

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.07.2013
Date of Reporting : 23.07.2013

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
39495	940	40435	50.14	36927	480	37407	50.16	903.1	16.24

* 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:

UI [OD:(+ve), UD:(-ve)]

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	48.45	16.39		64.84	125.42	125.83	0.41	190.67	0.00
Haryana	46.39	0.31		46.70	109.76	106.63	-3.13	153.33	0.00
Rajasthan	82.48	0.01	13.86	96.34	45.04	36.89	-8.15	133.23	0.00
Delhi	19.25			19.25	77.04	73.18	-3.86	92.43	0.00
UP	118.68	4.13	1.20	124.01	122.17	117.64	-4.53	241.65	13.08
Uttarakhand		16.31		16.31	16.86	15.77	-1.09	32.08	1.46
HP		22.91		22.91	0.29	-0.11	-0.40	22.80	0.00
J & K		13.91	0.00	13.91	18.66	17.42	-1.24	31.33	1.70
Chandigarh				0.00	6.28	5.61	-0.67	5.61	0.00
Total	315.25	73.97	15.06	404.28	521.51	498.85	-22.66	903.13	16.24

* Shortage furnished by the respective constituent.\$ Others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MWs:

UI/OA/PX IOD/Import: (+ve), UD/Export: (-ve)

State	Evening Peak (20:00 Hrs) MW				Off Peak (03:00 Hrs) MW				Day Energy MU
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	
Punjab	8484	0	118	1924	7986	0	49	1924	46.18
Haryana	6895	0	-538	1700	6020	0	-169	1597	37.81
Rajasthan	5763	0	-278	1	5267	0	-582	-11	-0.30
Delhi	4051	0	-49	262	3489	0	-240	-130	5.28
UP	10107	640	-287	1333	10735	480	119	1728	22.04
Uttarakhand	1382	200	137	204	1267	0	-147	93	3.55
HP	923	0	-62	-1053	831	0	105	-1244	-25.06
J&K	1632	100	3	-143	1133	0	-238	-235	-7.81
Chandigarh	258	0	-29	0	199	0	-33	-12	0.10
Total	39495	940	-985	4226	36927	480	-1135	3710	81.79

* STOA figures are at sellers boundary & PX figures are at regional boundary.

III. Regional Entities :

UI [OG:(+ve), UG:(-ve)]

Entity	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	1735	1857	1346	34.02	1417	33.03	0.99
	Rihand I STPS	1000	921	860	705	16.98	708	16.85	0.13
	Rihand II STPS	1000	971	875	701	17.83	743	17.71	0.12
	Rihand III STPS	500	486	483	352	8.42	351	8.71	-0.29
	Dadri I STPS	840	810	831	632	13.68	570	13.84	-0.16
	Dadri II STPS	980	975	799	705	16.76	698	16.98	-0.22
	Unchahar I TPS	420	399	323	303	7.28	303	7.31	-0.02
	Unchahar II TPS	420	403	309	306	6.98	291	7.07	-0.09
	Unchahar III TPS	210	201	155	153	3.45	144	3.45	0.00
	ISTPP (Jhajhar)	1500	1450	642	631	14.05	585	14.37	-0.32
	Dadri GPS	830	786	568	382	9.88	412	10.85	-0.98
	Anta GPS	419	399	395	353	9.16	382	9.20	-0.04
	Auraiya GPS	663	612	306	308	7.16	299	7.20	-0.04
	Sub Total (A)	10782	10147	8403	6877	165.66	6903	166.57	-0.91
B. NPC	INAPS	440	157	180	178	3.76	157	3.77	0.00
	RAPS- B	440	391	440	437	9.47	394	9.38	0.08
	RAPS- C	440	210	237	236	5.01	209	5.04	-0.03
	Sub Total (B)	1320	758	857	851	18.24	760	18.19	0.04
C. NHPC	Chamera I HPS	540	534	540	540	12.73	531	12.82	-0.08
	Chamera II HPS	300	300	301	305	7.22	301	7.24	-0.02
	Chamera III HPS	231	231	231	232	5.52	230	5.48	0.04
	Bairasui HPS	180	179	110	60	2.18	91	2.04	0.13
	Salal-HPS	690	663	667	667	15.93	664	15.91	0.02
	Tanakpur-HPS	94	37	64	86	0.88	37	0.90	-0.02
	Uri-HPS	480	316	360	302	7.42	309	7.28	0.13
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasi-HPS	390	323	404	406	7.63	318	7.75	-0.12
	Sewa-II HPS	120	119	122	116	2.19	91	2.16	0.03
	Sub Total (C)	3305	2702	2799	2714	61.68	2570	61.57	0.11
D. NJPC	Nathpa Jhakri	1500	1605	1619	1620	38.69	1612	38.49	0.20
	Sub Total (D)	1500	1605	1619	1620	38.69	1612	38.49	0.20
E. THDC	Tehri HPS	1000	929	800	983	22.33	931	22.21	0.12
	Koteswar HPS	400	371	380	342	8.02	334	8.00	0.02
	Sub Total (E)	1400	1299	1180	1325	30.35	1265	30.21	0.14
F. BBMB	Bhakra HPS	1480	1333	1352	1364	32.38	1349	31.98	0.40
	Dehar HPS	990	604	825	610	14.98	624	14.49	0.49
	Pong HPS	396	219	372	126	5.49	229	5.26	0.23
	Sub Total (F)	2866	2155	2549	2100	52.85	2202	51.73	1.12
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	218	173	4.37	182	4.61	-0.24
	KWHEP HPS(IPP)	1000	0	1203	1197	28.43	1185	28.51	-0.08
	Malana Stg-II HPS	100	0	111	112	2.60	108	2.40	0.20
	Shree Cement TPS	300	0	172	200	4.04	168	4.09	-0.06
	Budhil HPS(IPP)	70	0	71	69	1.66	69	1.63	0.02
	Sub Total (G)	1662	0	1775	1751	41.09	1712	41.25	-0.16
H. Total Regional Entities (A-G)	22836	18667	19182	17238	408.57	17024	408.02	0.55	

