

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 20.07.2013
Date of Reporting : 21.07.2013

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
37191	1490	38681	50.07	38485	1760	40245	50.26	890.5	30.59

* 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	45.17	14.34		59.52	120.93	121.09	0.17	180.61	5.30
Haryana	51.74	0.21		51.96	108.47	105.43	-3.04	157.38	0.00
Rajasthan	81.86	0.00	17.25	99.10	48.99	44.26	-4.73	143.36	0.00
Delhi	19.99			19.99	72.06	65.93	-6.13	85.92	0.06
UP	114.81	3.78	1.20	119.78	121.28	116.31	-4.97	236.09	20.81
Uttarakhand		17.31		17.31	16.33	17.20	0.88	34.51	2.73
HP		23.47		23.47	2.09	-0.57	-2.66	22.90	0.00
J & K		13.91	0.00	13.91	16.44	10.70	-5.74	24.61	1.70
Chandigarh				0.00	5.69	5.13	-0.57	5.13	0.00
Total	313.57	73.02	18.45	405.03	512.27	485.48	-26.79	890.51	30.59

* 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	STOA/PX transaction
Punjab	7466	0	-56	1923	8105	600	60	1923	46.16
Haryana	6784	0	-191	1645	6815	0	105	1170	34.93
Rajasthan	5710	0	-30	-193	6176	0	-71	-97	-3.36
Delhi	3546	0	-185	217	3924	0	-130	-162	3.29
UP	9789	1280	-609	1332	10601	1160	-309	2049	24.57
Uttarakhand	1341	110	85	258	1156	0	-18	108	4.27
HP	921	0	-132	-1101	824	0	-109	-1201	-24.70
J&K	1399	100	-192	-144	688	0	-600	-186	-7.69
Chandigarh	236	0	-32	0	197	0	-23	0	0.05
Total	37191	1490	-1341	3938	38485	1760	-1096	3604	77.53

* 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	1881	1866	39.92	1663	39.89	0.02
	Rihand I STPS	1000	915	983	898	18.68	778	18.91	-0.23
	Rihand II STPS	1000	824	853	737	16.79	700	16.94	-0.15
	Rihand III STPS	500	480	456	414	9.94	414	10.14	-0.20
	Dadri I STPS	840	810	650	808	15.30	637	15.31	-0.02
	Dadri II STPS	980	975	710	873	17.31	721	17.89	-0.58
	Unchahar I TPS	420	399	333	304	7.19	299	7.25	-0.07
	Unchahar II TPS	420	403	313	305	6.89	287	6.92	-0.03
	Unchahar III TPS	210	201	156	153	3.38	141	3.39	-0.01
	ISTPP (Jhajjar)	1500	1450	644	631	13.96	582	14.28	-0.32
	Dadri GPS	830	781	389	358	9.02	376	9.37	-0.35
	Anta GPS	419	398	398	380	9.13	380	9.23	-0.10
	Auraiva GPS	663	607	311	311	7.19	300	7.15	0.04
	Sub Total (A)		10782	9977	8077	8038	174.69	7279	176.67
B. NPC	INAPS	440	157	176	180	3.77	157	3.77	0.00
	RAPS- B	440	391	435	434	9.37	390	9.38	-0.01
	RAPS- C	440	210	235	237	4.97	207	5.04	-0.07
	Sub Total (B)		1320	758	846	851	18.12	755	18.19
C. NHPC	Chamera I HPS	540	534	540	360	11.00	458	11.13	-0.12
	Chamera II HPS	300	300	305	306	7.27	303	7.25	0.02
	Chamera III HPS	231	231	234	232	5.44	227	5.40	0.04
	Bairasuli HPS	180	179	179	60	2.53	105	2.55	-0.03
	Salal-HPS	690	550	548	551	13.08	545	13.20	-0.12
	Tanakpur-HPS	94	84	86	81	1.89	79	2.01	-0.12
	Uri-HPS	480	355	412	368	7.82	326	8.33	-0.51
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	407	320	9.33	389	9.35	-0.02
	Sewa-II HPS	120	119	125	0	2.01	84	2.02	0.00
	Sub Total (C)		3305	2739	2836	2278	60.37	2515	61.23
D. NJPC	Nathpa Jhakri	1500	1605	1622	1625	38.73	1614	38.51	0.23
	Sub Total (D)		1500	1605	1622	38.73	1614	38.51	0.23
E. THDC	Tehri HPS	1000	626	734	0	9.58	399	9.36	0.22
	Koteshwar HPS	400	231	187	292	5.28	220	5.54	-0.26
	Sub Total (E)		1400	856	921	292	14.86	619	14.90
F. BBMB	Bhakra HPS	1480	1347	1354	1362	32.58	1358	32.33	0.25
	Dehar HPS	990	392	825	600	9.60	400	9.40	0.20
	Pong HPS	396	217	366	126	5.30	221	5.20	0.10
	Sub Total (F)		2866	1955	2545	2088	47.48	1978	46.93
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	219	193	5.31	221	4.81	0.50
	KWHEP HPS(IPP)	1000	0	1197	1185	28.31	1179	28.51	-0.21
	Malana Stg-II HPS	100	0	114	113	2.71	113	2.52	0.19
	Shree Cement TPS	300	0	172	200	4.06	169	4.09	-0.03
	Budhil HPS(IPP)	70	0	0	69	0.56	23	0.95	-0.39
	Sub Total (G)		1662	0	1702	1760	40.95	1706	40.89
H. Total Regional Entities (A-G)		22836	17890	18549	16932	395.20	16467	397.31	-2.12

