

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOH188682

Power Supply Position in Northern Region for 28.07.2017

Date of Reporting : 29.07.2017



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
51752	2500	54252	49.99	51065	338	51403	49.93	1207.16	18.44

\* 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's:

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	97.11	18.10	0.15	115.35	127.45	128.59	1.14	243.94	0.00
Haryana	70.34	0.86	0.00	71.19	129.01	130.72	1.70	201.91	0.90
Rajasthan	95.18	0.28	13.00	108.46	74.34	74.17	-0.16	182.64	0.00
Delhi	24.38		0.00	24.38	89.61	89.12	-0.49	113.49	0.03
UP	151.48	24.31	0.00	175.80	167.39	171.21	3.82	347.00	6.86
Uttarakhand		19.69	7.25	26.94	13.73	14.33	0.61	41.27	0.27
HP		19.21	8.04	27.25	-3.73	0.27	4.00	27.53	0.02
J & K		26.00	0.00	26.00	14.04	17.62	3.58	43.63	10.37
Chandigarh				0.00	6.65	5.74	-0.91	5.74	0.00
<b>Total</b>	<b>438.48</b>	<b>108.45</b>	<b>28.44</b>	<b>575.38</b>	<b>618.49</b>	<b>631.78</b>	<b>13.29</b>	<b>1207.16</b>	<b>18.44</b>

\* Shortage furnished by the respective constituent \$ Others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MW's:

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	10730	0	-3	1428	9422	0	38	1523	10781	17	0
Haryana	8510	31	66	978	8722	0	-98	1172	9171	22	124
Rajasthan	6854	0	88	-119	8501	0	89	203	8882	1	0
Delhi	4690	0	-149	420	4761	0	200	466	5443	16	0
UP	15518	1955	0	244	15550	90	130	700	15713	22	2500
Uttarakhand	1955	0	165	-216	1522	0	100	-372	1955	20	0
HP	1180	0	125	-1798	977	0	261	-1929	1305	10	0
J&K	2056	514	309	-881	1405	248	23	-1271	2133	21	533
Chandigarh	260	0	-46	0	205	0	-35	-20	281	15	0
<b>Total</b>	<b>51752</b>	<b>2500</b>	<b>555</b>	<b>56</b>	<b>51065</b>	<b>338</b>	<b>709</b>	<b>471</b>	<b>53023</b>	<b>22</b>	<b>3109</b>

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

Diversity is 1.05

III. Regional Entities :

Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sento(MW)	Schedule Net MU	UI [OG(+ve), UG: (-ve)]	
								Net MU	Net MU
<b>A. NTPC</b>									
Singrauli STPS (5*200+2*500)	2000	1532	1657	1683	36.98	1541	36.72		0.27
Rihand I STPS (2*500)	1000	923	1002	1008	22.04	918	22.22		-0.18
Rihand II STPS (2*500)	1000	943	985	956	22.08	920	22.51		-0.44
Rihand III STPS (2*500)	1000	471	490	497	11.24	469	11.06		0.18
Dadri I STPS (4*210)	840	769	744	686	16.05	669	16.93		-0.88
Dadri II STPS (2*490)	980	929	902	836	19.42	809	20.20		-0.77
Unchahar I TPS (2*210)	420	350	380	350	7.83	326	8.29		-0.46
Unchahar II TPS (2*210)	420	382	413	347	8.12	339	8.79		-0.66
Unchahar III TPS (1*210)	210	192	192	137	3.99	166	4.39		-0.40
Unchahar IV TPS(1*500)	500	0	0	0	0.00	0	0.00		0.00
ISTPP (Jhajjar) (3*500)	1500	948	986	891	20.43	851	21.81		-1.38
Dadri GPS (4*130, 19+2*154.51)	830	768	170	174	3.89	162	4.15		-0.27
Anta GPS (3*88, 71+1*153.2)	419	391	0	0	0.00	0	0.00		0.00
Auraiya GPS (4*111, 19+2*109.30)	663	612	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	2	0	0	0.06	3	0.06		0.01
KHEP(4*200)	800	813	865	868	20.79	866	19.52		1.27
<b>Sub Total (A)</b>	<b>12612</b>	<b>10026</b>	<b>8786</b>	<b>8433</b>	<b>193</b>	<b>8041</b>	<b>197</b>		<b>-3.73</b>
<b>B. NPC</b>									
NAPS (2*220)	440	380	421	421	9.16	382	9.12		0.04
RAPS- B (2*220)	440	362	411	408	8.76	365	8.64		0.11
RAPS- C (2*220)	440	430	451	447	9.69	404	10.32		-0.63
<b>Sub Total (B)</b>	<b>1320</b>	<b>1172</b>	<b>1283</b>	<b>1276</b>	<b>27.61</b>	<b>1150</b>	<b>28.08</b>		<b>-0.48</b>
<b>C. NHPC</b>									
Chamera I HPS (3*180)	540	535	545	543	12.99	541	12.83		0.15
Chamera II HPS (3*100)	300	273	302	302	6.56	273	6.55		0.01
Chamera III HPS (3*77)	231	230	238	237	5.64	235	5.52		0.13
Bairasuli HPS(3*60)	180	78	185	124	1.79	75	1.77		0.02
Salal-HPS (6*115)	690	663	679	674	16.07	670	15.90		0.17
Tanakpur-HPS (3*31.4)	94	90	93	94	2.21	92	2.15		0.06
Uri-I HPS (4*120)	480	472	483	480	11.50	479	11.32		0.18
Uri-II HPS (4*60)	240	201	181	242	4.86	203	4.82		0.04
Dhauliganga-HPS (4*70)	280	281	292	273	6.83	285	6.74		0.10
Dulhasti-HPS (3*130)	390	387	399	395	9.31	388	9.28		0.04
Sewa-II HPS (3*40)	120	126	132	131	3.15	131	3.02		0.12
Parbati 3 (4*130)	520	514	514	256	5.40	225	5.38		0.03
<b>Sub Total (C)</b>	<b>4065</b>	<b>3848</b>	<b>4044</b>	<b>3752</b>	<b>86</b>	<b>3596</b>	<b>85</b>		<b>1.03</b>
<b>D.SJVNL</b>									
NJPC (6*250)	1500	1513	1611	1514	37.17	1549	36.31		0.85
Rampur HEP (6*68.67)	412	416	443	423	10.43	434	9.98		0.45
<b>Sub Total (D)</b>	<b>1912</b>	<b>1929</b>	<b>2054</b>	<b>1937</b>	<b>47.60</b>	<b>1983</b>	<b>46.29</b>		<b>1.30</b>
<b>E. THDC</b>									
Tehri HPS (4*250)	1000	890	900	899	21.26	886	21.00		0.26
Koteswar HPS (4*100)	400	344	398	303	8.29	346	8.26		0.04
<b>Sub Total (E)</b>	<b>1400</b>	<b>1234</b>	<b>1298</b>	<b>1202</b>	<b>29.56</b>	<b>1232</b>	<b>29.26</b>		<b>0.30</b>
<b>F. BBMB</b>									
Bhakra HPS (2*108+3*126+5*157)	1379	898	1325	734	21.77	907	21.56		0.21
Dehar HPS (6*165)	990	619	825	590	15.03	626	14.86		0.17
Pong HPS (6*66)	396	196	330	66	4.69	195	4.70		-0.01
<b>Sub Total (F)</b>	<b>2765</b>	<b>1713</b>	<b>2480</b>	<b>1390</b>	<b>41.48</b>	<b>1728</b>	<b>41.12</b>		<b>0.36</b>
<b>G. IPP(s)/JV(s)</b>									
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	116	197	3.84	160	5.09		-1.25
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1100	1100	26.29	1096	26.08		0.21
Malana Stg-II HPS (2*50)	100	0	112	112	2.65	111	2.50		0.15
Shree Cement TPS (2*150)	300	0	129	144	3.25	135	3.40		-0.15
Budhi HPS(IPP) (2*35)	70	0	76	76	1.78	74	1.79		-0.01
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1532</b>	<b>1630</b>	<b>37.81</b>	<b>1575</b>	<b>38.86</b>		<b>-1.05</b>
<b>H. Total Regional Entities (A-G)</b>	<b>25737</b>	<b>19922</b>	<b>21477</b>	<b>19619</b>	<b>463.35</b>	<b>19306</b>	<b>465.61</b>		<b>-2.26</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	630	480	11.83	493
Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	0	0	-0.03	-1
Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	715	555	13.90	579
Goindwal(GVK) (2*270)	540	246	180	5.09	212
Rajpura (2*700)	1400	1320	1320	31.63	1318
Talwandi Saboo (3*660)	1980	1550	1100	34.69	1445

	<b>Thermal (Total)</b>	<b>6560</b>	<b>4461</b>	<b>3635</b>	97.11	<b>4046</b>	
	Total Hydro	1000	771	745	18.10	754	
	Wind Power	0	0	0	0.00	0	
	Biomass	288	0	0	0.07	3	
	Solar	560	0	0	0.08	3	
	<b>Renewable(Total)</b>	<b>848</b>	<b>0</b>	<b>0</b>	<b>0.15</b>	<b>6</b>	
	<b>Total Punjab</b>	<b>8408</b>	<b>5232</b>	<b>4380</b>	<b>115.35</b>	<b>4806</b>	
Haryana	Panipat TPS (2*210+2*250)	920	402	401	9.91	413	
	DCRTPP (Yamuna nagar) (2*300)	600	476	544	11.73	489	
	Faridabad GPS (NTPC)(2*137.75+1*156)	432	179	190	4.31	179	
	RGTPP (khedar) (IPP) (2*600)	1200	802	1076	21.06	878	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP) (2*660)	1320	1113	1173	23.34	973	
	<b>Thermal (Total)</b>	<b>4497</b>	<b>2972</b>	<b>3384</b>	<b>70.34</b>	<b>2931</b>	
	Total Hydro	62	36	34	0.86	36	
	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>3008</b>	<b>3418</b>	<b>71.19</b>	<b>2966</b>	
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	169	148	3.95	164	
	suratgarh TPS (6*250)	1500	177	186	4.62	192	
	Chabra TPS (4*250)	1000	1152	1552	31.92	1330	
	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	187	190	4.58	191	
	RAPS A (NPC) (1*100+1*200)	300	160	164	4.01	167	
	Barsingar (NLC) (2*125)	250	104	203	2.97	124	
	Giral LTPS (2*125)	250	0	0	0.00	0	
	Rajwst LTPS (IPP) (8*135)	1080	648	496	10.83	451	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	451	520	11.35	473	
	Kawai(Adani) (2*660)	1320	568	1193	20.96	873	
	<b>Thermal (Total)</b>	<b>9536</b>	<b>3616</b>	<b>4652</b>	<b>95.18</b>	<b>3966</b>	
	Total Hydro	550	32	25	0.28	12	
	Wind power	4017	285	403	10.39	433	
	Biomass	99	23	23	0.56	23	
	Solar	1295	0	0	2.06	86	
	Renewable/Others (Total)	5411	308	426	13.00	542	
	<b>Total Rajasthan</b>	<b>15497</b>	<b>3956</b>	<b>5103</b>	<b>108.46</b>	<b>4519</b>	
UP	Anpara TPS (3*210+2*500)	1630	868	853	20.96	873	
	Obra TPS (2*50+2*94+5*200)	1194	373	290	7.70	321	
	Paricha TPS (2*110+2*220+2*250)	1160	696	728	16.93	705	
	Panki TPS (2*105)	210	0	0	0.00	0	
	Harduaganj TPS (1*60+1*105+2*250)	665	443	444	10.73	447	
	Tanda TPS (NTPC) (4*110)	440	271	288	6.85	286	
	Roza TPS (IPP) (4*300)	1200	805	805	19.31	805	
	Anpara-C (IPP) (2*600)	1200	566	566	13.53	564	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0	
	Anpara-D(2*500)	1000	895	915	21.58	899	
	Lalitpur TPS(3*660)	1980	1242	1230	19.83	826	
	Bara(2*660)	1320	602	604	14.05	585	
	<b>Thermal (Total)</b>	<b>12449</b>	<b>6761</b>	<b>6723</b>	<b>151.48</b>	<b>6312</b>	
	Vishnuparyag HPS (IPP)(4*110)	440	435	435	10.47	436	
	Alaknanda(4*82.5)	330	341	334	7.94	331	
	Other Hydro	527	274	324	5.90	246	
	Cogeneration	981	0	0	0.00	0	
	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>7811</b>	<b>7816</b>	<b>175.80</b>	<b>7325</b>	
	Uttarakhand	Other Hydro	1250	877	555	19.69	820
		Total Gas	225	274	280	6.59	275
		Wind Power	0	0	0	0.00	0
		Biomass	127	0	0	0.00	0
		Solar	100	0	0	0.66	27
Small Hydro (< 25 MW)		180	0	0	0.00	0	
<b>Renewable(Total)</b>		<b>407</b>	<b>0</b>	<b>0</b>	<b>0.66</b>	<b>27</b>	
<b>Total Uttarakhand</b>		<b>1882</b>	<b>1151</b>	<b>835</b>	<b>26.94</b>	<b>1122</b>	
Delhi		Raighat TPS (2*67.5)	135	0	0	0.00	0
		Delhi Gas Turbine (6x30 + 3x34)	282	36	37	0.77	32
	Pragati Gas Turbine (2x104+ 1x122)	330	259	257	6.33	264	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	418	417	10.23	426	
	Badarpur TPS (NTPC) (3*95+2*210)	705	336	323	7.05	294	
	<b>Thermal (Total)</b>	<b>2917</b>	<b>1050</b>	<b>1034</b>	<b>24.38</b>	<b>1016</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>1050</b>	<b>1034</b>	<b>24.38</b>	<b>1016</b>		
HP	Baspa HPS (IPP) (3*100)	300	330	330	7.92	330	
	Malana HPS (IPP) (2*43)	86	108	108	2.58	108	
	Other Hydro (>25MW)	372	383	364	8.71	363	
	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	334	319	8.04	335	
	<b>Renewable(Total)</b>	<b>486</b>	<b>334</b>	<b>319</b>	<b>8.04</b>	<b>335</b>	
	<b>Total HP</b>	<b>1244</b>	<b>1154</b>	<b>1120</b>	<b>27.25</b>	<b>1136</b>	
	J & K	Baqilhar HPS (IPP) (3*150+3*150)	900	883	883	21.19	883
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>1083</b>	<b>26</b>	<b>1084</b>	
<b>Total State Control Area Generation</b>		<b>50818</b>	<b>24447</b>	<b>24789</b>	<b>575.38</b>	<b>23974</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>		<b>8239</b>	<b>7836</b>	<b>202.65</b>	<b>8444</b>		
<b>Total Regional Availability(Gross)</b>	<b>76555</b>	<b>54163</b>	<b>52244</b>	<b>1241.38</b>	<b>51724</b>		

**IV. Total Hydro Generation:**

Regional Entities Hydro	12234	12069	10558	258.52	10772
State Control Area Hydro	7243	5279	4935	116.50	5156
<b>Total Regional Hydro</b>	<b>19477</b>	<b>17348</b>	<b>15493</b>	<b>375.02</b>	<b>15928</b>

**V. Total Renewable Generation:**

Regional Entities Renewable	30	0	0	0.13	5
State Control Area Renewable	7436	642	745	21.85	910
<b>Total Regional Renewable</b>	<b>7466</b>	<b>642</b>	<b>745</b>	<b>21.98</b>	<b>916</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)	500	-50	50	500	0.01	7.42	-7.40
765 KV Gwalior-Agra (D/C)	2646	2346	2715	0	54.77	0.00	54.77
400 KV Zerda-Kankroli	196	196	272	0	3.87	0.00	3.87
400 KV Zerda-Bhinmal	283	216	288	0	4.14	0.00	4.14
220 KV Auraiya-Malanpur	24	14	0	25	0.64	0.00	0.64
220 KV Badod-Kota/Morak	181	141	225	0	3.59	0.00	3.59
Mundra-Mohindergarh(HVDC Bipole)	0	0	0	0	0.00	0.00	0.00
400 KV RAPP-Subalpur	231	236	288	0	4.88	0.00	4.88
400 KV Vindhychal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	735	632	974	0	18.29	0.00	18.29
+/- 800 kV HVDC Champa-Kurushetra	1500	1000	1500	0	41.55	0	41.55
<b>Sub Total WR</b>	<b>6296</b>	<b>4731</b>			<b>131.75</b>	<b>7.42</b>	<b>124.33</b>
400 kV Sasaram - Varanasi	197	196	204	0	6.93	0.00	6.93
400 kV Sasaram - Allahabad	46	52	67	0	1.24	0.00	1.24
400 KV MZP- GKP (D/C)	150	448	498	0	9.05	0.00	9.05
400 KV Patna-Balia(D/C) X 2	475	605	625	0	13.04	0.00	13.04
400 KV B Sharif-Balia (D/C)	220	381	387	0	7.56	0.00	7.56
765 KV Gaya-Balia	324	354	368	0	7.21	0.00	7.21
765 KV Gaya-Varanasi (D/C)	73	236	265	0	4.34	0.00	4.34
220 KV Pusauli-Sahupuri	188	187	217	0	4.16	0.00	4.16
132 KV K'nasa-Sahupuri	0	0	0	0	0.96	0.00	0.96
132 KV Son Ngr-Rihand	-30	-18	0	40	-0.57	0.57	-1.14
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-369	-188	369	0	4.61	0.00	4.61
400 KV Barh -GKP (D/C)	183	197	211	0	4.21	0.00	4.21
400 kV B Sharif - Varanasi (D/C)	-186	-29	132	69	0.09	0.00	0.09
+/- 800 KV HVDC Alipurduar-Agra	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1271</b>	<b>2421</b>			<b>62.82</b>	<b>0.57</b>	<b>62.25</b>
+/- 800 KV HVDC BiswanathChariali-Agra	672	684	700	0.00	16.06	0.00	16.06
<b>Sub Total NER</b>	<b>672</b>	<b>684</b>			<b>16.06</b>	<b>0.00</b>	<b>16.06</b>
<b>Total IR Exch</b>	<b>8239</b>	<b>7836</b>			<b>210.63</b>	<b>7.99</b>	<b>202.65</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
44.24	3.67	47.91	6.54	-0.28	-14.02	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
40.43	137.95	178.38	78.32	124.33	202.65	37.89	-13.62	24.27

**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	-26	-27	0	-29	0	-1	0.58

**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	0.09	7.38	57.35	77.44	13.33	1.89	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)	
Freq	Time	Freq	Time	Hz	Index				
50.17	15.45	49.79	17.52	49.99	0.037	0.060	50.11	49.83	22.56

**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	403	0:00	403	0:00	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	414	5:08	395	0:44	0.0	0.0	0.0	0.0	0.0
Bareilly(PG)400kV	400	413	7:02	390	12:02	0.0	0.0	0.0	0.0	0.0
Kanpur	400	419	7:05	400	23:19	0.0	0.0	0.0	0.0	0.0
Dadri	400	409	5:34	393	14:33	0.0	0.0	0.0	0.0	0.0
Ballabgarh	400	413	7:00	395	14:51	0.0	0.0	0.0	0.0	0.0
Bawana	400	405	6:03	390	14:24	0.0	0.0	0.0	0.0	0.0
Bassi	400	420	18:02	398	23:25	0.0	0.0	0.0	0.0	0.0
Hissar	400	407	7:03	390	23:22	0.0	0.0	0.0	0.0	0.0
Moga	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	403	6:07	389	14:25	0.0	2.1	0.0	0.0	0.0
Nalagarh	400	408	6:25	394	14:16	0.0	0.0	0.0	0.0	0.0
Kishenpur	400	408	1:59	398	14:30	0.0	0.0	0.0	0.0	0.0
Wagoora	400	404	1:52	388	20:12	0.0	5.0	0.0	0.0	0.0
Amritsar	400	406	5:20	395	14:15	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	405	6:05	391	11:48	0.0	0.0	0.0	0.0	0.0
Rishikesh	400	412	5:31	393	19:38	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	780	7:00	748	21:42	0.0	0.0	0.0	0.0	0.0
Balia	765	781	7:01	746	19:18	0.0	0.0	0.0	0.0	0.0
Moga	765	889	6:41	765	16:01	0.0	0.0	0.6	0.6	0.6
Agra	765	791	7:05	756	23:20	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	790	7:04	758	23:21	0.0	0.0	0.0	0.0	0.0

Unnao	765	771	7:01	738	23:25	0.0	1.6	0.0	0.0	0.0
Lucknow	765	788	7:05	751	19:19	0.0	0.0	0.0	0.0	0.0
Meerut	765	793	7:02	759	21:42	0.0	0.0	0.0	0.0	0.0
Jhatikara	765	789	7:02	756	23:22	0.0	0.0	0.0	0.0	0.0
Bareilly 765 kV	765	789	7:01	753	23:21	0.0	0.0	0.0	0.0	0.0
Anta	765	782	17:15	762	23:19	0.0	0.0	0.0	0.0	0.0
Phagi	765	790	18:01	761	23:18	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	493.92	858.11	485.32	593.99	1558.13	723.55
Pong	426.72	384.05	408.64	454.47	401.13	244.95	994.94	312.84
Tehri	829.79	740.04	793.05	499.06	786.85	412.00	735.44	543.00
Koteshwar	612.50	598.50	609.84	4.49	609.41	4.20	543.00	547.10
Chamera-I	760.00	748.75	757.38	0.00	0.00	0.00	456.21	352.42
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	521.81	7.15	506.99	6.31	406.30	335.34

\* 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	1523	0	0	1428	0	0	37.23	0.09	37.31
Delhi	756	-290	0	540	-120	0	17.26	-2.02	15.23
Haryana	942	230	0	935	43	0	22.65	4.39	27.04
HP	-1807	-122	0	-1594	-204	0	-37.64	-3.95	-41.59
J&K	-779	-493	0	-786	-96	0	-18.83	-6.79	-25.63
CHD	0	-20	0	0	0	0	0.00	0.02	0.02
Rajasthan	-207	410	0	-409	290	0	-5.59	8.17	2.58
UP	736	-36	0	273	-29	0	7.27	-0.71	6.55
Uttarakhand	-265	-107	0	-265	49	0	-6.37	0.38	-5.99
Total	899	-428	0	122	-66	0	15.98	-0.45	15.53

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1928	1428	53	0	0	0
Delhi	1091	540	187	-443	0	0
Haryana	1117	935	249	-119	0	0
HP	-1402	-1807	-64	-206	0	0
J&K	-779	-786	-25	-498	0	0
CHD	0	0	39	-45	0	0
Rajasthan	-207	-409	410	-901	0	0
UP	1560	78	0	-36	0	0
Uttarakhand	-265	-265	141	-138	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	3.47%

(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	0	11
Rajasthan	3	35
Delhi	2	20
UP	0	9
Uttarakhand	3	47
HP	6	64
J & K	2	28
Chandigarh	3	35

**XIII. System Constraints:**

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

**XV. Weather Conditions For 28.07.2017 :**

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

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

1. 63 MVAR Bus-Reactor at Sohawal Charged first time on 1812 Hrs.

2. 400 kv Mainpuri- Orai charged from Orai at 1840 Hrs and synchronised from Mainpuri at 1913 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 : 28.07.2017

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER