

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 31.05.2013
Date of Reporting : 01.06.2013

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
37260	1434	38694	50.01	37804	560	38364	50.47	909.0	32.05

* 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	44.88	12.08		56.96	92.92	94.95	2.03	151.91	0.00
Haryana	46.28	0.63		46.91	83.67	87.03	3.36	133.94	0.34
Rajasthan	93.94	0.00	16.18	110.12	62.60	58.85	-3.76	168.96	0.27
Delhi	31.89			31.89	74.18	72.83	-1.35	104.72	0.03
UP	116.90	14.20	8.40	139.50	116.33	111.71	-4.62	251.21	29.65
Uttarakhand		15.71		15.71	19.45	19.18	-0.28	34.89	0.00
HP		20.71		20.71	4.30	5.01	0.71	25.72	0.07
J & K		13.35	0.00	13.35	18.97	18.56	-0.41	31.91	1.70
Chandigarh				0.00	5.38	5.78	0.40	5.78	0.00
Total	333.89	76.68	24.58	435.15	477.81	473.89	-3.91	909.04	32.05

* 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	6284	0	22	1304	5788	0	118	1212	30.44
Haryana	5750	134	189	234	5545	0	40	187	4.81
Rajasthan	6480	0	-388	199	7284	0	-347	226	4.75
Delhi	4204	0	-93	-310	4039	0	-117	-264	1.07
UP	10322	1200	-3	602	11513	560	-248	1893	22.59
Uttarakhand	1646	0	57	330	1370	0	-23	276	6.97
HP	959	0	-144	-1083	930	0	95	-1163	-24.49
J&K	1370	100	-34	-244	1128	0	-160	-325	-6.54
Chandigarh	246	0	-2	0	207	0	15	0	0.38
Total	37260	1434	-396	1032	37804	560	-627	2041	39.96

* 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	1563	1555	2043	36.96	1540	37.19	-0.23
	Rihand I STPS	1000	915	993	687	19.65	819	21.36	-1.71
	Rihand II STPS	1000	822	515	838	17.38	724	19.01	-1.63
	Rihand III STPS	500	475	504	430	10.53	439	11.09	-0.56
	Dadri I STPS	840	807	776	634	15.73	656	16.78	-1.05
	Dadri II STPS	980	969	1022	832	20.60	859	21.47	-0.86
	Unchahar I TPS	420	400	432	327	8.02	334	9.06	-1.04
	Unchahar II TPS	420	400	438	320	8.21	342	8.77	-0.56
	Unchahar III TPS	210	200	219	165	4.20	175	4.36	-0.15
	ISTPP (Jhajjar)	1500	403	325	320	6.65	277	8.45	-1.80
	Dadri GPS	830	782	184	192	4.21	175	4.38	-0.17
	Anta GPS	419	382	265	165	5.27	220	5.58	-0.30
	Auraiya GPS	663	616	153	147	3.46	144	3.43	0.03
	Sub Total (A)	10782	8734	7381	7100	160.88	6703	170.91	-10.04
	B. NPC	NAPS	440	294	331	341	7.17	299	7.06
RAPS- B		440	391	435	438	9.37	391	9.38	-0.01
RAPS- C		440	415	456	465	9.84	410	9.96	-0.12
Sub Total (B)		1320	1100	1222	1244	26.39	1099	26.40	-0.02
C. NHPC	Chamera I HPS	540	540	540	540	13.17	549	12.97	0.20
	Chamera II HPS	300	303	310	303	7.18	299	7.29	-0.10
	Chamera III HPS	231	231	236	231	5.43	226	5.52	-0.10
	Bairasuil HPS	180	179	181	40	2.50	104	2.27	0.23
	Salal-HPS	690	623	635	606	14.65	610	15.00	-0.35
	Tanakpur-HPS	94	67	85	61	1.53	64	1.60	-0.07
	Uri-HPS	480	455	478	471	10.81	451	10.92	-0.11
	Dhauliganga-HPS	280	277	280	131	4.78	199	4.87	-0.09
	Dulhasti-HPS	390	387	402	366	9.20	383	9.13	0.07
	Sewa-II HPS	120	119	126	0	1.23	51	1.20	0.03
	Sub Total (C)	3305	3181	3273	2749	70.48	2937	70.76	-0.28
	D.NJPC	Nathpa Jhakri	1500	1605	1623	1606	38.62	1609	38.52
Sub Total (D)		1500	1605	1623	1606	38.62	1609	38.52	0.09
E. THDC	Tehri HPS	1000	469	488	390	10.07	419	10.50	-0.43
	Koteshwar HPS	400	286	295	62	4.65	194	4.80	-0.15
	Sub Total (E)	1400	754	783	452	14.71	613	15.30	-0.59
F. BBMB	Bhakra HPS	1480	930	1237	757	22.77	949	22.33	0.44
	Dehar HPS	990	451	825	280	11.46	478	10.82	0.65
	Pong HPS	396	66	180	60	1.64	68	1.58	0.06
	Sub Total (F)	2866	1447	2242	1097	35.87	1495	34.73	1.15
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	233	51	3.09	129	2.13	0.96
	KWHEP HPS(IPP)	1000	0	1094	1000	24.69	1029	26.40	-1.71
	Malana Stg-II HPS	100	0	51	50	1.17	49	1.11	0.05
	Shree Cement TPS	300	0	241	240	5.85	244	5.85	-0.01
	Budhil HPS(IPP)	70	0	35	35	0.76	32	0.82	-0.06
	Sub Total (G)	1662	0	1654	1376	35.55	1481	36.31	-0.76
H. Total Regional Entities (A-G)	22836	16821	18178	15624	382.49	15937	392.93	-10.44	

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	1160	1060	26.34	1097	
	Guru Nanak Dev TPS(Bhatinda)	440	185	180	4.36	182	
	Guru Hargobind Singh TPS(L.mbt)	920	599	593	14.18	591	
	Thermal (Total)	2620	1944	1833	44.88	1870	
	Total Hydro	1148	461	474	12.08	503	
	Total Punjab	3768	2405	2307	56.96	2373	
Haryana	Panipat TPS	1367	640	658	15.64	652	
	DCRTPP (Yamuna nagar)	600	559	557	13.24	551	
	Faridabad GPS (NTPC)	432	159	145	4.13	172	
	RGTPP (khedar) (IPP)	1200	508	549	13.28	553	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	0	0	0.00	0	
	Thermal (Total)	4944	1866	1909	46.28	1928	
	Total Hydro	62	29	23	0.63	26	
		Total Haryana	5006	1895	1932	46.91	1955
Rajasthan	kota TPS	1240	1024	1030	26.71	1113	
	suratgarh TPS	1500	973	1128	25.92	1080	
	Chabra TPS	500	0	0	0.00	0	
	Dholpur GPS	330	0	0	0.00	0	
	Ramgarh GPS	111	59	63	1.55	65	
	RAPS A (NPC)	300	192	192	4.31	180	
	Barsingsar (NLC)	250	204	204	4.74	198	
	Giral LTPS	250	64	72	1.45	60	
	Rajwest LTPS (IPP)	1080	591	668	14.32	597	
	VSLP LTPS (IPP)	135	610	626	14.94	622	
	Thermal (Total)	5696	3717	3983	93.94	3914	
	Total Hydro	550	0	0	0.00	0	
	Wind power	2191	401	1043	14.08	586	
	Biomass	91	32	32	0.78	32	
	Solar	201	0	0	1.33	55	
		Renewable/Others (Total)	2483	433	1075	16.18	674
		Total Rajasthan	8729	4150	5058	110.12	4588
UP	Anpara TPS	1630	1138	1147	24.80	1033	
	Obra TPS	1288	495	519	11.40	475	
	Paricha TPS	1140	905	816	19.20	800	
	Panki TPS	210	75	90	1.70	71	
	Harduaganj TPS	665	344	453	5.80	242	
	Tanda TPS (NTPC)	440	399	397	9.66	402	
	Roza TPS (IPP)	1200	1004	900	22.56	940	
	Anpara-C (IPP)	1200	688	671	16.29	679	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	230	223	5.50	229	
	Thermal (Total)	8223	5278	5216	116.90	4871	
	Vishnuparyag HPS (IPP)	400	436	436	10.46	436	
	Other Hydro	527	169	121	3.75	156	
	Cogeneration	981	350	350	8.40	350	
		Total UP	10131	6233	6123	139.50	5377
Uttarakhand	Total Hydro	1303	708	570	15.71	655	
	Total Uttarakhand	1303	708	570	15.71	655	
Delhi	Rajghat TPS	135	49	52	1.31	55	
	Delhi Gas Turbine	282	115	121	2.83	118	
	Pragati Gas Turbine	330	281	296	6.93	289	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	217	215	5.40	225	
	Badarpur TPS (NTPC)	705	620	575	15.42	642	
	Thermal (Total)	2232	1282	1259	31.89	1329	
		Total Delhi	2232	1282	1259	31.89	1329
HP	Baspa HPS (IPP)	330	330	330	7.83	326	
	Malana HPS (IPP)	86	41	34	1.00	42	
	Other Hydro	589	489	469	11.87	495	
	Total HP	1005	860	833	20.71	863	
J & K	Baglihar HPS (IPP)	450	436	436	10.40	433	
	Other Hydro	323	110	128	2.95	123	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	546	564	13.35	556	
Total State Control Area Generation		33130	18079	18646	435.15	17696	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3572	5081	107.15	4465	
Total Regional Availability(Gross)		55966	39829	39351	924.79	38097	

IV. Total Hydro Generation:

Regional Entities Hydro	10364	9299	7005	188.62	7859
State Control Area Hydro	5368	2773	2585	76.68	2759
Total Regional Hydro	15731	12072	9590	265.30	10619

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	-100	150	250	100	1.58	0.97	0.60
Gwalior-Agra (D/C)	878	926	1352	0	22.84	0.00	22.84
Zerda-Kankroli	-97	-272	0	321	0.00	4.32	-4.32
Zerda-Bhinmal	-50	-233	17	315	0.00	2.90	-2.90
Malanpur-Auraiya	-86	-49	0	92	0.00	1.12	-1.12
Badod-Kota/Morak	-93	-105	0	140	0.00	2.14	-2.14
Mundra-Mohindergarh(HVDC)	1446	1449	1449	0	35.02	0.00	35.02
Sub Total WR	1898	1866			59.44	11.45	47.99
Pusauli Bypass	50	100	100	50	0.65	0.89	-0.24
MZP- GKP (D/C)	700	1140	1186	0	23.26	0.00	23.26
Patna-Balia(D/C)	501	904	904	0	15.89	0.00	15.89
B'Sharif-Balia (D/C)	148	529	575	0	8.80	0.00	8.80
Pusauli-Balia	17	63	98	0	1.33	0.00	1.33
Gaya-Fatehpur (765 Kv)	135	349	416	0	7.56	0.00	7.56
Pusauli-Sahupuri	159	170	177	0	3.61	0.00	3.61
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	44	0.00	1.05	-1.05
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1674	3215			61.10	1.94	59.16
Total IR Exch	3572	5081			120.54	13.38	107.15

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdi (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
37.81	2.59	40.40	-3.47	6.50	7.04	-3.33	-0.93	0.93

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
43.05	57.56	100.60	59.16	47.99	107.15	16.12	-9.56	6.55

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	0.00	0.80	78.70	77.90	66.70	21.30

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz	Index			
50.57	6.07	49.55	19.11	50.07	0.28	0.15	50.53	49.90

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	417	18:28	403	00:15	0.0	0.0	0.0	0.0
Gorakhpur	400	431	18:45	408	23:42	0.0	0.0	40.7	0.4
Bareilly	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Kanpur	400	424	18:03	400	11:42	0.0	0.0	7.3	0.0
Dadri	400	419	07:51	398	11:42	0.0	0.0	0.0	0.0
Ballabgarh	400	424	07:54	401	11:44	0.0	0.0	12.3	0.0
Bawana	400	420	07:56	401	11:42	0.0	0.0	0.0	0.0
Bassi	400	428	04:01	395	10:52	0.0	0.0	12.2	0.0
Hissar	400	411	08:00	395	11:35	0.0	0.0	0.0	0.0
Moga	400	420	03:57	403	11:45	0.0	0.0	0.0	0.0
Abdullapur	400	413	07:57	282	12:45	0.2	0.2	0.0	0.0
Nalagarh	400	419	04:02	401	16:10	0.0	0.0	0.0	0.0
Kishenpur	400	412	03:02	400	20:25	41.1	41.1	0.0	0.0
Wagoora	400	413	03:33	395	07:29	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	786	18:05	733	22:59	0.0	2.8	0.0	0.0
Balia	765	787	18:04	736	22:33	0.0	6.6	0.0	0.0
Moga	765	800	08:04	766	15:16	0.0	0.0	0.0	0.0
Agra	765	806	04:00	761	23:07	0.0	0.0	4.1	0.0
Bhiwani	765	794	08:03	763	09:57	0.0	0.0	0.0	0.0
Unnao	765	773	06:04	730	23:07	0.0	21.0	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	478.88	434.29	468.93	248.16	797.40	823.82
Pong	426.72	384.05	399.57	209.93	400.19	223.95	62.13	140.48
Tehri	829.79	740.04	750.15	49.85	818.65	982.26	200.86	316.00
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	758.66	NA	NA	NA	257.39	354.14
Rihand	268.22	252.98	255.79	107.70	256.21	125.00	NA	NA
RPS	352.80	343.81	347.37	NA	NA	NA	NA	16.71
Jawahar Sagar	298.70	295.78	297.94	NA	NA	NA	NA	37.38
RSD	527.91	487.91	509.40	144.00	500.73	127.00	284.61	148.32

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

1 Bus bar protection operated at 220 KV S/S Dausa (RRVPNL System) at 12.05 hrs/31.05.2013
Load loss of 870 MW in East Rajasthan net work by Tripping of lines & ICTS.
System restored at about 12.50 Hrs/31.05.2013. Detail report of tripping is Awaited from RRVPNL.

XII. Weather Conditions For 31.05.2013 :

1. Hot weather& Hot waves Condition prevailing in NR.

XIII. Synchronisation of new generating units :

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

1. 125 MVAR reactor at Vindhychal HVDC B/B charged at 19.46 Hrs/31.05.2013.
2. 765 KV Agra - Meerut line charged at 22.04 Hrs/31.05.2013 with 370 MW power flow from Agra to Meerut . Line taken out 22.10 Hrs/ 31.05.2013 due to Heavy sparking on Y - Phase wavetrap at Meerut end.

3. 765 KV Fathpur - Sasaram chages at 13.33 Hrs/31.05.2013 but this line tripped immdiately on over voltage.

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :

Report for : 31.05.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER