

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 12.04.2017

Date of Reporting : 13.04.2017



### 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
44219	759	44978	50.00	37821	378	38199	50.03	899.04	18.27

\* 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	Renewable/others \$	Total					
Punjab	39.90	3.56	0.28	43.74	64.69	66.34	1.65	110.08	0.00
Haryana	20.01	0.61	0.00	20.62	92.20	92.68	0.47	113.29	7.88
Rajasthan	96.71	0.72	11.19	108.62	70.17	70.84	0.68	179.47	0.50
Delhi	14.27		0.00	14.27	70.07	69.44	-0.63	83.71	0.02
UP	176.66	6.70	0.00	183.36	124.79	126.33	1.54	309.69	0.00
Uttarakhand		9.50	0.00	16.54	18.27	17.87	-0.40	34.41	0.00
HP		12.58	5.14	12.58	10.62	12.32	1.69	24.89	0.00
J & K		15.55	0.00	15.55	25.35	23.92	-1.43	39.47	9.87
Chandigarh				0.00	4.20	4.04	-0.17	4.04	0.00
<b>Total</b>	<b>347.55</b>	<b>49.22</b>	<b>16.61</b>	<b>415.28</b>	<b>480.35</b>	<b>483.76</b>	<b>3.40</b>	<b>899.04</b>	<b>18.27</b>

\* Shortage furnished by the respective constituent's 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	5436	0	27	-151	4699	0	184	-101	5436	20:00	0
Haryana	6230	263	-57	214	4946	0	204	301	6401	21:00	0
Rajasthan	8033	0	21	337	7326	0	15	442	8134	23:00	381
Delhi	3922	0	26	-453	2998	0	-13	-493	4100	17:00	0
UP	15696	25	128	821	14129	0	123	10	15696	20:00	25
Uttarakhand	1731	0	-4	161	1297	0	-8	150	1731	20:00	0
HP	1086	0	121	-918	796	0	34	-7	1306	8:00	0
J&K	1885	471	115	-160	1513	378	-20	-45	1907	21:00	477
Chandigarh	201	0	-29	0	116	0	5	0	204	19:00	0
<b>Total</b>	<b>44219</b>	<b>759</b>	<b>348</b>	<b>-148</b>	<b>37821</b>	<b>378</b>	<b>524</b>	<b>258</b>	<b>44219</b>	<b>20:00</b>	<b>759</b>

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

### 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	1628	1792	1786	39.01	1626	38.80	0.21
Rihand I STPS (2*500)	1000	930	979	965	20.88	870	21.22	-0.34
Rihand II STPS (2*500)	1000	478	517	507	11.33	472	10.98	0.34
Rihand III STPS (2*500)	1000	969	1035	1012	22.33	930	22.31	0.01
Dadri I STPS (4*210)	840	815	619	447	11.33	472	11.76	-0.43
Dadri II STPS (2*490)	980	980	894	694	17.65	736	18.24	-0.59
Unchahar I TPS (2*210)	420	403	420	400	7.83	326	8.05	-0.22
Unchahar II TPS (2*210)	420	405	421	427	7.88	328	8.14	-0.26
Unchahar III TPS (1*210)	210	203	217	180	3.84	160	4.06	-0.22
Unchahar IV TPS (1*660)	660	0	0	0	0.00	0	0.00	0.00
ISTPP (Jhajjar) (3*500)	1500	1440	995	318	16.55	690	16.91	-0.36
Dadri GPS (4*130.19+2*154.51)	830	609	243	178	3.85	160	4.22	-0.37
Anta GPS (3*88.71+1*153.2)	419	378	0	0	0.00	0	0.00	0.00
Auraiya GPS (4*111.19+2*109.30)	663	639	150	148	3.32	138	3.46	-0.15
Dadri Solar(5)	5	1	0	0	0.02	1	0.03	0.00
Unchahar Solar(10)	10	2	0	0	0.05	2	0.05	0.00
Singrauli Solar(15)	15	2	0	0	0.01	0	0.05	-0.04
KHEP(4*200)	800	872	870	0	3.70	154	3.50	0.20
<b>Sub Total (A)</b>	<b>12772</b>	<b>10754</b>	<b>9152</b>	<b>7062</b>	<b>170</b>	<b>7065</b>	<b>172</b>	<b>-2.22</b>
<b>B. NPC</b>								
NAPS (2*220)	440	400	412	443	9.40	392	9.60	-0.20
RAPS- B (2*220)	440	367	406	413	8.75	365	8.81	-0.05
RAPS- C (2*220)	440	210	231	235	4.84	202	5.04	-0.20
<b>Sub Total (B)</b>	<b>1320</b>	<b>977</b>	<b>1049</b>	<b>1091</b>	<b>22.99</b>	<b>958</b>	<b>23.45</b>	<b>-0.45</b>
<b>C. NHPC</b>								
Chamera I HPS (3*180)	540	535	552	0	7.58	316	7.34	0.24
Chamera II HPS (3*100)	300	301	310	303	6.12	255	5.85	0.27
Chamera III HPS (3*77)	231	231	231	235	4.28	178	4.10	0.18
Bairasuli HPS(3*60)	180	164	184	185	4.04	168	3.90	0.14
Salal-HPS (6*115)	690	438	548	450	11.45	477	10.52	0.93
Tanakpur-HPS (3*31.4)	94	22	31	27	0.66	28	0.53	0.13
Uri-I HPS (4*120)	480	475	480	478	11.58	482	11.40	0.17
Uri-II HPS (4*60)	240	237	241	238	5.71	238	5.69	0.02
Dhauliganga-HPS (4*70)	280	280	269	0	1.74	73	1.65	0.10
Dulhasti-HPS (3*130)	390	387	397	171	8.60	358	8.39	0.20
Sewa-II HPS (3*40)	120	126	131	132	3.12	130	3.02	0.09
Parbati 3 (4*130)	520	260	260	0	1.19	49	1.16	0.02
<b>Sub Total (C)</b>	<b>4065</b>	<b>3457</b>	<b>3634</b>	<b>2219</b>	<b>66</b>	<b>2753</b>	<b>64</b>	<b>2.51</b>
<b>D.SJVNL</b>								
NJPC (6*250)	1500	1605	1603	0	14.33	597	13.93	0.41
Rampur HEP (6*68.67)	412	336	376	0	3.24	135	3.09	0.15
<b>Sub Total (D)</b>	<b>1912</b>	<b>1941</b>	<b>1979</b>	<b>0</b>	<b>17.57</b>	<b>732</b>	<b>17.02</b>	<b>0.55</b>
<b>E. THDC</b>								
Tehri HPS (4*250)	1000	433	463	0	5.22	217	5.30	-0.08
Koteshwar HPS (4*100)	400	104	200	92	2.58	107	2.50	0.08
<b>Sub Total (E)</b>	<b>1400</b>	<b>538</b>	<b>663</b>	<b>92</b>	<b>7.79</b>	<b>325</b>	<b>7.80</b>	<b>-0.01</b>
<b>F. BBMB</b>								
Bhakra HPS (2*108+3*126+5*157)	1379	278	296	274	6.81	284	6.66	0.15
Dehar HPS (6*165)	990	375	660	160	9.21	384	9.01	0.20
Pong HPS (6*66)	396	24	165	0	0.58	24	0.58	0.00
<b>Sub Total (F)</b>	<b>2765</b>	<b>677</b>	<b>1121</b>	<b>434</b>	<b>16.60</b>	<b>692</b>	<b>16.25</b>	<b>0.36</b>
<b>G. IPP(s)/JV(s)</b>								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	103	75	1.46	61	1.34	0.11
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	750	0	7.60	317	7.12	0.48
Malana Stg-II HPS (2*50)	100	0	111	25	0.71	29	0.66	0.05
Shree Cement TPS (2*150)	300	0	124	90	2.50	104	2.52	-0.02
Budhil HPS(IPP) (2*35)	70	0	0	0	0.00	0	0.53	-0.53
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1088</b>	<b>191</b>	<b>12.27</b>	<b>511</b>	<b>12.19</b>	<b>0.08</b>
<b>H. Total Regional Entities (A-G)</b>	<b>25897</b>	<b>18343</b>	<b>18686</b>	<b>11088</b>	<b>312.87</b>	<b>13036</b>	<b>312.05</b>	<b>0.82</b>
<b>I. State Entities</b>								
	Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average(Sent out MW)		
<b>Punjab</b>	Guru Gobind Singh TPS (Ropar) (6*210)	1260	0	0	-0.17	-7		
	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	252	250	5.13	214		

	Goindwal(GVK) (2*270)	540	0	0	-0.02	-1
	Rajpura (2*700)	1400	660	660	14.02	584
	Talwandi Saboo (3*660)	1980	980	980	20.96	874
	<b>Thermal (Total)</b>	<b>6560</b>	<b>1892</b>	<b>1890</b>	<b>39.90</b>	<b>1662</b>
	Total Hydro	1000	235	147	3.56	148
	Wind Power	0	0	0	0.00	0
	Biomass	288	8	8	0.20	8
	Solar	560	0	0	0.08	3
	<b>Renewable(Total)</b>	<b>848</b>	<b>8</b>	<b>8</b>	<b>0.28</b>	<b>12</b>
	<b>Total Punjab</b>	<b>8408</b>	<b>2135</b>	<b>2045</b>	<b>43.74</b>	<b>1823</b>
Haryana	Panipat TPS (2*210+2*250)	920	0	0	0.00	0
	DCRTPP (Yamuna nagar) (2*300)	600	555	274	9.83	410
	Faridabad GPS (NTPC)(2*137.75+1*1156)	432	0	0	0.00	0
	RGTPP (khedar) (IPP) (2*600)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	565	375	10.18	424
	<b>Thermal (Total)</b>	<b>4497</b>	<b>1120</b>	<b>649</b>	<b>20.01</b>	<b>834</b>
	Total Hydro	62	25	31	0.61	25
	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>1145</b>	<b>680</b>	<b>20.62</b>	<b>859</b>
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	319	359	8.17	340
	suratgarh TPS (6*250)	1500	158	150	4.02	167
	Chabra TPS (4*250)	1000	1439	1165	28.91	1205
	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	180	180	4.56	190
	RAPS A (NPC) (1*100+1*200)	300	190	190	4.27	178
	Barsingsar (NLC) (2*125)	250	226	226	5.40	225
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	748	833	16.45	685
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	416	553	10.76	448
	Kawai(Adani) (2*660)	1320	594	619	14.18	591
	<b>Thermal (Total)</b>	<b>9536</b>	<b>4270</b>	<b>4275</b>	<b>96.71</b>	<b>4030</b>
	Total Hydro	550	63	21	0.72	30
	Wind power	4017	161	95	7.39	308
	Biomass	99	24	24	0.57	24
	Solar	1295	1	0	3.23	134
	Renewable/Others (Total)	5411	186	119	11.19	466
	<b>Total Rajasthan</b>	<b>15497</b>	<b>4519</b>	<b>4415</b>	<b>108.62</b>	<b>4526</b>
UP	Anpara TPS (3*210+2*500)	1630	1397	1404	31.10	1296
	Obra TPS (2*50+2*94+5*200)	1194	670	701	14.80	617
	Paricha TPS (2*110+2*220+2*250)	1160	839	821	17.00	708
	Panki TPS (2*105)	210	0	0	0.00	0
	Harduaganj TPS (1*60+1*105+2*250)	665	225	220	4.40	183
	Tanda TPS (NTPC) (4*110)	440	210	292	6.16	257
	Roza TPS (IPP) (4*300)	1200	837	837	17.00	708
	Anpara-C (IPP) (2*600)	1200	636	628	15.10	629
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Anpara-D(2*500)	1000	830	850	18.50	771
	Lalitpur TPS(3*660)	1980	1169	1157	23.70	988
	Bara(2*660)	1320	740	668	14.50	604
	<b>Thermal (Total)</b>	<b>12449</b>	<b>7553</b>	<b>7578</b>	<b>162.26</b>	<b>6761</b>
	Vishnuprayag HPS (IPP)(4*110)	440	124	117	2.80	117
	Alakanada(4*82.5)	330	85	84	1.90	79
	Other Hydro	527	124	124	2.00	83
	Cogeneration	981	600	600	14.40	600
	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>8486</b>	<b>8503</b>	<b>183.36</b>	<b>7640</b>
	Uttarakhand	Other Hydro	1250	485	307	9.50
Total Gas		225	273	284	6.57	274
Wind Power		0	0	0	0.00	0
Biomass		127	0	0	0.00	0
Solar		20	0	0	0.47	20
Small Hydro (< 25 MW)		180	0	0	0.00	0
<b>Renewable(Total)</b>		<b>327</b>	<b>0</b>	<b>0</b>	<b>0.47</b>	<b>20</b>
<b>Total Uttarakhand</b>	<b>1802</b>	<b>758</b>	<b>591</b>	<b>16.54</b>	<b>689</b>	
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	31	33	0.85	35
	Pragati Gas Turbine (2x104+ 1x122)	330	148	155	3.65	152
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	248	250	6.03	251
	Badarpur TPS (NTPC) (3*95+2*210)	705	167	167	3.75	156
	<b>Thermal (Total)</b>	<b>2917</b>	<b>594</b>	<b>605</b>	<b>14.27</b>	<b>595</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>594</b>	<b>605</b>	<b>14.27</b>	<b>595</b>	
HP	Baspa HPS (IPP) (3*100)	300	0	80	1.92	80
	Malana HPS (IPP) (2*43)	86	33	42	0.72	30
	Other Hydro (>25MW)	372	232	201	4.80	200
	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	237	218	5.14	214
	<b>Renewable(Total)</b>	<b>486</b>	<b>237</b>	<b>218</b>	<b>5.14</b>	<b>214</b>
	<b>Total HP</b>	<b>1244</b>	<b>502</b>	<b>541</b>	<b>12.58</b>	<b>524</b>
J & K	Baglihar HPS (IPP) (3*150+3*150)	900	592	446	12.69	529
	Other Hydro/IPP(including 98 MW Small Hydro)	308	136	120	2.86	119
	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

Renewable(Total)	98	0	0	0.00	0
Total J & K	1398	728	566	16	648
Total State Control Area Generation	50738	18866	17946	415.28	17303
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		8390	9231	184.50	7687
Total Regional Availability(Gross)	76635	45943	38266	912.65	38027

IV. Total Hydro Generation:

Regional Entities Hydro	12234	9231	2845	121.49	5062
State Control Area Hydro	7163	2644	2222	49.22	2344
Total Regional Hydro	19397	11875	5067	170.72	7407

V. Total Renewable Generation:

Regional Entities Renewable	30	0	0	0.08	3
State Control Area Renewable	7356	431	346	17.08	712
Total Regional Renewable	7386	431	346	17.16	715

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)	-400	-300	100	400	0.30	7.55	-7.25
765 KV Gwalior-Agra (D/C)	2214	2399	2858	0	46.53	0.00	46.53
400 KV Zerda-Kankrol	3	-35	3	250	0.00	3.08	-3.08
400 KV Zerda-Bhinmal	57	-17	79	190	0.00	1.56	-1.56
220 KV Auraiya-Malanpur	-9	-40	0	79	0.00	0.60	-0.60
220 KV Badod-Kota/Morak	49	3	49	49	0.12	0.00	0.12
Mundra-Mohindergarh(HVDC Bipole)	2201	2003	2505	0	52.07	0.00	52.07
400 KV RAPP-C-Sujalpur	355	310	467	0	7.66	0.00	7.66
400 KV Vindhychal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	1260	1374	1879	0	30.66	0.00	30.66
+/- 800 kV HVDC Champa-Kurushetra	600	1500	1500	0	26.99	0	26.99
<b>Sub Total WR</b>	<b>6330</b>	<b>7197</b>			<b>164.32</b>	<b>12.80</b>	<b>151.53</b>
400 kV Sasaram - Varanasi	143	160	171	0	3.80	0.00	3.80
400 kV Sasaram - Allahabad	-14	-19	0	29	0.00	0.41	-0.41
400 KV MZP- GKP (D/C)	54	120	161	256	0.00	1.16	-1.16
400 KV Patna-Balia(D/C) X 2	551	470	620	0	11.65	0.00	11.65
400 KV B'Sharif-Balia (D/C)	36	1	36	90	0.17	0.00	0.17
765 KV Gaya-Balia	313	197	313	0	4.69	0.00	4.69
765 KV Gaya-Varanasi (D/C)	345	203	358	0	4.39	0.00	4.39
220 KV Pusaui-Sahupuri	234	198	234	0	4.45	0.00	4.45
132 KV K'nasa-Sahupuri	0	0	1	0	0.00	0.00	0.00
132 KV Son Ngr-Rihand	-23	-22	0	34	0.00	0.58	-0.58
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-238	-195	0	379	0.00	4.72	-4.72
400 KV Barh -GKP (D/C)	522	556	562	0	10.86	0.00	10.86
400 kV B'Sharif - Varanasi (D/C)	-113	-135	0	270	0.00	3.51	-3.51
+/- 800 KV HVDC Alipurduar-Agra	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1810</b>	<b>1534</b>			<b>40.00</b>	<b>10.37</b>	<b>29.63</b>
+/- 800 KV HVDC BiswanathCharialli-Agra	250	500	500	500.00	3.68	0.34	3.34
<b>Sub Total NER</b>	<b>250</b>	<b>500</b>			<b>3.68</b>	<b>0.34</b>	<b>3.34</b>
<b>Total IR Exch</b>	<b>8390</b>	<b>9231</b>			<b>208.01</b>	<b>23.51</b>	<b>184.50</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
41.14	0.79	41.93	-0.81	-1.63	-3.72	4.59	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
37.39	151.56	188.95	32.97	151.53	184.50	-4.42	-0.04	-4.45

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	-12	-11	0	-30	0	-1	0.66

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	1.22	13.43	65.34	71.26	12.49	2.89	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)	
50.16	6.02	49.76	22.14	49.97	0.056	0.070	50.10	49.80	28.74

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	408	5:04	400	18:42	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	422	6:01	390	18:49	0.0	0.0	4.2	0.0	4.2
Bareilly(PG)400kV	400	422	5:04	388	19:01	0.0	0.9	1.0	0.0	1.0
Kanpur	400	418	13:03	394	18:59	0.0	0.0	0.0	0.0	0.0
Dadri	400	422	5:01	401	19:05	0.0	0.0	1.8	0.0	1.8
Ballabgarh	400	421	5:04	400	19:07	0.0	0.0	0.4	0.0	0.4
Bawana	400	422	13:03	400	19:04	0.0	0.0	3.3	0.0	3.3
Bassi	400	423	2:46	400	19:36	0.0	0.0	4.3	0.0	4.3
Hissar	400	421	13:01	397	19:07	0.0	0.0	0.6	0.0	0.6
Moga	400	424	13:33	400	19:08	0.0	0.0	3.1	0.0	3.1
Abdullapur	400	426	13:32	402	19:06	0.0	0.0	10.7	0.0	10.7
Nalagarh	400	426	13:04	405	19:13	0.0	0.0	18.3	0.0	18.3
Kishenpur	400	416	13:01	399	19:35	0.0	0.0	0.0	0.0	0.0
Wagoora	400	399	3:56	376	6:40	17.9	71.2	0.0	0.0	17.9
Amritsar	400	427	13:02	405	19:06	0.0	0.0	9.6	0.0	9.6
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	418	2:13	406	7:15	0.0	0.0	0.0	0.0	0.0
Rishikesh	400	403	0:00	403	0:00	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
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Station	Voltage Level (kV)	Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV	% Deviat
Fatehpur	765	787	13:01	737	5:52	0.0	0.0	0.0	0.0	0.0
Balia	765	799	13:03	748	18:53	0.0	0.0	0.0	0.0	0.0
Moga	765	808	13:02	764	19:07	0.0	0.0	3.3	0.0	3.3
Agra	765	797	13:02	744	5:51	9.3	9.3	0.0	0.0	9.3
Bhiwani	765	810	13:00	710	5:52	0.0	0.0	24.9	0.0	25.0
Unnao	765	781	13:02	723	18:59	3.4	23.2	0.0	0.0	3.4
Lucknow	765	805	6:02	742	19:00	0.0	0.0	3.9	0.0	3.9
Meerut	765	811	5:02	758	19:06	0.0	0.0	15.2	0.0	15.2
Jhatikara	765	810	13:06	766	19:37	0.0	0.0	7.0	0.0	7.0
Bareilly 765 kV	765	805	5:16	743	18:59	0.0	0.0	4.2	0.0	4.2
Anta	765	801	12:59	718	5:56	0.1	0.2	3.3	0.0	3.4
Phagi	765	0	0:00	0	0:00	100.0	100.0	0.0	0.0	100.0

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	465.50	199.81	479.24	441.00	311.37	226.59
Pong	426.72	384.05	396.94	157.28	395.87	141.12	71.05	42.56
Tehri	829.79	740.04	758.15	106.74	748.35	41.11	88.38	165.00
Koteshwar	612.50	598.50	610.93	4.95	611.26	5.20	165.00	169.55
Chamera-I	760.00	748.75	753.72	0.00	0.00	0.00	258.18	170.22
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	511.46	0.60	496.10	1.31	231.36	27.05

\* 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	-101	0	0	-101	-50	0	-2.42	-0.35	-2.77
Delhi	-275	-218	0	-164	-289	0	-4.41	-2.15	-6.55
Haryana	33	269	0	33	181	0	-1.63	-0.57	-2.20
HP	71	-78	0	70	-988	0	1.65	-6.40	-4.75
J&K	-45	0	0	-45	-115	0	-1.07	0.72	-0.35
CHD	0	0	0	0	0	0	0.00	0.00	0.00
Rajasthan	25	416	0	22	315	0	0.62	8.36	8.98
UP	66	-56	0	92	729	0	1.59	5.20	6.79
Uttarakhand	219	-69	0	123	38	0	5.06	0.09	5.15
Total	-6	264	0	30	-179	0	-0.61	4.91	4.29

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-101	-101	0	-201	0	0
Delhi	-103	-339	231	-429	0	0
Haryana	33	-169	269	-493	0	0
HP	78	-6	-36	-1125	0	0
J&K	-45	-45	99	-216	0	0
CHD	0	0	0	0	0	0
Rajasthan	34	17	417	-461	0	0
UP	92	19	1388	-56	0	0
Uttarakhand	248	119	160	-94	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	2	16
Haryana	2	16
Rajasthan	4	57
Delhi	5	52
UP	0	9
Uttarakhand	4	28
HP	3	20
J & K	1	13
Chandigarh	5	38

**XIII. System Constraints:**

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

**XV. Weather Conditions For 12.04.2017 :**

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

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

1.Three nos. of bays of Badhala and Two nos. of bays of 400 KV Bhadla-II at Bikaner s/s(Ra) charged first time at 13.56 hrs and 14.51 respectively  
2.765 KV, 3X110 MVAR ,Bus reactor at 765 kv Lalitpur(UP) first time charged at 17.16 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 : 12.04.2017

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER