

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

Power Supply Position in Northern Region For 01-Oct-2018

1. Regional Availability/Demand:

Date of Reporting:02-Oct-2018

Γ		Evening Peak (19:00) MW  Demand Met Shortage(-)/Surplus(+) Requirement Freq (				Off-Pea	nk (03:00) MW	Day Energy(Net MU)		
Ī	Demand Met	Shortage(-)/Surplus(+)	Requirement	Freq (Hz)	Demand Met	Shortage(-)/Surplus	Requirement	Freq (Hz)	Demand Met	Shortage
	48,358	1,402	49,760	49.95	41,504	289	41,793	50.06	1,068	11.26

2(A)State's Load D	eails (At Sta	ite Periphe	ry) in MU:										
			State's Contro	ol Area Ger	eration (N	et MU)		Drawal Sch	Act Drawal	UI	Requirement	Shortage	Consumption
State	Thermal	Hydro	Gas/Naptha/ Diesel	Solar	Wind	OthersBiomass/Small Hyd/Co-gen etc.)	Total	(Net MU)	(Net MU)	(Net MU)	(Net MU)	(Net MU)	(Net MU)
PUNJAB	102.52	20.31	0	4.29	0	8.3	135.42	22.61	21.56	-1.05	156.98	0	156.98
HARYANA	33.56	0.96	0	0.15	0	0.24	34.9	98.8	100.59	1.79	137.07	1.58	135.49
RAJASTHAN	133.85	0	2.99	13.88	9.3	3.78	163.79	47.62	47.89	0.27	211.68	0	211.68
DELHI	6.96	0	17.87	0	0	0.8	25.63	69.98	68.74	-1.24	94.37	0	94.37
UTTAR PRADESH	212.3	19.2	0	2.9	0	1.2	235.6	126.32	126.94	0.62	362.54	0	362.54
UTTARAKHAND	0	20.15	0	0.73	0	0	20.88	16.87	16.77	-0.1	38.1	0.45	37.65
HIMACHAL PRADESH	0	10.66	0	0	0	9.43	20.09	6.22	6.12	-0.1	26.21	0	26.21
JAMMU & KASHMIR	0	13.52	0	0	0	0	13.52	30.1	25.41	-4.69	48.16	9.23	38.93
CHANDIGARH	0	0	0	0	0	0	0	4.71	4.22	-0.49	4.22	0	4.22
Region	489.19	84.8	20.86	21.95	9.3	23.75	649.83	423.23	418.24	-4.99	1,079.33	11.26	1,068.07

2(B)State Demand Met (Peak and off-peak Hrs
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		Evening Pe	ak (19:00) MW			Off-Peak (03:00)	MW	
State	Demand Met	Shortage(-)/Surplus(+)	UI	STOA/PX Transaction	Demand Met	Shortage(-)/Sur	UI	STOA/PX Transaction
PUNJAB	7,205	0	-141	-1,994	5,125	0	-55	-2,499
HARYANA	6,680	121	132	297	5,164	0	89	-411
RAJASTHAN	8,501	0	75	-614	8,148	0	-130	-1,405
DELHI	4,374	0	-146	-529	3,512	0	-27	-1,013
UTTAR PRADESH	16,521	850	78	80	16,021	80	85	760
UTTARAKHAND	1,923	0	191	121	1,388	0	-24	241
HIMACHAL PRADESH	1,215	0	0	-1,088	830	0	-12	-525
JAMMU & KASHMIR	1,723	431	-183	-233	1,187	209	-258	-35
CHANDIGARH	216	0	-59	0	128	0	6	-55
Region	48,358	1,402	-53	-3,960	41,503	289	-326	-4,942

2(C)State's Demand Met in MWs (Maximum Demand Met and Maximum requirement of the day details)

	Maximum Demand, c	corresponding	shortage and requirem day	ent details for the	Maximum requirem	ent, correspo	onding shortage and dem	and details for the day
State	Maximum Demand Met of the day	Time	Shortage(-) /Surplus(+) during at maximum demand	Requirement at the max demand met of the day	Maximum Requirement of the day	Time	Shortage(-) /Surplus(+) during at maximum Requirement	Demand Met at maximum requiremnet
PUNJAB	7,205	19:00	0	7,205	7,205	19:00	0	7,205
HARYANA	6,939	20:00	553	7,492	7,492	20:00	553	6,939
RAJASTHAN	9,546	10:00	0	9,546	9,546	10:00	0	9,546
DELHI	4,513	16:00	0	4,513	4,513	16:00	0	4,513
UP	16,741	21:00	0	16,741	16,741	21:00	0	16,741
UTTARAKHAND	1,923	19:00	0	1,923	1,923	19:00	0	1,923
HP	1,364	8:00	0	1,364	1,364	8:00	0	1,364
J&K	1,879	22:00	470	2,349	2,349	22:00	470	1,879
CHANDIGARH	216	19:00	0	216	216	19:00	0	216
NR	48,684	20:00	1,346	50,030	50,030	20:00	1,346	48,684

## **3(A) State Entities Generation:**

CHANDIGARH							
	Inst. Capacity	N/A	N/A	Day Peal	ζ.	Day Energy	
Station/Constituents	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	AVG. MW
NIL	•	•	•		•		
Total	0	0	0			0	0
Total	0	0	0			0	0

DELHI							
	Inst. Capacity	19:00	03:00	Day Peal	k	Day Energy	
Station/Constituents	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	AVG. MW
BADARPUR TPS( 2 * 210 + 3 * 100 )	705	309	301	0		6.96	290
RAJGHAT TPS( 2 * 67.5 )	135	0	0	0			
Total THERMAL	840	309	301			6.96	290
BAWANA GPS( 2 * 253 + 4 * 216 )	1,370	679	503	0		13.93	580
DELHI GAS TURBINES( 3 * 34 + 6 * 30 )	282	36	37	0		0.31	13
PRAGATI GAS TURBINES( 1 * 121.2 + 2 * 104.6 )	331	147	151	0		3.63	151
RITHALA GPS(3 * 36)	108	0	0	0			
Total GAS/NAPTHA/DIESEL	2,091	862	691			17.87	744
WIND	0	0	0	0			
BIOMASS( 1 * 16 )	16	26	27	0		0.8	33
SOLAR(1*2)	2	0	0	0			
Total DELHI	2,949	1,197	1,019			25.63	1,067

	Inst. Capacity	19:00	03:00	Day Po	eak	Day Energy	
Station/Constituents	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	AVG. MW
DCRTPP (YAMUNA NAGAR)( 2 * 300 )	600	287	263	288	21:00	6.08	253
JHAJJAR(CLP)( 2 * 660 )	1,320	1,135	624	1,234	00:00	21.32	888
MAGNUM DIESEL (IPP)( 4 * 6.3 )	25	0	0	0			
PANIPAT TPS( 2 * 210 + 2 * 250 )	920	225	226	228	10:00	5.35	223
RGTPP( KHEDAR)( 2 * 600 )	1,200	0	0	413	23:00	0.82	34
Total THERMAL	4,065	1,647	1,113			33.57	1,398
FARIDABAD GPS( 1 * 156.07 + 2 * 137.75 )	432	0	0	0			
Total GAS/NAPTHA/DIESEL	432	0	0			0	0
TOTAL HYDRO HARYANA(1 * 62)	62	28	28	29	09:00	0.96	40
Total HYDEL	62	28	28			0.96	40
WIND	0	0	0	0			
BIOMASS( 1 * 106 )	106	0	0	0		0.24	10
SOLAR(1*50)	50	0	0	0		0.15	6
Total HARYANA	4,715	1,675	1,141			34.92	1,454

HIMACHAL PRADESH							
	Inst. Capacity	19:00	03:00	Day Peal	k	Day Energy	
Station/Constituents	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	AVG. MW
BASPA (IPP) HPS( 3 * 100 )	300	124	165	0		3.7	154
MALANA (IPP) HPS( 2 * 43 )	86	86	30	0		1.11	46
OTHER HYDRO HP(1 * 372)	372	250	212	0		5.85	244
Total HYDEL	758	460	407			10.66	444
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO( 1 * 486 )	486	388	404	0		9.43	393
Total SMALL HYDRO	486	388	404			9.43	393
Total HP	1,244	848	811			20.09	837

JAMMU & KASHMIR	Inst. Capacity	19:00	03:00	Day P	eak	Day Energy	
Station/Constituents	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	AVG. MW
GAS/DIESEL/OTHERS J&K( 1 * 190 )	190	0	0	0			
Total GAS/NAPTHA/DIESEL	190	0	0			0	0
BAGLIHAR (IPP) HPS(6*150)	900	581	381	0		10.86	453
OTHER HYDRO/IPP J&K( 1 * 308 )	308	149	78	0		2.66	111
Total HYDEL	1,208	730	459			13.52	564
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	730	459			13.52	564

	Inst. Capacity	19:00	03:00	Day Pe	ak	Day Energy	
Station/Constituents	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	AVG. MW
GOINDWAL(GVK)( 2 * 270 )	540	466	290	491		8.39	350
GURU GOBIND SINGH TPS (ROPAR)( 6 * 210 )	1,260	439	467	558		11.24	468
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)( 2 * 210 + 2 * 250 )	920	571	527	617		13.46	561
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		31.59	1,316
TALWANDI SABO TPS( 3 * 660 )	1,980	1,623	1,530	1,841		37.87	1,578
Total THERMAL	6,560	4,419	4,134			102.53	4,272
TOTAL HYDRO PUNJAB( 1 * 1000 )	1,000	809	718	809		20.31	846
Total HYDEL	1,000	809	718			20.31	846
WIND	0	0	0	0			
BIOMASS( 1 * 303 )	303	0	0	0		8.3	346
SOLAR(1 * 859)	859	0	0	520		4.29	179
Total PUNJAB	8,722	5,228	4,852			135.43	5,643

RAJASTHAN							
	Inst. Capacity	19:00	03:00	Day Pe	ak	Day Energy	
Station/Constituents	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	AVG. MW
BARSINGSAR (IPP) LTPS( 2 * 125 )	250	92	0	0		0.56	23
CHHABRA TPS( 1 * 660 + 4 * 250 )	1,660	1,206	1,239	0		28.37	1,182
GIRAL (IPP) LTPS( 2 * 125 )	250	0	0	0			
KALISINDH TPS( 2 * 600 )	1,200	555	555	0		13.21	550
KAWAI TPS( 2 * 660 )	1,320	988	1,195	0		26.38	1,099
KOTA TPS( 2 * 110 + 2 * 195 + 3 * 210 )	1,240	796	853	0		19.06	794
RAJWEST (IPP) LTPS( 8 * 135 )	1,080	719	848	0		19.39	808
SURATGARH TPS (6 * 250)	1,500	1,065	1,086	0		26.9	1,121
VSLPP (IPP)( 1 * 135 )	135	0	0	0			
Total THERMAL	8,635	5,421	5,776			133.87	5,577
DHOLPUR GPS( 3 * 110 )	330	0	0	0			
RAMGARH GPS( 1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5 )	271	121	123	0		2.99	125
Total GAS/NAPTHA/DIESEL	601	121	123			2.99	125
RAPS-A(1 * 100 + 1 * 200)	300	158	157	0		3.49	145
Total NUCLEAR	300	158	157			3.49	145
TOTAL HYDRO RAJASTHAN( 1 * 550 )	550	0	0	0			
Total HYDEL	550	0	0			0	0
WIND	4,292	108	421	0		9.3	388
BIOMASS( 1 * 102 )	102	12	12	0		0.29	12
SOLAR(1*1995)	1,995	46	0	0		13.88	578
Total RAJASTHAN	16,475	5,866	6,489			163.82	6,825

	Inst. Capacity	19:00	03:00	Day Pe	ak	Day Energy	
Station/Constituents	(MW)	Peak MW	Off Peak MW	(MW) Hr		(MU)	AVG. MW
ANPARA TPS(2 * 500 + 3 * 210)	1,630	1,167	1,176	0		29.9	1,246
ANPARA-C TPS(2 * 600)	1,200	865	842	0		20.4	850
ANPARA-D TPS(2 * 500)	1,000	933	932	0		21.7	904
BAJAJ ENERGY PVT LTD (IPP) TPS( 10 * 45 )	450	376	376	0		7.2	300
BARA PPGCL TPS( 3 * 660 )	1,980	888	908	0		21.8	908
HARDUAGANJ TPS( 1 * 105 + 1 * 60 + 2 * 250 )	665	538	538	0		12.5	521
LALITPUR TPS( 3 * 660 )	1,980	1,843	1,844	0		38.8	1,617
OBRA TPS ( 2 * 94 + 5 * 200 )	1,188	489	511	0		12	500
PANKI TPS(2 * 105)	210	0	0	0			
PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)	1,160	889	655	0		17.4	725
ROSA TPS(4 * 300)	1,200	1,066	1,065	0		23.9	996
TANDA TPS( 4 * 110 )	440	285	292	0		6.7	279
Total THERMAL	13,103	9,339	9,139			212.3	8,846
ALAKHANDA HEP( 4 * 82.5 )	330	247	330	0		6.7	279
VISHNUPARYAG HPS(4*110)	440	315	325	0		7.6	317
OTHER HYDRO UP( 1 * 527 )	527	280	270	0		4.9	204
Total HYDEL	1,297	842	925			19.2	800
WIND	0	0	0	0			
BIOMASS( 1 * 26 )	26	0	0	0			
SOLAR(1*472)	472	0	0	0		2.9	121
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	10,231	10,114			235.6	9,817

UTTARAKHAND										
g, t tg tt		Inst. Capacity	19:00	0.	3:00		Day Peal	ζ	Day Energy	ANG MAN
Station/Constituents		(MW)	Peak MW	Off P	eak MW	(MW	7)	Hrs	(MU)	AVG. MW
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	880	:	834	883		18:00	20.15	840
Total HYDEL		1,250	880		834				20.15	840
WIND		0	0		0	0				
BIOMASS(1 * 127)		127	0		0	0		12.00	0.52	20
SOLAR( 1 * 100 ) SMALL HYDRO( 1 * 180 )		100	0		0	92		12:00	0.73	30
Total SMALL HYDRO		180	0		0	0			0	0
Total UTTARAKHAND		2,107	880		334				20.88	870
3(B) Regional Entities General	tion									
3(b) Regional Entities General	Inst.	Declared Capacity	19:00	03:00	Day	Peak	Da	y Energy		
Station/Constituents	Capacity			Off Peak			SCHD		AVG. MW	UI
	(MW)	(MW)	Peak MW	MW	(MW)	Hrs	(MU)	ACT (MU)		
ВВМВ										
BHAKRA HPS( 2 * 108 + 3 * 126 + 5 * 157 )	1,379	404.51	648	358	648	20:00	9.71	9.83	410	0.12
DEHAR HPS(6 * 165)	990	586.67	725	570	725	20:00	14.08	14.24	593	0.16
PONG HPS(6 * 66)	396	325	330	330	330	20:00	7.8	7.84	327	0.04
Sub-Total	2,765	1,316.18	1,703	1,258	-	-	31.59	31.91	1,330	0.32
NHPC										
BAIRASIUL HPS( 3 * 60 )	180	86.15	140	73	142	19:00	2.07	2.19	91	0.12
CHAMERA HPS( 3 * 180 )	540	534.33	541	545	554	15:45	12.8	13.05	544	0.25
CHAMERA II HPS( 3 * 100 )	300	268.88	302	300	303	19:00	6.34	6.52	272	0.18
CHAMERA III HPS( 3 * 77 )	231	180.38	212	212	214	01:00	4.33	4.39	183	0.06
DHAULIGANGA HPS(4 * 70)	280	179.74	282	209	283	19:00	4.27	4.35	181	0.08
DULHASTI HPS(3*130)	390	387.16	408	403	411	23:00	9.29	9.59	400	0.3
KISHANGANGA(2 * 110)	220	66.15	0	83	84	00:00	1.6	1.53	64	-0.07
PARBATI III HEP(4 * 130)	520 690	95.69	243 255	0	387 684	18:15 07:00	2.3	2.33	97 360	0.03
SALAL HPS(6*115) SEWA-II HPS(3*40)	120	328.38 119.54	119	356	122	15:00	7.88 1.8	8.65 1.89	79	0.77
TANAKPUR HPS(1*31.42 + 2*	94	93.6	98	100	101	01:00	2.25	2.35	98	0.03
31.4 ) URI HPS( 4 * 120 )	480		218	132	357	08:00		5.22	218	0.62
URI-II HPS(4 * 60)	480	191.88	121	132	182	09:00	4.6 2.99	3.12	130	0.02
Sub-Total	4,525	2,656.57	2,939	2,537	-	-	62.52	65.18	2,717	2.66
NPCL	-,		<del>-,, .,</del>						-,	
NAPS( 2 * 220 )	440	385	426	430	436	10:00	9.24	9.27	386	0.03
RAPS-B(2*220)	440	383	421	426	427	02:00	9.19	9.13	380	-0.06
RAPS-C(2 * 220)	440	204	230	229	231	05:00	4.9	4.86	203	-0.04
Sub-Total	1,320	972	1,077	1,085	-	-	23.33	23.26	969	-0.07
NTPC							I			
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	65.26	384	260	384	19:00	6.58	6.69	279	0.11
AURAIYA GPS(2 * 109.3 + 4 *	663	185.53	625	296	625	19:00	7.87	8.15	340	0.28
111.19 ) DADRI GPS( 2 * 154.51 + 4 *	830	246.11	752	256	752	19:00	8.53	8.95	373	0.42
130.19 ) DADRI SOLAR( 1 * 5 )	5	0.91	0	0	0	_	0.02	0.02	1	0
DADRI-I TPS(4 * 210)	840	576.45	544	616	544	19:00	12.93	12.4	517	-0.53
DADRI-II TPS( 2 * 490 )	980	928.55	918	616	918	19:00	20.62	19.8	825	-0.82
ISTPP (JHAJJAR)( 3 * 500 )	1,500	1,137.45	1,133	1,489	1,508	07:24	27.09	26.93	1,122	-0.16
KOLDAM HPS( 4 * 200 )	800	872	795	0	795	-	8	8.46	353	0.46
RIHAND-I STPS(2*500)	1,000	730	780	777	780	19:00	17.18	18.59	775	1.41
RIHAND-II STPS(2 * 500)	1,000	942.5	1,005	1,012	1,005	19:00	22.11	23.89	995	1.78
RIHAND-III STPS(2 * 500)	1,000	471.25	501	506	501	19:00	11.05	11.96	498	0.91
SINGRAULI STPS( 2 * 500 + 5 * 200 )	2,000	1,810	1,947	1,966	1,947	19:00	43.37	43.56	1,815	0.19
SINGRAULI SOLAR(1*15)	15	2.72	0	0	0	-	0.07	0.07	3	0
UNCHAHAR II TPS( 2 * 210 )	420	382.2	416	374	416	19:00	8.59	8.42	351	-0.17
UNCHAHAR III TPS(1 * 210)	210	191.1	209	162	209	19:00	4.26	4.03	168	-0.23
UNCHAHAR IV TPS(1 * 500)	500	2 27	0	0	0	-	0	- 0.05	-	0
UNCHAHAR SOLAR(1*10) UNCHAHAR TPS(2*210)	10 420	2.27 352.08	0 325	326	325	19:00	0.05 8.02	0.05 7.11	2 296	-0.91
Sub-Total	12,612	8,896.38	10,334	8,656	325	19:00	206.34	209.08	8,713	2.74
SJVNL	14,014	0,020,00	10,004	0,000			<b>200.0⁴</b>	207.00	0,713	2.17
SJ V NL NATHPA-JHAKRI HPS( 6 * 250	1 500	1 407 20	1 402	166	1 //00	10.00	20.5	21	Q75	0.5
)	1,500	1,497.38	1,493	466	1,498	19:00	<u> </u>	21	875	0.5
RAMPUR HEP( 6 * 68.67 )	412	1 020 28	415	126	442	18:45	5.71	6.09	254	0.38
Sub-Total	1,912	1,939.38	1,908	592	-	-	26.21	27.09	1,129	0.88
THDC					Г		ı	Г		
KOTESHWAR HPS(4 * 100)	400	108.54	367	70	368	19:00	2.6	2.68	112	0.08
TEHRI HPS(4 * 250)	1,000	1,064	990	0	1,002	19:00	7.91	8.06	336	0.15
Sub-Total Total	1,400	1,172.54	1,357	70	-	-	10.51	10.74	448 15 306	0.23
Total	24,534	16,953.05	19,318	14,198			360.5	367.26	15,306	6.76

IPP/JV													
		Inst. Capacity	Declared C	apacity		19:00	03:00	Day	Peak	Da	y Energy		
Station/Consti	tuents	(MW)	(MW	)	1	Peak MW	Off Peak MW	(MW)	Hrs	SCHD (MU)	ACT (MU)	AVG. MW	UI
IPP										(===)			
ADHPL(IPP) HI	PS(2*96)	192	0			144	88	181	19:00	2.67	2.67	111	0
BUDHIL HPS (IF	PP)(2 * 35)	70	0			35	69	35	19:00	0.92	1.01	42	0.09
KARCHAM WANG * 250 )	GTOO HPS(4	1,000	0			1,000	270	1,000	18:30	10.89	11.19	466	0.3
MALANA2(1	2 * 50)	100	0			106	45	106	19:00	1.14	1.2	50	0.06
SAINJ HEP(	2 * 50)	50	0			100	55	100	00:00	1.99	2	83	0.01
SHREE CEMENT ( 150)	IPP) TPS( 2 *	300	0			297	298	298	03:00	7.17	7.1	296	-0.07
Sub-Total		1,712	0			1,682	825	-	-	24.78	25.17	1,048	0.39
Total		1,712	0			1,682	825			24.78	25.17	1,048	0.39
Summary Section													
,			Inst. Cap	acity		PEAK		OFF-PEAK		Da	y Energy	Day	y AVG.
Total State Control	Area Generatio	on	53,96	6		26,655		25,719			649.89	2	7,079
J. Net Inter Regional (+ve)/Export (-ve)]	l Exchange [In	port				3,283		2,871			61.19	3	3,358
Total Regional Avail	lability(Gross)		80,21	2		50,938		43,613		1	1,103.51	4	6,788
Total Hydro Genera	tion												
·			Inst. Cap	acity		PEAK		OFF-PEAK		Da	y Energy	Day	y AVG.
Regional Entities Hy	dro		12,81	4		10,087		4,984			161.45	(	5,727
State Control Area I	Hydro		6,125	5		3,749		3,371			84.8	3	3,533
Total Regional Hydr	0		18,93	9		13,836		8,355			246.25	1	0,260
Total Renewable Ge	neration												
			Inst. Cap	acity		PEAK		OFF-PEAK		Da	ny Energy	Day	y AVG.
Regional Entities Re	newable		30			0		0			0.14		6
State Control Area I	Renewable		9,214			580		864			50.31	2	2,096
Total Regional Rene	wable		9,244	ı		580		864			50.45	2	2,102
4(A) INTER-REG	IONAL EXC	CHANGES	(Import=(+ve) /									,	
SL.No.		Element		19:		03:00	+	Maximum Inter			Import in MU	Export in	NET
520.10				(M <sup>r</sup>		MW		rt (MW)	Export (1	MW)	import in the	MU	
•	1221	ZV Ch	D:11			etween EAST REGIO	ON and NOR	TH REGION	24		0	0.62	-0.62
2		W-Garhwa	-Kinand )-Sahupuri(U	-3		-34		-	34		U	0.62	-0.02
3			nnagar(PG)	-		<u>-</u>			_		-	-	-
4			Sahupuri(UP)	18		164	1	188	0		3.77	0	3.77
5			PG)-Balia(PG)	10		69		67	112		1.24	0	1.24
6			G)-Varanasi(P	-40	)4	-357		0	219		0	7.43	-7.43
7	400KV-	Fatehpur(U	P)-Sasaram	-	,	-		-	-		-	-	-
8	400KV-Mo	tihari(DMT	Γ)-Gorakhpur	-30	02	-212		0	338		0	5.2	-5.2
9	400KV-Mu	zaffarpur(I	PG)-Gorakhp	18	39	89	3	334	266		0.36	0	0.36
10			-Balia(PG)	50		8		261	65		1.38	0	1.38
11			lahabad(PG)	70		62		102	0		1.76	0	1.76
12			aranasi(PG)	31		319		323	0		7.64	0	7.64
13			G)-Sasaram.	-48		-461		0	510		0	9.45	-9.45
14			-Balia(PG) Varanasi(PG)	98 -37		37 -423		0	36 230		0.81	0 8.64	-8.64
16			duar-Agra(PG)	40		400		700	0		9.93	0	9.93
	-Total EAST		a1 -11g1 d(1 U)	-19		-339		093	1,810	)	26.89	31.34	-4.45
	<u>·</u>	<u> </u>		Import/E	xport betwee	n NORTH_EAST RI							
1	<b>I</b>		athCharialli	70		700		700	0		15.87	0	15.87
Sub-Tota	al NORTH_I	EAST REG	ION	70 Impo		700		700	0		15.87	0	15.87
1	220KW-A	raiva(NT)	Malanpur(PG)	Impo		tween WEST REGIO	m and NOR	TH REGION	213		0	4.02	-4.02
2			)-Kota(PG)	-12		-183		-	84		0	3.78	-3.78
3			-Modak(RJ)	-12		-		-	-		-	-	-
4			P)-Sujalpur	-		-		-	-		0	3.06	-3.06
5			G)-Rihand(N	-47	75	-454		-	485		0	11.33	-11.33

11	400KV-Sasaram-Allahabad(PG)	70	62	102	0	1.76	0	1.76
12	400KV-Sasaram-Varanasi(PG)	311	319	323	0	7.64	0	7.64
13	765KV-Fatehpur(PG)-Sasaram.	-486	-461	0	510	0	9.45	-9.45
14	765KV-Gaya(PG)-Balia(PG)	98	37	118	36	0.81	0	0.81
15	765KV-Gaya(PG)-Varanasi(PG)	-372	-423	0	230	0	8.64	-8.64
16	HVDC800KV-Alipurduar-Agra(PG)	400	400	700	0	9.93	0	9.93
Su	ıb-Total EAST REGION	-197	-339	2,093	1,810	26.89	31.34	-4.45
		Import/Export betwee	n NORTH_EAST RE	GION and NORTH REGIO	ON			
1	HVDC800KV-BiswanathCharialli	700	700	700	0	15.87	0	15.87
Sub-To	otal NORTH_EAST REGION	700	700	700	0	15.87	0	15.87
		Import/Export be	tween WEST REGIO	ON and NORTH REGION				
1	220KV-Auraiya(NT)-Malanpur(PG)	-199	-158	-	213	0	4.02	-4.02
2	220KV-Badod(MP)-Kota(PG)	-126	-183	-	84	0	3.78	-3.78
3	220KV-Badod(MP)-Modak(RJ)	-	-	-	-	-	-	-
4	400KV-RAPS C(NP)-Sujalpur	-	-	-	-	0	3.06	-3.06
5	400KV-Vindhyachal(PG)-Rihand(N	-475	-454	-	485	0	11.33	-11.33
6	400KV-Zerda(PG)-Bhinmal(PG)	-150	-265	0	377	0	5.87	-5.87
7	400KV-Zerda(PG)-Kankroli(RJ)	-306	-306	0	485	0	8.74	-8.74
8	765KV-0rai-Gwalior(PG)	-277	-182	0	292	0	5.54	-5.54
9	765KV-0rai-Jabalpur	47	54	177	544	3.03	0	3.03
10	765KV-0rai-Satna	1,234	1,151	1,272	0	28.54	0	28.54
11	765KV-Gwalior(PG)-Agra(PG)	807	592	876	0	10.68	0	10.68
12	765KV-Phagi(RJ)-Gwalior(PG)	475	211	476	-	5.59	0	5.59
13	HVDC500KV-Mundra(JH)-Mohind	1,300	1,300	1,304	0	31.49	0	31.49
14	HVDC500KV-Vindhyachal(PG)-Vind B/B	haychal -250	-250	0	250	0	6.04	-6.04
15	HVDC800KV-Champa(PG)-Kuruks	700	1,000	1,000	0	18.82	0	18.82
	b-Total WEST REGION	2,780	2,510	5,105	2,730	98.15	48.38	49.77
T	OTAL IR EXCHANGE	3,283	2,871	7,898	4,540	140.91	79.72	61.19
4(B) Inter Region	nal 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	44.93	-6.2	-47.08	-8.35	-4.45	3.9

RANG		< 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
% Frequency (		0	0	.6	18.4	72.6	74.7	6		.9	0	6.9
Maxir	num		Mi	inimum		Av	erage	Freq Variation	Standard	Freq. in 15	mnt blk	Freq Dev Ind
Frequency	Time	Freque			Time		luency	Index	Deviation	Max.	Min.	(% of Time
50.14	13:03:10	49.7	6		15:41:20	49	9.96	0.056	0.063	50.07	49.84	25.3
6.Voltage Profile: 400		aximum			Minir	num			Volta	ge (in %)		Voltage
	IVI	axiiiiuiii			Willin	IIUIII			v oita;	ge (m %)		Deviation Index
STATION	VOLTAGE	TIM	E	v	OLTAGE	T	ME	< 380	< 390	> 420	> 430	(% of time
Abdullapur(PG) - 400KV	422	04:0	0		404	18	3:35	0	0	16.32	0	16.32
Abdullapur(PG) - 400KV	422	04:0	0		404	18	3:35	0	0	16.32	0	16.32
Amritsar(PG) - 400KV	421	04:0	0		406	18	3:35	0	0	8.33	0	8.33
Ballabgarh(PG) -	420	04:0	0		402	18	3:35	0	0	0	0	0
400KV Bareilly II(PG) -	416	13:0	5		398	18	3:30	0	0	0	0	0
400KV Bareilly(UP) -	417	13:0	0	l	399	18	3:30	0	0	0	0	0
400KV Baspa(HP) -	426	03:5		<u>                                     </u>	404		3:40	0	0	35.42	0	35.42
400KV Bassi(PG) - 400KV	419	04:0	0	l	402	18	3:55	0	0	0	0	0
Bawana(DTL) -	418	04:0			403		3:30	0	0	0	0	0
400KV Ladri HVDC(PG).	417	08:0	0		403	18	3:30	0	0	0	0	0
- 400KV Gorakhpur(PG) - 400KV	414	13:0	5		388	18	3:10	0	.69	0	0	0
Hisar(PG) - 400KV	416	04:0	0		397	18	3:35	0	0	0	0	0
Kanpur(PG) - 400KV	420	13:0	5		404	18	3:25	0	0	0	0	0
Kashipur(UT) - 400KV	402	0:00	0		402	00	0:00	0	0	0	0	0
Kishenpur(PG) - 400KV	419	03:5	0		403	18	3:40	0	0	0	0	0
Moga(PG) - 400KV	412	04:0	0		396	18	3:35	0	0	0	0	0
Nallagarh(PG) - 400KV	426	03:5	0		404	18	3:40	0	0	35.42	0	35.42
Rihand HVDC(PG) -	409	08:0	0		409	08	3:00	1.04	1.04	0	0	1.04
400KV Rihand(NT) - 400KV	408	08:0	0		402	18	3:20	0	0	0	0	0
6.1 Voltage Profile: 7	65kV	1							-		1	•
001 ( 0.00 g 1 1 0.00 )		aximum			Minir	num			Volta	ge (in %)		Voltage Deviation
STATION	VOLTAGE	TIM	F	l v	OLTAGE	1	ME	< 728	< 742	> 800	> 820	Index (% of time
Anta RS(RJ) -	792	03:3		<b>V</b>	776		5:00	0	0	0	0	0
765KV Balia(PG) - 765KV	779	13:0			749		3:20	0	0	0	0	0
Bareilly II(PG) -	793	13:0			759		3:30	0	0	0	0	0
765KV L Bhiwani(PG) -	795	03:3	5		768	18	3:35	0	0	0	0	0
765KV Latehpur(PG) -	776	00:0	0		741	18	3:25	0	1.04	0	0	0
765KV L Jhatikara(PG) -	793	04:0	0		764	18	3:35	0	0	0	0	0
765KV Lucknow II(PG) - 765KV	786	13:0	5		752	18	3:20	0	0	0	0	0
Meerut(PG) -	793	04:0	0		782	00	):25	0	0	0	0	0
Moga(PG) - 765KV	777	04:0	0		748	18	3:35	0	0	0	0	0
Phagi(RJ) - 765KV	798	04:0	0		776	18	3:25	0	0	0	0	0
Unnao(UP) - 765KV	767	13:0	5		739	18	3:25	0	2.43	0	0	0

NR-WR

Total

5.Frequency Profile

149.51

194.44

5.Inter National Exchange with Nepal [Import (+ve)/Export(-ve)] [Linkwise]

Element Peak

132KV-Tanakpur(NH)-Mahendranagar(PG)

7.5

1.3

Peak MW

21.65

Off-Peak MW

0.05

90.6

82.25

49.77

61.19

Energy (MU)
Import Export
0 0.2863

-40.83

-21.06

Net Energy (MU)

-0.2863

-66.41

-113.49

Maximum Interchange(MW)
Import Export
0 26

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

		Off- Peak Hours (03:00	0)	] ]	Peak Hours (19	:00)		Day En	ergy (MU)	
State	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	ISGS /(LT+MT) Schedule		PX Schedule	Total (MU)
PUNJAB	-177.39	-2,321.59	0	24.49	-2,018.77	0	72.39	-0.42	-49.36	22.61
HARYANA	44.03	-455.37	0	297.02	0	0	100.34	8.18	-9.71	98.8
RAJASTHAN	-33.74	-1,370.89	0	-33.74	-580.35	0	71.65	-0.81	-23.22	47.62
DELHI	-0.68	-1,011.88	0	-42.26	-486.31	0	85.26	0.02	-15.29	69.98
UTTAR PRADESH	640.95	119.22	0	104.1	-23.9	0	127.22	3.73	-4.62	126.32
UTTARAKHAND	88.29	152.59	0	117.69	2.95	0	11.39	2.21	3.27	16.87
HIMACHAL PRADESH	-101.14	-423.78	0	-102.14	-985.52	0	22.46	-2.46	-13.77	6.22
JAMMU & KASHMIR	-232.99	197.64	0	-232.99	0	0	28.13	-5.59	7.57	30.1
CHANDIGARH	0	-55.38	0	0	0	0	5.18	0	-0.46	4.71
TOTAL	227.33	-5,169,44	0	132.17	-4.091.9	0	524.02	4.86	-105.59	423.23

7(B). Short-Term Open Access Details

	ISGS/(LT+MT) Schedule		Bilateral (I	Bilateral (MW)			PXII	L (MW)
State	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
PUNJAB	3,612.25	2,723.84	24.49	-177.39	-1,312.2	-2,321.59	0	0
HARYANA	4,802.59	3,749.45	685.94	44.03	0.59	-1,113.13	0	0
RAJASTHAN	3,458.77	2,476.11	-33.74	-33.74	-36.8	-2,299.84	0	0
DELHI	3,812.83	3,363.89	9.61	-42.26	-274.07	-1,154.85	0	0
UTTAR PRADESH	6,293.83	4,653.35	640.95	-64.79	238.06	-634.15	0	0
UTTARAKHAND	797.78	242.68	117.69	88.29	344.51	0.88	0	0
HIMACHAL PRADESH	1,478.79	577.36	-101.14	-103.72	-213.62	-1,102.78	0	0
JAMMU & KASHMIR	1,864.66	860.16	-232.99	-232.99	721.39	0	0	0
CHANDIGARH	284.78	163.11	0	0	0	-75.51	0	0

8.Major Reservoir Particulars

	Par	ameters	Present Pa	arameters	LAST Y	EAR	LAS	ST DAY
RESERVOIR	MDDL (Mts)	FRL (Mts)	Level (Mts)	Energy (MU)	Level (Mts)	Energy (MU)	Inflow (m3/s)	Usage (m3/s)
Bhakra	445.62	513.59	507.68	1,441	508.74	1,485	653.72	256.98
Chamera-I	748.75	760	758.46	-	-	-	289.9	354.11
Gandhisagar	295.78	295.78	-	-	-	-	-	0
Jawahar Sagar	295.78	298.7	-	-	-	-	-	0
Koteshwar	598.5	612.5	610.31	5	611.25	5	174	177.84
Pong	384.05	426.72	424.44	1,098	420.39	903	359.65	431.15
RPS	343.81	352.8	-	-	-	-	-	0
RSD	487.91	527.91	526.93	10	518.86	4	356.06	325.71
Rihand	252.98	268.22	-	-	-	-	-	0
Tehri	740.04	829.79	826.55	1,141	824.9	1,106	162.53	174
TOTAL	-	-	-	3,695	-	3,503	1,995.86	1,719.79

### 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

10. Zero Crossing Violations		
State	No. of violations(Maximum 8 in a day)	Maximum number of continuous blocks without sign change
CHANDIGARH	4	25
DELHI	4	37
HARYANA	1	15
HIMACHAL PRADESH	2	23
JAMMU & KASHMIR	2	22
PUNJAB	1	22
RAJASTHAN	1	17
UTTAR PRADESH	0	10
UTTARAKHAND	1	22

11. Significant events (If any):

14.Synchronisation of new generating units:			
15.Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation:  1. 315MVA ICT-1 at Panki (UP) on No-Load First Time Charged @ 18:24Hrs			
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		

12.Grid Disturbance / Any Other Significant Event:

13. Weather Conditions :