

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 29.07.2014
Date of Reporting : 30.07.2014

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
42588	1845	44433	49.95	40981	1080	42061	50.17	975.3	30.79

* 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	69.94	23.26		93.20	110.47	111.44	0.98	204.65	0.00
Haryana	58.33	0.52		58.85	106.87	105.45	-1.42	164.30	0.00
Rajasthan	93.87	0.80	9.71	104.39	43.45	43.97	0.53	148.36	0.00
Delhi	25.00			25.00	73.00	70.85	-2.15	95.85	0.08
UP	121.70	11.20	1.20	134.10	133.92	136.29	2.38	270.39	28.57
Uttarakhand		17.42		17.42	16.23	17.13	0.90	34.54	0.37
HP		24.52		24.52	-0.38	0.54	0.93	25.06	0.07
J & K		10.49	0.00	10.49	17.73	16.34	-1.39	26.83	1.70
Chandigarh				0.00	5.27	5.29	0.03	5.29	0.00
Total	368.84	88.21	10.91	467.96	506.54	507.32	0.78	975.27	30.79

* 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	8883	0	-61	1296	8681	0	62	1448	9144
Haryana	7445	0	-233	1215	7013	0	-100	1478	7579
Rajasthan	6184	0	226	-801	6157	0	-58	-352	6652
Delhi	4135	0	148	657	3913	0	-256	498	4501
UP	11624	1670	156	1116	11579	1080	56	1423	11966
Uttarakhand	1585	75	131	92	1399	0	77	85	1598
HP	1052	0	31	-1296	925	0	63	-1472	1176
J&K	1432	100	12	-250	1111	0	-117	-450	1624
Chandigarh	247	0	14	0	203	0	5	0	249
Total	42588	1845	423	2029	40981	1080	-267	2659	43326

* 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	1582	1606	1825	37.44	1560	37.45	-0.01
	Rihand I STPS	1000	711	749	755	17.67	736	15.94	1.73
	Rihand II STPS	1000	682	710	410	16.79	700	15.12	1.67
	Rihand III STPS	1000	750	740	736	18.38	766	16.91	1.47
	Dadri I STPS	840	770	589	586	15.33	639	14.46	0.86
	Dadri II STPS	980	470	375	373	9.23	385	9.11	0.12
	Unchahar I TPS	420	396	385	395	9.76	407	9.01	0.75
	Unchahar II TPS	420	398	350	316	9.60	400	8.80	0.80
	Unchahar III TPS	210	198	169	154	4.45	186	4.13	0.32
	ISTPP (Jhajjar)	1500	950	958	630	16.23	676	16.92	-0.69
	Dadri GPS	830	519	183	261	5.26	219	5.38	-0.13
	Anta GPS	419	386	252	225	5.73	239	5.68	0.05
	Auraiya GPS	663	623	266	149	4.35	181	4.29	0.07
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
	Sub Total (A)	11297	8440	7332	6815	170	7094	163	7
B. NPC	NAPS	440	271	313	312	6.54	273	6.50	0.04
	RAPS- B	440	394	439	442	9.50	396	9.46	0.05
	RAPS- C	440	390	413	417	8.82	367	9.36	-0.54
	Sub Total (B)	1320	1055	1165	1171	24.87	1036	25.32	-0.45
C. NHPC	Chamera I HPS	540	534	540	540	12.99	541	12.82	0.18
	Chamera II HPS	300	301	309	302	7.29	304	7.22	0.07
	Chamera III HPS	231	229	230	227	5.50	229	5.50	0.00
	Bairasui HPS	180	52	180	0	1.26	52	1.20	0.06
	Salal-HPS	690	661	670	678	16.23	676	15.88	0.35
	Tanakpur-HPS	94	58	88	0	1.39	58	1.38	0.01
	Uri-HPS	480	455	402	406	11.11	463	10.91	0.20
	Uri-II HPS	240	238	243	241	5.74	239	5.72	0.02
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	386	394	394	9.29	387	9.26	0.02
	Sewa-II HPS	120	119	130	0	2.16	90	2.09	0.07
	Parbati 3	390	261	270	263	6.31	263	6.27	0.04
	Sub Total ©	3935	3293	3457	3051	79	3303	78	1
D.SJVNL	NJPC	1500	1605	1614	1614	38.51	1605	38.52	-0.01
	Rampur HEP	275	280	292	287	6.88	287	6.72	0.16
	Sub Total (D)	1775	1885	1906	1901	45.39	1891	45.24	0.15
E. THDC	Tehri HPS	1000	872	878	866	20.11	838	20.00	0.11
	Koteshwar HPS	400	400	396	296	8.00	333	8.00	0.00
	Sub Total (E)	1400	1272	1274	1162	28.11	1171	28.00	0.11
F. BBMB	Bhakra HPS	1514	965	1339	826	23.26	969	23.17	0.09
	Dehar HPS	990	561	660	580	14.02	584	13.47	0.55
	Pong HPS	396	233	384	190	5.83	243	5.58	0.25
	Sub Total (F)	2900	1759	2383	1596	43.11	1796	42.21	0.90
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	228	228	4.72	197	5.26	-0.54
	KWHEP HPS(IPP)	1000	0	1200	1200	28.64	1193	28.51	0.12
	Malana Stg-II HPS	100	0	113	112	2.67	111	2.50	0.17
	Shree Cement TPS	300	0	144	138	3.41	142	3.43	-0.02
	Budhil HPS(IPP)	70	0	35	71	1.54	64	1.67	-0.14
	Sub Total (G)	1662	0	1720	1749	40.98	1707	41.37	-0.39
H. Total Regional Entities (A-G)		24289	17704	19237	17445	431.99	18000	423.70	8.30

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	1230	1190	25.84	1077
	Guru Nanak Dev TPS(Bhatinda)	440	439	419	8.79	366
	Guru Hargobind Singh TPS(L.mbt)	920	952	948	19.54	814
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	700	703	704	15.77	657
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	3980	3324	3261	69.94	2914
	Total Hydro	1148	978	978	23.26	969
	Total Punjab	5128	4302	4239	93.20	3884
	Haryana	Panipat TPS	1367	206	208	5.05
DCRTPP (Yamuna nagar)		600	548	426	10.34	431
Faridabad GPS (NTPC)		432	194	160	4.09	170
RGTPP (khedar) (IPP)		1200	916	897	21.04	877
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP)		1320	739	741	17.81	742
Thermal (Total)		4944	2603	2432	58.33	2430
Total Hydro		62	21	23	0.52	22
Total Haryana		5006	2624	2455	58.85	2452
Rajasthan		kota TPS	1240	900	887	21.13
	suratgarh TPS	1500	1043	963	23.80	992
	Chabra TPS	750	340	350	8.28	345
	Dholpur GPS	330	76	87	2.45	102
	Ramgarh GPS	271	140	128	3.49	146
	RAPS A (NPC)	300	0	0	0.00	0
	Barsingsar (NLC)	250	166	99	2.72	113
	Giral LTPS	250	0	0	0.00	0
	Rajwest LTPS (IPP)	1080	950	634	19.70	821
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	1320	527	482	12.30	513
	Thermal (Total)	8026	4142	3630	94	3911
	Total Hydro	550	36	27	0.80	34
	Wind power	2798	113	872	8.83	368
	Biomass	99	33	33	0.79	33
	Solar	730	0	0	0.09	4
	Renewable/Others (Total)	3627	146	905	9.71	405
	Total Rajasthan	12203	4324	4562	104.39	4349
	UP	Anpara TPS	1630	865	887	20.70
Obra TPS		1288	421	386	9.30	388
Paricha TPS		1140	664	798	18.00	750
Panki TPS		210	63	54	1.30	54
Harduaganj TPS		665	225	246	6.00	250
Tanda TPS (NTPC)		440	371	365	9.00	375
Roza TPS (IPP)		1200	1098	1089	26.30	1096
Anpara-C (IPP)		1200	1044	873	22.20	925
Bajaj Energy Pvt.Ltd(IPP) TPS		450	361	395	8.90	371
Thermal (Total)		8223	5112	5093	121.70	5071
Vishnuparyag HPS (IPP)		400	436	0	7.00	292
Other Hydro		527	187	218	4.20	175
Cogeneration		981	50	50	1.20	50
Total UP		10131	5785	5361	134.10	5296
Uttarakhand		Total Hydro	1303	708	711	17.42
	Total Uttarakhand	1303	708	711	17.42	726
Delhi	Rajghat TPS	135	96	98	2.16	90
	Delhi Gas Turbine	282	75	155	2.45	102
	Pragati Gas Turbine	330	276	281	6.55	273
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	298	299	6.43	268
	Badarpur TPS (NTPC)	705	284	305	7.40	308
	Thermal (Total)	2917	1029	1138	25.00	1042
	Total Delhi	2917	1029	1138	25.00	1042
HP	Baspa HPS (IPP)	300	330	330	7.79	325
	Malana HPS (IPP)	86	106	104	1.89	79
	Other Hydro	728	635	580	14.84	618
	Total HP	1114	1071	1014	24.52	1022
J & K	Baqilhar HPS (IPP)	450	438	438	10.49	437
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	438	438	10.49	437
Total State Control Area Generation		38896	20281	19918	467.96	19206
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4746.22	4491.43	103.94	4331
Total Regional Availability(Gross)		63186	44265	41854	1003.88	41537

IV. Total Hydro Generation:

Regional Entities Hydro	11302	10561	9250	231.92	9663
State Control Area Hydro	5589	3439	3409	88.21	3384
Total Regional Hydro	16891	14000	12659	320.12	13047

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	50	-100	100	300	0.70	1.40	-0.70
Gwalior-Agra (D/C)	1445	1459	2023	0	30.64	0.00	30.64
Zerda-Kankroli	-114	-143	0	349	0.00	4.81	-4.81
Zerda-Bhinmal	-101	-171	0	239	0.00	3.15	-3.15
Malanpur-Auraiya	-111	-41	0	111	0.00	1.51	-1.51
Badod-Kota/Morak	-55	-80	0	139	0.00	1.70	-1.70
Mundra-Mohindergarh(HVDC)	2002	1998	2012	0	48.39	0.00	48.39
Vindhychal - Rihand	328	320	328	0	7.80	0.00	7.80
Sub Total WR	3444	3242			87.53	12.57	74.95
Pusaali Bypass	400	400	400	0	9.70	0.00	9.70
MZP- GKP (D/C)	357	330	481	0	8.65	0.00	8.65
Patna-Balia(D/C)	196	164	276	0	4.55	0.00	4.55
B'Sharif-Balia (D/C)	204	215	359	0	5.51	0.00	5.51
Pusaali-Balia	93	68	0	103	0.00	1.83	-1.83
Gaya-Fatehpur (765 Kv)	-57	-64	8	-102	0.00	1.06	-1.06
Pusaali-Sahupuri	168	154	194	0	3.77	0.00	3.77
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-33	-34	0	40	0.00	0.79	-0.79
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-26	16	98	47	0.48	0.00	0.48
Sub Total ER	1302	1249			32.66	3.68	28.99
Total IR Exch	4746	4491			120.19	16.25	103.94

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
20.77	3.76	24.53	14.04	1.01	-2.49	15.80	1.04	-1.04

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR incld Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
37.12	65.74	102.87	28.99	74.95	103.94	-8.14	9.21	1.07

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	0.17	4.90	17.40	53.07	56.86	14.88	9.98	0.88	NA

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
50.35	18.01	49.68	19.15	49.99	0.10	0.10	50.27	49.84

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	411	17:36	403	22:12	0.0	0.0	0.0	0.0
Gorakhpur	400	414	18:02	394	19:37	0.0	0.0	0.0	0.0
Bareilly	400	420	18:03	401	19:35	0.0	0.0	0.0	0.0
Kanpur	400	420	18:00	405	20:14	0.0	0.0	0.0	0.0
Dadri	400	414	18:00	400	10:23	0.0	0.0	0.0	0.0
Ballabgarh	400	421	06:28	405	19:49	0.0	0.0	0.7	0.0
Bawana	400	416	06:20	404	19:49	0.0	0.0	0.0	0.0
Bassi	400	431	03:59	415	19:36	0.0	0.0	74.2	0.5
Hissar	400	411	17:46	398	19:37	0.0	0.0	0.0	0.0
Moga	400	412	05:06	410	01:10	0.0	0.0	0.0	0.0
Abdullapur	400	417	06:20	396	19:29	0.0	0.0	0.0	0.0
Nalagarh	400	414	03:02	404	10:53	0.0	0.0	0.0	0.0
Kishenpur	400	414	13:00	407	05:38	0.0	0.0	0.0	0.0
Wagoora	400	410	17:59	394	05:42	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	782	18:01	747	19:37	0.0	0.0	0.0	0.0
Balia	765	783	18:02	748	19:37	0.0	0.0	0.0	0.0
Moga	765	798	18:02	779	19:38	0.0	0.0	0.0	0.0
Agra	765	797	18:02	760	19:39	0.0	0.0	0.0	0.0
Bhiwani	765	798	18:02	773	19:36	0.0	0.0	0.0	0.0
Unnao	765	0	00:00	9999	00:00	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	487.48	652.97	491.45	778.28	1057.52	746.49
Pong	426.72	384.05	400.80	237.89	404.34	328.16	215.09	376.70
Tehri	829.79	740.04	748.65	42.00	NA	NA	301.26	205.00
Koteshwar	612.50	598.50	610.77	4.95	608.40	3.76	208.00	207.00
Chamera-I	760.00	748.75	757.00	12.82	NA	NA	505.02	347.40
Rihand	268.22	252.98	258.07	205.10	256.79	149.00	NA	NA
RPS	352.80	343.81	348.06	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.80	NA	NA	NA	NA	NA
RSD	527.91	487.91	516.64	144.00	506.65	144.00	224.47	197.51

* 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	1345	103	0	1296	0	0	31.25	2.66	33.90
Delhi	313	236	-50	352	336	-30	10.32	4.54	14.86
Haryana	1331	147	0	1285	-70	0	30.76	2.74	33.50
HP	-1144	-329	0	-991	-305	0	-22.98	-8.55	-31.53
J&K	-334	-115	0	-334	84	0	-10.09	-2.27	-12.36
CHD	0	0	0	0	0	0	0.33	0.00	0.33
Rajasthan	-791	437	2	-791	-10	0	-17.85	8.34	-9.51
UP	538	835	49	248	835	33	8.41	14.65	23.06
Uttarakhand	84	1	0	84	9	0	2.01	0.12	2.12
Total	1342	1316	1	1147	880	2	32.15	22.22	54.37

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1345	1275	381	0	0	0
Delhi	776	264	612	-238	-10	-51
Haryana	1331	1163	169	-70	0	0
HP	-818	-1144	-254	-464	0	0
J&K	-334	-537	84	-344	0	0
CHD	41	0	0	0	0	0
Rajasthan	-629	-791	488	-10	2	0
UP	593	208	934	246	49	11
Uttarakhand	84	84	15	1	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 29.07.2014 :**

Scattered Rain

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 :**