

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पारदर्शिता की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 13.07.2014
Date of Reporting : 14.07.2014

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
43142	2650	45792	49.86	45573	5246	50819	49.88	1047.6	100.93

* 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	62.45	23.38		85.83	126.63	126.76	0.13	212.59	27.39
Haryana	63.15	0.55		63.70	116.50	116.69	0.19	180.39	3.22
Rajasthan	112.98	0.11	14.21	127.31	65.93	64.81	-1.12	192.12	4.48
Delhi	29.25			29.25	82.19	81.80	-0.39	111.04	0.58
UP	118.50	12.70	1.20	132.40	123.55	127.29	3.74	259.69	61.26
Uttarakhand		20.22		20.22	13.54	13.18	-0.36	33.40	1.99
HP		24.31		24.31	-0.02	-1.07	-1.05	23.24	0.31
J & K		10.41	0.00	10.41	16.78	18.72	1.94	29.12	1.70
Chandigarh				0.00	5.46	6.03	0.57	6.03	0.00
Total	386.34	91.68	15.41	493.42	550.55	554.19	3.64	1047.62	100.93

* 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	8895	700	-45	1537	9243	1400	94	1775	9294
Haryana	7406	0	9	1045	8447	130	80	1466	8524
Rajasthan	6820	0	-280	-111	7248	994	129	-511	8997
Delhi	4735	0	525	432	5174	32	-8	474	5318
UP	11023	1775	-110	952	11326	2540	-160	1374	11891
Uttarakhand	1573	75	248	-17	1415	150	-28	4	1604
HP	781	0	-160	-1207	975	0	14	-1283	1071
J&K	1664	100	154	-250	1486	0	154	-373	1687
Chandigarh	245	0	19	20	259	0	35	0	291
Total	43142	2650	359	2402	45573	5246	310	2926	46072

* 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	Off Peak MW	Energy	Average	Schedule	UI
				(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
	Singrauli STPS	2000	1582	1559	2078	37.56	1565	37.48	0.08
	Rihand I STPS	1000	653	688	703	17.09	712	15.35	1.74
	Rihand II STPS	1000	748	779	932	19.42	809	17.67	1.75
	Rihand III STPS	1000	718	722	815	18.27	761	16.72	1.55
	Dadri I STPS	840	813	577	810	19.31	805	18.38	0.93
	Dadri II STPS	980	966	762	929	22.26	928	22.28	-0.02
	Unchahar I TPS	420	397	433	430	10.14	423	9.33	0.81
	Unchahar II TPS	420	400	440	437	10.21	425	9.30	0.91
	Unchahar III TPS	210	198	217	219	5.00	208	4.56	0.44
	ISTPP (Jhajjar)	1500	1200	1239	1237	27.95	1165	28.53	-0.58
	Dadri GPS	830	519	180	368	6.89	287	6.89	0.00
	Anta GPS	419	377	0	0	0.00	0	0.00	0.00
	Auraiya GPS	663	630	150	149	3.54	147	3.46	0.08
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	0	0	0	0.00	0	0.00	0.00
	Sub Total (A)	11297	9201	7746	9107	198	8236	190	8
B. NPC	NAPS	440	264	307	305	6.41	267	6.34	0.07
	RAPS- B	440	391	226	439	8.51	355	9.38	-0.88
	RAPS- C	440	348	407	374	8.39	349	8.35	0.03
	Sub Total (B)	1320	1003	940	1118	23.30	971	24.07	-0.77
C. NHPC	Chamera I HPS	540	535	540	540	13.01	542	12.84	0.17
	Chamera II HPS	300	301	311	307	7.30	304	7.22	0.08
	Chamera III HPS	231	229	237	237	5.59	233	5.50	0.09
	Bairasui HPS	180	179	182	138	3.27	136	2.96	0.31
	Salal-HPS	690	666	683	660	16.31	679	15.99	0.32
	Tanakpur-HPS	94	76	60	80	1.85	77	1.81	0.03
	Uri-HPS	480	475	479	476	11.55	481	11.40	0.15
	Uri-II HPS	240	240	249	244	5.82	243	5.76	0.06
	Dhauliganga-HPS	280	138	139	139	3.34	139	3.31	0.03
	Dulhasti-HPS	390	258	275	272	6.42	267	6.19	0.23
	Sewa-II HPS	120	119	127	0	0.98	41	0.90	0.08
	Parbati 3	390	261	265	260	5.80	242	5.75	0.05
	Sub Total ©	3935	3476	3546	3353	81	3384	80	2
D.SJVNL	NJPC	1500	1605	1616	1616	38.56	1606	38.52	0.03
	Rampur HEP	275	275	290	286	6.69	279	6.54	0.16
	Sub Total (D)	1775	1880	1906	1902	45.25	1885	45.06	0.19
E. THDC	Tehri HPS	1000	640	649	0	5.20	217	5.10	0.10
	Koteshwar HPS	400	104	201	91	2.55	106	2.50	0.05
	Sub Total (E)	1400	744	850	91	7.76	323	7.60	0.16
F. BBMB	Bhakra HPS	1514	934	1330	931	22.70	946	22.41	0.29
	Dehar HPS	990	568	825	580	13.85	577	13.63	0.22
	Pong HPS	396	243	360	180	5.85	244	5.82	0.03
	Sub Total (F)	2900	1744	2515	1691	42.40	1767	41.86	0.55
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	232	231	5.49	229	5.30	0.19
	KWHEP HPS(IPP)	1000	0	1200	1200	28.41	1184	28.51	-0.10
	Malana Stg-II HPS	100	0	113	113	2.63	110	2.51	0.12
	Shree Cement TPS	300	0	172	174	4.18	174	4.23	-0.05
	Budhil HPS(IPP)	70	0	71	71	1.68	70	1.68	0.00
	Sub Total (G)	1662	0	1788	1789	42.39	1766	42.23	0.16
H. Total Regional Entities (A-G)		24289	18048	19291	19051	439.98	18332	430.42	9.56

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	1244	1242	27.37	1140	
	Guru Nanak Dev TPS(Bhatinda)	440	408	410	8.65	360	
	Guru Hargobind Singh TPS(L.mbt)	920	460	723	14.43	601	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura	700	539	539	12.01	500	
	Talwandi Saboo	660	0	0	0.00	0	
	Thermal (Total)	3980	2651	2914	62.45	2602	
	Total Hydro	1148	973	970	23.38	974	
	Total Punjab	5128	3624	3884	85.83	3576	
	Haryana	Panipat TPS	1367	757	785	17.95	748
DCRTPP (Yamuna nagar)		600	432	489	10.83	451	
Faridabad GPS (NTPC)		432	0	0	0.00	0	
RGTPP (khedar) (IPP)		1200	478	1130	19.85	827	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP)		1320	744	536	14.53	605	
Thermal (Total)		4944	2411	2940	63.15	2631	
Total Hydro		62	20	21	0.55	23	
Total Haryana		5006	2431	2961	63.70	2654	
Rajasthan		kota TPS	1240	902	964	22.18	924
		suratgarh TPS	1500	984	1086	24.91	1038
	Chabra TPS	750	344	154	8.26	344	
	Dholpur GPS	330	0	0	0.00	0	
	Ramgarh GPS	271	125	105	2.87	120	
	RAPS A (NPC)	300	0	0	0.00	0	
	Barsingsar (NLC)	250	94	94	2.13	89	
	Giral LTPS	250	0	38	0.82	34	
	Rajwest LTPS (IPP)	1080	447	833	18.24	760	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Kalisindh Thermal	600	459	450	11.18	466	
	Kawai(Adani)	1320	857	608	22.39	933	
	Thermal (Total)	8026	4212	4332	113	4708	
	Total Hydro	550	0	0	0.11	5	
	Wind power	2798	544	686	12.91	538	
	Biomass	99	30	30	0.72	30	
	Solar	730	0	0	0.58	24	
	Renewable/Others (Total)	3627	574	716	14.21	592	
	Total Rajasthan	12203	4786	5048	127.31	5304	
	UP	Anpara TPS	1630	857	924	21.10	879
Obra TPS		1288	458	454	10.90	454	
Paricha TPS		1140	522	735	15.70	654	
Panki TPS		210	144	122	3.10	129	
Harduaganj TPS		665	380	387	9.10	379	
Tanda TPS (NTPC)		440	382	379	9.10	379	
Roza TPS (IPP)		1200	1098	1107	26.40	1100	
Anpara-C (IPP)		1200	535	963	14.80	617	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	365	363	8.30	346	
Thermal (Total)		8223	4741	5434	118.50	4938	
Vishnuparyag HPS (IPP)		400	436	0	8.70	363	
Other Hydro		527	212	182	4.00	167	
Cogeneration		981	50	50	1.20	50	
Total UP		10131	5439	5666	132.40	5154	
Uttarakhand		Total Hydro	1303	689	924	20.22	843
		Total Uttarakhand	1303	689	924	20.22	843
Delhi	Rajghat TPS	135	110	105	2.56	107	
	Delhi Gas Turbine	282	0	0	0.00	0	
	Pragati Gas Turbine	330	279	286	6.85	285	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	1370	249	286	6.48	270	
	Badarpur TPS (NTPC)	705	504	587	13.36	557	
	Thermal (Total)	2917	1142	1264	29.25	1219	
	Total Delhi	2917	1142	1264	29.25	1219	
HP	Baspa HPS (IPP)	300	305	315	7.40	308	
	Malana HPS (IPP)	86	104	104	2.46	102	
	Other Hydro	728	599	608	14.45	602	
	Total HP	1114	1008	1027	24.31	1013	
J & K	Baqilhar HPS (IPP)	450	438	438	10.41	434	
	Other Hydro/IPP	436	0	0	0.00	0	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	438	438	10.41	434	
Total State Control Area Generation		38896	19557	21212	493.42	20197	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5371	6373	135.84	5660	
Total Regional Availability(Gross)		63186	44219	46636	1069.24	44189	

IV. Total Hydro Generation:

Regional Entities Hydro	11302	10362	8581	213.17	8882
State Control Area Hydro	5589	3340	3562	91.68	3457
Total Regional Hydro	16891	13702	12143	304.85	12339

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	50	500	500	1.89	1.46	0.43
Gwalior-Agra (D/C)	2027	2111	2144	0	42.54	0.00	42.54
Zerda-Kankroli	-43	-169	0	310	0.00	3.85	-3.85
Zerda-Bhinmal	-3	-175	25	257	0.00	2.91	-2.91
Malanpur-Auraiya	-37	-41	0	63	0.00	1.10	-1.10
Badod-Kota/Morak	-50	-58	0	154	0.00	1.37	-1.37
Mundra-Mohindergarh(HVDC)	2102	2302	2325	0	52.72	0.00	52.72
Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total WR	3496	4020			97.15	10.68	86.47
Pusaali Bypass	400	400	400	0	9.72	0.00	9.72
MZP- GKP (D/C)	518	598	680	0	12.44	0.00	12.44
Patna-Balia(D/C)	491	682	728	0	13.15	0.00	13.15
B'Sharif-Balia (D/C)	266	462	511	0	8.30	0.00	8.30
Pusaali-Balia	-70	-8	0	-95	0.00	0.75	-0.75
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusaali-Sahupuri	163	151	198	0	3.60	0.00	3.60
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-30	-40	0	40	0.00	-0.70	0.70
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	137	108	189	52	2.23	0.00	2.23
Sub Total ER	1875	2353			49.42	0.05	49.37
Total IR Exch	5371	6373			146.57	10.73	135.84

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
26.98	3.13	30.12	17.36	0.88	4.85	14.34	0.00	0.00

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
52.33	86.74	139.07	49.37	86.47	135.84	-2.96	-0.27	-3.24

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	6.27	14.92	34.41	70.00	50.16	6.83	7.52	1.41	0.00

Frequency (Hz)				Average Frequency	Frequency Variation	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz	Index			
50.28	17.05	49.51	1.16	49.93	0.22	0.13	50.29	49.64

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	407	15:05	395	19:55	0.0	0.0	0.0	0.0
Gorakhpur	400	415	10:36	391	19:51	0.0	0.0	0.0	0.0
Bareilly	400	417	08:11	393	19:47	0.0	0.0	0.0	0.0
Kanpur	400	421	15:07	398	19:48	0.0	0.0	0.4	0.0
Dadri	400	414	14:47	394	19:48	0.0	0.0	0.0	0.0
Ballabgarh	400	423	15:07	400	00:36	0.0	0.0	3.1	0.0
Bawana	400	413	06:04	397	00:37	0.0	0.0	0.0	0.0
Bassi	400	428	18:05	395	09:43	0.0	0.0	10.2	0.0
Hissar	400	409	17:37	388	00:36	0.0	1.7	0.0	0.0
Moga	400	407	14:41	396	00:20	0.0	0.0	0.0	0.0
Abdullapur	400	413	06:05	396	00:38	0.0	0.0	0.0	0.0
Nalagarh	400	411	18:00	398	00:42	0.0	0.0	0.0	0.0
Kishenpur	400	412	08:28	402	19:46	0.0	0.0	0.0	0.0
Wagoora	400	407	02:01	391	19:45	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	14:02	734	19:47	0.0	3.3	0.0	0.0
Balia	765	777	06:05	739	19:53	0.0	1.0	0.0	0.0
Moga	765	790	15:12	762	00:36	0.0	0.0	0.0	0.0
Agra	765	795	18:09	752	19:49	0.0	0.0	0.0	0.0
Bhiwani	765	797	14:47	759	19:49	0.0	0.0	0.0	0.0
Unnao	765	776	08:03	725	23:27	2.1	17.4	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	1609	166	0	1537	0	0	37.48	4.02	41.50
Delhi	320	205	-51	359	123	-51	9.82	0.35	10.18
Haryana	1334	133	0	1094	-49	0	26.99	1.01	28.01
HP	-926	-357	0	-774	-433	0	-19.23	-9.72	-28.95
J&K	-334	-39	0	-334	84	0	-10.23	-2.35	-12.58
CHD	0	0	0	0	20	0	0.33	0.27	0.60
Rajasthan	-756	246	0	-658	547	0	-15.40	25.11	9.71
UP	420	935	19	274	640	38	8.00	7.28	15.28
Uttarakhand	-7	10	0	-7	-10	0	-0.16	0.89	0.74
Total	1660	1298	-32	1493	922	-13	37.62	26.86	64.49

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1609	1537	270	0	0	0
Delhi	765	271	530	-409	0	-51
Haryana	1334	892	157	-326	0	0
HP	-723	-926	-330	-524	0	0
J&K	-334	-587	84	-306	0	0
CHD	42	0	39	0	0	0
Rajasthan	-363	-756	1826	10	51	0
UP	469	261	935	0	49	0
Uttarakhand	-7	-7	74	-19	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 13.07.2014 :**

1. Hot weather.

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 :**