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	1260	1040	25.66	1069	
	Guru Nanak Dev TPS(Bhatinda)	440	190	180	4.06	169	
	Guru Hargobind Singh TPS(L.mbt)	920	947	825	18.74	781	
	Goindwal(GVK)		0	0	0.00	0	
	Thermal (Total)	2620	2397	2045	48.45	2019	
	Total Hydro	1148	734	664	16.39	683	
	Total Punjab	3768	3131	2709	64.84	2702	
Haryana	Panipat TPS	1367	650	594	14.14	589	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	192	161	4.32	180	
	RGTPP (khedar) (IPP)	1200	553	371	9.58	399	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	768	663	18.35	765	
	Thermal (Total)	4944	2163	1789	46.39	1933	
	Total Hydro	62	10	29	0.31	13	
		Total Haryana	5006	2173	1818	46.70	1946
	Rajasthan	kota TPS	1240	860	766	19.17	799
suratgarh TPS		1500	787	976	20.65	860	
Chabra TPS		500	188	192	4.38	182	
Dholpur GPS		330	125	117	2.56	107	
Ramgarh GPS		111	141	62	2.73	114	
RAPS A (NPC)		300	176	176	4.29	179	
Barsingar (NLC)		250	180	148	4.38	182	
Giral LTPS		250	69	80	1.69	70	
Rajwest LTPS (IPP)		1080	468	383	11.31	471	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Kalisindh Thermal		600	0	0	0.00	0	
Kawai(Adani)		660	496	460	11.31	471	
Thermal (Total)		6956	3490	3360	82.48	3437	
Total Hydro		550	0	0	0.01	0	
Wind power		2191	421	609	11.49	479	
Biomass		91	29	29	0.70	29	
Solar		201	0	0	1.66	69	
		Renewable/Others (Total)	2483	450	638	13.86	577
	Total Rajasthan	9989	3940	3998	96.34	4014	
UP	Anpara TPS	1630	1312	1297	28.20	1175	
	Obra TPS	1288	519	499	10.90	454	
	Paricha TPS	1140	705	665	15.00	625	
	Panki TPS	210	170	115	3.10	129	
	Harduaganj TPS	665	382	386	8.10	338	
	Tanda TPS (NTPC)	440	387	393	9.54	397	
	Roza TPS (IPP)	1200	821	833	19.70	821	
	Anpara-C (IPP)	1200	783	704	18.36	765	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	233	269	5.78	241	
	Thermal (Total)	8223	5312	5161	118.68	4945	
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0	
	Other Hydro	527	185	223	4.13	172	
	Cogeneration	981	50	50	1.20	50	
		Total UP	10131	5547	5434	124.01	5167
	Uttarakhand	Total Hydro	1303	564	749	16.31	680
Total Uttarakhand		1303	564	749	16.31	680	
Delhi	Rajghat TPS	135	37	49	0.95	39	
	Delhi Gas Turbine	282	72	72	1.57	66	
	Pragati Gas Turbine	330	267	265	5.96	248	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	490	495	10.77	449	
	Thermal (Total)	2232	866	881	19.25	802	
		Total Delhi	2232	866	881	19.25	802
HP	Baspa HPS (IPP)	330	335	305	7.66	319	
	Malana HPS (IPP)	86	100	101	2.30	96	
	Other Hydro	589	572	477	12.95	540	
		Total HP	1005	1007	883	22.91	954
J & K	Baglihar HPS (IPP)	450	436	440	10.57	440	
	Other Hydro	323	140	139	3.34	139	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	576	579	13.91	580
Total State Control Area Generation		34390	17804	17051	404.28	16845	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5434	4305	106.93	4455	
Total Regional Availability(Gross)		57226	42420	38594	919.78	38324	

IV. Total Hydro Generation:

Regional Entities Hydro	10364	9679	9241	218.98	9124
State Control Area Hydro	5368	3076	3127	73.97	3082
Total Regional Hydro	15731	12755	12368	292.95	12206

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	500	500	0	9.25	0.00	9.25
Gwalior-Agra (D/C)	1637	1320	1907	0	34.87	0.00	34.87
Zerda-Kankroli	89	-168	89	326	0.00	3.04	-3.04
Zerda-Bhinmal	94	-158	126	308	0.00	2.48	-2.48
Malanpur-Auraiya	-34	-37	0	86	0.00	0.81	-0.81
Badod-Kota/Morak	8	-46	30	140	0.00	1.28	-1.28
Mundra-Mohindergarh(HVDC)	1447	1006	1449	0	25.98	0.00	25.98
Sub Total WR	3741	2417			70.09	7.61	62.49
Pusauli Bypass	-306	-208	0	306	0.00	5.45	-5.45
MZP- GKP (D/C)	620	734	802	0	16.00	0.00	16.00
Patna-Balia(D/C)	546	597	711	0	14.18	0.00	14.18
B Sharif-Balia (D/C)	389	456	540	0	10.36	0.00	10.36
Pusauli-Balia	54	81	124	12	1.44	0.20	1.25
Gaya-Fatehpur (765 Kv)	57	-14	89	27	0.78	0.00	0.78
Pusauli-Sahupuri	154	187	188	0	4.21	0.00	4.21
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-38	-40	0	45	0.00	0.90	-0.90
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	217	95	259	0	4.01	0.00	4.01
Sub Total ER	1693	1888			50.98	6.54	44.44
Total IR Exch	5434	4305			121.07	14.14	106.93

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
34.32	3.73	38.04	7.83	42.89	2.40	-7.53	2.49	-2.49

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
50.76	78.99	129.75	44.44	62.49	106.93	-6.32	-16.51	-22.82

VI. Frequency Profile ←----- % of Time Frequency ----->

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7-49.8	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	0.00	0.00	87.80	0.30	87.80	64.40	12.20

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.36	8.04	49.73	15.45	50.05	0.16	0.11	50.40	49.95

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	414	06:08	400	20:04	0.0	0.0	0.0	0.0
Gorakhpur	400	420	06:31	401	20:09	0.0	0.0	0.0	0.0
Bareilly	400	419	06:09	398	11:25	0.0	0.0	0.0	0.0
Kanpur	400	421	06:08	403	10:56	0.0	0.0	1.3	0.0
Dadri	400	409	17:51	397	11:51	0.0	0.0	0.0	0.0
Ballabgarh	400	424	06:08	405	11:39	0.0	0.0	17.4	0.0
Bawana	400	417	06:08	400	11:39	0.0	0.0	0.0	0.0
Bassi	400	430	04:02	409	11:17	0.0	0.0	39.0	0.0
Hissar	400	409	06:24	392	12:19	0.0	0.0	0.0	0.0
Moga	400	412	03:53	397	12:19	0.0	0.0	0.0	0.0
Abdullapur	400	412	06:20	397	11:32	0.0	0.0	0.0	0.0
Nalagarh	400	414	03:52	401	14:35	0.0	0.0	0.0	0.0
Kishenpur	400	419	07:17	403	20:37	0.0	0.0	0.0	0.0
Wagoora	400	419	07:16	391	20:36	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	778	06:10	734	19:52	0.0	8.8	0.0	0.0
Balia	765	769	06:14	715	21:15	18.4	56.0	0.0	0.0
Moga	765	775	04:01	746	19:52	0.0	0.0	0.0	0.0
Agra	765	805	06:08	766	11:25	0.0	0.0	5.6	0.0
Bhiwani	765	785	08:03	753	11:47	0.0	0.0	0.0	0.0
Unnao	765	760	00:00	733	19:30	0.0	18.8	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	500.54	1114.30	474.64	345.61	1486.55	1015.89
Pong	426.72	384.05	412.53	577.87	392.32	84.61	919.22	340.65
Tehri	829.79	740.04	802.30	644.00	818.65	982.26	917.00	541.00
Koteshwar	612.50	598.50	608.30	3.76	NA	NA	541.00	532.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	295.63	344.88
Rihand	268.22	252.98	254.72	65.50	254.20	45.50	NA	NA
RPS	352.80	343.81	350.04	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.42	NA	NA	NA	NA	NA
RSD	527.91	487.91	512.06	144.00	501.24	144.00	343.96	284.78

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 22.07.2013 :

1.NORMAL WEATHER.

XIII. Synchronisation of new generating units :

XIV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :

1. Dhauliganga (280 MW) closed down till 30.09.2013 due to flooding of power house.
2. Vishnuprayg(UPPCL) (400 MW) Closed due to High Silt level in river water.
3. MANERI BHALI STG-1(90MW)/Utrakhand closed down due to flush flooding.

Report for : 22.07.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER