



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

Power Supply Position in Northern Region For 25-Aug-2018

Date of Reporting:26-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
52,273	674	52,947	49.9	48,751	239	48,990	50.05	1,171	9.9

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	77.74	14.73	0	5.8	0	0	98.27	138.88	139.1	0.22	237.37	0	237.37
HARYANA	35.1	0.3	0	0.14	0	0	35.54	145.88	145.62	-0.26	181.16	0	181.16
RAJASTHAN	106.78	0.2	2.2	12.34	44.42	0.47	166.4	49.36	50.39	1.03	216.79	0	216.79
DELHI	6.98	0	15.76	0	0	0	22.75	87.08	84.89	-2.19	107.65	0.01	107.64
UTTAR PRADESH	143.4	19.4	0	0.1	0	1.2	164.1	158.85	158.45	-0.4	322.55	0	322.55
UTTARAKHAND	0	18.24	0	0.31	0	0	18.56	18.06	18.07	0.01	36.63	0	36.63
HIMACHAL PRADESH	0	17.81	0	0	0	0	17.81	0.92	3.27	2.35	21.08	0	21.08
JAMMU & KASHMIR	0	24.94	0	0	0	0	24.94	18.57	16.99	-1.58	51.82	9.89	41.93
CHANDIGARH	0	0	0	0	0	0	0	6.1	5.4	-0.7	5.4	0	5.4
Region	370	95.62	17.96	18.69	44.42	1.67	548.37	623.7	622.18	-1.52	1,180.45	9.9	1,170.55

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	10,084	0	25	1,548	9,010	0	-13	2,051
HARYANA	8,404	0	34	2,304	7,760	0	14	2,218
RAJASTHAN	8,536	0	-131	-1,165	8,789	0	122	-413
DELHI	4,688	0	-47	-142	4,621	0	1	286
UTTAR PRADESH	15,101	130	-228	1,501	14,485	0	-27	2,379
UTTARAKHAND	1,708	0	-70	271	1,440	0	3	-10
HIMACHAL PRADESH	1,314	0	81	-1,702	1,096	0	94	-1,772
JAMMU & KASHMIR	2,176	544	187	-554	1,352	239	-58	-1,189
CHANDIGARH	261	0	4	-70	198	0	-49	-45
Region	52,272	674	-145	1,991	48,751	239	87	3,505

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	10,718	16:00	0	10,718	10,718	16:00	0	10,718
HARYANA	8,430	21:00	0	8,430	8,430	21:00	0	8,430
RAJASTHAN	9,847	9:00	0	9,847	9,847	9:00	0	9,847
DELHI	5,253	1:00	0	5,253	5,253	1:00	0	5,253
UP	15,751	24:00	0	15,751	15,751	24:00	0	15,751
UTTARAKHAND	1,708	20:00	0	1,708	1,708	20:00	0	1,708
HP	1,416	10:00	0	1,416	1,416	10:00	0	1,416
J&K	2,176	20:00	544	2,720	2,176	20:00	544	2,720
CHANDIGARH	263	22:00	0	263	263	22:00	0	263
NR	52,811	24:00	273	53,084	52,811	24:00	273	53,084

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	298	303	306	05:00	6.98	291
RAJGHAT TPS(2 * 67.5)	135	0	0	0		0	0
Total THERMAL	840	298	303			6.98	291
BAWANA GPS(2 * 253 + 4 * 216)	1,370	425	428	470	22:00	10.35	431
DELHI GAS TURBINES(3 * 34 + 6 * 30)	282	73	75	77	07:00	1.85	77
PRAGATI GAS TURBINES(1 * 121.2 + 2 * 104.6)	331	140	146	148	08:00	3.56	148
RITHALA GPS(3 * 36)	108	0	0	0		0	0
Total GAS/NAPHTHA/DIESEL	2,091	638	649			15.76	656
WIND	0	0	0	0		0	0
BIOMASS(1 * 16)	16	0	0	0			
SOLAR(1 * 2)	2	0	0	0		0	0
Total DELHI	2,949	936	952			22.74	947

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	475	478	537	15:00	12.21	509
JHAJJAR(CLP)(2 * 660)	1,320	761	741	872	01:00	18.03	751
MAGNUM DIESEL (IPP)(4 * 6.3)	25	0	0	0		0	0
PANIPAT TPS(2 * 210 + 2 * 250)	920	199	199	200	06:00	4.86	203
RGTPP(KHEDAR)(2 * 600)	1,200	0	0	0	00:00	0	0
Total THERMAL	4,065	1,435	1,418			35.1	1,463
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	15	16	18	01:00	0.3	13
Total HYDEL	62	15	16			0.3	13
WIND	0	0	0	0		0	0
BIOMASS(1 * 106)	106	0	0	0			
SOLAR(1 * 50)	50	0	0	0		0.14	6
Total HARYANA	4,715	1,450	1,434			35.54	1,482

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	330	330	330		6.81	284
MALANA (IPP) HPS(2 * 43)	86	87	86	86		2.07	86
OTHER HYDRO HP(1 * 372)	372	378	377	0		8.94	373
Total HYDEL	758	795	793			17.82	743
WIND	0	0	0	0		0	0
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0		0	0
SMALL HYDRO(1 * 486)	486	0	0	0			
Total SMALL HYDRO	486	0	0			0	0
Total HP	1,244	795	793			17.82	743

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	882	882	0		21.17	882
OTHER HYDRO/IPP J&K(1 * 308)	308	170	157	0		3.77	157
Total HYDEL	1,208	1,052	1,039			24.94	1,039
WIND	0	0	0	0		0	0
BIOMASS	0	0	0	0			
SOLAR	0	0	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	1,052	1,039			24.94	1,039

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		4.41	184
GURU GOBIND SINGH TPS (ROPAR)(6 * 210)	1,260	366	293	366		7.54	314
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)(2 * 210 + 2 * 250)	920	653	534	655		13.63	568
GURU NANAK DEV TPS (BHATINDA)(4 * 110)	460	0	0	0		-0.02	-1
RAJPURA(NPL) TPS(2 * 700)	1,400	1,320	1,195	1,320		29.2	1,217
TALWANDI SABO TPS(3 * 660)	1,980	1,210	616	1,220		22.99	958
Total THERMAL	6,560	3,795	2,783			77.75	3,240
TOTAL HYDRO PUNJAB(1 * 1000)	1,000	567	547	624		14.73	614
Total HYDEL	1,000	567	547			14.73	614
WIND	0	0	0	0		0	0
BIOMASS(1 * 303)	303	0	0	0			
SOLAR(1 * 859)	859	0	0	518		5.8	242
Total PUNJAB	8,722	4,362	3,330			98.28	4,096

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	224	114	0		4.43	185
CHHABRA TPS(1 * 660 + 4 * 250)	1,660	1,205	1,020	0		25.25	1,052
GIRAL (IPP) LTPS(2 * 125)	250	0	0	0		0	0
KALISINDH TPS(2 * 600)	1,200	411	409	0		10.07	420
KAWAI TPS(2 * 660)	1,320	877	444	0		16.82	701
KOTA TPS(2 * 110 + 2 * 195 + 3 * 210)	1,240	666	658	0		15.53	647
RAJWEST (IPP) LTPS(8 * 135)	1,080	916	599	0		15.75	656
SURATGARH TPS (6 * 250)	1,500	731	712	0		16.9	704
VSLPP (IPP)(1 * 135)	135	104	72	0		2.02	84
Total THERMAL	8,635	5,134	4,028			106.77	4,449
DHOLPUR GPS(3 * 110)	330	0	0	0		0	0
RAMGARH GPS(1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5)	271	83	94	0		2.2	92
Total GAS/NAPHTHA/DIESEL	601	83	94			2.2	92
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	0	30	0		0.2	8
Total HYDEL	550	0	30			0.2	8
WIND	4,292	1,618	1,883	0		44.42	1,851
BIOMASS(1 * 102)	102	19	19	0		0.47	20
SOLAR(1 * 1995)	1,995	41	0	0		12.34	514
Total RAJASTHAN	16,475	6,895	6,054			166.4	6,934

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	1,328	824	0		23.9	996
ANPARA-C TPS(2 * 600)	1,200	1,078	611	0		17.2	717
ANPARA-D TPS(2 * 500)	1,000	926	938	0		16.4	683
BAJAJ ENERGY PVT LTD (IPP) TPS(10 * 45)	450	0	223	0		3.6	150
BARA PPGCL TPS(3 * 660)	1,980	703	669	0		16	667
HARDUAGANJ TPS(1 * 105 + 1 * 60 + 2 * 250)	665	308	303	0		7.9	329
LALITPUR TPS(3 * 660)	1,980	664	363	0		14.3	596
OBRA TPS (2 * 94 + 5 * 200)	1,188	539	304	0		8.9	371
PANKI TPS(2 * 105)	210	0	0	0		0	0
PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)	1,160	473	473	0		11.8	492
ROSA TPS(4 * 300)	1,200	592	596	0		16.7	696
TANDA TPS(4 * 110)	440	316	246	0		6.7	279
Total THERMAL	13,103	6,927	5,550			143.4	5,976
ALAKHANDA HEP(4 * 82.5)	330	265	336	0		8	333
VISHNUPARYAG HPS(4 * 110)	440	435	435	0		10.5	438
OTHER HYDRO UP(1 * 527)	527	65	33	0		0.9	38
Total HYDEL	1,297	765	804			19.4	809
WIND	0	0	0	0		0	0
BIOMASS(1 * 26)	26	0	0	0			
SOLAR(1 * 472)	472	0	0	0		0.1	4
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	7,742	6,404			164.1	6,839

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	806	719	820	17:00	18.24	760			
Total HYDEL	1,250	806	719			18.24	760			
WIND	0	0	0	0		0	0			
BIOMASS(1 * 127)	127	0	0	0						
SOLAR(1 * 100)	100	0	0	38	14:00	0.31	13			
SMALL HYDRO(1 * 180)	180	0	0	0						
Total SMALL HYDRO	180	0	0			0	0			
Total UTTARAKHAND	2,107	806	719			18.55	773			

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	676.01	1,198	541	1,198	20:00	16.22	16.31	680	0.09
DEHAR HPS(6 * 165)	990	605.42	975	495	975	20:00	14.53	14.57	607	0.04
PONG HPS(6 * 66)	396	117.81	264	66	264	20:00	2.83	2.79	116	-0.04
Sub-Total	2,765	1,399.24	2,437	1,102	-	-	33.58	33.67	1,403	0.09
NHPC										
BAIRASIUL HPS(3 * 60)	180	91.56	178	21	181	19:00	2.2	2.34	98	0.14
CHAMERA HPS(3 * 180)	540	534.33	539	538	541	19:15	12.8	12.92	538	0.12
CHAMERA II HPS(3 * 100)	300	296.85	302	304	302	20:00	7.12	7.12	297	0
CHAMERA III HPS(3 * 77)	231	229.08	231	237	238	05:00	5.5	5.55	231	0.05
DHAULIGANGA HPS(4 * 70)	280	240.23	275	286	275	20:00	5.77	5.77	240	0
DULHASTI HPS(3 * 130)	390	380	391	387	392	14:00	9.12	9.18	383	0.06
KISHANGANGA(2 * 110)	220	0	0	0	0	-	0	0	0	0
PARBATI III HEP(4 * 130)	520	231.48	495	160	495	20:00	5.56	5.56	232	0
SALAL HPS(6 * 115)	690	688.25	708	706	708	20:00	16.52	16.98	708	0.46
SEWA-II HPS(3 * 40)	120	119.54	128	120	128	20:00	1.78	1.77	74	-0.01
TANAKPUR HPS(1 * 31.42 + 2 * 31.4)	94	48.46	64	0	64	20:00	1.16	1.17	49	0.01
URI HPS(4 * 120)	480	376.9	302	424	478	09:00	9.05	9.52	397	0.47
URI-II HPS(4 * 60)	480	201.84	242	200	242	20:00	4.84	4.99	208	0.15
Sub-Total	4,525	3,438.52	3,855	3,383	-	-	81.42	82.87	3,455	1.45
NPCL										
NAPS(2 * 220)	440	189	212	391	212	20:00	4.54	5.41	225	0.87
RAPS-B(2 * 220)	440	355	400	398	400	20:00	8.52	8.58	358	0.06
RAPS-C(2 * 220)	440	405	452	453	454	02:00	9.72	9.7	404	-0.02
Sub-Total	1,320	949	1,064	1,242	-	-	22.78	23.69	987	0.91
NTPC										
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	402.81	0	0	0	-	0	0	0	0
AURAIYA GPS(2 * 109.3 + 4 * 111.19)	663	634.09	0	0	0	-	0	0	0	0
DADRI GPS(2 * 154.51 + 4 * 130.19)	830	592.55	100	100	100	20:00	2.79	2.7	113	-0.09
DADRI SOLAR(1 * 5)	5	0.85	0	0	0	-	0.02	0	0	-0.02
DADRI-I TPS(4 * 210)	840	768.6	506	461	506	20:00	10.96	10.75	448	-0.21
DADRI-II TPS(2 * 490)	980	928.55	775	595	775	20:00	13.32	14.3	596	0.98
ISTPP (JHAJJAR)(3 * 500)	1,500	1,421.25	1,430	846	1,460	20:30	18.98	20.46	853	1.48
KOLDAM HPS(4 * 200)	800	872	869	862	869	20:00	20.93	20.91	871	-0.02
RIHAND-I STPS(2 * 500)	1,000	875.21	605	934	605	20:00	19.05	20.25	844	1.2
RIHAND-II STPS(2 * 500)	1,000	942.5	988	1,001	988	20:00	21.26	22.46	936	1.2
RIHAND-III STPS(2 * 500)	1,000	942.5	1,005	1,003	1,005	20:00	19.87	21.21	884	1.34
SINGRAULI STPS(2 * 500 + 5 * 200)	2,000	1,757.86	1,904	1,622	1,904	20:00	33.27	34.8	1,450	1.53
SINGRAULI SOLAR(1 * 15)	15	1.32	0	0	0	-	0.03	0.01	0	-0.02
UNCHAHAHAR II TPS(2 * 210)	420	382.2	247	354	247	20:00	5.94	6.63	276	0.69
UNCHAHAHAR III TPS(1 * 210)	210	191.1	159	117	159	20:00	2.82	3.03	126	0.21
UNCHAHAHAR IV TPS(1 * 500)	500	0	0	0	0	-	0	0	0	0
UNCHAHAHAR SOLAR(1 * 10)	10	1.02	0	0	0	-	0.02	0.02	1	0
UNCHAHAHAR TPS(2 * 210)	420	191.1	181	122	181	20:00	2.86	3.17	132	0.31
Sub-Total	12,612	10,905.51	8,769	8,017	-	-	172.12	180.7	7,530	8.58
SJVNL										
NATHPA-JHAKRI HPS(6 * 250)	1,500	1,605	1,619	1,615	1,643	19:00	38.52	38.78	1,616	0.26
RAMPUR HEP(6 * 68.67)	412	442	448	444	450	02:00	10.61	10.85	452	0.24
Sub-Total	1,912	2,047	2,067	2,059	-	-	49.13	49.63	2,068	0.5
THDC										
KOTESHWAR HPS(4 * 100)	400	293.15	205	370	376	11:00	7.04	7.02	293	-0.02
TEHRI HPS(4 * 250)	1,000	1,016.9	755	1,031	1,031	03:00	19.05	19.37	807	0.32
Sub-Total	1,400	1,310.05	960	1,401	-	-	26.09	26.39	1,100	0.3
Total	24,534	20,049.32	19,152	17,204			385.12	396.95	16,543	11.83

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	0	0	2	23:00	0.07	0.33	14	0.26
BUDHIL HPS (IPP)(2 * 35)	70	0	70	70	70	20:00	1.58	1.5	63	-0.08
KARCHAM WANGTOO HPS(4 * 250)	1,000	0	1,100	1,100	1,100	19:00	26.08	26.15	1,090	0.07
MALANA2(2 * 50)	100	0	110	110	111	01:00	2.44	2.57	107	0.13
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	276	143	295	22:00	4.4	4.28	178	-0.12
Sub-Total	1,712	0	1,666	1,533	-	-	37.16	37.44	1,561	0.28
Total	1,712	0	1,666	1,533	-	-	37.16	37.44	1,561	0.28

Summary Section					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Total State Control Area Generation	53,966	24,038	20,725	548.37	22,849
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		7,895	10,495	218.17	9,584
Total Regional Availability(Gross)	80,212	52,751	49,957	1,200.93	50,532

Total Hydro Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Hydro	12,814	11,578	10,197	246.63	10,276
State Control Area Hydro	6,125	4,000	3,948	95.63	3,985
Total Regional Hydro	18,939	15,578	14,145	342.26	14,261

Total Renewable Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Renewable	30	0	0	0.03	1
State Control Area Renewable	9,214	1,678	1,902	63.58	2,649
Total Regional Renewable	9,244	1,678	1,902	63.61	2,650

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	0	0	
3	132KV-Rihand-Sonnagar(PG)	-20	-30	-	31	0	0.52	-0.52	
4	220KV-Pusauli(PG)-Sahupuri(UP)	136	129	137	0	2.46	0	2.46	
5	400KV-Biharsharif(PG)-Baliala(PG)	67	77	114	0	1.63	0	1.63	
6	400KV-Biharsharif(PG)-Varanasi(PG)	123	13	106	152	0	0.21	-0.21	
7	400KV-Fatehpur(UP)-Sasaram	-	-	-	-	-	-	-	
8	400KV-Motihari(DMT)-Gorakhpur(UP)	320	248	-	334	0	4.76	-4.76	
9	400KV-Muzaffarpur(PG)-Gorakhpur(UP)	244	434	480	-	8.52	0	8.52	
10	400KV-Patna(PG)-Baliala(PG)	693	834	1,002	0	19.23	0	19.23	
11	400KV-Sasaram-Allahabad(PG)	8	20	47	0	0.46	0	0.46	
12	400KV-Sasaram-Varanasi(PG)	139	139	138	0	2.99	0	2.99	
13	765KV-Fatehpur(PG)-Sasaram.	-	50	-	120	0	3.1	-3.1	
14	765KV-Gaya(PG)-Baliala(PG)	218	190	226	0	3.34	0	3.34	
15	765KV-Gaya(PG)-Varanasi(PG)	49	128	218	-	2.44	0	2.44	
16	HVDC800KV-Alipurduar-Agra(PG)	400	700	700	0	12.1	0	12.1	
Sub-Total EAST REGION		2,377	2,932	3,168	637	53.17	8.59	44.58	
Import/Export between NORTH_EAST REGION and NORTH REGION									
1	HVDC800KV-BiswanathCharialli-Agra(PG)	700	700	700	0	17.01	0	17.01	
Sub-Total NORTH_EAST REGION		700	700	700	0	17.01	0	17.01	
Import/Export between WEST REGION and NORTH REGION									
1	220KV-Auraiya(NT)-Malanpur(PG)	40	43	-	59	0.76	0	0.76	
2	220KV-Badod(MP)-Kota(PG)	1	57	76	-10	1	0	1	
3	220KV-Badod(MP)-Modak(RJ)	-	-	-	-	-	-	-	
4	400KV-RAPS C(NP)-Sujalpur	-162	-90	190	76	2.27	0	2.27	
5	400KV-Vindhyachal(PG)-Rihand(NT)	479	479	0	479	0	20.02	-20.02	
6	400KV-Zerda(PG)-Bhinmal(PG)	52	41	104	154	0	0.26	-0.26	
7	400KV-Zerda(PG)-Kankroli(RJ)	-62	28	86	235	0	1.25	-1.25	
8	765KV-Orai-Gwalior(PG)	-306	-290	-	329	0	6.72	-6.72	
9	765KV-Orai-Jabalpur	992	881	1,070	-	18.71	0	18.71	
10	765KV-Orai-Satna	1,809	1,708	1,821	-	40.49	0	40.49	
11	765KV-Gwalior(PG)-Agra(PG)	-	1,904	2,222	0	46.11	0	46.11	
12	765KV-Phagi(RJ)-Gwalior(PG)	875	1,152	1,152	-	23.53	0	23.53	
13	HVDC500KV-Mundra(JH)-Mohindergarh(JH)	1,200	1,200	1,204	0	29.07	0	29.07	
14	HVDC500KV-Vindhyachal(PG)-Vindhyachal B/B	-100	-250	0	250	0	5.7	-5.7	
15	HVDC800KV-Champa(PG)-Kurukshetra(PG)(PG)	-	-	-	-	28.59	0	28.59	
Sub-Total WEST REGION		4,818	6,863	7,925	1,572	190.53	33.95	156.58	
TOTAL IR EXCHANGE		7,895	10,495	11,793	2,209	260.71	42.54	218.17	

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	139.18	60.92	-4.2	195.9	156.58	-39.32	
NR-ER	42.25	35.15	-33.68	43.72	61.59	17.87	

Total	181.43	96.07	-37.88	239.62	218.17	-21.45
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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)	3.08	0				0.1133	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	0	2.3	42.9	81.3	14.3	2.8	0	16.4

<-----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	03:59:20	49.83	18:39:20	50	0.03	0.05	50.1	49.9	18.7

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	414	06:00	398	23:30	0	0	0	0	0
Abdullapur(PG) - 400KV	414	06:00	398	23:30	0	0	0	0	0
Amritsar(PG) - 400KV	411	05:35	396	14:15	0	0	0	0	0
Ballabgarh(PG) - 400KV	415	05:35	397	19:30	0	0	0	0	0
Bareilly II(PG) - 400KV	416	06:05	398	19:25	0	0	0	0	0
Bareilly(UP) - 400KV	417	06:00	399	19:20	0	0	0	0	0
Baspa(HP) - 400KV	410	05:35	397	15:50	0	0	0	0	0
Bassi(PG) - 400KV	416	04:00	399	23:20	0	0	0	0	0
Bawana(DTL) - 400KV	414	06:00	399	23:05	0	0	0	0	0
Dadri HVDC(PG). - 400KV	413	05:45	399	23:30	0	0	0	0	0
Gorakhpur(PG) - 400KV	419	05:25	396	20:05	0	0	0	0	0
Hisar(PG) - 400KV	409	05:35	392	14:15	0	0	0	0	0
Kanpur(PG) - 400KV	422	05:30	406	19:20	0	0	19.1	0	19.1
Kashipur(UT) - 400KV	402	00:00	402	00:00	0	0	0	0	0
Kishenpur(PG) - 400KV	415	05:45	402	15:45	0	0	0	0	0
Moga(PG) - 400KV	409	06:00	395	14:15	0	0	0	0	0
Nallagarh(PG) - 400KV	410	05:35	397	15:50	0	0	0	0	0
Rihand HVDC(PG) - 400KV	408	15:05	408	15:05	.69	.69	0	0	.69
Rihand(NT) - 400KV	406	15:05	400	23:35	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	796	04:05	776	22:35	0	0	0	0	0
Balia(PG) - 765KV	791	06:00	755	19:25	0	0	0	0	0
Bareilly II(PG) - 765KV	794	06:00	760	19:20	0	0	0	0	0
Bhiwani(PG) - 765KV	795	05:35	768	19:25	0	0	0	0	0
Fatehpur(PG) - 765KV	787	03:25	750	19:25	0	0	0	0	0
Jhatikara(PG) - 765KV	790	05:35	761	23:20	0	0	0	0	0
Lucknow II(PG) - 765KV	793	06:05	758	19:30	0	0	0	0	0
Meerut(PG) - 765KV	800	05:35	771	19:20	0	0	1.74	0	1.74
Moga(PG) - 765KV	785	05:35	758	14:15	0	0	0	0	0
Phagi(RJ) - 765KV	0	00:00	0	00:00	100	100	0	0	100
Unnao(UP) - 765KV	784	03:00	745	19:25	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)
UTTAR PRADESH	2,341.13	38.18	0	1,792.29	-291.21	0	119.76	48.52	-9.44	158.85
DELHI	916.89	-630.85	0	715.73	-857.23	0	80.55	19.79	-13.26	87.08
CHANDIGARH	0	-45.28	0	0	-70.43	0	7.07	0	-0.97	6.1
PUNJAB	2,051.29	0	0	2,051.29	-503.07	0	91.9	49.2	-2.21	138.88
UTTARAKHAND	135.62	-145.89	0	182.85	88.23	0	14.93	3.84	-0.71	18.06
HIMACHAL PRADESH	-1,565.46	-206.42	0	-1,621.7	-79.96	0	40.42	-35.63	-3.87	0.92
JAMMU & KASHMIR	-1,047.39	-141.57	0	-1,047.39	493.2	0	35.55	-25.14	8.15	18.57
RAJASTHAN	-85.56	-327.87	0	-538.77	-626.31	0	64.42	-4.88	-10.18	49.36
HARYANA	2,248.97	-30.52	0	2,302.95	0.59	0	101.91	46.65	-2.68	145.88
TOTAL	4,995.49	-1,490.22	0	3,837.25	-1,846.19	0	556.51	102.35	-35.17	623.7

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	6,220.34	3,380.5	2,368.05	1,759.65	38.18	-1,457.47	0	0
DELHI	4,035.32	2,876.71	1,002.63	492.3	-222.36	-912.57	0	0
CHANDIGARH	345.93	243.27	0	0	0	-70.43	0	0
PUNJAB	4,158.22	3,645.48	2,051.29	2,032.66	0	-503.07	0	0
UTTARAKHAND	772.59	478.96	182.86	132.56	107.86	-166.12	0	0
HIMACHAL PRADESH	1,927.68	1,548.33	-1,382.52	-1,799.56	93.89	-267.51	0	0
JAMMU & KASHMIR	1,619.5	1,254.39	-1,047.39	-1,047.39	552.38	-141.57	0	0
RAJASTHAN	3,372.95	1,622.94	-85.56	-538.77	89.31	-1,709.79	0	0
HARYANA	5,003.74	3,490.87	2,461.93	1,421.92	146.52	-1,068.42	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	497.98	1,018	508.14	1,456	1,381.72	459.81
Chamera-I	748.75	760	0	-	-	-	-	-	0
Gandhisagar	295.78	295.78	0	-	-	-	-	-	0
Jawahar Sagar	295.78	298.7	0	-	-	-	-	-	0
Koteshwar	598.5	612.5	5	611.38	5	610.71	5	436	463.35
Pong	384.05	426.72	138	416.9	756	420.69	917	1,357.11	166.76
RPS	343.81	352.8	0	-	-	-	-	-	0
RSD	487.91	527.91	1	519.79	6	521.15	10	462.98	207
Rihand	252.98	268.22	0	260.45	330	263.74	528	21,913.61	0
Tehri	740.04	829.79	787	817.35	949	813.35	869	597.76	436
TOTAL	-	-	1,584	-	3,064	-	3,785	26,149.18	1,732.92

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	4	56
DELHI	5	43
HARYANA	0	0
HIMACHAL PRADESH	2	18
JAMMU & KASHMIR	1	20
PUNJAB	0	0
RAJASTHAN	3	20
UTTAR PRADESH	0	0
UTTARAKHAND	0	0

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