

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 12.05.2014  
Date of Reporting : 13.05.2014

### 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
35367	1687	37054	50.06	34376	600	34976	50.10	827.6	28.86

\* 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	27.80	11.90		39.69	66.93	65.19	-1.74	104.89	0.00
Haryana	23.62	0.37		23.99	89.06	90.79	1.73	114.79	0.90
Rajasthan	90.80	0.05	14.07	104.92	50.12	50.00	-0.12	154.91	0.00
Delhi	16.44			16.44	70.92	70.75	-0.16	87.19	0.08
UP	132.49	8.69	2.40	143.58	131.97	132.97	1.00	276.55	26.15
Uttarakhand		13.82		13.82	18.67	17.72	-0.95	31.54	0.04
HP		17.45		17.45	4.49	4.62	0.13	22.07	0.00
J & K		13.36	0.00	13.36	16.51	17.85	1.35	31.21	1.70
Chandigarh				0.00	4.49	4.46	-0.03	4.46	0.00
<b>Total</b>	<b>291.14</b>	<b>65.63</b>	<b>16.47</b>	<b>373.25</b>	<b>453.15</b>	<b>454.37</b>	<b>1.22</b>	<b>827.61</b>	<b>28.86</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	4660	0	-2	356	4783	0	4	552	13.29
Haryana	5218	203	199	373	5023	0	190	199	8.35
Rajasthan	6793	0	137	-56	5414	0	-46	-5	0.42
Delhi	3969	14	159	217	3390	0	-240	-100	1.78
UP	10993	1370	159	1003	12362	600	44	1628	26.33
Uttarakhand	932	0	-383	352	1354	0	62	238	6.56
HP	989	0	28	-1071	723	0	-41	-813	-19.23
J&K	1606	100	180	-407	1158	0	21	-703	-13.20
Chandigarh	208	0	-19	0	168	0	-16	0	0.24
<b>Total</b>	<b>35367</b>	<b>1687</b>	<b>457</b>	<b>767</b>	<b>34376</b>	<b>600</b>	<b>-21</b>	<b>996</b>	<b>24.54</b>

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

### III. Regional Entities :

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

A. NTPC	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
	Singrauli STPS	2000	1547	1450	1471	36.59	1525	35.73	0.86
	Rihand I STPS	1000	835	780	786	18.59	775	18.37	0.22
	Rihand II STPS	1000	900	841	832	20.52	855	19.98	0.54
	Rihand III STPS	1000	813	782	798	18.24	760	17.99	0.25
	Dadri I STPS	840	813	741	610	15.42	642	15.58	-0.17
	Dadri II STPS	980	980	718	712	16.37	682	17.44	-1.07
	Unchahar I TPS	420	408	403	330	8.23	343	8.57	-0.33
	Unchahar II TPS	420	204	200	168	3.77	157	3.91	-0.13
	Unchahar III TPS	210	204	193	156	3.77	157	3.93	-0.15
	ISTPP (Jhajjar)	1500	1000	913	819	20.30	846	20.67	-0.36
	Dadri GPS	830	806	376	352	8.35	348	8.54	-0.18
	Anta GPS	419	391	0	0	0.00	0	0.00	0.00
	Auraiya GPS	663	609	155	159	2.99	124	3.22	-0.23
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	0	0	0	0.00	0	0.00	0.00
	<b>Sub Total (A)</b>	<b>11297</b>	<b>9511</b>	<b>7552</b>	<b>7193</b>	<b>173</b>	<b>7215</b>	<b>174</b>	<b>-1</b>
B. NPC	NAPS	440	142	166	169	3.48	145	3.41	0.07
	RAPS- B	440	403	451	446	9.69	404	9.67	0.02
	RAPS- C	440	410	447	453	9.69	404	9.84	-0.15
	<b>Sub Total (B)</b>	<b>1320</b>	<b>955</b>	<b>1064</b>	<b>1068</b>	<b>22.87</b>	<b>953</b>	<b>22.92</b>	<b>-0.05</b>
C. NHPC	Chamera I HPS	540	535	540	540	12.85	535	12.84	0.01
	Chamera II HPS	300	300	200	300	6.24	260	6.20	0.04
	Chamera III HPS	231	229	154	229	3.92	163	3.90	0.02
	Bairasui HPS	180	180	182	182	4.37	182	4.32	0.05
	Salal-HPS	690	653	677	671	15.80	658	15.66	0.14
	Tanakpur-HPS	94	41	32	45	1.05	44	1.02	0.03
	Uri-HPS	480	475	475	475	11.52	480	11.40	0.12
	Uri-II HPS	240	240	245	242	5.77	241	5.76	0.01
	Dhauliganga-HPS	280	118	138	138	2.83	118	2.83	0.00
	Dulhasti-HPS	390	387	405	405	9.56	398	9.30	0.25
	Sewa-II HPS	120	122	130	130	3.08	129	2.93	0.16
	Parbati 3	390	255	130	260	2.12	89	2.12	0.00
	<b>Sub Total ©</b>	<b>3935</b>	<b>3535</b>	<b>3308</b>	<b>3617</b>	<b>79</b>	<b>3297</b>	<b>78</b>	<b>1</b>
D. SJVNL	NJPC	1500	1605	900	1616	25.62	1067	25.76	-0.14
	Rampur HEP	206		0	0	2.12	89		2.12
	<b>Sub Total (D)</b>	<b>1706</b>	<b>1605</b>	<b>900</b>	<b>1616</b>	<b>27.74</b>	<b>1156</b>	<b>25.76</b>	<b>1.98</b>
E. THDC	Tehri HPS	1000	570	362	573	9.11	380	9.00	0.11
	Koteshwar HPS	400	300	90	302	4.74	197	4.70	0.04
	<b>Sub Total (E)</b>	<b>1400</b>	<b>870</b>	<b>452</b>	<b>875</b>	<b>13.85</b>	<b>577</b>	<b>13.70</b>	<b>0.15</b>
F. BBMB	Bhakra HPS	1514	764	636	1312	19.00	792	18.33	0.67
	Dehar HPS	990	560	610	660	14.66	611	13.44	1.22
	Pong HPS	396	78	0	246	2.06	86	1.88	0.19
	<b>Sub Total (F)</b>	<b>2900</b>	<b>1402</b>	<b>1246</b>	<b>2218</b>	<b>35.72</b>	<b>1488</b>	<b>33.65</b>	<b>2.07</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	60	94	1.63	68	1.82	-0.19
	KWHEP HPS(IPP)	1000	0	450	688	13.98	583	15.36	-1.38
	Malana Stg-II HPS	100	0	0	112	0.85	35	0.72	0.13
	Shree Cement TPS	300	0	208	240	5.56	232	5.45	0.11
	Budhil HPS(IPP)	70	0	0	112	0.77	32	1.09	-0.32
	<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>718</b>	<b>1246</b>	<b>22.79</b>	<b>950</b>	<b>24.44</b>	<b>-1.65</b>
<b>H. Total Regional Entities (A-G)</b>		<b>24221</b>	<b>17878</b>	<b>15240</b>	<b>17833</b>	<b>375.25</b>	<b>15635</b>	<b>372.68</b>	<b>2.56</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	525	790	13	542
	Guru Nanak Dev TPS(Bhatinda)	440	65	120	2	90
	Guru Hargobind Singh TPS(L.mbt)	920	0	170	1	29
	Goindwal(GVK)		0	0	0	0
	Rajpura	700	649	350	12	497
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	<b>3980</b>	<b>1239</b>	<b>1430</b>	<b>28</b>	<b>1158</b>
	Total Hydro	1148	395	491	11.90	496
	<b>Total Punjab</b>	<b>5128</b>	<b>1634</b>	<b>1921</b>	<b>39.69</b>	<b>1654</b>
Haryana	Panipat TPS	1367	0	0	0.00	0
	DCRTPP (Yamuna nagar)	600	279	275	6.46	269
	Faridabad GPS (NTPC)	432	175	175	4.57	191
	RGTPP (khedar) (IPP)	1200	535	546	12.59	525
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	0	0	0.00	0
	Thermal (Total)	4944	989	996	24	984
	Total Hydro	62	27	10	0.37	15
	<b>Total Haryana</b>	<b>5006</b>	<b>1016</b>	<b>1006</b>	<b>23.99</b>	<b>1000</b>
	Rajasthan	kota TPS	1240	817	858	19.54
suratgarh TPS		1500	1214	1298	30.76	1282
Chabra TPS		750	221	209	5.22	218
Dholpur GPS		330	132	130	3.20	133
Ramgarh GPS		221	43	40	0.61	25
RAPS A (NPC)		300	180	180	4.06	169
Barsingsar (NLC)		250	81	83	1.83	76
Giral LTPS		250	0	0	0.00	0
Rajwest LTPS (IPP)		1080	564	497	12.05	502
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		1320	481	532	13.53	564
Thermal (Total)		7976	3733	3827	91	3783
Total Hydro		550	0	0	0.05	2
Wind power		2191	298	757	13.24	552
Biomass		91	25	25	0.60	25
Solar		201	0	0	0.24	10
Renewable/Others (Total)		2483	323	782	14.07	586
<b>Total Rajasthan</b>		<b>11009</b>	<b>4056</b>	<b>4609</b>	<b>104.92</b>	<b>4371</b>
UP	Anpara TPS	1630	1514	1535	32.80	1367
	Obra TPS	1288	416	365	8.50	354
	Paricha TPS	1140	810	827	17.30	721
	Panki TPS	210	165	170	3.60	150
	Harduaganj TPS	665	200	191	4.20	175
	Tanda TPS (NTPC)	440	377	369	9.07	378
	Roza TPS (IPP)	1200	1103	1044	25.61	1067
	Anpara-C (IPP)	1200	1047	1037	24.78	1032
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	320	234	6.64	277
	Thermal (Total)	8223	5952	5772	132	5520
	Vishnuparyag HPS (IPP)	400	198	198	4.59	191
	Other Hydro	527	229	117	4.10	171
	Cogeneration	981	100	100	2.40	100
	<b>Total UP</b>	<b>10131</b>	<b>6479</b>	<b>6187</b>	<b>143.58</b>	<b>5791</b>
Uttarakhand	Total Hydro	1303	568	526	13.82	576
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>568</b>	<b>526</b>	<b>13.82</b>	<b>576</b>
Delhi	Rajghat TPS	135	109	109	2.42	101
	Delhi Gas Turbine	282	104	105	2.38	99
	Pragati Gas Turbine	330	97	98	2.35	98
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	0	0	0.00	0
	Badarpur TPS (NTPC)	705	494	355	9.30	387
	Thermal (Total)	2917	804	667	16.44	685
	<b>Total Delhi</b>	<b>2917</b>	<b>804</b>	<b>667</b>	<b>16.44</b>	<b>685</b>
HP	Baspa HPS (IPP)	300	115	134	3.34	139
	Malana HPS (IPP)	86	38	45	0.85	35
	Other Hydro	728	567	519	13.26	553
	<b>Total HP</b>	<b>1114</b>	<b>720</b>	<b>698</b>	<b>17.45</b>	<b>727</b>
J & K	Baglihar HPS (IPP)	450	438	438	10.22	426
	Other Hydro/IPP	436	132	128	3.14	131
	Gas/Diesel/Others	209	0	0	0.00	0
	<b>Total J &amp; K</b>	<b>1094</b>	<b>570</b>	<b>566</b>	<b>13.36</b>	<b>556</b>
<b>Total State Control Area Generation</b>		<b>37702</b>	<b>15847</b>	<b>16180</b>	<b>373.25</b>	<b>15361</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>3389</b>	<b>4196</b>	<b>94.58</b>	<b>3941</b>
<b>Total Regional Availability(Gross)</b>		<b>61923</b>	<b>34476</b>	<b>38209</b>	<b>843.07</b>	<b>34937</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	11233	6416	9220	172.88	7203
State Control Area Hydro	5589	2509	2408	65.63	2543
<b>Total Regional Hydro</b>	<b>16823</b>	<b>8925</b>	<b>11628</b>	<b>238.51</b>	<b>9747</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	100	100	0	2.43	0.00	2.43
Gwalior-Agra (D/C)	944	1535	1705	0	29.15	0.00	29.15
Zerda-Kankroli	-199	-248	0	409	0.00	5.38	-5.38
Zerda-Bhinmal	-166	-216	0	352	0.00	4.13	-4.13
Malanpur-Auraiya	-43	-52	0	94	0.00	1.03	-1.03
Badod-Kota/Morak	-49	-78	0	114	0.00	1.58	-1.58
Mundra-Mohindergarh(HVDC)	2000	1998	2005	0	48.32	0.00	48.32
<b>Sub Total WR</b>	<b>2587</b>	<b>3039</b>			<b>79.90</b>	<b>12.12</b>	<b>67.78</b>
Pusaali Bypass	400	400	400	0	9.65	0.00	9.65
MZP- GKP (D/C)	120	320	456	28	6.19	0.00	6.19
Patna-Balia(D/C)	186	240	382	0	5.40	0.00	5.40
B'Sharif-Balia (D/C)	93	186	265	0	3.58	0.00	3.58
Pusaali-Balia	-89	-69	0	103	0.00	1.80	-1.80
Gaya-Fatehpur (765 Kv)	0	-72	3	180	0.00	0.76	-0.76
Pusaali-Sahupuri	187	185	200	0	4.51	0.00	4.51
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)	-95	-33	162	18	0.03	0.00	0.03
<b>Sub Total ER</b>	<b>802</b>	<b>1157</b>			<b>29.36</b>	<b>2.56</b>	<b>26.80</b>
<b>Total IR Exch</b>	<b>3389</b>	<b>4196</b>			<b>109.26</b>	<b>14.68</b>	<b>94.58</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
30.86	1.32	32.18	9.27	-1.61	-1.61	-0.39	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
39.84	57.33	97.17	26.80	67.78	94.58	-13.04	10.45	-2.60

**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	0.00	1.98	21.06	69.28	69.85	6.78	2.31	0.54	NA

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				
50.28	18.05	49.72	10.15	49.96	0.07	0.08	50.26	49.88

**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	18:09	402	00:00	0.0	0.0	0.0	0.0
Gorakhpur	400	423	18:03	409	10:11	0.0	0.0	9.1	0.0
Bareilly	400	420	18:04	396	15:28	0.0	0.0	0.0	0.0
Kanpur	400	415	18:03	397	10:45	0.3	0.3	0.0	0.0
Dadri	400	417	18:03	400	11:12	0.0	0.0	0.0	0.0
Ballabgarh	400	422	03:08	405	10:45	0.0	0.0	7.5	0.0
Bawana	400	417	18:03	401	10:19	0.0	0.0	0.0	0.0
Bassi	400	428	03:02	406	10:17	0.0	0.0	28.0	0.0
Hissar	400	412	18:06	394	10:15	0.0	0.0	0.0	0.0
Moga	400	411	18:06	396	10:13	0.0	0.0	0.0	0.0
Abdullapur	400	419	18:03	406	10:45	0.0	0.0	0.0	0.0
Nalagarh	400	416	06:02	396	10:15	0.0	0.0	0.0	0.0
Kishenpur	400	412	04:05	402	19:34	0.0	0.0	0.0	0.0
Wagoora	400	411	13:03	390	20:12	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	766	03:07	732	10:12	0.0	11.7	0.0	0.0
Balia	765	767	18:04	739	10:16	0.0	2.4	0.0	0.0
Moga	765	782	18:06	750	10:19	0.0	0.0	0.0	0.0
Agra	765	784	02:57	748	10:13	0.0	0.0	0.0	0.0
Bhiwani	765	797	18:06	762	11:11	0.0	0.0	0.0	0.0
Unnao	765	757	18:06	727	11:10	0.2	66.8	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:**

During the night 12-13 May due to storm and rain severe load crash to the tune of 9000-10000 MW in NR

**XII. Weather Conditions For 12.05.2014 :**

Cloudy in most part of 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 : 12.05.2014

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER