

# पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

## उत्तर क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 23.10.2017

Date of Reporting : 24.10.2017



### 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
42847	1214	44060	50.00	35356	439	35796	49.96	917.26	14.03

\* 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:

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	Gas/Naptha/Diesal	Solar	Wind	Other (Biomass/Small hydro/Co-Generation etc.)	Total					
Punjab	53.22	10.10	0.00	0.07	0.00	0.13	63.51	48.54	49.16	0.62	112.68	0.00
Haryana	37.33	0.67	3.85	0.00	0.00	0.00	41.85	84.99	86.92	1.93	128.77	0.00
Rajasthan	104.47	3.64	6.16	0.39	5.92	4.66	125.24	63.80	65.14	1.34	190.38	0.00
Delhi	0.00	0.00	13.38	0.00	0.00	0.00	13.38	66.92	65.29	-1.64	78.67	0.00
UP	168.59	15.29	0.00	0.00	0.00	1.20	185.07	122.44	124.08	1.64	309.15	4.97
Uttarakhand	0.00	13.48	6.75	0.69	0.00	0.00	20.92	12.35	10.96	-1.39	31.88	0.00
HP	0.00	6.64	0.00	0.00	0.00	3.11	9.75	13.57	14.26	0.70	24.01	0.00
J & K	0.00	8.05	0.00	0.00	0.00	0.00	8.05	31.25	30.14	-1.11	38.19	9.06
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.07	3.52	-0.54	3.52	0.00
<b>Total</b>	<b>363.61</b>	<b>57.87</b>	<b>30.15</b>	<b>1.14</b>	<b>5.92</b>	<b>9.10</b>	<b>467.78</b>	<b>447.93</b>	<b>449.48</b>	<b>1.55</b>	<b>917.26</b>	<b>14.03</b>

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

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

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	5292	0	-35	-664	4200	0	94	-360	5292	19	0
Haryana	6496	0	158	102	5061	0	186	64	6496	19	0
Rajasthan	8502	0	-148	-105	7364	0	-143	-4	9749	9	0
Delhi	3818	0	-71	-239	2816	0	-34	-280	3823	20	0
UP	13785	750	-235	-4	12705	210	124	-4	14129	21	0
Uttarakhand	1668	0	-83	-204	1069	0	-108	-11	1668	19	0
HP	1244	0	115	-806	743	0	-2	-20	1332	8	0
J&K	1854	464	23	152	1298	229	-184	424	1870	20	468
Chandigarh	188	0	-27	-86	100	0	-34	0	188	19	0
<b>Total</b>	<b>42847</b>	<b>1214</b>	<b>-303</b>	<b>-1853</b>	<b>35356</b>	<b>439</b>	<b>-101</b>	<b>-191</b>	<b>42847</b>	<b>19</b>	<b>1214</b>

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

### III. Regional Entities :

A. NTPC	Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Scentout(MW)	Schedule Net MU	UI Net MU
Rihand I STPS (2*500)	1000	923	1010	1007	22.18	924	22.13	0.04	
Rihand II STPS (2*500)	1000	943	1016	1000	22.91	954	22.55	0.35	
Rihand III STPS (2*500)	1000	943	1006	1031	22.91	955	22.32	0.59	
Dadri I STPS (4*210)	840	653	581	347	10.83	451	10.86	-0.04	
Dadri II STPS (2*490)	980	790	798	535	15.50	646	16.06	-0.55	
Unchahar I TPS (2*210)	420	192	195	150	3.95	165	3.97	-0.02	
Unchahar II TPS (2*210)	420	290	271	233	5.80	241	5.87	-0.08	
Unchahar III TPS (1*210)	210	192	193	126	3.58	149	3.66	-0.08	
Unchahar IV TPS(1*500)	500	459	481	372	9.48	395	9.54	-0.06	
ISTPP (Jhajjar) (3*500)	1500	725	720	680	15.20	633	15.55	-0.35	
Dadri GPS (4*130.19+2*154.51)	830	802	385	135	4.66	194	4.84	-0.18	
Anta GPS (3*88.71+1*153.2)	419	395	246	0	1.19	49	0.78	0.41	
Auraiya GPS (4*111.19+2*109.30)	663	579	281	0	1.44	60	1.42	0.02	
Dadri Solar(5)	5	1	0	0	0.02	1	0.02	0.00	
Unchahar Solar(10)	10	2	0	0	0.05	2	0.05	0.00	
Singrauli Solar(15)	15	3	0	0	0.07	3	0.07	0.00	
KHEP(4*200)	800	792	865	196	4.89	204	4.50	0.39	
<b>Sub Total (A)</b>	<b>12612</b>	<b>10402</b>	<b>9916</b>	<b>7327</b>	<b>185</b>	<b>7716</b>	<b>184</b>	<b>1.33</b>	
B. NPC	NAPS (2*220)	440	396	436	439	9.54	398	9.49	0.05
RAPS- B (2*220)	440	390	433	442	9.47	395	9.26	0.21	
RAPS- C (2*220)	440	415	450	451	9.84	410	9.96	-0.12	
<b>Sub Total (B)</b>	<b>1320</b>	<b>1201</b>	<b>1319</b>	<b>1332</b>	<b>28.85</b>	<b>1202</b>	<b>28.71</b>	<b>0.14</b>	
C. NHPC	Chamera I HPS (3*180)	540	534	541	0	2.75	115	2.60	0.15
Chamera II HPS (3*100)	300	300	299	0	2.21	92	2.13	0.09	
Chamera III HPS (3*77)	231	58	232	0	1.45	61	1.39	0.07	
Bairasuil HPS(3*60)	180	178	124	0	0.77	32	0.65	0.12	
Salal-HPS (6*115)	690	175	335	150	4.99	208	4.21	0.78	
Tanakpur-HPS (3*31.4)	94	58	57	60	1.49	62	1.38	0.10	
Uri-I HPS (4*120)	480	65	28	39	1.75	73	1.55	0.20	
Uri-II HPS (4*60)	240	51	36	38	1.26	52	1.22	0.04	
Dhauliganga-HPS (4*70)	280	103	280	70	2.51	105	2.47	0.05	
Dulhasti-HPS (3*130)	390	386	397	0	6.30	263	6.00	0.30	
Sewa-II HPS (3*40)	120	119	102	0	0.29	12	0.36	-0.07	
Parbati 3 (4*130)	520	45	390	0	1.01	42	0.96	0.05	
<b>Sub Total (C)</b>	<b>4065</b>	<b>2072</b>	<b>2823</b>	<b>357</b>	<b>27</b>	<b>1116</b>	<b>25</b>	<b>1.88</b>	
D.SJVNL	NJPC (6*250)	1500	1482	1459	249	12.24	510	12.23	0.01
Rampur HEP (6*68.67)	412	408	405	71	3.52	147	3.40	0.12	
<b>Sub Total (D)</b>	<b>1912</b>	<b>1890</b>	<b>1864</b>	<b>320</b>	<b>15.75</b>	<b>656</b>	<b>15.63</b>	<b>0.12</b>	
E. THDC	Tehri HPS (4*250)	1000	988	1002	0	7.05	294	6.90	0.15
Koteshwar HPS (4*100)	400	91	101	91	2.27	94	2.19	0.08	
<b>Sub Total (E)</b>	<b>1400</b>	<b>1079</b>	<b>1103</b>	<b>91</b>	<b>9.31</b>	<b>388</b>	<b>9.09</b>	<b>0.22</b>	
F. BBMB	Bhakra HPS (2*108+3*126+5*157)	1379	503	1068	387	12.14	506	12.08	0.06
Dehar HPS (6*165)	990	266	495	165	6.55	273	6.38	0.17	
Pong HPS (6*66)	396	272	330	132	6.53	272	6.52	0.01	
<b>Sub Total (F)</b>	<b>2765</b>	<b>1041</b>	<b>1893</b>	<b>684</b>	<b>25.22</b>	<b>1051</b>	<b>24.98</b>	<b>0.24</b>	
G. IPP(s)/JV(s)	Allain DuhanganHPS(IPP) (2*96)	192	0	104	0	0.98	41	0.96	0.02
Karcham Wangtoo HPS(IPP) (4*250)	1000	0	820	270	6.74	281	6.69	0.04	
Malana Stg-II HPS (2*50)	100	0	15	11	0.49	21	0.50	-0.01	
Shree Cement TPS (2*150)	300	0	146	147	3.50	146	3.44	0.06	
Budhil HPS(IPP) (2*35)	70	0	34	0	0.41	17	0.42	-0.01	
Sainj HPS (IPP) (2*50)	100	0	0	0	0	0	0.92	0	
<b>Sub Total (G)</b>	<b>1762</b>	<b>0</b>	<b>1120</b>	<b>427</b>	<b>12.11</b>	<b>505</b>	<b>12.01</b>	<b>0.10</b>	
<b>H. Total Regional Entities (A-G)</b>	<b>25837</b>	<b>17685</b>	<b>20038</b>	<b>10539</b>	<b>303.24</b>	<b>12635</b>	<b>299.19</b>	<b>4.05</b>	

### I. State Entities

Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average(S centout MW)
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Punjab	Guru Gobind Singh TPS (Ropar) (6*210)	1260	160	160	3.11	130
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	0	0	0.00	0
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	0	0	0.00	0
	Goindwal(GVK) (2*270)	540	290	290	7.79	324
	Rajpura (2*700)	1400	660	560	15.20	633
	Talwandi Saboo (3*660)	1980	1250	924	27.13	1130
	<b>Thermal (Total)</b>	<b>6560</b>	<b>2360</b>	<b>1934</b>	<b>53.22</b>	<b>2218</b>
	Total Hydro	1000	430	413	10.10	421
	Wind Power	0	0	0	0.00	0
	Biomass	303	0	0	0.13	5
	Solar	859	0	0	0.07	3
	<b>Renewable(Total)</b>	<b>1162</b>	<b>0</b>	<b>0</b>	<b>0.19</b>	<b>8</b>
	<b>Total Punjab</b>	<b>8722</b>	<b>2790</b>	<b>2347</b>	<b>63.51</b>	<b>2646</b>
	Haryana	Panipat TPS (2*210+2*250)	920	408	225	8.08
DCRTPP (Yamuna nagar) (2*300)		600	481	510	11.19	466
Faridabad GPS (NTPC)(2*137.75+1*156)		432	156	172	3.85	160
RGTPP (khedar) (IPP) (2*600)		1200	388	0	3.83	160
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	624	596	14.23	593
<b>Thermal (Total)</b>		<b>4497</b>	<b>2057</b>	<b>1503</b>	<b>41.18</b>	<b>1716</b>
Total Hydro		62	18	17	0.67	28
Wind Power		0	0	0	0.00	0
Biomass		106	0	0	0.00	0
Solar		50	0	0	0.00	0
<b>Renewable(Total)</b>		<b>156</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>
<b>Total Haryana</b>		<b>4715</b>	<b>2075</b>	<b>1520</b>	<b>41.85</b>	<b>1744</b>
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	746	740	18.49
	suratgarh TPS (6*250)	1500	188	371	6.72	280
	Chabra TPS (4*250)	1000	1471	1274	34.31	1429
	Chabra TPS (1*660)	660	0	0	0.00	0
	Dholpur GPS (3*110)	330	103	113	2.69	112
	Ramgarh GPS(1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	137	147	3.48	145
	RAPS A (NPC) (1*100+1*200)	300	160	157	4.19	174
	Barsingsar (NLC) (2*125)	250	218	218	4.20	175
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	690	376	14.46	603
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	748	405	12.78	532
	Kawai(Adani) (2*660)	1320	617	445	13.51	563
	<b>Thermal (Total)</b>	<b>9536</b>	<b>5078</b>	<b>4246</b>	<b>114.82</b>	<b>4784</b>
	Total Hydro	550	144	156	3.64	152
	Wind power	4292	72	790	5.92	247
	Biomass	102	20	20	0.48	20
	Solar	1995	7	0	0.39	16
	Renewable/Others (Total)	6389	99	810	6.79	283
	<b>Total Rajasthan</b>	<b>16475</b>	<b>5321</b>	<b>5212</b>	<b>125.24</b>	<b>5219</b>
	UP	Anpara TPS (3*210+2*500)	1630	1155	1133	27.24
Obra TPS (2*50+2*94+5*200)		1194	271	292	6.83	285
Paricha TPS (2*110+2*220+2*250)		1160	763	652	16.94	706
Panki TPS (2*105)		210	0	0	0.09	4
Harduaganj TPS (1*60+1*105+2*250)		665	416	423	10.08	420
Tanda TPS (NTPC) (4*110)		440	386	390	9.30	387
Roza TPS (IPP) (4*300)		1200	963	915	22.70	946
Anpara-C (IPP) (2*600)		1200	1092	1096	22.92	955
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	0	0	0.00	0
Anpara-D(2*500)		1000	452	442	10.42	434
Lalitpur TPS(3*660)		1980	1236	1231	29.60	1233
Bara(2*660)		1320	533	503	12.46	519
<b>Thermal (Total)</b>		<b>12449</b>	<b>7267</b>	<b>7077</b>	<b>168.59</b>	<b>7024</b>
Vishnuparyag HPS (IPP)(4*110)		440	221	231	5.45	227
Alaknanda(4*82.5)		330	153	165	3.40	142
Other Hydro		527	198	316	6.44	268
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>7889</b>	<b>7839</b>	<b>185.07</b>	<b>7711</b>	
Uttarakhand	Other Hydro	1250	732	501	13.48	562
	Total Gas	450	286	270	6.75	281
	Wind Power	0	0	0	0.00	0
	Biomass	127	0	0	0.00	0
	Solar	100	0	0	0.69	29
	Small Hydro (< 25 MW)	180	0	0	0.00	0
	<b>Renewable(Total)</b>	<b>407</b>	<b>0</b>	<b>0</b>	<b>0.69</b>	<b>29</b>
	<b>Total Uttarakhand</b>	<b>2107</b>	<b>1018</b>	<b>771</b>	<b>20.92</b>	<b>872</b>
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	36	37	0.86	36
	Pragati Gas Turbine (2x104+ 1x122)	330	263	263	6.38	266
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	250	252	6.14	256
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0
	<b>Thermal (Total)</b>	<b>2917</b>	<b>549</b>	<b>552</b>	<b>13.38</b>	<b>558</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>549</b>	<b>552</b>	<b>13.38</b>	<b>558</b>	
HP	Baspa HPS (IPP) (3*100)	300	63	63	2.16	90
	Malana HPS (IPP) (2*43)	86	61	0	0.48	20
	Other Hydro (>25MW)	372	209	133	4.00	167
	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	143	118	3.11	130
	<b>Renewable(Total)</b>	<b>486</b>	<b>143</b>	<b>118</b>	<b>3.11</b>	<b>130</b>
	<b>Total HP</b>	<b>1244</b>	<b>476</b>	<b>314</b>	<b>9.75</b>	<b>406</b>
	J & K	Baglihar HPS (IPP) (3*150+3*150)	900	275	274	6.59
Other Hydro/IPP(including 98 MW Small Hydro)		308	101	42	1.46	61
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>376</b>	<b>316</b>	<b>8</b>	<b>336</b>
<b>Total State Control Area Generation</b>	<b>52451</b>	<b>20494</b>	<b>18871</b>	<b>467.78</b>	<b>19491</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>		<b>5662</b>	<b>7073.96</b>	<b>170.80</b>	<b>7117</b>
<b>Total Regional Availability(Gross)</b>	<b>78288</b>	<b>46194</b>	<b>36483</b>	<b>941.82</b>	<b>39243</b>

**IV. Total Hydro Generation:**

<b>Regional Entities Hydro</b>	<b>12234</b>	<b>9488</b>	<b>1929</b>	<b>90.58</b>	<b>3757</b>
<b>State Control Area Hydro</b>	<b>7468</b>	<b>3034</b>	<b>2699</b>	<b>57.87</b>	<b>2851</b>
<b>Total Regional Hydro</b>	<b>19702</b>	<b>12522</b>	<b>4627</b>	<b>148.45</b>	<b>6608</b>

**V. Total Renewable Generation:**

<b>Regional Entities Renewable</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0.13</b>	<b>5</b>
<b>State Control Area Renewable</b>	<b>8844</b>	<b>242</b>	<b>928</b>	<b>10.77</b>	<b>449</b>
<b>Total Regional Renewable</b>	<b>8874</b>	<b>242</b>	<b>928</b>	<b>10.90</b>	<b>454</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	
Vindhychal(HVDC B/B)	-500	-250	0	500	0.00	9.84	-9.84
765 KV Gwalior-Agra (D/C)	1453	2158	2337	0	44.61	0.00	44.61
400 KV Zerda-Kankroli	-120	-63	0	146	0.00	2.03	-2.03
400 KV Zerda-Bhinmal	-11	-124	159	131	0.00	0.11	-0.11
220 KV Auraiya-Malanpur	-150	-48	0	150	0.00	1.59	-1.59
220 KV Badod-Kota/Morak	-58	-53	127	7	0.00	1.16	-1.16
Mundra-Mohindergarh(HVDC Bipole)	1601	1197	1604	0	34.59	0.00	34.59
400 KV RAPPCC-Sujalpur	214	149	332	0	4.02	0.00	4.02
400 KV Vindhychal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	345	1135	1377	0	20.12	0.00	20.12
+/- 800 kV HVDC Champa-Kurushetra	800	400	800	0	12.97	0	12.97
<b>Sub Total WR</b>	<b>3574</b>	<b>4501</b>			<b>116.31</b>	<b>14.73</b>	<b>101.58</b>
400 kV Sasaram - Varanasi	124	88	128	0	2.24	0.00	2.24
400 kV Sasaram - Allahabad	35	4	38	24	0.00	0.00	0.00
400 KV MZP- GKP (D/C)	67	494	650	0	10.75	0.00	10.75
400 KV Patna-Balia(D/C) X 2	576	548	1109	0	20.95	0.00	20.95
400 KV B'Sharif-Balia (D/C)	22	12	234	80	3.05	0.00	3.05
765 KV Gaya-Balia	65	135	225	0	4.06	0.00	4.06
765 KV Gaya-Varanasi (D/C)	237	269	398	240	4.03	0.00	4.03
220 KV Pusauli-Sahupuri	145	120	145	0	3.03	0.00	3.03
132 KV K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
132 KV Son Ngr-Rihand	-27	-18	0	29	0.00	0.52	-0.52
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-303	-81	80	307	0.00	1.74	-1.74
400 KV Barh -GKP (D/C)	-280	-204	0	288	0.00	4.39	-4.39
400 kV B'Sharif - Varanasi (D/C)	227	5	254	139	0.22	0.00	0.22
+/- 800 KV HVDC Alipurduar-Agra	500	500	500	0	13.79	0.00	13.79
<b>Sub Total ER</b>	<b>1388</b>	<b>1873</b>			<b>62.11</b>	<b>6.66</b>	<b>55.46</b>
+/- 800 KV HVDC BiswanathCharialli-Agra	700	700	700	0.00	13.77	0.00	13.77
<b>Sub Total NER</b>	<b>700</b>	<b>700</b>			<b>13.77</b>	<b>0.00</b>	<b>13.77</b>
<b>Total IR Exch</b>	<b>5662</b>	<b>7074</b>			<b>192.19</b>	<b>21.38</b>	<b>170.80</b>

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

ISGS/LT Schedule (MU)			Bilateral Schedule (MU)		Power Exchange ShdI (MU)		Wheeling (MU)	
ER	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
43.38	1.79	45.17	-5.23	-6.60	-4.43	-2.29	0.00	0.00

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Incls Mndra	Total	Through ER(including NER)	Through WR	Total	Through ER (including NER)	Through WR	Total
35.51	140.35	175.86	69.23	101.58	170.80	33.71	-38.77	-5.06

**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	-18	0	0	-22	0	0	0.11

**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	0.35	17.55	76.27	78.13	4.21	0.32	0.00	0.00

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation	Std. Dev.	Frequency in 15 Min Block		Freq Dev Index (% of Time)
Maximum		Minimum					MAX	MIN	
Freq	Time	Freq	Time	Hz	Index	(Hz)	(Hz)		
50.13	18.01	49.77	16.42	49.96	0.054	0.058	50.06	49.86	21.87

**VIII(A). Voltage profile 400 kV**

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviation Index
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV	
Rihand	400	404	2:15	401	11:10	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	414	8:00	396	18:24	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	413	20:37	404	9:16	0.0	0.0	0.0	0.0	0.0
Kanpur	400	415	4:01	409	7:13	0.0	0.0	0.0	0.0	0.0
Dadri	400	417	20:57	405	9:36	0.0	0.0	0.0	0.0	0.0
Ballabgarh	400	418	20:52	404	9:15	0.0	0.0	0.0	0.0	0.0
Bawana	400	419	21:12	407	9:44	0.0	0.0	0.0	0.0	0.0
Bassi	400	421	20:53	400	5:46	0.0	0.0	1.7	0.0	1.7
Hissar	400	419	20:56	404	9:45	0.0	0.0	0.0	0.0	0.0
Moga	400	421	4:33	408	9:53	0.0	0.0	0.1	0.0	0.1
Abdullapur	400	424	21:10	272	8:31	22.5	22.5	3.2	0.0	25.7
Nalagarh	400	431	4:32	413	18:09	0.0	0.0	53.2	0.6	53.2
Kishenpur	400	425	4:01	401	18:24	0.0	0.0	15.2	0.0	15.2
Wagoora	400	410	3:59	371	18:27	18.9	63.7	0.0	0.0	18.9
Amritsar	400	430	4:30	414	9:13	0.0	0.0	48.2	0.0	48.2
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	426	4:32	408	9:46	0.0	0.0	28.4	0.0	28.4

Rishikesh	400	418	20:56	403	18:22	0.0	0.0	0.0	0.0	0.0
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**VIII(B). Voltage profile 765 kV**

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviation Index
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV	
Fatehpur	765	776	13:02	754	23:48	0.0	0.0	0.0	0.0	0.0
Balia	765	772	0:00	772	0:00	0.0	0.0	0.0	0.0	0.0
Moga	765	803	20:56	775	8:14	0.0	0.0	2.0	0.0	2.0
Agra	765	795	20:57	769	9:47	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	805	20:56	782	5:50	0.0	0.0	3.6	0.0	3.6
Unnao	765	764	20:37	754	9:14	0.0	0.0	0.0	0.0	0.0
Lucknow	765	784	17:35	769	18:24	0.0	0.0	0.0	0.0	0.0
Meerut	765	808	20:55	774	7:11	0.0	0.0	5.6	0.0	5.6
Jhatikara	765	802	17:03	778	7:09	0.0	0.0	0.5	0.0	0.5
Bareilly 765 kV	765	787	17:35	772	9:14	0.0	0.0	0.0	0.0	0.0
Anta	765	787	20:22	772	5:48	0.0	0.0	0.0	0.0	0.0
Phagi	765	796	20:35	773	5:38	0.0	0.0	0.0	0.0	0.0

Note : "0" in Max / Min Col -> 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	507.36	1426.07	499.70	1076.64	298.94	343.00
Pong	426.72	384.05	418.04	794.52	415.28	680.86	67.00	388.22
Tehri	829.79	740.04	824.10	1088.91	823.90	1084.65	92.39	153.00
Koteshwar	612.50	598.50	610.87	4.21	610.58	4.95	153.00	148.83
Chamera-I	760.00	748.75	754.63	0.00	0.00	0.00	70.98	74.49
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	515.08	3.29	514.94	3.18	78.21	129.12

\* 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	-360	0	0	-461	-203	0	-9.24	-1.18	-10.43
Delhi	-124	-156	0	-184	-55	0	-4.26	-0.02	-4.28
Haryana	30	34	0	30	72	0	-0.91	1.16	0.25
HP	-20	0	0	-20	-786	0	1.06	-4.26	-3.20
J&K	157	266	0	157	-5	0	3.77	4.66	8.43
CHD	0	0	0	0	-86	0	0.00	-0.16	-0.16
Rajasthan	-102	98	0	-102	-3	0	-2.44	2.01	-0.43
UP	64	-68	0	64	-68	0	1.53	-1.63	-0.11
Uttarakhand	5	-16	0	5	-209	0	0.48	-0.46	0.02
<b>Total</b>	<b>-349</b>	<b>157</b>	<b>0</b>	<b>-510</b>	<b>-1343</b>	<b>0</b>	<b>-10.01</b>	<b>0.12</b>	<b>-9.89</b>

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-360	-461	0	-261	0	0
Delhi	-124	-225	174	-207	0	0
Haryana	30	-254	78	24	0	0
HP	108	-20	95	-883	0	0
J&K	157	157	365	-157	0	0
CHD	0	0	39	-86	0	0
Rajasthan	-102	-102	552	-336	0	0
UP	64	64	-68	-68	0	0
Uttarakhand	64	5	107	-248	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

WR	0.00%
ER	0.00%
Simultaneous	0.00%

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

WR	0.00%
ER	0.00%
Simultaneous	0.00%

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

Rihand - Dadri	0.00%
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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	1	22
Haryana	2	19
Rajasthan	0	12
Delhi	5	29
UP	1	21
Uttarakhand	5	57
HP	4	58
J & K	3	25
Chandigarh	5	30

**XIII. System Constraints:**

**XIV. Grid Disturbance / Any Other Significant Event:**

**XV. Weather Conditions For 23.10.2017 :**

**XVI. Synchronisation of new generating units :**

**XVII. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :**

1. 220KV Baghpat - Baraut - II first time charged at 12:20Hrs on 23.10.2017

**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.

Report for : 23.10.2017

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER