

पाँवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.07.2014
Date of Reporting : 23.07.2014

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
43928	3732	47660	49.87	43271	2230	45501	50.00	1023.6	56.16

* 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	67.26	23.35		90.61	126.53	126.57	0.04	217.18	0.00
Haryana	64.75	0.48		65.23	114.88	112.51	-2.37	177.74	1.76
Rajasthan	108.79	0.03	23.37	132.19	42.29	41.13	-1.16	173.32	0.00
Delhi	31.68			31.68	81.00	79.48	-1.52	111.15	0.19
UP	119.70	4.30	1.20	125.20	118.59	120.98	2.39	246.18	51.46
Uttarakhand		20.44		20.44	12.24	13.72	1.48	34.16	1.06
HP		25.50		25.50	-1.07	-0.51	0.55	24.99	0.00
J & K		14.73	0.00	14.73	17.45	18.28	0.83	33.01	1.70
Chandigarh				0.00	5.52	5.92	0.39	5.92	0.00
Total	392.18	88.83	24.57	505.58	517.42	518.06	0.63	1023.64	56.16

* 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	9345	0	-59	1574	9421	0	27	1903	9479
Haryana	7887	176	8	1749	7717	0	0	1927	8295
Rajasthan	7210	0	-42	-720	6863	0	13	-283	8037
Delhi	4827	6	76	527	4404	0	-115	254	5216
UP	10213	3265	147	254	10912	2230	-93	526	11105
Uttarakhand	1497	185	67	-10	1408	0	134	26	1546
HP	1006	0	-30	-1215	903	0	-21	-1333	1181
J&K	1674	100	12	-205	1437	0	51	-334	1704
Chandigarh	270	0	30	0	207	0	5	0	318
Total	43928	3732	208	1953	43271	2230	0	2686	45062

* 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	1641	1795	1778	39.46	1644	39.31	0.15
	Rihand I STPS	1000	727	770	822	18.87	786	16.98	1.89
	Rihand II STPS	1000	727	763	822	18.58	774	16.90	1.69
	Rihand III STPS	1000	705	765	660	17.09	712	15.47	1.62
	Dadri I STPS	840	770	753	733	17.90	746	17.00	0.90
	Dadri II STPS	980	475	464	417	10.79	450	10.76	0.03
	Unchahar I TPS	420	383	435	366	9.79	408	8.96	0.83
	Unchahar II TPS	420	400	439	420	9.96	415	8.99	0.98
	Unchahar III TPS	210	198	220	205	4.92	205	4.47	0.46
	ISTPP (Jhajjar)	1500	950	922	663	16.85	702	17.16	-0.31
	Dadri GPS	830	519	365	292	8.17	341	8.30	-0.13
	Anta GPS	419	384	256	258	5.91	246	5.72	0.19
	Auraiya GPS	663	617	151	145	3.62	151	3.47	0.15
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.01	0	0.07	-0.06
	Sub Total (A)	11297	8501	8098	7581	182	7581	174	8
B. NPC	NAPS	440	275	302	305	6.44	268	6.60	-0.16
	RAPS- B	440	396	440	440	9.51	396	9.50	0.01
	RAPS- C	440	375	375	375	8.74	364	9.00	-0.26
	Sub Total (B)	1320	1046	1117	1120	24.69	1029	25.10	-0.42
C. NHPC	Chamera I HPS	540	534	552	545	13.15	548	12.82	0.34
	Chamera II HPS	300	301	309	307	7.30	304	7.22	0.08
	Chamera III HPS	231	229	237	234	5.59	233	5.50	0.10
	Bairasui HPS	180	178	180	140	3.06	127	2.92	0.14
	Salal-HPS	690	658	664	668	16.00	667	15.79	0.21
	Tanakpur-HPS	94	63	58	79	1.56	65	1.52	0.05
	Uri-HPS	480	475	478	475	11.53	480	11.40	0.13
	Uri-II HPS	240	240	249	244	5.85	244	5.76	0.09
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	386	396	396	9.33	389	9.26	0.06
	Sewa-II HPS	120	119	98	0	1.06	44	0.90	0.16
	Parbati 3	390	185	264	135	4.58	191	4.50	0.08
	Sub Total ©	3935	3368	3484	3223	79	3292	78	1
D.SJVNL	NJPC	1500	1605	1613	1615	34.89	1454	34.84	0.05
	Rampur HEP	275	197	290	220	4.85	202	4.73	0.12
	Sub Total (D)	1775	1802	1903	1835	39.74	1656	39.57	0.17
E. THDC	Tehri HPS	1000	784	790	523	12.22	509	12.00	0.22
	Koteshwar HPS	400	400	400	101	5.09	212	5.05	0.04
	Sub Total (E)	1400	1184	1190	624	17.31	721	17.05	0.26
F. BBMB	Bhakra HPS	1514	936	1340	909	22.79	950	22.47	0.32
	Dehar HPS	990	575	800	560	14.31	596	13.79	0.52
	Pong HPS	396	196	372	126	4.82	201	4.71	0.11
	Sub Total (F)	2900	1707	2512	1595	41.92	1747	40.97	0.95
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	229	229	5.43	226	5.28	0.15
	KWHEP HPS(IPP)	1000	0	1200	1200	27.99	1166	28.16	-0.17
	Malana Stg-II HPS	100	0	113	111	2.65	110	2.49	0.16
	Shree Cement TPS	300	0	265	189	5.07	211	5.00	0.08
	Budhil HPS(IPP)	70	0	71	71	1.69	70	1.67	0.01
	Sub Total (G)	1662	0	1878	1801	42.82	1784	42.60	0.23
H. Total Regional Entities (A-G)		24289	17608	20182	17779	427.44	17810	416.46	10.98

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	1180	1240	26.41	1101
	Guru Nanak Dev TPS(Bhatinda)	440	432	427	9.12	380
	Guru Hargobind Singh TPS(L.mbt)	920	724	719	15.86	661
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	700	700	689	15.87	661
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	3980	3036	3075	67.26	2803
	Total Hydro	1148	976	990	23.35	973
	Total Punjab	5128	4012	4065	90.61	3776
	Haryana	Panipat TPS	1367	676	604	14.91
DCRTPP (Yamuna nagar)		600	552	455	11.42	476
Faridabad GPS (NTPC)		432	191	172	4.41	184
RGTPP (khedar) (IPP)		1200	1144	928	23.18	966
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP)		1320	563	371	10.84	452
Thermal (Total)		4944	3126	2530	64.75	2698
Total Hydro		62	21	20	0.48	20
Total Haryana		5006	3147	2550	65.23	2718
Rajasthan		kota TPS	1240	887	865	20.51
	suratgarh TPS	1500	1041	1043	24.63	1026
	Chabra TPS	750	349	340	8.83	368
	Dholpur GPS	330	0	0	0.00	0
	Ramgarh GPS	271	121	103	3.18	132
	RAPS A (NPC)	300	0	0	0.00	0
	Barsingsar (NLC)	250	97	96	2.17	91
	Giral LTPS	250	0	0	0.00	0
	Rajwest LTPS (IPP)	1080	833	431	15.01	626
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	405	405	9.99	416
	Kawai(Adani)	1320	988	894	24.46	1019
	Thermal (Total)	8026	4721	4177	109	4533
	Total Hydro	550	0	0	0.03	1
	Wind power	2798	561	1268	22.07	920
	Biomass	99	39	39	0.93	39
	Solar	730	0	0	0.37	15
	Renewable/Others (Total)	3627	600	1307	23.37	974
	Total Rajasthan	12203	5321	5484	132.19	5508
	UP	Anpara TPS	1630	872	780	19.70
Obra TPS		1288	471	530	12.00	500
Paricha TPS		1140	765	706	18.10	754
Panki TPS		210	126	131	2.90	121
Harduaganj TPS		665	397	405	9.00	375
Tanda TPS (NTPC)		440	366	363	8.90	371
Roza TPS (IPP)		1200	558	819	18.20	758
Anpara-C (IPP)		1200	902	900	21.40	892
Bajaj Energy Pvt.Ltd(IPP) TPS		450	405	403	9.50	396
Thermal (Total)		8223	4862	5037	119.70	4988
Vishnuparyag HPS (IPP)		400	0	0	0.00	0
Other Hydro		527	218	216	4.30	179
Cogeneration		981	50	50	1.20	50
Total UP		10131	5130	5303	125.20	5217
Uttarakhand		Total Hydro	1303	821	856	20.44
	Total Uttarakhand	1303	821	856	20.44	852
Delhi	Rajghat TPS	135	98	100	2.23	93
	Delhi Gas Turbine	282	179	138	3.81	159
	Pragati Gas Turbine	330	268	287	6.63	276
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	298	294	7.15	298
	Badarpur TPS (NTPC)	705	480	491	11.85	494
	Thermal (Total)	2917	1323	1310	31.68	1320
	Total Delhi	2917	1323	1310	31.68	1320
HP	Baspa HPS (IPP)	300	303	323	7.65	319
	Malana HPS (IPP)	86	103	104	2.46	103
	Other Hydro	728	663	639	15.38	641
	Total HP	1114	1069	1066	25.50	1063
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	21424	21247	505.58	21066
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4564	5632	126.37	5265
Total Regional Availability(Gross)		63186	46170	44658	1059.38	44141

IV. Total Hydro Generation:

Regional Entities Hydro	11302	10631	8817	214.04	8918
State Control Area Hydro	5589	3706	3761	88.83	3701
Total Regional Hydro	16891	14337	12578	302.87	12620

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	-100	-100	300	500	1.67	2.58	-0.91
Gwalior-Agra (D/C)	1481	1705	2103	0	37.67	0.00	37.67
Zerda-Kankroli	-156	-209	0	394	0.00	4.91	-4.91
Zerda-Bhinmal	-157	-135	0	260	0.00	3.79	-3.79
Malanpur-Auraiya	-82	-49	0	78	0.00	1.21	-1.21
Badod-Kota/Morak	-164	-144	0	174	0.00	3.34	-3.34
Mundra-Mohindergarh(HVDC)	1998	2302	2304	0	51.18	0.00	51.18
Vindhychal - Rihand	329	509	513	0	9.17	0.00	9.17
Sub Total WR	3149	3879			99.70	15.84	83.86
Pusaali Bypass	400	400	400	0	9.71	0.00	9.71
MZP- GKP (D/C)	340	594	684	0	12.75	0.00	12.75
Patna-Balia(D/C)	347	511	605	0	9.85	0.00	9.85
B'Sharif-Balia (D/C)	153	211	331	0	5.13	0.00	5.13
Pusaali-Balia	-88	-76	0	94	0.00	1.62	-1.62
Gaya-Fatehpur (765 Kv)	23	-24	149	51	1.12	0.00	1.12
Pusaali-Sahupuri	161	144	161	0	2.97	0.00	2.97
K'nasa-Sahupuri	0	0	0	0	0.00	0.48	-0.48
Son Ngr-Rihand	-22	-36	0	36	0.00	-0.59	0.59
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	101	29	196	9	2.49	0.00	2.49
Sub Total ER	1415	1753			44.02	1.51	42.51
Total IR Exch	4564	5632			143.71	17.34	126.37

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
27.58	3.78	31.36	16.06	13.60	-1.98	2.82	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
45.44	75.13	120.57	42.51	83.86	126.37	-2.93	8.73	5.80

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	2.31	15.99	48.61	78.17	41.53	8.30	1.59	0.03	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			
50.16	8.02	49.49	19.11	49.91	0.20	0.11	50.20	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	410	12:01	403	00:06	0.0	0.0	0.0	0.0
Gorakhpur	400	414	08:01	402	00:07	0.0	0.0	0.0	0.0
Bareilly	400	417	18:04	398	00:11	0.0	0.0	0.0	0.0
Kanpur	400	420	07:03	405	09:44	0.0	0.0	0.0	0.0
Dadri	400	410	06:58	394	14:13	0.0	0.0	0.0	0.0
Ballabgarh	400	420	06:08	401	14:12	0.0	0.0	0.0	0.0
Bawana	400	414	07:04	399	14:13	0.0	0.0	0.0	0.0
Bassi	400	427	04:02	411	11:08	0.0	0.0	33.6	0.0
Hissar	400	408	08:01	393	14:13	0.0	0.0	0.0	0.0
Moga	400	405	21:33	405	21:33	0.0	0.0	0.0	0.0
Abdullapur	400	415	18:04	396	09:37	0.0	0.0	0.0	0.0
Nalagarh	400	411	06:04	389	16:43	0.0	0.1	0.0	0.0
Kishenpur	400	413	06:57	404	19:50	0.0	0.0	0.0	0.0
Wagoora	400	409	06:02	394	19:50	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	08:04	750	09:44	0.0	0.0	0.0	0.0
Balia	765	783	08:01	758	00:09	0.0	0.0	0.0	0.0
Moga	765	780	22:11	776	00:55	0.0	0.0	0.0	0.0
Agra	765	794	18:36	761	09:44	0.0	0.0	0.0	0.0
Bhiwani	765	794	07:04	376	15:16	0.0	0.0	0.0	0.0
Unnao	765	769	08:02	744	00:10	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	1542	361	0	1493	81	0	35.58	8.06	43.64
Delhi	411	-143	-15	500	78	-51	14.42	-1.24	13.19
Haryana	1732	195	0	1686	63	0	38.84	2.42	41.26
HP	-1028	-304	0	-927	-288	0	-20.77	-7.92	-28.69
J&K	-334	0	0	-334	129	0	-10.09	-1.69	-11.77
CHD	0	0	0	0	0	0	0.33	0.25	0.58
Rajasthan	-791	505	3	-791	71	0	-16.92	8.44	-8.47
UP	526	0	0	254	0	0	8.03	0.00	8.03
Uttarakhand	-8	34	0	-8	-2	0	-0.19	0.17	-0.02
Total	2050	647	-12	1873	131	-51	49.24	8.49	57.73

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1542	1439	417	57	0	0
Delhi	1046	362	383	-500	-14	-51
Haryana	1732	1401	205	-326	0	0
HP	-724	-1079	-264	-425	0	0
J&K	-334	-537	129	-300	0	0
CHD	41	0	30	0	0	0
Rajasthan	-496	-791	506	-82	3	0
UP	581	209	0	0	0	0
Uttarakhand	-8	-8	41	-14	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 22.07.2014 :****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 :**