

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 10.01.2017

Date of Reporting : 11.01.2017



### 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
42483	1735	44218	49.98	28992	466	29458	49.99	865.41	15.74

\* 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	48.32	7.86	0.33	56.51	39.93	40.95	1.02	97.46	0.00
Haryana	50.11	0.46	0.00	50.57	68.31	67.18	-1.12	117.75	0.00
Rajasthan	114.51	5.14	11.99	131.64	74.08	77.21	3.13	208.85	3.12
Delhi	12.15		0.00	12.15	50.13	51.15	1.02	63.29	0.04
UP	179.16	7.15	0.00	186.31	82.06	82.75	0.69	269.06	0.29
Uttarakhand		9.02	0.00	16.14	19.02	19.08	0.06	35.22	0.00
HP		5.22	1.02	5.22	20.41	20.44	0.03	25.66	1.20
J & K		3.66	0.00	3.66	38.73	40.73	2.00	44.39	11.10
Chandigarh				0.00	3.69	3.72	0.03	3.72	0.00
<b>Total</b>	<b>404.25</b>	<b>38.51</b>	<b>13.34</b>	<b>462.20</b>	<b>396.36</b>	<b>403.22</b>	<b>6.85</b>	<b>865.41</b>	<b>15.74</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	5250	0	-88	-621	2900	0	44	-545	5250	19:00	0
Haryana	6379	0	-175	-168	3415	0	53	-488	6379	19:00	0
Rajasthan	9450	373	113	571	7689	0	201	578	9450	19:00	373
Delhi	3192	0	6	-22	1445	0	-86	-481	3777	11:00	2
UP	12838	800	70	-221	9882	0	-64	91	12838	19:00	800
Uttarakhand	1904	0	53	116	1167	0	-47	136	1904	19:00	0
HP	1234	50	-101	264	741	50	-51	531	1234	19:00	50
J&K	2047	512	112	773	1663	416	25	801	2169	20:00	542
Chandigarh	190	0	-13	0	90	0	-7	0	222	9:00	0
<b>Total</b>	<b>42483</b>	<b>1735</b>	<b>-24</b>	<b>691</b>	<b>28992</b>	<b>466</b>	<b>69</b>	<b>625</b>	<b>42483</b>	<b>1</b>	<b>1735</b>

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

Diversity is 1.02

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	1894	2059	1705	43.65	1819	43.06	0.59
Rihand I STPS (2*500)	1000	942	985	746	20.66	861	20.74	-0.08
Rihand II STPS (2*500)	1000	958	1037	774	21.40	891	21.19	0.20
Rihand III STPS (2*500)	1000	958	954	771	21.49	895	21.28	0.21
Dadri I STPS (4*210)	840	815	192	144	3.84	160	3.90	-0.07
Dadri II STPS (2*490)	980	980	457	337	9.25	385	9.93	-0.69
Unchahar I TPS (2*210)	420	407	354	287	7.27	303	7.97	-0.70
Unchahar II TPS (2*210)	420	405	357	307	7.20	300	7.73	-0.52
Unchahar III TPS (1*210)	210	203	192	138	3.58	149	4.08	-0.50
ISTPP (Jhajjar) (3*500)	1500	1440	0	0	0.00	0	0.00	0.00
Dadri GPS (4*130.19+2*154.51)	830	823	144	146	3.61	151	4.06	-0.45
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	0.00	0	0.03	-0.03
Singrauli Solar(15)	15	2	0	0	0.03	1	0.06	-0.02
KHEP(4*200)	800	870	547	0	2.62	109	2.61	0.01
<b>Sub Total (A)</b>	<b>12112</b>	<b>11752</b>	<b>7278</b>	<b>5355</b>	<b>145</b>	<b>6026</b>	<b>147</b>	<b>-2.05</b>
<b>B. NPC</b>								
NAPS (2*220)	440	417	455	452	10.05	419	10.01	0.04
RAPS- B (2*220)	440	384	428	432	9.30	388	9.22	0.09
RAPS- C (2*220)	440	220	240	239	5.06	211	5.28	-0.22
<b>Sub Total (B)</b>	<b>1320</b>	<b>1021</b>	<b>1123</b>	<b>1123</b>	<b>24.42</b>	<b>1017</b>	<b>24.50</b>	<b>-0.09</b>
<b>C. NHPC</b>								
Chamera I HPS (3*180)	540	540	547	0	1.80	75	1.62	0.18
Chamera II HPS (3*100)	300	301	307	0	1.07	45	0.98	0.10
Chamera III HPS (3*77)	231	167	159	0	0.53	22	0.50	0.03
Bairasuli HPS(3*60)	180	179	181	0	0.41	17	0.40	0.01
Salal-HPS (6*115)	690	77	220	62	2.17	90	1.85	0.32
Tanakpur-HPS (3*31.4)	94	20	31	27	0.59	25	0.49	0.10
Uri-I HPS (4*120)	480	111	235	43	2.92	122	2.67	0.25
Uri-II HPS (4*60)	240	74	119	80	1.90	79	1.78	0.12
Dhauliganga-HPS (4*70)	280	210	208	0	0.86	36	0.81	0.06
Dulhasti-HPS (3*130)	390	257	259	0	2.36	98	2.20	0.16
Sewa-II HPS (3*40)	120	119	0	0	0.33	14	0.37	-0.03
Parbati 3 (4*130)	520	130	131	0	0.42	17	0.39	0.03
<b>Sub Total (C)</b>	<b>4065</b>	<b>2186</b>	<b>2397</b>	<b>212</b>	<b>15</b>	<b>641</b>	<b>14</b>	<b>1.32</b>
<b>D.SJVNL</b>								
NJPC (6*250)	1500	1615	1589	0	6.10	254	6.10	0.00
Rampur HEP (6*68.67)	412	395	372	0	1.65	69	1.66	-0.01
<b>Sub Total (D)</b>	<b>1912</b>	<b>2010</b>	<b>1961</b>	<b>0</b>	<b>7.75</b>	<b>323</b>	<b>7.76</b>	<b>-0.02</b>
<b>E. THDC</b>								
Tehri HPS (4*250)	1000	996	960	0	8.89	370	8.90	-0.01
Koteshwar HPS (4*100)	400	128	299	73	3.06	127	3.06	0.00
<b>Sub Total (E)</b>	<b>1400</b>	<b>1124</b>	<b>1259</b>	<b>73</b>	<b>11.94</b>	<b>498</b>	<b>11.96</b>	<b>-0.02</b>
<b>F. BBMB</b>								
Bhakra HPS (2*108+3*126+5*157)	1379	523	939	400	13.21	551	12.56	0.65
Dehar HPS (6*165)	990	117	495	0	2.89	120	2.80	0.08
Pong HPS (6*66)	396	141	396	0	3.27	136	3.39	-0.12
<b>Sub Total (F)</b>	<b>2765</b>	<b>781</b>	<b>1830</b>	<b>400</b>	<b>19.37</b>	<b>807</b>	<b>18.75</b>	<b>0.61</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	35	630	3.46	144	3.56	-0.09
Malana Stg-II HPS (2*50)	100	0	0	0	0.21	9	0.19	0.02
Shree Cement TPS (2*150)	300	0	109	87	2.46	103	2.44	0.02
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>144</b>	<b>717</b>	<b>6.64</b>	<b>277</b>	<b>6.70</b>	<b>-0.05</b>
<b>H. Total Regional Entities (A-G)</b>	<b>25237</b>	<b>18873</b>	<b>15992</b>	<b>7879</b>	<b>230.11</b>	<b>9588</b>	<b>230.40</b>	<b>-0.28</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	-0.14	-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	204	203	4.60	192
	Goinawal(GVK) (2*270)	540	0	0	-0.02	-1

	Rajpura (2*700)	1400	1320	660	25.95	1081	
	Talwandi Saboo (3*660)	1980	716	616	17.95	748	
	<b>Thermal (Total)</b>	<b>6560</b>	<b>2240</b>	<b>1479</b>	<b>48.32</b>	<b>2014</b>	
	Total Hydro	1000	382	188	7.86	327	
	Wind Power	0	0	0	0.00	0	
	Biomass	288	0	0	0.30	12	
	Solar	560	0	0	0.03	1	
	<b>Renewable(Total)</b>	<b>848</b>	<b>0</b>	<b>0</b>	<b>0.33</b>	<b>14</b>	
	<b>Total Punjab</b>	<b>8408</b>	<b>2622</b>	<b>1667</b>	<b>56.51</b>	<b>2355</b>	
Haryana	Panipat TPS (2*210+2*250)	920	204	202	4.99	208	
	DCRTPP (Yamuna nagar) (2*300)	600	569	473	11.39	475	
	Faridabad GPS (NTPC)(2*137.75+1*156)	432	0	0	0.00	0	
	RGTPP (khedar) (IPP) (2*600)	1200	578	384	11.43	476	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP) (2*660)	1320	1145	738	22.31	930	
	<b>Thermal (Total)</b>	<b>4497</b>	<b>2496</b>	<b>1797</b>	<b>50.11</b>	<b>2088</b>	
	Total Hydro	62	18	13	0.46	19	
	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>2514</b>	<b>1810</b>	<b>50.57</b>	<b>2107</b>	
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1159	970	26.07	1086
suratgarh TPS (6*250)		1500	220	185	5.11	213	
Chabra TPS (4*250)		1000	913	762	21.09	879	
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	147	155	3.53	147	
RAPS A (NPC) (1*100+1*200)		300	190	190	4.33	181	
Barsingar (NLC) (2*125)		250	226	227	5.32	222	
Giral LTPS (2*125)		250	0	0	0.00	0	
Rajwest LTPS (IPP) (8*135)		1080	872	451	18.31	763	
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0	
Kalisindh Thermal(2*600)		1200	1124	822	20.42	851	
Kawai(Adani) (2*660)		1320	440	443	10.34	431	
<b>Thermal (Total)</b>		<b>8876</b>	<b>5291</b>	<b>4205</b>	<b>114.51</b>	<b>4771</b>	
Total Hydro		550	205	195	5.14	214	
Wind power		4017	130	559	9.06	378	
Biomass		99	13	13	0.32	13	
Solar		1295	0	0	2.61	109	
Renewable/Others (Total)		5411	143	572	11.99	500	
<b>Total Rajasthan</b>		<b>14837</b>	<b>5639</b>	<b>4972</b>	<b>131.64</b>	<b>5485</b>	
UP		Anpara TPS (3*210+2*500)	1630	1346	1047	30.29	1262
	Obra TPS (2*50+2*94+5*200)	1194	500	434	11.38	474	
	Paricha TPS (2*110+2*220+2*250)	1160	652	646	15.53	647	
	Panki TPS (2*105)	210	135	135	3.25	136	
	Harduaganj TPS (1*60+1*105+2*250)	665	402	407	10.04	418	
	Tanda TPS (NTPC) (4*110)	440	275	270	7.25	302	
	Roza TPS (IPP) (4*300)	1200	747	743	18.75	781	
	Anpara-C (IPP) (2*600)	1200	1080	639	21.88	912	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	194	252	5.59	233	
	Anpara-D(2*500)	1000	521	583	14.90	621	
	Lalitpur TPS(3*660)	1980	0	0	0.00	0	
	Bara(2*660)	1320	885	724	19.89	829	
	<b>Thermal (Total)</b>	<b>12449</b>	<b>6737</b>	<b>5880</b>	<b>158.76</b>	<b>6615</b>	
	Vishnuparyag HPS (IPP)(4*110)	440	83	83	1.92	80	
	Alakanada(4*82.5)	330	73	0	1.11	46	
	Other Hydro	527	250	83	4.13	172	
	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>7993</b>	<b>6896</b>	<b>186.31</b>	<b>7763</b>	
	Uttarakhand	Other Hydro	1250	581	298	9.02	376
		Total Gas	225	294	300	7.06	294
		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>875</b>	<b>598</b>	<b>16.14</b>	<b>673</b>	
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.01	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	78	80	1.93	80	
	Pragati Gas Turbine (2x104+ 1x122)	330	162	160	3.88	162	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	250	280	6.35	264	
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0	
	<b>Thermal (Total)</b>	<b>2917</b>	<b>490</b>	<b>520</b>	<b>12.15</b>	<b>506</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>490</b>	<b>520</b>	<b>12.15</b>	<b>506</b>	
	HP	Baspa HPS (IPP) (3*100)	300	0	0	1.06	44
Malana HPS (IPP) (2*43)		86	0	0	0.25	10	
Other Hydro		372	152	85	2.89	121	
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	39	1.02	43	
<b>Renewable(Total)</b>		<b>486</b>	<b>54</b>	<b>39</b>	<b>1.02</b>	<b>43</b>	
<b>Total HP</b>		<b>1244</b>	<b>206</b>	<b>123</b>	<b>5.22</b>	<b>218</b>	
J & K		Baqilhar HPS (IPP) (3*150+3*150)	900	113	113	2.71	113
	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>193</b>	<b>131</b>	<b>4</b>	<b>153</b>	

Total State Control Area Generation	50078	20532	16717	462.20	19258
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		7174	6436	194.79	8116
Total Regional Availability(Gross)	75315	43698	31033	887.10	36963

**IV. Total Hydro Generation:**

Regional Entities Hydro	12234	8029	1315	61.09	2545
State Control Area Hydro	7163	2285	1414	38.51	1901
Total Regional Hydro	19397	10314	2729	99.60	4446

**V. Total Renewable Generation:**

Regional Entities Renewable	30	0	0	0.06	2
State Control Area Renewable	7356	197	611	13.40	558
Total Regional Renewable	7386	197	611	13.46	561

**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)	50	-500	50	500	0.24	8.49	-8.25
765 KV Gwalior-Agra (D/C)	2255	1730	3067	0	61.04	0.00	61.04
400 KV Zerda-Kankroli	37	-214	87	227	0.00	1.26	-1.26
400 KV Zerda-Bhimnal	95	-109	223	140	1.09	0.00	1.09
220 KV Auraiya-Malanpur	-92	-78	0	93	0.00	1.26	-1.26
220 KV Badod-Kota/Morak	-34	-42	21	64	0.00	1.11	-1.11
Mundra-Mohinderghar(HVDC Bipole)	2499	2498	2505	0.00	54.40	0.00	54.40
400 KV RAPPCC-Sujalpur	285	220	530	0	6.56	0.00	6.56
400 KV Vindhychal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	1238	1135	938	0	35.49	0.00	35.49
<b>Sub Total WR</b>	<b>6333</b>	<b>4640</b>			<b>158.81</b>	<b>12.12</b>	<b>146.70</b>
400 kV Sasaram - Varanasi	-90	194	208	98	1.59	0.00	1.59
400 kV Sasaram - Allahabad	-191	46	49	201	0.00	1.66	-1.66
400 KV MZP- GKP (D/C)	24	179	335	41	4.29	0.00	4.29
400 KV Patna-Balia(D/C) X 2	398	635	821	0	15.07	0.00	15.07
400 KV B'Sharif-Balia (D/C)	26	113	233	0	3.38	0.00	3.38
765 KV Gaya-Balia	201	268	440	0	7.76	0.00	7.76
765 KV Gaya-Varanasi (D/C)	375	407	1154	0	12.59	0.00	12.59
220 KV Pusaali-Sahupuri	78	84	135	0	2.27	0.00	2.27
132 KV K'nasa-Sahupuri	0	0	0	0	0.48	0.51	-0.51
132 KV Son Ngr-Rihand	-20	0	0	28	0.00	0.30	-0.30
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	98	-76	228	67	2.17	0.00	2.17
400 KV Barh -GKP (D/C)	410	454	582	0	11.56	0.00	11.56
400 kV B'Sharif - Varanasi (D/C)	32	-8	219	32	1.69	0.00	1.69
<b>Sub Total ER</b>	<b>1341</b>	<b>2296</b>			<b>62.85</b>	<b>2.47</b>	<b>59.89</b>
+/- 800 KV BiswanathCharialli-Agra	-500	-500	0	500.00	0.00	11.80	-11.80
<b>Sub Total NER</b>	<b>-500</b>	<b>-500</b>			<b>0.00</b>	<b>11.80</b>	<b>-11.80</b>
<b>Total IR Exch</b>	<b>7174</b>	<b>6436</b>			<b>221.66</b>	<b>26.39</b>	<b>194.79</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
39.41	0.47	39.88	2.33	-4.63	26.88	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
69.09	136.19	205.29	48.09	146.70	194.79	-21.00	10.50	-10.50

**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	-38	-30	0	40	0	1	-0.78

**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	1.03	9.40	51.43	69.49	16.06	5.01	0.13	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	6.04	49.72	18.22	49.99	0.051	0.00	0.00	30.51	

**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	486.31	619.14	499.24	1064.89	168.60	398.33
Pong	426.72	384.05	407.01	397.88	409.36	474.29	68.41	225.29
Tehri	829.79	740.04	804.55	695.79	798.15	578.70	38.06	213.00
Koteshwar	612.50	598.50	610.36	4.69	610.89	4.69	213.00	201.37
Chamera-I	760.00	748.75	759.53	0.00	0.00	0.00	42.25	48.40
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	503.87	2.02	496.97	2.88	35.37	94.99

\* 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	2	0	-621	0	0	-18.56	1.70	-16.86
Delhi	-94	-386	0	-274	252	0	-3.92	2.23	-1.69
Haryana	-854	366	0	-517	350	0	-15.11	7.42	-7.69
HP	454	78	0	355	-91	0	12.04	-1.10	10.94
J&K	608	193	0	605	169	0	15.08	4.82	19.90
CHD	0	0	0	0	0	0	0.00	0.23	0.23
Rajasthan	16	563	0	16	555	0	7.75	13.92	21.67
UP	91	0	0	-121	-100	0	-8.39	-1.69	-10.08
Uttarakhand	286	-150	0	190	-74	0	6.22	-0.35	5.88
<b>Total</b>	<b>-41</b>	<b>665</b>	<b>0</b>	<b>-369</b>	<b>1060</b>	<b>0</b>	<b>-4.90</b>	<b>27.19</b>	<b>22.29</b>

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-537	-1271	676	-221	0	0
Delhi	-20	-310	671	-451	0	0
Haryana	-517	-854	382	-17	0	0
HP	715	298	78	-373	0	0
J&K	694	590	391	-52	0	0
CHD	0	0	48	-31	0	0
Rajasthan	892	8	836	489	0	0
UP	141	-912	0	-100	0	0
Uttarakhand	316	127	170	-180	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	3.82%
ER	0.00%
Simultaneous	1.39%

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

WR	20.14%
ER	0.00%
Simultaneous	24.31%

(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	18
Haryana	2	28
Rajasthan	2	21
Delhi	5	44
UP	2	14
Uttarakhand	4	41
HP	3	31
J & K	4	22
Chandigarh	4	46

**XIII. System Constraints:**

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

**XV. Weather Conditions For 10.01.2017 :**

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

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

400 kV Bus-I at Mainpuri along with Bay 704 first time charged at 17.55 Hrs

**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 : 10.01.2017

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER