

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 30.08.2014
Date of Reporting : 31.08.2014

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
45032	3580	48612	50.15	43836	3716	47552	50.03	1035.3	110.87

* 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	85.76	21.52		107.28	101.33	101.72	0.39	209.00	12.78
Haryana	85.66	0.62		86.28	97.51	96.71	-0.80	182.99	12.39
Rajasthan	106.03	1.25	4.59	111.86	73.07	73.02	-0.05	184.88	5.16
Delhi	26.33			26.33	75.42	72.50	-2.93	98.83	0.09
UP	112.30	17.30	0.36	129.96	131.07	132.86	1.79	262.82	70.06
Uttarakhand		18.14		18.14	15.20	16.59	1.39	34.73	3.47
HP		21.77		21.77	-1.77	-0.29	1.48	21.48	5.23
J & K		14.66	0.00	14.66	13.35	19.96	6.61	34.62	1.70
Chandigarh				0.00	4.74	5.93	1.19	5.93	0.00
Total	416.09	95.25	4.95	516.28	509.92	518.99	9.07	1035.28	110.87

* 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	9466	425	-23	1265	8720	75	-64	1243	9489
Haryana	8352	65	143	1640	7581	246	142	1688	8439
Rajasthan	7366	0	-116	-292	8270	572	138	697	8429
Delhi	4305	0	55	534	4213	0	-133	399	4601
UP	10875	2740	-279	233	11320	2635	208	1440	11772
Uttarakhand	1624	200	69	85	1461	55	96	85	1624
HP	1206	50	50	-1150	850	133	67	-1330	1206
J&K	1563	100	81	-377	1211	0	360	-821	1662
Chandigarh	276	0	46	0	210	0	31	0	287
Total	45032	3580	27	1937	43836	3716	844	3400	45588

* 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	2000	1504	1833	1328	39.16	1631	36.09	3.07
Rihand I STPS	1000	421	456	455	10.88	453	10.10	0.77
Rihand II STPS	1000	965	1027	1038	24.90	1038	23.16	1.74
Rihand III STPS	1000	921	956	987	23.65	985	22.07	1.58
Dadri I STPS	840	813	829	877	19.88	828	19.02	0.85
Dadri II STPS	980	478	469	487	11.26	469	11.05	0.21
Unchahar I TPS	420	198	212	223	5.14	214	4.74	0.40
Unchahar II TPS	420	400	432	437	10.44	435	9.56	0.88
Unchahar III TPS	210	198	211	217	5.15	215	4.72	0.43
I-STPP (Jhajhar)	1500	603	643	646	14.34	597	14.46	-0.13
Dadri GPS	830	742	544	762	17.35	723	17.09	0.26
Anta GPS	419	383	281	380	8.40	350	8.23	0.16
Auraiva GPS	663	599	600	612	14.52	605	14.23	0.29
Dadri Solar	5	1	0	0	0.01	1	0.03	-0.02
Unchahar Solar	10	3	0	0	0.04	1	0.07	-0.03
Sub Total (A)	11297	8228	8493	8449	205	8546	195	10
B. NPC								
NAPS	440	268	308	307	6.46	269	6.43	0.03
RAPS- B	440	200	225	227	4.78	199	4.80	-0.02
RAPS- C	440	385	410	408	8.72	363	9.24	-0.52
Sub Total (B)	1320	853	943	942	19.97	832	20.47	-0.50
C. NHPC								
Chamera I HPS	540	534	527	368	6.16	257	6.10	0.06
Chamera II HPS	300	300	303	208	4.85	202	4.75	0.10
Chamera III HPS	231	229	229	152	3.43	143	3.36	0.07
Bairasuli HPS	180	178	124	61	1.75	73	1.66	0.08
Salal-HPS	690	500	675	411	12.26	511	11.77	0.50
Tanakpur-HPS	94	87	91	89	2.17	90	2.10	0.07
Uri-HPS	480	366	411	354	9.21	384	9.02	0.19
Uri-II HPS	240	210	218	190	5.19	216	5.10	0.09
Dhauliganga-HPS	280	206	209	210	4.97	207	4.93	0.03
Dulhasti-HPS	390	386	393	393	9.30	388	9.26	0.04
Sewa-II HPS	120	119	118	0	0.60	25	0.60	0.00
Parbati 3	520	130	132	130	2.26	94	2.24	0.01
Sub Total ©	4065	3246	3430	2566	62	2589	61	1
D.SJVNL								
NJPC	1500	1605	1613	1419	29.88	1245	29.75	0.13
Rampur HEP	275	281	360	354	6.66	278	6.75	-0.09
Sub Total (D)	1775	1886	1973	1773	36.54	1522	36.50	0.04
E. THDC								
Tehri HPS	1000	803	800	505	9.59	399	9.50	0.09
Koteshwar HPS	400	126	381	92	3.09	129	3.03	0.06
Sub Total (E)	1400	930	1181	597	12.68	528	12.53	0.15
F. BBMB								
Bhakra HPS	1514	1007	1342	824	24.62	1026	24.17	0.45
Dehar HPS	990	530	660	450	13.00	542	12.72	0.29
Pong HPS	396	283	384	126	6.88	287	6.80	0.09
Sub Total (F)	2900	1820	2386	1400	44.50	1854	43.68	0.82
G. IPP(s)/JV(s)								
ADHPL HPS(IPP)	192	0	110	82	2.18	91	2.76	-0.58
KWHEP HPS(IPP)	1000	0	1025	620	16.02	667	16.18	-0.16
Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS	300	0	150	149	3.53	147	3.54	-0.01
Budhil HPS(IPP)	70	0	7	7	0.76	32	0.78	-0.02
Sub Total (G)	1662	0	1292	858	22.48	937	23.25	-0.77
H. Total Regional Entities (A-G)	24419	16963	19697	16585	403.42	16809	391.97	11.45

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	1185	1195	25.87	1078	
	Guru Nanak Dev TPS(Bhatinda)	440	450	445	9.46	394	
	Guru Hargobind Singh TPS(L.mbt)	920	938	947	20.75	864	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura	1400	1290	1342	29.69	1237	
	Talwandi Saboo	660	0	0	0.00	0	
	Thermal (Total)	4680	3863	3929	85.76	3573	
	Total Hydro	1148	925	851	21.52	897	
	Total Punjab	5828	4788	4780	107.28	4470	
	Haryana	Panipat TPS	1367	1132	1134	26.64	1110
DCRTPP (Yamuna nagar)		600	461	271	10.13	422	
Faridabad GPS (NTPC)		432	388	393	9.45	394	
RGTPP (khedar) (IPP)		1200	595	595	13.99	583	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP)		1320	1140	1136	25.46	1061	
Thermal (Total)		4944	3716	3529	85.66	3569	
Total Hydro		62	24	25	0.62	26	
Total Haryana		5006	3740	3554	86.28	3595	
Rajasthan		kota TPS	1240	866	848	19.48	812
	suratgarh TPS	1500	1341	1247	30.48	1270	
	Chabra TPS	750	170	0	1.44	60	
	Dholpur GPS	330	156	101	3.79	158	
	Ramgarh GPS	271	100	122	3.19	133	
	RAPS A (NPC)	300	0	0	0.00	0	
	Barsingar (NLC)	250	194	195	4.44	185	
	Giral LTPS	250	48	70	0.87	36	
	Rajwest LTPS (IPP)	1080	705	832	19.32	805	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Kalisindh Thermal	600	410	495	8.66	361	
	Kawai(Adani)	1320	597	608	14.35	598	
	Thermal (Total)	8026	4587	4518	106	4418	
	Total Hydro	550	0	0	1.25	52	
	Wind power	2798	228	98	3.55	148	
	Biomass	99	28	28	0.68	28	
	Solar	730	0	0	0.36	15	
	Renewable/Others (Total)	3627	256	126	4.59	191	
	Total Rajasthan	12203	4843	4644	111.86	4661	
	UP	Anpara TPS	1630	733	604	16.00	667
Obra TPS		1194	509	462	11.70	488	
Paricha TPS		1140	798	714	17.70	738	
Panki TPS		210	140	140	3.40	142	
Harduaganj TPS		665	401	382	9.60	400	
Tanda TPS (NTPC)		440	276	271	6.80	283	
Roza TPS (IPP)		1200	833	801	19.40	808	
Anpara-C (IPP)		1200	941	901	22.10	921	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	284	284	5.60	233	
Thermal (Total)		8129	4915	4559	112.30	4679	
Vishnuparyag HPS (IPP)		400	436	436	10.50	438	
Other Hydro		527	331	300	6.80	283	
Cogeneration		981	15	15	0.36	15	
Total UP		10037	5697	5310	129.96	4978	
Uttarakhand		Total Hydro	1398	775	730	18.14	756
		Total Uttarakhand	1398	775	730	18.14	756
Delhi	Raighat TPS	135	97	96	2.18	91	
	Delhi Gas Turbine	282	112	152	2.98	124	
	Pragati Gas Turbine	330	272	291	6.88	287	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	1370	444	434	10.58	441	
	Badarpur TPS (NTPC)	705	164	181	3.71	155	
	Thermal (Total)	2917	1089	1154	26.33	1097	
	Total Delhi	2917	1089	1154	26.33	1097	
HP	Baspa HPS (IPP)	300	333	303	6.58	274	
	Malana HPS (IPP)	86	53	53	1.24	52	
	Other Hydro	728	569	591	13.94	581	
	Total HP	1114	955	947	21.77	907	
J & K	Baqilhar HPS (IPP)	450	450	450	10.80	450	
	Other Hydro/IPP	436	157	188	3.86	161	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	607	638	14.66	611	
Total State Control Area Generation		39597	22494	21757	516.28	21074	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4836	6520	145.88	6079	
Total Regional Availability(Gross)		64017	47027	44862	1065.58	43962	

IV. Total Hydro Generation:

Regional Entities Hydro	11432	10105	7038	174.06	7252
State Control Area Hydro	5684	3617	3491	95.25	3531
Total Regional Hydro	17116	13722	10529	269.31	10784

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	100	500	500	100	7.35	0.25	7.10
Gwalior-Agra (D/C)	2086	2182	2510	0	51.61	0.00	51.61
Zerda-Kankroli	-163	-95	0	318	0.00	4.00	-4.00
Zerda-Bhinmal	-143	-16	39	323	0.00	2.38	-2.38
Malanpur-Auraiya	-153	-107	0	153	0.00	2.80	-2.80
Badod-Kota/Morak	-11	64	78	53	5.31	0.00	5.31
Mundra-Mohindergarh(HVDC)	1393	1491	1509	0	34.99	0.00	34.99
Vindhyachal - Rihand	461	452	461	0	10.75	0.00	10.75
Sub Total WR	3570	4471			110.02	9.43	100.59
Pusauli Bypass	400	400	400	0	9.29	0.00	9.29
MZP- GKP (D/C)	308	540	672	0	11.88	0.00	11.88
Patna-Balia(D/C)	401	625	648	0	12.51	0.00	12.51
B'Sharif-Balia (D/C)	305	426	463	0	8.85	0.00	8.85
Pusauli-Balia	-26	-13	12	56	0.00	0.58	-0.58
Gaya-Fatehpur (765 Kv)	-122	-39	64	127	0.00	0.42	-0.42
Pusauli-Sahupuri	137	159	187	0	3.32	0.00	3.32
K'nasa-Sahupuri	0	0	0	0	0.96	0.00	0.96
Son Ngr-Rihand	-34	-46	0	46	0.00	0.98	-0.98
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-103	-3	175	122	0.48	0.00	0.48
Sub Total ER	1266	2049			47.28	1.98	45.30
Total IR Exch	4836	6520			157.30	11.41	145.88

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	
24.75	3.84	28.60	9.47	8.46	12.53	25.94	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
50.60	84.00	134.60	45.30	100.59	145.88	-5.30	16.58	11.28

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	0.00	2.33	19.80	59.87	59.53	12.81	7.63	0.27	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				
50.24	23.43	49.74	19.12	49.98	0.08	0.09	50.22	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	404	01:49	398	00:05	0.0	0.0	0.0	0.0
Gorakhpur	400	410	07:01	388	14:23	0.0	0.4	0.0	0.0
Bareilly	400	416	07:03	395	11:47	0.0	0.0	0.0	0.0
Kanpur	400	414	06:04	400	13:55	0.0	0.0	0.0	0.0
Dadri	400	409	06:04	393	11:48	0.0	0.0	0.0	0.0
Ballabgarh	400	417	06:04	397	11:48	0.0	0.0	0.0	0.0
Bawana	400	412	06:03	397	11:52	0.0	0.0	0.0	0.0
Bassi	400	422	11:01	402	11:54	0.0	0.0	3.3	0.0
Hissar	400	405	01:49	390	11:54	0.0	0.0	0.0	0.0
Moga	400	409	06:01	396	12:32	0.0	0.0	0.0	0.0
Abdullapur	400	415	06:03	396	11:54	0.0	0.0	0.0	0.0
Nalagarh	400	422	06:01	406	11:48	0.0	0.0	0.9	0.0
Kishenpur	400	416	01:43	405	20:36	0.0	0.0	0.0	0.0
Wagoora	400	411	01:42	393	19:30	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	767	07:02	731	11:56	0.0	8.9	0.0	0.0
Balia	765	761	00:26	730	14:23	0.0	16.6	0.0	0.0
Moga	765	770	23:58	755	19:13	0.0	0.0	0.0	0.0
Agra	765	784	07:02	747	11:56	0.0	0.0	0.0	0.0
Bhiwani	765	786	07:02	753	11:54	0.0	0.0	0.0	0.0
Unnao	765	758	06:06	741	00:00	0.0	18.9	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	509.76	1530.03	510.50	1575.10	631.07	735.78
Pong	426.72	384.05	416.15	718.14	422.61	1020.81	181.40	412.01
Tehri	829.79	740.04	814.50	902.26	820.20	1002.27	273.34	218.00
Koteshwar	612.50	598.50	611.14	5.20	609.60	4.30	218.00	205.00
Chamera-I	760.00	748.75	751.33	12.02	0.00	0.00	155.72	167.16
Rihand	268.22	252.98	0.00	0.00	259.96	302.50	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	513.84	11.48	524.00	11.56	155.00	493.00

* 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	1243	0	0	1265	0	0	30.04	0.04	30.08
Delhi	322	127	-51	432	154	-53	10.59	2.46	13.05
Haryana	1670	18	0	1624	17	0	39.74	0.40	40.14
HP	-1197	-133	0	-944	-206	0	-24.35	-3.16	-27.51
J&K	-681	-140	0	-436	60	0	-11.54	-1.62	-13.16
CHD	0	0	0	0	0	0	0.24	0.01	0.25
Rajasthan	-900	1598	0	-899	605	2	-21.60	26.49	4.89
UP	873	517	49	184	0	49	9.39	15.14	24.53
Uttarakhand	93	-8	0	93	-8	0	2.23	-0.20	2.03
Total	1423	1979	-1	1318	621	-2	34.74	39.56	74.30

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1298	1199	152	0	0	0
Delhi	709	297	581	-436	-51	-53
Haryana	1670	1623	20	14	0	0
HP	-919	-1197	-60	-206	0	0
J&K	-377	-681	60	-191	0	0
CHD	30	0	39	0	0	0
Rajasthan	-898	-901	1624	498	2	0
UP	873	184	936	0	49	49
Uttarakhand	93	93	-8	-8	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 30.08.2014 :**

1. Normal weather in NR.

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 :**