

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

उत्तर क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 30.05.2018

Date of Reporting : 31.05.2018



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
51848	816	52663	49.90	51359	480	51840	50.04	1213.82	11.90

\* 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	Gas/Naphtha/Diesel	Solar	Wind	Other (Biomass/Small hydro/Co-Generation etc.)	Total					
Punjab	99.87	10.81	0.00	4.16	0.00	2.66	117.49	72.82	72.11	-0.71	189.60	0.00
Haryana	76.12	0.46	0.00	0.15	0.00	0.78	77.51	94.66	96.67	2.01	174.18	1.36
Rajasthan	113.93	0.00	4.18	8.08	20.50	4.44	151.13	75.38	79.05	3.67	230.18	2.19
Delhi	6.89	0.00	24.54	0.00	0.00	0.00	31.43	97.71	97.04	-0.67	128.47	0.07
UP	182.17	13.34	0.00	3.13	0.00	12.00	210.64	172.27	171.55	-0.72	382.20	0.00
Uttarakhand	0.00	14.65	6.02	0.69	0.00	0.00	21.35	19.57	20.60	1.03	41.95	0.00
HP	0.00	12.30	0.00	0.00	0.00	3.32	15.62	11.07	12.61	1.54	28.22	0.07
J & K	0.00	18.94	0.00	0.00	0.00	0.00	18.94	22.19	13.59	-8.60	32.54	8.22
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.11	6.48	0.37	6.48	0.00
<b>Total</b>	<b>478.98</b>	<b>70.50</b>	<b>34.74</b>	<b>16.19</b>	<b>20.50</b>	<b>23.20</b>	<b>644.12</b>	<b>571.78</b>	<b>569.70</b>	<b>-2.08</b>	<b>1213.82</b>	<b>11.90</b>

\* Storage 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	STOAPX transaction	Demand Met	Shortage	UI	STOAPX transaction			
Punjab	7241	0	-48	-483	7553	0	-43	-80	8726	15	0
Haryana	7901	0	53	169	7767	50	213	491	8153	1	330
Rajasthan	7479	0	-463	167	10234	0	315	-79	10877	1	0
Delhi	5172	0	-149	207	5606	0	140	360	6343	17	10
UP	18846	370	80	2070	15777	170	36	2071	18846	20	370
Uttarakhand	1932	0	96	302	1629	0	126	554	2047	21	0
HP	1221	0	36	-1009	1084	0	117	-479	1394	10	6
J&K	1782	446	-334	-249	1474	260	-266	22	1837	21	459
Chandigarh	275	0	-22	0	236	0	13	0	336	15	0
<b>Total</b>	<b>51848</b>	<b>816</b>	<b>-656</b>	<b>1174</b>	<b>51359</b>	<b>480</b>	<b>737</b>	<b>2860</b>	<b>53972</b>	<b>24</b>	<b>566</b>

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

III. Regional Entities :

Entity	Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI	
									Net MU	Net MU
A. NTPC	Singrauli STPS (6*200+2*500)	2000	1645	1544	1805	39.72	1655	39.42	0.30	
	Rihand I STPS (2*500)	1000	915	977	944	21.23	885	21.77	-0.54	
	Rihand II STPS (2*500)	1000	471	505	463	11.22	468	11.19	0.03	
	Rihand III STPS (2*500)	1000	943	1002	993	22.64	943	22.44	0.20	
	Dadri I STPS (4*210)	840	769	751	632	15.98	666	16.29	-0.31	
	Dadri II STPS (2*490)	980	929	907	891	20.97	874	20.80	0.17	
	Unchahar I TPS (2*210)	420	382	389	358	8.29	345	8.52	-0.23	
	Unchahar II TPS (2*210)	420	382	411	392	8.63	360	8.84	-0.21	
	Unchahar III TPS (1*210)	210	191	197	191	4.05	169	4.16	-0.11	
	Unchahar IV TPS(1*500)	500	0	0	0	0.00	0	0.00	0.00	
	ISTPP (Jhajjar) (3*500)	1500	753	944	643	17.20	717	17.46	-0.26	
	Dadri GPS (4*130.19+2*154.51)	830	0	240	114	4.56	190	4.20	0.36	
	Anta GPS (3*88.71+1*153.2)	419	0	0	0	0.00	0	0.00	0.00	
	Auraya GPS (4*111.19+2*109.30)	663	0	0	0	0.00	0	0.00	0.00	
	Dadri Solar(5)	5	1	0	0	0.00	0	0.02	-0.02	
	Unchahar Solar(10)	10	2	0	0	0.05	2	0.05	0.00	
	Singrauli Solar(15)	15	3	0	0	0.07	3	0.05	0.02	
	KHEP(4*200)	800	872	867	0	6.56	273	6.00	0.56	
	<b>Sub Total (A)</b>	<b>12612</b>	<b>8258</b>	<b>8734</b>	<b>7426</b>	<b>181</b>	<b>7549</b>	<b>181</b>	<b>-0.03</b>	
B. NPC	NAPS (2*220)	440	380	407	427	9.02	376	9.12	-0.10	
	RAPS- B (2*220)	440	356	394	396	8.48	353	8.54	-0.06	
	RAPS- C (2*220)	440	410	453	450	9.60	400	9.78	-0.18	
	<b>Sub Total (B)</b>	<b>1320</b>	<b>1146</b>	<b>1254</b>	<b>1273</b>	<b>27.10</b>	<b>1129</b>	<b>27.44</b>	<b>-0.34</b>	
C. NHPC	Chamera I HPS (3*180)	540	534	544	362	6.36	265	6.00	0.36	
	Chamera II HPS (3*100)	300	296	298	298	5.59	233	5.50	0.09	
	Chamera III HPS (3*77)	231	229	236	153	4.02	167	3.88	0.14	
	Bairasul HPS(3*60)	180	61	121	60	1.54	64	1.39	0.15	
	Salaj HPS (6*115)	690	500	553	555	12.66	528	12.00	0.66	
	Tanakpur-HPS (3*31.4)	94	37	45	34	1.04	44	0.89	0.15	
	Uri-I HPS (4*120)	480	475	486	481	11.75	490	11.40	0.35	
	Uri-II HPS (4*60)	240	63	244	0	1.52	64	1.51	0.01	
	Dhauliganga-HPS (4*70)	280	277	277	69	3.16	132	3.06	0.10	
	Dulhasti-HPS (3*130)	390	387	408	399	9.50	396	9.28	0.22	
	Sewa-II HPS (3*40)	120	121	125	0	0.43	18	0.40	0.03	
	Parbati 3 (4*130)	520	69	516	0	1.61	67	1.64	-0.03	
	Kishanganga(3*110)	330	0	184	186	4.50	188	4.35	0.15	
	<b>Sub Total (C)</b>	<b>4395</b>	<b>3049</b>	<b>4036</b>	<b>2598</b>	<b>64</b>	<b>2654</b>	<b>61</b>	<b>2.40</b>	
	D.SJVNL	NJPC (6*250)	1500	1497	1505	619	20.96	873	20.40	0.56
Rampur HEP (6*68.67)		412	412	404	170	5.94	247	5.67	0.27	
<b>Sub Total (D)</b>		<b>1912</b>	<b>1910</b>	<b>1909</b>	<b>789</b>	<b>26.90</b>	<b>1121</b>	<b>26.07</b>	<b>0.83</b>	
E. THDC	Tehri HPS (4*250)	1000	516	521	0	3.94	164	3.90	0.04	
	Koteswar HPS (4*100)	400	86	202	74	2.12	88	2.07	0.05	
	<b>Sub Total (E)</b>	<b>1400</b>	<b>602</b>	<b>723</b>	<b>74</b>	<b>6.06</b>	<b>252</b>	<b>5.97</b>	<b>0.09</b>	
F. BBMB	Bhakra HPS (2*108+3*126+5*157)	1379	615	1022	436	14.89	620	14.75	0.14	
	Dehar HPS (6*165)	990	391	825	330	9.52	397	9.38	0.14	
	Pong HPS (6*68)	396	51	147	0	1.24	52	1.22	0.02	
	<b>Sub Total (F)</b>	<b>2765</b>	<b>1056</b>	<b>1994</b>	<b>766</b>	<b>25.65</b>	<b>1069</b>	<b>25.35</b>	<b>0.30</b>	
G. IPP(s)/JV(s)	Allain DuhanganHPS(IPP) (2*96)	192	0	112	50	2.29	95	1.97	0.32	
	Karoram Wangtoo HPS(IPP) (4*250)	1000	0	1025	0	11.26	469	10.91	0.35	
	Malana Sta-II HPS (2*50)	100	0	78	85	0.98	41	0.92	0.06	
	Shree Cement TPS (2*150)	300	0	258	256	6.12	255	6.20	-0.08	
	Budhil HPS(IPP) (2*35)	70	0	70	70	1.08	45	1.37	-0.29	
	Sani HPS (IPP) (2*50)	100	0	0	0	0.00	0	1.19	0.00	
	<b>Sub Total (G)</b>	<b>1762</b>	<b>0</b>	<b>1545</b>	<b>461</b>	<b>21.72</b>	<b>905</b>	<b>21.37</b>	<b>0.35</b>	
<b>H. Total Regional Entities (A-G)</b>	<b>26167</b>	<b>16020</b>	<b>20195</b>	<b>13387</b>	<b>352.30</b>	<b>14679</b>	<b>348.71</b>	<b>3.59</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	680	720	16.26	677
	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	777	794	18.44	768
	Goindwal(GVK) (2*270)	540	290	290	8.10	337
	Rajpura (2*700)	1400	1020	1320	28.78	1199
	Talwandi Saboo (3*660)	1980	950	1150	28.31	1180
	<b>Thermal (Total)</b>	<b>6560</b>	<b>3717</b>	<b>4274</b>	<b>99.87</b>	<b>4161</b>
	Total Hydro	1000	406	406	10.81	451
	Wind Power	0	0	0	0.00	0
	Biomass	303	0	0	2.66	111
	Solar	859	0	0	4.16	173
	<b>Renewable(Total)</b>	<b>1162</b>	<b>0</b>	<b>0</b>	<b>6.81</b>	<b>284</b>
	<b>Total Punjab</b>	<b>8722</b>	<b>4123</b>	<b>4680</b>	<b>117.49</b>	<b>4896</b>
	Haryana	Panipat TPS (2*210+2*250)	920	574	629	14.21
DCRTPP (Yamuna nagar) (2*300)		600	541	542	11.69	487
Faridabad GPS (NTPC)(2*137.75+1*156)		432	0	0	0.00	0
RGTPP (kherda) (IPP) (2*600)		1200	996	1124	21.69	904
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	1223	1225	28.53	1189
<b>Thermal (Total)</b>		<b>4497</b>	<b>3334</b>	<b>3520</b>	<b>76.12</b>	<b>3172</b>
Total Hydro		62	4	30	0.46	19
Wind Power		0	0	0	0.00	0
Biomass		106	0	0	0.78	32
Solar		50	0	0	0.15	6
<b>Renewable(Total)</b>		<b>156</b>	<b>0</b>	<b>0</b>	<b>0.93</b>	<b>39</b>
<b>Total Haryana</b>		<b>4715</b>	<b>3338</b>	<b>3550</b>	<b>77.51</b>	<b>3230</b>
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	755	938	21.72
	suratgarh TPS (6*250)	1500	1074	1328	30.62	1276
	Chabra TPS (4*250)	1000	653	702	13.90	579
	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	172	178	4.18	174
	RAPS A (NPC) (1*100+1*200)	300	164	165	3.86	161
	Barsingsar (NLC) (2*125)	250	219	220	5.18	216
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	627	833	19.70	821
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	503	550	11.60	483
	Kawai(Adani) (2*660)	1320	532	436	11.20	467
	<b>Thermal (Total)</b>	<b>9536</b>	<b>4699</b>	<b>5350</b>	<b>121.97</b>	<b>5082</b>
	Total Hydro	550	0	0	0.00	0
	Wind power	4292	138	1732	20.50	854
	Biomass	102	24	24	0.59	24
	Solar	1995	29	0	8.08	336
	Renewable/Others (Total)	6389	191	1756	29.17	1215
	<b>Total Rajasthan</b>	<b>16475</b>	<b>4890</b>	<b>7106</b>	<b>151.13</b>	<b>6297</b>
UP	Anpara TPS (3*210+2*500)	1630	1219	1316	32.23	1343
	Obra TPS (2*50+2*94+5*200)	1194	334	319	7.74	322
	Paricha TPS (2*110+2*220+2*250)	1160	805	471	13.94	581
	Panki TPS (2*105)	210	0	0	0.00	0
	Harduaganj TPS (1*60+1*105+2*250)	665	539	318	11.15	465
	Tanda TPS (NTPC) (4*110)	440	370	215	7.42	309
	Roza TPS (IPP) (4*300)	1200	824	601	17.21	717
	Anpara-C (IPP) (2*600)	1200	1092	1092	23.29	971
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	401	223	6.96	290
	Anpara-D(2*500)	1000	896	901	21.59	900
	Lalitpur TPS(3*660)	1980	1234	694	19.42	809
	Bara(3*660)	1980	1112	1117	21.23	884
	<b>Thermal (Total)</b>	<b>13109</b>	<b>8826</b>	<b>7267</b>	<b>182.17</b>	<b>7591</b>
	Vishnupurayag HPS (IPP)(4*110)	440	435	400	8.79	366
	Alakananda(4*82.5)	330	83	82	2.66	111
	Other Hydro	527	120	76	1.89	79
	Cogeneration	1360	500	500	12.00	500
	Wind Power	0	0	0	0.00	0
	Biomass	26	0	0	0.00	0
	Solar	472	0	0	3.13	130
<b>Renewable(Total)</b>	<b>498</b>	<b>0</b>	<b>0</b>	<b>3.13</b>	<b>130</b>	
<b>Total UP</b>	<b>16264</b>	<b>9964</b>	<b>8325</b>	<b>210.64</b>	<b>8777</b>	
Uttarakhand	Other Hydro	1250	668	505	14.65	610
	Total Gas	450	243	269	6.02	251
	Wind Power	0	0	0	0.00	0
	Biomass	127	0	0	0.00	0
	Solar	100	0	0	0.69	29
	Small Hydro (< 25 MW)	180	0	0	0.00	0
	<b>Renewable(Total)</b>	<b>407</b>	<b>0</b>	<b>0</b>	<b>0.69</b>	<b>29</b>
	<b>Total Uttarakhand</b>	<b>2107</b>	<b>911</b>	<b>774</b>	<b>21.35</b>	<b>890</b>
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	138	140	3.35	140
	Pragati Gas Turbine (2x104+ 1x122)	330	263	265	6.54	273
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	618	624	14.65	610
	Badarpur TPS (NTPC) (3*95+2*210)	705	321	309	6.89	287
	<b>Thermal (Total)</b>	<b>2917</b>	<b>1340</b>	<b>1338</b>	<b>31.43</b>	<b>1310</b>
	Wind Power	0	0	0	0.00	0
	Biomass	16	37	34	0.00	0
	Solar	2	0	0	0.00	0
<b>Renewable(Total)</b>	<b>18</b>	<b>37</b>	<b>34</b>	<b>0.00</b>	<b>0</b>	
<b>Total Delhi</b>	<b>2935</b>	<b>1377</b>	<b>1372</b>	<b>31.43</b>	<b>1310</b>	

HP	Baspa HPS (IPP) (3*100)	300	93	165	4.49	187
	Malana HPS (IPP) (2*43)	86	36	65	0.93	39
	Other Hydro (>25MW)	372	337	299	6.88	287
	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	166	120	3.32	138
	Renewable(Total)	486	166	120	3.32	138
	Total HP	1244	632	649	15.62	651
	J & K	Baglihar HPS (IPP) (3*150+3*150)	900	822	676	15.46
Other Hydro/IPP(Including 98 MW Small Hydro)	308	159	132	3.49	145	
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	981	808	18.94	789	
Total State Control Area Generation		53860	26216	27264	644.12	26838
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		10224	10224	13270	240.50	10021
Total Regional Availability(Gross)		80027	56635	53921	1236.92	51538

IV. Total Hydro Generation:

Regional Entities Hydro	12564	10745	4362	144.47	5975
State Control Area Hydro	7468	3572	3225	70.50	3355
Total Regional Hydro	20032	14317	7587	214.97	9330

V. Total Renewable Generation:

Regional Entities Renewable	30	0	0	0.12	5
State Control Area Renewable	9214	394	1910	44.04	1835
Total Regional Renewable	9244	394	1910	44.16	1840

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

Element	Peak(20:00 Hrs) MW	Diff Peak(03:00 Hrs) MW	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
			Import	Export	Import	Export	
Vindhychal(HVDC B/B)	0	-250	100	250	0.07	4.78	-4.71
765 KV Gwalior-Agra (D/C)	995	1217	1385	0	27.83	0.00	27.83
400 KV Zerda-Kankroli	-245	-210	0	362	0.00	5.47	-5.47
400 KV Zerda-Bhinmal	-199	-163	27	338	0.00	3.64	-3.64
220 KV Auraiya-Malanpur	42	54	0	6	0.66	0.00	0.66
220 KV Badod-Kota/Morak	-71	65	155	0	0.77	0.00	0.77
Mundra-Mohindergarh(HVDC Bipole)	1702	1297	1804	0	33.50	0.00	33.50
400 KV RAPPK-Sujalpur	130	187	313	0	4.59	0.00	4.59
400 KV Vindhychal-Rihand	957	945	0	958	0.00	22.82	-22.82
765 kv Phagt-Gwalior (D/C)	775	1433	1488	0	28.67	0.00	28.67
+/- 800 KV HVDC Champa-Kurushetra	2000	2300	2400	0	51.66	0	51.66
765KV Orai-Jabalpur	655	1301	1309	0	22.60	0	22.60
765KV Orai-Satna	1888	1785	1942	0	41.60	0	41.60
765KV Orai-Gwalior	-231	-71	0	300	0.00	4	-4.09
<b>Sub Total WR</b>	<b>8398</b>	<b>9890</b>			<b>211.95</b>	<b>40.80</b>	<b>171.15</b>
400 kV Sasaram - Varanasi	-22	-65	0	81	0.00	1.38	-1.38
400 kV Sasaram - Allahabad	-81	-35	0	90	0.00	1.06	-1.06
400 KV MZP- GKP (D/C)	20	320	532	0	5.91	0.00	5.91
400 KV Patna-Balia(D/C) X 2	197	680	0	880	9.94	0.00	9.94
400 KV B Sharif-Balia (D/C)	202	414	0	488	7.27	0.00	7.27
765 KV Gaya-Balia	237	557	0	557	9.03	0.00	9.03
765 KV Gaya-Varanasi (D/C)	115	266	310	0	5.49	0.00	5.49
220 KV Pusaui-Sahupuri	185	163	202	0	4.23	0.00	4.23
132 KV Knasa-Sahupuri	0	0	0	0	0.96	0.00	0.96
132 KV Son Ngr-Rihand	-18	-19	0	28	0.00	0.49	-0.49
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-178	45	149	178	0.64	0.00	0.64
400 KV Mothari -GKP (D/C)	46	148	175	0	2.68	0.00	2.68
400 kV B Sharif - Varanasi (D/C)	123	-94	222	123	1.72	0.00	1.72
+/- 800 KV HVDC Alipurduar-Agra	500	500	500	0	12.29	0.00	12.29
<b>Sub Total ER</b>	<b>1326</b>	<b>2880</b>			<b>60.17</b>	<b>2.93</b>	<b>57.24</b>
+/- 800 KV HVDC Biswanath Chariali-Agra	500	500	500	0.00	12.11	0.00	12.11
<b>Sub Total NER</b>	<b>500</b>	<b>500</b>			<b>12.11</b>	<b>0.00</b>	<b>12.11</b>
<b>Total IR Exch</b>	<b>10224</b>	<b>13270</b>			<b>284.23</b>	<b>43.73</b>	<b>240.50</b>

VI(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
59.12	1.39	60.51	26.43	5.04	-0.10	9.24	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
85.45	156.71	242.16	69.35	171.15	240.50	-16.10	14.44	-1.66

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

Element	Peak(20:00 Hrs) MW	Diff Peak(03:00 Hrs) MW	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
			Import	Export	Import	Export	
132 KV Tanakpur - Mahendarnagar	-21	-18	0	29	0	1	-0.52

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	3.70	27.60	62.30	63.50	8.00	1.20	0.00	0.00

<----- Frequency (Hz) ----->				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block		Freq Dev Index (% of Time)
Maximum		Minimum					MAX	MIN	
Freq	Time	Freq	Time	Hz	Index	Std. Dev.	(Hz)	(Hz)	
50.15	8.04	49.72	13.40	49.95	0.091	0.080	50.10	49.78	36.50

## VIII(A). Voltage profile 400 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviation Index
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV	
Rihand	400	406	23:05	398	0:21	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	421	8:05	390	19:41	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	420	5:49	392	19:45	0.0	0.0	0.0	0.0	0.0
Kanpur	400	420	7:08	400	19:51	0.0	0.0	0.0	0.0	0.0
Dadri	400	415	6:00	395	14:46	0.0	0.0	0.0	0.0	0.0
Ballabgarh	400	417	6:00	395	14:42	0.0	0.0	0.0	0.0	0.0
Bawana	400	414	5:59	395	14:47	0.0	0.0	0.0	0.0	0.0
Bassi	400	417	18:00	391	0:06	0.0	0.0	0.0	0.0	0.0
Hissar	400	410	6:01	394	0:13	0.0	0.0	0.0	0.0	0.0
Moga	400	410	6:00	396	13:40	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	416	5:54	398	14:13	0.0	0.0	0.0	0.0	0.0
Nalagarh	400	417	6:03	396	14:57	0.0	0.0	0.0	0.0	0.0
Kishenpur	400	412	6:49	400	14:27	0.0	0.0	0.0	0.0	0.0
Wagooora	400	407	6:04	394	19:32	0.0	0.0	0.0	0.0	0.0
Amritsar	400	411	4:02	395	14:20	0.0	0.0	0.0	0.0	0.0
Kashipur	400	402	0:00	402	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	409	4:02	391	14:12	0.0	0.0	0.0	0.0	0.0
Rishikesh	400	416	5:51	390	14:47	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 Deviation Index
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV	
Fatehpur	765	786	7:03	749	19:43	0.0	0.0	0.0	0.0	0.0
Balia	765	794	7:27	751	19:40	0.0	0.0	0.0	0.0	0.0
Moga	765	790	6:01	759	14:27	0.0	0.0	0.0	0.0	0.0
Agra	765	791	6:02	756	0:19	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	800	5:55	769	21:07	0.0	0.0	0.0	0.0	0.0
Unnao	765	783	7:31	740	19:41	0.0	1.0	0.0	0.0	0.0
Lucknow	765	797	7:32	751	19:40	0.0	0.0	0.0	0.0	0.0
Meerut	765	805	6:00	764	14:46	0.0	0.0	3.4	0.0	3.4
Jhatikara	765	798	6:00	757	14:43	0.0	0.0	0.0	0.0	0.0
Bareilly 765 kV	765	809	6:03	748	19:40	0.0	0.0	9.1	0.0	9.1
Anta	765	794	6:03	769	0:09	0.0	0.0	0.0	0.0	0.0
Phagi	765	798	6:01	766	0:08	0.0	0.0	0.0	0.0	0.0

Note: '0' in Max / Min Col -&gt; 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	454.74	77.59	472.89	313.90	450.21	580.98
Pong	426.72	384.05	391.99	80.40	394.52	116.59	24.18	394.52
Tehri	829.79	740.04	743.40	16.12	744.40	21.02	147.59	142.00
Koteswar	612.50	598.50	610.54	4.95	610.08	4.69	142.00	139.99
Chamera-I	760.00	748.75	753.14	0.00	0.00	0.00	153.28	171.75
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 Saagar	298.70	295.78	0.00	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	498.98	2.91	514.05	2.94	181.21	148.00

\* 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	121	-201	0	121	-604	0	2.90	-6.44	-3.54
Delhi	644	-284	0	543	-336	0	15.10	-4.41	10.69
Haryana	487	4	0	155	14	0	3.93	-0.34	3.59
HP	-507	28	0	-611	-398	0	-10.37	-1.28	-11.65
J&K	-757	779	0	-757	508	0	-18.16	13.69	-4.47
CHD	0	0	0	0	0	0	0.00	0.75	0.75
Rajasthan	-8	-70	0	-8	176	0	-0.20	8.74	8.54
UP	1849	221	0	1392	678	0	41.63	0.09	41.72
Uttarakhand	64	490	0	59	243	0	1.27	7.66	8.93
<b>Total</b>	<b>1893</b>	<b>967</b>	<b>0</b>	<b>894</b>	<b>280</b>	<b>0</b>	<b>36.10</b>	<b>18.46</b>	<b>54.56</b>

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	121	121	201	-604	0	0
Delhi	742	538	272	-688	0	0
Haryana	493	-142	26	-237	0	0
HP	-191	-687	363	-440	0	0
J&K	-757	-757	779	403	0	0
CHD	0	0	99	-15	0	0
Rajasthan	-8	-8	1266	-78	0	0
UP	1882	1264	1190	-608	0	0
Uttarakhand	64	34	490	88	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	3.13%
ER	0.00%
Simultaneous	1.04%

(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	0	9
Haryana	1	15
Rajasthan	2	31
Delhi	5	27
UP	0	11
Uttarakhand	3	33
HP	3	24
J & K	3	33
Chandigarh	7	80

**XIII. System Constraints:****XIV. Grid Disturbance / Any Other Significant Event:****XV. Weather Conditions For 30.05.2018 :****XVI. Synchronisation of new generating units :****XVII. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / substation :**  
1.220 kV Raibareilly – Barchavan line first time synchronised at 19.46 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 : 30.05.2018

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER