

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(भारत सरकार का उद्यम)

## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOH188882

Power Supply Position in Northern Region for 25.05.2017

Date of Reporting : 26.05.2017



### 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
49058	861	49918	0.00	47660	155	47816	0.00	1127.78	7.57

\* 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	56.65	14.70	0.35	71.70	94.84	95.69	0.85	167.39	0.00
Haryana	51.79	0.53	0.00	52.32	102.68	103.89	1.22	156.22	0.00
Rajasthan	114.79	0.04	14.10	128.93	67.55	71.10	3.55	200.03	1.27
Delhi	19.85		0.00	19.85	95.78	96.15	0.37	116.00	0.07
UP	210.20	17.64	0.00	227.84	157.46	159.42	1.96	387.27	0.00
Uttarakhand		14.33	7.35	21.68	19.99	20.42	0.43	42.10	0.00
HP		15.51	5.51	21.02	4.00	6.48	2.49	27.50	0.32
J & K		22.99	0.00	22.99	14.67	1.98	-12.69	24.97	5.91
Chandigarh				0.00	6.27	6.31	0.05	6.31	0.00
<b>Total</b>	<b>453.29</b>	<b>85.73</b>	<b>27.31</b>	<b>566.33</b>	<b>563.22</b>	<b>561.45</b>	<b>-1.77</b>	<b>1127.78</b>	<b>7.57</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	7317	0	75	263	6517	0	9	736	7518	19	0
Haryana	7411	0	23	497	6678	0	187	536	7510	21	0
Rajasthan	8242	0	-14	354	8282	0	124	418	9515	24	362
Delhi	4866	0	-41	419	4848	0	490	487	5762	24	0
UP	16932	530	18	2290	17602	0	317	2356	17755	2	0
Uttarakhand	1800	0	-84	67	1660	0	55	88	1926	15	0
HP	1095	50	45	-1241	968	0	133	-1117	1302	12	0
J&K	1123	281	-622	-662	880	155	-489	-965	1380	6	345
Chandigarh	271	0	-8	10	225	0	5	34	331	15	0
<b>Total</b>	<b>49058</b>	<b>861</b>	<b>-608</b>	<b>1997</b>	<b>47660</b>	<b>155</b>	<b>831</b>	<b>2573</b>	<b>50801</b>	<b>21</b>	<b>880</b>

\$ STOA figures are at sellers 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 Sentout(MW)	Schedule Net MU	UI	
								Net MU	Net MU
<b>A. NTPC</b>									
Singrauli STPS (5*200+2*500)	2000	1775	1929	1913	42.87	1786	42.57		0.30
Rihand I STPS (2*500)	1000	923	834	916	21.39	891	22.10		-0.71
Rihand II STPS (2*500)	1000	943	946	1007	22.38	932	22.40		-0.02
Rihand III STPS (2*500)	1000	943	996	1004	22.18	924	22.58		-0.40
Dadri I STPS (4*210)	840	769	772	504	12.29	512	11.82		0.47
Dadri II STPS (2*490)	980	929	876	950	18.59	775	19.50		-0.91
Unchahar I TPS (2*210)	420	343	302	372	7.17	299	8.17		-1.01
Unchahar II TPS (2*210)	420	383	392	389	8.41	350	9.10		-0.70
Unchahar III TPS (1*210)	210	192	193	194	3.99	166	4.55		-0.56
Unchahar IV TPS(1*500)	500		0	0	0.00	0	0.00		0.00
ISTPP (Jhajjhar) (3*500)	1500	1421	1396	1368	31.37	1307	33.56		-2.18
Dadri GPS (4*130,19+2*154.51)	830	735	357	271	7.93	330	8.22		-0.29
Anta GPS (3*88,71+1*153.2)	419	381	0	0	0.00	0	0.00		0.00
Auraiya GPS (4*111,19+2*109.30)	663	598	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	0	0	0	0.00	0	0.00		0.00
Singrauli Solar(15)	15	3	0	0	0.07	3	0.06		0.00
KHEP(4*200)	800	792	708	129	10.90	454	10.50		0.40
<b>Sub Total (A)</b>	<b>12612</b>	<b>11129</b>	<b>9701</b>	<b>9017</b>	<b>210</b>	<b>8731</b>	<b>215</b>		<b>-5.61</b>
<b>B. NPC</b>									
NAPS (2*220)	440	380	412	430	9.13	381	9.12		0.01
RAPS- B (2*220)	440	350	397	403	8.56	357	8.37		0.19
RAPS- C (2*220)	440	410	447	450	9.60	400	9.84		-0.24
<b>Sub Total (B)</b>	<b>1320</b>	<b>1140</b>	<b>1256</b>	<b>1283</b>	<b>27.30</b>	<b>1137</b>	<b>27.33</b>		<b>-0.04</b>
<b>C. NHPC</b>									
Chamera I HPS (3*180)	540	535	547	0	8.30	346	8.00		0.30
Chamera II HPS (3*100)	300	304	307	303	7.29	304	7.29		0.00
Chamera III HPS (3*77)	231	232	236	232	5.56	231	5.54		0.01
Bairasuli HPS(3*60)	180	101	184	0	1.99	83	1.86		0.13
Salal-HPS (6*115)	690	636	675	453	15.80	658	15.27		0.53
Tanakpur-HPS (3*31.4)	94	38	56	36	1.02	43	0.92		0.11
Uri-I HPS (4*120)	480	474	480	483	11.62	484	11.38		0.23
Uri-II HPS (4*60)	240	70	247	0	1.67	69	1.67		-0.01
Dhauliganga-HPS (4*70)	280	280	293	0	3.37	141	3.25		0.12
Dulhasti-HPS (3*130)	390	387	385	400	9.39	391	9.30		0.10
Sewa-II HPS (3*40)	120	119	116	82	1.74	72	1.70		0.04
Parbati 3 (4*130)	520	412	469	0	2.16	90	2.23		-0.07
<b>Sub Total (C)</b>	<b>4065</b>	<b>3587</b>	<b>3995</b>	<b>1989</b>	<b>70</b>	<b>2913</b>	<b>68</b>		<b>1.49</b>
<b>D. SJVNL</b>									
NJPC (6*250)	1500	1482	1482	1491	36.33	1514	35.57		0.76
Rampur HEP (6*68.67)	412	408	427	430	10.09	420	9.79		0.29
<b>Sub Total (D)</b>	<b>1912</b>	<b>1890</b>	<b>1985</b>	<b>1921</b>	<b>46.42</b>	<b>1934</b>	<b>45.36</b>		<b>1.06</b>
<b>E. THDC</b>									
Tehri HPS (4*250)	1000	408	401	133	7.05	294	7.20		-0.15
Koteshwar HPS (4*100)	400	152	301	100	3.79	158	3.75		0.04
<b>Sub Total (E)</b>	<b>1400</b>	<b>560</b>	<b>702</b>	<b>233</b>	<b>10.84</b>	<b>452</b>	<b>10.95</b>		<b>-0.11</b>
<b>F. BBMB</b>									
Bhakra HPS (2*108+3*126+5*157)	1379	595	1083	475	14.66	611	14.28		0.37
Dehar HPS (6*165)	990	480	495	495	11.69	487	11.52		0.17
Pong HPS (6*66)	396	66	260	0	1.58	66	1.57		0.01
<b>Sub Total (F)</b>	<b>2765</b>	<b>1141</b>	<b>1838</b>	<b>970</b>	<b>27.92</b>	<b>1163</b>	<b>27.38</b>		<b>0.55</b>
<b>G. IPP(s)/JV(s)</b>									
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	213	98	2.76	115	2.02		0.74
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1100	1000	23.91	996	23.53		0.38
Malana Stg-II HPS (2*50)	100	0	112	26	1.18	49	1.10		0.08
Shree Cement TPS (2*150)	300	0	139	147	3.43	143	3.49		-0.06
Budhi HPS(IPP) (2*35)	70	0	71	46	1.62	67	1.60		0.02
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1635</b>	<b>1317</b>	<b>32.89</b>	<b>1371</b>	<b>31.73</b>		<b>1.16</b>
<b>H. Total Regional Entities (A-G)</b>	<b>25737</b>	<b>19447</b>	<b>21111</b>	<b>16730</b>	<b>424.81</b>	<b>17700</b>	<b>426.31</b>		<b>-1.50</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	400	210	6.14	256
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	0	0	-0.06	-2
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	936	720	19.15	798
	Goindwal(GVK) (2*270)	540	0	0	-0.03	-1
	Raipura (2*700)	1400	1320	1320	31.55	1314
	Talwandi Saboo (3*660)	1980	0	0	-0.09	-4

	<b>Thermal (Total)</b>	<b>6560</b>	<b>2656</b>	<b>2250</b>	56.65	<b>2361</b>	
	Total Hydro	1000	591	632	14.70	612	
	Wind Power	0	0	0	0.00	0	
	Biomass	288	0	0	0.28	12	
	Solar	560	0	0	0.07	3	
	<b>Renewable(Total)</b>	<b>848</b>	<b>0</b>	<b>0</b>	<b>0.35</b>	<b>15</b>	
	<b>Total Punjab</b>	<b>8408</b>	<b>3247</b>	<b>2882</b>	<b>71.70</b>	<b>2988</b>	
Haryana	Panipat TPS (2*210+2*250)	920	224	223	5.11	213	
	DCRTPP (Yamuna nagar) (2*300)	600	551	552	12.20	508	
	Faridabad GPS (NTPC)(2*137.75+1*156)	432	0	175	1.69	70	
	RGTPP (khedar) (IPP) (2*600)	1200	574	567	11.51	480	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar (CLP) (2*660)	1320	1061	594	21.29	887	
	<b>Thermal (Total)</b>	<b>4497</b>	<b>2410</b>	<b>2111</b>	<b>51.79</b>	<b>2158</b>	
	Total Hydro	62	10	32	0.53	22	
	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>2420</b>	<b>2143</b>	<b>52.32</b>	<b>2180</b>	
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	837	788	20.55	856	
	suratgarh TPS (6*250)	1500	595	452	14.30	596	
	Chabra TPS (4*250)	1000	430	593	12.63	526	
	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	161	165	4.28	178	
	RAPS A (NPC) (1*100+1*200)	300	168	167	4.28	178	
	Barsingar (NLC) (2*125)	250	112	207	3.00	125	
	Giral LTPS (2*125)	250	0	0	0.00	0	
	Rajwest LTPS (IPP) (8*135)	1080	712	722	16.01	667	
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	513	481	11.74	489	
	Kawai(Adani) (2*660)	1320	1197	1200	28.00	1167	
	<b>Thermal (Total)</b>	<b>9536</b>	<b>4725</b>	<b>4775</b>	<b>114.79</b>	<b>4783</b>	
	Total Hydro	550	0	9	0.04	2	
	Wind power	4017	150	672	10.96	457	
	Biomass	99	13	13	0.31	13	
	Solar	1295	0	0	2.84	118	
	Renewable/Others (Total)	5411	163	685	14.10	588	
	<b>Total Rajasthan</b>	<b>15497</b>	<b>4888</b>	<b>5469</b>	<b>128.93</b>	<b>5372</b>	
UP	Anpara TPS (3*210+2*500)	1630	1385	1367	32.61	1359	
	Obra TPS (2*50+2*94+5*200)	1194	535	664	14.09	587	
	Paricha TPS (2*110+2*220+2*250)	1160	778	777	18.62	776	
	Panki TPS (2*105)	210	140	131	3.25	136	
	Harduaganj TPS (1*60+1*105+2*250)	665	491	536	12.83	534	
	Tanda TPS (NTPC) (4*110)	440	389	390	9.20	383	
	Roza TPS (IPP) (4*300)	1200	1067	1076	25.34	1056	
	Anpara-C (IPP) (2*600)	1200	527	531	12.50	521	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	405	403	8.94	373	
	Anpara-D(2*500)	1000	836	859	20.38	849	
	Lalitpur TPS(3*660)	1980	715	1005	20.63	860	
	Bara(2*660)	1320	1182	1066	27.02	1126	
	<b>Thermal (Total)</b>	<b>12449</b>	<b>8450</b>	<b>8805</b>	<b>205.40</b>	<b>8559</b>	
	Vishnuparyag HPS (IPP)(4*110)	440	435	435	10.45	435	
	Alaknanda(4*82.5)	330	168	84	3.59	150	
	Other Hydro	527	171	163	3.60	150	
	Cogeneration	981	200	200	4.80	200	
	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>9424</b>	<b>9687</b>	<b>227.84</b>	<b>9494</b>	
	Uttarakhand	Other Hydro	1250	633	552	14.33	597
Total Gas		225	277	287	6.60	275	
Wind Power		0	0	0	0.00	0	
Biomass		127	0	0	0.00	0	
Solar		20	0	0	0.75	31	
Small Hydro (< 25 MW)		180	0	0	0.00	0	
<b>Renewable(Total)</b>		<b>327</b>	<b>0</b>	<b>0</b>	<b>0.75</b>	<b>31</b>	
<b>Total Uttarakhand</b>		<b>1802</b>	<b>910</b>	<b>839</b>	<b>21.68</b>	<b>903</b>	
Delhi		Raighat TPS (2*67.5)	135	0	0	0.00	0
		Delhi Gas Turbine (6x30 + 3x34)	282	65	65	1.72	71
	Pragati Gas Turbine (2x104+ 1x122)	330	147	154	3.66	152	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	307	301	7.24	302	
	Badarpur TPS (NTPC) (3*95+2*210)	705	333	333	7.24	302	
	<b>Thermal (Total)</b>	<b>2917</b>	<b>852</b>	<b>853</b>	<b>19.85</b>	<b>827</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>852</b>	<b>853</b>	<b>19.85</b>	<b>827</b>		
HP	Baspa HPS (IPP) (3*100)	300	319	328	7.02	292	
	Malana HPS (IPP) (2*43)	86	82	11	0.86	36	
	Other Hydro (>25MW)	372	350	333	7.63	318	
	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	232	220	5.51	230	
	<b>Renewable(Total)</b>	<b>486</b>	<b>232</b>	<b>220</b>	<b>5.51</b>	<b>230</b>	
	<b>Total HP</b>	<b>1244</b>	<b>983</b>	<b>892</b>	<b>21.02</b>	<b>876</b>	
J & K	Baqilhar HPS (IPP) (3*150+3*150)	900	880	880	21.12	880	
	Other Hydro/IPP(including 98 MW Small Hydro)	308	85	56	1.87	78	
	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>965</b>	<b>936</b>	<b>23</b>	<b>958</b>	
<b>Total State Control Area Generation</b>		<b>50738</b>	<b>23689</b>	<b>23701</b>	<b>566.33</b>	<b>23597</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>7169</b>	<b>8076</b>	<b>170.62</b>	<b>7109</b>	
<b>Total Regional Availability(Gross)</b>		<b>76475</b>	<b>51969</b>	<b>48507</b>	<b>1161.76</b>	<b>48407</b>	

**IV. Total Hydro Generation:**

Regional Entities Hydro	12234	10653	6366	193.83	8076
State Control Area Hydro	7163	4233	4022	91.24	4108
<b>Total Regional Hydro</b>	<b>19397</b>	<b>14886</b>	<b>10388</b>	<b>285.07</b>	<b>12184</b>

**V. Total Renewable Generation:**

Regional Entities Renewable	30	0	0	0.09	4
State Control Area Renewable	7356	395	905	20.71	863
<b>Total Regional Renewable</b>	<b>7386</b>	<b>395</b>	<b>905</b>	<b>20.80</b>	<b>867</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	-500	0	-500	0.00	12.24	-12.24
765 KV Gwalior-Agra (D/C)	2221	2457	2470	0	44.32	0.00	44.32
400 KV Zerda-Kankroli	-128	-211	0	344	0.00	5.63	-5.63
400 KV Zerda-Bhinmal	15	-180	36	315	0.00	3.91	-3.91
220 KV Auraiya-Malanpur	-32	0	0	68	0.00	0.62	-0.62
220 KV Badod-Kota/Morak	94	-35	129	117	0.00	0.42	-0.42
Mundra-Mohindergarh(HVDC Bipole)	1602	1998	2008	0	43.27	0.00	43.27
400 KV RAPPCC-Sujalpur	243	113	243	0	2.55	0.00	2.55
400 KV Vindhychal-Rihand	0	0	0	0	0.00	0.00	0.00
765 kv Phagi-Gwalior (D/C)	634	1083	1091	0	19.94	0.00	19.94
+/- 800 kv HVDC Champa-Kurushetra	1500	1500	1500	0	33.33	0	33.33
<b>Sub Total WR</b>	<b>5649</b>	<b>6225</b>			<b>143.40</b>	<b>22.81</b>	<b>120.59</b>
400 kv Sasaram - Varanasi	-192	-259	272	0	4.99	0.00	4.99
400 kv Sasaram - Allahabad	-47	-100	104	56	1.17	0.00	1.17
400 KV MZP- GKP (D/C)	273	431	466	0	7.84	0.00	7.84
400 KV Patna-Balia(D/C) X 2	640	749	756	0	16.35	0.00	16.35
400 KV B'Sharif-Balia (D/C)	220	246	258	0	4.81	0.00	4.81
765 KV Gaya-Balia	367	409	415	0	6.57	0.00	6.57
765 KV Gaya-Varanasi (D/C)	307	336	0	382	5.32	0.00	5.32
220 KV Pusauli-Sahupuri	0	0	0	0	0.00	0.00	0.00
132 KV K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
132 KV Son Ngr-Rihand	-27	-28	0	-30	0.00	-0.54	0.54
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	101	99	28	128	1.31	1.31	0.00
400 KV Barh -GKP (D/C)	448	548	556	0	10.81	0.00	10.81
400 kv B'Sharif - Varanasi (D/C)	-70	-80	36	143	1.10	0.00	1.10
+/- 800 KV HVDC Alipurduar-Agra	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>2020</b>	<b>2351</b>			<b>60.27</b>	<b>0.76</b>	<b>59.51</b>
+/- 800 KV HVDC BiswanathCharialli-Agra	-500	-500	150	500.00	0.00	9.48	-9.48
<b>Sub Total NER</b>	<b>-500</b>	<b>-500</b>			<b>0.00</b>	<b>9.48</b>	<b>-9.48</b>
<b>Total IR Exch</b>	<b>7169</b>	<b>8076</b>			<b>203.67</b>	<b>33.06</b>	<b>170.62</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
48.96	1.14	50.09	2.25	2.41	1.53	3.47	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
53.88	110.40	164.28	50.03	120.59	170.62	-3.85	10.18	6.34

**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	-27	-25	0	30	0	1	-0.64

**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	0.01	5.05	47.85	73.50	15.08	5.69	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)		
50.20	18.02	49.79	21.36	50.00	0.039	0.062	0.00	0.00	26.50

**VIII(A). Voltage profile 400 kV**

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviate
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV	
Rihand	400	405	18:16	401	9:36	0.0	0.0	0.0	0.0	0.0
Gorakhpur	400	410	14:01	388	20:41	0.0	3.6	0.0	0.0	0.0
Bareilly(PG)400kV	400	413	5:34	372	11:58	0.0	1.6	0.0	0.0	0.0
Kanpur	400	411	6:37	396	21:09	0.0	0.0	0.0	0.0	0.0
Dadri	400	417	5:32	399	14:45	0.0	0.0	0.0	0.0	0.0
Ballabgarh	400	414	5:33	394	14:47	0.0	0.0	0.0	0.0	0.0
Bawana	400	414	5:33	397	14:45	0.0	0.0	0.0	0.0	0.0
Bassi	400	421	18:30	397	22:31	0.0	0.0	0.5	0.0	0.5
Hissar	400	410	18:00	395	19:34	0.0	0.0	0.0	0.0	0.0
Moga	400	414	18:02	400	10:30	0.0	0.0	0.0	0.0	0.0
Abdullapur	400	413	5:34	397	19:42	0.0	0.0	0.0	0.0	0.0
Nalagarh	400	418	5:38	403	10:46	0.0	0.0	0.0	0.0	0.0
Kishenpur	400	411	2:48	399	21:08	0.0	0.0	0.0	0.0	0.0
Wagoora	400	398	18:01	376	20:07	15.4	80.0	0.0	0.0	15.4
Amritsar	400	422	2:46	403	10:26	0.0	0.0	5.1	0.0	5.1
Kashipur	400	0	0:00	0	0:00	0.0	0.0	0.0	0.0	0.0
Hamirpur	400	415	2:44	398	10:14	0.0	0.0	0.0	0.0	0.0
Rishikesh	400	416	5:33	388	19:50	0.0	1.9	0.0	0.0	0.0

**VIII(B). Voltage profile 765 kV**

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)				Voltage Deviate
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV	
Fatehpur	765	771	18:35	739	10:46	0.0	1.8	0.0	0.0	0.0
Balia	765	773	23:29	741	20:44	0.0	0.3	0.0	0.0	0.0
Moga	765	792	18:32	764	10:35	0.0	0.0	0.0	0.0	0.0
Agra	765	788	18:32	755	10:36	0.0	0.0	0.0	0.0	0.0
Bhiwani	765	798	18:32	768	22:29	0.0	0.0	0.0	0.0	0.0
Unnao	765	768	18:31	735	21:20	0.0	8.3	0.0	0.0	0.0

Lucknow	765	778	5:35	741	20:06	0.0	0.2	0.0	0.0
Meerut	765	799	18:32	761	19:53	0.0	0.0	0.0	0.0
Jhatikara	765	790	5:35	756	10:33	0.0	0.0	0.0	0.0
Bareilly 765 kV	765	785	5:34	742	19:52	0.0	0.0	0.0	0.0
Anta	765	797	18:46	757	18:55	0.0	0.0	0.0	0.0
Phagi	765	800	18:38	763	22:31	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	470.89	282.71	477.72	407.63	801.28	535.53
Pong	426.72	384.05	394.61	121.45	391.76	76.21	73.31	123.91
Tehri	829.79	740.04	745.45	26.48	742.95	13.93	135.63	251.00
Koteshwar	612.50	598.50	610.05	4.95	603.47	1.69	251.00	249.70
Chamera-I	760.00	748.75	752.69	0.00	0.00	0.00	283.64	225.58
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	513.70	6.77	503.88	2.72	282.67	292.89

\* 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	293	443	0	263	0	0	7.79	7.83	15.61
Delhi	539	-52	0	471	-52	0	12.66	0.84	13.49
Haryana	342	194	0	342	155	0	3.23	3.53	6.75
HP	-683	-434	0	-613	-628	0	-14.99	-10.04	-25.03
J&K	-575	-390	0	-575	-87	0	-13.80	-5.59	-19.39
CHD	0	34	0	0	10	0	0.00	0.88	0.88
Rajasthan	28	390	0	44	310	0	0.91	7.78	8.68
UP	949	1407	0	1174	1116	0	11.84	12.14	23.98
Uttarakhand	127	-40	0	60	7	0	1.72	0.24	1.96
<b>Total</b>	<b>1020</b>	<b>1553</b>	<b>0</b>	<b>1167</b>	<b>830</b>	<b>0</b>	<b>9.36</b>	<b>17.59</b>	<b>26.95</b>

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	465	263	689	0	0	0
Delhi	649	471	526	-468	0	0
Haryana	342	-107	263	-187	0	0
HP	-579	-714	-210	-756	0	0
J&K	-575	-575	0	-390	0	0
CHD	0	0	88	0	0	0
Rajasthan	44	22	392	127	0	0
UP	1174	111	1795	-47	0	0
Uttarakhand	128	-102	110	-75	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	100.00%
ER	100.00%
Simultaneous	99.31%

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

WR	100.00%
ER	100.00%
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	7	0
Haryana	7	96
Rajasthan	7	96
Delhi	7	96
UP	7	96
Uttarakhand	7	96
HP	7	0
J & K	7	0
Chandigarh	7	96

**XIII. System Constraints:**

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

**XV. Weather Conditions For 25.05.2017 :**

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

**XVII. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus //substation :**  
400 KV main bays 415 & 418 (Lucknow-1 &2) at Kanpur PG first time charged at 20:41/25.05.2017 Hrs.  
400 KV Lucknow -Kanpur -I charged and synchronized at 21.45/25.05.2017 Hrs

400 kV Lucknow –Kanpur -II charged and synchronized at 22.09/25.05.2017 Hrs.  
315 MVA ICT-3 at Sultanpur(UP) charged and taken on load at 12.56/25.05.2017 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 : 25.05.2017

पारी प्रभाती अभियंता / SHIFT CHARGE ENGINEER