

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 07.10.2016

Date of Reporting : 08.10.2016



### I. Regional Availability/Demand:

Evening Peak (19:00 Hrs) MW				Off Peak (03:00 Hrs) MW				Day Energy (Net MU)	
Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
45753	654	46408	50.11	40656	282	40939	50.10	1007.6	10.12

\* Half hourly (two 15 minutes block-one block each before and after the designated time) average frequency

### II. A. State's Load Details (At States periphery) in MUs:

UI [OD:(+ve), UD: (-ve)]

State	State's Control Area Generation (Net MU)				Drawal Schedule (Net MU)	Actual Drawal (Net MU)	UI (Net MU)	Consumption (Net MU)	Shortages * (MU)
	Thermal	Hydro	Renewable/others \$	Total					
Punjab	72.10	11.96		84.91	78.91	79.36	0.45	164.27	0.00
Haryana	53.07	0.88		53.95	101.33	97.73	-3.60	151.68	0.00
Rajasthan	106.82	1.64	9.32	117.79	60.11	59.73	-0.38	177.51	0.00
Delhi	16.26			16.26	84.31	85.45	1.13	101.71	0.04
UP	161.20	18.22		179.42	130.35	127.21	-3.14	306.63	1.18
Uttarakhand		13.04		16.57	19.25	21.96	2.71	38.54	0.00
HP		12.18		12.18	12.50	14.48	1.99	26.66	0.00
J & K		16.81	0.00	16.81	21.92	18.80	-3.12	35.61	8.90
Chandigarh				0.00	5.33	4.99	-0.33	4.99	0.00
<b>Total</b>	<b>409.45</b>	<b>74.73</b>	<b>9.32</b>	<b>497.89</b>	<b>514.00</b>	<b>509.72</b>	<b>-4.28</b>	<b>1007.61</b>	<b>10.12</b>

\* Shortage furnished by the respective constituent's Others include UP Co-generation and JK Diesel

### II. B. State's Demand Met in MWs:

UI/OA/PX [OD/Import: (+ve), UD/Export: (-ve)]

State	Evening Peak (19:00 Hrs) MW				Off Peak (03:00 Hrs) MW				Maximum Demand Met (MW) and Time(Hrs)	Shortage (MW)	
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction			
Punjab	7224	0	-438	386	5965	0	-40	408	7503	20:00	0
Haryana	7541	0	-404	900	5190	0	-100	871	7972	20:00	0
Rajasthan	7796	0	222	600	7632	0	205	598	8412	20:00	0
Delhi	4575	0	75	249	4011	0	100	60	4698	20:00	0
UP	13324	160	-396	741	14167	0	-201	983	14669	23:00	0
Uttarakhand	1882	0	162	134	1473	0	51	39	1882	19:00	0
HP	1186	0	72	-711	922	0	96	-158	1342	9:00	0
J&K	1977	494	-15	-53	1129	282	-95	-139	1977	19:00	494
Chandigarh	248	0	-16	0	168	0	1	0	248	19:00	0
<b>Total</b>	<b>45753</b>	<b>654</b>	<b>-738</b>	<b>2247</b>	<b>40656</b>	<b>282</b>	<b>17</b>	<b>2663</b>	<b>47419</b>	<b>20:00</b>	<b>447</b>

\* STOA figures are at sellers boundary & PX figures are at regional boundary. # figures may not be at simultaneous hour.

Diversity is 1.03

### III. Regional Entities :

UI [OD:(+ve), UG: (-ve)]

Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
			(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
<b>A. NTPC</b>								
Singrauli STPS (5*200+2*500)	2000	1835	1774	1960	40.89	1704	40.57	0.33
Rihand I STPS (2*500)	1000	943	832	925	20.09	837	19.65	0.44
Rihand II STPS (2*500)	1000	943	813	997	20.22	843	19.58	0.64
Rihand III STPS (2*500)	1000	463	442	498	10.42	434	10.31	0.12
Dadri I STPS (4*210)	840	815	759	608	15.04	626	15.79	-0.76
Dadri II STPS (2*490)	980	970	810	802	18.12	755	19.43	-1.31
Unchahar I TPS (2*210)	420	153	147	182	3.34	139	3.45	-0.11
Unchahar II TPS (2*210)	420	400	347	352	8.15	340	8.52	-0.36
Unchahar III TPS (1*210)	210	200	178	170	3.92	163	4.22	-0.30
ISTPP (Jhajjar) (3*500)	1500	1425	760	613	14.00	583	14.24	-0.24
Dadri GPS (4*130.19+2*154.51)	830	786	319	368	7.73	322	7.85	-0.12
Anta GPS (3*88.71+1*153.2)	419	385	350	277	7.78	324	7.37	0.41
Auraiya GPS (4*111.19+2*109.30)	663	623	152	139	3.47	145	3.60	-0.13
Dadri Solar(5)	5	1	0	0	0.02	1	0.02	0.00
Unchahar Solar(10)	10	2	0	0	0.04	2	0.04	-0.01
Singrauli Solar(15)	15	1	0	0	0.03	1	0.03	0.00
KHEP(4*200)	800	858	858	0	7.00	292	6.50	0.50
<b>Sub Total (A)</b>	<b>12112</b>	<b>10803</b>	<b>8541</b>	<b>7891</b>	<b>180</b>	<b>7511</b>	<b>181</b>	<b>-0.90</b>
<b>B. NPC</b>								
NAPS (2*220)	440	186	208	214	4.46	186	4.46	0.00
RAPS- B (2*220)	440	370	418	414	8.92	372	8.88	0.04
RAPS- C (2*220)	440	0	0	0	-0.19	-8	0.00	-0.19
<b>Sub Total (B)</b>	<b>1320</b>	<b>556</b>	<b>626</b>	<b>628</b>	<b>13.19</b>	<b>549</b>	<b>13.34</b>	<b>-0.16</b>
<b>C. NHPC</b>								
Chamera I HPS (3*180)	540	540	549	0	3.68	153	3.50	0.18
Chamera II HPS (3*100)	300	301	309	101	3.07	128	2.93	0.15
Chamera III HPS (3*77)	231	221	230	0	1.99	83	1.89	0.11
Bairasuli HPS(3*60)	180	179	183	62	1.12	47	1.07	0.05
Salal-HPS (6*115)	690	444	555	430	11.33	472	10.66	0.67
Tanakpur-HPS (3*31.4)	94	68	65	72	1.74	72	1.62	0.11
Uri-I HPS (4*120)	480	144	140	121	3.60	150	3.48	0.12
Uri-II HPS (4*60)	240	85	154	81	2.07	86	2.03	0.04
Dhauliganga-HPS (4*70)	280	280	140	70	2.49	104	2.49	0.00
Dulhasti-HPS (3*130)	390	383	399	395	9.29	387	9.18	0.11
Sewa-II HPS (3*40)	120	119	105	0	0.33	14	0.36	-0.03
Parbati 3 (4*130)	520	520	392	0	1.35	56	1.26	0.09
<b>Sub Total (C)</b>	<b>4065</b>	<b>3283</b>	<b>3221</b>	<b>1332</b>	<b>42</b>	<b>1752</b>	<b>40</b>	<b>1.59</b>
<b>D.SJVNL</b>								
NJPC (6*250)	1500	1605	1603	257	17.56	731	17.56	-0.01
Rampur HEP (6*88.67)	412	442	444	74	5.08	212	4.93	0.15
<b>Sub Total (D)</b>	<b>1912</b>	<b>2047</b>	<b>2047</b>	<b>331</b>	<b>22.64</b>	<b>943</b>	<b>22.49</b>	<b>0.15</b>
<b>E. THDC</b>								
Tehri HPS (4*250)	1000	1071	1067	265	8.52	355	8.00	0.52
Koteshwar HPS (4*100)	400	120	300	91	2.90	121	2.89	0.02
<b>Sub Total (E)</b>	<b>1400</b>	<b>1192</b>	<b>1367</b>	<b>356</b>	<b>11.43</b>	<b>476</b>	<b>10.89</b>	<b>0.54</b>
<b>F. BBMB</b>								
Bhakra HPS (2*108+3*126+5*157)	1379	802	1090	674	19.73	822	19.25	0.48
Dehar HPS (6*165)	990	393	660	430	9.57	399	9.44	0.14
Pong HPS (6*66)	396	152	330	66</				

I. State Entities	Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average(Sent out MW)	
Punjab	Guru Gobind Singh TPS (Ropar) (6*210)	1260	690	690	16.50	687	
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	90	190	4.19	174	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	224	425	6.04	252	
	Goindwal(GVK) (2*270)	540	0	0	-0.03	-1	
	Rajpura (2*700)	1400	1320	1320	31.10	1296	
	Talwandi Saboo (3*660)	1980	1050	308	14.32	596	
	<b>Thermal (Total)</b>	<b>6560</b>	<b>3374</b>	<b>2933</b>	<b>72.10</b>	<b>3004</b>	
	Total Hydro	1000	508	414	11.96	498	
	Wind Power	0	0	0	0.00	0	
	Biomass	288	24	24	0.58	24	
	Solar	560	0	0	0.28	11	
	<b>Renewable(Total)</b>	<b>848</b>	<b>24</b>	<b>24</b>	<b>0.86</b>	<b>36</b>	
	<b>Total Punjab</b>	<b>8408</b>	<b>3906</b>	<b>3371</b>	<b>84.91</b>	<b>3538</b>	
	Haryana	Panipat TPS (2*210+2*250)	920	568	571	12.94	539
		DCRTPP (Yamuna nagar) (2*300)	600	552	461	11.11	463
		Faridabad GPS (NTPC)(2*137.75+1*1156)	432	0	0	0.00	0
RGTPP (khedar) (IPP) (2*600)		1200	1123	764	19.69	820	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP) (2*660)		1320	480	375	9.33	389	
<b>Thermal (Total)</b>		<b>4497</b>	<b>2723</b>	<b>2171</b>	<b>53.07</b>	<b>2211</b>	
Total Hydro		62	41	41	0.88	37	
Wind Power		0	0	0	0.00	0	
Biomass		40	0	0	0.00	0	
Solar		0	0	0	0.00	0	
<b>Renewable(Total)</b>		<b>40</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	
<b>Total Haryana</b>		<b>4599</b>	<b>2764</b>	<b>2212</b>	<b>53.95</b>	<b>2248</b>	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	1036	952	23.39	975
	suratgarh TPS (6*250)	1500	196	188	4.39	183	
	Chabra TPS (4*250)	1000	802	744	19.13	797	
	Dholpur GPS (3*110)	330	0	0	0.00	0	
	Ramgarh GPS(1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	125	126	3.11	130	
	RAPS A (NPC) (1*100+1*200)	300	167	168	4.16	173	
	Barsingar (NLC) (2*125)	250	113	114	2.66	111	
	Giral LTPS (2*125)	250	0	0	0.00	0	
	Rajwest LTPS (IPP) (8*135)	1080	747	520	14.28	595	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	408	408	9.81	409	
	Kawai(Adani) (2*660)	1320	1187	1150	25.91	1080	
	<b>Thermal (Total)</b>	<b>8876</b>	<b>4781</b>	<b>4370</b>	<b>106.82</b>	<b>4451</b>	
	Total Hydro	550	101	45	1.64	68	
	Wind power	4017	371	515	8.63	360	
	Biomass	99	16	16	0.39	16	
	Solar	1295	1	0	0.30	12	
	Renewable/Others (Total)	5411	388	531	9.32	388	
	<b>Total Rajasthan</b>	<b>14837</b>	<b>5270</b>	<b>4946</b>	<b>117.79</b>	<b>4908</b>	
UP	Anpara TPS (3*210+2*500)	1630	1026	1010	22.59	941	
	Obra TPS (2*50+2*94+5*200)	1194	279	259	6.34	264	
	Paricha TPS (2*110+2*220+2*250)	1160	891	918	19.63	818	
	Panki TPS (2*105)	210	108	59	2.62	109	
	Harduaganj TPS (1*60+1*105+2*250)	665	507	537	12.07	503	
	Tanda TPS (NTPC) (4*110)	440	382	377	8.74	364	
	Roza TPS (IPP) (4*300)	1200	1100	1112	25.97	1082	
	Anpara-C (IPP) (2*600)	1200	972	980	24.07	1003	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	405	404	8.11	338	
	Anpara-D(2*500)	1000	403	336	7.95	331	
	Lalitpur TPS(3*660)	1980	869	932	21.92	914	
	Bara(2*660)	1320	0	0	0.00	0	
	<b>Thermal (Total)</b>	<b>12449</b>	<b>6942</b>	<b>6924</b>	<b>160.00</b>	<b>6667</b>	
	Vishnuparyag HPS (IPP)(4*110)	440	345	326	7.96	332	
	Alakanada(4*82.5)	330	164	165	4.14	172	
	Other Hydro	527	247	287	6.13	255	
	Cogeneration	981	50	50	1.20	50	
	Wind Power	0	0	0	0.00	0	
	Biomass	26	0	0	0.00	0	
	Solar	102	0	0	0.00	0	
	<b>Renewable(Total)</b>	<b>128</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	
<b>Total UP</b>	<b>14855</b>	<b>7748</b>	<b>7752</b>	<b>179.42</b>	<b>7476</b>		
Uttarakhand	Other Hydro	1250	631	548	13.04	544	
	Total Gas	225	148	159	3.53	147	
	Wind Power	0	0	0	0.00	0	
	Biomass	127	0	0	0.00	0	
	Solar	20	0	0	0.00	0	
	Small Hydro (< 25 MW)	180	0	0	0.00	0	
	<b>Renewable(Total)</b>	<b>327</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	
	<b>Total Uttarakhand</b>	<b>1802</b>	<b>779</b>	<b>707</b>	<b>16.57</b>	<b>691</b>	
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.02	-1	
	Delhi Gas Turbine (6x30 + 3x34)	282	71	70	1.82	76	
	Pragati Gas Turbine (2x104+ 1x122)	330	145	146	3.61	151	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	251	250	4.52	188	
	Badarpur TPS (NTPC) (3*95+2*210)	705	325	174	6.34	264	
	<b>Thermal (Total)</b>	<b>2917</b>	<b>792</b>	<b>640</b>	<b>16.26</b>	<b>678</b>	
	Wind Power	0	0	0	0.00	0	
	Biomass	16	0	0	0.00	0	
	Solar	2	0	0	0.00	0	
	<b>Renewable(Total)</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	
<b>Total Delhi</b>	<b>2935</b>	<b>792</b>	<b>640</b>	<b>16.26</b>	<b>678</b>		

HP	Baspa HPS (IPP) (3*100)	300	123	95	3.12	130
	Malana HPS (IPP) (2*43)	86	96	4	0.78	33
	Other Hydro	372	190	170	4.21	176
	Wind Power	0	0	0	0.00	0
	Biomass	0	0	0	0.00	0
	Solar	0	0	0	0.00	0
	Small Hydro (< 25 MW)	486	175	180	4.06	169
	<b>Renewable(Total)</b>	<b>486</b>	<b>175</b>	<b>180</b>	<b>4.06</b>	<b>169</b>
	<b>Total HP</b>	<b>1244</b>	<b>584</b>	<b>449</b>	<b>12.18</b>	<b>507</b>
	J & K	Baglihar HPS (IPP) (3*150+3*150)	900	585	585	14.04
Other Hydro/IPP(including 98 MW Small Hydro)		308	137	93	2.77	115
Gas/Diesel/Others		190	0	0	0.00	0
Wind Power		0	0	0	0.00	0
Biomass		0	0	0	0.00	0
Solar		0	0	0	0.00	0
Small Hydro (< 25 MW)Included in Other Hydro Above		98	0	0	0.00	0
<b>Renewable(Total)</b>		<b>98</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>
<b>Total J &amp; K</b>	<b>1398</b>	<b>722</b>	<b>678</b>	<b>17</b>	<b>700</b>	
<b>Total State Control Area Generation</b>		<b>50078</b>	<b>22566</b>	<b>20755</b>	<b>497.89</b>	<b>20745</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>9351</b>	<b>8920</b>	<b>215.36</b>	<b>8974</b>
<b>Total Regional Availability(Gross)</b>		<b>75315</b>	<b>50923</b>	<b>41959</b>	<b>1030.53</b>	<b>42939</b>

IV. Total Hydro Generation:

Regional Entities Hydro	12234	10566	3656	127.94	5331
State Control Area Hydro	7163	3491	3112	74.73	3261
<b>Total Regional Hydro</b>	<b>19397</b>	<b>14058</b>	<b>6768</b>	<b>202.67</b>	<b>8592</b>

V. Total Renewable Generation:

Regional Entities Renewable	30	0	0	0.09	4
State Control Area Renewable	7356	587	735	14.24	593
<b>Total Regional Renewable</b>	<b>7386</b>	<b>587</b>	<b>735</b>	<b>14.33</b>	<b>597</b>

VI(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(19:00 Hrs) MW	Off Peak(03:00 Hrs) MW	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
			Import	Export	Import	Export	
Vindhychall(HVDC B/B)	-500	50	400	500	0.33	8.28	-7.95
765 KV Gwalior-Agra (D/C)	2890	2321	3001	0	60.48	0.00	60.48
400 KV Zerda-Kankroli	106	125	174	0	2.41	0.00	2.41
400 KV Zerda-Bhinmal	95	126	201	0	2.60	0.00	2.60
220 KV Auraiya-Malanpur	-29	-54	0	104	0.00	0.75	-0.75
220 KV Badod-Kota/Morak	37	43	96	9	0.89	0.00	0.89
Mundra-Mohindergerh(HVDC Bipole)	2397	2198	2406	0.00	55.56	0.00	55.56
400 KV Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	1173	1014	1349	0	28.73	0.00	28.73
<b>Sub Total WR</b>	<b>6169</b>	<b>5823</b>			<b>150.99</b>	<b>9.04</b>	<b>141.96</b>
Pusauli Bypass/HVDC	150	150	150	0	3.69	0.00	3.69
400 KV MZP- GKP (D/C)	353	468	567	0	10.18	0.00	10.18
400 KV Patna-Balia(D/C) X 2	576	405	576	0	11.77	0.00	11.77
400 KV B Sharif-Balia (D/C)	146	197	257	0	4.75	0.00	4.75
765 KV Gaya-Balia	331	380	501	0	4.76	0.00	4.76
765 KV Gaya-Varanasi (D/C)	660	614	796	0	16.01	0.00	16.01
220 KV Pusauli-Sahupuri	0	0	0	0	0.00	0.00	0.00
132 KV K'nasa-Sahupuri	-34	-28	0	34	0.00	0.66	-0.66
132 KV Son Ngr-Rihand	-28	-22	0	30	0.00	0.50	-0.50
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-85	-38	71	85	0.00	0.17	-0.17
400 KV Barh -GKP (D/C)	464	374	464	0	8.95	0.00	8.95
400 kV B Sharif - Varanasi (D/C)	149	97	131	0	3.50	0.00	3.50
<b>Sub Total ER</b>	<b>2682</b>	<b>2597</b>			<b>63.60</b>	<b>1.33</b>	<b>62.27</b>
+/- 800 KV BiswanathChariali-Agra	500	500	500	0.00	11.14	0.00	11.14
<b>Sub Total NER</b>	<b>500</b>	<b>500</b>			<b>11.14</b>	<b>0.00</b>	<b>11.14</b>
<b>Total IR Exch</b>	<b>9351</b>	<b>8920</b>			<b>225.73</b>	<b>10.37</b>	<b>215.36</b>

VI(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ISGS/LT Schedule (MU)			Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
ER	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
49.58	3.42	53.01	26.98	7.77	2.05	16.19	0.00	0.00

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mndra	Total	Through ER(including NER)	Through WR	Total	Through ER (including NER)	Through WR	Total
82.03	133.96	215.99	73.41	141.96	215.36	-8.63	8.00	-0.62

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

Element	Peak(19:00 Hrs) MW	Off Peak(03:00 Hrs) MW	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
			Import	Export	Import	Export	
132 KV Tanakpur - Mahendarnagar	-25	0	0	25	0	0	-0.38

VII. Frequency Profile <----- % of Time Frequency ----->

<49.2	<49.7	<49.8	<49.9	<50.0	49.9-50.05	50.05-50.10	50.10-50.20	>50.20	>50.50
0.00	0.00	0.00	6.02	58.02	80.88	11.37	2.27	0.00	0.00

<----- Frequency (Hz) ----->				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block		Freq Dev Index (% of Time)
Maximum		Minimum					MAX (Hz)	MIN (Hz)	
50.16	Time 23.59	49.83	Time 12.16	49.99	0.034	0.056	50.14	50.00	19.12

## VIII(A). Voltage profile 400 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviat
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV	
Rihand	400	409	7:32	403	5:25	0.4	0.4	0.0	0.0	0.4
Gorakhpur	400	418	6:20	396	22:36	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	417	4:00	398	22:35	0.0	0.0	0.0	0.0	0.0
Kanpur	400	415	3:53	407	9:28	0.0	0.0	0.0	0.0	0.0
Dadri	400	415	3:49	398	14:27	0.0	0.0	0.0	0.0	0.0
Ballabgarh	400	422	2:57	398	14:29	0.0	0.0	4.6	0.0	4.6
Bawana	400	416	2:57	396	14:16	0.0	0.0	0.0	0.0	0.0
Bassi	400	421	3:59	395	12:17	0.0	0.0	0.3	0.0	0.3
Hissar	400	416	2:58	395	14:52	0.0	0.0	0.0	0.0	0.0
Moga	400	418	3:59	398	18:56	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	427	2:57	405	18:37	0.0	0.0	22.7	0.0	22.7
Nalagarh	400	430	2:56	408	18:42	0.0	0.0	40.1	0.0	40.1
Kishenpur	400	423	2:40	400	18:39	0.0	0.0	10.4	0.0	10.4
Wagoora	400	416	2:44	377	18:54	2.4	27.1	0.0	0.0	2.4
Amritsar	400	429	2:56	406	18:42	0.0	0.0	25.9	0.0	25.9
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	0	0:00	0	0:00	100.0	100.0	0.0	0.0	100.0
Rishikesh	400	414	4:00	391	12:17	0.0	0.0	0.0	0.0	0.0

## VIII(B). Voltage profile 765 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviat
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV	
Fatehpur	765	772	7:21	745	23:05	0.0	0.0	0.0	0.0	0.0
Balia	765	783	7:22	751	22:34	0.0	0.0	0.0	0.0	0.0
Moga	765	0	0:00	0	0:00	100.0	100.0	0.0	0.0	100.0
Agra	765	786	3:58	753	14:50	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	794	2:54	762	13:40	0.0	0.0	0.0	0.0	0.0
Unnao	765	765	7:24	731	22:45	0.0	16.6	0.0	0.0	0.0
Lucknow	765	787	7:22	752	22:34	0.0	0.0	0.0	0.0	0.0
Meerut	765	799	3:59	761	12:17	0.0	0.0	0.0	0.0	0.0
Jhatikara	765	795	3:52	761	14:41	0.0	0.0	0.0	0.0	0.0
Bareilly 765 kV	765	791	3:59	757	22:34	0.0	0.0	0.0	0.0	0.0
Anta	765	786	3:02	759	13:30	0.0	0.0	0.0	0.0	0.0
Phagi	765	794	2:58	760	13:37	0.0	0.0	0.0	0.0	0.0

Note : '0' in Max / Min Col -&gt; Telemetry Outage

## IX. Reservoir Parameters:

Name of Reservoir	Parameters		Present Parameters		Last Year		Last day	
	FRL (m)	MDDL (m)	Level (m)	Energy (MU)	Level (m)	Energy (MU)	Inflow (m <sup>3</sup> /s)	Usage (m <sup>3</sup> /s)
Bhakra	513.59	445.62	502.34	1192.70	510.97	1590.18	413.17	590.29
Pong	426.72	384.05	416.19	718.14	420.57	916.71	92.43	226.34
Tehri	829.79	740.04	824.60	1099.49	821.55	1035.00	154.03	184.00
Koteswar	612.50	598.50	609.97	4.57	610.18	4.69	184.00	191.42
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	105.21	0.00
Rihand	268.22	252.98	0.00	0.00	0.00	0.00	0.00	0.00
RPS	352.80	343.81	0.00	0.00	0.00	0.00	0.00	0.00
Jawahar Sagar	298.70	295.78	0.00	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	516.92	4.44	513.68	3.11	89.81	194.60

\* NA: Not Available

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

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (19:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	408	0	0	386	0	0	9.68	0.02	9.71
Delhi	92	-33	0	91	158	0	3.06	3.49	6.55
Haryana	577	294	0	593	307	0	13.93	5.37	19.30
HP	-55	-104	0	-134	-577	0	-1.93	-6.88	-8.82
J&K	-38	-101	0	-38	-15	0	-0.91	-0.98	-1.89
CHD	0	0	0	0	0	0	0.00	0.74	0.74
Rajasthan	-3	601	0	-5	606	0	-0.09	14.56	14.47
UP	983	0	0	841	-100	0	22.20	4.59	26.79
Uttarakhand	36	3	0	36	98	0	0.87	4.02	4.90
Total	2002	661	0	1771	477	0	46.81	24.93	71.74

## X(B). Short-Term Open Access Details:

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	408	386	2	0	0	0
Delhi	251	23	397	-132	0	0
Haryana	756	412	331	-272	0	0
HP	14	-134	-90	-779	0	0
J&K	-38	-38	0	-151	0	0
CHD	0	0	0	0	89	0
Rajasthan	-3	-5	623	582	0	0
UP	1009	836	1175	-100	0	0
Uttarakhand	36	36	455	-122	0	0

**XI. System Reliability Indices(Violation of TTC and ATC):**

(i)%age of times N-1 Criteria was violated in the inter - regional corridors

<b>WR</b>	<b>0.00%</b>
<b>ER</b>	<b>0.00%</b>
<b>Simultaneous</b>	<b>0.00%</b>

(ii)%age of times ATC violated on the inter-regional corridors

<b>WR</b>	<b>15.28%</b>
<b>ER</b>	<b>0.00%</b>
<b>Simultaneous</b>	<b>6.60%</b>

(iii)%age of times Angular Difference on Important Buses was beyond permissible limits(40 deg.)

<b>Rihand - Dadri</b>	<b>0.00%</b>
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**XII. Zero Crossing Violations**

State	No. of violations(Maximum 8 in a day)	Maximum number of continuous blocks without sign change
Punjab	0	9
Haryana	3	28
Rajasthan	1	15
Delhi	2	17
UP	1	13
Uttarakhand	4	33
HP	4	59
J & K	3	27
Chandigarh	3	33

**XIII. System Constraints:****XIV. Grid Disturbance / Any Other Significant Event:****XV. Weather Conditions For 07.10.2016 :**  
Normal**XVI. Synchronisation of new generating units :****XVII. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :****XVIII. Tripping of lines in pooling stations :****XIX. 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.