UNCHAHAH II TPS(2 * 210)	420	382.2	330	230	330	19:00	7.8	8.21	342	0.41
UNCHAHAH III TPS(1 * 210)	210	191.1	206	130	206	19:00	4.02	4.03	168	0.01
UNCHAHAH IV TPS(1 * 500)	500	0	0	0	0	-	0	-	-	0
UNCHAHAH SOLAR(1 * 10)	10	1.4	0	0	0	-	0.03	0.03	1	0
UNCHAHAH TPS(2 * 210)	420	382.2	343	242	343	19:00	7.57	8.25	344	0.68
Sub-Total	12,612	9,981.3	9,039	7,003	-	-	181.29	186.55	7,773	5.26
SJVNL										
NATHPA-JHAKRI HPS(6 * 250)	1,500	1,249.38	1,254	0	1,315	07:00	8.8	9.33	389	0.53
RAMPUR HEP(6 * 68.67)	412	344.38	369	0	369	19:00	2.45	2.69	112	0.24
Sub-Total	1,912	1,593.76	1,623	0	-	-	11.25	12.02	501	0.77
THDC										
KOTESHWAR HPS(4 * 100)	400	91.25	0	90	102	07:00	2.19	2.12	88	-0.07
TEHRI HPS(4 * 250)	1,000	1,064	987	0	1,037	07:00	6.85	7.06	294	0.21
Sub-Total	1,400	1,155.25	987	90	-	-	9.04	9.18	382	0.14
Total	24,534	16,378.56	16,747	9,087			267.98	277.17	11,550	9.19

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	70	18:00	0.31	0.26	11	-0.05
KARCHAM WANGTOO HPS(4 * 250)	1,000	0	825	0	825	19:00	4.74	4.89	204	0.15
MALANA2(2 * 50)	100	0	0	0	0	-	0	-	-	0
SAINJ HEP(2 * 50)	50	0	100	15	100	00:00	0.59	0.6	25	0.01
SHREE CEMENT (IPP) TPS(2 * 150)	300	0	150	85	150	19:00	2.62	2.62	109	0
Sub-Total	1,712	0	1,144	100	-	-	8.26	8.37	349	0.11
Total	1,712	0	1,144	100	-	-	8.26	8.37	349	0.11

Summary Section					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Total State Control Area Generation	54,626	20,763	16,957	510.83	21,285
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		4,978	6,581	146.83	7,354
Total Regional Availability(Gross)	80,872	43,632	32,725	943.2	40,536

Total Hydro Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Hydro	12,814	8,432	975	75.32	3,138
State Control Area Hydro	6,125	2,037	1,523	44.63	1,860
Total Regional Hydro	18,939	10,469	2,498	119.95	4,998

Total Renewable Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Renewable	30	0	0	0.1	4
State Control Area Renewable	9,214	406	575	39.39	1,641
Total Regional Renewable	9,244	406	575	39.49	1,645

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	-18	-20	-	38	0	0.66	-0.66
2	132KV-Karmnasa(PG)-Sahupuri(U ..	-	-	-	-	-	-	-
3	132KV-Rihand-Sonnagar(PG)	-	-	-	-	-	-	-
4	220KV-Pusauli(PG)-Sahupuri(UP)	116	76	141	0	2.52	0	2.52
5	400KV-Biharsharif(PG)-Baliala(PG)	63	105	178	0	3.1	0	3.1
6	400KV-Biharsharif(PG)-Varanasi(P..	6	66	66	119	0	0.21	-0.21
7	400KV-Fatehpur(UP)-Sasaram	-	-	-	-	-	-	-
8	400KV-Motihari(DMT)-Gorakhpur ..	120	214	238	0	4.64	0	4.64
9	400KV-Muzaffarpur(PG)-Gorakhp ..	-34	12	260	-126	1.2	0	1.2
10	400KV-Patna(PG)-Baliala(PG)	253	346	478	0	8.95	0	8.95
11	400KV-Sasaram-Allahabad(PG)	0	-49	0	128	0	0.63	-0.63
12	400KV-Sasaram-Varanasi(PG)	-76	-19	11	76	0	0.66	-0.66
13	765KV-Fatehpur(PG)-Sasaram.	26	76	207	0	2.82	0	2.82
14	765KV-Gaya(PG)-Baliala(PG)	141	204	237	0	4.86	0	4.86
15	765KV-Gaya(PG)-Varanasi(PG)	151	264	393	0	6.17	0	6.17
16	HVDC800KV-Alipurduar-Agra(PG)	200	200	200	-	4.81	0	4.81
Sub-Total EAST REGION		948	1,475	2,409	235	39.07	2.16	36.91
Import/Export between NORTH_EAST REGION and NORTH REGION								
1	HVDC800KV-BiswanathCharialli- ..	700	500	700	-	13.06	0	13.06
Sub-Total NORTH_EAST REGION		700	500	700	0	13.06	0	13.06
Import/Export between WEST REGION and NORTH REGION								
1	220KV-Auraiya(NT)-Malanpur(PG)	-54	-80	-	140	0	2.06	-2.06
2	220KV-Badod(MP)-Kota(PG)	-86	-25	36	110	0	1.22	-1.22
3	220KV-Badod(MP)-Modak(RJ)	-	-	-	-	-	-	-
4	400KV-RAPS C(NP)-Sujalpur	-70	-7	68	234	0	1.9	-1.9
5	400KV-Vindhyachal(PG)-Rihand(N ..	-994	-960	0	497	0	23.31	-23.31
6	400KV-Zerda(PG)-Bhinmal(PG)	-30	-14	239	103	0.14	0	0.14
7	400KV-Zerda(PG)-Kankroli(RJ)	-181	-222	33	250	0	3.48	-3.48
8	765KV-0rai-Gwalior(PG)	-303	-328	0	533	0	9.27	-9.27
9	765KV-0rai-Jabalpur	64	556	556	-48	7.54	0	7.54
10	765KV-0rai-Satna	1,620	1,645	1,653	0	38.66	0	38.66
11	765KV-Gwalior(PG)-Agra(PG)	1,096	1,472	1,472	-	31.66	0	31.66
12	765KV-Phagi(RJ)-Gwalior(PG)	920	1,021	689	-	25.41	0	25.41
13	HVDC500KV-Mundra(JH)-Mohind..	598	798	803	0	16.99	0	16.99
14	HVDC500KV-Vindhyachal(PG)-Vindhaychal B/B	-250	-250	0	250	0	6.02	-6.02
15	HVDC800KV-Champa(PG)-Kuruku..	1,000	1,000	1,000	0	23.72	0	23.72
Sub-Total WEST REGION		3,330	4,606	6,549	2,069	144.12	47.26	96.86
TOTAL IR EXCHANGE		4,978	6,581	9,658	2,304	196.25	49.42	146.83

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	53.28	-23.08	7.73	37.93	36.91	-1.02

NR-WR	148.13	-37.63	-2	108.5	96.86	-11.64
Total	201.41	-60.71	5.73	146.43	146.83	0.4

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)	24.48	0	0	27	0	0.3107	-0.3107

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	2	23.5	76.4	70	5.5	1	0	6.5

<-----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.	
50.14	22:01:00	49.72	06:29:50	49.95	0.076	0.07	50.07	49.79	30

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	426	20:30	409	11:40	0	0	42.36	0	42.36
Amritsar(PG) - 400KV	426	03:00	410	11:40	0	0	50	0	50
Ballabgarh(PG) - 400KV	425	04:00	402	11:05	0	0	26.74	0	26.74
Bareilly II(PG) - 400KV	420	03:00	401	10:55	0	0	0	0	0
Bareilly(UP) - 400KV	421	03:00	402	10:45	0	0	5.9	0	5.9
Baspa(HP) - 400KV	427	03:10	412	11:40	0	0	49.65	0	49.65
Bassi(PG) - 400KV	421	20:25	394	07:25	0	0	1.39	0	1.39
Bawana(DTL) - 400KV	427	04:00	409	11:35	0	0	42.01	0	42.01
Dadri HVDC(PG) - 400KV	427	04:00	427	04:00	39.58	39.58	47.22	0	86.8
Gorakhpur(PG) - 400KV	420	03:00	406	11:05	0	0	0	0	0
Hisar(PG) - 400KV	423	20:25	404	07:20	0	0	21.18	0	21.18
Kanpur(PG) - 400KV	424	03:00	408	11:05	0	0	22.92	0	22.92
Kashipur(UT) - 400KV	402	00:00	402	00:00	0	0	0	0	0
Kishenpur(PG) - 400KV	418	03:00	404	11:50	0	0	0	0	0
Moga(PG) - 400KV	418	20:00	404	07:20	0	0	0	0	0
Nallagarh(PG) - 400KV	427	03:10	412	11:40	0	0	49.65	0	49.65
Rihand HVDC(PG) - 400KV	404	03:00	404	03:00	1.74	1.74	0	0	1.74
Rihand(NT) - 400KV	404	03:00	404	03:00	2.08	2.08	0	0	2.08

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	800	20:30	768	07:25	0	0	2.43	0	2.43
Balia(PG) - 765KV	785	03:00	761	11:05	0	0	0	0	0
Bareilly II(PG) - 765KV	800	03:00	764	10:45	0	0	.35	0	.35
Bhiwani(PG) - 765KV	804	20:00	769	07:15	0	0	6.6	0	6.6
Fatehpur(PG) - 765KV	775	03:00	747	11:05	0	0	0	0	0
Jhatikara(PG) - 765KV	803	20:25	768	07:15	0	0	4.17	0	4.17
Lucknow II(PG) - 765KV	794	03:00	762	11:05	0	0	0	0	0
Meerut(PG) - 765KV	806	19:25	767	07:15	0	0	2.43	0	2.43
Moga(PG) - 765KV	796	19:25	754	07:15	0	0	0	0	0
Phagi(RJ) - 765KV	805	20:30	768	06:30	0	0	5.56	0	5.56
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	789.36	0	-1,580.53	0	0	60.97	-38.74	10.1	32.33
HARYANA	-842.83	110.16	0	-834.91	-38.68	0	83.34	-21	0.14	62.49
RAJASTHAN	-96.51	61.19	0	-96.51	-515.65	0	68.46	-1.25	2.21	69.42
DELHI	-1,027.16	-541.1	0	-1,039.09	-366.95	0	77.45	-26.15	-6.13	45.17
UTTAR PRADESH	99.44	0	0	89.36	1.95	0	110.54	-4.25	0.01	106.3
UTTARAKHAND	425.38	-47.61	0	458.04	29.19	0	12.42	10.17	0.08	22.67
HIMACHAL PRADESH	321.9	-15.15	0	143.34	-260.83	0	14.3	7.26	-1.69	19.88
JAMMU & KASHMIR	495.36	148	0	495.36	0	0	22.45	11.89	2.42	36.75
CHANDIGARH	0	-25.34	0	0	0	0	3.5	0	-0.27	3.24
TOTAL	-2,306.29	479.51	0	-2,364.94	-1,150.97	0	453.43	-62.07	6.87	398.25

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	3,238.75	2,208.11	-1,580.53	-1,681.87	888.03	0	0	0
HARYANA	4,347.52	2,646.51	-785.84	-1,026.2	110.16	-393.52	0	0
RAJASTHAN	3,733.32	2,395.36	199.29	-96.51	1,250.46	-716.91	0	0
DELHI	3,855.57	2,387.95	-894.67	-1,206.42	166.77	-666.77	0	0
UTTAR PRADESH	6,225.74	3,879.52	99.44	-476.27	41.89	-365.6	0	0
UTTARAKHAND	803.29	385.82	458.04	399.98	143.5	-80.08	0	0
HIMACHAL PRADESH	1,349.56	220.81	409.91	143.23	250.35	-530.05	0	0
JAMMU & KASHMIR	1,455.48	672.52	495.36	495.36	315.74	-283.77	0	0
CHANDIGARH	247.9	101.32	0	0	19.53	-50.67	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	507.94	1,441	504.35	1,286	227.21	265.78
Chamera-I	748.75	760	-	-	-	-	-	0
Gandhisagar	295.78	295.78	-	-	-	-	-	0
Jawahar Sagar	295.78	298.7	-	-	-	-	-	0
Koteshwar	598.5	612.5	610.32	5	611.19	5	156	138.9
Pong	384.05	426.72	419.32	862	414.36	645	71.64	322.36
RPS	343.81	352.8	-	-	-	-	-	0
RSD	487.91	527.91	521.12	5	508.99	3	87.15	172.47
Rihand	252.98	268.22	-	-	-	-	-	0
Tehri	740.04	829.79	822.05	1,046	818.6	974	116.38	154
TOTAL	-	-	-	3,359	-	2,913	658.38	1,053.51

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	32
DELHI	0	11
HARYANA	0	8
HIMACHAL PRADESH	1	18
JAMMU & KASHMIR	2	24
PUNJAB	1	16
RAJASTHAN	4	31
UTTAR PRADESH	0	9
UTTARAKHAND	6	55

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