

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 09.09.2014
Date of Reporting : 10.09.2014



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
37628	3699	41326	49.95	35426	2430	37856	50.09	846.6	70.69

* 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	23.71	8.71		32.41	85.78	85.87	0.09	118.29	0.45
Haryana	62.07	0.60		62.67	71.27	70.43	-0.84	133.11	0.95
Rajasthan	103.44	1.09	3.87	108.40	56.55	52.92	-3.64	161.31	0.00
Delhi	24.16			24.16	76.79	76.91	0.12	101.07	0.86
UP	104.10	16.30	0.36	120.76	124.38	128.48	4.10	249.24	68.18
Uttarakhand		20.90		20.90	14.84	14.88	0.04	35.78	0.20
HP		25.47		25.47	0.09	-0.80	-0.88	24.67	0.05
J & K		10.50	0.00	10.50	10.43	7.65	-2.78	18.15	0.00
Chandigarh				0.00	4.98	4.97	-0.01	4.97	0.00
Total	317.48	83.57	4.23	405.28	445.11	441.31	-3.80	846.59	70.69

* 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				# Max(hourly) Demand Met of Day (MW)
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	
Punjab	5803	0	-84	775	4411	0	-39	1014	5841
Haryana	6524	43	-121	1268	5629	0	98	1456	6677
Rajasthan	6954	0	-716	63	6941	0	-120	259	7290
Delhi	4399	257	80	440	3721	0	-156	-168	4767
UP	9928	3180	76	-150	11729	2430	555	1419	11844
Uttarakhand	1610	70	-36	105	1465	0	57	164	1645
HP	1155	49	-31	-1199	838	0	-58	-1228	1203
J&K	1011	100	-122	-425	530	0	-189	-665	1011
Chandigarh	245	0	14	0	162	0	-21	0	247
Total	37628	3699	-940	876	35426	2430	126	2250	37846

* STOA figures are at sellers boundary & PX figures are at regional boundary. # figures may not be at simultaneous hour.

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III. Regional Entities :

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 (5*200+2*500)	2000	1474	1982	1429	38.73	1614	35.34	3.40
Rihand I STPS (2*500)	1000	390	454	401	10.14	423	9.17	0.97
Rihand II STPS (2*500)	1000	925	1023	985	24.04	1002	21.81	2.24
Rihand III STPS (2*500)	1000	921	1012	919	23.25	969	21.59	1.66
Dadri I STPS (4*210)	840	727	650	743	17.81	742	17.19	0.63
Dadri II STPS (2*490)	980	980	980	945	23.53	980	23.27	0.26
Unchahar I TPS (2*210)	420	197	218	191	5.04	210	4.55	0.49
Unchahar II TPS (2*210)	420	398	439	430	10.26	428	9.24	1.02
Unchahar III TPS (1*220)	210	198	218	208	5.05	211	4.56	0.49
ISTPP (Jhajjar) (3*500)	1500	881	994	624	15.54	647	15.81	-0.28
Dadri GPS (4*130.19+2*154.51)	830	772	296	382	8.48	353	8.42	0.06
Anta GPS (3*88.71+1*153.2)	419	393	248	235	5.86	244	5.51	0.35
Auraiya GPS (4*111.19+2*109.30)	663	618	267	312	7.04	293	6.85	0.18
Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
Unchahar Solar	10	3	0	0	0.02	1	0.07	-0.05
Sub Total (A)	11297	8878	8781	7804	195	8118	183	11
B. NPC								
NAPS (2*220)	440	274	309	311	6.50	271	6.58	-0.08
RAPS- B (2*220)	440	388	435	434	9.31	388	9.31	0.00
RAPS- C (2*220)	440	175	185	180	3.77	157	4.20	-0.43
Sub Total (B)	1320	837	929	925	19.58	816	20.09	-0.50
C. NHPC								
Chamera I HPS (3*180)	540	534	551	538	13.14	548	12.82	0.33
Chamera II HPS (3*100)	300	300	302	305	7.26	302	7.20	0.06
Chamera III HPS (3*77)	231	229	235	226	5.34	222	5.25	0.09
Bairasuil HPS(3*60)	180	178	180	120	2.90	121	2.84	0.06
Salal-HPS (6*115)	690	656	684	684	16.47	686	15.74	0.73
Tanakpur-HPS (3*40)	94	90	92	89	2.19	91	2.17	0.03
Uri-I HPS (4*120)	480	378	410	410	8.89	370	8.89	0.00
Uri-II HPS (4*60)	240	209	244	182	4.99	208	5.02	-0.03
Dhauliganga-HPS (4*70)	280	200	210	210	4.88	203	4.80	0.08
Dulhasti-HPS (3*130)	390	387	400	397	9.40	392	9.28	0.13
Sewa-II HPS (3*40)	120	119	122	118	2.86	119	2.86	0.00
Parbati 3 (4*130)	520	130	130	131	3.15	131	3.12	0.03
Sub Total ©	4065	3410	3559	3409	81	3395	80	2
D. SJVNL								
NJPC (6*250)	1500	1605	1619	1414	32.24	1343	31.57	0.66
Rampur HEP (4*68.67)	275	296	370	365	7.44	310	7.11	0.34
Sub Total (D)	1775	1901	1989	1779	39.68	1653	38.68	1.00
E. THDC								
Tehri HPS (4*250)	1000	1060	1065	0	5.11	213	5.00	0.11
Koteshwar HPS (4*100)	400	73	101	90	1.77	74	1.75	0.02
Sub Total (E)	1400	1133	1166	90	6.88	286	6.75	0.13
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	493	1092	387	11.98	499	11.83	0.15
Dehar HPS (6*165)	990	565	825	580	13.70	571	13.57	0.13
Pong HPS (6*66)	396	72	258	0	1.78	74	1.74	0.04
Sub Total (F)	2900	1131	2175	967	27.46	1144	27.14	0.32
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	192	108	3.35	140	3.06	0.29
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1050	600	17.11	713	16.80	0.32
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	149	149	3.52	147	3.54	-0.02
Budhil HPS(IPP)	70	0	60	59	1.35	56	1.38	-0.02
Sub Total (G)	1662	0	1451	916	25.34	1056	24.77	0.58
H. Total Regional Entities (A-G)	24419	17290	20050	15889	395.24	16468	380.82	14.42

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) (6*210)	1260	420	320	8.37	349
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	208	179	4.14	173
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	464	363	9.45	394
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	300	0	1.75	73
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1392	862	23.71	988
	Total Hydro	1148	485	278	8.71	363
	Total Punjab	5828	1877	1140	32.41	1351
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	1031	1014	23.36	973
	DCRTPP (Yamuna nagar) (2*300)	600	507	490	11.46	477
	Faridabad GPS (NTPC)	432	189	181	4.52	188
	RGTPP (khedar) (IPP) (2*600)	1200	1077	906	22.74	947
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	0	0	0.00	0
	Thermal (Total)	4944	2804	2591	62.07	2586
	Total Hydro	62	26	24	0.60	25
	Total Haryana	5006	2830	2615	62.67	2611
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1013	1065	23.22	967
	suratgarh TPS (6*250)	1500	1007	1096	23.85	994
	Chabra TPS (3*250)	750	344	375	8.61	359
	Dholpur GPS (3*110)	330	0	0	0.07	3
	Ramgarh GPS (1*3 + 1*35.5 + 2*37.5 + 1*110 + 1*50)	271	129	137	3.75	156
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingsar (NLC) (2*125)	250	187	174	4.17	174
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	832	832	17.22	718
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	0	0	0.00	0
	Kawai(Adani) (2*660)	1320	1131	957	22.55	940
	Thermal (Total)	8026	4643	4636	103	4310
	Total Hydro	550	101	0	1.09	45
	Wind power	2798	191	100	2.90	121
	Biomass	99	18	18	0.44	18
	Solar	730	0	0	0.53	22
	Renewable/Others (Total)	3627	209	118	3.87	161
	Total Rajasthan	12203	4953	4754	108.40	4517
UP	Anpara TPS (3*210+2*500)	1630	783	809	18.80	783
	Obra TPS (2*50+2*94+5*200)	1194	368	352	8.80	367
	Paricha TPS (2*110+2*220+2*250)	1140	580	491	12.30	513
	Panki TPS (2*105)	210	77	153	2.70	113
	Harduaganj TPS (1*60+1*105+2*250)	665	476	410	10.80	450
	Tanda TPS (NTPC) (4*110)	440	386	271	8.30	346
	Roza TPS (IPP) (4*300)	1200	824	833	19.70	821
	Anpara-C (IPP) (2*600)	1200	531	765	14.60	608
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	323	363	8.10	338
	Thermal (Total)	8129	4348	4447	104.10	4338
	Vishnuparyag HPS (IPP)	400	436	436	10.50	438
	Other Hydro	527	310	210	5.80	242
	Cogeneration	981	15	15	0.36	15
	Total UP	10037	5109	5108	120.76	4594
Uttarakhand	Total Hydro	1398	889	896	20.90	871
	Total Uttarakhand	1398	889	896	20.90	871
Delhi	Rajghat TPS (2*67.5)	180	79	91	2.16	90
	Delhi Gas Turbine (6x30 + 3x34)	282	121	72	1.99	83
	Pragati Gas Turbine (2x104+ 1x122)	330	288	291	7.20	300
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	301	277	7.00	292
	Badarpur TPS (NTPC) (3*95+2*210)	705	155	277	5.81	242
	Thermal (Total)	2962	944	1008	24.16	1007
	Total Delhi	2962	944	1008	24.16	1007
HP	Baspa HPS (IPP) (2*150)	300	330	300	7.17	299
	Malana HPS (IPP) (2*43)	86	93	66	1.66	69
	Other Hydro	728	703	688	16.64	694
	Total HP	1114	1126	1054	25.47	1061
J & K	Baglihar HPS (IPP) (3*150)	450	440	436	10.50	438
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	440	436	10.50	438
Total State Control Area Generation		39642	18168	17011	405.28	16449
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2760	4202	82.78	3449
Total Regional Availability(Gross)		64062	40978	37102	883.30	36367

IV. Total Hydro Generation:

Regional Entities Hydro	11432	10132	6952	175.96	7332
State Control Area Hydro	5684	3377	2898	83.57	3045
Total Regional Hydro	17116	13509	9850	259.53	10376

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	150	100	150	150	0.61	2.57	-1.96
Gwalior-Agra (D/C)	1337	1684	2128	0	37.05	0.00	37.05
Zerda-Kankroli	0	0	0	44	0.00	0.06	-0.06
Zerda-Bhinmal	-207	-51	-99	413	0.00	3.36	-3.36
Malanpur-Auraiya	35	18	0	35	0.00	1.37	-1.37
Badod-Kota/Morak	-122	7	33	122	0.00	7.08	-7.08
Mundra-Mohindergarh(HVDC)	1097	1393	1414	0	32.57	0.00	32.57
Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total WR	2290	3151			70.23	14.44	55.79
Pusauli Bypass	200	200	200	0	4.86	0.00	4.86
MZP- GKP (D/C)	160	436	600	0	9.26	0.00	9.26
Patna-Balia(D/C)	61	172	282	0	4.09	0.00	4.09
B'Sharif-Balia (D/C)	60	204	283	0	4.32	0.00	4.32
Pusauli-Balia	-90	-40	0	99	0.00	1.32	-1.32
Gaya-Fatehpur (765 Kv)	30	41	219	0	2.48	0.00	2.48
Pusauli-Sahupuri	139	154	210	0	3.56	0.00	3.56
K'nasa-Sahupuri	0	0	0	0	0.96	0.48	0.48
Son Ngr-Rihand	-43	-44	0	47	0.00	0.93	-0.93
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-47	-72	141	92	0.18	0.00	0.18
Sub Total ER	470	1051			29.71	2.72	26.99
Total IR Exch	2760	4202			99.94	17.16	82.78

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
20.95	3.82	24.77	3.63	19.53	-3.62	6.79	0.00	0.00

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
24.79	56.04	80.83	26.99	55.79	82.78	2.20	-0.24	1.95

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

<49.2	<49.7	<49.8	<49.9	<50.0	49.9-50.05	50.05-50.10	50.10-50.20	>50.20	>50.50
0.00	8.25	19.64	47.80	79.25	44.26	6.94	1.03	0.00	0.00

<----- Frequency (Hz) ----->				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.16	13.02	49.34	19.09	49.89	0.27	0.13	50.16	49.56

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	413	2:37	407	18:42	0.0	0.0	0.0	0.0
Gorakhpur	400	413	17:09	392	4:37	0.0	0.0	0.0	0.0
Bareilly	400	416	13:02	400	19:07	0.0	0.0	0.0	0.0
Kanpur	400	417	7:03	401	19:09	0.0	0.0	0.0	0.0
Dadri	400	420	7:03	402	19:05	0.0	0.0	0.0	0.0
Ballabgarh	400	424	7:03	405	19:05	0.0	0.0	8.4	0.0
Bawana	400	421	7:05	402	19:05	0.0	0.0	0.0	0.0
Bassi	400	420	3:23	404	19:05	0.0	0.0	0.0	0.0
Hissar	400	414	7:03	397	19:05	0.0	0.0	0.0	0.0
Moga	400	416	6:58	402	15:23	0.0	0.0	0.0	0.0
Abdullapur	400	420	6:55	396	19:08	0.0	0.0	0.0	0.0
Nalagarh	400	417	23:46	407	19:05	0.0	0.0	0.0	0.0
Kishenpur	400	411	1:21	402	19:02	0.0	0.0	0.0	0.0
Wagoora	400	415	1:21	406	19:04	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	778	13:01	747	19:06	0.0	0.0	0.0	0.0
Balia	765	771	17:09	740	4:36	0.0	1.0	0.0	0.0
Moga	765	795	6:57	766	19:05	0.0	0.0	0.0	0.0
Agra	765	793	7:03	750	8:57	0.0	0.0	0.0	0.0
Bhiwani	765	802	7:05	768	19:10	0.0	0.0	1.7	0.0
Unnao	765	750	7:07	741	4:32	0.0	10.8	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	510.81	1590.18	511.38	1620.46	743.74	330.46
Pong	426.72	384.05	416.41	730.66	423.70	1066.19	345.38	107.32
Tehri	829.79	740.04	818.35	969.25	820.15	1002.27	241.70	114.00
Koteshwar	612.50	598.50	611.69	5.46	610.60	4.95	114.00	117.00
Chamera-I	760.00	748.75	759.00	47.14	0.00	0.00	320.31	356.38
Rihand	268.22	252.98	0.00	0.00	0.00	0.00	0.00	0.00
RPS	352.80	343.81	0.00	0.00	0.00	0.00	0.00	0.00
Jawahar Sagar	298.70	295.78	0.00	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	517.47	4.79	522.40	10.66	371.09	207.17

* NA: Not Available

X(A). Short-Term Open Access Details:

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (20:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	824	190	0	775	0	0	18.99	1.22	20.21
Delhi	65	-178	-56	442	3	-5	8.87	-2.34	6.53
Haryana	1279	177	0	1234	34	0	30.65	-1.92	28.72
HP	-977	-250	0	-846	-354	0	-19.19	-7.05	-26.24
J&K	-564	-101	0	-412	-13	0	-10.84	-1.42	-12.26
CHD	0	0	0	0	0	0	0.07	0.37	0.44
Rajasthan	157	102	0	55	8	0	3.54	3.37	6.91
UP	237	1132	49	-409	259	0	-5.44	20.01	14.57
Uttarakhand	85	79	0	85	20	0	2.05	1.74	3.78
Total	1106	1150	-6	925	-43	-5	28.69	13.96	42.66

X(B). Short-Term Open Access Details:

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	824	775	204	0	0	0
Delhi	808	65	112	-322	-5	-56
Haryana	1317	1234	180	-706	0	0
HP	-673	-993	-120	-546	0	0
J&K	-361	-715	0	-152	0	0
CHD	15	0	49	0	0	0
Rajasthan	157	55	398	-298	0	0
UP	237	-533	1329	66	49	0
Uttarakhand	85	85	149	15	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 09.09.2014 :**

1. Partial load Inruption in J&K due to incliment weather and flood.

XIV. Synchronisation of new generating units :

0.00

XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :**XVI. Tripping of lines in pooling stations :****XVII. Complete generation loss in a generating station :**