

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 15.05.2014  
Date of Reporting : 16.05.2014

### 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
35014	2985	37999	50.02	31365	1190	32555	50.06	785.5	52.74

\* 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	19.67	11.79		31.46	72.23	72.33	0.10	103.79	0.00
Haryana	22.28	0.21		22.49	86.47	87.30	0.83	109.79	0.35
Rajasthan	99.57	0.00	5.78	105.35	44.22	43.75	-0.47	149.10	0.00
Delhi	16.91			16.91	62.87	64.32	1.45	81.23	0.10
UP	123.73	7.87	2.40	134.01	114.21	116.60	2.38	250.60	49.35
Uttarakhand		13.14		13.14	20.06	20.27	0.21	33.40	1.12
HP		17.65		17.65	7.55	5.82	-1.73	23.47	0.13
J & K		13.62	0.00	13.62	17.21	16.26	-0.96	29.88	1.70
Chandigarh				0.00	4.49	4.24	-0.25	4.24	0.00
<b>Total</b>	<b>282.16</b>	<b>64.28</b>	<b>8.18</b>	<b>354.62</b>	<b>429.31</b>	<b>430.87</b>	<b>1.56</b>	<b>785.50</b>	<b>52.74</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	4864	0	-85	267	4072	0	51	413	7.00	
Haryana	5381	0	103	117	4453	0	216	141	5.97	
Rajasthan	6484	0	-352	-13	5090	0	-315	69	-2.00	
Delhi	3768	0	14	157	2821	0	60	-531	-2.65	
UP	10360	2720	161	554	11639	1190	262	1354	17.55	
Uttarakhand	1561	155	87	285	1316	0	15	229	5.83	
HP	980	10	-179	-958	799	0	-32	-677	-16.71	
J&K	1410	100	-22	-474	1046	0	-28	-694	-12.87	
Chandigarh	206	0	-15	0	129	0	-29	0	0.24	
<b>Total</b>	<b>35014</b>	<b>2985</b>	<b>-288</b>	<b>-66</b>	<b>31365</b>	<b>1190</b>	<b>200</b>	<b>305</b>	<b>2.35</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	1650	1786	1775	39.66	1652	39.40	0.25
Rihand I STPS	1000	800	884	802	18.85	786	18.32	0.53
Rihand II STPS	1000	900	982	905	21.44	893	20.87	0.57
Rihand III STPS	1000	846	901	751	19.06	794	19.03	0.03
Dadri I STPS	840	813	680	616	14.95	623	15.42	-0.47
Dadri II STPS	980	933	760	697	16.49	687	17.64	-1.15
Unchahar I TPS	420	408	407	355	8.73	364	9.11	-0.37
Unchahar II TPS	420	408	416	315	8.11	338	8.53	-0.42
Unchahar III TPS	210	198	182	155	3.80	158	3.97	-0.17
ISTPP (Jhajihar)	1500	1000	681	645	15.97	665	16.24	-0.27
Dadri GPS	830	804	180	280	6.67	278	6.83	-0.16
Anta GPS	419	391	0	0	0.00	0	0.00	0.00
Auraiya GPS	663	517	148	153	3.43	143	3.48	-0.05
Dadri Solar	5	1	0	0	0.03	1	0.03	0.00
Unchahar Solar	10	1	0	0	0.00	0	0.03	-0.03
<b>Sub Total (A)</b>	<b>11297</b>	<b>9670</b>	<b>8007</b>	<b>7449</b>	<b>177</b>	<b>7382</b>	<b>179</b>	<b>-2</b>
<b>B. NPC</b>								
NAPS	440	147	165	171	3.49	146	3.53	-0.03
RAPS- B	440	410	449	451	9.74	406	9.84	-0.10
RAPS- C	440	210	230	234	5.01	209	5.04	-0.03
<b>Sub Total (B)</b>	<b>1320</b>	<b>767</b>	<b>844</b>	<b>856</b>	<b>18.24</b>	<b>760</b>	<b>18.41</b>	<b>-0.16</b>
<b>C. NHPC</b>								
Chamera I HPS	540	535	540	540	12.97	540	12.84	0.13
Chamera II HPS	300	300	297	202	5.97	249	5.90	0.07
Chamera III HPS	231	229	229	156	3.82	159	3.75	0.07
Bairasui HPS	180	180	180	180	4.11	171	4.06	0.05
Salal-HPS	690	595	575	667	14.51	605	14.19	0.32
Tanakpur-HPS	94	32	42	31	0.82	34	0.78	0.04
Uri-HPS	480	475	477	476	11.56	481	11.40	0.15
Uri-II HPS	240	240	243	244	5.83	243	5.76	0.07
Dhauliganga-HPS	280	101	140	138	2.42	101	2.40	0.02
Dulhasti-HPS	390	387	405	404	9.50	396	9.30	0.20
Sewa-II HPS	120	122	130	130	3.09	129	2.93	0.16
Parbati 3	390	260	260	0	1.77	74	1.69	0.08
<b>Sub Total ©</b>	<b>3935</b>	<b>3456</b>	<b>3518</b>	<b>3168</b>	<b>76</b>	<b>3181</b>	<b>75</b>	<b>1</b>
<b>D. SJVNL</b>								
NJPC	1500	1605	1270	507	19.07	795	18.96	0.10
Rampur HEP	206		212	134	4.25	177	4	0.75
<b>Sub Total (D)</b>	<b>1706</b>	<b>1605</b>	<b>1482</b>	<b>641</b>	<b>23.32</b>	<b>971</b>	<b>22.46</b>	<b>0.85</b>
<b>E. THDC</b>								
Tehri HPS	1000	417	417	285	9.09	379	9.00	0.09
Koteshwar HPS	400	300	302	90	4.72	197	4.70	0.02
<b>Sub Total (E)</b>	<b>1400</b>	<b>717</b>	<b>719</b>	<b>375</b>	<b>13.81</b>	<b>575</b>	<b>13.70</b>	<b>0.11</b>
<b>F. BBMB</b>								
Bhakra HPS	1514	794	1313	635	19.43	810	19.07	0.36
Dehar HPS	990	560	660	610	14.75	615	13.44	1.31
Pong HPS	396	64	186	0	1.59	66	1.55	0.05
<b>Sub Total (F)</b>	<b>2900</b>	<b>1419</b>	<b>2159</b>	<b>1245</b>	<b>35.77</b>	<b>1490</b>	<b>34.05</b>	<b>1.72</b>
<b>G. IPP(s)/JV(s)</b>								
ADHPL HPS(IPP)	192	0	95	42	1.24	52	1.33	-0.09
KWHEP HPS(IPP)	1000	0	361	421	10.40	433	10.20	0.19
Malana Stg-II HPS	100	0	104	0	0.59	25	0.58	0.01
Shree Cement TPS	300	0	249	214	5.74	239	5.52	0.22
Budhil HPS(IPP)	70	0	7	14	1.00	42	1.12	-0.12
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>816</b>	<b>691</b>	<b>18.97</b>	<b>791</b>	<b>18.76</b>	<b>0.21</b>
<b>H. Total Regional Entities (A-G)</b>	<b>24221</b>	<b>17634</b>	<b>17545</b>	<b>14425</b>	<b>363.64</b>	<b>15152</b>	<b>361.26</b>	<b>2.38</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	350	350	8	348
	Guru Nanak Dev TPS(Bhatinda)	440	120	90	2	96
	Guru Hargobind Singh TPS(L.mbt)	920	403	404	9	376
	Goindwal(GVK)		0	0	0	0
	Rajpura	700	0	0	0	0
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	<b>3980</b>	<b>873</b>	<b>844</b>	<b>20</b>	<b>820</b>
	Total Hydro	1148	631	344	11.79	491
<b>Total Punjab</b>	<b>5128</b>	<b>1504</b>	<b>1188</b>	<b>31.46</b>	<b>1311</b>	
Haryana	Panipat TPS	1367	0	0	0.00	0
	DCRTPP (Yamuna nagar)	600	285	280	5.82	243
	Faridabad GPS (NTPC)	432	175	175	4.64	194
	RGTPP (khedar) (IPP)	1200	539	550	11.82	492
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	0	0	0.00	0
	Thermal (Total)	4944	999	1005	22	928
	Total Hydro	62	10	9	0.21	9
	<b>Total Haryana</b>	<b>5006</b>	<b>1009</b>	<b>1014</b>	<b>22.49</b>	<b>937</b>
	Rajasthan	kota TPS	1240	890	835	20.19
suratgarh TPS		1500	870	803	19.73	822
Chabra TPS		750	389	191	6.52	272
Dholpur GPS		330	53	0	0.40	17
Ramgarh GPS		221	80	0	0.29	12
RAPS A (NPC)		300	206	206	4.05	169
Barsingsar (NLC)		250	80	79	1.75	73
Giral LTPS		250	0	0	0.00	0
Rajwest LTPS (IPP)		1080	768	428	15.84	660
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	253	3.57	149
Kawai(Adani)		1320	1184	1045	27.23	1135
Thermal (Total)		7976	4520	3840	100	4149
Total Hydro		550	0	0	0.00	0
Wind power		2191	79	234	4.99	208
Biomass		91	28	28	0.66	28
Solar		201	0	0	0.13	5
Renewable/Others (Total)		2483	107	262	5.78	241
<b>Total Rajasthan</b>		<b>11009</b>	<b>4627</b>	<b>4102</b>	<b>105.35</b>	<b>4390</b>
UP	Anpara TPS	1630	1437	1537	32.20	1342
	Obra TPS	1288	0	166	2.20	92
	Paricha TPS	1140	848	826	17.90	746
	Panki TPS	210	85	85	1.80	75
	Harduaganj TPS	665	0	191	1.60	67
	Tanda TPS (NTPC)	440	372	372	8.91	371
	Roza TPS (IPP)	1200	1099	1098	25.45	1061
	Anpara-C (IPP)	1200	1049	1040	24.81	1034
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	401	401	8.86	369
	Thermal (Total)	8223	5291	5716	124	5156
	Vishnuparyag HPS (IPP)	400	168	158	3.86	161
	Other Hydro	527	240	207	4.02	167
	Cogeneration	981	100	100	2.40	100
	<b>Total UP</b>	<b>10131</b>	<b>5799</b>	<b>6181</b>	<b>134.01</b>	<b>5423</b>
	Uttarakhand	Total Hydro	1303	558	529	13.14
<b>Total Uttarakhand</b>		<b>1303</b>	<b>558</b>	<b>529</b>	<b>13.14</b>	<b>547</b>
Delhi	Rajghat TPS	135	57	53	1.28	53
	Delhi Gas Turbine	282	108	113	2.67	111
	Pragati Gas Turbine	330	93	96	2.30	96
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	0	0	0.00	0
	Badarpur TPS (NTPC)	705	495	495	10.66	444
	Thermal (Total)	2917	753	757	16.91	705
	<b>Total Delhi</b>	<b>2917</b>	<b>753</b>	<b>757</b>	<b>16.91</b>	<b>705</b>
HP	Baspa HPS (IPP)	300	49	209	2.91	121
	Malana HPS (IPP)	86	85	0	0.86	36
	Other Hydro	728	637	517	13.89	579
	<b>Total HP</b>	<b>1114</b>	<b>771</b>	<b>726</b>	<b>17.65</b>	<b>736</b>
J & K	Baglihar HPS (IPP)	450	440	438	10.52	439
	Other Hydro/IPP	436	130	126	3.10	129
	Gas/Diesel/Others	209	0	0	0.00	0
	<b>Total J &amp; K</b>	<b>1094</b>	<b>570</b>	<b>564</b>	<b>13.62</b>	<b>568</b>
<b>Total State Control Area Generation</b>		<b>37702</b>	<b>15591</b>	<b>15061</b>	<b>354.62</b>	<b>14615</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>4445</b>	<b>3283</b>	<b>93.32</b>	<b>3888</b>
<b>Total Regional Availability(Gross)</b>		<b>61923</b>	<b>37581</b>	<b>32769</b>	<b>811.58</b>	<b>33655</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	11233	8438	5892	161.47	6728
State Control Area Hydro	5589	2780	2379	64.28	2518
<b>Total Regional Hydro</b>	<b>16823</b>	<b>11218</b>	<b>8271</b>	<b>225.75</b>	<b>9246</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	500	100	500	0	3.95	0.66	3.30
Gwalior-Agra (D/C)	1474	1374	1926	0	32.46	0.00	32.46
Zerda-Kankroli	13	-244	17	280	0.00	2.77	-2.77
Zerda-Bhinmal	4	-226	56	263	0.00	2.00	-2.00
Malanpur-Auraiya	-50	-42	0	58	0.00	0.90	-0.90
Badod-Kota/Morak	-22	-124	0	129	0.00	1.46	-1.46
Mundra-Mohindergarh(HVDC)	2002	1498	2005	0	40.92	0.00	40.92
<b>Sub Total WR</b>	<b>3921</b>	<b>2336</b>			<b>77.33</b>	<b>7.78</b>	<b>69.55</b>
Pusaui Bypass	400	400	400	0	9.64	0.00	9.64
MZP- GKP (D/C)	30	228	354	60	4.59	0.00	4.59
Patna-Balia(D/C)	84	232	272	0	4.80	0.00	4.80
B'Sharif-Balia (D/C)	24	139	190	0	2.78	0.00	2.78
Pusaui-Balia	-130	-72	0	130	0.00	2.09	-2.09
Gaya-Fatehpur (765 Kv)	-54	-75	102	103	0.00	0.01	-0.01
Pusaui-Sahupuri	155	162	164	0	3.02	0.00	3.02
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)	15	-67	146	67	1.04	0.00	1.04
<b>Sub Total ER</b>	<b>524</b>	<b>947</b>			<b>25.87</b>	<b>2.09</b>	<b>23.77</b>
<b>Total IR Exch</b>	<b>4445</b>	<b>3283</b>			<b>103.20</b>	<b>9.88</b>	<b>93.32</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
33.10	0.71	33.81	7.40	-2.33	-10.38	-6.70	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
30.83	52.60	83.43	23.77	69.55	93.32	-7.06	16.95	9.89

**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	1.22	11.32	37.54	74.90	53.94	5.98	1.38	0.30	NA

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN
Freq	Time	Freq	Time	Hz				
50.25	18.03	49.63	19.41	49.93	0.15	0.10	50.20	49.78

**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	407	06:06	401	22:11	0.0	0.0	0.0	0.0
Gorakhpur	400	434	07:03	411	01:40	0.0	0.0	68.1	1.8
Bareilly	400	416	07:03	397	22:07	0.0	0.0	0.0	0.0
Kanpur	400	417	07:02	403	19:18	0.0	0.0	0.0	0.0
Dadri	400	416	07:02	400	14:13	0.0	0.0	0.0	0.0
Ballabgarh	400	423	03:01	407	14:11	0.0	0.0	13.8	0.0
Bawana	400	419	07:03	402	14:11	0.0	0.0	0.0	0.0
Bassi	400	427	03:06	407	09:24	0.0	0.0	20.6	0.0
Hissar	400	412	02:54	398	19:19	0.0	0.0	0.0	0.0
Moga	400	412	02:57	398	19:17	0.0	0.0	0.0	0.0
Abdullapur	400	416	12:58	405	19:19	0.0	0.0	0.0	0.0
Nalagarh	400	422	03:07	405	14:28	0.0	0.0	6.9	0.0
Kishenpur	400	412	02:27	399	19:28	0.0	0.0	0.0	0.0
Wagoora	400	409	03:43	388	21:31	0.0	1.6	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	772	07:03	740	19:25	0.0	0.5	0.0	0.0
Balia	765	769	07:03	736	01:09	0.0	13.9	0.0	0.0
Moga	765	782	03:06	755	19:19	0.0	0.0	0.0	0.0
Agra	765	782	07:04	754	22:06	0.0	0.0	0.0	0.0
Bhiwani	765	789	18:03	767	14:13	0.0	0.0	0.0	0.0
Unnao	765	759	07:07	735	23:45	0.0	25.3	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	481.76	503.43	475.71	368.17	637.92	701.52
Pong	426.72	384.05	403.17	296.79	400.39	230.85	131.90	31.83
Tehri	829.79	740.04	751.75	61.57	NA	NA	127.72	298.00
Koteshwar	612.50	598.50	610.71	4.95	601.40	0.80	298.00	300.00
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 15.05.2014 :**

Normal weather.

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

0.00

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

- 1: 500 MVA ICT (new) first time charged at 20.36hrs of dt.15.05.2014 at Gr.Noida (UPPCL).
2. 315 MVA ICT at Jodhpur(RRVPNL) replaced by new ICT at 20:33 hrs of dt. 15.05.2014.

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

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

Report for : 15.05.2014

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER