



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

Power Supply Position in Northern Region For 24-Sep-2018

Date of Reporting:25-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
41,955	720	42,675	49.97	33,331	207	33,538	50.03	872	10.04

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	7.66	18.37	0	4.29	0	8.3	38.62	67.53	65.9	-1.63	104.52	0	104.52
HARYANA	9.29	0.57	0	0.03	0	0.48	10.37	84.7	85.96	1.26	97.22	0.89	96.33
RAJASTHAN	106.54	0.3	3.01	12.77	6.17	3.96	132.75	48.47	48.78	0.31	181.53	0	181.53
DELHI	6.61	0	15.69	0	0	0.75	23.05	64.85	62.98	-1.87	86.05	0.02	86.03
UTTAR PRADESH	129.1	21.3	0	2.3	0	1.2	153.9	149.22	148.68	-0.54	302.58	0	302.58
UTTARAKHAND	0	9.48	0	0.19	0	0	9.67	23.78	24.42	0.64	34.45	0.36	34.09
HIMACHAL PRADESH	0	14	0	0	0	8.1	22.1	6.19	3.5	-2.69	25.6	0	25.6
JAMMU & KASHMIR	0	21.12	0	0	0	0	21.12	25.52	16.82	-8.7	46.71	8.77	37.94
CHANDIGARH	0	0	0	0	0	0	0	5.33	3.49	-1.84	3.49	0	3.49
Region	259.2	85.14	18.7	19.58	6.17	22.79	411.58	475.59	460.53	-15.06	882.15	10.04	872.11

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	4,364	0	-71	-422	3,346	0	-221	612
HARYANA	5,571	3	1	824	3,234	0	51	290
RAJASTHAN	8,496	0	59	-428	6,815	0	108	-836
DELHI	4,113	0	46	-706	3,113	0	-77	-580
UTTAR PRADESH	14,816	0	-485	1,688	13,461	0	-46	1,880
UTTARAKHAND	1,279	225	-179	14	1,220	0	184	-28
HIMACHAL PRADESH	1,185	0	-19	-1,357	852	0	-343	-929
JAMMU & KASHMIR	1,966	491	-142	193	1,175	207	-450	-430
CHANDIGARH	165	0	-85	-35	116	0	-59	-80
Region	41,955	719	-875	-229	33,332	207	-853	-101

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	4,364	20:00	0	4,364	4,364	20:00	0	4,364
HARYANA	5,571	20:00	3	5,574	5,574	20:00	3	5,571
RAJASTHAN	8,496	20:00	0	8,496	8,496	20:00	0	8,496
DELHI	4,188	13:00	0	4,188	4,188	13:00	0	4,188
UP	14,836	19:00	30	14,866	14,866	19:00	30	14,836
UTTARAKHAND	1,925	10:00	0	1,925	1,925	10:00	0	1,925
HP	1,304	10:00	0	1,304	1,304	10:00	0	1,304
J&K	1,966	20:00	491	2,457	2,457	20:00	491	1,966
CHANDIGARH	182	19:00	0	182	182	19:00	0	182
NR	41,955	20:00	720	42,675	42,675	20:00	720	41,955

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	318	309	0		6.61	275
RAJGHAT TPS(2 * 67.5)	135	0	0	0			
Total THERMAL	840	318	309			6.61	275
BAWANA GPS(2 * 253 + 4 * 216)	1,370	519	429	0		10.95	456
DELHI GAS TURBINES(3 * 34 + 6 * 30)	282	40	39	0		1.05	44
PRAGATI GAS TURBINES(1 * 121.2 + 2 * 104.6)	331	150	151	0		3.69	154
RITHALA GPS(3 * 36)	108	0	0	0			
Total GAS/NAPHTHA/DIESEL	2,091	709	619			15.69	654
WIND	0	0	0	0			
BIOMASS(1 * 16)	16	28	25	0		0.75	31
SOLAR(1 * 2)	2	0	0	0			
Total DELHI	2,949	1,055	953			23.05	960

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	0	0	0			
JHAJJAR(CLP)(2 * 660)	1,320	520	375	0		9.29	387
MAGNUM DIESEL (IPP)(4 * 6.3)	25	0	0	0			
PANIPAT TPS(2 * 210 + 2 * 250)	920	0	0	0			
RGTPP(KHEDAR)(2 * 600)	1,200	0	0	0			
Total THERMAL	4,065	520	375			9.29	387
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	0	37	0		0.57	24
Total HYDEL	62	0	37			0.57	24
WIND	0	0	0	0			
BIOMASS(1 * 106)	106	0	0	0		0.48	20
SOLAR(1 * 50)	50	0	0	0		0.03	1
Total HARYANA	4,715	520	412			10.37	432

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	282	330	330	02:00	7.45	310
MALANA (IPP) HPS(2 * 43)	86	100	96	100	19:00	2.33	97
OTHER HYDRO HP(1 * 372)	372	186	179	180	23:00	4.22	176
Total HYDEL	758	568	605			14	583
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO(1 * 486)	486	365	231	370	23:00	8.1	338
Total SMALL HYDRO	486	365	231			8.1	338
Total HP	1,244	933	836			22.1	921

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	737	882	882	03:00	18.55	773
OTHER HYDRO/IPP J&K(1 * 308)	308	129	105	132	18:00	2.58	108
Total HYDEL	1,208	866	987			21.13	881
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	866	987			21.13	881

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	0	0	0		-0.1	-4
GURU GOBIND SINGH TPS (ROPAR)(6 * 210)	1,260	0	0	0		-0.13	-5
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)(2 * 210 + 2 * 250)	920	0	0	0		-0.1	-4
GURU NANAK DEV TPS (BHATINDA)(4 * 110)	460	0	0	0		-0.02	-1
RAJPURA(NPL) TPS(2 * 700)	1,400	600	280	600		8.14	339
TALWANDI SABO TPS(3 * 660)	1,980	0	0	0		-0.13	-5
Total THERMAL	6,560	600	280			7.66	320
TOTAL HYDRO PUNJAB(1 * 1000)	1,000	842	478	842		18.37	765
Total HYDEL	1,000	842	478			18.37	765
WIND	0	0	0	0			
BIOMASS(1 * 303)	303	0	0	0		8.3	346
SOLAR(1 * 859)	859	0	0	288		4.29	179
Total PUNJAB	8,722	1,442	758			38.62	1,610

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	0	68	0		1.15	48
CHHABRA TPS(1 * 660 + 4 * 250)	1,660	1,172	1,144	0		27.82	1,159
GIRAL (IPP) LTPS(2 * 125)	250	0	0	0			
KALISINDH TPS(2 * 600)	1,200	457	387	0		10.05	419
KAWAI TPS(2 * 660)	1,320	1,156	856	0		23.07	961
KOTA TPS(2 * 110 + 2 * 195 + 3 * 210)	1,240	771	661	0		16.31	680
RAJWEST (IPP) LTPS(8 * 135)	1,080	850	428	0		14.96	623
SURATGARH TPS(6 * 250)	1,500	592	531	0		13.18	549
VSLPP (IPP)(1 * 135)	135	0	0	0			
Total THERMAL	8,635	4,998	4,075			106.54	4,439
DHOLPUR GPS(3 * 110)	330	0	0	0			
RAMGARH GPS(1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5)	271	124	126	0		3.01	125
Total GAS/NAPHTHA/DIESEL	601	124	126			3.01	125
RAPS-A(1 * 100 + 1 * 200)	300	163	160	0		3.74	156
Total NUCLEAR	300	163	160			3.74	156
TOTAL HYDRO RAJASTHAN(1 * 550)	550	0	30	0		0.3	13
Total HYDEL	550	0	30			0.3	13
WIND	4,292	136	407	0		6.17	257
BIOMASS(1 * 102)	102	9	9	0		0.21	9
SOLAR(1 * 1995)	1,995	42	0	0		12.77	532
Total RAJASTHAN	16,475	5,472	4,807			132.74	5,531

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	1,279	1,140	0		28	1,167
ANPARA-C TPS(2 * 600)	1,200	648	611	0		14.8	617
ANPARA-D TPS(2 * 500)	1,000	943	944	0		20.7	863
BAJAJ ENERGY PVT LTD (IPP) TPS(10 * 45)	450	112	112	0		2.4	100
BARA PPGCL TPS(3 * 660)	1,980	883	676	0		16.8	700
HARDUAGANJ TPS(1 * 105 + 1 * 60 + 2 * 250)	665	443	249	0		6.4	267
LALITPUR TPS(3 * 660)	1,980	0	0	0			
OBRA TPS (2 * 94 + 5 * 200)	1,188	504	312	0		9	375
PANKI TPS(2 * 105)	210	0	0	0			
PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)	1,160	484	472	0		11.6	483
ROSA TPS(4 * 300)	1,200	619	601	0		14.6	608
TANDA TPS(4 * 110)	440	164	199	0		4.8	200
Total THERMAL	13,103	6,079	5,316			129.1	5,380
ALAKHANDA HEP(4 * 82.5)	330	348	354	0		8.2	342
VISHNUPARYAG HPS(4 * 110)	440	427	427	0		10.3	429
OTHER HYDRO UP(1 * 527)	527	142	166	0		2.8	117
Total HYDEL	1,297	917	947			21.3	888
WIND	0	0	0	0			
BIOMASS(1 * 26)	26	0	0	0			
SOLAR(1 * 472)	472	0	0	0		2.3	96
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	7,046	6,313			153.9	6,414

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/NAPHTHA/DIESEL	450	0	0			0	0			
OTHER HYDRO UK(1 * 1250)	1,250	559	265	649	16:00	9.48	395			
Total HYDEL	1,250	559	265			9.48	395			
WIND	0	0	0	0						
BIOMASS(1 * 127)	127	0	0	0						
SOLAR(1 * 100)	100	0	0	37	13:00	0.19	8			
SMALL HYDRO(1 * 180)	180	0	0	0						
Total SMALL HYDRO	180	0	0			0	0			
Total UTTARAKHAND	2,107	559	265			9.67	403			

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	395.99	603	369	603	20:00	9.5	9.62	401	0.12
DEHAR HPS(6 * 165)	990	378.02	0	610	610	12:00	9.07	9.71	405	0.64
PONG HPS(6 * 66)	396	138.12	264	0	264	13:00	3.32	3.32	138	0
Sub-Total	2,765	912.13	867	979	-	-	21.89	22.65	944	0.76
NHPC										
BAIRASIUL HPS(3 * 60)	180	0	0	0	0	-	0	0	0	0
CHAMERA HPS(3 * 180)	540	523.24	549	544	552	13:30	12.56	12.87	536	0.31
CHAMERA II HPS(3 * 100)	300	0	0	0	0	-	0	0	0	0
CHAMERA III HPS(3 * 77)	231	0	0	0	0	-	0	0	0	0
DHAULIGANGA HPS(4 * 70)	280	274.11	276	279	289	19:00	6.54	6.68	278	0.14
DULHASTI HPS(3 * 130)	390	386.69	402	400	406	08:00	9.28	9.49	395	0.21
KISHANGANGA(2 * 110)	220	82.38	87	83	88	19:00	1.98	2.03	85	0.05
PARBATI III HEP(4 * 130)	520	366.21	367	367	375	01:00	8.79	8.82	368	0.03
SALAL HPS(6 * 115)	690	657.12	706	631	710	08:45	15.77	16.42	684	0.65
SEWA-II HPS(3 * 40)	120	130	132	132	134	17:00	3.12	3.14	131	0.02
TANAKPUR HPS(1 * 31.42 + 2 * 31.4)	94	93	100	100	100	21:00	2.23	2.34	98	0.11
URI HPS(4 * 120)	480	229.06	239	256	380	08:00	5.5	6.16	257	0.66
URI-II HPS(4 * 60)	480	135.68	122	146	182	17:00	3.26	3.4	142	0.14
Sub-Total	4,525	2,877.49	2,980	2,938	-	-	69.03	71.35	2,974	2.32
NPCL										
NAPS(2 * 220)	440	386	426	421	430	15:00	9.26	9.23	385	-0.03
RAPS-B(2 * 220)	440	377	402	424	424	03:00	9.05	8.79	366	-0.26
RAPS-C(2 * 220)	440	205	230	230	230	20:00	4.92	4.86	203	-0.06
Sub-Total	1,320	968	1,058	1,075	-	-	23.23	22.88	954	-0.35
NTPC										
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	390.11	36	0	144	23:56	0.28	0.19	8	-0.09
AURAIYA GPS(2 * 109.3 + 4 * 111.19)	663	618.06	20	0	171	23:57	0.27	0.34	14	0.07
DADRI GPS(2 * 154.51 + 4 * 130.19)	830	577.4	189	114	189	20:00	3.27	3.29	137	0.02
DADRI SOLAR(1 * 5)	5	0.37	0	0	0	-	0.01	0.01	0	0
DADRI-I TPS(4 * 210)	840	775.81	574	368	574	20:00	10.08	9.96	415	-0.12
DADRI-II TPS(2 * 490)	980	928.55	923	564	923	20:00	14.98	15.59	650	0.61
ISTPP (JHAJJAR)(3 * 500)	1,500	1,421.25	1,510	868	1,524	18:42	25.35	25.44	1,060	0.09
KOLDAM HPS(4 * 200)	800	872	868	808	871	01:00	19.96	20.79	866	0.83
RIHAND-I STPS(2 * 500)	1,000	730	771	627	771	20:00	15.46	17.37	724	1.91
RIHAND-II STPS(2 * 500)	1,000	942.5	991	647	991	20:00	18.99	21.01	875	2.02
RIHAND-III STPS(2 * 500)	1,000	471.25	511	346	511	20:00	9.59	10.69	445	1.1
SINGRAULI STPS(2 * 500 + 5 * 200)	2,000	1,815	1,288	1,945	1,288	20:00	34.86	35.75	1,490	0.89
SINGRAULI SOLAR(1 * 15)	15	2.68	0	0	0	-	0.06	0.08	3	0.02
UNCHAHAH II TPS(2 * 210)	420	382.2	404	246	404	20:00	6.43	7.24	302	0.81
UNCHAHAH III TPS(1 * 210)	210	191.1	190	116	190	20:00	3.18	3.34	139	0.16
UNCHAHAH IV TPS(1 * 500)	500	0	0	0	0	-	0	0.05	2	0.05
UNCHAHAH SOLAR(1 * 10)	10	2.22	0	0	0	-	0.05	-	-	-0.05
UNCHAHAH TPS(2 * 210)	420	382.2	355	235	355	20:00	6.5	6.89	287	0.39
Sub-Total	12,612	10,502.7	8,630	6,884	-	-	169.32	178.03	7,417	8.71
SJVNL										
NATHPA-JHAKRI HPS(6 * 250)	1,500	1,543.5	1,618	1,532	1,641	18:00	34.58	35.66	1,486	1.08
RAMPUR HEP(6 * 68.67)	412	442	450	429	450	20:00	9.56	10.01	417	0.45
Sub-Total	1,912	1,985.5	2,068	1,961	-	-	44.14	45.67	1,903	1.53
THDC										
KOTESHWAR HPS(4 * 100)	400	348.75	409	363	411	19:00	8.37	8.44	352	0.07
TEHRI HPS(4 * 250)	1,000	1,064	1,066	1,074	1,074	03:00	25.54	25.52	1,063	-0.02
Sub-Total	1,400	1,412.75	1,475	1,437	-	-	33.91	33.96	1,415	0.05
Total	24,534	18,658.57	17,078	15,274			361.52	374.54	15,607	13.02

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	231	231	231	23:00	4.87	5.51	230	0.64
BUDHIL HPS (IPP)(2 * 35)	70	0	35	0	70	22:00	0.92	0.35	15	-0.57
KARCHAM WANGTOO HPS(4 * 250)	1,000	0	1,000	650	1,000	19:00	16.76	18.05	752	1.29
MALANA2(2 * 50)	100	0	110	111	111	03:00	2.41	2.62	109	0.21
SAINJ HEP(2 * 50)	50	0	110	106	110	00:00	1.62	2.55	106	0.93
SHREE CEMENT (IPP) TPS(2 * 150)	300	0	299	236	299	18:00	6.88	6.8	283	-0.08
Sub-Total	1,712	0	1,785	1,334	-	-	33.46	35.88	1,495	2.42
Total	1,712	0	1,785	1,334	-	-	33.46	35.88	1,495	2.42

Summary Section					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Total State Control Area Generation	53,966	17,893	15,331	411.58	17,149
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		6,244	3,098	80.98	5,814
Total Regional Availability(Gross)	80,212	43,000	35,037	902.98	40,064

Total Hydro Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Hydro	12,814	9,744	9,221	223.5	9,312
State Control Area Hydro	6,125	3,752	3,349	85.15	3,548
Total Regional Hydro	18,939	13,496	12,570	308.65	12,860

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	580	672	43.59	1,816
Total Regional Renewable	9,244	580	672	43.68	1,820

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 ..	-	-	-	-	0	0	0
3	132KV-Rihand-Sonnagar(PG)	-	-	-	-	0	0.66	-0.66
4	220KV-Pusauli(PG)-Sahupuri(UP)	169	162	187	0	4.01	0	4.01
5	400KV-Biharsharif(PG)-Baliala(PG)	-10	-112	10	126	0	1.69	-1.69
6	400KV-Biharsharif(PG)-Varanasi(P..	-254	-347	0	424	0	7.04	-7.04
7	400KV-Fatehpur(UP)-Sasaram	-	-	-	-	-	-	-
8	400KV-Motihari(DMT)-Gorakhpur ..	-236	-258	0	312	0	5.71	-5.71
9	400KV-Muzaffarpur(PG)-Gorakhp ..	192	86	211	170	0.26	0	0.26
10	400KV-Patna(PG)-Baliala(PG)	276	153	364	13	4.82	0	4.82
11	400KV-Sasaram-Allahabad(PG)	77	75	105	0	1.85	0	1.85
12	400KV-Sasaram-Varanasi(PG)	304	312	330	0	7.79	0	7.79
13	765KV-Fatehpur(PG)-Sasaram.	-409	-534	0	556	0	10.44	-10.44
14	765KV-Gaya(PG)-Baliala(PG)	-156	-41	164	17	0	1.11	-1.11
15	765KV-Gaya(PG)-Varanasi(PG)	-215	-393	0	510	0	7.61	-7.61
16	HVDC800KV-Alipurduar-Agra(PG)	1,200	1,200	1,200	0	25.75	0	25.75
Sub-Total EAST REGION		938	303	2,571	2,128	44.48	34.26	10.22
Import/Export between NORTH_EAST REGION and NORTH REGION								
1	HVDC800KV-BiswanathCharialli- ..	700	700	1,400	0	16	0	16
Sub-Total NORTH_EAST REGION		700	700	1,400	0	16	0	16
Import/Export between WEST REGION and NORTH REGION								
1	220KV-Auraiya(NT)-Malanpur(PG)	-4	-38	-	88	0	0.99	-0.99
2	220KV-Badod(MP)-Kota(PG)	-33	-32	-	72	0	1.23	-1.23
3	220KV-Badod(MP)-Modak(RJ)	-	-	-	-	-	-	-
4	400KV-RAPS C(NP)-Sujalpur	-	-	-	51	1	0	1
5	400KV-Vindhyachal(PG)-Rihand(N ..	-475	-314	-	477	0	9.9	-9.9
6	400KV-Zerda(PG)-Bhinmal(PG)	-17	-159	61	270	0	3.99	-3.99
7	400KV-Zerda(PG)-Kankroli(RJ)	-54	-317	0	422	0	7.6	-7.6
8	765KV-0rai-Gwalior(PG)	-367	-195	0	388	0	6.32	-6.32
9	765KV-0rai-Jabalpur	585	100	585	0	2.61	0	2.61
10	765KV-0rai-Satna	1,525	1,207	1,525	0	31.58	0	31.58
11	765KV-Gwalior(PG)-Agra(PG)	1,432	755	1,432	0	18.96	0	18.96
12	765KV-Phagi(RJ)-Gwalior(PG)	763	237	383	-	10.2	0	10.2
13	HVDC500KV-Mundra(JH)-Mohind..	1,501	801	1,503	0	20.61	0	20.61
14	HVDC500KV-Vindhyachal(PG)-Vindhaychal B/B	-250	-250	0	250	0	6.03	-6.03
15	HVDC800KV-Champa(PG)-Kuruku..	0	300	500	0	5.86	0	5.86
Sub-Total WEST REGION		4,606	2,095	5,989	2,018	90.82	36.06	54.76
TOTAL IR EXCHANGE		6,244	3,098	9,960	4,146	151.3	70.32	80.98

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	33	21.93	-46.38	8.55	10.22	1.67

NR-WR	107.25	50.36	-45.87	111.74	54.76	-56.98
Total	140.25	72.29	-92.25	120.29	80.98	-39.31

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)	-30.7	-18.53		31		0.497	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	1.9	4.5	20.6	72.5	74.8	4.5	.2	0	4.6

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

Maximum		Minimum		Average	Freq Variation	Standard	Freq. in 15 mnt blk		Freq Dev Index
Frequency	Time	Frequency	Time				Frequency	Index	
50.11	23:21:30	49.57	18:23:10	49.95	0.09	0.08	50.06	49.64	25.2

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	06:00	412	19:10	0	0	45.14	0	45.14
Abdullapur(PG) - 400KV	427	06:00	412	19:10	0	0	45.14	0	45.14
Amritsar(PG) - 400KV	427	23:20	414	11:45	0	0	47.92	0	47.92
Ballabgarh(PG) - 400KV	422	04:00	403	19:10	0	0	15.28	0	15.28
Bareilly II(PG) - 400KV	417	06:00	402	18:20	0	0	0	0	0
Bareilly(UP) - 400KV	418	06:00	402	18:20	0	0	0	0	0
Baspa(HP) - 400KV	425	04:00	416	11:35	0	0	36.81	0	36.81
Bassi(PG) - 400KV	424	04:00	401	19:10	0	0	11.81	0	11.81
Bawana(DTL) - 400KV	423	04:00	408	19:10	0	0	25.69	0	25.69
Dadri HVDC(PG). - 400KV	421	03:55	421	03:55	1.04	1.04	13.19	0	14.23
Gorakhpur(PG) - 400KV	415	06:00	391	18:10	0	0	0	0	0
Hisar(PG) - 400KV	421	04:00	404	19:10	0	0	2.78	0	2.78
Kanpur(PG) - 400KV	419	06:00	402	18:20	0	0	0	0	0
Kashipur(UT) - 400KV	402	00:00	402	00:00	0	0	0	0	0
Kishenpur(PG) - 400KV	420	23:20	409	11:45	0	0	0	0	0
Moga(PG) - 400KV	419	23:20	403	11:50	0	0	0	0	0
Nallagarh(PG) - 400KV	425	04:00	416	11:35	0	0	36.81	0	36.81
Rihand HVDC(PG) - 400KV	414	13:00	414	13:00	.35	.35	0	0	.35
Rihand(NT) - 400KV	412	13:00	400	09:40	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	02:50	778	20:40	0	0	0	0	0
Balia(PG) - 765KV	779	06:00	746	18:20	0	0	0	0	0
Bareilly II(PG) - 765KV	795	06:00	0	13:50	14.93	14.93	0	0	14.93
Bhiwani(PG) - 765KV	799	02:05	774	19:15	0	0	0	0	0
Fatehpur(PG) - 765KV	771	06:00	737	18:20	0	1.39	0	0	0
Jhatikara(PG) - 765KV	798	04:00	768	19:10	0	0	0	0	0
Lucknow II(PG) - 765KV	789	06:00	753	18:20	0	0	0	0	0
Meerut(PG) - 765KV	801	04:00	771	19:10	0	0	1.04	0	1.04
Moga(PG) - 765KV	786	23:20	743	11:25	0	0	0	0	0
Phagi(RJ) - 765KV	804	04:00	775	19:10	0	0	2.08	0	2.08
Unnao(UP) - 765KV	774	06:00	743	18:20	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	1,519.51	-907.44	0	1,392.86	-1,814.88	0	57.86	35.9	-26.21	67.53
HARYANA	1,396.2	-1,106.01	0	823.51	0	0	76.1	23.72	-15.11	84.7
RAJASTHAN	-52.11	-783.64	0	-358.45	-69.15	0	64.25	-5.93	-9.85	48.47
DELHI	561.01	-1,141.49	0	520.46	-1,225.99	0	80.18	13.39	-28.72	64.85
UTTAR PRADESH	1,879.99	0	0	1,692.77	-4.77	0	119.58	39.17	-9.53	149.22
UTTARAKHAND	208.89	-236.99	0	6.73	7.09	0	22.13	3.29	-1.63	23.78
HIMACHAL PRADESH	-764.95	-163.98	0	-823.25	-534.12	0	32.93	-18.06	-8.69	6.19
JAMMU & KASHMIR	-677.52	247.32	0	-677.52	870.58	0	25.96	-16.26	15.82	25.52
CHANDIGARH	0	-80.46	0	0	-35.2	0	6.09	0	-0.76	5.33
TOTAL	4,071.02	-4,172.69	0	2,577.11	-2,806.44	0	485.08	75.22	-84.68	475.59

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	3,476.03	1,812.27	1,549.12	1,345.29	-907.44	-1,814.88	0	0
HARYANA	4,378.16	2,497.46	1,396.2	513.55	2.06	-1,111.9	0	0
RAJASTHAN	3,362.97	1,659.48	-52.11	-960.92	0	-974.17	0	0
DELHI	3,698.82	2,759.52	692.68	363.04	-877.4	-1,509.6	0	0
UTTAR PRADESH	6,341.36	3,998.62	1,883.48	1,467.02	0	-812.76	0	0
UTTARAKHAND	1,528.01	593.76	238.52	6.73	76.87	-318.24	0	0
HIMACHAL PRADESH	1,658.16	1,082.88	-664.68	-972.97	-131.8	-612.96	0	0
JAMMU & KASHMIR	1,170	996.18	-677.52	-677.52	880.48	247.32	0	0
CHANDIGARH	270.22	237.09	0	0	0	-80.46	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	505.23	1,326	508.61	1,485	1,897.34	272.83
Chamera-I	748.75	760	759.61	-	-	-	2,357.32	348.42
Gandhisagar	295.78	295.78	-	-	-	-	-	0
Jawahar Sagar	295.78	298.7	-	-	-	-	-	0
Koteshwar	598.5	612.5	-	-	-	-	-	0
Pong	384.05	426.72	422.77	1,021	420.93	931	5,597.27	189.07
RPS	343.81	352.8	-	-	-	-	-	0
RSD	487.91	527.91	525.9	13	520.02	5	226.44	29.71
Rihand	252.98	268.22	264.32	579	-	-	-	0
Tehri	740.04	829.79	825.5	1,119	824.6	1,099	430.77	553
TOTAL	-	-	-	4,058	-	3,520	10,509.14	1,393.03

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	7	92
DELHI	4	22
HARYANA	1	14
HIMACHAL PRADESH	4	42
JAMMU & KASHMIR	6	46
PUNJAB	2	18
RAJASTHAN	1	19
UTTAR PRADESH	0	12
UTTARAKHAND	5	33

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 :

1. 315MVA ICT-1 first time charged from HV Side through Bay No:403 along with 400KV Bus-1 at 15:04Hrs at Tanda.

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