

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 13.01.2017

Date of Reporting : 14.01.2017



### 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
44273	626	44899	49.98	30658	457	31115	49.99	907.42	20.23

\* 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	49.10	7.70	0.22	57.02	41.09	42.17	1.08	99.19	0.00
Haryana	55.28	0.42	0.00	55.71	66.73	66.05	-0.68	121.75	0.00
Rajasthan	116.20	5.00	18.94	140.14	72.89	76.87	3.99	217.01	1.50
Delhi	12.27		0.00	12.27	54.06	55.22	1.15	67.49	0.01
UP	190.42	7.59	0.00	198.01	88.90	90.19	1.29	288.20	4.27
Uttarakhand		8.59	0.00	11.07	22.55	23.81	1.25	34.88	2.20
HP		4.11	1.14	4.11	20.83	21.84	1.01	25.95	0.00
J & K		3.77	0.00	3.77	40.53	45.26	4.73	49.03	12.26
Chandigarh				0.00	3.94	3.92	-0.02	3.92	0.00
<b>Total</b>	<b>423.28</b>	<b>37.18</b>	<b>20.30</b>	<b>482.10</b>	<b>411.52</b>	<b>425.32</b>	<b>13.80</b>	<b>907.42</b>	<b>20.23</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	5375	0	100	-725	3132	0	72	-546	5375	19:00	0
Haryana	6553	0	-353	-230	3379	0	-71	-477	6553	19:00	0
Rajasthan	9705	76	280	533	8044	0	-46	786	10095	9:00	0
Delhi	3348	0	-81	13	1515	0	143	-665	3998	11:00	0
UP	13715	0	46	-218	10701	0	-31	98	13715	19:00	0
Uttarakhand	1931	0	213	327	1223	0	-87	421	1931	19:00	0
HP	1263	0	-25	238	744	0	-17	550	1429	10:00	0
J&K	2198	550	226	696	1827	457	96	888	2253	20:00	563
Chandigarh	184	0	-32	0	95	0	-9	0	239	9:00	0
<b>Total</b>	<b>44273</b>	<b>626</b>	<b>374</b>	<b>634</b>	<b>30658</b>	<b>457</b>	<b>49</b>	<b>1055</b>	<b>44273</b>	<b>19:00</b>	<b>626</b>

