

**पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड**  
(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)  
**उत्तरी क्षेत्रीय भार प्रेषण केंद्र**



**Power Supply Position in Northern Region for 26.06.2012**  
**Date of Reporting : 27.06.2012**

**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
37455	3513	40968	49.61	39552	2328	41880	49.97	931.8	74.61

\* 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	47.43	18.12		65.55	119.24	127.78	8.55	193.33	22.42
Haryana	55.29	0.86		56.15	64.67	80.37	15.70	136.52	13.36
Rajasthan	76.64	0.00	35.11	111.74	48.20	48.55	0.35	160.30	0.37
Delhi	29.03			29.03	87.15	81.69	-5.46	110.71	0.44
UP	103.33	14.49	4.80	122.62	100.47	117.32	16.85	239.94	34.92
Uttarakhand		17.57		17.57	12.67	14.69	2.03	32.26	0.00
HP		18.90		18.90	5.03	4.57	-0.46	23.47	0.15
J & K		15.10	0.00	15.10	13.84	13.81	-0.03	28.91	2.95
Chandigarh				0.00	7.23	6.41	-0.82	6.41	0.00
<b>Total</b>	<b>311.72</b>	<b>85.03</b>	<b>39.91</b>	<b>436.65</b>	<b>458.49</b>	<b>495.20</b>	<b>36.71</b>	<b>931.85</b>	<b>74.61</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	8221	1108	389	1857	8235	727	475	1857	44.57	
Haryana	5573	815	504	456	5752	423	638	456	10.94	
Rajasthan	6390	0	-281	-229	7005	0	334	-229	-5.50	
Delhi	4566	0	-148	623	4447	3	-289	623	19.37	
UP	9016	1440	273	0	10677	1075	520	50	1.50	
Uttarakhand	1333	0	78	38	1383	0	124	38	0.92	
HP	785	0	-245	-1309	884	0	-96	-1310	-32.11	
J&K	1299	150	16	-553	940	100	-214	-553	-13.52	
Chandigarh	273	0	-35	40	229	0	-41	20	1.20	
<b>Total</b>	<b>37455</b>	<b>3513</b>	<b>552</b>	<b>922</b>	<b>39552</b>	<b>2328</b>	<b>1451</b>	<b>951</b>	<b>27.37</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 (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI Net MU
		Singrauli STPS	2000	1903	2071	2066	46.23	1926	45.68
	Rihand I STPS	1000	890	977	980	21.56	899	21.36	0.20
	Rihand II STPS	1000	575	624	622	13.94	581	13.80	0.14
	Rihand III STPS	500		0	0	0.00	0		0.00
	Dadri I STPS	840	793	870	852	18.86	786	19.04	-0.17
	Dadri II STPS	980	960	1010	1013	22.99	958	23.04	-0.05
	Unchahar I TPS	420	402	433	439	9.66	402	9.65	0.01
	Unchahar II TPS	420	402	440	437	9.68	403	9.65	0.03
	Unchahar III TPS	210	200	220	213	4.82	201	4.80	0.02
	ISTPP (Jhajhar)	1000	904	934	887	19.17	799	19.86	-0.69
	Dadri GPS	830	760	560	668	14.51	605	14.66	-0.15
	Anta GPS	419	382	251	255	5.87	245	6.01	-0.14
	Auraiya GPS	663	601	447	430	10.55	439	9.93	0.62
	<b>Sub Total (A)</b>	<b>10282</b>	<b>8773</b>	<b>8837</b>	<b>8862</b>	<b>197.84</b>	<b>8243</b>	<b>197.46</b>	<b>0.38</b>
B. NPC	NAPS	440	256	295	298	6.22	259	6.14	0.07
	RAPS- B	440	391	434	436	9.39	391	9.38	0.01
	RAPS- C	440	200	229	231	4.95	206	4.80	0.15
	<b>Sub Total (B)</b>	<b>1320</b>	<b>847</b>	<b>958</b>	<b>965</b>	<b>20.56</b>	<b>857</b>	<b>20.33</b>	<b>0.23</b>
C. NHPC	Chamera I HPS	540	534	540	540	12.85	535	12.81	0.03
	Chamera II HPS	300	300	304	302	7.17	299	7.23	-0.07
	Chamera III HPS	231		0	77	2.76	115		2.76
	Bairasuil HPS	180	182	150	120	2.58	108	2.76	-0.18
	Salal-HPS	690	652	651	651	15.55	648	15.62	-0.08
	Tanakpur-HPS	94	87	93	93	2.23	93	2.23	-0.01
	Uri-HPS	480	470	479	480	11.55	481	11.54	0.01
	Dhauliganga-HPS	280	277	283	280	6.75	281	6.81	-0.07
	Dulhasti-HPS	390	387	409	399	9.25	386	9.25	0.00
	Sewa-II HPS	120	80	85	80	1.17	49	1.15	0.01
	<b>Sub Total (C)</b>	<b>3305</b>	<b>2968</b>	<b>2994</b>	<b>3022</b>	<b>71.84</b>	<b>2994</b>	<b>69.43</b>	<b>2.42</b>
D. NJPC	Nathpa Jhakri	1500	1600	1620	1622	38.56	1607	38.40	0.16
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1600</b>	<b>1620</b>	<b>1622</b>	<b>38.56</b>	<b>1607</b>	<b>38.40</b>	<b>0.16</b>
E. THDC	Tehri HPS	1000	530	527	535	9.31	388	10.00	-0.70
	Koteshwar HPS	400	350	180	350	4.28	178	4.30	-0.02
	<b>Sub Total (E)</b>	<b>1400</b>	<b>880</b>	<b>707</b>	<b>885</b>	<b>13.59</b>	<b>566</b>	<b>14.30</b>	<b>-0.71</b>
F. BBMB	Bhakra HPS	1480	892	1109	755	22.31	930	21.41	0.90
	Dehar HPS	990	607	660	640	15.05	627	14.57	0.48
	Pong HPS	396	243	318	168	6.04	252	5.83	0.21
	<b>Sub Total (F)</b>	<b>2866</b>	<b>1742</b>	<b>2087</b>	<b>1563</b>	<b>43.40</b>	<b>1808</b>	<b>41.81</b>	<b>1.59</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	197	197	4.26	177	4.41	-0.16
	KWHEP HPS(IPP)	1000	0	1200	1200	28.66	1194	28.51	0.15
	Malana Stg-II HPS	100	0	84	98	1.98	83	0.00	1.98
	Shree Cement TPS	300	0	135	263	6.76	282	6.62	0.14
	Budhil HPS(IPP)	70		71	72	1.72	72		1.72
	<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1687</b>	<b>1830</b>	<b>43.38</b>	<b>1808</b>	<b>39.55</b>	<b>3.83</b>
<b>H. Total Regional Entities (A-G)</b>		<b>22336</b>	<b>16811</b>	<b>18890</b>	<b>18749</b>	<b>429.17</b>	<b>17882</b>	<b>421.27</b>	<b>7.90</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	1046	1042	23.00	958	
	Guru Nanak Dev TPS(Bhatinda)	440	209	209	4.48	187	
	Guru Hargobind Singh TPS(L.mbt)	920	926	897	19.95	831	
	Thermal (Total)	2620	2181	2148	47.43	1976	
	Total Hydro	1148	783	784	18.12	755	
	<b>Total Punjab</b>	<b>3768</b>	<b>2964</b>	<b>2932</b>	<b>65.55</b>	<b>2731</b>	
Haryana	Panipat TPS	1367	1060	1117	26.24	1093	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	361	372	8.80	367	
	RGTPP (kheadar) (IPP)	1200	491	483	12.10	504	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	322	483	8.15	340	
	Thermal (Total)	4944	2234	2455	55.29	2304	
	Total Hydro	62	36	37	0.86	36	
	<b>Total Haryana</b>	<b>5006</b>	<b>2270</b>	<b>2492</b>	<b>56.15</b>	<b>2340</b>	
	Rajasthan	kota TPS	1240	980	976	23.04	960
suratgarh TPS		1500	1123	1109	26.35	1098	
Chabra TPS		500	218	217	4.78	199	
Dholpur GPS		330	166	97	2.62	109	
Ramgarh GPS		111	50	51	1.23	51	
RAPS A (NPC)		300	175	175	4.79	200	
Barsingsar (NLC)		250	186	183	4.78	199	
Giral LTPS		250	42	94	1.10	46	
Rajwest LTPS (IPP)		540	338	338	7.95	331	
VSLLP LTPS (IPP)		135	0	0	0.00	0	
Thermal (Total)		5156	3278	3240	76.64	3193	
Total Hydro		550	0	0	0.00	0	
Wind power		1843	1510	1556	34.12	1422	
Biomass		91	28	28	0.67	28	
Solar		128	0	0	0.32	13	
Renewable/Others (Total)		2062	1538	1584	35.11	1463	
<b>Total Rajasthan</b>		<b>7767</b>	<b>4816</b>	<b>4824</b>	<b>111.74</b>	<b>4656</b>	
UP		Anpara TPS	1630	1160	1208	26.20	1092
		Obra TPS	1382	508	520	11.40	475
		Paricha TPS	890	583	579	12.30	513
	Panki TPS	210	75	80	1.70	71	
	Harduaganj TPS	665	44	42	2.60	108	
	Tanda TPS (NTPC)	440	381	374	9.31	388	
	Roza TPS (IPP)	1200	824	819	19.68	820	
	Anpara-C (IPP)	1200	542	510	12.79	533	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	320	321	7.35	306	
	Thermal (Total)	8067	4437	4453	103.33	4305	
	Vishnuparyag HPS (IPP)	400	436	436	10.46	436	
	Other Hydro	527	160	0	4.03	168	
	Cogeneration	981	200	200	4.80	200	
	<b>Total UP</b>	<b>9975</b>	<b>5233</b>	<b>5089</b>	<b>122.62</b>	<b>4673</b>	
	Uttarakhand	Total Hydro	1303	763	692	17.57	732
<b>Total Uttarakhand</b>		<b>1303</b>	<b>763</b>	<b>692</b>	<b>17.57</b>	<b>732</b>	
Delhi	Rajghat TPS	135	100	102	2.31	96	
	Delhi Gas Turbine	282	211	213	5.14	214	
	Pragati Gas Turbine	330	217	269	6.42	268	
	Rithala GPS	108	29	29	0.54	23	
	Bawana GPS	677	257	222	5.51	229	
	Badarpur TPS (NTPC)	705	420	430	9.10	379	
	Thermal (Total)	2237	1234	1265	29.03	1209	
	<b>Total Delhi</b>	<b>2237</b>	<b>1234</b>	<b>1265</b>	<b>29.03</b>	<b>1209</b>	
HP	Baspa HPS (IPP)	330	330	330	7.92	330	
	Malana HPS (IPP)	86	77	85	1.82	76	
	Other Hydro	589	404	380	9.17	382	
	<b>Total HP</b>	<b>1005</b>	<b>811</b>	<b>795</b>	<b>19</b>	<b>788</b>	
J & K	Baglihar HPS (IPP)	450	439	440	10.55	440	
	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>617</b>	<b>637</b>	<b>15.10</b>	<b>629</b>	
<b>Total State Control Area Generation</b>		<b>32017</b>	<b>18708</b>	<b>18726</b>	<b>436.65</b>	<b>17758</b>	
<b>J. Net Inter Regional Exchange (Import (+ve)/Export (-ve))</b>			<b>2187</b>	<b>4346</b>	<b>88.21</b>	<b>3675</b>	
<b>Total Regional Availability(Gross)</b>		<b>54353</b>	<b>39785</b>	<b>41821</b>	<b>954.03</b>	<b>39315</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	8889	8587	202.29	8429
State Control Area Hydro	5368	3170	2945	74.57	3107
<b>Total Regional Hydro</b>	<b>15731</b>	<b>12059</b>	<b>11532</b>	<b>276.86</b>	<b>11536</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	500	500	0	11.99	0.00	11.99
Gwalior-Agra (D/C)	428	691	900	0	16.21	0.00	16.21
Zerda-Kankroli	23	120	262	58	1.51	0.00	1.51
Zerda-Bhinmal	59	83	325	99	1.61	0.00	1.61
Malanpur-Auraiya	-41	-49	0	120	0.00	1.17	-1.17
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>969</b>	<b>1345</b>			<b>31.31</b>	<b>1.17</b>	<b>30.14</b>
Pusauli Bypass	300	200	300	0	5.26	0.00	5.26
MZP- GKP (D/C)	400	1076	1162	0	21.17	0.00	21.17
Patna-Balia(D/C)	381	536	557	0	10.63	0.00	10.63
B'Sharif-Balia (D/C)	163	642	657	0	10.12	0.00	10.12
Barh - Balia(D/C)	0	328	410	0	5.55	0.00	5.55
Pusauli-Balia	-16	-33	102	72	0.64	0.00	0.64
Gayaa-Fatehpur (765 Kv)	-75	169	231	75	2.40	0.00	2.40
Pusauli-Sahupuri	107	112	170	0	3.32	0.00	3.32
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>1218</b>	<b>3001</b>			<b>59.09</b>	<b>1.02</b>	<b>58.07</b>
<b>Total IR Exch</b>	<b>2187</b>	<b>4346</b>			<b>90.40</b>	<b>2.19</b>	<b>88.21</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
27.89	3.71	31.61	3.38	23.12	-6.11	1.46	0.00	0.00
<b>Total IR Schedule (MU)</b>			<b>Total IR Actual (MU)</b>			<b>Net IR UI (MU)</b>		
Through ER	Through WR	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
28.88	24.44	53.32	58.07	30.14	88.21	29.19	5.69	34.89

**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	1.20	14.50	35.10	84.90	64.30	10.00	0.60

<----- 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	18.03	49.07	22.37	49.76	1.04	0.21	50.23	49.27

**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	405	07:27	399	11:58	0.0	0.0	0.0	0.0
Gorakhpur	400	427	18:35	399	11:59	0.0	0.0	20.3	0.0
Bareilly	400	416	18:06	389	11:36	0.0	0.6	0.0	0.0
Kanpur	400	412	18:04	390	11:39	0.0	0.0	0.0	0.0
Dadri	400	408	19:28	389	11:39	0.0	0.8	0.0	0.0
Ballabgarh	400	413	19:31	391	11:38	0.0	0.0	0.0	0.0
Bawana	400	412	07:55	394	11:38	0.0	0.0	0.0	0.0
Bassi	400	418	18:04	390	05:32	0.0	0.0	0.0	0.0
Hissar	400	409	15:04	387	13:23	0.0	1.5	0.0	0.0
Moga	400	416	14:57	396	13:25	0.0	0.0	0.0	0.0
Abdullapur	400	416	21:01	398	13:34	0.0	0.0	0.0	0.0
Nalagarh	400	408	19:31	388	11:42	0.0	3.2	0.0	0.0
Kishenpur	400	409	02:15	399	11:34	0.0	0.0	0.0	0.0
Wagoora	400	409	02:15	392	11:35	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 (m <sup>3</sup> /s)	Usage (m <sup>3</sup> /s)
Bhakra	513.59	445.62	467.21	226.00	483.38	544.27	1175.29	850.61
Pong	426.72	384.05	395.03	126.34	460.60	544.90	315.99	460.60
Tehri	829.79	740.04	743.75	19.04	818.65	982.26	385.78	336.00
Koteshwar	612.50	598.50	604.15	2.08	NA	NA	335.00	325.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	385.93	348.99
Rihand	268.22	252.98	254.51	57.30	255.76	106.50	NA	NA
RPS	352.80	343.81	349.77	NA	345.31	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.64	NA	298.02	NA	NA	NA
RSD	527.91	487.91	499.55	NA	509.47	NA	319.78	175.00

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 26.06.2012 :**

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 : 26.06.2012

पारी प्रमारी अभियंता / SHIFT CHARGE ENGINEER