



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

Power Supply Position in Northern Region For 26-Nov-2018

Date of Reporting:27-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
42,327	513	42,840	50.04	30,015	295	30,310	50.06	900	11.67

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	68.1	12.84	0	4.21	0	7.99	93.13	29.46	30.16	0.7	123.29	0	123.29
HARYANA	48.31	0.46	0	0.13	0	1.13	50.03	64.58	66.22	1.64	116.91	0.66	116.25
RAJASTHAN	125.46	4.9	1.77	12.23	2.31	4.14	150.82	74.49	79.67	5.18	230.49	0	230.49
DELHI	-0.01	0	14.82	0	0	0.9	15.7	45.48	45.23	-0.25	60.93	0	60.93
UTTAR PRADESH	126.42	5.9	0	1.72	0	16.8	150.85	106.51	106.35	-0.16	257.2	0	257.2
UTTARAKHAND	0	8.22	2.41	0.63	0	0.42	11.68	22.4	23.26	0.86	34.94	0	34.94
HIMACHAL PRADESH	0	5.02	0	0	0	3.66	8.68	18.4	18.42	0.02	27.13	0.03	27.1
JAMMU & KASHMIR	0	9.24	0	0	0	0	9.24	37.83	37.39	-0.44	57.61	10.98	46.63
CHANDIGARH	0	0	0	0	0	0	0	2.73	3.15	0.42	3.15	0	3.15
Region	368.28	46.58	19	18.92	2.31	35.04	490.13	401.88	409.85	7.97	911.65	11.67	899.98

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	5,644	0	-64	-1,581	3,512	0	117	-1,090
HARYANA	6,256	0	121	-583	3,649	0	110	-714
RAJASTHAN	9,794	0	176	-282	7,992	0	152	134
DELHI	3,200	0	34	-1,384	1,525	0	-3	-1,549
UTTAR PRADESH	12,042	0	-200	100	9,704	0	-78	74
UTTARAKHAND	1,797	0	48	424	1,129	0	145	327
HIMACHAL PRADESH	1,373	0	-17	-79	757	0	-70	321
JAMMU & KASHMIR	2,053	513	-181	495	1,670	295	-127	643
CHANDIGARH	169	0	7	-56	77	0	3	-30
Region	42,328	513	-76	-2,946	30,015	295	249	-1,884

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	5,815	18:00	0	5,815	5,815	18:00	0	5,815	3,483	2:00
HARYANA	6,256	19:00	0	6,256	6,256	19:00	0	6,256	3,476	1:00
RAJASTHAN	11,648	9:00	0	11,648	11,648	9:00	0	11,648	7,417	5:00
DELHI	3,318	11:00	0	3,318	3,318	11:00	0	3,318	1,477	4:00
UP	12,117	20:00	100	12,217	12,217	20:00	100	12,117	9,704	3:00
UTTARAKHAND	1,851	8:00	0	1,851	1,851	8:00	0	1,851	1,076	2:00
HP	1,548	8:00	9	1,557	1,557	8:00	9	1,548	753	4:00
J&K	2,188	10:00	547	2,735	2,735	10:00	547	2,188	1,670	3:00
CHANDIGARH	183	8:00	0	183	183	8:00	0	183	77	3:00
NR	42,327	19:00	513	42,840	42,840	19:00	513	42,327	30,005	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	-3	-3	0		-0.01	0
RAJGHAT TPS(2 * 67.5)	135	0	0	0			
Total THERMAL	840	-3	-3			-0.01	0
BAWANA GPS(2 * 253 + 4 * 216)	1,370	429	429	0		10.31	430
DELHI GAS TURBINES(3 * 34 + 6 * 30)	282	40	40	0		0.9	38
PRAGATI GAS TURBINES(1 * 121.2 + 2 * 104.6)	331	157	158	0		3.6	150
RITHALA GPS(3 * 36)	108	0	0	0			
Total GAS/NAPHTHA/DIESEL	2,091	626	627			14.81	618
WIND	0	0	0	0			
BIOMASS(1 * 16)	16	28	34	0		0.9	38
SOLAR(1 * 2)	2	0	0	0			
Total DELHI	2,949	651	658			15.7	656

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	281	246	0		6.04	252
JHAJJAR(CLP)(2 * 660)	1,320	584	371	0		12.53	522
MAGNUM DIESEL (IPP)(4 * 6.3)	25	0	0	0			
PANIPAT TPS(2 * 210 + 2 * 250)	920	455	403	0		10.36	432
RGTPP(KHEDAR)(2 * 600)	1,200	1,128	761	0		19.38	808
Total THERMAL	4,065	2,448	1,781			48.31	2,014
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	6	18	0		0.46	19
Total HYDEL	62	6	18			0.46	19
WIND	0	0	0	0			
BIOMASS(1 * 106)	106	0	0	0		1.13	47
SOLAR(1 * 50)	50	0	0	0		0.13	5
Total HARYANA	4,715	2,454	1,799			50.03	2,085

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	30	99		1.57	65
MALANA (IPP) HPS(2 * 43)	86	47	0	47		0.39	16
OTHER HYDRO HP(1 * 372)	372	151	94	0		3.07	128
Total HYDEL	758	228	124			5.03	209
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO(1 * 486)	486	214	106	0		3.66	153
Total SMALL HYDRO	486	214	106			3.66	153
Total HP	1,244	442	230			8.69	362

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	0	237	237		6.36	265
OTHER HYDRO/IPP J&K(1 * 308)	308	0	119	141		2.89	120
Total HYDEL	1,208	0	356			9.25	385
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	0	356			9.25	385

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	400	290	440		9.42	393
GURU GOBIND SINGH TPS (ROPAR)(6 * 210)	1,260	0	0	0		-0.1	-4
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)(2 * 210 + 2 * 250)	920	738	648	857		18.29	762
GURU NANAK DEV TPS (BHATINDA)(4 * 110)	460	0	0	0		-0.01	0
RAJPURA(NPL) TPS(2 * 700)	1,400	660	330	660		14.62	609
TALWANDI SABO TPS(3 * 660)	1,980	1,228	616	1,228		25.87	1,078
Total THERMAL	6,560	3,026	1,884			68.09	2,838
TOTAL HYDRO PUNJAB(1 * 1000)	1,000	439	320	613		12.84	535
Total HYDEL	1,000	439	320			12.84	535
WIND	0	0	0	0			
BIOMASS(1 * 303)	303	0	0	0		7.99	333
SOLAR(1 * 859)	859	0	0	384		4.21	175
Total PUNJAB	8,722	3,465	2,204			93.13	3,881

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	225	224	0		5.36	223
CHHABRA TPS(1 * 660 + 4 * 250)	1,660	1,501	1,496	0		35.38	1,474
GIRAL (IPP) LTPS(2 * 125)	250	0	0	0			
KALISINDH TPS(2 * 600)	1,200	549	408	0		12.53	522
KAWAI TPS(2 * 660)	1,320	593	587	0		13.66	569
KOTA TPS(2 * 110 + 2 * 195 + 3 * 210)	1,240	1,024	816	0		23.05	960
RAJWEST (IPP) LTPS(8 * 135)	1,080	704	486	0		15.72	655
SURATGARH TPS(6 * 250)	1,500	877	714	0		19.77	824
VSLPP (IPP)(1 * 135)	135	0	0	0			
Total THERMAL	8,635	5,473	4,731			125.47	5,227
DHOLPUR GPS(3 * 110)	330	0	0	0			
RAMGARH GPS(1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5)	271	70	73	0		1.77	74
Total GAS/NAPHTHA/DIESEL	601	70	73			1.77	74
RAPS-A(1 * 100 + 1 * 200)	300	159	159	0		3.7	154
Total NUCLEAR	300	159	159			3.7	154
TOTAL HYDRO RAJASTHAN(1 * 550)	550	216	120	0		4.9	204
Total HYDEL	550	216	120			4.9	204
WIND	4,292	47	43	0		2.31	96
BIOMASS(1 * 102)	102	18	18	0		0.44	18
SOLAR(1 * 1995)	1,995	9	0	0		12.23	510
Total RAJASTHAN	16,475	5,992	5,144			150.82	6,283

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	1,345	1,153	0		32.77	1,365
ANPARA-C TPS(2 * 600)	1,200	1,073	620	0		24.25	1,010
ANPARA-D TPS(2 * 500)	1,000	941	953	0		21.77	907
BAJAJ ENERGY PVT LTD (IPP) TPS(10 * 45)	450	0	0	0			
BARA PPGCL TPS(3 * 660)	1,980	964	667	0		21.03	876
HARDUAGANJ TPS(1 * 105 + 1 * 60 + 2 * 250)	665	448	252	0		6.96	290
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	316	223	0		6.98	291
PANKI TPS(2 * 105)	210	0	0	0			
PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)	1,160	134	265	0		5.52	230
ROSA TPS(4 * 300)	1,200	0	0	0			
TANDA TPS(4 * 110)	440	238	216	0		7.13	297
Total THERMAL	13,763	5,459	4,349			126.41	5,266
ALAKHANDA HEP(4 * 82.5)	330	83	82	0		1.95	81
VISHNUPARYAG HPS(4 * 110)	440	103	103	0		2.47	103
OTHER HYDRO UP(1 * 527)	527	60	32	0		1.48	62
Total HYDEL	1,297	246	217			5.9	246
WIND	0	0	0	0			
BIOMASS(1 * 26)	26	0	0	0			
SOLAR(1 * 472)	472	0	0	0		1.72	72
CO-GENERATION(1 * 1360)	1,360	700	700	0		16.8	700
Total OTHERs	1,360	700	700			16.8	700
Total UP	16,918	6,405	5,266			150.83	6,284

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	2.41	100			
Total GAS/NAPHTHA/DIESEL	450	95	95			2.41	100			
OTHER HYDRO UK(1 * 1250)	1,250	454	244	566	08:00	8.22	343			
Total HYDEL	1,250	454	244			8.22	343			
WIND	0	0	0	0						
BIOMASS(1 * 127)	127	21	10	22	20:00	0.42	18			
SOLAR(1 * 100)	100	0	0	93	12:00	0.63	26			
SMALL HYDRO(1 * 180)	180	0	0	0						
Total SMALL HYDRO	180	0	0			0	0			
Total UTTARAKHAND	2,107	570	349			11.68	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	376.75	491	334	491	19:00	9.04	9.08	378	0.04
DEHAR HPS(6 * 165)	990	189.53	480	0	480	19:00	4.55	4.65	194	0.1
PONG HPS(6 * 66)	396	277.66	330	198	330	19:00	6.66	6.7	279	0.04
Sub-Total	2,765	843.94	1,301	532	-	-	20.25	20.43	851	0.18
NHPC										
BAIRASIUL HPS(3 * 60)	180	0	0	0	0	-	0	0	0	0
CHAMERA HPS(3 * 180)	540	535.58	532	0	532	19:00	2.8	3.02	126	0.22
CHAMERA II HPS(3 * 100)	300	192.58	203	0	203	19:00	2.03	2.17	90	0.14
CHAMERA III HPS(3 * 77)	231	153	0	0	0	-	1.3	-	-	-1.3
DHAULIGANGA HPS(4 * 70)	280	61.35	208	70	273	18:00	1.44	1.36	57	-0.08
DULHASTI HPS(3 * 130)	390	386.9	0	0	0	-	4.2	-	-	-4.2
KISHANGANGA(2 * 110)	220	0	0	0	0	-	0	0	0	0
PARBATI III HEP(4 * 130)	520	33.79	253	0	263	03:00	0.81	0.82	34	0.01
SALAL HPS(6 * 115)	690	163.75	256	125	378	20:00	3.93	4.7	196	0.77
SEWA-II HPS(3 * 40)	120	80.09	82	0	86	07:00	0.45	0.48	20	0.03
TANAKPUR HPS(1 * 31.42 + 2 * 31.4)	94	36.25	35	35	66	00:30	0.87	0.97	40	0.1
URI HPS(4 * 120)	480	187.92	357	152	360	11:00	4.51	5.1	213	0.59
URI-II HPS(4 * 60)	480	109.06	81	122	183	15:00	2.62	2.7	113	0.08
Sub-Total	4,525	1,940.27	2,007	504	-	-	24.96	21.32	889	-3.64
NPCL										
NAPS(2 * 220)	440	407	437	447	448	23:50	9.77	9.71	405	-0.06
RAPS-B(2 * 220)	440	193	216	221	221	03:00	4.63	4.65	194	0.02
RAPS-C(2 * 220)	440	420	471	471	471	19:00	10.08	10.24	427	0.16
Sub-Total	1,320	1,020	1,124	1,139	-	-	24.48	24.6	1,026	0.12
NTPC										
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	340.85	0	150	151	03:15	0.76	0.74	31	-0.02
AURAIYA GPS(2 * 109.3 + 4 * 111.19)	663	389.58	123	0	190	20:00	1.56	1.62	68	0.06
DADRI GPS(2 * 154.51 + 4 * 130.19)	830	399.79	0	0	0	-	6.81	0	0	-6.81
DADRI SOLAR(1 * 5)	5	0.86	0	0	3	13:03	0.02	0.02	1	0
DADRI-I TPS(4 * 210)	840	785.9	563	332	563	19:00	9.85	9.78	408	-0.07
DADRI-II TPS(2 * 490)	980	928.55	818	560	818	19:00	16.71	17.5	729	0.79
ISTPP (JHAJJAR)(3 * 500)	1,500	947.5	978	558	1,007	17:20	19.08	18.78	783	-0.3
KOLDAM HPS(4 * 200)	800	872	743	0	869	07:00	3	2.98	124	-0.02
RIHAND-I STPS(2 * 500)	1,000	461.25	478	483	478	19:00	11	11.89	495	0.89
RIHAND-II STPS(2 * 500)	1,000	942.5	986	937	986	19:00	22.38	23.74	989	1.36
RIHAND-III STPS(2 * 500)	1,000	942.5	984	922	984	19:00	22.3	23.69	987	1.39
SINGRAULI STPS(2 * 500 + 5 * 200)	2,000	1,862.5	2,021	1,994	2,021	19:00	44.69	45.11	1,880	0.42
SINGRAULI SOLAR(1 * 15)	15	2.51	0	0	0	-	0.06	0.07	3	0.01
UNCHAHAH II TPS(2 * 210)	420	382.2	380	236	406	17:00	6.95	6.67	278	-0.28
UNCHAHAH III TPS(1 * 210)	210	191.1	162	128	194	18:00	3.54	3.37	140	-0.17
UNCHAHAH IV TPS(1 * 500)	500	0	0	0	0	-	0	-	-	0
UNCHAHAH SOLAR(1 * 10)	10	1.64	0	0	0	-	0.04	-	-	-0.04
UNCHAHAH TPS(2 * 210)	420	382.2	346	242	410	08:00	6.91	6.76	282	-0.15
Sub-Total	12,612	9,833.43	8,582	6,542	-	-	175.66	172.72	7,198	-2.94
SJVNL										
NATHPA-JHAKRI HPS(6 * 250)	1,500	1,347.81	1,492	0	1,492	19:00	8.8	9.05	377	0.25
RAMPUR HEP(6 * 68.67)	412	371.21	417	0	417	19:00	2.45	2.57	107	0.12
Sub-Total	1,912	1,719.02	1,909	0	-	-	11.25	11.62	484	0.37
THDC										
KOTESHWAR HPS(4 * 100)	400	91.25	105	91	105	19:00	2.19	2.21	92	0.02
TEHRI HPS(4 * 250)	1,000	1,064	988	0	1,025	07:00	6.9	6.98	291	0.08
Sub-Total	1,400	1,155.25	1,093	91	-	-	9.09	9.19	383	0.1
Total	24,534	16,511.91	16,016	8,808			265.69	259.88	10,831	-5.81

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	0.31	13	0
KARCHAM WANGTOO HPS(4 * 250)	1,000	0	1,000	0	1,000	18:00	4.51	4.58	191	0.07
MALANA2(2 * 50)	100	0	0	0	0	-	0	-	-	0
SAINJ HEP(2 * 50)	50	0	100	0	100	04:30	0.63	0.67	28	0.04
SHREE CEMENT (IPP) TPS(2 * 150)	300	0	145	70	146	11:00	2.49	2.39	100	-0.1
Sub-Total	1,712	0	1,314	70	-	-	7.94	7.95	332	0.01
Total	1,712	0	1,314	70	-	-	7.94	7.95	332	0.01

Summary Section					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Total State Control Area Generation	54,626	19,979	16,006	490.13	20,422
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		7,535	8,064	150.92	7,199
Total Regional Availability(Gross)	80,872	44,844	32,948	908.88	38,781

Total Hydro Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Hydro	12,814	8,222	1,127	71.1	2,963
State Control Area Hydro	6,125	1,589	1,399	46.6	1,942
Total Regional Hydro	18,939	9,811	2,526	117.7	4,905

Total Renewable Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Renewable	30	0	0	0.09	4
State Control Area Renewable	9,214	337	211	35.77	1,490
Total Regional Renewable	9,244	337	211	35.86	1,494

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)	30	30	-	34	0	0.62	-0.62
4	220KV-Pusauli(PG)-Sahupuri(UP)	-103	-85	137	0	2.61	0	2.61
5	400KV-Biharsharif(PG)-Baliala(PG)	49	17	130	0	0.85	0	0.85
6	400KV-Biharsharif(PG)-Varanasi(P..	182	32	45	195	0	1.9	-1.9
7	400KV-Fatehpur(UP)-Sasaram	-	-	-	-	-	-	-
8	400KV-Motihari(DMT)-Gorakhpur ..	236	260	358	0	6.92	0	6.92
9	400KV-Muzaffarpur(PG)-Gorakhp ..	-118	-24	216	224	0	0.58	-0.58
10	400KV-Patna(PG)-Baliala(PG)	389	454	589	0	12.31	0	12.31
11	400KV-Sasaram-Allahabad(PG)	-112	-125	149	0	3.04	0	3.04
12	400KV-Sasaram-Varanasi(PG)	235	195	235	0	7.93	0	7.93
13	765KV-Fatehpur(PG)-Sasaram.	-165	-76	78	165	0	0.78	-0.78
14	765KV-Gaya(PG)-Baliala(PG)	70	136	166	0	3.09	0	3.09
15	765KV-Gaya(PG)-Varanasi(PG)	42	268	341	56	3.71	0	3.71
16	HVDC800KV-Alipurduar-Agra(PG)	450	300	500	0	9.51	0	9.51
Sub-Total EAST REGION		1,185	1,382	2,944	674	50.45	3.88	46.57
Import/Export between NORTH_EAST REGION and NORTH REGION								
1	HVDC800KV-BiswanathCharialli- ..	450	450	650	0	13.27	0	13.27
Sub-Total NORTH_EAST REGION		450	450	650	0	13.27	0	13.27
Import/Export between WEST REGION and NORTH REGION								
1	220KV-Auraiya(NT)-Malanpur(PG)	-93	-73	-	154	0	2.58	-2.58
2	220KV-Badod(MP)-Kota(PG)	-76	-86	3	140	0	1.54	-1.54
3	220KV-Badod(MP)-Modak(RJ)	-	-	-	-	-	-	-
4	400KV-RAPS C(NP)-Sujalpur	-57	-47	58	144	0	1.09	-1.09
5	400KV-Vindhyachal(PG)-Rihand(N ..	965	920	-	981	0	22.6	-22.6
6	400KV-Zerda(PG)-Bhinmal(PG)	-127	-52	118	160	0	1.08	-1.08
7	400KV-Zerda(PG)-Kankroli(RJ)	-261	-287	0	310	0	5.11	-5.11
8	765KV-0rai-Gwalior(PG)	-294	-450	0	551	0	10.58	-10.58
9	765KV-0rai-Jabalpur	79	387	499	0	7.12	0	7.12
10	765KV-0rai-Satna	1,604	1,580	1,652	0	38.43	0	38.43
11	765KV-Gwalior(PG)-Agra(PG)	1,157	1,205	1,410	0	27.05	0	27.05
12	765KV-Phagi(RJ)-Gwalior(PG)	852	985	1,326	-	25.09	0	25.09
13	HVDC500KV-Mundra(JH)-Mohind..	1,001	1,000	1,003	0	23.61	0	23.61
14	HVDC500KV-Vindhyachal(PG)-Vindhaychal B/B	250	250	0	250	0	6.04	-6.04
15	HVDC800KV-Champa(PG)-Kuruku..	900	900	900	0	20.4	0	20.4
Sub-Total WEST REGION		5,900	6,232	6,969	2,690	141.7	50.62	91.08
TOTAL IR EXCHANGE		7,535	8,064	10,563	3,364	205.42	54.5	150.92

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	53.36	-23.27	8.5	38.59	46.57	7.98

NR-WR	154.56	-35.94	-3.31	115.31	91.08	-24.23
Total	207.92	-59.21	5.19	153.9	150.92	-2.98

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)	22.47	0		24		0.2639	-0.2639

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	.3	8.8	53.1	80.2	10.3	.7	0	11

<-----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.	
50.15	13:04:20	49.78	06:13:30	49.99	0.035	0.058	50.07	49.82	19.8

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	04:00	411	06:45	0	0	44.44	0	44.44
Amritsar(PG) - 400KV	425	04:00	411	06:40	0	0	40.28	0	40.28
Ballabgarh(PG) - 400KV	425	21:00	406	11:05	0	0	30.9	0	30.9
Bareilly II(PG) - 400KV	419	04:00	402	12:45	0	0	0	0	0
Bareilly(UP) - 400KV	420	04:00	404	12:45	0	0	0	0	0
Baspa(HP) - 400KV	428	04:05	411	18:20	0	0	52.08	0	52.08
Bassi(PG) - 400KV	419	20:00	391	06:40	0	0	0	0	0
Bawana(DTL) - 400KV	426	04:00	411	06:40	0	0	37.15	0	37.15
Dadri HVDC(PG) - 400KV	427	04:00	415	12:15	0	0	56.94	0	56.94
Gorakhpur(PG) - 400KV	418	03:00	406	12:20	0	0	0	0	0
Hisar(PG) - 400KV	423	20:55	405	06:40	0	0	9.72	0	9.72
Kanpur(PG) - 400KV	422	03:20	410	11:05	0	0	21.18	0	21.18
Kashipur(UT) - 400KV	402	00:00	402	00:00	0	0	0	0	0
Kishenpur(PG) - 400KV	418	03:55	404	18:15	0	0	0	0	0
Moga(PG) - 400KV	418	20:55	403	06:40	0	0	0	0	0
Nallagarh(PG) - 400KV	428	04:05	411	18:20	0	0	52.08	0	52.08
Rihand HVDC(PG) - 400KV	406	19:25	406	19:25	.35	.35	0	0	.35
Rihand(NT) - 400KV	405	19:25	401	12:10	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	20:05	764	06:30	0	0	0	0	0
Balia(PG) - 765KV	784	03:20	764	12:10	0	0	0	0	0
Bareilly II(PG) - 765KV	798	03:20	768	12:45	0	0	0	0	0
Bhiwani(PG) - 765KV	806	20:00	770	06:30	0	0	7.29	0	7.29
Fatehpur(PG) - 765KV	773	20:55	751	10:35	0	0	0	0	0
Jhatikara(PG) - 765KV	803	21:10	770	06:40	0	0	5.21	0	5.21
Lucknow II(PG) - 765KV	793	03:25	766	12:45	0	0	0	0	0
Meerut(PG) - 765KV	805	19:55	770	06:45	0	0	4.17	0	4.17
Moga(PG) - 765KV	796	19:55	753	06:40	0	0	0	0	0
Phagi(RJ) - 765KV	799	20:00	762	06:30	0	0	0	0	0
Unnao(UP) - 765KV	774	03:20	748	12:50	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	592.02	0	-1,580.53	0	0	64.02	-38.74	4.18	29.46
HARYANA	-842.4	128.76	0	-718.11	134.84	0	83.24	-20.9	2.24	64.58
RAJASTHAN	-8.28	142.68	0	-8.28	-273.97	0	69.35	0.28	4.87	74.49
DELHI	-1,026.84	-521.84	0	-1,038.58	-345.3	0	76.6	-26.02	-5.09	45.48
UTTAR PRADESH	74.01	0	0	93.83	5.85	0	110.96	-4.38	-0.07	106.51
UTTARAKHAND	425.6	-98.48	0	397.45	26.45	0	11.51	9.93	0.97	22.4
HIMACHAL PRADESH	321.68	-1.13	0	142.92	-222.06	0	13.45	7.26	-2.32	18.4
JAMMU & KASHMIR	495.36	148	0	495.36	0	0	23.37	11.89	2.58	37.83
CHANDIGARH	0	-30.4	0	0	-55.74	0	3.6	0	-0.87	2.73
TOTAL	-2,242.74	359.61	0	-2,215.94	-729.93	0	456.1	-60.68	6.49	401.88

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	3,715.43	2,235.51	-1,580.53	-1,681.87	690.69	0	0	0
HARYANA	4,439.12	2,323.69	-718.11	-1,026.15	161.96	-83.4	0	0
RAJASTHAN	4,022.91	2,342.55	88.39	-8.28	1,239.91	-531.89	0	0
DELHI	3,910.4	2,377.48	-894.45	-1,202.99	206.24	-631.3	0	0
UTTAR PRADESH	5,962.76	3,993.94	93.83	-471.99	36.05	-158.29	0	0
UTTARAKHAND	822.77	271.89	454.71	331.4	210.48	-118.8	0	0
HIMACHAL PRADESH	1,345.67	131.19	409.72	142.92	257.24	-503.12	0	0
JAMMU & KASHMIR	1,512.99	717.02	495.36	495.36	315.74	-202.7	0	0
CHANDIGARH	263.36	104.69	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	508.02	1,456	504.84	1,299	200.77	239.33
Chamera-I	748.75	760	-	-	-	-	-	0
Gandhisagar	295.78	295.78	-	-	-	-	-	0
Jawahar Sagar	295.78	298.7	-	-	-	-	-	0
Koteshwar	598.5	612.5	609.44	4	610.83	5	154	145.98
Pong	384.05	426.72	419.72	876	414.79	669	89.06	386.78
RPS	343.81	352.8	-	-	-	-	-	0
RSD	487.91	527.91	521.69	5	509.69	3	100.42	97.42
Rihand	252.98	268.22	262.01	418	262.28	435	-	0
Tehri	740.04	829.79	822.7	1,059	819.2	986	116.65	154
TOTAL	-	-	-	3,818	-	3,397	660.9	1,023.51

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	2	23
DELHI	3	23
HARYANA	1	21
HIMACHAL PRADESH	1	13
JAMMU & KASHMIR	2	29
PUNJAB	1	19
RAJASTHAN	5	34
UTTAR PRADESH	0	8
UTTARAKHAND	4	47

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 :

- | |
|---|
| <ol style="list-style-type: none">1.500 MVA ICT-3 at Tuglkabad first time taken on load at 12.15 hrs.2. Sub bank 2 of ACF-5 at HVDC Kurukshetra :Charged at 15.18, discharged at 15.40 |
|---|

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