

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पारदर्शित की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 27.07.2014
Date of Reporting : 28.07.2014

I. Regional Availability/Demand:

Demand Met	Evening Peak (20:00 Hrs) MW			Demand Met	Off Peak (03:00 Hrs) MW			Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)		Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
42752	2506	45258	50.01	43254	2504	45758	50.03	1005.9	56.70

* 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	71.55	23.26		94.81	118.15	118.80	0.66	213.61	0.00
Haryana	59.61	0.49		60.10	114.55	114.08	-0.47	174.18	0.00
Rajasthan	101.92	1.31	13.48	116.71	50.52	54.22	3.70	170.93	0.58
Delhi	28.44			28.44	69.41	71.25	1.84	99.69	0.14
UP	120.16	13.79	1.20	135.15	117.18	121.20	4.03	256.36	52.49
Uttarakhand		15.03		15.03	15.81	17.74	1.92	32.76	1.56
HP		21.88		21.88	-0.32	0.44	0.76	22.32	0.23
J & K		14.73	0.00	14.73	16.40	16.15	-0.25	30.88	1.70
Chandigarh				0.00	5.09	5.21	0.13	5.21	0.00
Total	381.67	90.50	14.68	486.84	506.79	519.10	12.31	1005.94	56.70

* 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	9262	0	14	1493	8933	0	177	1621	9530
Haryana	7242	0	-401	1283	7563	0	147	1706	7918
Rajasthan	6590	0	213	-800	7107	116	296	-367	7615
Delhi	4223	6	291	191	4191	5	51	165	4951
UP	11115	2325	166	844	11633	2340	334	928	11633
Uttarakhand	1569	75	121	95	1437	0	47	85	1569
HP	887	0	10	-1271	814	43	22	-1440	1085
J&K	1623	100	-15	-230	1370	0	125	-417	1660
Chandigarh	240	0	11	0	206	0	9	0	268
Total	42752	2506	409	1606	43254	2504	1207	2281	44331

* 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	1589	1842	1607	38.28	1595	37.96	0.33
	Rihand I STPS	1000	789	841	940	20.44	851	18.76	1.68
	Rihand II STPS	1000	410	418	523	10.91	455	9.76	1.15
	Rihand III STPS	1000	798	811	934	20.30	846	19.01	1.29
	Dadri I STPS	840	770	723	811	18.36	765	17.86	0.51
	Dadri II STPS	980	470	466	483	11.10	463	11.21	-0.11
	Unchahar I TPS	420	395	426	427	10.24	427	9.43	0.81
	Unchahar II TPS	420	400	414	440	10.37	432	9.50	0.87
	Unchahar III TPS	210	198	205	216	5.07	211	4.66	0.41
	ISTPP (Jhajjar)	1500	950	1007	796	20.77	865	21.00	-0.23
	Dadri GPS	830	519	242	288	6.54	273	6.56	-0.02
	Anta GPS	419	386	247	224	5.67	236	5.79	-0.12
	Auraiya GPS	663	631	164	154	3.81	159	3.77	0.04
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.02	1	0.07	-0.05
	Sub Total (A)	11297	8308	7806	7843	182	7579	175	7
B. NPC	NAPS	440	272	309	312	6.48	270	6.53	-0.05
	RAPS- B	440	396	435	440	9.46	394	9.50	-0.05
	RAPS- C	440	390	413	416	8.88	370	9.36	-0.48
	Sub Total (B)	1320	1058	1157	1168	24.82	1034	25.39	-0.58
C. NHPC	Chamera I HPS	540	534	547	548	13.03	543	12.82	0.22
	Chamera II HPS	300	272	310	307	6.68	278	6.57	0.11
	Chamera III HPS	231	229	233	234	5.55	231	5.50	0.05
	Bairasui HPS	180	178	182	120	4.08	170	4.00	0.08
	Salal-HPS	690	663	682	682	16.37	682	15.91	0.47
	Tanakpur-HPS	94	81	87	45	1.95	81	1.94	0.01
	Uri-HPS	480	475	472	473	11.48	478	11.40	0.08
	Uri-II HPS	240	240	243	241	5.76	240	5.76	0.00
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	284	391	261	6.89	287	6.81	0.08
	Sewa-II HPS	120	119	130	0	0.93	39	0.90	0.03
	Parbati 3	390	261	272	262	6.32	263	6.27	0.05
	Sub Total ©	3935	3336	3549	3173	79	3294	78	1
D.SJVNL	NJPC	1500	1605	1614	1617	37.29	1554	37.29	0.00
	Rampur HEP	275	244	217	288	5.79	241	5.86	-0.07
	Sub Total (D)	1775	1849	1831	1905	43.08	1795	43.15	-0.07
E. THDC	Tehri HPS	1000	840	855	402	16.11	671	16.00	0.11
	Koteshwar HPS	400	300	302	275	7.06	294	7.00	0.06
	Sub Total (E)	1400	1140	1157	677	23.17	965	23.00	0.17
F. BBMB	Bhakra HPS	1514	958	1340	826	23.21	967	22.98	0.23
	Dehar HPS	990	575	825	580	14.28	595	13.80	0.48
	Pong HPS	396	218	380	124	6.05	252	5.22	0.83
	Sub Total (F)	2900	1750	2545	1530	43.54	1814	42.00	1.54
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	228	229	5.22	218	5.16	0.06
	KWHEP HPS(IPP)	1000	0	1200	1200	28.46	1186	28.51	-0.05
	Malana Stg-II HPS	100	0	113	112	2.67	111	2.51	0.16
	Shree Cement TPS	300	0	143	140	3.41	142	3.42	-0.01
	Budhil HPS(IPP)	70	0	71	71	1.69	70	1.67	0.01
	Sub Total (G)	1662	0	1755	1752	41.45	1727	41.28	0.17
H. Total Regional Entities (A-G)		24289	17441	19800	18048	436.99	18208	428.06	8.93

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	975	912	20.57	857
	Guru Nanak Dev TPS(Bhatinda)	440	330	332	6.53	272
	Guru Hargobind Singh TPS(L.mbt)	920	933	942	20.56	857
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	700	1055	1060	23.89	995
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	3980	3293	3246	71.55	2981
	Total Hydro	1148	977	974	23.26	969
	Total Punjab	5128	4270	4220	94.81	3950
	Haryana	Panipat TPS	1367	206	209	5.02
DCRTPP (Yamuna nagar)		600	466	436	11.05	460
Faridabad GPS (NTPC)		432	161	158	3.81	159
RGTPP (khedar) (IPP)		1200	985	917	21.70	904
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP)		1320	738	740	18.03	751
Thermal (Total)		4944	2556	2460	59.61	2484
Total Hydro		62	17	20	0.49	21
Total Haryana		5006	2573	2480	60.10	2504
Rajasthan		kota TPS	1240	885	723	21.08
	suratgarh TPS	1500	1086	1074	25.49	1062
	Chabra TPS	750	351	336	8.56	357
	Dholpur GPS	330	87	95	2.24	93
	Ramgarh GPS	271	144	129	3.53	147
	RAPS A (NPC)	300	0	0	0.00	0
	Barsingsar (NLC)	250	96	98	2.18	91
	Giral LTPS	250	0	0	0.00	0
	Rajwest LTPS (IPP)	1080	930	950	22.12	922
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	400	7.36	307
	Kawai(Adani)	1320	536	0	9.37	390
	Thermal (Total)	8026	4115	3805	102	4247
	Total Hydro	550	56	63	1.31	55
	Wind power	2798	511	711	12.21	509
	Biomass	99	39	39	0.95	39
	Solar	730	0	0	0.32	13
	Renewable/Others (Total)	3627	550	750	13.48	562
	Total Rajasthan	12203	4721	4618	116.71	4863
	UP	Anpara TPS	1630	896	876	21.10
Obra TPS		1288	435	492	10.50	438
Paricha TPS		1140	743	854	18.60	775
Panki TPS		210	63	0	0.70	29
Harduaganj TPS		665	410	401	9.50	396
Tanda TPS (NTPC)		440	369	382	9.07	378
Roza TPS (IPP)		1200	1099	1098	26.29	1095
Anpara-C (IPP)		1200	720	716	17.13	714
Bajaj Energy Pvt.Ltd(IPP) TPS		450	320	280	7.27	303
Thermal (Total)		8223	5055	5099	120.16	5007
Vishnuparyag HPS (IPP)		400	436	436	10.47	436
Other Hydro		527	179	207	3.33	139
Cogeneration		981	50	50	1.20	50
Total UP		10131	5720	5792	135.15	5195
Uttarakhand		Total Hydro	1303	752	771	15.03
	Total Uttarakhand	1303	752	771	15.03	626
Delhi	Rajghat TPS	135	96	91	2.04	85
	Delhi Gas Turbine	282	146	150	3.52	147
	Pragati Gas Turbine	330	280	286	6.84	285
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	302	299	7.10	296
	Badarpur TPS (NTPC)	705	222	424	8.94	372
	Thermal (Total)	2917	1046	1250	28.44	1185
	Total Delhi	2917	1046	1250	28.44	1185
HP	Baspa HPS (IPP)	300	332	332	7.78	324
	Malana HPS (IPP)	86	104	104	2.47	103
	Other Hydro	728	488	494	11.63	485
	Total HP	1114	924	930	21.88	912
J & K	Baqilhar HPS (IPP)	450	438	438	10.51	438
	Other Hydro/IPP	436	163	175	4.22	176
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	601	613	14.73	614
Total State Control Area Generation		38896	20607	20674	486.84	19849
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5397.93	5357.68	124.72	5197
Total Regional Availability(Gross)		63186	45805	44080	1048.55	43253

IV. Total Hydro Generation:

Regional Entities Hydro	11302	10623	8826	225.18	9383
State Control Area Hydro	5589	3506	3578	90.50	3335
Total Regional Hydro	16891	14129	12404	315.68	12717

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	50	100	400	0.80	2.66	-1.85
Gwalior-Agra (D/C)	1735	1315	1905	0	32.73	0.00	32.73
Zerda-Kankroli	-79	-160	0	322	0.00	4.15	-4.15
Zerda-Bhinmal	-82	-174	0	174	0.00	3.93	-3.93
Malanpur-Auraiya	-110	-53	0	110	0.00	1.45	-1.45
Badod-Kota/Morak	-27	-31	0	117	0.00	1.45	-1.45
Mundra-Mohindergarh(HVDC)	2002	2302	2305	0	50.80	0.00	50.80
Vindhychal - Rihand	430	380	490	0	11.32	0.00	11.32
Sub Total WR	3819	3629			95.64	13.64	82.00
Pusaui Bypass	400	400	400	0	9.69	0.00	9.69
MZP- GKP (D/C)	374	472	668	0	11.26	0.00	11.26
Patna-Balia(D/C)	497	511	578	0	11.48	0.00	11.48
B'Sharif-Balia (D/C)	174	179	272	0	4.40	0.00	4.40
Pusaui-Balia	-86	-77	0	103	0.00	1.78	-1.78
Gaya-Fatehpur (765 Kv)	5	29	117	32	1.11	0.00	1.11
Pusaui-Sahupuri	140	147	196	0	3.61	0.00	3.61
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-37	-33	0	40	0.00	0.73	-0.73
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	112	101	224	0	3.18	0.00	3.18
Sub Total ER	1579	1729			45.22	2.51	42.71
Total IR Exch	5398	5358			140.86	16.15	124.72

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
19.38	3.77	23.15	13.44	6.66	-3.61	5.64	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
34.02	64.48	98.50	42.71	82.00	124.72	8.69	17.52	26.21

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	0.66	12.68	54.34	63.31	14.71	7.22	2.08	NA

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
50.31	17.34	49.77	20.13	49.99	0.08	0.09	50.29	49.91

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	408	17:14	401	00:05	0.0	0.0	0.0	0.0
Gorakhpur	400	413	05:06	399	19:28	0.0	0.0	0.0	0.0
Bareilly	400	417	17:34	400	19:36	0.0	0.0	0.0	0.0
Kanpur	400	420	17:32	406	00:08	0.0	0.0	0.0	0.0
Dadri	400	414	17:32	396	00:09	0.0	0.0	0.0	0.0
Ballabgarh	400	421	17:04	403	00:08	0.0	0.0	0.7	0.0
Bawana	400	415	17:31	400	00:11	0.0	0.0	0.0	0.0
Bassi	400	430	17:03	413	00:09	0.0	0.0	49.3	0.0
Hissar	400	409	17:04	394	00:10	0.0	0.0	0.0	0.0
Moga	400	415	05:42	401	19:18	0.0	0.0	0.0	0.0
Abdullapur	400	414	17:04	396	00:11	0.0	0.0	0.0	0.0
Nalagarh	400	413	05:02	403	12:13	0.0	0.0	0.0	0.0
Kishenpur	400	414	05:06	406	19:36	0.0	0.0	0.0	0.0
Wagoora	400	410	01:29	394	20:27	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	781	17:04	749	19:37	0.0	0.0	0.0	0.0
Balia	765	779	06:05	754	19:34	0.0	0.0	0.0	0.0
Moga	765	781	17:36	761	00:20	0.0	0.0	0.0	0.0
Agra	765	800	17:31	763	00:10	0.0	0.0	0.0	0.0
Bhiwani	765	796	17:32	767	00:09	0.0	0.0	0.0	0.0
Unnao	765	767	17:32	743	00:09	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	1346	276	0	1297	197	0	31.51	9.93	41.44
Delhi	313	-97	-51	352	-112	-49	11.39	-4.75	6.64
Haryana	1528	178	0	1482	-199	0	34.68	0.58	35.26
HP	-1143	-297	0	-991	-280	0	-23.23	-7.85	-31.08
J&K	-334	-83	0	-334	104	0	-10.09	-1.73	-11.81
CHD	0	0	0	0	0	0	0.33	0.00	0.33
Rajasthan	-791	421	3	-791	-9	0	-17.29	9.56	-7.74
UP	537	344	48	254	541	49	8.23	4.61	12.84
Uttarakhand	96	-11	0	96	-1	0	2.30	-0.13	2.18
Total	1551	730	0	1364	242	0	37.84	10.22	48.06

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1346	1297	645	147	0	0
Delhi	825	264	239	-471	-2	-51
Haryana	1528	1279	181	-480	0	0
HP	-839	-1143	-229	-423	0	0
J&K	-334	-537	104	-324	0	0
CHD	41	0	0	0	0	0
Rajasthan	-550	-791	719	-9	3	0
UP	591	202	639	0	49	0
Uttarakhand	96	96	20	-11	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 27.07.2014 :**

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 :**