

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पब्लिसिटी की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 17.06.2013  
Date of Reporting : 18.06.2013

### 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
30398	1652	32050	49.64	25246	0	25246	50.37	672.1	17.50

\* 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:

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	10.23	4.72		14.94	94.10	94.25	0.16	109.20	3.73
Haryana	14.83	0.20		15.03	81.30	78.52	-2.78	93.55	0.00
Rajasthan	74.21	0.00	8.50	82.71	62.07	58.74	-3.33	141.45	0.03
Delhi	15.22			15.22	66.29	60.84	-5.45	76.06	0.04
UP	92.15	1.38	4.20	97.73	92.46	85.05	-7.41	182.79	12.00
Uttarakhand		0.42		0.42	13.90	18.52	4.62	18.94	0.00
HP		11.51		11.51	-1.44	9.09	10.53	20.61	0.00
J & K		13.42	0.00	13.42	13.19	12.07	-1.13	25.48	1.70
Chandigarh				0.00	5.10	4.07	-1.03	4.07	0.00
<b>Total</b>	<b>206.64</b>	<b>31.65</b>	<b>12.70</b>	<b>250.98</b>	<b>426.98</b>	<b>421.16</b>	<b>-5.82</b>	<b>672.14</b>	<b>17.50</b>

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

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

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	5576	0	-130	1297	4073	0	-70	834	27.56	
Haryana	4717	0	-215	1007	3040	0	-775	1078	22.12	
Rajasthan	5554	0	-476	349	5634	0	-85	268	6.91	
Delhi	3476	12	-16	-214	2820	0	-413	170	2.49	
UP	8203	1540	-205	340	7367	0	-341	947	13.31	
Uttarakhand	711	0	90	-10	687	0	46	-41	-0.90	
HP	832	0	242	-394	705	0	590	-925	-15.62	
J&K	1127	100	25	-322	798	0	-129	-473	-9.61	
Chandigarh	202	0	202	0	122	0	122	0	0.00	
<b>Total</b>	<b>30398</b>	<b>1652</b>	<b>-483</b>	<b>2053</b>	<b>25246</b>	<b>0</b>	<b>-1054</b>	<b>1858</b>	<b>46.26</b>	

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

### III. Regional Entities :

Entity	Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI Net MU
A. NTPC	Singrauli STPS	2000	1836	2080	1545	41.65	1736	41.78	-0.13
	Rihand I STPS	1000	915	991	650	19.59	816	20.09	-0.50
	Rihand II STPS	1000	966	1043	656	20.41	851	20.42	-0.01
	Rihand III STPS	500	471	493	143	9.91	413	9.97	-0.05
	Dadri I STPS	840	810	654	471	12.05	502	11.59	0.46
	Dadri II STPS	980	975	1043	696	17.64	735	17.70	-0.06
	Unchahar I TPS	420	403	435	310	8.41	350	8.37	0.03
	Unchahar II TPS	420	201	220	151	4.14	173	4.12	0.03
	Unchahar III TPS	210	201	220	154	4.14	173	4.10	0.04
	ISTPP (Jhajhar)	1500	940	368	302	7.20	300	7.71	-0.51
	Dadri GPS	830	810	389	400	9.23	385	9.54	-0.31
	Anta GPS	419	398	0	0	0.00	0	0.00	0.00
	Auraiya GPS	663	630	304	159	5.40	225	5.45	-0.05
	<b>Sub Total (A)</b>	<b>10782</b>	<b>9555</b>	<b>8240</b>	<b>5637</b>	<b>159.77</b>	<b>6657</b>	<b>160.84</b>	<b>-1.07</b>
B. NPC	NAPS	440	306	325	333	7.05	294	7.36	-0.31
	RAPS- B	440	388	429	434	9.32	388	9.31	0.01
	RAPS- C	440	410	442	460	9.36	390	9.84	-0.48
	<b>Sub Total (B)</b>	<b>1320</b>	<b>1104</b>	<b>1196</b>	<b>1227</b>	<b>25.73</b>	<b>1072</b>	<b>26.51</b>	<b>-0.78</b>
C. NHPC	Chamera I HPS	540	540	540	540	13.04	543	12.96	0.08
	Chamera II HPS	300	310	310	303	7.45	310	7.43	0.02
	Chamera III HPS	231	231	240	231	5.57	232	5.54	0.03
	Bairasuil HPS	180	179	120	150	2.41	100	2.77	-0.36
	Salal-HPS	690	660	667	667	16.00	667	15.84	0.16
	Tanakpur-HPS	94	0	0	0	0.00	0	0.00	0.00
	Uri-HPS	480	475	476	463	11.43	476	11.36	0.07
	Dhauliganga-HPS	280	70	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	0	383	8.88	370	9.11	-0.24
	Sewa-II HPS	120	119	124	79	1.70	71	1.55	0.15
<b>Sub Total (C)</b>	<b>3305</b>	<b>2971</b>	<b>2477</b>	<b>2816</b>	<b>66.47</b>	<b>2770</b>	<b>66.56</b>	<b>-0.09</b>	
D. NJPC	Natpaa Jhakri	1500	0	0	0	0.00	0	0.00	0.00
	<b>Sub Total (D)</b>	<b>1500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>	<b>0.00</b>
E. THDC	Tehri HPS	1000	649	500	610	12.28	512	12.00	0.28
	Koteshwar HPS	400	295	200	296	6.78	283	6.75	0.03
	<b>Sub Total (E)</b>	<b>1400</b>	<b>944</b>	<b>700</b>	<b>906</b>	<b>19.06</b>	<b>794</b>	<b>18.75</b>	<b>0.31</b>
F. BBMB	Bhakra HPS	1480	1222	1260	1260	29.42	1226	29.32	0.10
	Dehar HPS	990	609	825	620	14.98	624	14.61	0.37
	Pong HPS	396	13	123	0	0.33	14	0.31	0.02
	<b>Sub Total (F)</b>	<b>2866</b>	<b>1843</b>	<b>2208</b>	<b>1880</b>	<b>44.73</b>	<b>1864</b>	<b>44.24</b>	<b>0.49</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	151	148	3.24	135	3.88	-0.64
	KWHEP HPS(IPP)	1000	0	0	0	1.93	80	23.28	-21.35
	Malana Stg-II HPS	100	0	63	60	1.41	59	1.29	0.12
	Shree Cement TPS	300	0	272	263	6.36	265	6.37	-0.01
	Budhil HPS(IPP)	70	0	35	34	0.82	34	0.72	0.10
	<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>521</b>	<b>505</b>	<b>13.76</b>	<b>573</b>	<b>35.54</b>	<b>-21.78</b>
<b>H. Total Regional Entities (A-G)</b>	<b>22836</b>	<b>16418</b>	<b>15342</b>	<b>12971</b>	<b>329.53</b>	<b>13730</b>	<b>352.45</b>	<b>-22.92</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	210	170	4.26	177	
	Guru Nanak Dev TPS(Bhatinda)	440	92	90	1.49	62	
	Guru Hargobind Singh TPS(L.mbt)	920	211	153	4.48	187	
	Goindwal(GVK)		0	0	0.00	0	
	Thermal (Total)	2620	513	413	10.23	426	
	Total Hydro	1148	621	310	4.72	196	
	<b>Total Punjab</b>	<b>3768</b>	<b>1134</b>	<b>723</b>	<b>14.94</b>	<b>623</b>	
Haryana	Panipat TPS	1367	222	202	5.06	211	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	0	0	0.00	0	
	RGTPP (khedar) (IPP)	1200	463	357	9.77	407	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	0	0	0.00	0	
	Thermal (Total)	4944	685	559	14.83	618	
	Total Hydro	62	0	0	0.20	8	
		<b>Total Haryana</b>	<b>5006</b>	<b>685</b>	<b>559</b>	<b>15.03</b>	<b>626</b>
	Rajasthan	kota TPS	1240	910	793	21.03	876
suratgarh TPS		1500	928	849	21.67	903	
Chabra TPS		500	196	226	5.01	209	
Dholpur GPS		330	134	110	2.98	124	
Ramgarh GPS		111	24	26	0.79	33	
RAPS A (NPC)		300	176	176	4.37	182	
Barsingar (NLC)		250	0	84	0.69	29	
Giral LTPS		250	33	50	2.01	84	
Rajwest LTPS (IPP)		1080	705	571	15.66	652	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Kalisindh Thermal		600	0	0	0.00	0	
Kawai(Adani)		660	0	0	0.00	0	
Thermal (Total)		6956	3106	2885	74.21	3092	
Total Hydro		550	10	0	0.00	0	
Wind power		2191	560	322	6.71	280	
Biomass		91	19	19	0.45	19	
Solar		201	0	0	1.33	55	
Renewable/Others (Total)		2483	579	341	8.50	354	
		<b>Total Rajasthan</b>	<b>9989</b>	<b>3695</b>	<b>3226</b>	<b>82.71</b>	<b>3446</b>
UP		Anpara TPS	1630	1224	1052	26.00	1083
	Obra TPS	1288	411	346	8.50	354	
	Paricha TPS	1140	724	738	18.10	754	
	Panki TPS	210	77	36	0.70	29	
	Harduaganj TPS	665	324	329	6.90	288	
	Tanda TPS (NTPC)	440	294	245	6.60	275	
	Roza TPS (IPP)	1200	648	603	14.75	615	
	Anpara-C (IPP)	1200	529	380	10.60	442	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	0	0	0.00	0	
	Thermal (Total)	8223	4231	3729	92.15	3840	
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0	
	Other Hydro	527	102	54	1.38	58	
	Cogeneration	981	175	175	4.20	175	
		<b>Total UP</b>	<b>10131</b>	<b>4508</b>	<b>3958</b>	<b>97.73</b>	<b>4072</b>
Uttarakhand	Total Hydro	1303	0	0	0.42	18	
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>0</b>	<b>0</b>	<b>0.42</b>	<b>18</b>	
Delhi	Rajghat TPS	135	38	40	0.84	35	
	Delhi Gas Turbine	282	79	79	1.64	68	
	Pragati Gas Turbine	330	142	140	3.41	142	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	480	415	9.33	389	
	Thermal (Total)	2232	739	674	15.22	634	
	<b>Total Delhi</b>	<b>2232</b>	<b>739</b>	<b>674</b>	<b>15.22</b>	<b>634</b>	
HP	Baspa HPS (IPP)	330	0	0	0.37	15	
	Malana HPS (IPP)	86	44	21	1.28	53	
	Other Hydro	589	390	440	9.87	411	
		<b>Total HP</b>	<b>1005</b>	<b>434</b>	<b>461</b>	<b>11.51</b>	<b>480</b>
J & K	Baglihar HPS (IPP)	450	438	436	10.46	436	
	Other Hydro	323	110	128	2.95	123	
	Gas/Diesel/Others	183	0	0	0.00	0	
		<b>Total J &amp; K</b>	<b>956</b>	<b>548</b>	<b>564</b>	<b>13.42</b>	<b>559</b>
<b>Total State Control Area Generation</b>		<b>34390</b>	<b>11743</b>	<b>10165</b>	<b>250.98</b>	<b>10457</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>5811</b>	<b>2994</b>	<b>103.47</b>	<b>4311</b>	
<b>Total Regional Availability(Gross)</b>		<b>57226</b>	<b>32896</b>	<b>26130</b>	<b>683.98</b>	<b>28499</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	5599	5810	136.84	5702
State Control Area Hydro	5368	1715	1389	31.65	1319
<b>Total Regional Hydro</b>	<b>15731</b>	<b>7314</b>	<b>7199</b>	<b>168.49</b>	<b>7020</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	300	6.40	1.21	5.19
Gwalior-Agra (D/C)	1946	1355	1946	0	35.98	0.00	35.98
Zerda-Kankroli	19	-5	140	80	0.28	0.00	0.28
Zerda-Bhinmal	96	5	171	93	0.77	0.00	0.77
Malanpur-Auraiya	-52	-87	0	87	0.00	0.70	-0.70
Badod-Kota/Morak	-23	11	70	23	0.00	0.63	-0.63
Mundra-Mohindergarh(HVDC)	1434	1038	1450	0	27.07	0.00	27.07
<b>Sub Total WR</b>	<b>3920</b>	<b>2217</b>			<b>70.50</b>	<b>2.54</b>	<b>67.96</b>
Pusauli Bypass	-266	-273	0	377	0.00	5.80	-5.80
MZP- GKP (D/C)	626	404	692	0	13.53	0.00	13.53
Patna-Balia(D/C)	721	335	725	0	13.38	0.00	13.38
B'Sharif-Balia (D/C)	274	119	297	0	6.28	0.00	6.28
Pusauli-Balia	-28	-22	19	43	0.00	0.23	-0.23
Gaya-Fatehpur (765 Kv)	111	-7	176	59	1.76	0.00	1.76
Pusauli-Sahupuri	130	140	152	0	3.07	0.00	3.07
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-38	-40	0	45	0.00	0.90	-0.90
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	361	121	433	0	4.42	0.00	4.42
<b>Sub Total ER</b>	<b>1891</b>	<b>777</b>			<b>42.44</b>	<b>6.93</b>	<b>35.51</b>
<b>Total IR Exch</b>	<b>5811</b>	<b>2994</b>			<b>112.94</b>	<b>9.46</b>	<b>103.47</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
38.03	1.80	39.83	7.46	19.76	-4.72	-7.96	0.95	-0.95

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
43.51	49.82	93.33	35.51	67.96	103.47	-8.00	18.14	10.14

**VI. Frequency Profile** <----- % of Time Frequency ----->

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7-49.8	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	1.20	6.80	86.40	7.40	80.80	45.20	12.40

<----- Frequency (Hz) ----->				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.47	3.29	49.36	19.42	49.98	0.35	0.19	50.46	49.56

**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	420	03:03	399	14:45	0.0	0.0	0.0	0.0
Gorakhpur	400	432	04:10	409	19:42	0.0	0.0	32.8	2.4
Bareilly	400	429	03:06	401	19:38	0.0	0.0	12.9	0.0
Kanpur	400	431	03:15	403	19:38	0.0	0.0	34.9	0.1
Dadri	400	426	03:06	399	17:06	0.0	0.0	17.8	0.0
Ballabgarh	400	432	03:04	402	17:06	0.0	0.0	26.8	4.5
Bawana	400	428	02:05	400	19:41	0.0	0.0	26.0	0.0
Bassi	400	435	03:59	409	08:38	0.0	0.0	36.7	5.7
Hissar	400	418	01:29	392	17:05	0.0	0.0	0.0	0.0
Moga	400	417	03:15	393	17:05	0.0	0.0	0.0	0.0
Abdullapur	400	431	02:06	400	19:33	0.0	0.0	21.0	0.1
Nalagarh	400	429	01:41	402	11:21	0.0	0.0	26.7	0.0
Kishenpur	400	414	23:54	400	19:10	0.0	0.0	0.0	0.0
Wagoora	400	413	01:09	395	19:09	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	799	03:15	752	14:35	0.0	0.0	0.0	0.0
Balia	765	770	04:03	729	19:37	0.0	32.0	0.0	0.0
Moga	765	787	03:15	739	17:06	0.0	0.3	0.0	0.0
Agra	765	822	03:28	758	19:42	0.0	0.0	17.0	0.6
Bhiwani	765	804	03:15	752	17:06	0.0	0.0	6.1	0.0
Unnao	765	779	03:55	732	19:44	0.0	15.8	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 (m <sup>3</sup> /s)	Usage (m <sup>3</sup> /s)
Bhakra	513.59	445.62	486.06	619.14	465.72	204.14	1026.74	1471.10
Pong	426.72	384.05	402.20	273.51	396.77	157.28	22.99	316.84
Tehri	829.79	740.04	757.30	100.00	818.65	982.26	2036.69	355.00
Koteswar	612.50	598.50	608.30	4.21	NA	NA	426.00	395.00
Chamera-I	760.00	748.75	760.00	NA	NA	NA	333.85	353.21
Rihand	268.22	252.98	255.06	78.60	255.06	78.60	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	514.05	160.00	499.65	124.00	480.11	53.18

\* NA: Not Available

**X. System Constraints:**

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

**XII. Weather Conditions For 17.06.2013 :**

1. Wide spread rains in Punjab , Haryana , HP , J & K , Uttranchal , UP, Delhi& Partial in Rajasthan.

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

**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 :**

1. NJPC ( 1500 MW , Kacham (1000 MW), Basapa (330MW), Dhaliganga ( 280MW), Vishnuprayg (400MW),Tanakpur(90MW) closed due high silt level.  
& Complete generation of Ultrakhand about (800MW) Except Ramganga (30MW).

Report for : 17.06.2013

पारी प्रभाती अभियंता / SHIFT CHARGE ENGINEER