

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 26.04.2014  
Date of Reporting : 27.04.2014

### 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
36045	2120	38165	0.00	34285	1460	35745	50.03	809.3	51.95

\* 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	51.07	7.21		58.29	54.57	53.88	-0.69	112.17	0.00
Haryana	57.30	0.62		57.91	50.57	50.17	-0.40	108.09	0.16
Rajasthan	103.74	0.18	0.31	104.23	57.55	58.14	0.59	162.37	1.28
Delhi	17.17			17.17	63.35	61.63	-1.72	78.79	0.64
UP	131.13	5.91	7.20	144.24	109.82	112.82	3.00	257.07	46.82
Uttarakhand		9.71		9.71	22.80	23.27	0.47	32.98	1.06
HP		12.95		12.95	11.60	11.78	0.18	24.73	0.30
J & K		12.81	0.00	12.81	19.48	16.11	-3.38	28.91	1.70
Chandigarh				0.00	3.33	4.16	0.83	4.16	0.00
<b>Total</b>	<b>360.41</b>	<b>49.38</b>	<b>7.51</b>	<b>417.30</b>	<b>393.07</b>	<b>391.96</b>	<b>-1.10</b>	<b>809.26</b>	<b>51.95</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	5125	0	-103	33	5047	0	27	-166	-2.56
Haryana	5464	0	109	318	4959	0	-57	259	3.23
Rajasthan	7022	0	-37	197	6362	0	89	-132	5.71
Delhi	3727	0	6	-102	2954	0	-98	-441	-4.92
UP	10390	1945	-303	656	11750	1310	389	1697	20.75
Uttarakhand	1623	75	32	454	1151	150	-2	279	10.47
HP	1073	0	-82	-530	857	0	12	-167	-4.88
J&K	1414	100	-90	-227	1078	0	-193	-231	-5.53
Chandigarh	207	0	15	0	127	0	-6	0	0.00
<b>Total</b>	<b>36045</b>	<b>2120</b>	<b>-454</b>	<b>798</b>	<b>34285</b>	<b>1460</b>	<b>161</b>	<b>1097</b>	<b>22.28</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	1879	2010	2068	45.55	1898	45.09	0.46
Rihand I STPS	1000	838	946	936	20.90	871	19.76	1.14
Rihand II STPS	1000	950	1038	1036	23.21	967	22.78	0.43
Rihand III STPS	1000	871	946	926	20.99	874	20.89	0.09
Dadri I STPS	840	813	844	773	18.41	767	18.82	-0.41
Dadri II STPS	980	605	494	642	12.68	528	12.74	-0.06
Unchahar I TPS	420	408	422	408	9.10	379	9.70	-0.60
Unchahar II TPS	420	203	199	205	4.81	201	4.79	0.02
Unchahar III TPS	210	204	212	191	4.87	203	4.68	0.19
ISTPP (Jhajjar)	1500	1000	517	507	10.84	452	11.19	-0.35
Dadri GPS	830	805	183	175	4.09	170	4.49	-0.40
Anta GPS	419	391	195	0	1.93	80	2.19	-0.26
Auraiya GPS	663	645	152	148	3.35	140	3.46	-0.11
Dadri Solar	5		0	0	0.00	0		0.00
Unchahar Solar	10		0	0	0.00	0		0.00
<b>Sub Total (A)</b>	<b>11297</b>	<b>9611</b>	<b>8158</b>	<b>8015</b>	<b>181</b>	<b>7531</b>	<b>181</b>	<b>0</b>
<b>B. NPC</b>								
NAPS	440	148	169	169	3.46	144	3.55	-0.09
RAPS- B	440	410	454	444	9.71	404	9.84	-0.14
RAPS- C	440	420	462	446	9.81	409	10.08	-0.27
<b>Sub Total (B)</b>	<b>1320</b>	<b>978</b>	<b>1085</b>	<b>1059</b>	<b>22.98</b>	<b>958</b>	<b>23.47</b>	<b>-0.49</b>
<b>C. NHPC</b>								
Chamera I HPS	540	537	180	540	7.74	323	7.60	0.14
Chamera II HPS	300	300	91	302	4.90	204	4.73	0.17
Chamera III HPS	231	231	76	227	2.93	122	2.80	0.13
Bairasui HPS	180	122	122	122	2.95	123	2.93	0.02
Salal-HPS	690	457	455	575	11.42	476	10.96	0.46
Tanakpur-HPS	94	23	22	31	0.61	26	0.55	0.06
Uri-HPS	480	475	477	478	11.56	482	11.40	0.16
Uri-II HPS	240	187	187	186	4.60	192	4.49	0.11
Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
Dulhasti-HPS	390	387	131	411	5.74	239	5.95	-0.21
Sewa-II HPS	120	122	130	130	3.09	129	2.93	0.16
Parbati 3	390	260	0	0	1.24	52	1.20	0.04
<b>Sub Total ©</b>	<b>3935</b>	<b>3101</b>	<b>1871</b>	<b>3002</b>	<b>57</b>	<b>2366</b>	<b>56</b>	<b>1</b>
<b>D. SJVNL</b>								
NJPC	1500	1605	396	1019	13.52	563	13.12	0.41
Rampur HEP	206		0	0	0.00	0		0.00
<b>Sub Total (D)</b>	<b>1706</b>	<b>1605</b>	<b>396</b>	<b>1019</b>	<b>13.52</b>	<b>563</b>	<b>13.12</b>	<b>0.41</b>
<b>E. THDC</b>								
Tehri HPS	1000	495	165	500	7.60	317	7.50	0.10
Koteshwar HPS	400	150	89	303	3.70	154	3.60	0.10
<b>Sub Total (E)</b>	<b>1400</b>	<b>645</b>	<b>254</b>	<b>803</b>	<b>11.30</b>	<b>471</b>	<b>11.10</b>	<b>0.19</b>
<b>F. BBMB</b>								
Bhakra HPS	1514	311	315	471	7.98	333	7.47	0.51
Dehar HPS	990	372	435	330	9.15	381	8.93	0.22
Pong HPS	396	25	0	186	0.64	27	0.60	0.04
<b>Sub Total (F)</b>	<b>2900</b>	<b>709</b>	<b>750</b>	<b>987</b>	<b>17.77</b>	<b>740</b>	<b>17.00</b>	<b>0.77</b>
<b>G. IPP(s)/JV(s)</b>								
ADHPL HPS(IPP)	192	0	63	141	1.08	45	1.05	0.04
KWHEP HPS(IPP)	1000	0	150	837	6.88	287	6.84	0.04
Malana Stg-II HPS	100	0	0	112	0.43	18	0.40	0.03
Shree Cement TPS	300	0	287	283	6.94	289	6.90	0.04
Budhil HPS(IPP)	70	0	7	14	0.68	28	0.77	-0.09
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>507</b>	<b>1387</b>	<b>16.01</b>	<b>667</b>	<b>15.95</b>	<b>0.06</b>
<b>H. Total Regional Entities (A-G)</b>	<b>24221</b>	<b>16649</b>	<b>13021</b>	<b>16272</b>	<b>319.08</b>	<b>13295</b>	<b>316.76</b>	<b>2.33</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	1050	1000	19.53	814
	Guru Nanak Dev TPS(Bhatinda)	440	120	90	2.17	90
	Guru Hargobind Singh TPS(L.mbt)	920	621	511	13.54	564
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	700	660	658	15.84	660
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	<b>3980</b>	<b>2451</b>	<b>2259</b>	<b>51</b>	<b>2128</b>
	Total Hydro	1148	375	252	7.21	301
	<b>Total Punjab</b>	<b>5128</b>	<b>2826</b>	<b>2511</b>	<b>58.29</b>	<b>2429</b>
Haryana	Panipat TPS	1367	633	635	14.78	616
	DCRTPP (Yamuna nagar)	600	568	570	12.67	528
	Faridabad GPS (NTPC)	432	179	187	4.40	183
	RGTPP (khedar) (IPP)	1200	593	594	13.21	550
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	609	612	12.24	510
	Thermal (Total)	4944	2582	2598	57	2387
	Total Hydro	62	24	25	0.62	26
	<b>Total Haryana</b>	<b>5006</b>	<b>2606</b>	<b>2623</b>	<b>57.91</b>	<b>2413</b>
	Rajasthan	kota TPS	1240	1159	1147	27.11
suratgarh TPS		1500	1090	892	23.95	998
Chabra TPS		750	220	404	9.08	378
Dholpur GPS		330	130	132	3.23	134
Ramgarh GPS		221	67	84	2.00	83
RAPS A (NPC)		300	0	0	0.00	0
Barsingsar (NLC)		250	0	0	0.00	0
Giral LTPS		250	71	91	1.78	74
Rajwest LTPS (IPP)		1080	933	869	21.94	914
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		1320	612	642	14.64	610
Thermal (Total)		7976	4282	4261	104	4322
Total Hydro		550	23	0	0.18	7
Wind power		2191	209	30	2.29	96
Biomass		91	25	25	0.61	25
Solar		201	0	0	0.24	10
Renewable/Others (Total)		2483	234	55	0.31	13
<b>Total Rajasthan</b>		<b>11009</b>	<b>4539</b>	<b>4316</b>	<b>104.23</b>	<b>4343</b>
UP	Anpara TPS	1630	1583	1566	33.50	1396
	Obra TPS	1288	239	257	5.20	217
	Paricha TPS	1140	880	824	18.50	771
	Panki TPS	210	85	85	1.80	75
	Harduaganj TPS	665	396	359	8.40	350
	Tanda TPS (NTPC)	440	279	274	6.77	282
	Roza TPS (IPP)	1200	1134	1134	27.07	1128
	Anpara-C (IPP)	1200	887	873	21.25	885
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	401	360	8.65	361
	Thermal (Total)	8223	5884	5732	131	5464
	Vishnuparyag HPS (IPP)	400	108	114	2.57	107
	Other Hydro	527	152	152	3.34	139
	Cogeneration	981	300	300	7.20	300
	<b>Total UP</b>	<b>10131</b>	<b>6444</b>	<b>6298</b>	<b>144.24</b>	<b>5903</b>
	Uttarakhand	Total Hydro	1303	407	515	9.71
<b>Total Uttarakhand</b>		<b>1303</b>	<b>407</b>	<b>515</b>	<b>9.71</b>	<b>405</b>
Delhi	Rajghat TPS	135	86	95	2.44	102
	Delhi Gas Turbine	282	150	142	3.47	145
	Pragati Gas Turbine	330	99	100	2.25	94
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	0	0	0.00	0
	Badarpur TPS (NTPC)	705	346	359	9.01	375
	Thermal (Total)	2917	681	696	17.17	715
	<b>Total Delhi</b>	<b>2917</b>	<b>681</b>	<b>696</b>	<b>17.17</b>	<b>715</b>
HP	Baspa HPS (IPP)	300	32	64	1.67	69
	Malana HPS (IPP)	86	22	94	0.54	23
	Other Hydro	728	429	496	10.74	448
	<b>Total HP</b>	<b>1114</b>	<b>483</b>	<b>654</b>	<b>12.95</b>	<b>540</b>
J & K	Baglihar HPS (IPP)	450	436	440	10.51	438
	Other Hydro/IPP	436	73	131	2.30	96
	Gas/Diesel/Others	209	0	0	0.00	0
	<b>Total J &amp; K</b>	<b>1094</b>	<b>509</b>	<b>571</b>	<b>12.81</b>	<b>534</b>
<b>Total State Control Area Generation</b>		<b>37702</b>	<b>18495</b>	<b>18184</b>	<b>417.30</b>	<b>17280</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>3497</b>	<b>3656</b>	<b>89.95</b>	<b>3748</b>
<b>Total Regional Availability(Gross)</b>		<b>61923</b>	<b>35013</b>	<b>38112</b>	<b>826.33</b>	<b>34323</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	11233	3484	6901	107.75	4490
State Control Area Hydro	5589	1973	2169	49.38	1950
<b>Total Regional Hydro</b>	<b>16823</b>	<b>5457</b>	<b>9070</b>	<b>157.13</b>	<b>6440</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	-100	200	500	100	5.18	0.23	4.95
Gwalior-Agra (D/C)	1596	1440	2024	0	36.97	0.00	36.97
Zerda-Kankroli	-234	-321	0	346	0.00	6.67	-6.67
Zerda-Bhinmal	-181	-263	0	315	0.00	5.06	-5.06
Malanpur-Auraiya	-124	-42	0	126	0.00	1.54	-1.54
Badod-Kota/Morak	-36	-133	0	136	0.00	1.48	-1.48
Mundra-Mohindergarh(HVDC)	1909	1913	1915	0	46.01	0.00	46.01
<b>Sub Total WR</b>	<b>2830</b>	<b>2794</b>			<b>88.16</b>	<b>14.97</b>	<b>73.18</b>
Pusauli Bypass	400	400	400	0	9.37	0.00	9.37
MZP- GKP (D/C)	40	186	256	0	1.94	0.00	1.94
Patna-Balia(D/C)	429	442	500	0	9.96	0.00	9.96
B'Sharif-Balia (D/C)	49	84	66	0	0.85	0.00	0.85
Pusauli-Balia	-148	-129	0	166	0.00	3.23	-3.23
Gaya-Fatehpur (765 Kv)	-74	-58	90	94	0.00	0.77	-0.77
Pusauli-Sahupuri	0	0	0	0	0.00	0.00	0.00
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	0	0	0	0	0.00	0.00	0.00
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-29	-63	140	87	0.00	1.36	-1.36
<b>Sub Total ER</b>	<b>667</b>	<b>862</b>			<b>22.12</b>	<b>5.36</b>	<b>16.76</b>
<b>Total IR Exch</b>	<b>3497</b>	<b>3656</b>			<b>110.28</b>	<b>20.33</b>	<b>89.95</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
37.22	0.28	37.50	4.68	2.81	-3.43	4.60	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
38.75	53.17	91.92	16.76	73.18	89.95	-21.98	20.01	-1.97

**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	>50.50
0.00	7.16	22.40	55.21	87.17	40.89	3.21	0.69	0.03	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				
50.18	18.03	49.49	21.06	49.88	0.28	0.11	50.10	0.00

**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	401	04:07	397	02:46	0.0	0.0	0.0	0.0
Gorakhpur	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Bareilly	400	411	02:45	402	04:48	0.0	0.0	0.0	0.0
Kanpur	400	409	02:49	405	00:10	0.0	0.0	0.0	0.0
Dadri	400	412	02:44	406	00:11	0.0	0.0	0.0	0.0
Ballabgarh	400	418	02:38	414	00:00	0.0	0.0	0.0	0.0
Bawana	400	416	02:54	409	00:11	0.0	0.0	0.0	0.0
Bassi	400	426	03:36	414	00:10	0.0	0.0	64.1	0.0
Hissar	400	407	02:53	400	00:08	0.0	0.0	0.0	0.0
Moga	400	409	02:44	403	00:00	0.0	0.0	0.0	0.0
Abdullapur	400	415	02:46	410	00:09	0.0	0.0	0.0	0.0
Nalagarh	400	416	02:53	410	00:00	0.0	0.0	0.0	0.0
Kishenpur	400	413	02:57	407	00:05	0.0	0.0	0.0	0.0
Wagoora	400	408	03:20	401	00:05	0.0	0.0	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	760	02:54	747	00:10	0.0	0.0	0.0	0.0
Balia	765	757	03:58	747	01:19	0.0	0.0	0.0	0.0
Moga	765	779	02:54	766	00:10	0.0	0.0	0.0	0.0
Agra	765	795	02:57	781	00:10	0.0	0.0	0.0	0.0
Bhiwani	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Unnao	765	746	02:59	736	04:53	0.0	62.5	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	483.24	536.06	479.88	454.47	375.79	241.51
Pong	426.72	384.05	402.50	281.22	400.33	223.85	74.47	42.90
Tehri	829.79	740.04	760.95	128.85	0.00	0.00	83.68	235.00
Koteshwar	612.50	598.50	611.13	5.20	0.00	0.00	235.00	245.00
Chamera-I	760.00	748.75	755.10	0.00	0.00	0.00	236.14	209.75
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 Sagar	298.70	295.78	0.00	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	0.00	0.00	0.00	0.00	0.00	0.00

\* NA: Not Available

**X. System Constraints:**

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

**XII. Weather Conditions For 26.04.2014 :**  
Normal

**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 :**  
Dhauliganga (280MW) are out of operation since 16.06.2013.  
Civil construction is in progress for rectification of the major damages in Plants/Dam caused due to flood  
Dhauliganga expected by April, 2014 .

Report for : 26.04.2014

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER