

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 17.06.2012  
Date of Reporting : 18.06.2012

### 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
36667	1056	37723	49.95	39793	2020	41813	50.02	916.6	60.54

\* 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	43.09	18.33		61.42	112.39	130.72	18.33	192.14	11.45
Haryana	44.90	0.94		45.84	61.33	89.16	27.83	135.00	8.28
Rajasthan	68.01	0.00	19.85	87.85	54.74	63.27	8.53	151.13	0.00
Delhi	30.28			30.28	81.83	72.93	-8.90	103.21	0.53
UP	93.25	15.06	4.80	113.11	105.03	130.54	25.51	243.65	36.52
Uttarakhand		21.39		21.39	13.34	12.15	-1.18	33.54	0.49
HP		17.14		17.14	10.24	5.49	-4.75	22.63	0.32
J & K		15.02	0.00	15.02	13.86	14.67	0.82	29.69	2.95
Chandigarh				0.00	6.44	5.57	-0.87	5.57	0.00
<b>Total</b>	<b>279.52</b>	<b>87.88</b>	<b>24.65</b>	<b>392.05</b>	<b>459.20</b>	<b>524.52</b>	<b>65.32</b>	<b>916.56</b>	<b>60.54</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	8132	550	665	1988	8235	450	829	1988	48.91	
Haryana	5374	73	972	300	5576	565	1210	300	7.19	
Rajasthan	5992	0	-23	-94	6721	0	684	-94	-2.00	
Delhi	4220	6	-330	545	4371	0	-205	435	13.86	
UP	9126	250	777	0	11266	905	1310	0	1.20	
Uttarakhand	1502	0	34	30	1381	0	-38	30	0.73	
HP	801	27	-200	-1013	926	0	-210	-969	-22.96	
J&K	1290	150	1	-575	1079	100	-70	-575	-14.04	
Chandigarh	230	0	-13	40	238	0	-1	20	1.20	
<b>Total</b>	<b>36667</b>	<b>1056</b>	<b>1883</b>	<b>1221</b>	<b>39793</b>	<b>2020</b>	<b>3509</b>	<b>1136</b>	<b>34.09</b>	

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

### III. Regional Entities :

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	1730	1877	1867	41.85	1744	41.52	0.33
	Rihand I STPS	1000	890	947	978	21.41	892	21.36	0.05
	Rihand II STPS	1000	970	1042	1044	23.42	976	23.28	0.13
	Rihand III STPS	500		0	0	0.00	0		0.00
	Dadri I STPS	840	793	815	965	17.97	749	18.44	-0.47
	Dadri II STPS	980	963	1004	1015	22.58	941	23.03	-0.45
	Unchahar I TPS	420	402	436	433	9.48	395	9.59	-0.12
	Unchahar II TPS	420	404	433	437	9.49	395	9.58	-0.10
	Unchahar III TPS	210	201	216	216	4.75	198	4.79	-0.04
	ISTPP (Jhajjar)	1000	940	755	759	18.78	783	17.98	0.80
	Dadri GPS	830	743	698	699	15.97	666	16.09	-0.11
	Anta GPS	419	382	348	345	7.85	327	7.89	-0.03
	Auraiya GPS	663	574	537	544	12.45	519	12.23	0.22
	<b>Sub Total (A)</b>	<b>10282</b>	<b>8992</b>	<b>9108</b>	<b>9302</b>	<b>206.00</b>	<b>8583</b>	<b>205.77</b>	<b>0.23</b>
B. NPC	NAPS	440	257	291	291	6.10	254	6.17	-0.07
	RAPS- B	440	388	430	431	9.29	387	9.31	-0.03
	RAPS- C	440	200	232	234	4.96	207	4.80	0.16
	<b>Sub Total (B)</b>	<b>1320</b>	<b>845</b>	<b>953</b>	<b>956</b>	<b>20.35</b>	<b>848</b>	<b>20.28</b>	<b>0.07</b>
C. NHPC	Chamera I HPS	540	534	540	540	12.30	512	12.82	-0.52
	Chamera II HPS	300	300	300	300	7.13	297	7.22	-0.10
	Chamera III HPS	231		153	154	3.22	134		3.22
	Bairasuil HPS	180	182	120	120	2.73	114	3.02	-0.28
	Salal-HPS	690	661	660	661	15.93	664	15.88	0.04
	Tanakpur-HPS	94	52	80	47	1.58	66	1.55	0.03
	Uri-HPS	480	476	478	478	11.58	482	11.61	-0.03
	Dhauliganga-HPS	280	277	278	278	6.49	270	6.65	-0.16
	Dulhasti-HPS	390	386	405	362	9.13	380	9.56	-0.44
	Sewa-II HPS	120	74	81	80	1.39	58	1.56	-0.17
	<b>Sub Total (C)</b>	<b>3305</b>	<b>2942</b>	<b>3095</b>	<b>3020</b>	<b>71.46</b>	<b>2977</b>	<b>69.87</b>	<b>1.59</b>
D.NJPC	Nathpa Jhakri	1500	1600	1622	1626	38.68	1612	38.40	0.28
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1600</b>	<b>1622</b>	<b>1626</b>	<b>38.68</b>	<b>1612</b>	<b>38.40</b>	<b>0.28</b>
E. THDC	Tehri HPS	1000	500	105	121	3.78	157	4.00	-0.22
	Koteshwar HPS	400	200	198	198	2.59	108	2.70	-0.11
	<b>Sub Total (E)</b>	<b>1400</b>	<b>700</b>	<b>303</b>	<b>319</b>	<b>6.37</b>	<b>265</b>	<b>6.70</b>	<b>-0.33</b>
F. BBMB	Bhakra HPS	1480	894	1049	748	21.83	910	21.47	0.36
	Dehar HPS	990	613	825	640	15.07	628	14.71	0.36
	Pong HPS	396	253	336	230	6.17	257	6.07	0.10
	<b>Sub Total (F)</b>	<b>2866</b>	<b>1761</b>	<b>2210</b>	<b>1618</b>	<b>43.07</b>	<b>1795</b>	<b>42.25</b>	<b>0.82</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	225	145	3.93	164	3.54	0.38
	KWHEP HPS(IPP)	1000	0	1125	950	23.75	989	22.57	1.17
	Malana Stg-II HPS	100	0	85	77	1.65	69	0.00	1.65
	Shree Cement TPS	300	0	122	145	2.96	123	3.24	-0.28
	Budhil HPS(IPP)	70		69	69	1.41	59		1.41
	<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1626</b>	<b>1386</b>	<b>33.70</b>	<b>1404</b>	<b>29.36</b>	<b>4.34</b>
<b>H. Total Regional Entities (A-G)</b>		<b>22336</b>	<b>16839</b>	<b>18917</b>	<b>18227</b>	<b>419.62</b>	<b>17484</b>	<b>412.63</b>	<b>6.99</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	1250	1250	26.62	1109	
	Guru Nanak Dev TPS(Bhatinda)	440	100	202	2.46	103	
	Guru Hargobind Singh TPS(L.mbt)	920	646	652	14.00	583	
	Thermal (Total)	2620	1996	2104	43.09	1795	
	Total Hydro	1148	784	783	18.33	764	
	<b>Total Punjab</b>	<b>3768</b>	<b>2780</b>	<b>2887</b>	<b>61.42</b>	<b>2559</b>	
Haryana	Panipat TPS	1367	946	964	23.00	958	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	361	368	8.75	365	
	RGTPP (khedar) (IPP)	1200	475	512	13.15	548	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	0	0	0.00	0	
	Thermal (Total)	4944	1782	1844	44.90	1871	
	Total Hydro	62	21	20	0.94	39	
	<b>Total Haryana</b>	<b>5006</b>	<b>1803</b>	<b>1864</b>	<b>45.84</b>	<b>1910</b>	
	Rajasthan	kota TPS	1240	917	970	22.39	933
suratgarh TPS		1500	1054	1132	26.06	1086	
Chabra TPS		500	221	220	5.20	217	
Dholpur GPS		330	164	96	2.78	116	
Ramgarh GPS		111	54	52	1.33	56	
RAPS A (NPC)		300	181	181	3.80	158	
Barsingsar (NLC)		250	115	132	2.89	120	
Giral LTPS		250	65	0	0.51	21	
Rajwest LTPS (IPP)		540	230	0	3.06	128	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Thermal (Total)		5156	3001	2783	68.01	2834	
Total Hydro		550	0	0	0.00	0	
Wind power		1843	623	1047	18.75	781	
Biomass		91	30	30	0.72	30	
Solar		128	0	0	0.38	16	
Renewable/Others (Total)		2062	653	1077	19.85	827	
<b>Total Rajasthan</b>		<b>7767</b>	<b>3654</b>	<b>3860</b>	<b>87.85</b>	<b>3661</b>	
UP		Anpara TPS	1630	1071	1096	22.50	938
		Obra TPS	1382	539	484	11.70	488
		Paricha TPS	890	68	554	9.20	383
	Panki TPS	210	0	88	0.80	33	
	Harduaganj TPS	665	38	36	0.70	29	
	Tanda TPS (NTPC)	440	282	282	7.02	292	
	Roza TPS (IPP)	1200	824	829	19.64	818	
	Anpara-C (IPP)	1200	608	597	14.16	590	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	343	311	7.54	314	
	Thermal (Total)	8067	3773	4277	93.25	3885	
	Vishnuparyag HPS (IPP)	400	436	436	10.45	435	
	Other Hydro	527	163	0	4.61	192	
	Cogeneration	981	200	200	4.80	200	
	<b>Total UP</b>	<b>9975</b>	<b>4572</b>	<b>4913</b>	<b>113.11</b>	<b>4278</b>	
	Uttarakhand	Total Hydro	1303	915	852	21.39	891
<b>Total Uttarakhand</b>		<b>1303</b>	<b>915</b>	<b>852</b>	<b>21.39</b>	<b>891</b>	
Delhi	Rajghat TPS	135	100	102	2.78	116	
	Delhi Gas Turbine	282	184	210	4.44	185	
	Pragati Gas Turbine	330	267	278	6.76	282	
	Rithala GPS	108	22	22	0.64	27	
	Bawana GPS	677	239	257	6.94	289	
	Badarpur TPS (NTPC)	705	410	410	8.72	363	
	Thermal (Total)	2237	1222	1279	30.28	1262	
	<b>Total Delhi</b>	<b>2237</b>	<b>1222</b>	<b>1279</b>	<b>30.28</b>	<b>1262</b>	
HP	Baspa HPS (IPP)	330	221	332	7.18	299	
	Malana HPS (IPP)	86	60	60	1.40	58	
	Other Hydro	589	331	376	8.56	357	
	<b>Total HP</b>	<b>1005</b>	<b>612</b>	<b>768</b>	<b>17</b>	<b>714</b>	
J & K	Baglihar HPS (IPP)	450	436	437	10.47	436	
	Other Hydro	323	178	197	4.55	189	
	Gas/Diesel/Others	183	0	0	0.00	0	
	<b>Total J &amp; K</b>	<b>956</b>	<b>614</b>	<b>634</b>	<b>15.02</b>	<b>626</b>	
<b>Total State Control Area Generation</b>		<b>32017</b>	<b>16172</b>	<b>17057</b>	<b>392.05</b>	<b>15900</b>	
<b>J. Net Inter Regional Exchange</b> (Import (+ve)/Export (-ve))			<b>4031</b>	<b>5863</b>	<b>115.28</b>	<b>4803</b>	
<b>Total Regional Availability(Gross)</b>		<b>54353</b>	<b>39120</b>	<b>41147</b>	<b>926.94</b>	<b>38187</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	8665	7755	188.90	7871
State Control Area Hydro	5368	3109	3057	77.43	3226
<b>Total Regional Hydro</b>	<b>15731</b>	<b>11774</b>	<b>10812</b>	<b>266.33</b>	<b>11097</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	350	500	0	10.19	0.00	10.19
Gwalior-Agra (D/C)	999	1408	1445	0	28.47	0.00	28.47
Zerda-Kankroli	329	459	484	0	7.18	0.00	7.18
Zerda-Bhinmal	325	453	570	0	7.52	0.00	7.52
Malanpur-Auraiya	-37	33	35	40	0.02	0.00	0.02
Badod-Kota/Morak	0	0	0	0	0.00	0.00	0.00
Mundra-Mohindergarh(HVDC)	0	0	0	0	0.00	0.00	0.00
<b>Sub Total WR</b>	<b>2116</b>	<b>2703</b>			<b>53.37</b>	<b>0.00</b>	<b>53.37</b>
Pusauli Bypass	-52	119	218	117	2.73	0.18	2.55
MZP- GKP (D/C)	666	900	1030	0	20.30	0.00	20.30
Patna-Balia(D/C)	343	707	750	0	11.60	0.00	11.60
B'Sharif-Balia (D/C)	411	602	603	0	10.17	0.00	10.17
Barh - Balia(D/C)	343	432	641	0	9.93	0.00	9.93
Pusauli-Balia	44	17	44	0	0.42	0.00	0.42
Gaya-Fatehpur (765 Kv)	63	260	294	0	4.39	0.00	4.39
Pusauli-Sahupuri	139	152	161	0	3.58	0.00	3.58
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-42	-29	0	48	0.00	1.02	-1.02
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1915</b>	<b>3160</b>			<b>63.11</b>	<b>1.20</b>	<b>61.91</b>
<b>Total IR Exch</b>	<b>4031</b>	<b>5863</b>			<b>116.48</b>	<b>1.20</b>	<b>115.28</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
23.65	0.80	24.45	-1.58	34.91	1.79	2.92	0.00	0.00

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
24.66	36.04	60.70	61.91	53.37	115.28	37.25	17.33	54.58

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

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	2.40	12.30	92.00	82.10	27.80	5.60

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz	(Hz)	(Hz)		
50.48	18.04	49.28	23.08	49.90	0.44	0.19	50.38	49.61

**VII. Voltage profile**

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	400	06:59	390	00:22	0.0	0.0	0.0	0.0
Gorakhpur	400	429	17:47	386	02:13	0.0	6.6	15.9	0.0
Bareilly	400	418	18:02	376	00:22	1.1	27.9	0.0	0.0
Kanpur	400	413	18:01	381	00:25	0.0	13.4	0.0	0.0
Dadri	400	410	18:03	386	00:26	0.0	3.9	0.0	0.0
Ballabgarh	400	416	18:03	388	00:25	0.0	0.5	0.0	0.0
Bawana	400	413	18:03	388	00:22	0.0	0.7	0.0	0.0
Bassi	400	427	18:03	383	05:44	0.0	3.4	7.1	0.0
Hissar	400	410	18:03	382	23:07	0.0	14.2	0.0	0.0
Moga	400	419	18:03	392	14:19	0.0	0.0	0.0	0.0
Abdullapur	400	416	18:03	393	23:07	0.0	0.0	0.0	0.0
Nalagarh	400	407	18:03	393	23:00	0.0	0.0	0.0	0.0
Kishenpur	400	414	18:03	399	14:12	0.0	0.0	0.0	0.0
Wagoora	400	407	03:08	390	20:40	0.0	0.0	0.0	0.0

**VIII. 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	465.72	204.14	480.34	468.02	697.27	829.65
Pong	426.72	384.05	396.77	157.28	411.49	544.80	55.36	462.50
Tehri	829.79	740.04	742.00	9.37	818.65	982.26	200.00	194.00
Koteswar	612.50	598.50	606.50	2.88	NA	NA	134.00	172.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	315.62	333.22
Rihand	268.22	252.98	255.00	76.20	254.02	38.60	NA	NA
RPS	352.80	343.81	349.88	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.00	NA	NA	NA	NA	NA
RSD	527.91	487.91	499.65	NA	511.30	NA	202.72	321.20

\* NA: Not Available  
IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 17.06.2012 :  
1. Hot dry weather

XII. Synchronisation of new generating units :  
0.00

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

XIV. Tripping of lines in pooling stations :

XV. Complete generation loss in a generating station :

Report for : 17.06.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER