

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

## उत्तर क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 25.08.2017

Date of Reporting : 26.08.2017



### I. Regional Availability/Demand:

Evening Peak (20:00 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
49310	1756	51066	50.01	49561	776	50337	50.03	1138.75	11.26

\* 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 MU:

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	59.94	20.60	0.19	80.73	110.95	109.30	-1.66	190.03	0.00
Haryana	54.89	0.84	0.00	55.73	117.08	118.27	1.19	174.00	0.00
Rajasthan	104.78	0.62	25.56	130.96	61.54	63.19	1.66	194.16	0.00
Delhi	18.55		0.00	18.55	88.38	87.66	-0.72	106.21	0.07
UP	152.86	24.60	0.00	177.46	187.53	189.55	2.02	367.00	2.02
Uttarakhand		19.32	7.31	26.63	11.76	11.40	-0.36	38.02	0.00
HP		18.35	6.80	25.15	0.62	0.72	0.10	25.87	0.00
J & K		26.02	0.00	26.02	13.34	12.73	-0.61	38.75	9.17
Chandigarh			0.00	0.00	5.58	4.71	-0.87	4.71	0.00
<b>Total</b>	<b>391.02</b>	<b>110.35</b>	<b>39.86</b>	<b>541.24</b>	<b>596.77</b>	<b>597.51</b>	<b>0.74</b>	<b>1138.75</b>	<b>11.26</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 (20:00 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	7732	0	5	1127	8600	0	256	1486	9110	1	0
Haryana	7473	40	129	1252	7887	0	86	1424	8185	1	0
Rajasthan	7923	0	25	-216	8510	0	-2	72	9034	1	0
Delhi	4883	0	-43	313	4689	0	66	481	5401	16	0
UP	16265	1255	71	1433	15747	540	87	2458	16593	24	1000
Uttarakhand	1823	0	8	-231	1577	0	-20	-249	1823	20	0
HP	1161	0	-5	-1702	1024	0	22	-1605	1342	8	0
J&K	1845	461	-64	-746	1340	236	-69	-1168	1946	21	487
Chandigarh	205	0	-32	-60	187	0	-34	-10	237	12	0
<b>Total</b>	<b>49310</b>	<b>1756</b>	<b>94</b>	<b>1170</b>	<b>49561</b>	<b>776</b>	<b>392</b>	<b>2889</b>	<b>52333</b>	<b>1</b>	<b>1056</b>

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

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### III. Regional Entities :

Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentoout(MW)	Schedule Net MU	UI	
								Net MU	Net MU
<b>A. NTPC</b>									
Singrauli STPS (5*200+2*500)	2000	1740	1875	1803	40.10	1671	39.47		0.63
Rihand I STPS (2*500)	1000	461	486	501	10.75	448	10.65		0.09
Rihand II STPS (2*500)	1000	943	1000	1009	21.94	914	21.68		0.26
Rihand III STPS (2*500)	1000	943	991	920	21.74	906	21.59		0.16
Dadri I STPS (4*210)	840	576	520	314	10.93	455	11.68		-0.75
Dadri II STPS (2*490)	980	929	913	495	15.26	636	16.01		-0.75
Unchahar I TPS (2*210)	420	383	372	285	7.02	297	7.51		-0.49
Unchahar II TPS (2*210)	420	383	398	294	7.12	297	8.01		-0.89
Unchahar III TPS (1*210)	210	192	188	118	3.02	126	3.13		-0.11
Unchahar IV TPS(1*500)	500	0	0	0	0.00	0	0.00		0.00
ISTPP (Jhajjar) (3*500)	1500	948	963	969	20.48	853	21.46		-0.99
Dadri GPS (4*130, 19+2*154.51)	830	765	135	238	4.39	183	4.83		-0.44
Anta GPS (3*88.71+1*153.2)	419	389	233	246	5.10	213	5.07		0.03
Auraiya GPS (4*111.19+2*109.30)	663	613	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	0.05	2	0.04		0.01
Singrauli Solar(15)	15	2	0	0	0.05	2	0.05		-0.01
KHEP(4*200)	800	792	788	794	18.78	782	18.00		0.78
<b>Sub Total (A)</b>	<b>12612</b>	<b>10061</b>	<b>8862</b>	<b>7986</b>	<b>187</b>	<b>7781</b>	<b>189</b>		<b>-2.47</b>
<b>B. NPC</b>									
NAPS (2*220)	440	382	423	419	9.17	382	9.17		0.00
RAPS- B (2*220)	440	373	417	420	8.99	375	8.88		0.11
RAPS- C (2*220)	440	430	451	450	9.67	403	10.32		-0.65
<b>Sub Total (B)</b>	<b>1320</b>	<b>1185</b>	<b>1291</b>	<b>1289</b>	<b>27.82</b>	<b>1159</b>	<b>28.37</b>		<b>-0.55</b>
<b>C. NHPC</b>									
Chamera I HPS (3*180)	540	534	539	343	9.70	404	9.52		0.18
Chamera II HPS (3*100)	300	282	302	301	6.77	282	6.75		0.02
Chamera III HPS (3*77)	231	194	231	230	4.69	196	4.65		0.05
Bairasuli HPS(3*60)	180	86	171	78	2.11	88	2.06		0.05
Salal-HPS (6*115)	690	672	681	681	16.42	684	16.12		0.29
Tanakpur-HPS (3*31.4)	94	89	93	93	2.25	94	2.13		0.12
Uri-I HPS (4*120)	480	263	440	250	6.66	278	6.32		0.34
Uri-II HPS (4*60)	240	151	126	150	3.69	154	3.61		0.08
Dhauliganga-HPS (4*70)	280	281	291	278	6.75	281	6.75		0.00
Dulhasti-HPS (3*130)	390	387	403	399	9.40	392	9.26		0.15
Sewa-II HPS (3*40)	120	119	120	116	1.04	43	1.00		0.04
Parbati 3 (4*130)	520	514	515	0	3.51	146	3.45		0.07
<b>Sub Total (C)</b>	<b>4065</b>	<b>3571</b>	<b>3912</b>	<b>2920</b>	<b>73</b>	<b>3042</b>	<b>72</b>		<b>1.39</b>
<b>D.SJVNL</b>									
NJPC (6*250)	1500	1497	1607	1549	36.75	1531	35.94		0.81
Rampur HEP (6*68.67)	412	412	440	427	10.28	428	9.89		0.39
<b>Sub Total (D)</b>	<b>1912</b>	<b>1910</b>	<b>2047</b>	<b>1976</b>	<b>47.03</b>	<b>1959</b>	<b>45.83</b>		<b>1.20</b>
<b>E. THDC</b>									
Tehri HPS (4*250)	1000	988	980	258	9.85	411	9.55		0.30
Koteswar HPS (4*100)	400	147	398	90	3.59	149	3.53		0.06
<b>Sub Total (E)</b>	<b>1400</b>	<b>1135</b>	<b>1378</b>	<b>348</b>	<b>13.44</b>	<b>560</b>	<b>13.08</b>		<b>0.36</b>
<b>F. BBMB</b>									
Bhakra HPS (2*108+3*126+5*157)	1379	856	1327	651	20.55	856	20.54		0.01
Dehar HPS (6*165)	990	585	825	560	14.28	595	14.03		0.25
Pong HPS (6*66)	396	267	330	198	6.56	273	6.42		0.14
<b>Sub Total (F)</b>	<b>2765</b>	<b>1708</b>	<b>2482</b>	<b>1409</b>	<b>41.39</b>	<b>1725</b>	<b>40.99</b>		<b>0.40</b>
<b>G. IPP(s)/JV(s)</b>									
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	189	77	2.53	105	2.50		0.03
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1100	1100	26.28	1095	26.08		0.20
Malana Stg-II HPS (2*50)	100	0	111	100	2.28	95	2.12		0.16
Shree Cement TPS (2*150)	300	0	149	146	3.47	145	3.51		-0.04
Budhi HPS(IPP) (2*35)	70	0	69	72	1.58	66	1.66		-0.08
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1618</b>	<b>1495</b>	<b>36.14</b>	<b>1506</b>	<b>35.87</b>		<b>0.28</b>
<b>H. Total Regional Entities (A-G)</b>	<b>25737</b>	<b>19569</b>	<b>21590</b>	<b>17422</b>	<b>425.55</b>	<b>17731</b>	<b>424.95</b>		<b>0.60</b>

### I. State Entities

Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average(Sento ut MW)
<b>Punjab</b>					
Guru Gobind Singh TPS (Ropar) (6*210)	1260	0	160	2.60	108
Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	100	90	2.08	87
Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	0	204	2.08	87
Goindwal(GVK) (2*270)	540	360	180	6.63	276
Rajpura (2*700)	1400	660	1220	22.78	949
Tahwandi Saboo (3*660)	1980	924	924	23.78	991

	<b>Thermal (Total)</b>	<b>6560</b>	<b>2044</b>	<b>2778</b>	59.94	<b>2498</b>
	Total Hydro	1000	902	912	20.60	859
	Wind Power	0	0	0	0.00	0
	Biomass	303	0	0	0.12	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>2946</b>	<b>3690</b>	<b>80.73</b>	<b>3364</b>
Haryana	Panipat TPS (2*210+2*250)	920	255	214	5.46	228
	DCRTPP (Yamuna nagar) (2*300)	600	219	224	5.17	216
	Faridabad GPS (NTPC)(2*137.75+1*156)	432	177	166	4.24	176
	RGTPP (khedar) (IPP) (2*600)	1200	496	787	16.22	676
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajar(CLP) (2*660)	1320	1108	1170	23.80	992
	<b>Thermal (Total)</b>	<b>4497</b>	<b>2255</b>	<b>2561</b>	<b>54.89</b>	<b>2287</b>
	Total Hydro	62	32	35	0.84	35
	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>2287</b>	<b>2596</b>	<b>55.73</b>	<b>2322</b>
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	856	839	20.36	848
	suratgarh TPS (6*250)	1500	889	887	20.98	874
	Chabra TPS (4*250)	1000	453	393	9.88	412
	Chabra TPS (1*660)	660	0	0	0.00	0
	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	169	171	4.51	188
	RAPS A (NPC) (1*100+1*200)	300	169	168	4.20	175
	Barsingar (NLC) (2*125)	250	95	108	2.42	101
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwast LTPS (IPP) (8*135)	1080	603	442	11.37	474
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	812	832	19.78	824
	Kawai(Adani) (2*660)	1320	446	453	11.26	469
	<b>Thermal (Total)</b>	<b>9536</b>	<b>4492</b>	<b>4293</b>	<b>104.78</b>	<b>4366</b>
	Total Hydro	550	68	0	0.62	26
	Wind power	4292	568	1234	22.27	928
	Biomass	102	24	24	0.58	24
	Solar	1995	0	0	2.71	113
	Renewable/Others (Total)	6389	592	1258	25.56	1065
	<b>Total Rajasthan</b>	<b>16475</b>	<b>5152</b>	<b>5551</b>	<b>130.96</b>	<b>5457</b>
	UP	Anpara TPS (3*210+2*500)	1630	737	712	17.66
Obra TPS (2*50+2*94+5*200)		1194	468	460	10.77	449
Paricha TPS (2*110+2*220+2*250)		1160	526	447	11.13	464
Panki TPS (2*105)		210	0	0	0.00	0
Harduaganj TPS (1*60+1*105+2*250)		665	312	319	7.62	318
Tanda TPS (NTPC) (4*110)		440	371	371	8.86	369
Roza TPS (IPP) (4*300)		1200	796	804	16.75	698
Anpara-C (IPP) (2*600)		1200	1103	1065	25.02	1043
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	0	0	0.00	0
Anpara-D(2*500)		1000	451	454	10.79	450
Lalitpur TPS(3*660)		1980	1810	1117	29.03	1210
Bara(2*660)		1320	604	604	14.49	604
<b>Thermal (Total)</b>		<b>12449</b>	<b>7178</b>	<b>6353</b>	<b>152.14</b>	<b>6339</b>
Vishnuparyag HPS (IPP)(4*110)		440	435	435	10.47	436
Alaknanda(4*82.5)		330	343	342	8.21	342
Other Hydro		527	300	300	5.93	247
Cogeneration		981	30	30	0.72	30
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>8286</b>	<b>7460</b>	<b>177.46</b>	<b>7394</b>
Uttarakhand		Other Hydro	1250	779	857	19.32
	Total Gas	225	286	286	6.85	285
	Wind Power	0	0	0	0.00	0
	Biomass	127	0	0	0.00	0
	Solar	100	0	0	0.46	19
	Small Hydro (< 25 MW)	180	0	0	0.00	0
	<b>Renewable(Total)</b>	<b>407</b>	<b>0</b>	<b>0</b>	<b>0.46</b>	<b>19</b>
	<b>Total Uttarakhand</b>	<b>1882</b>	<b>1065</b>	<b>1143</b>	<b>26.63</b>	<b>1109</b>
Delhi	Raighat TPS (2*67.5)	135	0	0	-0.01	0
	Delhi Gas Turbine (6x30 + 3x34)	282	71	70	1.79	75
	Pragati Gas Turbine (2x104+ 1x122)	330	263	260	6.26	261
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	431	430	10.51	438
	Badarpur TPS (NTPC) (3*95+2*210)	705	0	0	0.00	0
	<b>Thermal (Total)</b>	<b>2917</b>	<b>765</b>	<b>760</b>	<b>18.55</b>	<b>773</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>765</b>	<b>760</b>	<b>18.55</b>	<b>773</b>	
HP	Baspa HPS (IPP) (3*100)	300	330	330	7.79	325
	Malana HPS (IPP) (2*43)	86	90	91	2.04	85
	Other Hydro (>25MW)	372	377	354	8.51	355
	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	302	282	6.80	284
	<b>Renewable(Total)</b>	<b>486</b>	<b>302</b>	<b>282</b>	<b>6.80</b>	<b>284</b>
<b>Total HP</b>	<b>1244</b>	<b>1100</b>	<b>1057</b>	<b>25.15</b>	<b>1048</b>	
J & K	Baqilhar HPS (IPP) (3*150+3*150)	900	883	884	21.21	884
	Other Hydro/IPP(including 98 MW Small Hydro)	308	202	200	4.81	201
	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>1085</b>	<b>1084</b>	<b>26</b>	<b>1084</b>	
<b>Total State Control Area Generation</b>		<b>52226</b>	<b>22686</b>	<b>23341</b>	<b>541.24</b>	<b>22552</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>6557</b>	<b>9318</b>	<b>190.15</b>	<b>7923</b>
<b>Total Regional Availability(Gross)</b>		<b>77963</b>	<b>50832</b>	<b>50082</b>	<b>1156.94</b>	<b>48206</b>

**IV. Total Hydro Generation:**

Regional Entities Hydro	12234	12006	8723	226.30	9364
State Control Area Hydro	7243	5330	5308	110.35	5186
<b>Total Regional Hydro</b>	<b>19477</b>	<b>17336</b>	<b>14032</b>	<b>336.66</b>	<b>14550</b>

**V. Total Renewable Generation:**

Regional Entities Renewable	30	0	0	0.11	5
State Control Area Renewable	8844	894	1540	33.01	1375
<b>Total Regional Renewable</b>	<b>8874</b>	<b>894</b>	<b>1540</b>	<b>33.12</b>	<b>1380</b>

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

Element	Peak(20:00 Hrs) MW	Off Peak(03:00 Hrs) MW	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
			Import	Export	Import	Export	
Vindhychal(HVDC B/B)	200	-500	200	500	0.96	3.64	-2.68
765 KV Gwalior-Agra (D/C)	1894	2479	2523	0	53.40	0.00	53.40
400 KV Zerda-Kankroli	-111	-17	55	155	0.00	1.79	-1.79
400 KV Zerda-Bhinmal	-2	-36	107	133	0.40	0.00	0.40
220 KV Auraiya-Malanpur	-56	-60	0	65	0.00	0.33	-0.33
220 KV Badod-Kota/Morak	-30	7	34	53	0.00	0.18	-0.18
Mundra-Mohindergarh(HVDC Bipole)	1997	2002	2005	0	44.96	0.00	44.96
400 KV RAPP-Subalpur	180	100	290	6	3.11	0.00	3.11
400 KV Vindhychal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	814	980	1100	0	22.40	0.00	22.40
+/- 800 kV HVDC Champa-Kurushetra	0	1500	1500	0	11.94	0	11.94
<b>Sub Total WR</b>	<b>4886</b>	<b>6455</b>			<b>137.16</b>	<b>5.94</b>	<b>131.22</b>
400 kV Sasaram - Varanasi	185	153	185	0	3.94	0.00	3.94
400 kV Sasaram - Allahabad	6	38	45	0	0.69	0.00	0.69
400 KV MZP- GKP (D/C)	312	501	702	0	12.02	0.00	12.02
400 KV Patna-Balia(D/C) X 2	479	785	954	0	17.42	0.00	17.42
400 KV B Sharif-Balia (D/C)	98	187	254	0	4.48	0.00	4.48
765 KV Gaya-Balia	234	295	309	0	6.29	0.00	6.29
765 KV Gaya-Varanasi (D/C)	94	307	390	0	6.82	0.00	6.82
220 KV Pusauli-Sahupuri	120	120	134	0	2.71	0.00	2.71
132 KV K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
132 KV Son Ngr-Rihand	-21	-28	0	34	0.00	0.52	-0.52
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-187	-160	0	187	0.00	2.31	-2.31
400 KV Barh -GKP (D/C)	190	156	0	194	0.00	3.44	-3.44
400 kV B Sharif - Varanasi (D/C)	-139	9	273	145	0.27	0.00	0.27
+/- 800 KV HVDC Alipurduar-Agra	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1371</b>	<b>2363</b>			<b>54.63</b>	<b>6.27</b>	<b>48.36</b>
+/- 800 KV HVDC BiswanathChariali-Agra	300	500	500	0.00	10.57	0.00	10.57
<b>Sub Total NER</b>	<b>300</b>	<b>500</b>			<b>10.57</b>	<b>0.00</b>	<b>10.57</b>
<b>Total IR Exch</b>	<b>6557</b>	<b>9318</b>			<b>202.37</b>	<b>12.22</b>	<b>190.15</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
43.32	3.65	46.97	21.53	13.08	-10.96	3.89	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
57.55	138.52	196.06	58.93	131.22	190.15	1.38	-7.29	-5.91

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

Element	Peak(20:00 Hrs) MW	Off Peak(03:00 Hrs) MW	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
			Import	Export	Import	Export	
132 KV Tanakpur - Mahendarnagar	0	-28	0	28	0	0	-0.39

**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	0.23	4.44	44.90	81.33	13.53	1.45	0.00	0.00

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block		Freq Dev Index (% of Time)
Maximum		Minimum					MAX (Hz)	MIN (Hz)	
50.17	6.03	49.75	19.15	50.00	0.029	0.053	50.08	49.84	18.67

**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	407	3:59	401	19:10	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	415	7:40	396	22:08	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	415	7:02	397	19:11	0.0	0.0	0.0	0.0	0.0
Kanpur	400	420	7:03	404	19:13	0.0	0.0	0.0	0.0	0.0
Dadri	400	414	6:02	400	14:35	0.0	0.0	0.0	0.0	0.0
Ballabgarh	400	416	6:03	400	14:37	0.0	0.0	0.0	0.0	0.0
Bawana	400	411	7:02	398	0:00	0.0	0.0	0.0	0.0	0.0
Bassi	400	422	7:01	405	0:13	0.0	0.0	4.7	0.0	4.7
Hissar	400	412	7:01	398	0:10	0.0	0.0	0.0	0.0	0.0
Moga	400	413	17:01	402	0:06	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	413	6:05	401	0:13	0.0	0.0	0.0	0.0	0.0
Nalagarh	400	417	7:03	406	0:11	0.0	0.0	0.0	0.0	0.0
Kishenpur	400	417	8:02	405	19:36	0.0	0.0	0.0	0.0	0.0
Wagoora	400	411	3:00	387	19:38	0.0	2.1	0.0	0.0	0.0
Amritsar	400	415	7:00	405	0:07	0.0	0.0	0.0	0.0	0.0
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	414	16:55	404	0:00	0.0	0.0	0.0	0.0	0.0
Rishikesh	400	418	7:05	400	20:18	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	789	7:03	758	22:21	0.0	0.0	0.0	0.0	0.0
Balia	765	790	7:41	762	19:14	0.0	0.0	0.0	0.0	0.0
Moga	765	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Agra	765	796	7:02	765	22:22	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	799	6:05	776	0:00	0.0	0.0	0.0	0.0	0.0

Unnao	765	781	7:41	744	19:14	0.0	0.0	0.0	0.0	0.0
Lucknow	765	792	7:42	759	19:14	0.0	0.0	0.0	0.0	0.0
Meerut	765	804	7:01	773	0:12	0.0	0.0	4.0	0.0	4.0
Jhatikara	765	799	7:03	769	0:12	0.0	0.0	0.0	0.0	0.0
Bareilly 765 kV	765	793	7:03	760	19:14	0.0	0.0	0.0	0.0	0.0
Anta	765	789	6:59	771	0:00	0.0	0.0	0.0	0.0	0.0
Phagi	765	798	7:01	775	0:00	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	508.14	1455.60	499.24	1064.89	1153.88	613.88
Pong	426.72	384.05	420.69	916.71	415.45	693.24	840.05	373.27
Tehri	829.79	740.04	813.35	869.27	814.65	895.26	397.80	226.00
Koteswar	612.50	598.50	610.71	4.92	610.43	4.69	226.00	236.64
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	242.38	263.49
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	521.15	9.66	520.14	3.17	231.50	460.24

\* NA: Not Available

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

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (20:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	1688	-202	0	1328	-202	0	39.47	-7.19	32.28
Delhi	619	-138	0	679	-367	0	17.27	-5.18	12.08
Haryana	1273	152	0	1243	9	0	24.72	2.72	27.43
HP	-1329	-276	0	-1353	-349	0	-29.34	-6.99	-36.32
J&K	-741	-428	0	-741	-5	0	-17.77	-3.45	-21.22
CHD	0	-10	0	0	-60	0	0.00	-0.22	-0.22
Rajasthan	-59	131	0	-160	-56	0	-1.82	0.66	-1.16
UP	1265	1193	0	1503	-69	0	17.67	20.37	38.04
Uttarakhand	-211	-39	0	-284	53	0	-5.53	0.58	-4.95
Total	2506	384	0	2216	-1046	0	44.67	1.31	45.97

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1780	1328	-167	-706	0	0
Delhi	1193	476	60	-524	0	0
Haryana	1273	886	176	-59	0	0
HP	-1031	-1581	-186	-376	0	0
J&K	-741	-741	-5	-498	0	0
CHD	0	0	39	-65	0	0
Rajasthan	-59	-261	133	-990	0	0
UP	1569	218	1876	-69	0	0
Uttarakhand	-195	-284	99	-68	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	13
Haryana	2	23
Rajasthan	1	19
Delhi	3	24
UP	0	11
Uttarakhand	1	13
HP	2	31
J & K	3	34
Chandigarh	4	37

**XIII. System Constraints:**

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

**XV. Weather Conditions For 25.08.2017 :**

**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.

**Report for : 25.08.2017**

**पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**