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

Diversity is 1.03

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

### III. Regional Entities :

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	1890	2036	2064	45.05	1877	44.69	0.36
Rihand I STPS (2*500)	1000	947	1015	773	20.72	863	20.96	-0.24
Rihand II STPS (2*500)	1000	957	1002	769	21.65	902	21.79	-0.15
Rihand III STPS (2*500)	1000	958	1017	763	21.48	895	21.90	-0.42
Dadri I STPS (4*210)	840	815	209	164	4.30	179	4.55	-0.25
Dadri II STPS (2*490)	980	980	455	349	10.01	417	10.97	-0.96
Unchahar I TPS (2*210)	420	407	376	273	8.22	343	8.99	-0.76
Unchahar II TPS (2*210)	420	405	319	292	7.75	323	8.65	-0.91
Unchahar III TPS (1*210)	210	203	140	144	3.93	164	4.33	-0.40
ISTPP (Jhajihar) (3*500)	1500	1440	0	0	0.00	0	0.00	0.00
Dadri GPS (4*130.19+2*154.51)	830	808	144	144	3.63	151	3.94	-0.31
Anta GPS (3*88.71+1*153.2)	419	417	0	0	0.00	0	0.00	0.00
Auraiya GPS (4*111.19+2*109.30)	663	637	0	0	0.00	0	0.00	0.00
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	0.00
Singrauli Solar(15)	15	2	0	0	0.06	3	0.05	0.01
KHEP(4*200)	800	870	697	0	2.61	109	2.61	0.00
<b>Sub Total (A)</b>	<b>12112</b>	<b>11737</b>	<b>7410</b>	<b>5735</b>	<b>149</b>	<b>6227</b>	<b>153</b>	<b>-4.02</b>
<b>B. NPC</b>								
NAPS (2*220)	440	418	457	460	10.13	422	10.03	0.10
RAPS- B (2*220)	440	282	366	199	6.10	254	6.76	-0.66
RAPS- C (2*220)	440	220	239	240	5.08	212	5.28	-0.20
<b>Sub Total (B)</b>	<b>1320</b>	<b>920</b>	<b>1062</b>	<b>899</b>	<b>21.31</b>	<b>888</b>	<b>22.08</b>	<b>-0.77</b>
<b>C. NHPC</b>								
Chamera I HPS (3*180)	540	540	545	0	1.80	75	1.62	0.18
Chamera II HPS (3*100)	300	301	309	0	1.01	42	1.00	0.01
Chamera III HPS (3*77)	231	167	127	0	0.51	21	0.50	0.01
Bairasuli HPS(3*60)	180	179	122	0	0.46	19	0.46	0.00
Salal-HPS (6*115)	690	66	230	70	1.95	81	1.59	0.36
Tanakpur-HPS (3*31.4)	94	22	21	22	0.60	25	0.52	0.07
Uri-I HPS (4*120)	480	109	156	73	2.82	118	2.61	0.21
Uri-II HPS (4*60)	240	65	121	40	1.60	67	1.55	0.05
Dhauliganga-HPS (4*70)	280	210	210	0	0.86	36	0.81	0.06
Dulhasti-HPS (3*130)	390	257	265	0	2.43	101	2.30	0.13
Sewa-II HPS (3*40)	120	119	16	0	0.23	10	0.30	-0.07
Parbati 3 (4*130)	520	130	138	0	0.42	18	0.39	0.03
<b>Sub Total (C)</b>	<b>4065</b>	<b>2164</b>	<b>2260</b>	<b>205</b>	<b>15</b>	<b>612</b>	<b>14</b>	<b>1.05</b>
<b>D. SJVNL</b>								
NJPC (6*250)	1500	1615	1343	0	5.93	247	6.10	-0.17
Rampur HEP (6*88.67)	412	442	371	0	1.66	69	1.70	-0.04
<b>Sub Total (D)</b>	<b>1912</b>	<b>2057</b>	<b>1714</b>	<b>0</b>	<b>7.58</b>	<b>316</b>	<b>7.80</b>	<b>-0.21</b>
<b>E. THDC</b>								
Tehri HPS (4*250)	1000	988	957	0	8.61	359	8.60	0.01
Koteshwar HPS (4*100)	400	128	402	67	3.10	129	3.06	0.04
<b>Sub Total (E)</b>	<b>1400</b>	<b>1116</b>	<b>1359</b>	<b>67</b>	<b>11.71</b>	<b>488</b>	<b>11.66</b>	<b>0.05</b>
<b>F. BBMB</b>								
Bhakra HPS (2*108+3*126+5*157)	1379	529	936	400	13.19	550	12.69	0.50
Dehar HPS (6*165)	990	112	495	0	2.80	117	2.68	0.12
Pong HPS (6*66)	396	175	396	0	4.23	176	4.20	0.03
<b>Sub Total (F)</b>	<b>2765</b>	<b>815</b>	<b>1827</b>	<b>400</b>	<b>20.22</b>	<b>843</b>	<b>19.57</b>	<b>0.65</b>
<b>G. IPP(s)/JV(s)</b>								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.37	16	0.36	0.02
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	630	0	3.25	135	3.56	-0.31
Malana Stg-II HPS (2*50)	100	0	0	0	0.18	8	0.18	0.01
Shree Cement TPS (2*150)	300	0	146	101	3.04	127	3.04	0.00
Budhil HPS(IPP) (2*35)	70	0	0	0	0.14	6	0.15	-0.02
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>776</b>	<b>101</b>	<b>6.98</b>	<b>291</b>	<b>7.28</b>	<b>-0.30</b>
<b>H. Total Regional Entities (A-G)</b>	<b>25237</b>	<b>18809</b>	<b>16408</b>	<b>7406</b>	<b>231.96</b>	<b>9665</b>	<b>235.51</b>	<b>-3.55</b>

I. State Entities	Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average(Sentout MW)
Punjab	Guru Gobind Singh TPS (Ropar) (6*210)	1260	0	0	-0.13	-5
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	0	0	-0.02	-1
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	182	213	4.35	181
	Goidwal(GVK) (2*270)	540	0	0	-0.03	-1

	Rajpura (2*700)	1400	1320	660	26.80	1117
	Talwandi Saboo (3*660)	1980	616	616	18.13	755
	<b>Thermal (Total)</b>	<b>6560</b>	<b>2118</b>	<b>1489</b>	<b>49.10</b>	<b>2046</b>
	Total Hydro	1000	314	179	7.70	321
	Wind Power	0	0	0	0.00	0
	Biomass	288	0	0	0.17	7
	Solar	560	0	0	0.05	2
	<b>Renewable(Total)</b>	<b>848</b>	<b>0</b>	<b>0</b>	<b>0.22</b>	<b>9</b>
	<b>Total Punjab</b>	<b>8408</b>	<b>2432</b>	<b>1668</b>	<b>57.02</b>	<b>2376</b>
Haryana	Panipat TPS (2*210+2*250)	920	0	0	0.00	0
	DCRTPP (Yamuna nagar) (2*300)	600	463	467	11.00	458
	Faridabad GPS (NTPC)(2*137.75+1*156)	432	0	0	0.00	0
	RGTPP (khedar) (IPP) (2*600)	1200	1149	765	23.50	979
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1233	740	20.79	866
	<b>Thermal (Total)</b>	<b>4497</b>	<b>2845</b>	<b>1972</b>	<b>55.28</b>	<b>2303</b>
	Total Hydro	62	22	21	0.42	18
	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>2867</b>	<b>1993</b>	<b>55.71</b>	<b>2321</b>
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1152	935	25.50	1063
	suratgarh TPS (6*250)	1500	219	181	5.00	208
	Chabra TPS (4*250)	1000	921	776	20.30	846
	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	154	156	3.90	163
	RAPS A (NPC) (1*100+1*200)	300	190	190	4.30	179
	Barsingar (NLC) (2*125)	250	113	112	2.50	104
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	721	600	16.80	700
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	1129	829	24.10	1004
	Kawai(Adani) (2*660)	1320	607	548	13.80	575
	<b>Thermal (Total)</b>	<b>8876</b>	<b>5206</b>	<b>4327</b>	<b>116.20</b>	<b>4842</b>
	Total Hydro	550	219	227	5.00	208
	Wind power	4017	329	760	16.07	670
	Biomass	99	13	13	0.32	13
	Solar	1295	5	0	2.55	106
	Renewable/Others (Total)	5411	347	773	18.94	789
	<b>Total Rajasthan</b>	<b>14837</b>	<b>5772</b>	<b>5327</b>	<b>140.14</b>	<b>5839</b>
UP	Anpara TPS (3*210+2*500)	1630	1427	1392	32.89	1370
	Obra TPS (2*50+2*94+5*200)	1194	491	436	11.47	478
	Paricha TPS (2*110+2*220+2*250)	1160	658	502	16.68	695
	Panki TPS (2*105)	210	135	135	3.32	138
	Harduaganj TPS (1*60+1*105+2*250)	665	412	404	11.70	487
	Tanda TPS (NTPC) (4*110)	440	376	285	8.55	356
	Roza TPS (IPP) (4*300)	1200	1112	732	24.57	1024
	Anpara-C (IPP) (2*600)	1200	1058	616	20.52	855
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	195	194	5.67	236
	Anpara-D(2*500)	1000	590	578	14.00	584
	Lalitpur TPS(3*660)	1980	0	0	0.00	0
	Bara(2*660)	1320	882	727	20.66	861
	<b>Thermal (Total)</b>	<b>12449</b>	<b>7336</b>	<b>6001</b>	<b>170.02</b>	<b>7084</b>
	Vishnuparyag HPS (IPP)(4*110)	440	78	73	1.77	74
	Alakanada(4*82.5)	330	75	0	1.02	42
	Other Hydro	527	248	161	4.81	200
	Cogeneration	981	850	850	20.40	850
	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>8587</b>	<b>7085</b>	<b>198.01</b>	<b>8250</b>	
Uttarakhand	Other Hydro	1250	448	284	8.59	358
	Total Gas	225	101	103	2.43	101
	Wind Power	0	0	0	0.00	0
	Biomass	127	0	0	0.00	0
	Solar	20	0	0	0.06	2
	Small Hydro (< 25 MW)	180	0	0	0.00	0
	<b>Renewable(Total)</b>	<b>327</b>	<b>0</b>	<b>0</b>	<b>0.06</b>	<b>2</b>
<b>Total Uttarakhand</b>	<b>1802</b>	<b>549</b>	<b>387</b>	<b>11.07</b>	<b>461</b>	
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.01	0
	Delhi Gas Turbine (6x30 + 3x34)	282	79	80	1.93	80
	Pragati Gas Turbine (2x104+ 1x122)	330	160	140	3.72	155
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	250	280	6.64	276
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0
	<b>Thermal (Total)</b>	<b>2917</b>	<b>489</b>	<b>500</b>	<b>12.27</b>	<b>511</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>489</b>	<b>500</b>	<b>12.27</b>	<b>511</b>
HP	Baspa HPS (IPP) (3*100)	300	0	0	1.06	44
	Malana HPS (IPP) (2*43)	86	0	0	0.22	9
	Other Hydro	372	45	26	1.69	70
	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	56	42	1.14	48
	<b>Renewable(Total)</b>	<b>486</b>	<b>56</b>	<b>42</b>	<b>1.14</b>	<b>48</b>
	<b>Total HP</b>	<b>1244</b>	<b>101</b>	<b>68</b>	<b>4.11</b>	<b>171</b>
	J & K	Baqilhar HPS (IPP) (3*150+3*150)	900	117	118	2.82
Other Hydro/IPP(including 98 MW Small Hydro)		308	80	18	0.95	40
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>197</b>	<b>136</b>	<b>4</b>	<b>157</b>

Total State Control Area Generation	50078	20994	17164	482.10	20088
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		8149	6999	206.33	8597
Total Regional Availability(Gross)	75315	45550	31570	920.40	38350

**IV. Total Hydro Generation:**

Regional Entities Hydro	12234	8487	671	60.63	2526
State Control Area Hydro	7163	1803	1252	37.18	1653
Total Regional Hydro	19397	10289	1924	97.81	4179

**V. Total Renewable Generation:**

Regional Entities Renewable	30	0	0	0.12	5
State Control Area Renewable	7356	403	815	20.36	848
Total Regional Renewable	7386	403	815	20.48	853

**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	-500	50	500	0.08	10.79	-10.71
765 KV Gwalior-Agra (D/C)	2609	2278	3270	0	62.50	0.00	62.50
400 KV Zerda-Kankroli	82	-177	82	177	0.00	1.04	-1.04
400 KV Zerda-Bhimnal	135	-41	241	99	1.38	0.00	1.38
220 KV Auraiya-Malanpur	-85	-75	0	101	0.00	1.46	-1.46
220 KV Badod-Kota/Morak	30	-33	71	42	0.02	0.00	0.02
Mundra-Mohinderghar(HVDC Bipole)	2503	2097	2507	0.00	59.42	0.00	59.42
400 KV RAPPCC-Sujalpur	400	316	530	0	8.84	0.00	8.84
400 KV Vindhychal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	1330	1191	1568	0	34.12	0.00	34.12
<b>Sub Total WR</b>	<b>6504</b>	<b>5056</b>			<b>166.35</b>	<b>13.29</b>	<b>153.06</b>
400 kV Sasaram - Varanasi	204	206	220	0	5.02	0.00	5.02
400 kV Sasaram - Allahabad	35	34	51	0	0.82	0.00	0.82
400 KV MZP- GKP (D/C)	66	361	331	0	4.89	0.00	4.89
400 KV Patna-Balia(D/C) X 2	647	617	903	0	17.04	0.00	17.04
400 KV B'Sharif-Balia (D/C)	23	123	239	0	3.08	0.00	3.08
765 KV Gaya-Balia	184	238	290	0	5.79	0.00	5.79
765 KV Gaya-Varanasi (D/C)	426	422	750	0	13.75	0.00	13.75
220 KV Pusaali-Sahupuri	92	94	156	0	2.52	0.00	2.52
132 KV K'nasa-Sahupuri	0	0	0	0	0.00	0.51	-0.51
132 KV Son Ngr-Rihand	-18	-24	0	26	0.00	0.43	-0.43
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-68	-63	157	90	0.00	0.09	-0.09
400 KV Barh -GKP (D/C)	520	450	560	0	11.75	0.00	11.75
400 kV B'Sharif - Varanasi (D/C)	34	-15	201	48	1.69	0.00	1.69
<b>Sub Total ER</b>	<b>2145</b>	<b>2443</b>			<b>66.35</b>	<b>1.03</b>	<b>65.32</b>
+/- 800 KV BiswanathChariali-Agra	-500	-500	0	500.00	0.00	12.05	-12.05
<b>Sub Total NER</b>	<b>-500</b>	<b>-500</b>			<b>0.00</b>	<b>12.05</b>	<b>-12.05</b>
<b>Total IR Exch</b>	<b>8149</b>	<b>6999</b>			<b>232.70</b>	<b>26.36</b>	<b>206.33</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
42.62	0.44	43.06	1.04	0.05	27.10	0.00	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
71.20	143.41	214.61	53.27	153.06	206.33	-17.93	9.65	-8.28

**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	-37	-38	0	42	0	1	-0.87

**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	0.07	6.40	43.51	69.90	18.11	5.16	0.47	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)		
50.23	18.02	49.79	7.16	50.01	0.043	0.066	0.00	0.00	30.10

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

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Volta ge Deviat
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV	
Rihand	400	407	1:03	397	7:41	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	418	4:01	400	9:40	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	421	0:59	397	9:47	0.0	0.0	1.2	0.0	1.2
Kanpur	400	417	0:59	395	9:37	0.0	0.0	0.0	0.0	0.0
Dadri	400	427	3:59	401	9:38	0.0	0.0	22.2	0.0	22.2
Ballabgarh	400	430	4:00	404	9:37	0.0	0.0	33.0	0.0	33.0
Bawana	400	425	3:44	401	9:38	0.0	0.0	19.7	0.0	19.7
Bassi	400	425	4:00	396	9:35	0.0	0.0	2.3	0.0	2.3
Hissar	400	423	4:03	397	12:43	0.0	0.0	1.4	0.0	1.4
Moga	400	415	19:38	402	12:15	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	427	3:03	405	12:15	0.0	0.0	27.6	0.0	27.6
Nalagarh	400	430	3:12	412	12:16	0.0	0.0	39.4	0.0	39.4
Kishenpur	400	419	2:28	397	12:14	0.0	0.0	0.0	0.0	0.0
Wagoora	400	412	17:49	367	10:34	36.3	85.6	0.0	0.0	36.3
Amritsar	400	429	3:07	406	12:14	0.0	0.0	33.8	0.0	33.8
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	424	2:27	413	5:49	0.0	0.0	22.5	0.0	22.5
Rishikesh	400	422	4:00	391	9:42	0.0	0.0	4.4	0.0	4.4

**VIII(B). Voltage profile 765 kV**

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Volta ge Deviat
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV	
Fatehpur	765	772	20:28	734	9:47	0.0	4.3	0.0	0.0	0.0
Balia	765	787	4:02	749	9:47	0.0	0.0	0.0	0.0	0.0
Moga	765	792	19:43	764	9:38	0.0	0.0	0.0	0.0	0.0

Agra	765	788	4:01	746	9:38	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	809	3:04	763	9:38	0.0	0.0	20.6	0.0	20.6
Unnao	765	775	4:02	730	9:46	0.0	23.9	0.0	0.0	0.0
Lucknow	765	800	4:00	758	9:47	0.0	0.0	0.0	0.0	0.0
Meerut	765	807	20:26	762	9:38	0.0	0.0	11.6	0.0	11.6
Jhatikara	765	806	4:01	758	9:38	0.0	0.0	10.5	0.0	10.5
Bareilly 765 kV	765	796	4:02	750	9:38	0.0	0.0	0.0	0.0	0.0
Anta	765	796	3:58	758	9:33	0.0	0.0	0.0	0.0	0.0
Phagi	765	804	4:00	754	9:42	0.0	0.0	0.6	0.0	0.6

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	485.75	610.73	498.69	1041.47	175.42	398.08
Pong	426.72	384.05	406.73	388.64	408.92	464.36	58.25	287.50
Tehri	829.79	740.04	803.30	671.47	796.70	555.70	37.06	208.00
Koteshwar	612.50	598.50	610.47	4.80	611.03	4.95	208.00	204.07
Chamera-I	760.00	748.75	759.32	0.00	0.00	0.00	39.53	48.32
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	503.68	1.80	496.65	0.63	33.30	67.18

\* 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	-547	1	0	-621	-104	0	-18.56	0.04	-18.52
Delhi	-94	-571	0	-275	288	0	-3.94	3.67	-0.26
Haryana	-854	377	0	-517	287	0	-15.11	6.62	-8.49
HP	478	72	0	345	-107	0	11.88	-0.54	11.34
J&K	608	280	0	605	91	0	15.41	5.09	20.50
CHD	0	0	0	0	0	0	0.00	0.20	0.20
Rajasthan	303	483	0	146	387	0	12.52	9.93	22.45
UP	98	0	0	-118	-100	0	-8.57	-1.62	-10.20
Uttarakhand	286	135	0	130	197	0	4.67	5.22	9.89
<b>Total</b>	<b>278</b>	<b>777</b>	<b>0</b>	<b>-307</b>	<b>940</b>	<b>0</b>	<b>-1.69</b>	<b>28.61</b>	<b>26.92</b>

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-537	-1271	435	-518	0	0
Delhi	-20	-307	906	-589	0	0
Haryana	-517	-854	382	-312	0	0
HP	690	331	126	-428	0	0
J&K	742	590	449	-108	0	0
CHD	0	0	48	-26	0	0
Rajasthan	1168	142	871	-278	0	0
UP	155	-959	0	-100	0	0
Uttarakhand	294	91	409	60	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	3.13%
ER	0.00%
Simultaneous	0.00%

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

WR	21.53%
ER	0.00%
Simultaneous	13.89%

(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	17
Rajasthan	1	14
Delhi	4	33
UP	2	16
Uttarakhand	3	22
HP	2	17
J & K	6	61
Chandigarh	3	42

**XIII. System Constraints:**

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

**XV. Weather Conditions For 13.01.2017 :**

XVI. Synchronisation of new generating units :

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

0

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 : 13.01.2017

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER