

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(कार्पोरेशन की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 26.05.2014  
Date of Reporting : 27.05.2014

### 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
38626	1864	40490	50.06	32754	0	32754	50.17	855.5	41.41

\* 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:

UI (OD:(+ve), UD: (-ve))

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	39.02	15.76		54.78	75.06	74.84	-0.22	129.62	0.00
Haryana	44.85	0.17		45.01	76.47	74.85	-1.61	119.86	0.13
Rajasthan	115.13	0.00	5.37	120.49	51.98	53.27	1.29	173.76	2.07
Delhi	16.59			16.59	74.60	73.50	-1.10	90.09	0.90
UP	126.60	7.73	1.20	135.53	110.40	109.81	-0.59	245.35	35.28
Uttarakhand		13.71		13.71	19.22	19.83	0.61	33.54	1.29
HP		18.11		18.11	6.24	6.97	0.74	25.08	0.05
J & K		14.14	0.00	14.14	17.44	18.75	1.31	32.88	1.70
Chandigarh				0.00	4.49	5.32	0.83	5.32	0.00
<b>Total</b>	<b>342.19</b>	<b>69.61</b>	<b>6.57</b>	<b>418.36</b>	<b>435.88</b>	<b>437.14</b>	<b>1.26</b>	<b>855.51</b>	<b>41.41</b>

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

### II. B. State's Demand Met in MWs:

UI/OA/PX (OD/Import: (+ve), UD/Export: (-ve))

State	Evening Peak (20:00 Hrs) MW				Off Peak (03:00 Hrs) MW				Day Energy MU
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction
Punjab	5907	0	-151	367	5018	0	103	368	9.75
Haryana	5902	0	-438	469	4563	0	97	384	8.93
Rajasthan	7233	0	-257	11	6580	0	-7	-139	-1.93
Delhi	4055	4	103	296	3221	0	-279	320	8.29
UP	10948	1685	33	812	9970	0	-74	1724	23.98
Uttarakhand	1673	75	92	390	1208	0	53	205	6.69
HP	1072	0	-12	-893	815	0	-29	-707	-16.56
J&K	1597	100	136	-496	1194	0	8	-598	-12.62
Chandigarh	240	0	15	0	185	0	24	0	0.53
<b>Total</b>	<b>38626</b>	<b>1864</b>	<b>-479</b>	<b>957</b>	<b>32754</b>	<b>0</b>	<b>-103</b>	<b>1558</b>	<b>27.06</b>

\* STOA figures are at sellers boundary & PX figures are at regional boundary.

### III. Regional Entities :

UI (OG:(+ve), UG: (-ve))

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
<b>A. NTPC</b>								
Singrauli STPS	2000	1725	1860	1723	39.81	1659	39.72	0.09
Rihand I STPS	1000	873	881	902	19.22	801	19.15	0.07
Rihand II STPS	1000	850	803	815	18.74	781	18.88	-0.14
Rihand III STPS	1000	915	954	961	20.48	853	20.30	0.18
Dadri I STPS	840	813	687	602	15.03	626	15.46	-0.43
Dadri II STPS	980	980	743	725	17.60	733	18.14	-0.54
Unchahar I TPS	420	406	396	309	8.00	333	8.39	-0.39
Unchahar II TPS	420	404	401	311	8.03	334	8.18	-0.16
Unchahar III TPS	210	202	169	154	3.91	163	4.05	-0.14
ISTPP (Jhajjar)	1500	1000	323	318	8.77	365	8.94	-0.17
Dadri GPS	830	798	182	191	4.23	176	4.47	-0.23
Anta GPS	419	391	0	0	0.00	0	0.01	-0.01
Auraiya GPS	663	421	149	156	3.49	145	3.59	-0.10
Dadri Solar	5	1	0	0	0.00	0	0.03	-0.03
Unchahar Solar	10	3	0	0	0.00	0	0.07	-0.07
<b>Sub Total (A)</b>	<b>11297</b>	<b>9783</b>	<b>7548</b>	<b>7167</b>	<b>167</b>	<b>6971</b>	<b>169</b>	<b>-2</b>
<b>B. NPC</b>								
NAPS	440	143	162	168	3.44	143	3.43	0.01
RAPS- B	440	399	444	449	9.81	409	9.58	0.24
RAPS- C	440	210	228	231	4.94	206	5.04	-0.11
<b>Sub Total (B)</b>	<b>1320</b>	<b>752</b>	<b>834</b>	<b>848</b>	<b>18.19</b>	<b>758</b>	<b>18.05</b>	<b>0.14</b>
<b>C. NHPC</b>								
Chamera I HPS	540	534	540	540	11.55	481	12.82	-1.26
Chamera II HPS	300	300	303	301	6.30	262	6.25	0.05
Chamera III HPS	231	229	236	219	4.22	176	4.15	0.07
Bairasui HPS	180	180	180	180	4.19	175	4.13	0.06
Salal-HPS	690	639	667	659	15.63	651	15.35	0.28
Tanakpur-HPS	94	36	50	24	0.80	34	0.83	-0.03
Uri-HPS	480	475	476	476	11.52	480	11.40	0.12
Uri-II HPS	240	240	247	244	5.85	244	5.76	0.09
Dhauliganga-HPS	280	119	140	138	2.91	121	2.86	0.05
Dulhasti-HPS	390	387	402	379	9.47	395	9.30	0.17
Sewa-II HPS	120	122	130	130	3.07	128	2.93	0.15
Parbati 3	390	260	260	180	2.07	86	2.00	0.07
<b>Sub Total ©</b>	<b>3935</b>	<b>3521</b>	<b>3631</b>	<b>3470</b>	<b>78</b>	<b>3233</b>	<b>78</b>	<b>0</b>
<b>D. SJVNL</b>								
NJPC	1500	1605	1613	507	20.76	865	20.45	0.31
Rampur HEP	206	173	209	136	4.27	178	2	1.97
<b>Sub Total (D)</b>	<b>1706</b>	<b>1778</b>	<b>1822</b>	<b>643</b>	<b>25.03</b>	<b>1043</b>	<b>22.75</b>	<b>2.28</b>
<b>E. THDC</b>								
Tehri HPS	1000	390	391	0	5.01	209	5.00	0.01
Koteshwar HPS	400	116	301	90	2.84	118	2.80	0.04
<b>Sub Total (E)</b>	<b>1400</b>	<b>506</b>	<b>692</b>	<b>90</b>	<b>7.84</b>	<b>327</b>	<b>7.80</b>	<b>0.04</b>
<b>F. BBMB</b>								
Bhakra HPS	1514	686	1314	383	16.70	696	16.47	0.23
Dehar HPS	990	496	660	495	13.00	542	11.90	1.10
Pong HPS	396	125	312	63	3.21	134	3.00	0.21
<b>Sub Total (F)</b>	<b>2900</b>	<b>1307</b>	<b>2286</b>	<b>941</b>	<b>32.91</b>	<b>1371</b>	<b>31.37</b>	<b>1.54</b>
<b>G. IPP(s)/JV(s)</b>								
ADHPL HPS(IPP)	192	0	148	89	1.94	81	1.90	0.04
KWHEP HPS(IPP)	1000	0	619	445	11.41	475	11.59	-0.17
Malana Stg-II HPS	100	0	112	35	0.87	36	0.82	0.06
Shree Cement TPS	300	0	278	266	6.22	259	6.23	-0.01
Budhil HPS(IPP)	70	0	68	68	1.14	47	1.13	0.01
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1225</b>	<b>903</b>	<b>21.58</b>	<b>899</b>	<b>21.66</b>	<b>-0.08</b>
<b>H. Total Regional Entities (A-G)</b>	<b>24221</b>	<b>17647</b>	<b>18038</b>	<b>14062</b>	<b>350.44</b>	<b>14602</b>	<b>348.77</b>	<b>1.67</b>

I. State Entities	Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average(Sent out MW)
Punjab	Guru Gobind Singh TPS (Ropar)	1260	900	700	19	790
	Guru Nanak Dev TPS(Bhatinda)	440	170	170	4	163
	Guru Hargobind Singh TPS(L.mbt)	920	500	409	13	558
	Goindwal(GVK)		0	0	0	0
	Rajpura	700	287	0	3	116
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	<b>3980</b>	<b>1857</b>	<b>1279</b>	<b>39</b>	<b>1626</b>
	Total Hydro	1148	633	692	15.76	657
<b>Total Punjab</b>	<b>5128</b>	<b>2490</b>	<b>1971</b>	<b>54.78</b>	<b>2283</b>	
Haryana	Panipat TPS	1367	0	0	0.00	0
	DCRTPP (Yamuna nagar)	600	268	255	5.20	217
	Faridabad GPS (NTPC)	432	385	348	9.24	385
	RGTPP (khedar) (IPP)	1200	416	418	9.99	416
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1076	739	20.41	850
	Thermal (Total)	4944	2145	1760	45	1869
	Total Hydro	62	7	7	0.17	7
	<b>Total Haryana</b>	<b>5006</b>	<b>2152</b>	<b>1767</b>	<b>45.01</b>	<b>1875</b>
	Rajasthan	kota TPS	1240	1035	1004	24.17
suratgarh TPS		1500	1007	987	25.36	1057
Chabra TPS		750	602	560	13.72	572
Dholpur GPS		330	129	133	3.24	135
Ramgarh GPS		221	100	79	1.32	55
RAPS A (NPC)		300	201	201	4.11	171
Barsingsar (NLC)		250	190	178	4.06	169
Giral LTPS		250	6	0	0.11	5
Rajwest LTPS (IPP)		1080	903	645	21.13	880
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		1320	777	616	17.90	746
Thermal (Total)		7976	4950	4403	115	4797
Total Hydro		550	0	0	0.00	0
Wind power		2191	24	503	4.31	179
Biomass		91	28	28	0.67	28
Solar		201	4	0	0.39	16
Renewable/Others (Total)		2483	56	531	5.37	224
<b>Total Rajasthan</b>	<b>11009</b>	<b>5006</b>	<b>4934</b>	<b>120.49</b>	<b>5021</b>	
UP	Anpara TPS	1630	1360	1369	32.20	1342
	Obra TPS	1288	313	326	7.10	296
	Paricha TPS	1140	771	779	18.30	763
	Panki TPS	210	144	140	3.40	142
	Harduaganj TPS	665	356	356	8.60	358
	Tanda TPS (NTPC)	440	367	304	8.15	339
	Roza TPS (IPP)	1200	1121	774	22.72	947
	Anpara-C (IPP)	1200	860	648	18.74	781
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	279	279	7.40	308
	Thermal (Total)	8223	5571	4975	127	5275
	Vishnuparyag HPS (IPP)	400	208	217	5.00	208
	Other Hydro	527	139	95	2.74	114
	Cogeneration	981	50	50	1.20	50
	<b>Total UP</b>	<b>10131</b>	<b>5968</b>	<b>5337</b>	<b>135.53</b>	<b>5439</b>
Uttarakhand	Total Hydro	1303	554	572	13.71	571
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>554</b>	<b>572</b>	<b>13.71</b>	<b>571</b>
Delhi	Rajghat TPS	135	84	84	2.35	98
	Delhi Gas Turbine	282	137	117	2.91	121
	Pragati Gas Turbine	330	141	146	3.59	149
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	0	0	0.00	0
	Badarpur TPS (NTPC)	705	400	325	7.74	323
	Thermal (Total)	2917	762	672	16.59	691
	<b>Total Delhi</b>	<b>2917</b>	<b>762</b>	<b>672</b>	<b>16.59</b>	<b>691</b>
HP	Baspa HPS (IPP)	300	110	200	3.97	165
	Malana HPS (IPP)	86	50	66	0.97	40
	Other Hydro	728	548	567	13.17	549
	<b>Total HP</b>	<b>1114</b>	<b>708</b>	<b>833</b>	<b>18.11</b>	<b>755</b>
J & K	Baglihar HPS (IPP)	450	448	440	10.59	441
	Other Hydro/IPP	436	175	148	3.55	148
	Gas/Diesel/Others	209	0	0	0.00	0
	<b>Total J &amp; K</b>	<b>1094</b>	<b>623</b>	<b>588</b>	<b>14.14</b>	<b>589</b>
<b>Total State Control Area Generation</b>		<b>37702</b>	<b>18263</b>	<b>16674</b>	<b>418.36</b>	<b>17224</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>4786</b>	<b>4220</b>	<b>110.94</b>	<b>4623</b>
<b>Total Regional Availability(Gross)</b>		<b>61923</b>	<b>41087</b>	<b>34956</b>	<b>879.74</b>	<b>36448</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	11233	9310	5713	157.59	6566
State Control Area Hydro	5589	2664	2787	69.61	2692
<b>Total Regional Hydro</b>	<b>16823</b>	<b>11974</b>	<b>8500</b>	<b>227.20</b>	<b>9259</b>

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

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	300	250	500	0	7.93	0.00	7.93
Gwalior-Agra (D/C)	1834	1549	2000	0	39.86	0.00	39.86
Zerda-Kankroli	-92	-270	0	332	0.00	5.24	-5.24
Zerda-Bhinmal	-57	-210	30	294	0.00	3.66	-3.66
Malanpur-Auraiya	-56	-36	0	80	0.00	0.90	-0.90
Badod-Kota/Morak	-56	-99	0	115	0.00	1.68	-1.68
Mundra-Mohindergarh(HVDC)	1999	2001	2006	0	48.36	0.00	48.36
<b>Sub Total WR</b>	<b>3872</b>	<b>3185</b>			<b>96.15</b>	<b>11.48</b>	<b>84.67</b>
Pusauli Bypass	400	400	400	0	9.65	0.00	9.65
MZP- GKP (D/C)	222	272	378	0	5.66	0.00	5.66
Patna-Balia(D/C)	55	88	180	0	1.74	0.00	1.74
B'Sharif-Balia (D/C)	245	213	388	0	4.82	0.00	4.82
Pusauli-Balia	-46	-47	0	92	0.00	1.42	-1.42
Gaya-Fatehpur (765 Kv)	-61	-27	15	178	0.73	0.00	0.73
Pusauli-Sahupuri	188	182	211	0	4.22	0.00	4.22
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-42	-38	0	48	0.00	0.60	-0.60
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-47	-8	200	129	1.47	0.00	1.47
<b>Sub Total ER</b>	<b>914</b>	<b>1035</b>			<b>28.29</b>	<b>2.02</b>	<b>26.27</b>
<b>Total IR Exch</b>	<b>4786</b>	<b>4220</b>			<b>124.44</b>	<b>13.50</b>	<b>110.94</b>

**V(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
29.67	0.33	30.01	9.47	0.37	-3.49	3.89	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	Through WR	Total	Through ER	Through WR	Total
35.99	67.16	103.15	26.27	84.67	110.94	-9.72	17.51	7.79

**VI. 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	0.78	7.64	28.26	62.79	47.92	16.64	7.15	0.04	0.00

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz				
50.20	13.02	49.54	22.08	49.96	0.12	0.11	50.20	49.76

**VII. Voltage profile 400 kV**

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV
Rihand	400	406	03:24	397	15:08	0.0	0.0	0.0	0.0
Gorakhpur	400	442	06:01	414	19:41	0.0	0.0	90.2	44.6
Bareilly	400	424	04:20	393	14:40	0.0	0.0	26.8	0.0
Kanpur	400	423	04:29	397	22:08	0.0	0.0	6.5	0.0
Dadri	400	420	04:28	395	14:38	0.0	0.0	0.0	0.0
Ballabgarh	400	417	19:02	401	14:36	0.0	0.0	0.0	0.0
Bawana	400	422	03:39	399	14:45	0.0	0.0	8.9	0.0
Bassi	400	431	04:04	406	14:40	0.0	0.0	29.6	1.4
Hissar	400	413	04:10	398	10:15	0.0	0.0	0.0	0.0
Moga	400	410	04:03	393	22:07	0.0	0.0	0.0	0.0
Abdullapur	400	421	04:13	399	22:05	0.0	0.0	0.1	0.0
Nalagarh	400	416	04:03	398	14:20	0.0	0.0	0.0	0.0
Kishenpur	400	410	02:41	398	19:50	0.0	0.0	0.0	0.0
Wagoora	400	408	02:38	386	20:14	0.0	4.3	0.0	0.0

**VIII. Voltage profile 765 kV**

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV
Fatehpur	765	782	04:11	736	22:08	0.0	4.2	0.0	0.0
Balia	765	792	06:02	746	22:09	0.0	0.0	0.0	0.0
Moga	765	783	04:09	748	22:07	0.0	0.0	0.0	0.0
Agra	765	798	04:18	749	22:09	0.0	0.0	0.0	0.0
Bhiwani	765	801	04:11	757	22:09	0.0	0.0	1.8	0.0
Unnao	765	774	04:27	726	22:07	0.4	39.1	0.0	0.0

**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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	480.26	468.02	475.12	356.29	445.54	595.42
Pong	426.72	384.05	403.33	296.79	399.38	203.01	77.90	56.83
Tehri	829.79	740.04	745.75	29.00	NA	NA	114.04	208.00
Koteshwar	612.50	598.50	610.55	4.95	604.70	2.15	208.00	188.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	206.25	230.88
Rihand	268.22	252.98	258.07	205.10	256.79	149.00	NA	NA
RPS	352.80	343.81	348.06	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.80	NA	NA	NA	NA	NA
RSD	527.91	487.91	516.64	144.00	506.65	144.00	224.47	197.51

\* NA: Not Available

**X. System Constraints:**

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

**XII. Weather Conditions For 26.05.2014 :**

1. Normal weather in NR.

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

0.00

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

**XV. Tripping of lines in pooling stations :**

**XVI. Complete generation loss in a generating station :**

Report for : 26.05.2014

पारी प्रभाती अभियंता / SHIFT CHARGE ENGINEER