

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

उत्तर क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GO118682

Power Supply Position in Northern Region for 27.06.2018

Date of Reporting : 28.06.2018



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
52693	740	53433	50.02	53037	253	53291	50.02	1227.62	11.48

\* 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	86.37	15.00	0.00	4.16	0.00	2.66	108.19	135.47	134.35	-1.12	242.53	0.00
Haryana	60.03	0.42	0.00	0.07	0.00	0.78	61.30	128.05	128.81	0.76	190.11	0.00
Rajasthan	106.59	0.87	3.49	5.30	9.90	4.48	130.63	52.74	53.64	0.90	184.27	0.00
Delhi	6.62	0.00	20.95	0.00	0.00	0.00	27.57	96.39	94.60	-1.79	122.17	0.12
UP	173.19	16.20	0.00	2.90	0.00	6.00	198.29	167.01	166.08	-0.93	364.37	0.00
Uttarakhand	0.00	17.48	6.70	0.63	0.00	0.00	24.81	20.87	21.33	0.46	46.14	0.00
HP	0.00	15.76	0.00	0.00	0.00	3.42	19.17	4.52	5.97	1.45	25.14	0.00
J & K	0.00	25.40	0.00	0.00	0.00	0.00	25.40	20.09	21.52	1.43	46.92	11.36
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.40	5.97	-0.43	5.97	0.00
<b>Total</b>	<b>432.79</b>	<b>91.12</b>	<b>31.14</b>	<b>13.05</b>	<b>9.90</b>	<b>17.34</b>	<b>595.35</b>	<b>631.54</b>	<b>632.28</b>	<b>0.74</b>	<b>1227.62</b>	<b>11.48</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	9619	0	-130	2024	9640	0	-131	2288	10511	12	0
Haryana	7339	0	-259	1467	9054	0	253	1784	9486	1	0
Rajasthan	7648	0	223	-1093	7759	0	94	-1053	8192	1	0
Delhi	4955	0	9	185	5548	0	55	803	6068	1	0
UP	17745	260	380	2206	16489	0	-278	2581	17956	22	0
Uttarakhand	2119	0	140	140	1828	0	-78	344	2134	21	0
HP	1106	0	27	-1422	1038	0	33	-1252	1302	10	0
J&K	1921	480	-71	-445	1435	253	-60	-668	2224	22	556
Chandigarh	242	0	-74	0	247	0	-19	24	282	16	0
<b>Total</b>	<b>52693</b>	<b>740</b>	<b>246</b>	<b>3062</b>	<b>53037</b>	<b>253</b>	<b>-132</b>	<b>4850</b>	<b>56352</b>	<b>1</b>	<b>254</b>

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

III. Regional Entities :

A. NTPC	Station/ Constituent	Inst. Capacity	Declared	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
		(Effective) MW	Capacity(MW)	(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
	Singrauli STPS (6*200+2*500)	2000	1200	1337	1305	28.49	1187	27.62	0.87
	Rihand I STPS (2*500)	1000	920	1002	1000	21.37	890	21.17	0.20
	Rihand II STPS (2*500)	1000	873	993	824	20.26	844	19.94	0.32
	Rihand III STPS (2*500)	1000	943	1004	1005	20.40	850	19.45	0.95
	Dadri I STPS (4*210)	840	769	425	428	11.35	473	11.41	-0.06
	Dadri II STPS (2*490)	980	929	856	633	16.71	696	16.12	0.59
	Unchahar I TPS (2*210)	420	382	272	322	6.26	261	6.53	-0.27
	Unchahar II TPS (2*210)	420	382	320	319	6.49	270	6.31	0.18
	Unchahar III TPS (1*210)	210	191	136	141	3.02	126	3.24	-0.22
	Unchahar IV TPS(1*500)	500	0	0	0	0.00	0	0.00	0.00
	ISTPP (Jhajjar) (3*500)	1500	617	500	573	12.60	525	12.87	-0.27
	Dadri GPS (4*130.19+2*154.51)	830	0	113	230	3.87	161	2.78	1.09
	Anta GPS (3*88.71+1*153.2)	419	0	0	225	2.55	106	1.50	1.05
	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	0.02	1	0.02	0.00
	Unchahar Solar(10)	10	2	0	0	0.04	2	0.04	0.00
	Singrauli Solar(15)	15	1	0	0	0.04	2	0.04	0.00
	KHEP(4*200)	800	872	694	740	12.18	508	12.00	0.18
	<b>Sub Total (A)</b>	<b>12612</b>	<b>8081</b>	<b>7652</b>	<b>7744</b>	<b>166</b>	<b>6901</b>	<b>161</b>	<b>4.58</b>
B. NPC	NAPS (2*220)	440	280	389	212	6.94	289	6.72	0.22
	RAPS- B (2*220)	440	355	398	404	8.59	358	8.52	0.07
	RAPS- C (2*220)	440	405	449	452	9.60	400	9.78	-0.18
	<b>Sub Total (B)</b>	<b>1320</b>	<b>1040</b>	<b>1236</b>	<b>1068</b>	<b>25.13</b>	<b>1047</b>	<b>25.02</b>	<b>0.11</b>
C. NHPC	Chamera I HPS (3*180)	540	534	536	0	6.79	283	6.70	0.09
	Chamera II HPS (3*100)	300	297	301	300	6.94	289	6.90	0.04
	Chamera III HPS (3*77)	231	221	239	233	5.46	227	5.31	0.15
	Bairasul HPS(3*60)	180	66	120	59	1.70	71	1.59	0.11
	Salaj-HPS (6*115)	690	685	614	690	15.85	660	16.45	-0.60
	Tanakpur-HPS (3*31.4)	94	70	67	53	1.78	74	1.67	0.11
	Uri-I HPS (4*120)	480	335	460	230	8.53	356	8.04	0.49
	Uri-II HPS (4*60)	240	193	215	204	4.80	200	4.64	0.16
	Dhauliganga-HPS (4*70)	280	272	282	208	5.34	223	5.23	0.11
	Dulhasti-HPS (3*130)	390	390	389	396	9.33	389	9.25	0.08
	Sewa-II HPS (3*40)	120	125	114	0	0.77	32	0.75	0.02
	Parbati 3 (4*130)	520	75	507	0	1.83	76	1.80	0.03
	Kishanganga(3*110)	330	142	219	184	3.49	145	3.40	0.09
	<b>Sub Total (C)</b>	<b>4395</b>	<b>3406</b>	<b>4062</b>	<b>2555</b>	<b>73</b>	<b>3026</b>	<b>72</b>	<b>0.90</b>
D.SJVNL	NJPC (6*250)	1500	1605	1449	1225	30.72	1280	31.00	-0.28
	Rampur HEP (6*68.67)	412	442	419	424	8.85	369	8.58	0.26
	<b>Sub Total (D)</b>	<b>1912</b>	<b>2047</b>	<b>1868</b>	<b>1649</b>	<b>39.57</b>	<b>1649</b>	<b>39.59</b>	<b>-0.02</b>
E. THDC	Tehri HPS (4*250)	1000	518	522	122	4.01	167	4.00	0.01
	Koteswar HPS (4*100)	400	90	104	70	2.20	92	2.17	0.03
	<b>Sub Total (E)</b>	<b>1400</b>	<b>608</b>	<b>626</b>	<b>192</b>	<b>6.21</b>	<b>259</b>	<b>6.17</b>	<b>0.04</b>
F. BBMB	Bhakra HPS (2*108+3*126+5*157)	1379	817	1095	734	19.69	820	19.61	0.08
	Dehar HPS (6*165)	990	491	660	420	11.74	489	11.79	-0.05
	Pong HPS (6*68)	396	67	141	47	1.65	69	1.61	0.04
	<b>Sub Total (F)</b>	<b>2765</b>	<b>1375</b>	<b>1896</b>	<b>1201</b>	<b>33.08</b>	<b>1378</b>	<b>33.01</b>	<b>0.07</b>
G. IPP(s)/JV(s)	Allain DuhanganHPS(IPP) (2*96)	192	0	60	101	2.88	120	1.68	1.20
	Karcham Wangtoo HPS(IPP) (4*250)	1000	0	1000	850	17.44	727	17.53	-0.09
	Malana Sta-II HPS (2*50)	100	0	85	0	1.35	56	1.27	0.08
	Shree Cement TPS (2*150)	300	0	101	69	1.94	81	2.12	-0.18
	Budhil HPS(IPP) (2*35)	70	0	76	70	0.17	7	1.65	-1.48
	Sani HPS (IPP) (2*50)	100	0	0	0	0.00	1.43	0.00	0.00
	<b>Sub Total (G)</b>	<b>1762</b>	<b>0</b>	<b>1322</b>	<b>1089</b>	<b>23.78</b>	<b>991</b>	<b>24.25</b>	<b>-0.47</b>
<b>H. Total Regional Entities (A-G)</b>		<b>26167</b>	<b>16558</b>	<b>18662</b>	<b>15499</b>	<b>366.02</b>	<b>15251</b>	<b>360.81</b>	<b>5.21</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	670	640	14.52	605
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	0	0	0.00	0
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	789	795	17.62	734
	Goindwal(GVK) (2*270)	540	215	246	5.32	221
	Rajpura (2*700)	1400	970	1020	24.55	1023
	Talwandi Saboo (3*660)	1980	924	970	24.37	1016
	<b>Thermal (Total)</b>	<b>6560</b>	<b>3568</b>	<b>3671</b>	<b>86.37</b>	<b>3599</b>
	Total Hydro	1000	520	645	15.00	625
	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>4088</b>	<b>4316</b>	<b>108.19</b>	<b>4508</b>
	Haryana	Panipat TPS (2*210+2*250)	920	398	570	11.63
DCRTPP (Yamuna nagar) (2*300)		600	471	477	11.41	475
Faridabad GPS (NTPC)(2*137.75+1*156)		432	0	0	0.00	0
RGTPP (khedan) (IPP) (2*600)		1200	607	755	15.89	662
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	787	787	21.10	879
<b>Thermal (Total)</b>		<b>4497</b>	<b>2263</b>	<b>2589</b>	<b>60.03</b>	<b>2501</b>
Total Hydro		62	7	16	0.42	17
Wind Power		0	0	0	0.00	0
Biomass		106	0	0	0.78	33
Solar		50	0	0	0.07	3
<b>Renewable(Total)</b>		<b>156</b>	<b>0</b>	<b>0</b>	<b>0.85</b>	<b>35</b>
<b>Total Haryana</b>		<b>4715</b>	<b>2270</b>	<b>2605</b>	<b>61.30</b>	<b>2554</b>
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	784	813	18.84
	suratgarh TPS (6*250)	1500	369	680	12.29	512
	Chabra TPS (4*250)	1000	910	727	19.10	796
	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	142	147	3.49	145
	RAPS A (NPC) (1*100+1*200)	300	168	166	3.97	165
	Barsingsar (NLC) (2*125)	250	210	218	5.68	237
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	741	445	13.71	571
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(2*600)	1200	561	403	10.81	451
	Kawai(Adani) (2*660)	1320	1193	1136	26.17	1090
	<b>Thermal (Total)</b>	<b>9536</b>	<b>5078</b>	<b>4735</b>	<b>114.05</b>	<b>4752</b>
	Total Hydro	550	46	33	0.87	36
	Wind power	4292	302	1290	9.90	413
	Biomass	102	21	21	0.51	21
	Solar	1995	18	0	5.30	221
	Renewable/Others (Total)	6389	341	1311	15.71	655
	<b>Total Rajasthan</b>	<b>16475</b>	<b>5465</b>	<b>6079</b>	<b>130.63</b>	<b>5443</b>
UP	Anpara TPS (3*210+2*500)	1630	1320	1319	30.60	1275
	Obra TPS (2*50+2*94+5*200)	1194	521	492	10.60	442
	Paricha TPS (2*110+2*220+2*250)	1160	766	587	14.30	596
	Panki TPS (2*105)	210	0	0	0.00	0
	Harduaganj TPS (1*60+1*105+2*250)	665	498	486	9.80	408
	Tanda TPS (NTPC) (4*110)	440	275	215	5.19	216
	Roza TPS (IPP) (4*300)	1200	746	590	14.60	608
	Anpara-C (IPP) (2*600)	1200	1055	1096	21.30	888
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	223	219	0.00	0
	Anpara-D(2*500)	1000	935	947	20.50	854
	Lalitpur TPS(3*660)	1980	1301	1030	26.30	1096
	Bara(3*660)	1980	1031	727	20.00	833
	<b>Thermal (Total)</b>	<b>13109</b>	<b>8671</b>	<b>7708</b>	<b>173.19</b>	<b>7216</b>
	Vishnuparyag HPS (IPP)(4*110)	440	435	435	10.50	438
	Alakananda(4*82.5)	330	165	219	5.10	213
	Other Hydro	527	48	15	0.60	25
	Cogeneration	1360	250	250	6.00	250
	Wind Power	0	0	0	0.00	0
Biomass	26	0	0	0.00	0	
Solar	472	0	0	2.90	121	
<b>Renewable(Total)</b>	<b>498</b>	<b>0</b>	<b>0</b>	<b>2.90</b>	<b>121</b>	
<b>Total UP</b>	<b>16264</b>	<b>9569</b>	<b>8627</b>	<b>198.29</b>	<b>8262</b>	
Uttarakhand	Other Hydro	1250	750	678	17.48	728
	Total Gas	450	274	284	6.70	279
	Wind Power	0	0	0	0.00	0
	Biomass	127	0	0	0.00	0
	Solar	100	0	0	0.63	26
	Small Hydro (< 25 MW)	180	0	0	0.00	0
	<b>Renewable(Total)</b>	<b>407</b>	<b>0</b>	<b>0</b>	<b>0.63</b>	<b>26</b>
	<b>Total Uttarakhand</b>	<b>2107</b>	<b>1024</b>	<b>962</b>	<b>24.81</b>	<b>1034</b>
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	132	131	3.12	130
	Pragati Gas Turbine (2x104+ 1x122)	330	262	260	6.40	267
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	494	561	11.44	477
	Badarpur TPS (NTPC) (3*95+2*210)	705	324	304	6.62	276
	<b>Thermal (Total)</b>	<b>2917</b>	<b>1212</b>	<b>1256</b>	<b>27.57</b>	<b>1149</b>
	Wind Power	0	0	0	0.00	0
	Biomass	16	20	36	0.00	0
	Solar	2	0	0	0.00	0
<b>Renewable(Total)</b>	<b>18</b>	<b>20</b>	<b>36</b>	<b>0.00</b>	<b>0</b>	
<b>Total Delhi</b>	<b>2935</b>	<b>1232</b>	<b>1292</b>	<b>27.57</b>	<b>1149</b>	

HP	Baspa HPS (IPP) (3*100)	300	286	286	6.89	287	
	Malana HPS (IPP) (2*43)	86	75	14	1.09	46	
	Other Hydro (>25MW)	372	358	298	7.77	324	
	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	193	97	3.42	142	
	Renewable(Total)	486	193	97	3.42	142	
	Total HP	1244	911	696	19.17	799	
	J & K	Baglihar HPS (IPP) (3*150+3*150)	900	881	881	21.16	882
		Other Hydro/IPP(Including 98 MW Small Hydro)	308	175	178	4.24	177
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	1056	1059	25.40	1058	
Total State Control Area Generation		53860	25615	25635	595.35	24806	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		13317	14269.4	288.21	12009		
Total Regional Availability(Gross)		80027	57594	55403	1249.58	52066	

IV. Total Hydro Generation:

Regional Entities Hydro	12564	10291	7288	185.50	7722
State Control Area Hydro	7468	4212	4080	91.12	4244
Total Regional Hydro	20032	14503	11368	276.63	11967

V. Total Renewable Generation:

Regional Entities Renewable	30	0	0	0.10	4
State Control Area Renewable	9214	554	1444	30.32	1263
Total Regional Renewable	9244	554	1444	30.42	1267

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)	100	-100	250	250	2.09	0.89	1.20
765 KV Gwalior-Agra (D/C)	1821	2608	2921	0	54.16	0.00	54.16
400 KV Zerda-Kankroli	-382	-220	0	502	0.00	6.80	-6.80
400 KV Zerda-Bhinmal	0	-218	0	378	0.00	2.33	-2.33
220 KV Auraiya-Malanpur	31	74	21	0	1.28	0.00	1.28
220 KV Badod-Kota/Morak	-17	9	140	0	0.00	0.66	-0.66
Mundra-Mohindergarhi(HVDC Bipole)	2297	1797	2308	0	45.72	0.00	45.72
400 KV RAPPC-Sujalpur	70	188	374	0	5.11	0.00	5.11
400 KV Vindhychal-Rihand	961	940	0	964	0.00	20.54	-20.54
765 kv Phagt-Gwalior (D/C)	910	1111	1556	0	30.51	0.00	30.51
+/- 800 KV HVDC Champa-Kurushetra	1500	1000	1500	0	24.18	0	24.18
765KV Orai-Jabalpur	712	1291	1304	0	23.51	0	23.51
765KV Orai-Satna	1704	1852	1873	0	42.77	0	42.77
765KV Orai-Gwalior	-319	-313	0	667	0.00	10	-9.69
<b>Sub Total WR</b>	<b>9388</b>	<b>10018</b>			<b>229.33</b>	<b>40.92</b>	<b>188.41</b>
400 kV Sasaram - Varanasi	237	237	247	0	5.51	0.00	5.51
400 kV Sasaram - Allahabad	134	132	187	0	3.78	0.00	3.78
400 kV MZP- GKP (D/C)	326	308	614	0	10.08	0.00	10.08
400 KV Patna-Balia(D/C) X 2	620	763	927	0	15.06	0.00	15.06
400 KV B Sharif-Balia (D/C)	203	470	515	0	8.16	0.00	8.16
765 KV Gaya-Balia	320	544	544	0	9.83	0.00	9.83
765 KV Gaya-Varanasi (D/C)	302	353	620	0	10.56	0.00	10.56
220 KV Pusaui-Sahupuri	156	161	167	0	3.56	0.00	3.56
132 KV Knasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
132 KV Son Ngr-Rihand	-9	-9	0	23	0.00	0.23	-0.23
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	138	187	154	55	1.47	0.00	1.47
400 KV Mothari -GKP (D/C)	102	82	146	0	1.91	0.00	1.91
400 kV B Sharif - Varanasi (D/C)	1	23	204	23	1.76	0.00	1.76
+/- 800 KV HVDC Alipurduar-Agra	700	500	700	0	12.31	0.00	12.31
<b>Sub Total ER</b>	<b>3230</b>	<b>3751</b>			<b>83.98</b>	<b>0.23</b>	<b>83.76</b>
+/- 800 KV HVDC Biswanath-Charialli-Agra	700	500	700	0.00	16.05	0.00	16.05
<b>Sub Total NER</b>	<b>700</b>	<b>500</b>			<b>16.05</b>	<b>0.00</b>	<b>16.05</b>
<b>Total IR Exch</b>	<b>13317</b>	<b>14269</b>			<b>329.36</b>	<b>41.14</b>	<b>288.21</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
54.16	2.13	56.29	44.32	46.88	-2.72	11.87	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
95.76	197.03	292.79	99.81	188.41	288.21	4.04	-8.62	-4.58

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	-25	-6	0	27	0	0	-0.31

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	0.00	2.30	53.70	84.90	12.10	1.40	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)	
50.13	6.03	49.84	5.29	50.00	0.023	0.048	50.10	49.90	15.10

## 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	404	7:01	399	11:43	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	425	7:39	396	19:40	0.0	0.0	17.2	0.0	17.2
Bareilly(PG)400kV	400	420	6:02	396	14:25	0.0	0.0	0.0	0.0	0.0
Kanpur	400	421	5:59	402	14:30	0.0	0.0	3.7	0.0	3.7
Dadri	400	416	7:01	394	14:36	0.0	0.0	0.0	0.0	0.0
Ballabgarh	400	417	6:03	392	14:29	0.0	0.0	0.0	0.0	0.0
Bawana	400	414	7:25	393	14:29	0.0	0.0	0.0	0.0	0.0
Bassi	400	418	4:00	401	13:39	0.0	0.0	0.0	0.0	0.0
Hissar	400	411	7:01	392	13:40	0.0	0.0	0.0	0.0	0.0
Moga	400	410	5:20	396	11:08	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	412	6:02	395	13:42	0.0	0.0	0.0	0.0	0.0
Nalagarh	400	412	5:07	400	14:35	0.0	0.0	0.0	0.0	0.0
Kishenpur	400	409	3:40	399	11:02	0.0	0.0	0.0	0.0	0.0
Wagoora	400	406	3:45	391	10:14	0.0	0.0	0.0	0.0	0.0
Amritsar	400	410	7:02	396	12:10	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	5:01	398	15:03	0.0	0.0	0.0	0.0	0.0
Rishikesh	400	413	6:02	389	13:51	0.0	1.0	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	785	4:15	747	14:28	0.0	0.0	0.0	0.0	0.0
Balia	765	798	7:31	765	0:05	0.0	0.0	0.0	0.0	0.0
Moga	765	799	6:02	766	13:39	0.0	0.0	0.0	0.0	0.0
Agra	765	794	5:04	754	15:22	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	797	6:01	755	13:38	0.0	0.0	0.0	0.0	0.0
Unnao	765	786	5:57	739	14:28	0.0	4.0	0.0	0.0	0.0
Lucknow	765	800	6:02	760	14:29	0.0	0.0	0.0	0.0	0.0
Meerut	765	786	18:56	781	0:00	0.0	0.0	0.0	0.0	0.0
Jhatikara	765	792	6:01	748	14:36	0.0	0.0	0.0	0.0	0.0
Bareilly 765 kV	765	808	6:02	757	14:28	0.0	0.0	5.3	0.0	5.3
Anta	765	790	4:01	766	13:40	0.0	0.0	0.0	0.0	0.0
Phagi	765	796	3:57	763	14:19	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	454.58	74.65	476.82	387.82	682.55	845.29
Pong	426.72	384.05	389.85	52.62	393.48	102.14	27.21	141.81
Tehri	829.79	740.04	743.30	15.63	744.75	22.75	192.26	145.00
Koteswar	612.50	598.50	610.68	4.90	610.91	5.00	145.00	144.69
Chamera-I	760.00	748.75	753.24	0.00	0.00	0.00	279.87	184.00
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	501.36	4.78	513.34	10.10	138.36	247.61

\* 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	1990	298	0	1726	298	0	46.22	7.14	53.36
Delhi	1148	-345	0	1054	-870	0	28.13	-10.90	17.23
Haryana	1774	9	0	1666	-200	0	33.76	-3.10	30.66
HP	-1481	228	0	-1384	-38	0	-30.81	1.48	-29.33
J&K	-1092	425	0	-1092	647	0	-26.22	15.45	-10.77
CHD	0	24	0	0	0	0	0.00	0.64	0.64
Rajasthan	-52	-1001	0	-52	-1041	0	-1.25	-10.34	-11.59
UP	2189	392	0	1817	389	0	47.22	3.07	50.29
Uttarakhand	-143	487	0	-143	283	0	-3.44	8.45	5.01
<b>Total</b>	<b>4334</b>	<b>517</b>	<b>0</b>	<b>3592</b>	<b>-530</b>	<b>0</b>	<b>93.61</b>	<b>11.89</b>	<b>105.50</b>

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	2024	1726	298	298	0	0
Delhi	1257	1048	-64	-938	0	0
Haryana	1801	1189	22	-730	0	0
HP	-1151	-1486	278	-240	0	0
J&K	-1092	-1092	790	385	0	0
CHD	0	0	73	0	0	0
Rajasthan	-52	-52	45	-1532	0	0
UP	2242	1784	670	0	0	0
Uttarakhand	-143	-143	492	127	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	0.69%
ER	0.00%
Simultaneous	0.00%

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

WR	7.99%
ER	0.00%
Simultaneous	4.17%

(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	22
Haryana	0	11
Rajasthan	1	18
Delhi	5	36
UP	1	14
Uttarakhand	3	21
HP	2	19
J & K	0	12
Chandigarh	6	71

**XIII. System Constraints:**

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

**XV. Weather Conditions For 27.06.2018 :**

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

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

0.00

**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 : 27.06.2018

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER