

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 30.09.2014
Date of Reporting : 01.10.2014

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
42392	3584	45976	50.15	38052	4564	42616	49.92	944.0	103.11

* 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	68.69	16.53		85.22	80.26	81.36	1.10	166.58	0.00
Haryana	85.41	0.75		86.16	70.64	71.94	1.30	158.10	7.13
Rajasthan	126.25	0.87	16.92	144.04	57.37	60.86	3.50	204.91	6.33
Delhi	25.50			25.50	70.57	70.86	0.29	96.36	0.21
UP	126.00	13.20	0.40	139.60	85.28	87.07	1.78	226.67	82.55
Uttarakhand		15.12		15.12	12.45	14.24	1.79	29.36	6.54
HP		14.57		14.57	7.81	9.86	2.05	24.43	0.36
J & K		12.60	0.00	12.60	17.65	20.01	2.36	32.61	0.00
Chandigarh				0.00	4.25	5.00	0.75	5.00	0.00
Total	431.84	73.65	17.32	522.81	406.28	421.20	14.92	944.01	103.11

* 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	7579	0	20	622	7033	0	11	730	7861
Haryana	7103	729	30	842	6548	365	192	934	7103
Rajasthan	8791	0	61	142	8278	144	6	484	8988
Delhi	4332	0	-81	352	3722	0	-17	78	4507
UP	9892	2585	-395	-386	9304	3785	50	92	10014
Uttarakhand	1474	270	26	45	1116	270	62	43	1538
HP	1186	0	139	-809	856	0	9	-272	1231
J&K	1794	0	196	-245	1036	0	57	-547	1794
Chandigarh	241	0	4	0	160	0	11	0	255
Total	42392	3584	0	563	38052	4564	379	1542	42392

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

figures may not be at simultaneous hour.

Diversity is 1.02

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	1567	1930	1435	38.28	1595	37.61	0.67
Rihand I STPS (2*500)	1000	647	442	909	16.95	706	15.53	1.42
Rihand II STPS (2*500)	1000	950	1025	1039	24.80	1034	22.79	2.02
Rihand III STPS (2*500)	1000	950	1011	1012	24.16	1007	22.79	1.37
Dadri I STPS (4*210)	840	603	612	655	15.29	637	14.46	0.83
Dadri II STPS (2*490)	980	975	992	1019	23.75	990	23.34	0.41
Unchahar I TPS (2*210)	420	195	218	220	5.23	218	4.67	0.56
Unchahar II TPS (2*210)	420	400	434	436	10.49	437	9.58	0.91
Unchahar III TPS (1*220)	210	198	216	218	5.21	217	4.74	0.46
I-STPP (Jhajhar) (3*500)	1500	953	881	930	20.88	870	22.77	-1.89
Dadri GPS (4*130.19+2*154.51)	830	784	262	302	7.42	309	7.34	0.08
Anta GPS (3*88.71+1*153.2)	419	393	208	208	5.27	220	5.17	0.11
Auraiva GPS (4*111.19+2*109.30)	663	476	141	155	3.54	147	3.42	0.12
Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
Unchahar Solar	10	3	0	0	0.04	2	0.07	-0.03
Sub Total (A)	11297	9096	8372	8538	201	8389	194	7
B. NPC								
NAPS (2*220)	440	275	315	313	6.59	275	6.60	-0.01
RAPS- B (2*220)	440	396	435	439	9.41	392	9.50	-0.09
RAPS- C (2*220)	440	0	0	0	-0.22	-9	0.00	-0.22
Sub Total (B)	1320	671	750	752	15.78	658	16.10	-0.32
C. NHPC								
Chamera I HPS (3*180)	540	534	0	0	2.93	122	2.89	0.04
Chamera II HPS (3*100)	300	300	300	103	3.63	151	3.50	0.13
Chamera III HPS (3*77)	231	229	222	82	2.47	103	2.40	0.07
Bairasuli HPS(3*60)	180	120	123	19	1.26	52	1.00	0.26
Salal-HPS (6*115)	690	404	560	350	10.30	429	9.71	0.60
Tanakpur-HPS (3*40)	94	78	55	91	1.95	81	1.86	0.09
Uri-I HPS (4*120)	480	435	450	454	10.92	455	10.43	0.49
Uri-II HPS (4*60)	240	230	236	234	5.59	233	5.53	0.06
Dhauliganga-HPS (4*70)	280	147	210	70	3.10	129	3.00	0.10
Dulhasti-HPS (3*130)	390	387	403	401	9.46	394	9.29	0.17
Sewa-II HPS (3*40)	120	119	120	0	0.58	24	0.50	0.08
Parbati 3 (4*130)	520	130	132	0	1.29	54	1.27	0.03
Sub Total ©	4065	3113	2810	1803	53	2229	51	2
D.SJVNL								
NJPC (6*250)	1500	1605	1509	532	18.64	777	18.47	0.17
Rampur HEP (4*68.67)	275	165	298	126	4.09	170	3.95	0.14
Sub Total (D)	1775	1770	1807	658	22.73	947	22.43	0.31
E. THDC								
Tehri HPS (4*250)	1000	1060	1059	0	5.47	228	5.40	0.07
Koteshwar HPS (4*100)	400	91	101	0	1.78	74	1.75	0.03
Sub Total (E)	1400	1151	1160	0	7.25	302	7.15	0.10
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	930	1336	807	22.35	931	22.31	0.04
Dehar HPS (6*165)	990	326	660	280	8.18	341	7.82	0.36
Pong HPS (6*66)	396	226	384	192	5.36	223	5.42	-0.06
Sub Total (F)	2900	1481	2380	1279	35.89	1495	35.55	0.34
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	65	66	1.54	64	1.52	0.02
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	900	280	10.02	418	9.60	0.42
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	294	297	7.01	292	7.13	-0.12
Budhil HPS(IPP)	70	0	28	25	0.63	26	0.62	0.01
Sub Total (G)	1662	0	1287	668	19.20	800	18.88	0.33
H. Total Regional Entities (A-G)	24419	17283	18565	13698	355.67	14820	345.77	9.90

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	640	760	15.39	641
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	280	306	6.18	258
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	722	716	15.40	642
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1383	1387	31.71	1321
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	3025	3169	68.69	2862
	Total Hydro	1148	592	702	16.53	689
Total Punjab	5828	3617	3871	85.22	3551	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	1104	1081	24.96	1040
	DCRTPP (Yamuna nagar) (2*300)	600	274	244	6.10	254
	Faridabad GPS (NTPC)	432	174	173	4.04	168
	RGTPP (khedar) (IPP) (2*600)	1200	878	1063	23.48	978
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1147	938	26.84	1118
	Thermal (Total)	4944	3577	3499	85.41	3559
	Total Hydro	62	31	29	0.75	31
	Total Haryana	5006	3608	3528	86.16	3590
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	943	930	21.85
suratgarh TPS (6*250)		1500	1333	1373	32.22	1343
Chabra TPS (3*250)		750	630	583	15.09	629
Dholpur GPS (3*110)		330	114	138	2.88	120
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	172	172	4.94	206
RAPS A (NPC) (1*100+1*200)		300	165	165	4.31	180
Barsingsar (NLC) (2*125)		250	204	205	4.66	194
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	950	950	23.30	971
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	885	624	17.00	708
Thermal (Total)		8026	5396	5140	126	5260
Total Hydro		550	24	24	0.87	36
Wind power		2798	414	530	15.52	647
Biomass		99	36	36	0.87	36
Solar		730	0	0	0.54	22
Renewable/Others (Total)		3627	450	566	16.92	705
Total Rajasthan	12203	5870	5730	144.04	6002	
UP	Anpara TPS (3*210+2*500)	1630	893	862	20.80	867
	Obra TPS (2*50+2*94+5*200)	1194	361	383	8.70	363
	Paricha TPS (2*110+2*220+2*250)	1140	631	596	14.40	600
	Panki TPS (2*105)	210	135	63	2.20	92
	Harduaganj TPS (1*60+1*105+2*250)	665	491	419	11.00	458
	Tanda TPS (NTPC) (4*110)	440	367	376	9.10	379
	Roza TPS (IPP) (4*300)	1200	1103	1107	26.50	1104
	Anpara-C (IPP) (2*600)	1200	989	1002	23.90	996
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	401	403	9.40	392
	Thermal (Total)	8129	5371	5211	126.00	5250
	Vishnuparyag HPS (IPP)	400	347	327	7.50	313
	Other Hydro	527	259	231	5.70	238
	Cogeneration	981	15	15	0.40	17
	Total UP	10037	5992	5784	139.60	5504
Uttarakhand	Total Hydro	1398	737	607	15.12	630
	Total Uttarakhand	1398	737	607	15.12	630
Delhi	Raighat TPS (2*67.5)	135	39	40	0.87	36
	Delhi Gas Turbine (6x30 + 3x34)	282	104	106	2.51	105
	Pragati Gas Turbine (2x104+ 1x122)	330	295	298	6.96	290
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	282	299	6.97	291
	Badarpur TPS (NTPC) (3*95+2*210)	705	356	323	8.18	341
	Thermal (Total)	2917	1076	1066	25.50	1062
Total Delhi	2917	1076	1066	25.50	1062	
HP	Baspa HPS (IPP) (2*150)	300	80	120	3.72	155
	Malana HPS (IPP) (2*43)	86	82	30	0.93	39
	Other Hydro	728	402	398	9.92	413
	Total HP	1114	564	548	14.57	607
J & K	Baqilhar HPS (IPP) (3*150)	450	450	450	10.80	450
	Other Hydro/IPP	436	75	75	1.80	75
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	525	525	12.60	525
Total State Control Area Generation		39597	21989	21659	522.81	21471
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2881	4399	87.68	3653
Total Regional Availability(Gross)		64017	43435	39756	966.17	39944

IV. Total Hydro Generation:

Regional Entities Hydro	11432	9121	4086	130.92	5455
State Control Area Hydro	5684	2732	2666	73.65	2756
Total Regional Hydro	17116	11853	6752	204.57	8211

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	-400	0	500	0.00	11.27	-11.27
Gwalior-Agra (D/C)	1028	1218	1490	0	28.47	0.00	28.47
Zerda-Kankroli	-93	-83	0	284	0.00	3.26	-3.26
Zerda-Bhinmal	-96	-46	45	277	0.00	2.83	-2.83
Malanpur-Auraiya	95	163	0	163	0.00	2.82	-2.82
Badod-Kota/Morak	-31	-46	0	154	0.00	1.74	-1.74
Mundra-Mohindergarh(HVDC)	1199	1201	1203	0	29.06	0.00	29.06
Vindhychal - Rihand	488	484	509	0	11.79	0.00	11.79
Sub Total WR	2090	2491			69.32	21.92	47.40
Pusauli Bypass	100	400	400	100	4.34	1.29	3.05
MZP- GKP (D/C)	140	514	590	0	9.64	0.00	9.64
Patna-Balia(D/C)	129	216	647	0	6.84	0.00	6.84
B'Sharif-Balia (D/C)	221	217	690	0	7.31	0.00	7.31
Pusauli-Balia	25	-113	178	133	0.00	0.43	-0.43
Gaya-Fatehpur (765 Kv)	16	351	445	0	6.48	0.00	6.48
Pusauli-Sahupuri	201	171	213	0	3.73	0.00	3.73
K'nasa-Sahupuri	0	0	0	0	0.00	0.75	-0.75
Son Ngr-Rihand	-33	-34	0	38	0.00	0.00	0.00
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-8	186	354	8	4.40	0.00	4.40
Sub Total ER	791	1908			42.74	2.46	40.28
Total IR Exch	2881	4399			112.06	24.38	87.68

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

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
24.68	3.88	28.56	12.34	3.07	-3.50	6.11	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
37.40	40.49	77.89	40.28	47.40	87.68	2.88	6.91	9.79

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	4.33	21.69	47.89	75.44	39.79	8.95	3.59	0.00	0.00

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				
50.20	17.04	49.52	18.38	49.90	0.24	0.12	50.18	49.76

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	0	00:00	9999	00:00	100.0	100.0	0.0	0.0
Gorakhpur	400	413	07:02	397	18:38	0.0	0.0	0.0	0.0
Bareilly	400	416	05:08	400	09:19	0.0	0.0	0.0	0.0
Kanpur	400	417	18:02	407	00:07	0.0	0.0	0.0	0.0
Dadri	400	413	05:07	398	10:24	0.0	0.0	0.0	0.0
Ballabgarh	400	419	05:00	403	18:35	0.0	0.0	0.0	0.0
Bawana	400	414	05:01	400	10:45	0.0	0.0	0.0	0.0
Bassi	400	425	04:00	404	23:17	0.0	0.0	11.3	0.0
Hissar	400	406	02:48	394	10:25	0.0	0.0	0.0	0.0
Moga	400	411	05:02	155	16:40	2.7	2.7	0.0	0.0
Abdullapur	400	415	05:01	396	18:39	0.0	0.0	0.0	0.0
Nalagarh	400	422	04:58	405	18:38	0.0	0.0	8.8	0.0
Kishenpur	400	221	02:54	214	19:09	100.0	100.0	0.0	0.0
Wagoora	400	412	03:00	392	19:28	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	0	00:00	0	00:00	100.0	100.0	0.0	0.0
Balia	765	774	07:05	0	11:22	0.5	0.5	0.0	0.0
Moga	765	780	05:00	756	18:38	0.0	0.0	0.0	0.0
Agra	765	788	03:10	761	18:37	0.0	0.0	0.0	0.0
Bhiwani	765	0	00:00	0	00:00	100.0	100.0	0.0	0.0
Unnao	765	761	15:21	748	00:06	0.0	0.0	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 (m ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	510.49	1575.10	511.13	1605.30	400.91	665.45
Pong	426.72	384.05	416.39	730.66	422.87	1020.81	163.30	326.97
Tehri	829.79	740.04	824.05	1086.79	824.85	1104.00	145.88	119.00
Koteshwar	612.50	598.50	608.96	3.98	610.35	4.75	119.00	118.00
Chamera-I	760.00	748.75	755.18	0.00	0.00	0.00	120.40	79.93
Rihand	268.22	252.98	856.50	364.10	855.30	343.60	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	515.05	6.17	518.96	3.08	123.15	264.03

* 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	730	0	0	622	0	0	16.45	0.00	16.45
Delhi	65	38	-25	369	-17	0	6.12	0.41	6.54
Haryana	914	20	0	831	11	0	21.43	0.36	21.79
HP	-553	281	0	-538	-272	0	-12.26	2.17	-10.09
J&K	-539	-8	0	-336	91	0	-9.23	0.77	-8.45
CHD	0	0	0	0	0	0	0.07	0.00	0.07
Rajasthan	169	314	0	174	-32	0	4.20	2.19	6.39
UP	68	0	25	-386	0	0	-6.59	4.21	-2.38
Uttarakhand	32	11	0	32	13	0	0.77	0.24	1.01
Total	886	657	-1	768	-206	0	20.98	10.35	31.33

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	730	622	0	0	0	0
Delhi	487	65	294	-379	0	-25
Haryana	914	831	20	9	0	0
HP	-456	-598	372	-295	0	0
J&K	-336	-539	190	-8	0	0
CHD	15	0	0	0	0	0
Rajasthan	253	122	718	-32	0	0
UP	68	-513	779	0	25	0
Uttarakhand	32	32	16	5	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 30.09.2014 :**

Normal

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 :**