

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 11.05.2014  
Date of Reporting : 12.05.2014

### 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
35395	1505	36900	50.06	34404	600	35004	50.07	827.4	26.98

\* 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	22.79	10.53		33.32	78.60	77.04	-1.56	110.36	0.00
Haryana	22.53	0.63		23.16	86.50	87.41	0.91	110.57	0.03
Rajasthan	103.28	0.00	10.13	113.41	48.83	48.93	0.10	162.34	0.00
Delhi	18.43			18.43	61.48	61.53	0.04	79.96	0.00
UP	130.11	8.91	2.40	141.42	131.29	131.04	-0.25	272.46	25.15
Uttarakhand		14.69		14.69	18.73	17.90	-0.83	32.59	0.11
HP		17.79		17.79	3.49	5.30	1.81	23.09	0.00
J & K		13.69	0.00	13.69	15.61	18.06	2.45	31.75	1.70
Chandigarh				0.00	4.49	4.23	-0.26	4.23	0.00
<b>Total</b>	<b>297.14</b>	<b>66.24</b>	<b>12.53</b>	<b>375.91</b>	<b>449.03</b>	<b>451.45</b>	<b>2.42</b>	<b>827.36</b>	<b>26.98</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	4733	0	-474	668	4799	0	-14	812	17.29
Haryana	5488	0	17	422	4560	0	314	250	9.64
Rajasthan	6093	0	-211	-52	6657	0	58	4	1.00
Delhi	3609	0	37	86	3302	0	107	-186	-2.31
UP	11292	1370	-168	881	11618	600	-105	1538	24.11
Uttarakhand	1547	35	44	308	1238	0	-83	247	6.97
HP	910	0	-79	-1123	860	0	75	-1015	-22.62
J&K	1529	100	251	-358	1194	0	123	-730	-13.00
Chandigarh	193	0	-6	0	176	0	-3	0	0.24
<b>Total</b>	<b>35395</b>	<b>1505</b>	<b>-589</b>	<b>832</b>	<b>34404</b>	<b>600</b>	<b>472</b>	<b>919</b>	<b>21.30</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 Capacity(MW)	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
	(Effective) MW		(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
<b>A. NTPC</b>								
Singrauli STPS	2000	1608	1861	1619	38.20	1591	38.13	0.06
Rihand I STPS	1000	827	916	789	18.28	762	18.33	-0.05
Rihand II STPS	1000	927	950	746	20.52	855	20.63	-0.11
Rihand III STPS	1000	677	485	711	14.35	598	14.51	-0.16
Dadri I STPS	840	704	620	615	13.26	552	14.04	-0.79
Dadri II STPS	980	980	700	710	16.43	684	16.86	-0.43
Unchahar I TPS	420	408	412	384	8.38	349	8.74	-0.36
Unchahar II TPS	420	204	200	167	3.93	164	4.11	-0.18
Unchahar III TPS	210	204	211	168	3.91	163	4.05	-0.14
ISTPP (Jhajjar)	1500	1000	635	994	16.28	679	16.39	-0.10
Dadri GPS	830	805	294	332	7.36	307	7.51	-0.15
Anta GPS	419	391	0	0	0.00	0	0.00	0.00
Auraiya GPS	663	637	152	116	3.38	141	3.43	-0.05
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>9373</b>	<b>7436</b>	<b>7351</b>	<b>164</b>	<b>6846</b>	<b>167</b>	<b>-2</b>
<b>B. NPC</b>								
NAPS	440	142	167	167	3.47	145	3.41	0.06
RAPS- B	440	403	450	444	9.71	405	9.67	0.04
RAPS- C	440	410	453	437	9.69	404	9.84	-0.15
<b>Sub Total (B)</b>	<b>1320</b>	<b>955</b>	<b>1070</b>	<b>1048</b>	<b>22.87</b>	<b>953</b>	<b>22.92</b>	<b>-0.05</b>
<b>C. NHPC</b>								
Chamera I HPS	540	535	540	540	12.75	531	12.84	-0.09
Chamera II HPS	300	300	302	197	6.77	282	6.80	-0.03
Chamera III HPS	231	229	157	229	4.41	184	4.40	0.01
Bairasui HPS	180	180	182	182	4.35	181	4.32	0.03
Salal-HPS	690	667	673	675	16.08	670	16.01	0.07
Tanakpur-HPS	94	42	46	60	1.05	44	1.00	0.05
Uri-HPS	480	475	477	474	11.47	478	11.40	0.07
Uri-II HPS	240	240	248	243	5.82	243	5.76	0.06
Dhauliganga-HPS	280	135	140	140	3.35	140	3.35	0.00
Dulhasti-HPS	390	387	405	404	9.47	395	9.30	0.17
Sewa-II HPS	120	122	130	130	3.07	128	2.93	0.14
Parbati 3	390	260	0	0	2.45	102	2.36	0.10
<b>Sub Total ©</b>	<b>3935</b>	<b>3572</b>	<b>3300</b>	<b>3274</b>	<b>81</b>	<b>3377</b>	<b>80</b>	<b>1</b>
<b>D. SJVNL</b>								
NJPC	1500	1605	946	1614	28.40	1183	28.34	0.06
Rampur HEP	206		0	0	4.20	175		4.20
<b>Sub Total (D)</b>	<b>1706</b>	<b>1605</b>	<b>946</b>	<b>1614</b>	<b>32.59</b>	<b>1358</b>	<b>28.34</b>	<b>4.25</b>
<b>E. THDC</b>								
Tehri HPS	1000	505	363	577	9.07	378	9.00	0.07
Koteshwar HPS	400	300	92	302	4.52	188	4.50	0.02
<b>Sub Total (E)</b>	<b>1400</b>	<b>805</b>	<b>455</b>	<b>879</b>	<b>13.59</b>	<b>566</b>	<b>13.50</b>	<b>0.09</b>
<b>F. BBMB</b>								
Bhakra HPS	1514	767	614	1316	18.74	781	18.41	0.33
Dehar HPS	990	570	600	660	14.71	613	13.68	1.03
Pong HPS	396	9	0	0	0.28	12	0.21	0.07
<b>Sub Total (F)</b>	<b>2900</b>	<b>1346</b>	<b>1214</b>	<b>1976</b>	<b>33.73</b>	<b>1405</b>	<b>32.30</b>	<b>1.43</b>
<b>G. IPP(s)/JV(s)</b>								
ADHPL HPS(IPP)	192	0	104	105	1.94	81	2.34	-0.40
KWHEP HPS(IPP)	1000	0	452	793	15.80	658	16.07	-0.28
Malana Stg-II HPS	100	0	0	112	0.85	35	0.79	0.06
Shree Cement TPS	300	0	210	196	4.71	196	4.65	0.07
Budhil HPS(IPP)	70	0	7	7	1.08	45	1.31	-0.23
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>773</b>	<b>1213</b>	<b>24.37</b>	<b>1016</b>	<b>25.16</b>	<b>-0.79</b>
<b>H. Total Regional Entities (A-G)</b>	<b>24221</b>	<b>17656</b>	<b>15194</b>	<b>17355</b>	<b>372.50</b>	<b>15521</b>	<b>369.45</b>	<b>3.06</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	525	12	520
	Guru Nanak Dev TPS(Bhatinda)	440	0	0	0	0
	Guru Hargobind Singh TPS(L.mbt)	920	0	0	0	0
	Goindwal(GVK)		0	0	0	0
	Rajpura	700	456	634	10	430
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	<b>3980</b>	<b>981</b>	<b>1159</b>	<b>23</b>	<b>950</b>
	Total Hydro	1148	400	400	10.53	439
<b>Total Punjab</b>	<b>5128</b>	<b>1381</b>	<b>1559</b>	<b>33.32</b>	<b>1388</b>	
Haryana	Panipat TPS	1367	0	0	0.00	0
	DCRTPP (Yamuna nagar)	600	258	268	6.11	255
	Faridabad GPS (NTPC)	432	175	175	4.62	192
	RGTPP (khedar) (IPP)	1200	510	537	11.80	492
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	0	0	0.00	0
	Thermal (Total)	4944	943	980	23	939
	Total Hydro	62	28	28	0.63	26
	<b>Total Haryana</b>	<b>5006</b>	<b>971</b>	<b>1008</b>	<b>23.16</b>	<b>965</b>
	Rajasthan	kota TPS	1240	825	816	19.47
suratgarh TPS		1500	1215	1269	30.06	1252
Chabra TPS		750	192	196	4.92	205
Dholpur GPS		330	133	116	3.16	132
Ramgarh GPS		221	73	43	1.76	73
RAPS A (NPC)		300	180	180	4.07	170
Barsingsar (NLC)		250	84	82	1.84	77
Giral LTPS		250	0	0	0.00	0
Rajwest LTPS (IPP)		1080	645	436	14.14	589
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		1320	959	950	23.86	994
Thermal (Total)		7976	4306	4088	103	4303
Total Hydro		550	0	0	0.00	0
Wind power		2191	657	449	9.25	385
Biomass		91	25	25	0.60	25
Solar		201	0	0	0.28	12
Renewable/Others (Total)		2483	682	474	10.13	422
<b>Total Rajasthan</b>		<b>11009</b>	<b>4988</b>	<b>4562</b>	<b>113.41</b>	<b>4726</b>
UP	Anpara TPS	1630	1454	1498	32.50	1354
	Obra TPS	1288	398	412	8.70	363
	Paricha TPS	1140	739	836	17.20	717
	Panki TPS	210	85	155	2.80	117
	Harduaganj TPS	665	174	193	3.90	163
	Tanda TPS (NTPC)	440	379	370	9.13	380
	Roza TPS (IPP)	1200	1103	1080	25.51	1063
	Anpara-C (IPP)	1200	927	1036	23.59	983
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	320	320	6.78	283
	Thermal (Total)	8223	5579	5900	130	5421
	Vishnuparyag HPS (IPP)	400	248	220	5.43	226
	Other Hydro	527	237	77	3.48	145
	Cogeneration	981	100	100	2.40	100
	<b>Total UP</b>	<b>10131</b>	<b>6164</b>	<b>6297</b>	<b>141.42</b>	<b>5666</b>
Uttarakhand	Total Hydro	1303	566	615	14.69	612
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>566</b>	<b>615</b>	<b>14.69</b>	<b>612</b>
Delhi	Rajghat TPS	135	109	109	2.42	101
	Delhi Gas Turbine	282	104	103	2.44	101
	Pragati Gas Turbine	330	97	94	2.33	97
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	0	0	0.00	0
	Badarpur TPS (NTPC)	705	437	495	11.24	468
	Thermal (Total)	2917	747	801	18.43	768
	<b>Total Delhi</b>	<b>2917</b>	<b>747</b>	<b>801</b>	<b>18.43</b>	<b>768</b>
HP	Baspa HPS (IPP)	300	59	178	3.72	155
	Malana HPS (IPP)	86	0	96	0.94	39
	Other Hydro	728	576	588	13.14	547
	<b>Total HP</b>	<b>1114</b>	<b>635</b>	<b>862</b>	<b>17.79</b>	<b>741</b>
J & K	Baglihar HPS (IPP)	450	438	442	10.55	440
	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>570</b>	<b>13.69</b>	<b>570</b>
<b>Total State Control Area Generation</b>		<b>37702</b>	<b>16022</b>	<b>16274</b>	<b>375.91</b>	<b>15437</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>4104</b>	<b>4661</b>	<b>95.30</b>	<b>3971</b>
<b>Total Regional Availability(Gross)</b>		<b>61923</b>	<b>35320</b>	<b>38290</b>	<b>843.71</b>	<b>34929</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	11233	6471	8753	179.53	7480
State Control Area Hydro	5589	2436	2552	66.24	2534
<b>Total Regional Hydro</b>	<b>16823</b>	<b>8907</b>	<b>11305</b>	<b>245.77</b>	<b>10014</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	50	500	500	50	7.57	0.04	7.53
Gwalior-Agra (D/C)	1539	1654	1870	0	32.49	0.00	32.49
Zerda-Kankroli	-92	-163	0	285	0.00	3.72	-3.72
Zerda-Bhinmal	-48	-132	38	250	0.00	2.54	-2.54
Malanpur-Auraiya	-70	-22	0	70	0.00	0.90	-0.90
Badod-Kota/Morak	-55	-56	0	113	0.00	1.27	-1.27
Mundra-Mohindergarh(HVDC)	1698	1502	2004	0	38.23	0.00	38.23
<b>Sub Total WR</b>	<b>3022</b>	<b>3283</b>			<b>78.29</b>	<b>8.47</b>	<b>69.81</b>
Pusauli Bypass	400	400	400	0	9.59	0.00	9.59
MZP- GKP (D/C)	304	300	368	0	5.43	0.00	5.43
Patna-Balia(D/C)	262	290	353	0	5.64	0.00	5.64
B'Sharif-Balia (D/C)	159	196	268	0	3.56	0.00	3.56
Pusauli-Balia	-83	-74	0	92	0.00	1.68	-1.68
Gaya-Fatehpur (765 Kv)	-107	24	40	205	0.00	1.22	-1.22
Pusauli-Sahupuri	187	163	200	0	4.35	0.00	4.35
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)	-40	79	79	168	0.00	0.17	-0.17
<b>Sub Total ER</b>	<b>1082</b>	<b>1378</b>			<b>28.56</b>	<b>3.07</b>	<b>25.49</b>
<b>Total IR Exch</b>	<b>4104</b>	<b>4661</b>			<b>106.84</b>	<b>11.54</b>	<b>95.30</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
28.78	0.96	29.74	7.82	-0.21	-2.61	-2.83	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
34.95	62.71	97.66	25.49	69.81	95.30	-9.47	7.10	-2.36

**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	0.21	2.13	11.85	44.04	61.57	15.57	11.00	1.97	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				
50.35	18.05	49.65	21.10	50.00	0.08	0.09	50.35	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	18:07	397	05:38	0.0	0.0	0.0	0.0
Gorakhpur	400	432	16:05	411	22:54	0.0	0.0	66.9	5.3
Bareilly	400	419	18:07	396	22:53	0.0	0.0	0.0	0.0
Kanpur	400	420	18:03	402	22:09	0.0	0.0	0.0	0.0
Dadri	400	420	18:04	404	22:55	0.0	0.0	0.0	0.0
Ballabgarh	400	429	18:04	410	22:48	0.0	0.0	30.2	0.0
Bawana	400	421	18:03	402	22:52	0.0	0.0	0.7	0.0
Bassi	400	436	18:03	410	10:27	0.0	0.0	35.1	5.5
Hissar	400	415	18:05	395	22:52	0.0	0.0	0.0	0.0
Moga	400	415	18:05	399	21:32	0.0	0.0	0.0	0.0
Abdullapur	400	422	18:04	405	19:44	0.0	0.0	3.0	0.0
Nalagarh	400	422	18:05	407	22:42	0.0	0.0	1.7	0.0
Kishenpur	400	412	03:22	401	20:12	0.0	0.0	0.0	0.0
Wagoora	400	411	12:58	391	20:14	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	784	18:04	745	22:52	0.0	0.0	0.0	0.0
Balia	765	784	18:05	742	22:51	0.0	0.0	0.0	0.0
Moga	765	790	18:05	757	22:51	0.0	0.0	0.0	0.0
Agra	765	804	18:05	743	20:19	0.0	0.0	0.3	0.0
Bhiwani	765	807	18:08	769	22:52	0.0	0.0	2.7	0.0
Unnao	765	767	18:03	731	22:51	0.0	14.7	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 (m <sup>3</sup> /s)	Usage (m <sup>3</sup> /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 11.05.2014 :**  
1. 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 :**

Report for : 11.05.2014

पारी प्रभावी अभियंता / SHIFT CHARGE ENGINEER