

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 15.06.2013
Date of Reporting : 16.06.2013

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
29926	1424	31350	50.07	34121	50	34171	50.45	761.5	7.62

* 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	16.40	7.21		23.61	102.32	88.44	-13.89	112.04	0.00
Haryana	29.28	0.52		29.81	84.95	79.81	-5.14	109.62	0.00
Rajasthan	73.70	0.00	4.74	78.44	64.27	61.35	-2.92	139.79	0.00
Delhi	21.18			21.18	70.87	68.13	-2.74	89.31	0.10
UP	113.04	10.55	4.20	127.79	107.06	103.07	-3.99	230.86	5.65
Uttarakhand		20.18		20.18	12.72	10.59	-2.13	30.76	0.00
HP		22.04		22.04	2.79	-0.92	-3.72	21.12	0.00
J & K		13.40	0.00	13.40	13.96	10.45	-3.51	23.86	1.70
Chandigarh				0.00	5.53	4.11	-1.42	4.11	0.17
Total	253.60	73.91	8.94	336.45	464.46	425.01	-39.45	761.47	7.62

* 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 IOD/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	4283	0	-338	2040	5987	0	-263	2014	50.70	
Haryana	3836	0	-332	879	5067	0	-78	919	20.64	
Rajasthan	5518	0	-164	470	5813	0	-267	376	8.96	
Delhi	3484	4	-401	54	3481	0	-363	110	2.98	
UP	9031	1320	-26	120	11132	0	78	1372	15.48	
Uttarakhand	1402	0	53	92	1366	0	-107	57	1.82	
HP	879	0	-90	-979	636	50	-324	-1064	-22.82	
J&K	1311	100	71	-70	505	0	-583	-417	-5.47	
Chandigarh	182	0	-50	0	135	0	-101	0	0.04	
Total	29926	1424	-1278	2607	34121	50	-2010	3367	72.34	

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

III. Regional Entities :

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

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	Net MU
A. NTPC	Singrauli STPS	2000	1935	1567	1603	36.72	1530	36.68	0.04
	Rihand I STPS	1000	915	770	731	15.21	634	16.15	-0.93
	Rihand II STPS	1000	970	800	769	16.62	693	17.40	-0.78
	Rihand III STPS	500	470	395	340	7.87	328	8.46	-0.58
	Dadri I STPS	840	810	527	463	10.77	449	10.89	-0.12
	Dadri II STPS	980	975	718	715	16.38	682	17.14	-0.76
	Unchahar I TPS	420	402	365	311	6.79	283	6.81	-0.02
	Unchahar II TPS	420	201	174	150	3.34	139	3.37	-0.03
	Unchahar III TPS	210	201	184	154	3.38	141	3.37	0.01
	ISTPP (Jhajjar)	1500	880	317	342	11.82	493	11.52	0.30
	Dadri GPS	830	800	202	464	8.95	373	8.81	0.14
	Anta GPS	419	398	0	0	0.00	0	0.00	0.00
	Auraiya GPS	663	622	153	154	3.58	149	3.60	-0.03
	Sub Total (A)	10782	9577	6172	6196	141.42	5893	144.19	-2.76
	B. NPC	NAAPS	440	292	335	336	7.12	297	7.01
RAPS- B		440	388	429	432	9.28	387	9.31	-0.03
RAPS- C		440	430	450	453	9.67	403	10.32	-0.65
Sub Total (B)		1320	1110	1214	1221	26.07	1086	26.64	-0.57
C. NHPC	Chamera I HPS	540	540	540	540	12.42	517	11.56	0.85
	Chamera II HPS	300	310	313	304	7.30	304	7.37	-0.07
	Chamera III HPS	231	231	233	233	5.48	228	5.54	-0.06
	Bairasul HPS	180	179	180	120	3.67	153	3.73	-0.07
	Salal-HPS	690	212	0	651	5.03	210	5.08	-0.05
	Tanakpur-HPS	94	81	85	66	1.84	77	1.94	-0.11
	Uri-HPS	480	475	474	432	11.24	468	11.39	-0.16
	Dhauliganga-HPS	280	280	282	280	6.73	281	6.77	-0.03
	Dulhasi-HPS	390	291	410	176	6.80	283	6.99	-0.20
	Sewa-II HPS	120	119	122	100	2.52	105	2.67	-0.15
Sub Total (C)	3305	2718	2639	2902	63.02	2626	63.05	-0.03	
D. NJPC	Nathpa Jhakri	1500	1605	1609	1613	38.29	1595	38.51	-0.21
	Sub Total (D)	1500	1605	1609	1613	38.29	1595	38.51	-0.21
E. THDC	Tehri HPS	1000	556	123	505	6.72	280	7.04	-0.32
	Koteswar HPS	400	289	0	261	3.47	145	3.80	-0.33
	Sub Total (E)	1400	845	123	766	10.19	424	10.84	-0.65
F. BBMB	Bhakra HPS	1480	1251	1259	1229	29.97	1249	30.02	-0.05
	Dehar HPS	990	624	825	580	15.08	628	14.97	0.11
	Pong HPS	396	33	126	0	0.80	33	0.78	0.02
	Sub Total (F)	2866	1907	2210	1809	45.85	1910	45.78	0.07
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	230	230	5.49	229	5.27	0.22
	KWHEP HPS(IPP)	1000	0	1200	1127	28.11	1171	28.48	-0.37
	Malana Stg-II HPS	100	0	110	98	2.38	99	2.16	0.22
	Shree Cement TPS	300	0	261	262	6.22	259	6.32	-0.10
	Budhil HPS(IPP)	70	0	35	35	0.82	34	0.72	0.10
	Sub Total (G)	1662	0	1836	1752	43.02	1792	42.96	0.06
H. Total Regional Entities (A-G)	22836	17763	15803	16259	367.86	15328	371.96	-4.09	

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	170	520	6.33	264	
	Guru Nanak Dev TPS(Bhatinda)	440	95	190	3.14	131	
	Guru Hargobind Singh TPS(L.mbt)	920	161	482	6.94	289	
	Goindwal(GVK)		0	0	0.00	0	
	Thermal (Total)	2620	426	1192	16.40	683	
	Total Hydro	1148	230	378	7.21	300	
	Total Punjab	3768	656	1570	23.61	984	
Haryana	Panipat TPS	1367	382	378	8.97	374	
	DCRTPP (Yamuna nagar)	600	267	258	6.12	255	
	Faridabad GPS (NTPC)	432	0	158	2.72	113	
	RGTPP (khedar) (IPP)	1200	474	468	11.47	478	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	0	0	0.00	0	
	Thermal (Total)	4944	1123	1262	29.28	1220	
	Total Hydro	62	21	21	0.52	22	
		Total Haryana	5006	1144	1283	29.81	1242
	Rajasthan	kota TPS	1240	905	965	21.36	890
suratgarh TPS		1500	740	732	18.01	751	
Chabra TPS		500	194	209	4.78	199	
Dholpur GPS		330	110	110	2.50	104	
Ramgarh GPS		111	57	66	1.61	67	
RAPS A (NPC)		300	189	189	4.35	181	
Barsingar (NLC)		250	169	203	4.63	193	
Giral LTPS		250	49	134	2.01	84	
Rajwest LTPS (IPP)		1080	482	698	14.44	602	
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	2895	3306	73.70	3071	
Total Hydro		550	0	0	0.00	0	
Wind power		2191	123	12	2.96	123	
Biomass		91	28	28	0.67	28	
Solar		201	0	0	1.12	46	
Renewable/Others (Total)		2483	151	40	4.74	198	
		Total Rajasthan	9989	3046	3346	78.44	3268
UP		Anpara TPS	1630	1183	1190	29.20	1217
	Obra TPS	1288	346	365	8.90	371	
	Paricha TPS	1140	774	815	19.10	796	
	Panki TPS	210	68	59	1.50	63	
	Harduaganj TPS	665	409	404	9.60	400	
	Tanda TPS (NTPC)	440	253	299	7.31	305	
	Roza TPS (IPP)	1200	878	842	19.81	825	
	Anpara-C (IPP)	1200	530	486	11.93	497	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	253	252	5.69	237	
	Thermal (Total)	8223	4694	4712	113.04	4710	
	Vishnuparyag HPS (IPP)	400	328	436	7.58	316	
	Other Hydro	527	127	146	2.97	124	
	Cogeneration	981	175	175	4.20	175	
		Total UP	10131	5324	5469	127.79	5009
	Uttarakhand	Total Hydro	1303	915	827	20.18	841
		Total Uttarakhand	1303	915	827	20.18	841
Delhi	Rajghat TPS	135	97	97	2.07	86	
	Delhi Gas Turbine	282	78	55	1.71	71	
	Pragati Gas Turbine	330	296	264	6.35	265	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	500	490	11.06	461	
	Thermal (Total)	2232	971	906	21.18	883	
		Total Delhi	2232	971	906	21.18	883
HP	Baspa HPS (IPP)	330	306	306	7.37	307	
	Malana HPS (IPP)	86	87	70	1.97	82	
	Other Hydro	589	543	569	12.70	529	
		Total HP	1005	936	945	22.04	918
J & K	Baglihar HPS (IPP)	450	436	436	10.45	435	
	Other Hydro	323	110	128	2.95	123	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	546	564	13.40	559
Total State Control Area Generation		34390	13538	14910	336.45	13703	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2885	4528	76.25	3177	
Total Regional Availability(Gross)		57226	32226	35697	780.56	32208	

IV. Total Hydro Generation:

Regional Entities Hydro	10364	8121	8545	193.33	8055
State Control Area Hydro	5368	2775	2881	73.91	2764
Total Regional Hydro	15731	10896	11426	267.23	10819

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	-400	200	400	400	2.79	2.33	0.46
Gwalior-Agra (D/C)	1334	1588	1811	0	25.39	0.00	25.39
Zerda-Kankroli	-3	-9	0	288	0.00	2.74	-2.74
Zerda-Bhinmal	-32	16	130	331	0.00	1.68	-1.68
Malanpur-Auraiya	-58	-1	0	75	0.00	0.85	-0.85
Badod-Kota/Morak	27	39	62	114	0.14	0.00	0.14
Mundra-Mohindergarh(HVDC)	1051	1222	1383	0	26.59	0.00	26.59
Sub Total WR	1919	3055			54.90	7.60	47.31
Pusauli Bypass	-338	-171	0	338	0.00	5.05	-5.05
MZP- GKP (D/C)	380	464	554	0	10.63	0.00	10.63
Patna-Balia(D/C)	416	560	582	0	10.75	0.00	10.75
B Sharif-Balia (D/C)	201	256	301	0	5.57	0.00	5.57
Pusauli-Balia	-5	-15	28	28	0.00	0.00	0.00
Gaya-Fatehpur (765 Kv)	9	62	204	31	2.05	0.00	2.05
Pusauli-Sahupuri	140	158	165	0	3.31	0.00	3.31
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)	201	199	318	0	2.58	0.00	2.58
Sub Total ER	966	1473			34.89	5.95	28.94
Total IR Exch	2885	4528			89.79	13.54	76.25

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
31.20	1.95	33.15	6.19	25.34	5.09	-2.72	0.59	-0.58

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
45.02	62.23	107.25	28.94	47.31	76.25	-16.08	-14.92	-31.00

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	0.00	0.30	55.60	0.20	55.60	91.20	44.40

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	Index			
50.53	16.13	49.78	20.01	50.19	0.53	0.14	50.56	50.05

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	418	06:21	404	00:00	0.0	0.0	0.0	0.0
Gorakhpur	400	434	07:03	408	22:59	0.0	0.0	71.3	10.7
Bareilly	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Kanpur	400	424	06:10	409	00:01	0.0	0.0	24.4	0.0
Dadri	400	422	20:57	404	00:09	0.0	0.0	4.0	0.0
Ballabgarh	400	427	06:11	412	00:00	0.0	0.0	44.4	0.0
Bawana	400	422	17:14	405	00:10	0.0	0.0	5.5	0.0
Bassi	400	434	03:01	409	15:34	0.0	0.0	46.2	6.9
Hissar	400	419	16:14	400	00:01	0.0	0.0	0.0	0.0
Moga	400	420	13:08	404	00:10	0.0	0.0	0.0	0.0
Abdullapur	400	419	16:22	404	00:11	0.0	0.0	0.0	0.0
Nalagarh	400	420	16:08	406	00:08	0.0	0.0	0.0	0.0
Kishenpur	400	420	03:40	402	20:06	0.0	0.0	0.0	0.0
Wagoora	400	426	06:02	400	20:09	0.0	0.0	11.4	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	793	13:02	466	18:04	0.0	0.4	0.0	0.0
Balia	765	773	06:10	732	19:49	0.0	10.4	0.0	0.0
Moga	765	788	13:17	757	00:10	0.0	0.0	0.0	0.0
Agra	765	817	13:29	777	19:49	0.0	0.0	36.3	0.0
Bhiwani	765	795	16:26	764	00:15	0.0	0.0	0.0	0.0
Unnao	765	769	06:11	739	00:18	0.0	1.5	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 ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	484.25	569.03	467.45	230.40	1702.52	1073.46
Pong	426.72	384.05	400.73	237.89	398.20	179.94	588.03	127.68
Tehri	829.79	740.04	747.50	34.10	818.65	982.26	378.73	426.00
Koteshwar	612.50	598.50	608.30	4.21	NA	NA	426.00	395.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	515.48	352.97
Rihand	268.22	252.98	255.24	85.80	NA	NA	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	511.96	NA	500.49	NA	561.98	290.79

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 15.06.2013 :

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

XIII. Synchronisation of new generating units :

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

1. 400 Daultabad - Gurgaon - I (HVPN) Synchronised at 17.36Hrs / 15.06.2013.

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :

Report for : 15.06.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER