

**पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड**

(भारत सरकार का उद्यम)

**उत्तरी क्षेत्रीय भार प्रेषण केंद्र**

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 09.01.2017

Date of Reporting : 10.01.2017



**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
40006	1756	41762	49.98	28103	448	28550	49.99	843.90	16.24

\* 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	45.15	7.94	0.23	53.31	40.12	40.64	0.51	93.95	0.00
Haryana	40.10	0.53	0.00	40.64	70.52	69.32	-1.20	109.95	2.95
Rajasthan	112.29	5.07	21.90	139.26	67.19	69.35	2.16	208.60	0.00
Delhi	12.16		0.00	12.16	48.64	49.34	0.70	61.49	0.06
UP	178.69	6.04	0.00	184.74	84.45	83.10	-1.35	267.83	1.08
Uttarakhand		9.41	0.00	16.52	16.50	15.60	-0.90	32.12	0.19
HP		4.40	1.14	4.40	19.58	18.85	-0.74	23.24	1.20
J & K		3.83	0.00	3.83	39.02	39.26	0.23	43.08	10.77
Chandigarh				0.00	3.69	3.63	-0.06	3.63	0.00
<b>Total</b>	<b>388.39</b>	<b>37.22</b>	<b>23.27</b>	<b>454.84</b>	<b>389.70</b>	<b>389.07</b>	<b>-0.64</b>	<b>843.90</b>	<b>16.24</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	5165	0	51	-621	2828	0	-142	-546	5165	19:00	0
Haryana	5720	351	-30	-199	2976	0	-113	-619	5973	7:00	0
Rajasthan	9625	0	141	518	7546	0	16	518	9733	13:00	0
Delhi	3061	50	-39	18	1382	0	-128	-489	3678	11:00	0
UP	11318	800	-151	-225	10098	0	268	77	12714	8:00	30
Uttarakhand	1709	0	-4	138	990	0	-115	72	1745	9:00	0
HP	1201	50	-93	280	601	50	-81	445	1296	10:00	50
J&K	2020	505	-53	764	1591	398	-35	772	2050	20:00	513
Chandigarh	187	0	-14	0	91	0	1	0	218	9:00	0
<b>Total</b>	<b>40006</b>	<b>1756</b>	<b>-193</b>	<b>671</b>	<b>28103</b>	<b>448</b>	<b>-329</b>	<b>231</b>	<b>40006</b>	<b>19:00</b>	<b>1756</b>

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

Diversity is 1.06

UI [OD:(+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	1900	2048	1515	42.73	1780	42.60	0.13
Rihand I STPS (2*500)	1000	943	997	707	20.50	854	20.19	0.31
Rihand II STPS (2*500)	1000	958	1012	729	20.83	868	20.56	0.27
Rihand III STPS (2*500)	1000	958	1010	692	20.68	862	20.54	0.14
Dadri I STPS (4*210)	840	815	159	164	3.98	166	4.07	-0.09
Dadri II STPS (2*490)	980	980	374	345	9.17	382	9.80	-0.63
Unchahar I TPS (2*210)	420	407	284	266	7.10	296	7.84	-0.75
Unchahar II TPS (2*210)	420	405	303	283	7.12	297	7.68	-0.56
Unchahar III TPS (1*210)	210	203	138	137	3.46	144	3.91	-0.45
ISTPP (Jhajihar) (3*500)	1500	1440	0	0	0.00	0	0.00	0.00
Dadri GPS (4*130.19+2*154.51)	830	825	154	157	3.65	152	4.16	-0.51
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	1	0	0	0.03	1	0.02	0.01
Singrauli Solar(15)	15	1	0	0	0.02	1	0.04	-0.01
KHEP(4*200)	800	870	863	0	2.59	108	2.61	-0.02
<b>Sub Total (A)</b>	<b>12112</b>	<b>11759</b>	<b>7342</b>	<b>4995</b>	<b>142</b>	<b>5911</b>	<b>144</b>	<b>-2.16</b>
<b>B. NPC</b>								
NAPS (2*220)	440	419	458	456	10.05	419	10.06	0.00
RAPS- B (2*220)	440	385	430	432	9.28	386	9.24	0.04
RAPS- C (2*220)	440	220	239	239	5.07	211	5.28	-0.21
<b>Sub Total (B)</b>	<b>1320</b>	<b>1024</b>	<b>1127</b>	<b>1127</b>	<b>24.39</b>	<b>1016</b>	<b>24.58</b>	<b>-0.18</b>
<b>C. NHPC</b>								
Chamera I HPS (3*180)	540	540	540	0	2.28	95	2.10	0.18
Chamera II HPS (3*100)	300	301	305	0	0.97	40	0.83	0.15
Chamera III HPS (3*77)	231	167	160	0	0.52	22	0.50	0.02
Bairasuli HPS(3*60)	180	179	110	0	0.56	23	0.55	0.02
Salal-HPS (6*115)	690	79	230	40	2.28	95	1.91	0.38
Tanakpur-HPS (3*31.4)	94	24	28	32	0.66	27	0.58	0.08
Uri-I HPS (4*120)	480	114	230	40	3.05	127	2.73	0.32
Uri-II HPS (4*60)	240	76	121	40	1.86	78	1.83	0.03
Dhauliganga-HPS (4*70)	280	210	208	0	0.80	33	0.74	0.07
Dulhasti-HPS (3*130)	390	257	268	0	2.34	97	2.20	0.14
Sewa-II HPS (3*40)	120	119	0	0	0.35	15	0.37	-0.01
Parbati 3 (4*130)	520	130	132	0	0.41	17	0.39	0.02
<b>Sub Total (C)</b>	<b>4065</b>	<b>2197</b>	<b>2332</b>	<b>152</b>	<b>16</b>	<b>671</b>	<b>15</b>	<b>1.38</b>
<b>D.SJVNL</b>								
NJPC (6*250)	1500	1615	1613	0	6.63	276	6.48	0.15
Rampur HEP (6*88.67)	412	320	371	0	1.83	76	1.77	0.06
<b>Sub Total (D)</b>	<b>1912</b>	<b>1935</b>	<b>1984</b>	<b>0</b>	<b>8.46</b>	<b>352</b>	<b>8.25</b>	<b>0.21</b>
<b>E. THDC</b>								
Tehri HPS (4*250)	1000	996	973	0	8.76	365	8.79	-0.02
Koteshwar HPS (4*100)	400	128	392	71	3.10	129	3.06	0.04
<b>Sub Total (E)</b>	<b>1400</b>	<b>1124</b>	<b>1365</b>	<b>71</b>	<b>11.86</b>	<b>494</b>	<b>11.85</b>	<b>0.01</b>
<b>F. BBMB</b>								
Bhakra HPS (2*108+3*126+5*157)	1379	529	938	400	13.26	552	12.70	0.56
Dehar HPS (6*165)	990	121	495	0	2.84	118	2.90	-0.06
Pong HPS (6*66)	396	149	396	0	3.60	150	3.57	0.03
<b>Sub Total (F)</b>	<b>2765</b>	<b>799</b>	<b>1829</b>	<b>400</b>	<b>19.70</b>	<b>821</b>	<b>19.17</b>	<b>0.53</b>
<b>G. IPP(s)/JV(s)</b>								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.42	17	0.40	0.02
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	615	0	3.40	142	3.56	-0.16
Malana Stg-II HPS (2*50)	100	0	0	0	0.24	10	0.23	0.01
Shree Cement TPS (2*150)	300	0	111	83	2.54	106	2.61	-0.06
Budhil HPS(IPP) (2*35)	70	0	0	0	0.14	6	0.15	-0.01
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>726</b>	<b>83</b>	<b>6.73</b>	<b>281</b>	<b>6.94</b>	<b>-0.21</b>
<b>H. Total Regional Entities (A-G)</b>	<b>25237</b>	<b>18836</b>	<b>16705</b>	<b>6828</b>	<b>229.11</b>	<b>9546</b>	<b>229.52</b>	<b>-0.41</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	-6
	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	206	203	4.67	195
	Goidwal(GVK) (2*270)	540	0	0	-0.03	-1

	Rajpura (2*700)	1400	1120	660	24.82	1034
	Talwandi Saboo (3*660)	1980	616	616	15.84	660
	<b>Thermal (Total)</b>	<b>6560</b>	<b>1942</b>	<b>1479</b>	<b>45.15</b>	<b>1881</b>
	Total Hydro	1000	404	181	7.94	331
	Wind Power	0	0	0	0.00	0
	Biomass	288	9	9	0.22	9
	Solar	560	0	0	0.01	0
	<b>Renewable(Total)</b>	<b>848</b>	<b>9</b>	<b>9</b>	<b>0.23</b>	<b>9</b>
	<b>Total Punjab</b>	<b>8408</b>	<b>2355</b>	<b>1669</b>	<b>53.31</b>	<b>2221</b>
Haryana	Panipat TPS (2*210+2*250)	920	224	207	5.15	215
	DCRTPP (Yamuna nagar) (2*300)	600	380	229	7.35	306
	Faridabad GPS (NTPC)(2*137.75+1*156)	432	0	0	0.00	0
	RGTPP (khedar) (IPP) (2*600)	1200	107	775	13.28	553
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	940	380	14.33	597
	<b>Thermal (Total)</b>	<b>4497</b>	<b>1651</b>	<b>1591</b>	<b>40.10</b>	<b>1671</b>
	Total Hydro	62	22	18	0.53	22
	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>1673</b>	<b>1609</b>	<b>40.64</b>	<b>1693</b>
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1042	880	22.97	957
	suratgarh TPS (6*250)	1500	184	181	4.57	190
	Chabra TPS (4*250)	1000	679	587	16.03	668
	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	159	156	3.86	161
	RAPS A (NPC) (1*100+1*200)	300	190	190	4.29	179
	Barsingar (NLC) (2*125)	250	227	222	5.15	215
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	837	446	15.46	644
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	1137	820	22.69	945
	Kawai(Adani) (2*660)	1320	741	743	17.27	720
	<b>Thermal (Total)</b>	<b>8876</b>	<b>5196</b>	<b>4225</b>	<b>112.29</b>	<b>4679</b>
	Total Hydro	550	195	198	5.07	211
	Wind power	4017	425	1283	21.59	899
	Biomass	99	13	13	0.32	13
	Solar	1295	0	0	0.00	0
	Renewable/Others (Total)	5411	438	1296	21.90	913
	<b>Total Rajasthan</b>	<b>14837</b>	<b>5829</b>	<b>5719</b>	<b>139.26</b>	<b>5802</b>
UP	Anpara TPS (3*210+2*500)	1630	1078	1082	31.01	1292
	Obra TPS (2*50+2*94+5*200)	1194	445	290	9.97	415
	Paricha TPS (2*110+2*220+2*250)	1160	647	655	16.73	697
	Panki TPS (2*105)	210	134	135	3.25	135
	Harduaganj TPS (1*60+1*105+2*250)	665	397	403	10.15	423
	Tanda TPS (NTPC) (4*110)	440	273	273	7.48	312
	Roza TPS (IPP) (4*300)	1200	746	833	19.97	832
	Anpara-C (IPP) (2*600)	1200	648	324	18.81	784
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	253	280	6.40	267
	Anpara-D(2*500)	1000	596	515	14.84	618
	Lalitpur TPS(3*660)	1980	0	0	0.00	0
	Bara(2*660)	1320	738	724	19.69	821
	<b>Thermal (Total)</b>	<b>12449</b>	<b>5955</b>	<b>5514</b>	<b>158.29</b>	<b>6596</b>
	Vishnuparyag HPS (IPP)(4*110)	440	0	78	1.63	68
	Alakanada(4*82.5)	330	0	0	1.16	48
	Other Hydro	527	121	159	3.26	136
	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>6926</b>	<b>6601</b>	<b>184.74</b>	<b>7697</b>	
Uttarakhand	Other Hydro	1250	557	364	9.41	392
	Total Gas	225	290	298	7.06	294
	Wind Power	0	0	0	0.00	0
	Biomass	127	0	0	0.00	0
	Solar	20	0	0	0.04	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>0.04</b>	<b>2</b>
	<b>Total Uttarakhand</b>	<b>1802</b>	<b>847</b>	<b>662</b>	<b>16.52</b>	<b>688</b>
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	82	82	1.95	81
	Pragati Gas Turbine (2x104+ 1x122)	330	160	163	3.90	162
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	251	280	6.31	263
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0
	<b>Thermal (Total)</b>	<b>2917</b>	<b>493</b>	<b>525</b>	<b>12.16</b>	<b>507</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>493</b>	<b>525</b>	<b>12.16</b>	<b>507</b>
HP	Baspa HPS (IPP) (3*100)	300	0	0	1.08	45
	Malana HPS (IPP) (2*43)	86	0	0	0.23	10
	Other Hydro	372	109	45	1.94	81
	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	54	44	1.14	47
	<b>Renewable(Total)</b>	<b>486</b>	<b>54</b>	<b>44</b>	<b>1.14</b>	<b>47</b>
	<b>Total HP</b>	<b>1244</b>	<b>163</b>	<b>90</b>	<b>4.40</b>	<b>183</b>
	J & K	Baqilhar HPS (IPP) (3*150+3*150)	900	120	120	2.88
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>200</b>	<b>138</b>	<b>4</b>	<b>160</b>	

Total State Control Area Generation	50078	18486	17013	454.84	18952
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		7329	6112	200.77	8366
Total Regional Availability(Gross)	75315	42521	29952	884.73	36864

**IV. Total Hydro Generation:**

Regional Entities Hydro	12234	8988	623	62.76	2615
State Control Area Hydro	7163	1952	1524	37.22	1847
Total Regional Hydro	19397	10941	2147	99.98	4462

**V. Total Renewable Generation:**

Regional Entities Renewable	30	0	0	0.07	3
State Control Area Renewable	7356	501	1349	23.31	971
Total Regional Renewable	7386	501	1349	23.38	974

**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)	-300	-100	50	500	0.11	0.00	0.11
765 KV Gwalior-Agra (D/C)	2485	2009	3116	0	58.69	0.00	58.69
400 KV Zerda-Kankroli	26	-131	93	170	0.00	0.82	-0.82
400 KV Zerda-Bhimnal	89	-66	200	128	0.95	0.00	0.95
220 KV Auraiya-Malanpur	-62	-43	0	91	0.00	1.37	-1.37
220 KV Badod-Kota/Morak	-42	-4	23	56	0.00	0.70	-0.70
Mundra-Mohinderghar(HVDC Bipole)	2503	1998	2505	0.00	56.98	0.00	56.98
400 KV RAPPCC-Sujalpur	340	120	444	0	6.43	0.00	6.43
400 KV Vindhychal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	1055	899	1419	0	29.17	0.00	29.17
<b>Sub Total WR</b>	<b>6094</b>	<b>4682</b>			<b>152.33</b>	<b>2.89</b>	<b>149.44</b>
400 kV Sasaram - Varanasi	196	190	227	0	4.96	0.00	4.96
400 kV Sasaram - Allahabad	-46	-48	148	54	5.63	1.19	4.43
400 KV MZP- GKP (D/C)	-46	158	307	90	3.16	0.00	3.16
400 KV Patna-Balia(D/C) X 2	617	606	781	0	15.41	0.00	15.41
400 KV B'Sharif-Balia (D/C)	15	92	167	0	2.06	0.00	2.06
765 KV Gaya-Balia	179	235	341	0	6.06	0.00	6.06
765 KV Gaya-Varanasi (D/C)	361	349	755	0	12.60	0.00	12.60
220 KV Pusauli-Sahupuri	80	84	148	0	5.63	0.00	5.63
132 KV K'nasa-Sahupuri	0	0	0	0	0.48	0.51	-0.51
132 KV Son Ngr-Rihand	-25	-23	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	-114	-111	98	136	0.00	1.06	-1.06
400 KV Barh -GKP (D/C)	458	400	518	0	10.72	0.00	10.72
400 kV B'Sharif - Varanasi (D/C)	60	-2	120	94	0.16	0.00	0.16
<b>Sub Total ER</b>	<b>1735</b>	<b>1930</b>			<b>66.86</b>	<b>3.27</b>	<b>63.10</b>
+/- 800 KV BiswanathChariali-Agra	-500	-500	0	500.00	0.00	11.77	-11.77
<b>Sub Total NER</b>	<b>-500</b>	<b>-500</b>			<b>0.00</b>	<b>11.77</b>	<b>-11.77</b>
<b>Total IR Exch</b>	<b>7329</b>	<b>6112</b>			<b>219.19</b>	<b>17.93</b>	<b>200.77</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
0.00	0.00	0.00	0.00	0.00	0.00	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
0.00	0.00	0.00	51.33	149.44	200.77	51.33	149.44	200.77

**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	-28	-30	0	32	0	1	-0.74

**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	0.02	3.92	46.28	73.47	17.89	4.79	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)		
50.20	18.01	49.79	12.10	50.00	0.037	0.00	0.00	26.53	

**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	486.51	627.57	499.40	1064.89	171.54	397.71
Pong	426.72	384.05	407.09	407.15	409.51	484.26	70.54	245.51
Tehri	829.79	740.04	804.95	704.00	798.60	585.00	37.49	209.00
Koteshwar	612.50	598.50	610.06	4.69	611.00	4.95	209.00	204.18
Chamera-I	760.00	748.75	759.60	0.00	0.00	0.00	53.75	61.67
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	503.96	2.05	497.19	3.46	35.03	88.97

\* 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	0	0	-18.56	1.21	-17.35
Delhi	-94	-395	0	-273	291	0	-3.91	3.16	-0.75
Haryana	-854	235	0	-517	318	0	-15.11	5.95	-9.15
HP	430	15	0	355	-75	0	11.89	-1.62	10.27
J&K	608	164	0	605	159	0	15.22	3.35	18.57
CHD	0	0	0	0	0	0	0.00	0.25	0.25
Rajasthan	-7	525	0	-7	525	0	7.26	13.05	20.31
UP	77	0	0	-125	-100	0	-8.68	-1.62	-10.29
Uttarakhand	191	-118	0	178	-40	0	4.47	0.55	5.02
<b>Total</b>	<b>-197</b>	<b>428</b>	<b>0</b>	<b>-407</b>	<b>1078</b>	<b>0</b>	<b>-7.41</b>	<b>24.29</b>	<b>16.88</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	-183	0	0
Delhi	-20	-309	684	-396	0	0
Haryana	-517	-854	345	-180	0	0
HP	717	331	62	-541	0	0
J&K	694	590	280	-124	0	0
CHD	0	0	48	-36	0	0
Rajasthan	864	-7	871	465	0	0
UP	137	-915	0	-100	0	0
Uttarakhand	221	86	173	-138	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	2.43%
ER	0.00%
Simultaneous	0.00%

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

WR	10.07%
ER	0.00%
Simultaneous	1.74%

(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	17
Haryana	2	16
Rajasthan	1	23
Delhi	5	28
UP	1	18
Uttarakhand	3	35
HP	1	20
J & K	1	16
Chandigarh	3	36

**XIII. System Constraints:**

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

**XV. Weather Conditions For 09.01.2017 :**

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 : 09.01.2017

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER