



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

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

Date of Reporting:29-Aug-2018

1. Regional Availability/Demand:

Evening Peak (20:00) 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
52,931	831	53,763	49.83	51,022	243	51,265	50.09	1,209	10.98

2(A)State's Load Deals (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	89.18	13.68	0	3.64	0	2.26	108.76	145.84	145.32	-0.52	254.08	0	254.08
HARYANA	31.71	0.92	0	0.09	0	0.49	33.22	138.9	137.83	-1.07	171.08	0.03	171.05
RAJASTHAN	120.08	0.52	2.87	11.31	9.82	0.31	144.9	76.9	77.45	0.55	222.35	0	222.35
DELHI	7	0	13.32	0	0	0	20.32	88.3	87.29	-1.01	107.8	0.19	107.61
UTTAR PRADESH	132.21	20.02	0	1.67	0	1.2	155.09	180.42	180.72	0.3	335.81	0	335.81
UTTARAKHAND	0	21.45	0	0.44	0	0	21.89	16.77	16.77	0	38.66	0	38.66
HIMACHAL PRADESH	0	18.51	0	0	0	9.69	28.21	-0.51	2.29	2.8	30.5	0	30.5
JAMMU & KASHMIR	0	24.64	0	0	0	0	24.64	20.53	17.92	-2.61	53.32	10.76	42.56
CHANDIGARH	0	0	0	0	0	0	0	6.49	5.92	-0.57	5.92	0	5.92
Region	380.18	99.74	16.19	17.15	9.82	13.95	537.03	673.64	671.51	-2.13	1,219.52	10.98	1,208.54

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

State	Evening Peak (20:00) MW				Off-Peak (03:00) MW			
	Demand Met	Shortage(-)/Surpl ..	UI	STOA/PX Transaction	Demand Met	Shortage(-)/Surpl ..	UI	STOA/PX Transaction
PUNJAB	10,487	0	-226	1,702	9,870	0	-35	2,048
HARYANA	7,591	19	-31	2,306	7,962	0	69	2,406
RAJASTHAN	8,857	0	-262	-125	9,122	0	-91	84
DELHI	4,735	0	-63	148	4,591	0	106	441
UTTAR PRADESH	15,808	300	-178	1,803	15,332	0	153	2,373
UTTARAKHAND	1,796	0	-57	102	1,460	0	30	-174
HIMACHAL PRADESH	1,345	0	107	-1,695	1,105	0	114	-1,771
JAMMU & KASHMIR	2,051	513	-19	-513	1,375	243	-60	-1,117
CHANDIGARH	262	0	-32	-50	205	0	-46	0
Region	52,932	832	-761	3,678	51,022	243	240	4,290

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	Demand Met at maximum requiremnet	Time	Shortage(-)/Surplus(+) during at maximum Requirement	Maximum Requirement of the day
PUNJAB	11,183	13:00	0	11,183	11,183	13:00	0	11,183
HARYANA	8,000	1:00	0	8,000	8,000	1:00	0	8,000
RAJASTHAN	9,791	8:00	0	9,791	9,791	8:00	0	9,791
DELHI	5,152	1:00	0	5,152	5,152	1:00	0	5,152
UP	16,212	1:00	0	16,212	16,212	1:00	0	16,212
UTTARAKHAND	1,796	20:00	0	1,796	1,796	20:00	0	1,796
HP	1,404	10:00	0	1,404	1,404	10:00	0	1,404
J&K	2,174	21:00	544	2,718	2,174	21:00	544	2,718
CHANDIGARH	299	15:00	0	299	299	15:00	0	299
NR	53,564	1:00	263	53,827	53,564	1:00	263	53,827

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	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BADARPUR TPS(2 * 210 + 3 * 100)	705	308	298	308	20:00	7	292
RAJGHAT TPS(2 * 67.5)	135	0	0	0		0	0
Total THERMAL	840	308	298			7	292
BAWANA GPS(2 * 253 + 4 * 216)	1,370	360	427	463	22:00	8.09	337
DELHI GAS TURBINES(3 * 34 + 6 * 30)	282	30	74	76	09:00	1.64	68
PRAGATI GAS TURBINES(1 * 121.2 + 2 * 104.6)	331	146	145	149	06:00	3.6	150
RITHALA GPS(3 * 36)	108	0	0	0		0	0
Total GAS/NAPHTHA/DIESEL	2,091	536	646			13.33	555
WIND	0	0	0	0		0	0
BIOMASS(1 * 16)	16	0	0	0		0	0
SOLAR(1 * 2)	2	0	0	0		0	0
Total DELHI	2,949	844	944			20.33	847

HARYANA							
Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
DCRTPP (YAMUNA NAGAR)(2 * 300)	600	233	474	486	11:00	9	375
JHAJJAR(CLP)(2 * 660)	1,320	743	740	747	19:00	17.81	742
MAGNUM DIESEL (IPP)(4 * 6.3)	25	0	0	0		0	0
PANIPAT TPS(2 * 210 + 2 * 250)	920	196	200	202	06:00	4.9	204
RGTPP(KHEGAR)(2 * 600)	1,200	0	0	0	00:00	0	0
Total THERMAL	4,065	1,172	1,414			31.71	1,321
FARIDABAD GPS(1 * 156.07 + 2 * 137.75)	432	0	0	0	00:00	0	0
Total GAS/NAPHTHA/DIESEL	432	0	0			0	0
TOTAL HYDRO HARYANA(1 * 62)	62	28	27	29	18:00	0.92	38
Total HYDEL	62	28	27			0.92	38
WIND	0	0	0	0		0	0
BIOMASS(1 * 106)	106	0	0	0		0.49	20
SOLAR(1 * 50)	50	0	0	0		0.09	4
Total HARYANA	4,715	1,200	1,441			33.21	1,383

HIMACHAL PRADESH							
Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BASPA (IPP) HPS(3 * 100)	300	331	331	331		7.92	330
MALANA (IPP) HPS(2 * 43)	86	91	86	91	17:00	2.03	85
OTHER HYDRO HP(1 * 372)	372	361	380	0		8.55	356
Total HYDEL	758	783	797			18.5	771
WIND	0	0	0	0		0	0
BIOMASS	0	0	0	0		0	0
SOLAR	0	0	0	0		0	0
SMALL HYDRO(1 * 486)	486	438	434	0		9.69	404
Total SMALL HYDRO	486	438	434			9.69	404
Total HP	1,244	1,221	1,231			28.19	1,175

JAMMU & KASHMIR							
Station/Constituents	Inst. Capacity	20:00	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		0	0
Total GAS/NAPHTHA/DIESEL	190	0	0			0	0
BAGLIHAR (IPP) HPS(6 * 150)	900	883	882	0		21.18	883
OTHER HYDRO/IPP J&K(1 * 308)	308	155	174	0		3.47	145
Total HYDEL	1,208	1,038	1,056			24.65	1,028
WIND	0	0	0	0		0	0
BIOMASS	0	0	0	0		0	0
SOLAR	0	0	0	0		0	0
SMALL HYDRO(1 * 98)	98	0	0	0		0	0
Total SMALL HYDRO	98	0	0			0	0
Total J&K	1,496	1,038	1,056			24.65	1,028

PUNJAB							
Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
GOINDWAL(GVK)(2 * 270)	540	246	145	246		5.02	209
GURU GOBIND SINGH TPS (ROPAR)(6 * 210)	1,260	567	458	576		12.39	516
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)(2 * 210 + 2 * 250)	920	618	506	619		13.77	574
GURU NANAK DEV TPS (BHATINDA)(4 * 110)	460	0	0	0		-0.02	-1
RAJPURA(NPL) TPS(2 * 700)	1,400	1,320	1,320	1,320		31.68	1,320
TALWANDI SABO TPS(3 * 660)	1,980	1,220	995	1,220		26.35	1,098
Total THERMAL	6,560	3,971	3,424			89.19	3,716
TOTAL HYDRO PUNJAB(1 * 1000)	1,000	614	524	667		13.68	570
Total HYDEL	1,000	614	524			13.68	570
WIND	0	0	0	0		0	0
BIOMASS(1 * 303)	303	0	0	0		2.26	94
SOLAR(1 * 859)	859	0	0	0		3.64	152
Total PUNJAB	8,722	4,585	3,948			108.77	4,532

RAJASTHAN							
Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BARSINGSAR (IPP) LTPS(2 * 125)	250	223	226	0		5.27	220
CHHABRA TPS(1 * 660 + 4 * 250)	1,660	1,176	1,157	0		25.2	1,050
GIRAL (IPP) LTPS(2 * 125)	250	0	0	0		0	0
KALISINDH TPS(2 * 600)	1,200	552	385	0		11.41	475
KAWAI TPS(2 * 660)	1,320	1,195	1,100	0		23.16	965
KOTA TPS(2 * 110 + 2 * 195 + 3 * 210)	1,240	682	654	0		16.03	668
RAJWEST (IPP) LTPS(8 * 135)	1,080	841	817	0		19.8	825
SURATGARH TPS (6 * 250)	1,500	758	678	0		17.22	718
VSLPP (IPP)(1 * 135)	135	105	73	0		1.99	83
Total THERMAL	8,635	5,532	5,090			120.08	5,004
DHOLPUR GPS(3 * 110)	330	0	0	0		0	0
RAMGARH GPS(1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5)	271	116	114	0		2.87	120
Total GAS/NAPHTHA/DIESEL	601	116	114			2.87	120
RAPS-A(1 * 100 + 1 * 200)	300	0	0	0		0	0
Total NUCLEAR	300	0	0			0	0
TOTAL HYDRO RAJASTHAN(1 * 550)	550	57	0	0		0.52	22
Total HYDEL	550	57	0			0.52	22
WIND	4,292	214	797	0		9.82	409
BIOMASS(1 * 102)	102	13	13	0		0.31	13
SOLAR(1 * 1995)	1,995	37	0	0		11.31	471
Total RAJASTHAN	16,475	5,969	6,014			144.91	6,039

UTTAR PRADESH							
Station/Constituents	Inst. Capacity	20:00	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	1,229	1,308	0		28.37	1,182
ANPARA-C TPS(2 * 600)	1,200	1,092	1,101	0		19.6	817
ANPARA-D TPS(2 * 500)	1,000	885	941	0		21.19	883
BAJAJ ENERGY PVT LTD (IPP) TPS(10 * 45)	450	0	0	0		0	0
BARA PPGCL TPS(3 * 660)	1,980	473	348	0		9.2	383
HARDUAGANJ TPS(1 * 105 + 1 * 60 + 2 * 250)	665	440	254	0		7.48	312
LALITPUR TPS(3 * 660)	1,980	0	0	0		0	0
OBRA TPS (2 * 94 + 5 * 200)	1,188	509	533	0		9.63	401
PANKI TPS(2 * 105)	210	0	0	0		0	0
PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)	1,160	879	490	0		14.35	598
ROSA TPS(4 * 300)	1,200	1,065	605	0		17.44	727
TANDA TPS(4 * 110)	440	260	161	0		4.95	206
Total THERMAL	13,103	6,832	5,741			132.21	5,509
ALAKHANDA HEP(4 * 82.5)	330	339	344	0		8.03	335
VISHNUPARYAG HPS(4 * 110)	440	435	435	0		10.48	437
OTHER HYDRO UP(1 * 527)	527	65	48	0		1.51	63
Total HYDEL	1,297	839	827			20.02	835
WIND	0	0	0	0		0	0
BIOMASS(1 * 26)	26	0	0	0		0	0
SOLAR(1 * 472)	472	0	0	0		1.67	70
CO-GENERATION(1 * 1360)	1,360	50	50	0		1.2	50
Total OTHERs	1,360	50	50			1.2	50
Total UP	16,258	7,721	6,618			155.1	6,464

UTTARAKHAND										
Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW			
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)				
TOTAL GAS UK(1 * 450)	450	0	0	0		0	0			
Total GAS/NAPTHA/DIESEL	450	0	0			0	0			
OTHER HYDRO UK(1 * 1250)	1,250	902	888	964	14:00	21.45	894			
Total HYDEL	1,250	902	888			21.45	894			
WIND	0	0	0	0		0	0			
BIOMASS(1 * 127)	127	0	0	0		0	0			
SOLAR(1 * 100)	100	0	0	62	14:00	0.44	18			
SMALL HYDRO(1 * 180)	180	0	0	0		0	0			
Total SMALL HYDRO	180	0	0			0	0			
Total UTTARAKHAND	2,107	902	888			21.89	912			

3(B) Regional Entities Generation

Station/Constituents	Inst. Capacity	Declared Capacity	20:00	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	718.27	1,196	541	1,196	20:00	17.24	17.33	722	0.09
DEHAR HPS(6 * 165)	990	602.65	825	495	825	20:00	14.46	14.53	605	0.07
PONG HPS(6 * 66)	396	157.08	264	66	264	20:00	3.77	3.83	160	0.06
Sub-Total	2,765	1,478	2,285	1,102	-	-	35.47	35.69	1,487	0.22
NHPC										
BAIRASIUL HPS(3 * 60)	180	92.44	118	112	175	19:00	2.22	2.43	101	0.21
CHAMERA HPS(3 * 180)	540	523.22	543	537	548	17:45	12.54	12.7	529	0.16
CHAMERA II HPS(3 * 100)	300	296.85	305	300	307	19:00	7.12	7.21	300	0.09
CHAMERA III HPS(3 * 77)	231	200.64	234	232	236	05:00	4.8	4.91	205	0.11
DHAULIGANGA HPS(4 * 70)	280	278.44	286	274	292	19:00	6.64	6.81	284	0.17
DULHASTI HPS(3 * 130)	390	380.66	394	391	396	-	9.14	9.31	388	0.17
KISHANGANGA(2 * 110)	220	73.91	87	68	87	12:00	1.77	1.87	78	0.1
PARBATI III HEP(4 * 130)	520	155.17	519	121	523	19:00	3.72	3.79	158	0.07
SALAL HPS(6 * 115)	690	688.25	708	708	718	06:00	16.52	17	708	0.48
SEWA-II HPS(3 * 40)	120	119.54	120	118	124	23:59	1.3	1.32	55	0.02
TANAKPUR HPS(1 * 31.42 + 2 * 31.4)	94	84.64	97	90	97	20:00	2.03	2.15	90	0.12
URI HPS(4 * 120)	480	278.54	445	371	467	23:59	6.68	7.34	306	0.66
URI-II HPS(4 * 60)	480	167.85	241	153	243	08:00	4.03	4.16	173	0.13
Sub-Total	4,525	3,340.15	4,097	3,475	-	-	78.51	81	3,375	2.49
NPCL										
NAPS(2 * 220)	440	378	418	417	423	08:00	9.07	9.03	376	-0.04
RAPS-B(2 * 220)	440	357	0	0	0	-	8.57	9.56	398	0.99
RAPS-C(2 * 220)	440	407	450	452	453	04:00	9.77	9.71	405	-0.06
Sub-Total	1,320	1,142	868	869	-	-	27.41	28.3	1,179	0.89
NTPC										
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	404.86	0	0	0	-	0	0.03	1	0.03
AURAIYA GPS(2 * 109.3 + 4 * 111.19)	663	637	0	0	0	-	0	0	0	0
DADRI GPS(2 * 154.51 + 4 * 130.19)	830	589.95	0	0	0	-	2.81	0	0	-2.81
DADRI SOLAR(1 * 5)	5	0.85	0	0	0	-	0.02	0.02	1	0
DADRI-I TPS(4 * 210)	840	788.4	544	337	544	20:00	8.47	8.35	348	-0.12
DADRI-II TPS(2 * 490)	980	928.55	806	532	806	20:00	14.06	14.72	613	0.66
ISTPP (JHAJJAR)(3 * 500)	1,500	947.5	890	593	978	21:16	14.29	14.42	601	0.13
KOLDAM HPS(4 * 200)	800	872	868	870	871	11:00	18.44	18.48	770	0.04
RIHAND-I STPS(2 * 500)	1,000	920.34	988	999	988	20:00	21.72	23.32	972	1.6
RIHAND-II STPS(2 * 500)	1,000	942.5	990	999	990	20:00	22.34	23.78	991	1.44
RIHAND-III STPS(2 * 500)	1,000	942.5	999	991	999	20:00	21.82	23.35	973	1.53
SINGRAULI STPS(2 * 500 + 5 * 200)	2,000	1,750	1,911	1,903	1,919	23:00	39.81	40.1	1,671	0.29
SINGRAULI SOLAR(1 * 15)	15	1.69	0	0	0	-	0.04	0.06	3	0.02
UNCHAHAH II TPS(2 * 210)	420	382.2	342	245	342	20:00	5.66	5.84	243	0.18
UNCHAHAH III TPS(1 * 210)	210	191.1	166	119	166	20:00	2.86	2.83	118	-0.03
UNCHAHAH IV TPS(1 * 500)	500	0	0	0	0	-	0	0	0	0
UNCHAHAH SOLAR(1 * 10)	10	1.22	0	0	9	11:51	0.03	0.03	1	0
UNCHAHAH TPS(2 * 210)	420	191.1	191	129	191	20:00	3	2.98	124	-0.02
Sub-Total	12,612	10,491.76	8,695	7,717	-	-	175.37	178.31	7,430	2.94
SJVNL										
NATHPA-JHAKRI HPS(6 * 250)	1,500	1,605	1,642	1,605	1,645	19:00	38.52	39	1,625	0.48
RAMPUR HEP(6 * 68.67)	412	442	448	448	450	09:00	10.61	10.9	454	0.29
Sub-Total	1,912	2,047	2,090	2,053	-	-	49.13	49.9	2,079	0.77
THDC										
KOTESHWAR HPS(4 * 100)	400	348.15	400	362	400	20:00	8.36	8.48	353	0.12
TEHRI HPS(4 * 250)	1,000	1,064	1,065	1,007	1,066	19:00	23.71	24.7	1,029	0.99
Sub-Total	1,400	1,412.15	1,465	1,369	-	-	32.07	33.18	1,382	1.11
Total	24,534	19,911.06	19,500	16,585			397.96	406.38	16,932	8.42

IPP/JV

Station/Constituents	Inst. Capacity	Declared Capacity	20:00	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	175	136	201	21:00	3.06	3.21	134	0.15
BUDHIL HPS (IPP)(2 * 35)	70	0	75	70	76	23:00	1.79	1.53	64	-0.26
KARCHAM WANGTOO HPS(4 * 250)	1,000	0	1,100	1,100	1,100	19:00	26.08	26.44	1,102	0.36
MALANA2(2 * 50)	100	0	112	112	112	03:00	2.4	2.55	106	0.15
SAINJ HEP(2 * 50)	50	0	110	110	110	00:00	2.59	2.61	109	0.02
SHREE CEMENT (IPP) TPS(2 * 150)	300	0	244	139	293	22:00	4.23	4.16	173	-0.07
Sub-Total	1,712	0	1,816	1,667	-	-	40.15	40.5	1,688	0.35
Total	1,712	0	1,816	1,667	-	-	40.15	40.5	1,688	0.35

Summary Section					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Total State Control Area Generation	53,966	23,480	22,140	537.05	22,377
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		11,538	13,115	244.43	15,313
Total Regional Availability(Gross)	80,212	56,334	53,507	1,228.36	56,310

Total Hydro Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Hydro	12,814	12,377	10,397	254.59	10,608
State Control Area Hydro	6,125	4,261	4,119	99.74	4,156
Total Regional Hydro	18,939	16,638	14,516	354.33	14,764

Total Renewable Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Renewable	30	0	0	0.11	5
State Control Area Renewable	9,214	702	1,244	39.72	1,655
Total Regional Renewable	9,244	702	1,244	39.83	1,660

4(A) INTER-REGIONAL EXCHANGES (Import=(+ve) /Export =(-ve))

SL.No.	Element	20:00	03:00	Maximum Interchange (MW)		Import in MU	Export in MU	NET
		(MW)	MW	Import (MW)	Export (MW)			
Import/Export between EAST REGION and NORTH REGION								
1	132KV-Garhwa-Rihand	-	-	-	-	0	0	0
2	132KV-Karmnasa(PG)-Sahupuri(UP)	-	-	-	-	0.96	0	0.96
3	132KV-Rihand-Sonnagar(PG)	-	-	-	-	0	0.61	-0.61
4	220KV-Pusauli(PG)-Sahupuri(UP)	156	125	156	0	3.27	0	3.27
5	400KV-Biharsharif(PG)-Baliala(PG)	142	70	206	0	3.41	0	3.41
6	400KV-Biharsharif(PG)-Varanasi(PG)	129	119	4	157	0	1.69	-1.69
7	400KV-Fatehpur(UP)-Sasaram	-	-	-	-	-	-	-
8	400KV-Motihari(DMT)-Gorakhpur(UP)	-356	-208	0	356	0	5.74	-5.74
9	400KV-Muzaffarpur(PG)-Gorakhpur(UP)	306	230	442	0	6.98	0	6.98
10	400KV-Patna(PG)-Baliala(PG)	161	610	691	0	7.73	0	7.73
11	400KV-Sasaram-Allahabad(PG)	7	20	43	0	0.48	0	0.48
12	400KV-Sasaram-Varanasi(PG)	137	123	141	0	3	0	3
13	765KV-Fatehpur(PG)-Sasaram.	-283	-242	0	317	0	4.92	-4.92
14	765KV-Gaya(PG)-Baliala(PG)	326	250	360	0	6.25	0	6.25
15	765KV-Gaya(PG)-Varanasi(PG)	-144	-111	220	0	3.36	0	3.36
16	HVDC800KV-Alipurduar-Agra(PG)	300	200	444	-	5.9	0	5.9
Sub-Total EAST REGION		881	1,186	2,707	830	41.34	12.96	28.38
Import/Export between NORTH_EAST REGION and NORTH REGION								
1	HVDC800KV-BiswanathCharialli-Agra(PG)	850	2,000	2,000	0	42.02	0	42.02
Sub-Total NORTH_EAST REGION		850	2,000	2,000	0	42.02	0	42.02
Import/Export between WEST REGION and NORTH REGION								
1	220KV-Auraiya(NT)-Malanpur(PG)	-	-	-	-	0.5	0	0.5
2	220KV-Badod(MP)-Kota(PG)	48	38	84	-	1.01	0	1.01
3	220KV-Badod(MP)-Modak(RJ)	-	-	-	-	-	-	-
4	400KV-RAPS C(NP)-Sujalpur	270	180	331	0	5.03	0	5.03
5	400KV-Vindhyachal(PG)-Rihand(NT)	-	-	-	-	0	22.2	-22.2
6	400KV-Zerda(PG)-Bhinmal(PG)	37	43	84	141	0	0.47	-0.47
7	400KV-Zerda(PG)-Kankroli(RJ)	-129	-78	0	293	0	3.07	-3.07
8	765KV-Orai-Gwalior(PG)	-379	-284	0	379	0	7.96	-7.96
9	765KV-Orai-Jabalpur	1,092	900	1,302	0	21.12	0	21.12
10	765KV-Orai-Satna	1,801	1,704	1,819	0	42.05	0	42.05
11	765KV-Gwalior(PG)-Agra(PG)	2,428	2,008	2,606	0	48.53	0	48.53
12	765KV-Phagi(RJ)-Gwalior(PG)	1,038	1,021	1,374	-	2.6	0	2.6
13	HVDC500KV-Mundra(JH)-Mohindergarh(JH)	2,001	1,997	2,005	0	48.39	0	48.39
14	HVDC500KV-Vindhyachal(PG)-Vindhyachal B/B	350	200	444	0	5.9	0	5.9
15	HVDC800KV-Champa(PG)-Kurukshetra(PG)(PG)	1,250	2,200	2,200	0	32.6	0	32.6
Sub-Total WEST REGION		9,807	9,929	12,249	813	207.73	33.7	174.03
TOTAL IR EXCHANGE		11,538	13,115	16,956	1,643	291.09	46.66	244.43

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-WR	133.23	61.38	-2.36	192.25	174.03	-18.22
NR-ER	47.56	38.13	-13.63	72.06	70.4	-1.66

Total	180.79	99.51	-15.99	264.31	244.43	-19.88
-------	--------	-------	--------	--------	--------	--------

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)	20.25	0				0.3295	0

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	.9	3	16.3	72.1	78.1	5.3	.5	0	5.6

<-----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.	
50.19	13:03:10	49.62	19:17:50	49.96	0.07	0.07	50.06	49.74	21.9

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	413	06:00	397	00:40	0	0	0	0	0
Abdullapur(PG) - 400KV	413	06:00	397	00:40	0	0	0	0	0
Amritsar(PG) - 400KV	407	07:00	394	14:15	0	0	0	0	0
Ballabgarh(PG) - 400KV	415	06:00	396	13:45	0	0	0	0	0
Bareilly II(PG) - 400KV	412	06:00	394	19:15	0	0	0	0	0
Bareilly(UP) - 400KV	413	06:00	395	19:15	0	0	0	0	0
Baspa(HP) - 400KV	407	05:35	396	14:15	0	0	0	0	0
Bassi(PG) - 400KV	413	04:00	398	22:45	0	0	0	0	0
Bawana(DTL) - 400KV	413	06:00	398	00:40	0	0	0	0	0
Dadri HVDC(PG). - 400KV	413	06:00	397	13:45	0	0	0	0	0
Gorakhpur(PG) - 400KV	415	07:25	387	19:10	0	1.74	0	0	0
Hisar(PG) - 400KV	408	06:00	391	13:45	0	0	0	0	0
Kanpur(PG) - 400KV	419	06:00	406	00:40	0	0	0	0	0
Kashipur(UT) - 400KV	402	00:00	402	00:00	0	0	0	0	0
Kishenpur(PG) - 400KV	412	05:00	403	10:05	0	0	0	0	0
Moga(PG) - 400KV	407	06:00	394	13:45	0	0	0	0	0
Nallagarh(PG) - 400KV	407	05:35	396	14:15	0	0	0	0	0
Rihand HVDC(PG) - 400KV	405	17:15	405	17:15	.35	.35	0	0	.35
Rihand(NT) - 400KV	404	17:15	399	19:15	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	788	05:25	774	22:15	0	0	0	0	0
Balia(PG) - 765KV	778	07:25	743	19:10	0	0	0	0	0
Bareilly II(PG) - 765KV	786	06:00	751	19:15	0	0	0	0	0
Bhiwani(PG) - 765KV	795	06:05	768	19:10	0	0	0	0	0
Fatehpur(PG) - 765KV	780	06:00	736	13:40	0	4.51	0	0	0
Jhatikara(PG) - 765KV	790	06:00	758	13:40	0	0	0	0	0
Lucknow II(PG) - 765KV	784	07:25	746	19:10	0	0	0	0	0
Meerut(PG) - 765KV	799	06:00	768	19:15	0	0	0	0	0
Moga(PG) - 765KV	789	06:00	762	13:45	0	0	0	0	0
Phagi(RJ) - 765KV	0	00:00	0	00:00	100	100	0	0	100
Unnao(UP) - 765KV	769	07:25	736	19:10	0	4.51	0	0	0

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

State	Off- Peak Hours (03:00)			Peak Hours (20:00)			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)
UTTAR PRADESH	2,349.95	23.52	0	1,798.43	4.9	0	134.66	48.63	-2.87	180.42
HIMACHAL PRADESH	-1,588.15	-182.83	0	-1,637.97	-56.56	0	38.58	-36.15	-2.95	-0.51
HARYANA	2,251.83	153.68	0	2,305.88	0.59	0	90.87	46.8	1.21	138.9
CHANDIGARH	0	0	0	0	-50.25	0	7.27	0	-0.78	6.49
PUNJAB	2,048.22	0	0	2,053.73	-351.72	0	97.78	49.22	-1.16	145.84
UTTARAKHAND	161.09	-335.36	0	182.31	-80.05	0	18.39	4.12	-5.75	16.77
DELHI	870.98	-430.11	0	743.77	-595.92	0	77.48	19.84	-9.02	88.3
JAMMU & KASHMIR	-1,046.16	-70.7	0	-1,046.16	533.3	0	35.78	-25.11	9.86	20.53
RAJASTHAN	6.42	77.55	0	-138.12	12.68	0	76.75	-0.8	0.95	76.9
TOTAL	5,054.18	-764.25	0	4,261.87	-583.03	0	577.56	106.55	-10.51	673.64

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
UTTAR PRADESH	6,545.19	4,387.66	2,368.4	1,772.61	23.52	-949.6	0	0
HIMACHAL PRADESH	1,815.62	1,429.51	-1,406.36	-1,815.62	92.47	-246.21	0	0
HARYANA	4,613.73	2,702.37	2,465.07	1,711.89	160.66	-345.92	0	0
CHANDIGARH	356.22	271.81	0	0	0	-85.42	0	0
PUNJAB	4,440.59	3,893.69	2,053.73	2,042.33	0	-351.72	0	0
UTTARAKHAND	870.1	660.59	232.81	108.72	-41.18	-366.53	0	0
DELHI	3,918.97	2,645.46	1,031.01	277.16	-138.68	-747.66	0	0
JAMMU & KASHMIR	1,639.31	1,339.8	-1,046.16	-1,046.16	582.68	-70.7	0	0
RAJASTHAN	3,926.94	2,695.11	6.42	-138.12	341.28	-1,221.89	0	0

8. Major Reservoir Particulars

RESERVOIR	Parameters			Present Parameters		LAST YEAR		LAST DAY	
	MDDL (Mts)	FRL (Mts)	Energy (MU)	Level (Mts)	Energy (MU)	Level (Mts)	Energy (MU)	Inflow (m3/s)	Usage (m3/s)
Bhakra	445.62	513.59	653	499.09	1,053	508.64	1,485	940.66	497.95
Chamera-I	748.75	760	0	757.11	-	-	-	290.52	345.05
Gandhisagar	295.78	295.78	0	-	-	-	-	-	0
Jawahar Sagar	295.78	298.7	0	-	-	-	-	-	0
Koteshwar	598.5	612.5	5	-	-	-	-	-	0
Pong	384.05	426.72	138	417.63	781	420.85	931	572.08	223.93
RPS	343.81	352.8	0	-	-	-	-	-	0
RSD	487.91	527.91	1	520.29	5	520.44	10	364.66	252.31
Rihand	252.98	268.22	0	-	-	-	-	-	0
Tehri	740.04	829.79	787	818.6	974	815.3	908	555.07	554
TOTAL	-	-	1,584	-	2,813	-	3,334	2,722.99	1,873.24

9. System Reliability Indices (Violation of TTC and ATC):**(i) %age of times N-1 Criteria was violated in the inter - regional corridors**

WR	0
ER	0
Simultaneous	0

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

WR	0
ER	0
Simultaneous	0

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

Rihand-Dadri	0
--------------	---

10. Zero Crossing Violations

State	No. of violations (Maximum 8 in a day)	Maximum number of continuous blocks without sign change
CHANDIGARH	3	26
DELHI	1	19
HARYANA	0	1
HIMACHAL PRADESH	2	30
JAMMU & KASHMIR	4	25
PUNJAB	0	9
RAJASTHAN	1	13
UP	1	13
UTTARAKHAND	2	22

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