



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

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

Date of Reporting:29-Oct-2018

**1. Regional Availability/Demand:**

Evening Peak (19:00) 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
40,934	460	41,394	50.07	34,022	238	34,260	49.97	900	8.92

**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	65.21	14.05	0	4.21	0	7.99	91.46	36.73	36.2	-0.53	127.66	0	127.66
HARYANA	27.45	0.94	0	0.11	0	0.49	29	83.61	84.96	1.35	113.96	0	113.96
RAJASTHAN	141.3	3.17	2.06	14.85	4.67	4.49	170.54	43.82	47.56	3.74	218.1	0	218.1
DELHI	-0.02	0	16.5	0	0	0	16.48	48.28	47.9	-0.38	64.44	0.06	64.38
UTTAR PRADESH	149.29	11.57	0	2.5	0	2.4	165.75	111.99	112.1	0.11	277.85	0	277.85
UTTARAKHAND	0	11.51	7.1	0.69	0	0	19.29	13.26	12.08	-1.18	31.37	0	31.37
HIMACHAL PRADESH	0	6.47	0	0	0	4.44	10.91	14.3	15.02	0.72	25.93	0	25.93
JAMMU & KASHMIR	0	7.49	0	0	0	0	7.49	36.11	30.02	-6.09	46.37	8.86	37.51
CHANDIGARH	0	0	0	0	0	0	0	3.04	2.85	-0.19	2.85	0	2.85
<b>Region</b>	<b>383.23</b>	<b>55.2</b>	<b>25.66</b>	<b>22.36</b>	<b>4.67</b>	<b>19.81</b>	<b>510.92</b>	<b>391.14</b>	<b>388.69</b>	<b>-2.45</b>	<b>908.53</b>	<b>8.92</b>	<b>899.61</b>

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

State	Evening Peak (19:00) MW				Off-Peak (03:00) MW			
	Demand Met	Shortage(-)/Surplus(+)	UI	STOA/PX Transaction	Demand Met	Shortage(-)/Sur ..	UI	STOA/PX Transaction
PUNJAB	5,468	0	28	-1,650	4,088	0	-62	-1,145
HARYANA	5,547	0	57	86	4,507	0	-1	241
RAJASTHAN	9,029	0	233	-1,506	8,286	0	338	-1,086
DELHI	3,243	0	-21	-606	2,048	0	-37	-1,444
UTTAR PRADESH	12,792	0	-125	73	11,635	0	105	495
UTTARAKHAND	1,641	0	21	85	1,190	0	-12	66
HIMACHAL PRADESH	1,222	0	-18	-474	834	0	55	60
JAMMU & KASHMIR	1,839	460	-283	242	1,349	238	-212	341
CHANDIGARH	154	0	-24	-55	84	0	-7	-10
<b>Region</b>	<b>40,935</b>	<b>460</b>	<b>-132</b>	<b>-3,805</b>	<b>34,021</b>	<b>238</b>	<b>167</b>	<b>-2,482</b>

**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	5,475	8:00	0	5,475	5,475	8:00	0	5,475
HARYANA	5,547	19:00	0	5,547	5,547	19:00	0	5,547
RAJASTHAN	10,780	8:00	0	10,780	10,780	8:00	0	10,780
DELHI	3,301	12:00	0	3,301	3,301	12:00	0	3,301
UP	13,034	20:00	0	13,034	13,034	20:00	0	13,034
UTTARAKHAND	1,641	19:00	0	1,641	1,641	19:00	0	1,641
HP	1,361	9:00	0	1,361	1,361	9:00	0	1,361
J&K	2,022	20:00	505	2,527	2,527	20:00	505	2,022
CHANDIGARH	154	19:00	0	154	154	19:00	0	154
NR	40,934	19:00	460	41,394	41,394	19:00	460	40,934

**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)	
<b>NIL</b>							
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>

DELHI							
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BADARPUR TPS( 2 * 210 + 3 * 100 )	705	-3	-3	-3	11:00	-0.02	-1
RAJGHAT TPS( 2 * 67.5 )	135	0	0	0			
<b>Total THERMAL</b>	<b>840</b>	<b>-3</b>	<b>-3</b>			<b>-0.02</b>	<b>-1</b>
BAWANA GPS( 2 * 253 + 4 * 216 )	1,370	439	480	552	11:00	11.73	489
DELHI GAS TURBINES( 3 * 34 + 6 * 30 )	282	32	31	38	06:00	0.91	38
PRAGATI GAS TURBINES( 1 * 121.2 + 2 * 104.6 )	331	158	156	158	20:00	3.86	161
RITHALA GPS( 3 * 36 )	108	0	0	0			
<b>Total GAS/NAPHTHA/DIESEL</b>	<b>2,091</b>	<b>629</b>	<b>667</b>			<b>16.5</b>	<b>688</b>
WIND	0	0	0	0			
BIOMASS( 1 * 16 )	16	0	0	0			
SOLAR( 1 * 2 )	2	0	0	0			
<b>Total DELHI</b>	<b>2,949</b>	<b>626</b>	<b>664</b>			<b>16.48</b>	<b>687</b>

HARIYANA							
Station/Constituents	Inst. Capacity	19:00	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	740	743	0		18.34	764
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	394	378	0		9.11	380
<b>Total THERMAL</b>	<b>4,065</b>	<b>1,134</b>	<b>1,121</b>			<b>27.45</b>	<b>1,144</b>
FARIDABAD GPS( 1 * 156.07 + 2 * 137.75 )	432	0	0	0			
<b>Total GAS/NAPHTHA/DIESEL</b>	<b>432</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>
TOTAL HYDRO HARYANA( 1 * 62 )	62	28	29	0		0.94	39
<b>Total HYDEL</b>	<b>62</b>	<b>28</b>	<b>29</b>			<b>0.94</b>	<b>39</b>
WIND	0	0	0	0			
BIOMASS( 1 * 106 )	106	0	0	0		0.49	20
SOLAR( 1 * 50 )	50	0	0	0		0.11	5
<b>Total HARYANA</b>	<b>4,715</b>	<b>1,162</b>	<b>1,150</b>			<b>28.99</b>	<b>1,208</b>

HIMACHAL PRADESH							
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BASPA (IPP) HPS( 3 * 100 )	300	59	79	197	21:00	2.05	85
MALANA (IPP) HPS( 2 * 43 )	86	73	0	73	18:00	0.43	18
OTHER HYDRO HP( 1 * 372 )	372	145	217	0		3.99	166
<b>Total HYDEL</b>	<b>758</b>	<b>277</b>	<b>296</b>			<b>6.47</b>	<b>269</b>
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	7.7493	14:00	0	0
SMALL HYDRO( 1 * 486 )	486	173	211	0		4.44	185
<b>Total SMALL HYDRO</b>	<b>486</b>	<b>173</b>	<b>211</b>			<b>4.44</b>	<b>185</b>
<b>Total HP</b>	<b>1,244</b>	<b>450</b>	<b>507</b>			<b>10.91</b>	<b>454</b>

JAMMU & KASHMIR							
Station/Constituents	Inst. Capacity	19:00	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			
<b>Total GAS/NAPHTHA/DIESEL</b>	<b>190</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>
BAGLIHAR (IPP) HPS( 6 * 150 )	900	237	236	0		5.68	237
OTHER HYDRO/IPP J&K( 1 * 308 )	308	103	62	0		1.81	75
<b>Total HYDEL</b>	<b>1,208</b>	<b>340</b>	<b>298</b>			<b>7.49</b>	<b>312</b>
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO( 1 * 98 )	98	0	0	0			
<b>Total SMALL HYDRO</b>	<b>98</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>
<b>Total J&amp;K</b>	<b>1,496</b>	<b>340</b>	<b>298</b>			<b>7.49</b>	<b>312</b>

PUNJAB							
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
GOINDWAL(GVK)( 2 * 270 )	540	145	160	160		3.64	152
GURU GOBIND SINGH TPS (ROPAR)( 6 * 210 )	1,260	0	0	0		-0.14	-6
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)( 2 * 210 + 2 * 250 )	920	156	190	193		3.88	162
GURU NANAK DEV TPS (BHATINDA)( 4 * 110 )	460	0	0	0		-0.01	0
RAJPURA(NPL) TPS( 2 * 700 )	1,400	1,320	1,320	1,320		31.62	1,318
TALWANDI SABO TPS( 3 * 660 )	1,980	1,250	950	1,250		26.22	1,093
<b>Total THERMAL</b>	<b>6,560</b>	<b>2,871</b>	<b>2,620</b>			<b>65.21</b>	<b>2,719</b>
TOTAL HYDRO PUNJAB( 1 * 1000 )	1,000	598	428	607		14.05	585
<b>Total HYDEL</b>	<b>1,000</b>	<b>598</b>	<b>428</b>			<b>14.05</b>	<b>585</b>
WIND	0	0	0	0			
BIOMASS( 1 * 303 )	303	0	0	0		7.99	333
SOLAR( 1 * 859 )	859	0	0	463		4.21	175
<b>Total PUNJAB</b>	<b>8,722</b>	<b>3,469</b>	<b>3,048</b>			<b>91.46</b>	<b>3,812</b>

RAJASTHAN							
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BARSINGSAR (IPP) LTPS( 2 * 125 )	250	73	74	0		1.32	55
CHHABRA TPS( 1 * 660 + 4 * 250 )	1,660	1,409	1,504	0		34.69	1,445
GIRAL (IPP) LTPS( 2 * 125 )	250	0	0	0			
KALISINDH TPS( 2 * 600 )	1,200	554	406	0		12.5	521
KAWAI TPS( 2 * 660 )	1,320	1,207	1,125	0		27.35	1,140
KOTA TPS( 2 * 110 + 2 * 195 + 3 * 210 )	1,240	646	829	0		18.65	777
RAJWEST (IPP) LTPS( 8 * 135 )	1,080	742	630	0		18.7	779
SURATGARH TPS( 6 * 250 )	1,500	1,281	1,088	0		28.11	1,171
VSLPP (IPP)( 1 * 135 )	135	0	0	0			
<b>Total THERMAL</b>	<b>8,635</b>	<b>5,912</b>	<b>5,656</b>			<b>141.32</b>	<b>5,888</b>
DHOLPUR GPS( 3 * 110 )	330	0	0	0			
RAMGARH GPS( 1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5 )	271	83	83	0		2.06	86
<b>Total GAS/NAPHTHA/DIESEL</b>	<b>601</b>	<b>83</b>	<b>83</b>			<b>2.06</b>	<b>86</b>
RAPS-A( 1 * 100 + 1 * 200 )	300	163	164	0		3.81	159
<b>Total NUCLEAR</b>	<b>300</b>	<b>163</b>	<b>164</b>			<b>3.81</b>	<b>159</b>
TOTAL HYDRO RAJASTHAN( 1 * 550 )	550	128	74	0		3.17	132
<b>Total HYDEL</b>	<b>550</b>	<b>128</b>	<b>74</b>			<b>3.17</b>	<b>132</b>
WIND	4,292	175	134	0		4.67	195
BIOMASS( 1 * 102 )	102	28	28	0		0.68	28
SOLAR( 1 * 1995 )	1,995	11	0	0		14.85	619
<b>Total RAJASTHAN</b>	<b>16,475</b>	<b>6,500</b>	<b>6,139</b>			<b>170.56</b>	<b>7,107</b>

UTTAR PRADESH							
Station/Constituents	Inst. Capacity	19:00	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	1,338	1,329	0		33.42	1,393
ANPARA-C TPS( 2 * 600 )	1,200	1,095	1,042	0		25.09	1,045
ANPARA-D TPS( 2 * 500 )	1,000	476	956	0		16.07	670
BAJAJ ENERGY PVT LTD (IPP) TPS( 10 * 45 )	450	0	0	0			
BARA PPGCL TPS( 3 * 660 )	1,980	993	1,046	0		23.47	978
HARDUAGANJ TPS( 1 * 105 + 1 * 60 + 2 * 250 )	665	314	305	0		7.05	294
LALITPUR TPS( 3 * 660 )	1,980	0	0	0			
MEJA TPS( 1 * 660 )	660	0	0	0			
OBRA TPS ( 2 * 94 + 5 * 200 )	1,188	0	0	0			
PANKI TPS( 2 * 105 )	210	0	0	0			
PARICHA TPS( 2 * 110 + 2 * 210 + 2 * 250 )	1,160	739	631	0		16.33	680
ROSA TPS( 4 * 300 )	1,200	951	851	0		21.56	898
TANDA TPS( 4 * 110 )	440	279	271	0		6.3	263
<b>Total THERMAL</b>	<b>13,763</b>	<b>6,185</b>	<b>6,431</b>			<b>149.29</b>	<b>6,221</b>
ALAKHANDA HEP( 4 * 82.5 )	330	83	83	0		2.67	111
VISHNUPARYAG HPS( 4 * 110 )	440	152	142	0		3.54	148
OTHER HYDRO UP( 1 * 527 )	527	208	266	0		5.35	223
<b>Total HYDEL</b>	<b>1,297</b>	<b>443</b>	<b>491</b>			<b>11.56</b>	<b>482</b>
WIND	0	0	0	0			
BIOMASS( 1 * 26 )	26	0	0	0			
SOLAR( 1 * 472 )	472	0	0	0		2.5	104
CO-GENERATION( 1 * 1360 )	1,360	100	100	0		2.4	100
<b>Total OTHERs</b>	<b>1,360</b>	<b>100</b>	<b>100</b>			<b>2.4</b>	<b>100</b>
<b>Total UP</b>	<b>16,918</b>	<b>6,728</b>	<b>7,022</b>			<b>165.75</b>	<b>6,907</b>

UTTARAKHAND										
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW			
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)				
TOTAL GAS UK( 1 * 450 )	450	292	303	304	07:00	7.1	296			
Total GAS/NAPHTHA/DIESEL	450	292	303			7.1	296			
OTHER HYDRO UK( 1 * 1250 )	1,250	641	462	683	18:00	11.51	480			
Total HYDEL	1,250	641	462			11.51	480			
WIND	0	0	0	0						
BIOMASS( 1 * 127 )	127	0	0	0						
SOLAR( 1 * 100 )	100	0	0	94	12:00	0.69	29			
SMALL HYDRO( 1 * 180 )	180	0	0	0						
Total SMALL HYDRO	180	0	0			0	0			
Total UTTARAKHAND	2,107	933	765			19.3	805			

### 3(B) Regional Entities Generation

Station/Constituents	Inst. Capacity	Declared Capacity	19:00	03:00	Day Peak		Day Energy		AVG. MW	UI
	(MW)	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	SCHD (MU)	ACT (MU)		
<b>BBMB</b>										
BHAKRA HPS( 2 * 108 + 3 * 126 + 5 * 157 )	1,379	570.23	1,085	410	1,085	19:00	13.69	14.03	585	0.34
DEHAR HPS( 6 * 165 )	990	258.75	480	165	495	20:00	6.21	6.42	268	0.21
PONG HPS( 6 * 66 )	396	257.97	264	264	264	19:00	6.19	6.21	259	0.02
Sub-Total	2,765	1,086.95	1,829	839	-	-	26.09	26.66	1,112	0.57
<b>NHPC</b>										
BAIRASIUL HPS( 3 * 60 )	180	0	0	0	0	-	0	-	-	0
CHAMERA HPS( 3 * 180 )	540	534.33	539	0	545	17:30	3.82	3.95	165	0.13
CHAMERA II HPS( 3 * 100 )	300	135.53	300	0	302	20:00	2.85	3.04	127	0.19
CHAMERA III HPS( 3 * 77 )	231	78.48	230	0	233	07:00	1.88	1.99	83	0.11
DHAULIGANGA HPS( 4 * 70 )	280	90.17	140	71	141	23:59	2.14	2.17	90	0.03
DULHASTI HPS( 3 * 130 )	390	386.9	394	0	397	18:00	5.49	5.59	233	0.1
KISHANGANGA( 2 * 110 )	220	81.25	198	69	198	19:00	1.95	1.94	81	-0.01
PARBATI III HEP( 4 * 130 )	520	41.51	384	0	389	03:00	1	1.02	43	0.02
SALAL HPS( 6 * 115 )	690	166.67	520	140	545	17:30	4	0.4	17	-3.6
SEWA-II HPS( 3 * 40 )	120	89.84	119	0	120	20:00	0.55	0.54	23	-0.01
TANAKPUR HPS( 1 * 31.42 + 2 * 31.4 )	94	54.64	91	60	95	13:00	1.31	1.4	58	0.09
URI HPS( 4 * 120 )	480	143.23	311	124	352	23:00	3.44	3.91	163	0.47
URI-II HPS( 4 * 60 )	480	88.18	78	82	182	13:00	2.12	2.2	92	0.08
Sub-Total	4,525	1,890.73	3,304	546	-	-	30.55	28.15	1,175	-2.4
<b>NPCL</b>										
NAPS( 2 * 220 )	440	398	435	432	435	19:00	9.55	9.6	400	0.05
RAPS-B( 2 * 220 )	440	193	219	216	219	19:00	4.63	4.67	195	0.04
RAPS-C( 2 * 220 )	440	422	467	470	471	09:00	10.13	10.1	421	-0.03
Sub-Total	1,320	1,013	1,121	1,118	-	-	24.31	24.37	1,016	0.06
<b>NTPC</b>										
ANTA GPS( 1 * 153.2 + 3 * 88.71 )	419	128.97	150	150	266	06:31	3.79	3.88	162	0.09
AURAIYA GPS( 2 * 109.3 + 4 * 111.19 )	663	463.83	102	100	106	08:00	2.44	2.4	100	-0.04
DADRI GPS( 2 * 154.51 + 4 * 130.19 )	830	415	0	0	0	-	5.46	0	0	-5.46
DADRI SOLAR( 1 * 5 )	5	0.87	0	0	3	11:36	0.02	0.02	1	0
DADRI-I TPS( 4 * 210 )	840	432.33	423	395	423	19:00	8.51	8.42	351	-0.09
DADRI-II TPS( 2 * 490 )	980	696.41	740	760	740	19:00	14.92	16.02	668	1.1
ISTPP (JHAJJAR)( 3 * 500 )	1,500	947.5	869	862	1,012	05:11	20.96	20.6	858	-0.36
KOLDAM HPS( 4 * 200 )	800	872	724	0	873	-	4.5	4.35	181	-0.15
RIHAND-I STPS( 2 * 500 )	1,000	922.5	948	1,010	948	19:00	22	23.96	998	1.96
RIHAND-II STPS( 2 * 500 )	1,000	942.5	939	1,011	939	19:00	22.53	23.48	978	0.95
RIHAND-III STPS( 2 * 500 )	1,000	471.25	491	504	491	19:00	11.2	11.89	495	0.69
SINGRAULI STPS( 2 * 500 + 5 * 200 )	2,000	1,810	1,945	1,977	1,945	19:00	43.34	46.53	1,939	3.19
SINGRAULI SOLAR( 1 * 15 )	15	2.75	0	0	0	-	0.07	0.06	3	-0.01
UNCHAHAH II TPS( 2 * 210 )	420	382.2	367	315	367	19:00	8.2	7.82	326	-0.38
UNCHAHAH III TPS( 1 * 210 )	210	191.1	172	134	172	19:00	4.03	3.65	152	-0.38
UNCHAHAH IV TPS( 1 * 500 )	500	0	0	0	0	-	0	-	-	0
UNCHAHAH SOLAR( 1 * 10 )	10	1.97	0	0	7	11:36	0.05	0.04	2	-0.01
UNCHAHAH TPS( 2 * 210 )	420	382.2	373	265	373	19:00	8.3	7.84	327	-0.46
Sub-Total	12,612	9,063.38	8,243	7,483	-	-	180.32	180.96	7,541	0.64
<b>SJVNL</b>										
NATHPA-JHAKRI HPS( 6 * 250 )	1,500	1,497.38	1,483	0	1,501	18:00	11.85	11.87	495	0.02
RAMPUR HEP( 6 * 68.67 )	412	442	408	0	430	18:00	3.29	3.4	142	0.11
Sub-Total	1,912	1,939.38	1,891	0	-	-	15.14	15.27	637	0.13
<b>THDC</b>										
KOTESHWAR HPS( 4 * 100 )	400	103.75	202	90	202	19:00	2.49	2.5	104	0.01
TEHRI HPS( 4 * 250 )	1,000	1,064	994	0	1,027	18:00	6.77	6.85	285	0.08
Sub-Total	1,400	1,167.75	1,196	90	-	-	9.26	9.35	389	0.09
Total	24,534	16,161.19	17,584	10,076			285.67	284.76	11,870	-0.91

## IPP/JV

Station/Constituents	Inst. Capacity	Declared Capacity	19:00	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	78	0	184	19:00	1.03	1.03	43	0
BUDHIL HPS (IPP)( 2 * 35 )	70	0	69	0	70	18:00	0.51	0.45	19	-0.06
KARCHAM WANGTOO HPS( 4 * 250 )	1,000	0	1,000	0	1,000	19:00	6.4	6.22	259	-0.18
MALANA2( 2 * 50 )	100	0	27	0	105	20:00	0.45	0.47	20	0.02
SAINJ HEP( 2 * 50 )	50	0	55	35	55	08:00	0.76	0.86	36	0.1
SHREE CEMENT (IPP) TPS( 2 * 150 )	300	0	0	0	0	-	6.69	-	-	-6.69
<b>Sub-Total</b>	<b>1,712</b>	<b>0</b>	<b>1,229</b>	<b>35</b>	<b>-</b>	<b>-</b>	<b>15.84</b>	<b>9.03</b>	<b>377</b>	<b>-6.81</b>
<b>Total</b>	<b>1,712</b>	<b>0</b>	<b>1,229</b>	<b>35</b>	<b>-</b>	<b>-</b>	<b>15.84</b>	<b>9.03</b>	<b>377</b>	<b>-6.81</b>

Summary Section					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Total State Control Area Generation	54,626	20,208	19,593	510.94	21,289
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		3,770	5,446	108.9	5,402
Total Regional Availability(Gross)	80,872	42,791	35,150	913.63	38,932

Total Hydro Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Hydro	12,814	10,173	1,510	92.81	3,867
State Control Area Hydro	6,125	2,455	2,078	55.19	2,300
Total Regional Hydro	18,939	12,628	3,588	148	6,167

Total Renewable Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Renewable	30	0	0	0.12	5
State Control Area Renewable	9,214	387	373	40.63	1,693
Total Regional Renewable	9,244	387	373	40.75	1,698

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

SL.No.	Element	19:00	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 ..	-	-	-	-	0.96	0	0.96
3	132KV-Rihand-Sonnagar(PG)	-32	-32	-	35	0	0.72	-0.72
4	220KV-Pusauli(PG)-Sahupuri(UP)	-141	-119	141	0	2.95	0	2.95
5	400KV-Biharsharif(PG)-Baliala(PG)	71	31	22	73	0	0.53	-0.53
6	400KV-Biharsharif(PG)-Varanasi(P..	191	151	0	245	0	3.04	-3.04
7	400KV-Fatehpur(UP)-Sasaram	-	-	-	-	-	-	-
8	400KV-Motihari(DMT)-Gorakhpur ..	220	264	300	0	5.87	0	5.87
9	400KV-Muzaffarpur(PG)-Gorakhp ..	-65	-44	200	141	0	0.12	-0.12
10	400KV-Patna(PG)-Baliala(PG)	306	423	551	0	10.27	0	10.27
11	400KV-Sasaram-Allahabad(PG)	-113	-131	174	0	3.13	0	3.13
12	400KV-Sasaram-Varanasi(PG)	-279	-261	279	0	9.36	0	9.36
13	765KV-Fatehpur(PG)-Sasaram.	-303	-224	2	303	0	4.53	-4.53
14	765KV-Gaya(PG)-Baliala(PG)	34	63	115	0	1.4	0	1.4
15	765KV-Gaya(PG)-Varanasi(PG)	116	3	163	142	0	0.08	-0.08
16	HVDC800KV-Alipurduar-Agra(PG)	150	300	300	-	6.24	0	6.24
<b>Sub-Total EAST REGION</b>		<b>155</b>	<b>424</b>	<b>2,247</b>	<b>939</b>	<b>40.18</b>	<b>9.02</b>	<b>31.16</b>
Import/Export between NORTH_EAST REGION and NORTH REGION								
1	HVDC800KV-BiswanathCharialli- ..	700	700	700	-	16.48	0	16.48
<b>Sub-Total NORTH_EAST REGION</b>		<b>700</b>	<b>700</b>	<b>700</b>	<b>0</b>	<b>16.48</b>	<b>0</b>	<b>16.48</b>
Import/Export between WEST REGION and NORTH REGION								
1	220KV-Auraiya(NT)-Malanpur(PG)	-106	-115	-	177	0	2.73	-2.73
2	220KV-Badod(MP)-Kota(PG)	-104	-163	1	144	0	2.82	-2.82
3	220KV-Badod(MP)-Modak(RJ)	-	-	-	-	-	-	-
4	400KV-RAPS C(NP)-Sujalpur	-300	-310	0	471	0	7.33	-7.33
5	400KV-Vindhyachal(PG)-Rihand(N ..	463	447	0	244	0	11.28	-11.28
6	400KV-Zerda(PG)-Bhinmal(PG)	-224	0	38	418	0	3.33	-3.33
7	400KV-Zerda(PG)-Kankroli(RJ)	-301	-215	0	432	0	6.94	-6.94
8	765KV-0rai-Gwalior(PG)	-304	-316	0	480	0	8.23	-8.23
9	765KV-0rai-Jabalpur	-158	178	263	-435	0	0.12	-0.12
10	765KV-0rai-Satna	1,340	1,451	1,489	0	33.74	0	33.74
11	765KV-Gwalior(PG)-Agra(PG)	750	1,129	1,264	-	21.9	0	21.9
12	765KV-Phagi(RJ)-Gwalior(PG)	509	686	518	-	15.29	0	15.29
13	HVDC500KV-Mundra(JH)-Mohind..	600	800	1,002	0	17.23	0	17.23
14	HVDC500KV-Vindhyachal(PG)-Vindhaychal B/B	-250	-250	0	250	0	6.04	-6.04
15	HVDC800KV-Champa(PG)-Kuruku..	1,000	1,000	1,000	0	21.92	0	21.92
<b>Sub-Total WEST REGION</b>		<b>2,915</b>	<b>4,322</b>	<b>5,575</b>	<b>2,181</b>	<b>110.08</b>	<b>48.82</b>	<b>61.26</b>
<b>TOTAL IR EXCHANGE</b>		<b>3,770</b>	<b>5,446</b>	<b>8,522</b>	<b>3,120</b>	<b>166.74</b>	<b>57.84</b>	<b>108.9</b>

## 4(B) Inter Regional Schedule &amp; 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	42.3	-3.83	0	38.47	31.16	-7.31

NR-WR	146.2	-11.7	-54.27	80.23	61.26	-18.97
Total	188.5	-15.53	-54.27	118.7	108.9	-9.8

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)	0	0		12		0.0187	-0.0187

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	4.2	47	78.5	14.7	2.6	0	17.3

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

Maximum		Minimum		Average	Freq Variation	Standard	Freq. in 15 mnt blk		Freq Dev Index
Frequency	Time	Frequency	Time				Frequency	Index	
50.2	12:02:20	49.84	05:13:40	50	0.032	0.057	50.11	49.89	21.5

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	20:55	412	18:10	0	0	36.81	0	36.81
Abdullapur(PG) - 400KV	427	20:55	412	18:10	0	0	36.81	0	36.81
Amritsar(PG) - 400KV	424	21:25	411	06:50	0	0	23.96	0	23.96
Ballabgarh(PG) - 400KV	425	20:55	409	11:40	0	0	14.58	0	14.58
Bareilly II(PG) - 400KV	416	21:30	405	17:55	0	0	0	0	0
Bareilly(UP) - 400KV	417	21:30	406	17:55	0	0	0	0	0
Baspa(HP) - 400KV	427	21:35	410	18:25	0	0	30.56	0	30.56
Bassi(PG) - 400KV	420	20:55	399	07:15	0	0	.35	0	.35
Bawana(DTL) - 400KV	425	20:55	412	18:10	0	0	24.31	0	24.31
Dadri HVDC(PG). - 400KV	424	21:30	413	11:20	0	0	12.15	0	12.15
Gorakhpur(PG) - 400KV	417	07:55	406	17:55	0	0	0	0	0
Hisar(PG) - 400KV	423	20:55	407	07:15	0	0	4.51	0	4.51
Kanpur(PG) - 400KV	421	21:30	412	17:55	0	0	2.78	0	2.78
Kashipur(UT) - 400KV	402	00:00	402	00:00	0	0	0	0	0
Kishenpur(PG) - 400KV	419	03:30	404	18:25	0	0	0	0	0
Moga(PG) - 400KV	416	04:00	404	07:15	0	0	0	0	0
Nallagarh(PG) - 400KV	427	21:35	410	18:25	0	0	30.56	0	30.56
Rihand HVDC(PG) - 400KV	410	21:30	404	00:05	0	0	0	0	0
Rihand(NT) - 400KV	409	21:30	403	05:40	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	791	20:30	772	07:15	0	0	0	0	0
Balia(PG) - 765KV	783	07:40	768	17:55	0	0	0	0	0
Bareilly II(PG) - 765KV	794	21:30	773	17:55	0	0	0	0	0
Bhiwani(PG) - 765KV	804	20:55	781	12:40	0	0	6.6	0	6.6
Fatehpur(PG) - 765KV	776	21:30	744	17:50	0	0	0	0	0
Jhatikara(PG) - 765KV	803	20:55	777	10:35	0	0	3.47	0	3.47
Lucknow II(PG) - 765KV	790	06:35	772	17:55	0	0	0	0	0
Meerut(PG) - 765KV	807	20:55	779	17:50	0	0	6.25	0	6.25
Moga(PG) - 765KV	786	20:55	764	07:15	0	0	0	0	0
Phagi(RJ) - 765KV	801	21:00	774	07:10	0	0	.35	0	.35
Unnao(UP) - 765KV	781	06:35	765	09:25	0	0	0	0	0

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

State	Off- Peak Hours (03:00)			Peak Hours (19:00)			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	-1,145.04	0	0	-842.25	-807.43	0	62.65	-21.83	-4.09	36.73
HARYANA	240.68	0	0	282.95	-196.78	0	85	5.69	-7.08	83.61
RAJASTHAN	-7.97	-1,078.01	0	-7.97	-1,498.13	0	66.85	-0.24	-22.79	43.82
DELHI	-291.87	-1,152.22	0	-281.66	-324.17	0	74.19	-8.81	-17.1	48.28
UTTAR PRADESH	495.16	0	0	72.64	0	0	109.19	3.31	-0.51	111.99
UTTARAKHAND	61.25	5.11	0	18.77	66.32	0	11.38	0.9	0.98	13.26
HIMACHAL PRADESH	62.34	-2.75	0	61.68	-535.2	0	15.34	3.19	-4.23	14.3
JAMMU & KASHMIR	143.63	197.66	0	143.63	98.83	0	25.56	3.45	7.1	36.11
CHANDIGARH	0	-10.07	0	0	-55.37	0	3.82	0	-0.77	3.04
<b>TOTAL</b>	<b>-441.82</b>	<b>-2,040.28</b>	<b>0</b>	<b>-552.21</b>	<b>-3,251.93</b>	<b>0</b>	<b>453.98</b>	<b>-14.34</b>	<b>-48.49</b>	<b>391.14</b>

**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	3,506.42	2,241.27	-842.25	-1,145.04	0	-908.36	0	0
HARYANA	4,172.64	2,817.71	323.46	-81.28	5.59	-836.28	0	0
RAJASTHAN	3,562.32	2,213.75	-7.97	-16.15	287.47	-1,847.09	0	0
DELHI	3,467.42	2,645.32	-281.66	-478.88	-159.07	-1,462.8	0	0
UTTAR PRADESH	6,144.26	3,616.44	495.16	-3.83	0	-437.3	0	0
UTTARAKHAND	834.71	268.08	90.55	-61.23	292.14	-140.48	0	0
HIMACHAL PRADESH	1,431.55	260.02	251.63	61.68	157.05	-976.55	0	0
JAMMU & KASHMIR	1,635.27	737.57	143.63	143.63	444.74	0	0	0
CHANDIGARH	280.4	104.26	0	0	0	-99.67	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	508.62	1,485	507.15	1,411	266.49	360.19
Chamera-I	748.75	760	-	-	-	-	-	0
Gandhisagar	295.78	295.78	-	-	-	-	-	0
Jawahar Sagar	295.78	298.7	-	-	-	-	-	0
Koteshwar	598.5	612.5	-	-	-	-	-	0
Pong	384.05	426.72	422.34	1,006	417.36	768	113.98	349.83
RPS	343.81	352.8	-	-	-	-	-	0
RSD	487.91	527.91	525.29	5	514.57	4	124.45	191.51
Rihand	252.98	268.22	-	-	-	-	-	0
Tehri	740.04	829.79	-	-	-	-	-	0
<b>TOTAL</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,496</b>	<b>-</b>	<b>2,183</b>	<b>504.92</b>	<b>901.53</b>

**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	27
DELHI	4	26
HARYANA	0	12
HIMACHAL PRADESH	3	21
JAMMU & KASHMIR	3	26
PUNJAB	1	13
RAJASTHAN	3	22
UTTAR PRADESH	2	17
UTTARAKHAND	6	56

**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**