

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 13.06.2013
Date of Reporting : 14.06.2013

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
34089	1469	35558	50.13	38249	895	39144	50.07	831.3	30.00

* 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	26.93	8.58		35.51	106.19	97.49	-8.71	132.99	0.00
Haryana	41.82	0.69		42.51	90.12	84.10	-6.02	126.61	0.00
Rajasthan	77.49	0.00	3.76	81.26	66.75	63.60	-3.15	144.86	0.00
Delhi	24.39			24.39	75.90	73.36	-2.53	97.75	0.27
UP	114.47	14.12	5.40	133.99	113.79	107.67	-6.11	241.66	28.03
Uttarakhand		18.74		18.74	14.18	14.21	0.03	32.96	0.00
HP		21.89		21.89	3.87	1.76	-2.11	23.65	0.00
J & K		13.41	0.00	13.41	15.90	12.31	-3.59	25.72	1.70
Chandigarh				0.00	5.90	5.15	-0.75	5.15	0.00
Total	285.10	77.44	9.16	371.70	492.59	459.65	-32.95	831.34	30.00

* 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	
Punjab	5731	0	112	1918	7371	0	-11	1973	47.67
Haryana	5176	0	115	721	6258	0	-224	747	16.84
Rajasthan	5524	0	-440	471	6201	0	-59	366	9.50
Delhi	4020	29	-34	89	4411	0	-55	150	5.49
UP	9866	1340	33	91	10548	895	-363	866	10.64
Uttarakhand	1590	0	118	107	1425	0	65	53	1.84
HP	908	0	-81	-945	940	0	-72	-1086	-23.32
J&K	1058	100	-306	-318	875	0	-191	-417	-8.69
Chandigarh	216	0	-52	0	220	0	-12	0	0.16
Total	34089	1469	-533	2135	38249	895	-922	2653	60.12

* 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
A. NTPC	Singrauli STPS	2000	1741	1854	1872	36.24	1510	36.76	-0.52
	Rihand I STPS	1000	915	897	994	17.88	745	18.36	-0.48
	Rihand II STPS	1000	970	708	1043	19.13	797	19.75	-0.62
	Rihand III STPS	500	470	492	513	9.44	393	9.76	-0.33
	Dadri I STPS	840	810	641	645	13.90	579	13.83	0.07
	Dadri II STPS	980	975	739	850	16.95	706	17.31	-0.36
	Unchahar I TPS	420	402	345	343	7.15	298	7.43	-0.28
	Unchahar II TPS	420	201	151	153	3.44	143	3.45	-0.01
	Unchahar III TPS	210	200	156	155	3.47	144	3.48	-0.01
	ISTPP (Jhajjar)	1500	906	501	422	12.29	512	11.97	0.32
	Dadri GPS	830	800	331	357	7.62	318	7.76	-0.14
	Anta GPS	419	397	248	157	4.65	194	5.24	-0.60
	Auraiya GPS	663	624	150	154	3.51	146	3.48	0.03
	Sub Total (A)	10782	9410	7213	7658	155.65	6485	158.57	-2.92
B. NPC	NAPS	440	290	332	329	7.02	293	6.96	0.06
	RAPS- B	440	390	432	437	9.31	388	9.36	-0.05
	RAPS- C	440	430	452	459	9.82	409	10.32	-0.50
	Sub Total (B)	1320	1110	1216	1225	26.15	1089	26.64	-0.49
C. NHPC	Chamera I HPS	540	540	540	540	13.01	542	12.96	0.05
	Chamera II HPS	300	310	311	311	7.23	301	7.42	-0.20
	Chamera III HPS	231	231	220	233	5.40	225	5.33	0.08
	Bairasul HPS	180	179	182	182	3.61	150	3.99	-0.39
	Salal-HPS	690	651	660	660	15.64	652	15.63	0.01
	Tanakpur-HPS	94	79	85	79	1.70	71	1.89	-0.19
	Uri-HPS	480	475	473	469	11.28	470	11.33	-0.06
	Dhauliganga-HPS	280	280	280	281	6.64	277	6.75	-0.11
	Dulhasti-HPS	390	352	400	276	8.42	351	8.45	-0.03
	Sewa-II HPS	120	119	121	41	2.40	100	2.49	-0.09
	Sub Total (C)	3305	3216	3272	3072	75.31	3138	76.25	-0.94
D. NJPC	Nathpa Jhakri	1500	1605	1618	1608	38.09	1587	38.15	-0.06
	Sub Total (D)	1500	1605	1618	1608	38.09	1587	38.15	-0.06
E. THDC	Tehri HPS	1000	545	548	513	9.72	405	9.96	-0.24
	Koteshwar HPS	400	289	291	291	5.23	218	5.70	-0.47
	Sub Total (E)	1400	834	839	804	14.96	623	15.66	-0.71
F. BBMB	Bhakra HPS	1480	1231	1259	1259	30.12	1255	29.54	0.58
	Dehar HPS	990	617	825	580	15.12	630	14.81	0.32
	Pong HPS	396	55	243	0	1.28	53	1.32	-0.04
	Sub Total (F)	2866	1903	2327	1839	46.52	1938	45.67	0.85
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	168	233	5.14	214	5.27	-0.13
	KWHEP HPS(IPP)	1000	0	1200	900	26.34	1098	28.51	-2.16
	Malana Stg-II HPS	100	0	113	55	1.69	70	1.51	0.18
	Shree Cement TPS	300	0	124	138	3.40	142	3.56	-0.16
	Budhil HPS(IPP)	70	0	35	34	0.82	34	0.72	0.10
	Sub Total (G)	1662	0	1640	1360	37.39	1558	39.57	-2.17
H. Total Regional Entities (A-G)	22836	18079	18125	17566	394.06	16419	400.51	-6.45	

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	420	1040	15.38	641	
	Guru Nanak Dev TPS(Bhatinda)	440	102	126	2.52	105	
	Guru Hargobind Singh TPS(L.mbt)	920	202	692	9.03	376	
	Goindwal(GVK)		0	0	0.00	0	
	Thermal (Total)	2620	724	1858	26.93	1122	
	Total Hydro	1148	374	425	8.58	357	
	Total Punjab	3768	1098	2283	35.51	1480	
Haryana	Panipat TPS	1367	407	648	12.11	505	
	DCRTPP (Yamuna nagar)	600	274	257	6.14	256	
	Faridabad GPS (NTPC)	432	187	143	4.00	167	
	RGTPP (khedar) (IPP)	1200	532	905	14.70	613	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	0	397	4.87	203	
	Thermal (Total)	4944	1400	2350	41.82	1742	
	Total Hydro	62	19	29	0.69	29	
	Total Haryana	5006	1419	2379	42.51	1771	
	Rajasthan	kota TPS	1240	860	953	22.22	926
suratgarh TPS		1500	739	989	18.64	777	
Chabra TPS		500	193	202	4.92	205	
Dholpur GPS		330	111	117	2.75	115	
Ramgarh GPS		111	68	68	1.63	68	
RAPS A (NPC)		300	189	195	4.34	181	
Barsingsar (NLC)		250	165	202	4.67	195	
Giral LTPS		250	117	117	2.38	99	
Rajwest LTPS (IPP)		1080	635	582	15.96	665	
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	3077	3425	77.49	3229	
Total Hydro		550	0	0	0.00	0	
Wind power		2191	0	193	1.39	58	
Biomass		91	23	23	0.55	23	
Solar		201	0	0	1.83	76	
Renewable/Others (Total)		2483	23	216	3.76	157	
Total Rajasthan		9989	3100	3641	81.26	3386	
UP	Anpara TPS	1630	1308	1322	28.30	1179	
	Obra TPS	1288	521	538	11.80	492	
	Paricha TPS	1140	667	598	13.70	571	
	Panki TPS	210	90	80	1.80	75	
	Harduaganj TPS	665	417	412	9.00	375	
	Tanda TPS (NTPC)	440	298	298	7.31	304	
	Roza TPS (IPP)	1200	837	1008	21.97	916	
	Anpara-C (IPP)	1200	645	481	14.18	591	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	230	385	6.41	267	
	Thermal (Total)	8223	5013	5122	114.47	4770	
	Vishnuparyag HPS (IPP)	400	436	436	10.42	434	
	Other Hydro	527	188	173	3.70	154	
	Cogeneration	981	225	225	5.40	225	
	Total UP	10131	5862	5956	133.99	5149	
	Uttarakhand	Total Hydro	1303	841	757	18.74	781
		Total Uttarakhand	1303	841	757	18.74	781
Delhi	Rajghat TPS	135	97	93	2.33	97	
	Delhi Gas Turbine	282	158	153	3.66	153	
	Pragati Gas Turbine	330	262	260	6.41	267	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	0	186	1.58	66	
	Badarpur TPS (NTPC)	705	505	410	10.41	434	
	Thermal (Total)	2232	1022	1102	24.39	1016	
	Total Delhi	2232	1022	1102	24.39	1016	
HP	Baspa HPS (IPP)	330	303	333	7.54	314	
	Malana HPS (IPP)	86	101	101	2.46	102	
	Other Hydro	589	435	490	11.90	496	
	Total HP	1005	839	924	21.89	912	
J & K	Baglihar HPS (IPP)	450	436	436	10.45	436	
	Other Hydro	323	110	128	2.95	123	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	546	564	13.41	559	
Total State Control Area Generation		34390	14727	17606	371.70	15053	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4000	5375	90.91	3788	
Total Regional Availability(Gross)		57226	36852	40547	856.67	35260	

IV. Total Hydro Generation:

Regional Entities Hydro	10364	9537	8511	208.05	8669
State Control Area Hydro	5368	2807	2872	77.44	2792
Total Regional Hydro	15731	12344	11383	285.48	11461

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	300	450	450	50	5.63	0.40	5.23
Gwalior-Agra (D/C)	1049	1720	1933	0	28.36	0.00	28.36
Zerda-Kankroli	-42	-35	37	322	0.00	2.92	-2.92
Zerda-Bhinmal	-11	-4	120	241	0.00	1.55	-1.55
Malanpur-Auraiya	-54	1	0	61	0.00	0.77	-0.77
Badod-Kota/Morak	4	14	75	152	0.00	3.59	-3.59
Mundra-Mohindergarh(HVDC)	1447	1448	1449	0	30.02	0.00	30.02
Sub Total WR	2693	3594			64.01	9.23	54.78
Pusauli Bypass	100	300	300	0	4.73	0.00	4.73
MZP- GKP (D/C)	312	520	660	0	11.12	0.00	11.12
Patna-Balia(D/C)	465	580	727	0	11.43	0.00	11.43
B Sharif-Balia (D/C)	134	152	245	0	3.15	0.00	3.15
Pusauli-Balia	-90	-107	0	1115	0.00	1.78	-1.78
Gaya-Fatehpur (765 Kv)	76	68	152	26	1.49	0.00	1.49
Pusauli-Sahupuri	160	171	174	0	3.62	0.00	3.62
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)	188	137	251	5	3.28	0.00	3.28
Sub Total ER	1307	1781			38.81	2.68	36.13
Total IR Exch	4000	5375			102.82	11.91	90.91

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
34.64	2.49	37.13	6.48	20.37	3.34	-5.98	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
47.54	59.98	107.52	36.13	54.78	90.91	-11.41	-5.20	-16.61

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	1.77	84.70	1.30	82.93	74.18	15.30

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum	Time	Minimum	Time				MAX (Hz)	MIN (Hz)
50.66	8.00	49.63	0.18	50.13	0.49	0.16	50.67	49.86

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	08:29	401	00:15	0.0	0.0	0.0	0.0
Gorakhpur	400	433	06:11	409	00:50	0.0	0.0	47.2	4.1
Bareilly	400	425	07:40	396	00:22	0.0	0.0	4.2	0.0
Kanpur	400	420	09:01	401	22:23	0.0	0.0	0.0	0.0
Dadri	400	420	07:42	396	00:15	0.0	0.0	0.0	0.0
Ballabgarh	400	426	07:31	401	00:19	0.0	0.0	12.0	0.0
Bawana	400	420	07:45	399	00:15	0.0	0.0	0.0	0.0
Bassi	400	428	06:03	408	00:17	0.0	0.0	35.0	0.0
Hissar	400	410	13:15	393	00:17	0.0	0.0	0.0	0.0
Moga	400	418	06:10	399	20:32	0.0	0.0	0.0	0.0
Abdullapur	400	416	07:41	291	06:53	0.1	0.1	0.0	0.0
Nalagarh	400	415	07:56	398	00:19	0.0	0.0	0.0	0.0
Kishenpur	400	413	06:09	401	20:35	0.0	0.0	0.0	0.0
Wagoora	400	414	08:18	402	20:36	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	08:42	749	22:41	0.0	0.0	0.0	0.0
Balia	765	762	17:44	731	22:23	0.0	51.8	0.0	0.0
Moga	765	796	06:04	748	20:36	0.0	0.0	0.0	0.0
Agra	765	813	07:56	756	00:13	0.0	0.0	9.3	0.0
Bhiwani	765	789	06:07	756	00:15	0.0	0.0	0.0	0.0
Unnao	765	781	07:30	731	23:09	0.0	11.8	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 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 13.06.2013 :

1. Hot & Humid weather in NR.

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 :

Report for : 13.06.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER