

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्ट की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 07.09.2014
Date of Reporting : 08.09.2014

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
35376	3557	38933	49.99	31843	2600	34443	50.07	770.1	64.80

* 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	16.38	5.64		22.01	85.63	86.25	0.61	108.26	0.00
Haryana	46.88	0.60		47.49	70.10	69.30	-0.80	116.78	0.13
Rajasthan	90.70	0.11	5.77	96.58	55.99	55.25	-0.74	151.83	0.00
Delhi	24.21			24.21	60.08	60.91	0.83	85.12	0.16
UP	109.10	16.70	0.40	126.20	101.39	106.23	4.84	232.43	63.99
Uttarakhand		20.65		20.65	13.61	13.76	0.15	34.41	0.49
HP		22.91		22.91	-0.23	0.15	0.38	23.06	0.03
J & K		10.46	0.00	10.46	6.31	3.43	-2.89	13.89	0.00
Chandigarh				0.00	4.16	4.28	0.13	4.28	0.00
Total	287.27	77.07	6.17	370.50	397.04	399.55	2.50	770.05	64.80

* 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	5264	0	7	886	3910	0	-7	1510	5412
Haryana	5704	677	63	1273	4919	0	-96	1136	5942
Rajasthan	6627	0	-262	248	6322	0	-114	425	6684
Delhi	4044	0	69	85	3163	0	38	-536	4295
UP	10007	2670	0	190	10674	2600	297	729	11188
Uttarakhand	1657	110	101	100	1428	0	20	96	1657
HP	1080	0	62	-1204	869	0	-3	-1231	1164
J&K	764	100	-25	-366	397	0	-168	-664	764
Chandigarh	230	0	20	0	161	0	2	0	230
Total	35376	3557	34	1212	31843	2600	-30	1464	35405

* 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 :

A. NTPC	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
		Singrauli STPS	2000	1400	1522	1517	36.32	1513	33.48
	Rihand I STPS	1000	187	284	263	4.98	207	4.32	0.65
	Rihand II STPS	1000	905	986	961	23.05	961	21.18	1.88
	Rihand III STPS	1000	903	966	971	22.34	931	20.80	1.54
	Dadri I STPS	840	815	796	736	19.26	803	19.04	0.22
	Dadri II STPS	980	980	905	756	20.85	869	21.39	-0.54
	Unchahar I TPS	420	0	0	0	0.00	0	0.00	0.00
	Unchahar II TPS	420	400	438	440	9.97	416	9.11	0.87
	Unchahar III TPS	210	143	220	0	3.35	140	3.15	0.20
	I-STPP (Jhajhar)	1500	990	641	621	14.44	602	14.49	-0.05
	Dadri GPS	830	772	182	186	4.21	175	4.28	-0.07
	Anta GPS	419	393	-4	200	1.08	45	1.07	0.01
	Auraiva GPS	663	615	158	163	3.67	153	3.53	0.14
	Dadri Solar	5	1	0	0	0.03	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
	Sub Total (A)	11297	8506	7094	6814	164	6816	156	8
B. NPC	NAPS	440	271	307	317	6.59	275	6.50	0.08
	RAPS- B	440	395	432	435	9.31	388	9.48	-0.17
	RAPS- C	440	185	179	187	3.65	152	4.44	-0.79
	Sub Total (B)	1320	851	918	939	19.55	815	20.42	-0.87
C. NHPC	Chamera I HPS	540	542	549	550	13.22	551	13.01	0.22
	Chamera II HPS	300	300	304	303	7.20	300	7.20	0.00
	Chamera III HPS	231	229	241	230	5.56	232	5.50	0.06
	Bairasui HPS	180	178	180	120	3.54	147	3.45	0.09
	Salal-HPS	690	0	0	0	0.00	0	0.00	0.00
	Tanakpur-HPS	94	75	91	60	1.83	76	1.79	0.04
	Uri-HPS	480	385	408	400	9.70	404	9.60	0.10
	Uri-II HPS	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS	280	207	209	209	5.01	209	4.97	0.04
	Dulhasti-HPS	390	387	398	397	9.36	390	9.28	0.09
	Sewa-II HPS	120	122	130	131	3.03	126	2.93	0.10
	Parbati 3	520	33	0	133	0.78	33	0.78	0.00
	Sub Total ©	4065	2457	2510	2533	59	2468	58	1
D.SJVNL	NJPC	1500	1605	1615	1020	33.09	1379	32.54	0.56
	Rampur HEP	275	271	361	291	6.80	283	6.53	0.27
	Sub Total (D)	1775	1876	1976	1311	39.89	1662	39.07	0.83
E. THDC	Tehri HPS	1000	1060	1060	0	5.07	211	5.00	0.07
	Koteshwar HPS	400	73	101	91	1.77	74	1.75	0.02
	Sub Total (E)	1400	1133	1161	91	6.84	285	6.75	0.09
F. BBMB	Bhakra HPS	1514	494	1091	386	11.85	494	11.85	0.00
	Dehar HPS	990	572	825	585	13.96	581	13.73	0.23
	Pong HPS	396	28	132	0	0.70	29	0.68	0.03
	Sub Total (F)	2900	1094	2048	971	26.51	1105	26.26	0.25
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	216	229	4.71	196	5.02	-0.31
	KWHEP HPS(IPP)	1000	0	960	628	17.84	743	17.82	0.02
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	300	0	149	149	3.54	147	3.53	0.00
	Budhil HPS(IPP)	70	0	63	63	1.49	62	1.34	0.15
	Sub Total (G)	1662	0	1388	1069	27.58	1149	27.72	-0.14
H. Total Regional Entities (A-G)		24419	15916	17095	13728	343.19	14300	334.66	8.52

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	170	6.43	268	
	Guru Nanak Dev TPS(Bhatinda)	440	183	80	2.59	108	
	Guru Hargobind Singh TPS(L.mbt)	920	367	346	7.36	307	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura	1400	0	0	0.00	0	
	Talwandi Saboo	660	0	0	0.00	0	
	Thermal (Total)	4680	970	596	16.38	682	
	Total Hydro	1148	449	216	5.64	235	
	Total Punjab	5828	1419	812	22.01	917	
	Haryana	Panipat TPS	1367	409	244	7.77	324
DCRTPP (Yamuna nagar)		600	504	491	11.44	477	
Faridabad GPS (NTPC)		432	193	182	4.28	178	
RGTPP (khedar) (IPP)		1200	1070	1090	23.39	975	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP)		1320	0	0	0.00	0	
Thermal (Total)		4944	2176	2007	46.88	1954	
Total Hydro		62	27	27	0.60	25	
Total Haryana		5006	2203	2034	47.49	1979	
Rajasthan		kota TPS	1240	749	659	15.15	631
	suratgarh TPS	1500	665	589	13.99	583	
	Chabra TPS	750	358	314	8.45	352	
	Dholpur GPS	330	0	0	0.00	0	
	Ramgarh GPS	271	127	125	3.06	128	
	RAPS A (NPC)	300	0	0	0.00	0	
	Barsingar (NLC)	250	185	184	4.18	174	
	Giral LTPS	250	0	0	0.00	0	
	Rajwest LTPS (IPP)	1080	832	832	19.80	825	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Kalisindh Thermal	600	0	0	0.00	0	
	Kawai(Adani)	1320	1172	1048	26.06	1086	
	Thermal (Total)	8026	4088	3751	91	3779	
	Total Hydro	550	88	0	0.11	5	
	Wind power	2798	71	442	4.79	200	
	Biomass	99	27	27	0.64	27	
	Solar	730	0	0	0.33	14	
	Renewable/Others (Total)	3627	98	469	5.77	240	
	Total Rajasthan	12203	4274	4220	96.58	4024	
	UP	Anpara TPS	1630	746	818	18.20	758
Obra TPS		1194	373	342	8.20	342	
Paricha TPS		1140	540	504	12.10	504	
Panki TPS		210	108	126	2.90	121	
Harduaganj TPS		665	417	419	9.70	404	
Tanda TPS (NTPC)		440	377	367	9.10	379	
Roza TPS (IPP)		1200	824	829	19.70	821	
Anpara-C (IPP)		1200	871	855	20.70	863	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	363	365	8.50	354	
Thermal (Total)		8129	4619	4625	109.10	4546	
Vishnuparyag HPS (IPP)		400	436	436	10.50	438	
Other Hydro		527	200	305	6.20	258	
Cogeneration		981	15	15	0.40	17	
Total UP		10037	5270	5381	126.20	4821	
Uttarakhand		Total Hydro	1398	810	866	20.65	860
		Total Uttarakhand	1398	810	866	20.65	860
Delhi	Raighat TPS	135	90	91	2.11	88	
	Delhi Gas Turbine	282	73	74	1.68	70	
	Pragati Gas Turbine	330	266	267	6.46	269	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	1370	277	271	6.62	276	
	Badarpur TPS (NTPC)	705	304	308	7.34	306	
	Thermal (Total)	2917	1010	1011	24.21	1009	
	Total Delhi	2917	1010	1011	24.21	1009	
HP	Baspa HPS (IPP)	300	330	330	7.50	313	
	Malana HPS (IPP)	86	80	86	1.75	73	
	Other Hydro	728	547	680	13.66	569	
	Total HP	1114	957	1096	22.91	954	
J & K	Baqilhar HPS (IPP)	450	436	436	10.46	436	
	Other Hydro/IPP	436	0	0	0.00	0	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	436	436	10.46	436	
Total State Control Area Generation		39597	16379	15856	370.50	15000	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3692	3865	96.55	4023	
Total Regional Availability(Gross)		64017	37166	33449	810.24	33322	

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8871	5763	155.03	6460
State Control Area Hydro	5684	2967	2946	77.07	2774
Total Regional Hydro	17116	11838	8709	232.10	9233

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	
Vindhyachal B/B	-250	50	250	250	1.48	0.80	0.68
Gwalior-Agra (D/C)	1690	1419	2007	0	35.27	0.00	35.27
Zerda-Kankroli	-39	-146	0	146	0.00	1.86	-1.86
Zerda-Bhinmal	-28	-157	14	180	0.00	1.71	-1.71
Malanpur-Auraiya	-34	-76	0	78	0.00	1.18	-1.18
Badod-Kota/Morak	72	-4	75	4	1.02	0.00	1.02
Mundra-Mohindergarh(HVDC)	1003	997	1207	0	24.57	0.00	24.57
Vindhyachal - Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total WR	2414	2083			62.33	5.55	56.78
Pusauli Bypass	200	200	200	0	4.14	0.00	4.14
MZP- GKP (D/C)	382	640	776	0	12.41	0.00	12.41
Patna-Balia(D/C)	298	317	402	0	7.26	0.00	7.26
B'Sharif-Balia (D/C)	246	295	384	0	6.65	0.00	6.65
Pusauli-Balia	-81	-42	0	81	0.00	0.97	-0.97
Gaya-Fatehpur (765 Kv)	137	204	358	0	5.60	0.00	5.60
Pusauli-Sahupuri	134	145	198	0	3.04	0.00	3.04
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-43	-40	0	50	0.00	1.01	-1.01
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	5	63	254	9	2.65	0.00	2.65
Sub Total ER	1278	1782			41.75	1.98	39.77
Total IR Exch	3692	3865			104.08	7.53	96.55

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
21.78	3.81	25.59	13.82	3.89	-3.73	0.10	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
35.68	41.00	76.68	39.77	56.78	96.55	4.09	15.77	19.87

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	1.10	5.97	21.28	65.59	64.21	11.13	3.38	0.00	NA

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				
50.19	9.03	49.56	19.12	49.96	0.10	0.09	50.17	49.78

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	415	06:40	410	00:08	0.0	0.0	0.0	0.0
Gorakhpur	400	413	09:01	397	04:17	0.0	0.0	0.0	0.0
Bareilly	400	418	09:02	406	19:18	0.0	0.0	0.0	0.0
Kanpur	400	421	06:50	405	19:13	0.0	0.0	1.2	0.0
Dadri	400	422	05:17	408	19:13	0.0	0.0	8.7	0.0
Ballabgarh	400	426	02:28	409	19:11	0.0	0.0	42.4	0.0
Bawana	400	423	05:17	407	19:11	0.0	0.0	26.5	0.0
Bassi	400	431	02:38	402	19:11	0.0	0.0	26.4	1.1
Hissar	400	417	02:39	388	12:12	0.0	0.0	0.0	0.0
Moga	400	420	02:27	405	19:13	0.0	0.0	0.0	0.0
Abdullapur	400	422	06:03	396	19:11	0.0	0.0	14.2	0.0
Nalagarh	400	425	04:00	410	19:10	0.0	0.0	30.3	0.0
Kishenpur	400	418	01:36	406	19:12	0.0	0.0	0.0	0.0
Wagoora	400	417	23:31	401	07:15	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	780	02:39	744	19:34	0.0	0.0	0.0	0.0
Balia	765	772	09:04	746	21:09	0.0	0.0	0.0	0.0
Moga	765	804	06:05	773	19:11	0.0	0.0	12.2	0.0
Agra	765	800	02:38	752	12:12	0.0	0.0	0.0	0.0
Bhiwani	765	807	02:40	776	19:13	0.0	0.0	29.3	0.0
Unnao	765	758	07:52	739	19:34	0.0	13.9	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	510.33	1560.04	511.16	1605.30	742.35	340.09
Pong	426.72	384.05	416.18	718.14	423.37	1051.02	645.28	42.65
Tehri	829.79	740.04	817.55	954.00	819.90	1000.00	258.24	113.00
Koteshwar	612.50	598.50	611.65	5.46	610.45	5.30	113.00	118.00
Chamera-I	760.00	748.75	759.64	53.95	752.55	17.57	414.00	358.00
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	516.88	3.02	522.79	10.65	988.71	134.19

* 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	1127	383	0	1078	-192	0	26.26	5.64	31.90
Delhi	-10	-476	-51	393	-257	-51	7.30	-11.71	-4.41
Haryana	998	138	0	1210	63	0	24.92	2.73	27.65
HP	-1077	-154	0	-976	-228	0	-21.89	-5.14	-27.02
J&K	-563	-101	0	-361	-5	0	-9.87	-1.38	-11.25
CHD	0	0	0	0	0	0	0.07	0.00	0.07
Rajasthan	158	268	0	158	91	0	3.78	6.43	10.21
UP	433	246	49	-303	443	49	-2.80	5.71	2.91
Uttarakhand	89	7	0	89	11	0	2.14	0.24	2.37
Total	1154	311	-1	1288	-74	-1	29.91	2.52	32.44

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1127	1078	385	-454	0	0
Delhi	660	-10	-43	-841	0	-51
Haryana	1293	914	142	63	0	0
HP	-688	-1093	-131	-430	0	0
J&K	-361	-563	0	-152	0	0
CHD	15	0	0	0	0	0
Rajasthan	158	158	386	-95	0	0
UP	433	-425	542	0	49	0
Uttarakhand	89	89	22	7	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 07.09.2014 :**

1. Heavy rain in J&K / Scattered rain in rest part of NR.

XIV. Synchronisation of new generating units :

0.00

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

1.400kV Dadri-Harshvihar-II line first time charged @ 17.05 on date 06.09.2014

XVI. Tripping of lines in pooling stations :**XVII. Complete generation loss in a generating station :**