



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

Power Supply Position in Northern Region For 19-Sep-2018

Date of Reporting:20-Sep-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
54,747	837	55,584	49.84	51,050	790	51,840	49.95	1,258	9.85

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	104.9	18.94	0	4.29	0	8.3	136.43	90.93	89.9	-1.03	226.33	0	226.33
HARYANA	66.2	0.95	0	0.17	0	0.49	67.81	120.36	121.08	0.72	188.89	0	188.89
RAJASTHAN	128.87	0	3.06	12.93	25.73	4.19	174.77	55.45	54.19	-1.26	228.96	0	228.96
DELHI	6.66	0	17.56	0	0	0.92	25.13	83.64	83.42	-0.22	108.55	0	108.55
UTTAR PRADESH	191.5	23	0	3	0	1.2	218.7	173.29	173.53	0.24	392.23	0	392.23
UTTARAKHAND	0	18.98	0	0.07	0	0	19.05	18.18	19.93	1.75	40.82	1.84	38.98
HIMACHAL PRADESH	0	12.09	0	0	0	8.98	21.06	7.53	9.37	1.84	30.43	0	30.43
JAMMU & KASHMIR	0	12.79	0	0	0	0	12.79	29.99	25.69	-4.3	46.49	8.01	38.48
CHANDIGARH	0	0	0	0	0	0	0	5.26	4.93	-0.33	4.93	0	4.93
Region	498.13	86.75	20.62	20.46	25.73	24.08	675.74	584.63	582.04	-2.59	1,267.63	9.85	1,257.78

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

State	Evening Peak (20:00) MW				Off-Peak (03:00) MW			
	Demand Met	Shortage(-)/Surplus(+)	UI	STOA/PX Transaction	Demand Met	Shortage(-)/Sur ..	UI	STOA/PX Transaction
PUNJAB	8,069	0	-44	-431	9,073	0	-110	982
HARYANA	8,911	0	-40	1,155	7,880	0	240	1,696
RAJASTHAN	9,729	0	-322	-395	8,997	0	11	-750
DELHI	4,849	0	-53	-220	4,316	0	112	-158
UTTAR PRADESH	17,878	140	-164	2,014	16,896	600	107	2,177
UTTARAKHAND	1,797	230	35	124	1,534	0	86	252
HIMACHAL PRADESH	1,400	0	41	-1,191	1,117	0	229	-693
JAMMU & KASHMIR	1,869	467	-394	-58	1,076	190	-182	-475
CHANDIGARH	245	0	2	-81	161	0	-19	0
Region	54,747	837	-939	917	51,050	790	474	3,031

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 requirement
PUNJAB	9,821	10:00	0	9,821	9,821	10:00	0	9,821
HARYANA	8,911	20:00	0	8,911	8,911	20:00	0	8,911
RAJASTHAN	10,319	10:00	0	10,319	10,319	10:00	0	10,319
DELHI	5,047	17:00	0	5,047	5,047	17:00	0	5,047
UP	18,121	21:00	0	18,121	18,121	21:00	0	18,121
UTTARAKHAND	1,910	19:00	110	2,020	2,020	19:00	110	1,910
HP	1,466	8:00	0	1,466	1,466	8:00	0	1,466
J&K	2,074	19:00	518	2,592	2,592	19:00	518	2,074
CHANDIGARH	254	16:00	0	254	254	16:00	0	254
NR	54,747	20:00	837	55,584	55,584	20:00	837	54,747

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	316	309	0		6.66	278
RAJGHAT TPS(2 * 67.5)	135	0	0	0			
Total THERMAL	840	316	309			6.66	278
BAWANA GPS(2 * 253 + 4 * 216)	1,370	499	430	0		12.01	500
DELHI GAS TURBINES(3 * 34 + 6 * 30)	282	74	75	0		1.84	77
PRAGATI GAS TURBINES(1 * 121.2 + 2 * 104.6)	331	148	153	0		3.71	155
RITHALA GPS(3 * 36)	108	0	0	0			
Total GAS/NAPHTHA/DIESEL	2,091	721	658			17.56	732
WIND	0	0	0	0			
BIOMASS(1 * 16)	16	36	34	0		0.92	38
SOLAR(1 * 2)	2	0	0	0			
Total DELHI	2,949	1,073	1,001			25.14	1,048

HARIYANA							
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	245	241	0		5.7	238
JHAJJAR(CLP)(2 * 660)	1,320	1,236	844	0		27.98	1,166
MAGNUM DIESEL (IPP)(4 * 6.3)	25	0	0	0			
PANIPAT TPS(2 * 210 + 2 * 250)	920	405	408	0		9.8	408
RGTPP(KHEDAR)(2 * 600)	1,200	1,119	782	0		22.71	946
Total THERMAL	4,065	3,005	2,275			66.19	2,758
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	28	28	0		0.95	40
Total HYDEL	62	28	28			0.95	40
WIND	0	0	0	0			
BIOMASS(1 * 106)	106	0	0	0		0.49	20
SOLAR(1 * 50)	50	0	0	0		0.17	7
Total HARYANA	4,715	3,033	2,303			67.8	2,825

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	163	92	306	02:00	4.37	182
MALANA (IPP) HPS(2 * 43)	86	88	14	88	20:00	1.02	43
OTHER HYDRO HP(1 * 372)	372	354	248	0		6.69	279
Total HYDEL	758	605	354			12.08	504
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0		0	0
SMALL HYDRO(1 * 486)	486	380	370	0		8.98	374
Total SMALL HYDRO	486	380	370			8.98	374
Total HP	1,244	985	724			21.06	878

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			
Total GAS/NAPHTHA/DIESEL	190	0	0			0	0
BAGLIHAR (IPP) HPS(6 * 150)	900	442	442	0		10.6	442
OTHER HYDRO/IPP J&K(1 * 308)	308	110	58	0		2.19	91
Total HYDEL	1,208	552	500			12.79	533
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	552	500			12.79	533

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	238	243	246		5.57	232
GURU GOBIND SINGH TPS (ROPAR)(6 * 210)	1,260	567	471	576		12.68	528
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)(2 * 210 + 2 * 250)	920	846	741	851		19.43	810
GURU NANAK DEV TPS (BHATINDA)(4 * 110)	460	0	0	0		-0.02	-1
RAJPURA(NPL) TPS(2 * 700)	1,400	660	1,320	1,320		27.65	1,152
TALWANDI SABO TPS(3 * 660)	1,980	1,400	1,841	1,841		39.59	1,650
Total THERMAL	6,560	3,711	4,616			104.9	4,371
TOTAL HYDRO PUNJAB(1 * 1000)	1,000	804	595	804		18.94	789
Total HYDEL	1,000	804	595			18.94	789
WIND	0	0	0	0			
BIOMASS(1 * 303)	303	0	0	0		8.3	346
SOLAR(1 * 859)	859	0	0	0		4.29	179
Total PUNJAB	8,722	4,515	5,211			136.43	5,685

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	107	108	0		2.48	103
CHHABRA TPS(1 * 660 + 4 * 250)	1,660	1,401	1,462	0		33.41	1,392
GIRAL (IPP) LTPS(2 * 125)	250	0	0	0			
KALISINDH TPS(2 * 600)	1,200	551	400	0		11.83	493
KAWAI TPS(2 * 660)	1,320	1,205	1,158	0		27.29	1,137
KOTA TPS(2 * 110 + 2 * 195 + 3 * 210)	1,240	677	668	0		15.28	637
RAJWEST (IPP) LTPS(8 * 135)	1,080	860	827	0		20.4	850
SURATGARH TPS(6 * 250)	1,500	905	598	0		18.18	758
VSLPP (IPP)(1 * 135)	135	0	0	0			
Total THERMAL	8,635	5,706	5,221			128.87	5,370
DHOLPUR GPS(3 * 110)	330	0	0	0			
RAMGARH GPS(1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5)	271	129	132	0		3.06	128
Total GAS/NAPHTHA/DIESEL	601	129	132			3.06	128
RAPS-A(1 * 100 + 1 * 200)	300	154	157	0		3.64	152
Total NUCLEAR	300	154	157			3.64	152
TOTAL HYDRO RAJASTHAN(1 * 550)	550	0	0	0			
Total HYDEL	550	0	0			0	0
WIND	4,292	676	1,303	0		25.73	1,072
BIOMASS(1 * 102)	102	23	23	0		0.55	23
SOLAR(1 * 1995)	1,995	42	0	0		12.93	539
Total RAJASTHAN	16,475	6,730	6,836			174.78	7,284

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	1,350	1,347	0		33.4	1,392
ANPARA-C TPS(2 * 600)	1,200	657	657	0		15.5	646
ANPARA-D TPS(2 * 500)	1,000	928	933	0		21.7	904
BAJAJ ENERGY PVT LTD (IPP) TPS(10 * 45)	450	352	352	0		7	292
BARA PPGCL TPS(3 * 660)	1,980	500	517	0		12.4	517
HARDUAGANJ TPS(1 * 105 + 1 * 60 + 2 * 250)	665	319	315	0		7.2	300
LALITPUR TPS(3 * 660)	1,980	1,819	1,840	0		39.1	1,629
OBRA TPS(2 * 94 + 5 * 200)	1,188	470	440	0		10.8	450
PANKI TPS(2 * 105)	210	0	0	0			
PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)	1,160	804	814	0		18.3	763
ROSA TPS(4 * 300)	1,200	840	845	0		20.2	842
TANDA TPS(4 * 110)	440	278	196	0		5.9	246
Total THERMAL	13,103	8,317	8,256			191.5	7,981
ALAKHANDA HEP(4 * 82.5)	330	292	290	0		7.1	296
VISHNUPARYAG HPS(4 * 110)	440	435	435	0		10.5	438
OTHER HYDRO UP(1 * 527)	527	263	343	0		5.4	225
Total HYDEL	1,297	990	1,068			23	959
WIND	0	0	0	0			
BIOMASS(1 * 26)	26	0	0	0			
SOLAR(1 * 472)	472	0	0	0		3	125
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	9,357	9,374			218.7	9,115

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						
Total GAS/NAPTHA/DIESEL	450	0	0			0	0			
OTHER HYDRO UK(1 * 1250)	1,250	875	766	939	08:00	18.98	791			
Total HYDEL	1,250	875	766			18.98	791			
WIND	0	0	0	0						
BIOMASS(1 * 127)	127	0	0	0						
SOLAR(1 * 100)	100	0	0	104	12:00	0.07	3			
SMALL HYDRO(1 * 180)	180	0	0	0						
Total SMALL HYDRO	180	0	0			0	0			
Total UTTARAKHAND	2,107	875	766			19.05	794			

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	826.74	1,346	680	1,346	20:00	19.84	19.96	832	0.12
DEHAR HPS(6 * 165)	990	456.15	725	495	725	20:00	10.95	11.02	459	0.07
PONG HPS(6 * 66)	396	255.26	264	264	264	20:00	6.13	6.12	255	-0.01
Sub-Total	2,765	1,538.15	2,335	1,439	-	-	36.92	37.1	1,546	0.18
NHPC										
BAIRASIUL HPS(3 * 60)	180	54.27	141	51	141	20:00	1.3	1.32	55	0.02
CHAMERA HPS(3 * 180)	540	534.33	539	0	551	18:30	4.42	4.62	193	0.2
CHAMERA II HPS(3 * 100)	300	197.02	305	101	305	21:00	4.12	4.22	176	0.1
CHAMERA III HPS(3 * 77)	231	119.43	231	77	233	19:00	2.85	2.92	122	0.07
DHAULIGANGA HPS(4 * 70)	280	202.79	284	204	285	19:00	4.82	4.9	204	0.08
DULHASTI HPS(3 * 130)	390	387.16	407	411	412	01:00	9.25	9.61	400	0.36
KISHANGANGA(2 * 110)	220	120.62	174	120	174	20:00	2.9	0.3	13	-2.6
PARBATI III HEP(4 * 130)	520	75.69	379	14	382	19:00	1.82	1.85	77	0.03
SALAL HPS(6 * 115)	690	325.21	632	355	632	20:00	7.8	8.58	358	0.78
SEWA-II HPS(3 * 40)	120	119.54	120	0	120	20:00	0.37	0.39	16	0.02
TANAKPUR HPS(1 * 31.42 + 2 * 31.4)	94	93.39	97	99	100	05:00	2.24	2.31	96	0.07
URI HPS(4 * 120)	480	223.33	362	177	362	20:00	5.36	5.92	247	0.56
URI-II HPS(4 * 60)	480	148.07	183	124	236	21:00	3.55	3.8	158	0.25
Sub-Total	4,525	2,600.85	3,854	1,733	-	-	50.8	50.74	2,115	-0.06
NPCL										
NAPS(2 * 220)	440	381	418	428	432	05:00	9.14	9.19	383	0.05
RAPS-B(2 * 220)	440	381	420	421	420	20:00	9.14	9.12	380	-0.02
RAPS-C(2 * 220)	440	205	230	230	231	09:00	4.92	4.83	201	-0.09
Sub-Total	1,320	967	1,068	1,079	-	-	23.2	23.14	964	-0.06
NTPC										
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	148.96	248	233	248	20:00	5.02	4.98	208	-0.04
AURAIYA GPS(2 * 109.3 + 4 * 111.19)	663	313.5	255	211	317	22:00	5.26	5.63	235	0.37
DADRI GPS(2 * 154.51 + 4 * 130.19)	830	358.75	320	338	380	00:25	6.79	6.59	275	-0.2
DADRI SOLAR(1 * 5)	5	0.91	0	0	3	12:41	0.02	0.02	1	0
DADRI-I TPS(4 * 210)	840	768.6	724	447	724	20:00	15.4	16.41	684	1.01
DADRI-II TPS(2 * 490)	980	928.55	820	846	820	20:00	21.78	21.07	878	-0.71
ISTPP (JHAJJAR)(3 * 500)	1,500	1,369.85	1,180	890	1,509	23:37	27.04	28.03	1,168	0.99
KOLDAM HPS(4 * 200)	800	872	867	0	869	19:00	8.5	9.13	380	0.63
RIHAND-I STPS(2 * 500)	1,000	461.25	502	508	502	20:00	11.06	12.22	509	1.16
RIHAND-II STPS(2 * 500)	1,000	942.5	992	1,000	992	20:00	22.61	24.11	1,005	1.5
RIHAND-III STPS(2 * 500)	1,000	942.5	1,000	1,002	1,000	20:00	22.61	23.91	996	1.3
SINGRAULI STPS(2 * 500 + 5 * 200)	2,000	1,800	1,960	1,963	1,960	20:00	43.2	46.78	1,949	3.58
SINGRAULI SOLAR(1 * 15)	15	2.55	0	0	0	-	0.06	0.07	3	0.01
UNCHAHAH II TPS(2 * 210)	420	382.2	424	395	424	20:00	8.92	9.64	402	0.72
UNCHAHAH III TPS(1 * 210)	210	191.1	209	180	209	20:00	4.38	4.68	195	0.3
UNCHAHAH IV TPS(1 * 500)	500	0	0	0	0	-	0	-	-	0
UNCHAHAH SOLAR(1 * 10)	10	2.23	0	0	0	-	0.05	0.05	2	0
UNCHAHAH TPS(2 * 210)	420	382.2	421	375	421	20:00	9.01	9.29	387	0.28
Sub-Total	12,612	9,867.65	9,922	8,388	-	-	211.71	222.61	9,277	10.9
SJVNL										
NATHPA-JHAKRI HPS(6 * 250)	1,500	1,497.38	1,537	509	1,617	19:00	21.5	22.49	937	0.99
RAMPUR HEP(6 * 68.67)	412	442	434	138	448	19:00	5.98	6.44	268	0.46
Sub-Total	1,912	1,939.38	1,971	647	-	-	27.48	28.93	1,205	1.45
THDC										
KOTESHWAR HPS(4 * 100)	400	99.9	304	71	304	20:00	2.4	2.54	106	0.14
TEHRI HPS(4 * 250)	1,000	1,064	1,042	0	1,042	20:00	7.12	7.42	309	0.3
Sub-Total	1,400	1,163.9	1,346	71	-	-	9.52	9.96	415	0.44
Total	24,534	18,076.93	20,496	13,357			359.63	372.48	15,522	12.85

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	181	67	181	20:00	1.81	1.95	81	0.14
BUDHIL HPS (IPP)(2 * 35)	70	0	35	44	69	01:00	1.13	0.92	38	-0.21
KARCHAM WANGTOO HPS(4 * 250)	1,000	0	1,000	400	1,000	19:00	11.83	12.24	510	0.41
MALANA2(2 * 50)	100	0	105	35	105	21:00	1.07	1.14	48	0.07
SAINJ HEP(2 * 50)	50	0	110	70	110	00:00	1.56	1.73	72	0.17
SHREE CEMENT (IPP) TPS(2 * 150)	300	0	298	247	299	16:00	6.98	6.9	288	-0.08
Sub-Total	1,712	0	1,729	863	-	-	24.38	24.88	1,037	0.5
Total	1,712	0	1,729	863	-	-	24.38	24.88	1,037	0.5

Summary Section					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Total State Control Area Generation	53,966	27,120	26,715	675.75	28,156
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		9,107	10,823	217.94	11,475
Total Regional Availability(Gross)	80,212	58,452	51,758	1,291.05	56,188

Total Hydro Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Hydro	12,814	11,804	4,506	153.84	6,410
State Control Area Hydro	6,125	3,854	3,311	86.74	3,614
Total Regional Hydro	18,939	15,658	7,817	240.58	10,024

Total Renewable Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Renewable	30	0	0	0.14	6
State Control Area Renewable	9,214	1,157	1,730	65.43	2,726
Total Regional Renewable	9,244	1,157	1,730	65.57	2,732

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	-	-	-	-	-	-	-
2	132KV-Karmnasa(PG)-Sahupuri(U ..	-	-	-	-	-	-	-
3	132KV-Rihand-Sonnagar(PG)	-30	-21	-	36	0	0.55	-0.55
4	220KV-Pusauli(PG)-Sahupuri(UP)	157	145	161	0	3.43	0	3.43
5	400KV-Biharsharif(PG)-Baliala(PG)	70	54	140	0	0.53	0	0.53
6	400KV-Biharsharif(PG)-Varanasi(P..	-361	-186	0	361	0	4.36	-4.36
7	400KV-Fatehpur(UP)-Sasaram	-	-	-	-	-	-	-
8	400KV-Motihari(DMT)-Gorakhpur ..	-316	-214	0	316	0	4.56	-4.56
9	400KV-Muzaffarpur(PG)-Gorakhp ..	-94	245	553	94	4.91	0	4.91
10	400KV-Patna(PG)-Baliala(PG)	446	184	621	0	9.21	0	9.21
11	400KV-Sasaram-Allahabad(PG)	78	107	134	0	2.6	0	2.6
12	400KV-Sasaram-Varanasi(PG)	305	281	305	0	6.77	0	6.77
13	765KV-Fatehpur(PG)-Sasaram.	-539	-450	0	539	0	9.29	-9.29
14	765KV-Gaya(PG)-Baliala(PG)	313	240	320	0	5.23	0	5.23
15	765KV-Gaya(PG)-Varanasi(PG)	194	94	251	104	1.7	0	1.7
16	HVDC800KV-Alipurduar-Agra(PG)	1,300	1,300	1,300	0	29.59	0	29.59
Sub-Total EAST REGION		1,523	1,779	3,785	1,450	63.97	18.76	45.21
Import/Export between NORTH_EAST REGION and NORTH REGION								
1	HVDC800KV-BiswanathCharialli- ..	700	700	700	0	15.5	0	15.5
Sub-Total NORTH_EAST REGION		700	700	700	0	15.5	0	15.5
Import/Export between WEST REGION and NORTH REGION								
1	220KV-Auraiya(NT)-Malanpur(PG)	-36	-16	-	107	0	0.72	-0.72
2	220KV-Badod(MP)-Kota(PG)	-50	-30	38	64	0	0.83	-0.83
3	220KV-Badod(MP)-Modak(RJ)	-	-	-	-	-	-	-
4	400KV-RAPS C(NP)-Sujalpur	96	271	280	2	2.99	0	2.99
5	400KV-Vindhyachal(PG)-Rihand(N ..	-950	-954	0	482	0	22.78	-22.78
6	400KV-Zerda(PG)-Bhinmal(PG)	43	18	66	260	0	2.17	-2.17
7	400KV-Zerda(PG)-Kankroli(RJ)	-108	-16	0	296	0	4.08	-4.08
8	765KV-0rai-Gwalior(PG)	-290	-300	0	365	0	7.45	-7.45
9	765KV-0rai-Jabalpur	798	1,341	1,429	0	22.08	0	22.08
10	765KV-0rai-Satna	1,610	1,950	1,957	0	43.71	0	43.71
11	765KV-Gwalior(PG)-Agra(PG)	1,966	2,793	2,831	0	49.35	0	49.35
12	765KV-Phagi(RJ)-Gwalior(PG)	805	1,287	662	-	24.75	0	24.75
13	HVDC500KV-Mundra(JH)-Mohind..	1,250	1,250	1,253	0	30.28	0	30.28
14	HVDC500KV-Vindhyachal(PG)-Vindhaychal B/B	250	-250	250	250	0.22	5.75	-5.53
15	HVDC800KV-Champa(PG)-Kuruku..	1,500	1,000	1,500	0	27.63	0	27.63
Sub-Total WEST REGION		6,884	8,344	10,266	1,826	201.01	43.78	157.23
TOTAL IR EXCHANGE		9,107	10,823	14,751	3,276	280.48	62.54	217.94

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	53.38	39.33	-28.67	64.04	45.21	-18.83

NR-WR	147.94	57.63	-35.87	169.7	157.23	-12.47
Total	201.32	96.96	-64.54	233.74	217.94	-15.8

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)	22.15	0		22		0.1688	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	0	2.5	23.3	75.3	72.2	4.1	.4	0	4.5

<-----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.	
50.13	16:03:50	49.72	18:22:00	49.95	0.071	0.067	50.05	49.78	27.8

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	409	05:30	396	14:50	0	0	0	0	0
Abdullapur(PG) - 400KV	409	05:30	396	14:50	0	0	0	0	0
Amritsar(PG) - 400KV	407	23:50	394	10:45	0	0	0	0	0
Ballabgarh(PG) - 400KV	411	05:30	392	10:45	0	0	0	0	0
Bareilly II(PG) - 400KV	411	05:30	394	18:45	0	0	0	0	0
Bareilly(UP) - 400KV	412	05:30	398	10:45	0	0	0	0	0
Baspa(HP) - 400KV	410	04:10	396	14:50	0	0	0	0	0
Bassi(PG) - 400KV	411	04:00	393	10:45	0	0	0	0	0
Bawana(DTL) - 400KV	410	05:30	395	10:45	0	0	0	0	0
Dadri HVDC(PG). - 400KV	410	05:30	396	10:45	0	0	0	0	0
Gorakhpur(PG) - 400KV	411	05:35	390	18:20	0	.35	0	0	0
Hisar(PG) - 400KV	403	05:30	389	10:45	0	1.74	0	0	0
Kanpur(PG) - 400KV	412	16:25	402	18:55	0	0	0	0	0
Kashipur(UT) - 400KV	402	00:00	402	00:00	0	0	0	0	0
Kishenpur(PG) - 400KV	411	04:00	399	15:25	0	0	0	0	0
Moga(PG) - 400KV	402	04:00	391	10:45	0	0	0	0	0
Nallagarh(PG) - 400KV	410	04:10	396	14:50	0	0	0	0	0
Rihand HVDC(PG) - 400KV	408	16:00	401	18:50	0	0	0	0	0
Rihand(NT) - 400KV	407	05:30	399	11:30	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	782	04:05	763	10:35	0	0	0	0	0
Balia(PG) - 765KV	773	07:05	751	19:50	0	0	0	0	0
Bareilly II(PG) - 765KV	791	05:30	765	10:45	0	0	0	0	0
Bhiwani(PG) - 765KV	783	05:25	755	10:45	0	0	0	0	0
Fatehpur(PG) - 765KV	778	05:30	751	18:20	0	0	0	0	0
Jhatikara(PG) - 765KV	780	05:30	750	10:45	0	0	0	0	0
Lucknow II(PG) - 765KV	781	05:30	755	19:25	0	0	0	0	0
Meerut(PG) - 765KV	791	05:30	762	10:45	0	0	0	0	0
Moga(PG) - 765KV	774	05:30	749	10:45	0	0	0	0	0
Phagi(RJ) - 765KV	782	16:05	762	09:45	0	0	0	0	0
Unnao(UP) - 765KV	770	05:30	746	18:50	0	0	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)
PUNJAB	1,637.45	-655.84	0	1,536.47	-1,967.51	0	77.03	38.87	-24.97	90.93
HARYANA	1,841.04	-144.76	0	1,305.88	-151.14	0	96.9	34.36	-10.9	120.36
RAJASTHAN	-52.15	-697.36	0	-52.15	-342.63	0	68.64	-1.25	-11.94	55.45
DELHI	564.11	-721.62	0	524.83	-744.77	0	88.44	13.77	-18.56	83.64
UTTAR PRADESH	2,177.21	0	0	2,014.1	0	0	129.92	46.21	-2.85	173.29
UTTARAKHAND	216.95	35.02	0	115.8	7.77	0	12.77	3.86	1.55	18.18
HIMACHAL PRADESH	-853.48	160.78	0	-836.67	-354.5	0	29.05	-19.83	-1.69	7.53
JAMMU & KASHMIR	-644.63	169.54	0	-644.63	586.54	0	35.62	-15.47	9.84	29.99
CHANDIGARH	0	0	0	0	-80.52	0	5.25	0	0.01	5.26
TOTAL	4,886.5	-1,854.24	0	3,963.63	-3,046.76	0	543.62	100.52	-59.51	584.63

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	4,090.06	2,944.6	1,685.11	1,488.91	-655.84	-1,967.51	0	0
HARYANA	4,912.56	3,657.38	1,869.93	987.11	-144.76	-1,112.09	0	0
RAJASTHAN	3,616.11	2,292.46	-52.15	-52.15	-1.2	-1,341.1	0	0
DELHI	4,039.16	3,102.29	696.73	466.62	-523.88	-1,176.53	0	0
UTTAR PRADESH	6,766.66	4,748.92	2,198.36	1,739.45	0	-813.34	0	0
UTTARAKHAND	768.4	390.48	238.1	115.8	205.38	-75.81	0	0
HIMACHAL PRADESH	1,577.45	870.49	-752.82	-938.37	162.31	-405.46	0	0
JAMMU & KASHMIR	2,316.58	1,187.63	-644.63	-644.63	586.54	141.37	0	0
CHANDIGARH	328.55	168.95	0	0	58.42	-80.52	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	503.36	1,232	508.71	1,485	535.1	575.6
Chamera-I	748.75	760	-	-	-	-	-	0
Gandhisagar	295.78	295.78	-	-	-	-	-	0
Jawahar Sagar	295.78	298.7	-	-	-	-	-	0
Koteshwar	598.5	612.5	610.76	4,950	610.17	5	161	166.97
Pong	384.05	426.72	419.67	876	421.13	946	231.09	356.45
RPS	343.81	352.8	-	-	-	-	-	0
RSD	487.91	527.91	520.48	6	520.62	7	164.27	239.82
Rihand	252.98	268.22	-	-	-	-	-	0
Tehri	740.04	829.79	824.6	1,107	824.05	1,088	210.36	122
TOTAL	-	-	-	8,171	-	3,531	1,301.82	1,460.84

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	1	16
DELHI	1	21
HARYANA	0	6
HIMACHAL PRADESH	2	36
JAMMU & KASHMIR	2	20
PUNJAB	1	20
RAJASTHAN	1	21
UTTAR PRADESH	0	10
UTTARAKHAND	4	30

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 :

400 kV , 12 Ohm Series Bus Reactor at 400 kV Mandola Substation first time charged at 19.09 Hrs on 19.08.18

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