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	1060	1160	24.52	1022	
	Guru Nanak Dev TPS(Bhatinda)	440	180	210	4.02	167	
	Guru Hargobind Singh TPS(L.mbt)	920	656	936	16.63	693	
	Goindwal(GVK)		0	0	0.00	0	
	Thermal (Total)	2620	1896	2306	45.17	1882	
	Total Hydro	1148	513	679	14.34	598	
	Total Punjab	3768	2409	2985	59.52	2480	
Haryana	Panipat TPS	1367	600	544	13.93	580	
	DCRTPP (Yamuna nagar)	600	0	263	2.97	124	
	Faridabad GPS (NTPC)	432	193	304	5.99	249	
	RGTPP (khedar) (IPP)	1200	333	439	9.91	413	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	663	665	18.95	790	
	Thermal (Total)	4944	1789	2215	51.74	2156	
	Total Hydro	62	0	25	0.21	9	
		Total Haryana	5006	1789	2240	51.96	2165
	Rajasthan	kota TPS	1240	866	867	19.74	822
suratgarh TPS		1500	881	774	18.47	770	
Chabra TPS		500	206	201	4.66	194	
Dholpur GPS		330	114	123	2.85	119	
Ramgarh GPS		111	98	118	2.80	117	
RAPS A (NPC)		300	176	176	4.29	179	
Barsingar (NLC)		250	151	180	3.79	158	
Giral LTPS		250	62	62	1.35	56	
Rajwest LTPS (IPP)		1080	468	383	11.43	476	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Kalisindh Thermal		600	0	0	0.00	0	
Kawai(Adani)		660	484	544	12.49	520	
Thermal (Total)		6956	3506	3428	81.86	3411	
Total Hydro		550	0	0	0.00	0	
Wind power		2191	338	849	15.18	632	
Biomass		91	31	2323	0.56	23	
Solar		201	0	0	1.51	63	
Renewable/Others (Total)		2483	369	3172	17.25	719	
		Total Rajasthan	9989	3875	6600	99.10	4129
UP		Anpara TPS	1630	1022	1202	27.10	1129
	Obra TPS	1288	476	448	10.90	454	
	Paricha TPS	1140	450	539	12.40	517	
	Panki TPS	210	144	108	3.20	133	
	Harduaganj TPS	665	220	214	5.20	217	
	Tanda TPS (NTPC)	440	394	393	9.36	390	
	Roza TPS (IPP)	1200	824	999	21.23	884	
	Anpara-C (IPP)	1200	806	764	18.37	765	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	292	293	7.05	294	
	Thermal (Total)	8223	4628	4960	114.81	4784	
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0	
	Other Hydro	527	166	196	3.78	157	
	Cogeneration	981	50	50	1.20	50	
		Total UP	10131	4844	5206	119.78	4991
	Uttarakhand	Total Hydro	1303	362	680	17.31	721
		Total Uttarakhand	1303	362	680	17.31	721
Delhi	Rajghat TPS	135	30	31	0.68	28	
	Delhi Gas Turbine	282	73	191	3.18	133	
	Pragati Gas Turbine	330	262	298	6.57	274	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	480	410	9.55	398	
	Thermal (Total)	2232	845	930	19.99	833	
		Total Delhi	2232	845	930	19.99	833
HP	Baspa HPS (IPP)	330	307	307	7.36	307	
	Malana HPS (IPP)	86	106	106	2.54	106	
	Other Hydro	589	611	592	13.56	565	
		Total HP	1005	1024	1005	23.47	978
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	15724	20225	405.03	16876	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4653	3659	85.11	3546	
Total Regional Availability(Gross)		57226	38926	40816	885.33	36889	

IV. Total Hydro Generation:

Regional Entities Hydro	10364	9454	7774	197.77	8240
State Control Area Hydro	5368	2641	3164	73.02	3042
Total Regional Hydro	15731	12095	10938	270.79	11283

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	500	300	2.88	2.39	0.49
Gwalior-Agra (D/C)	1483	1230	1836	0	31.28	0.00	31.28
Zerda-Kankroli	11	-155	73	270	0.00	2.93	-2.93
Zerda-Bhinmal	-24	-138	112	249	0.00	2.10	-2.10
Malanpur-Auraiya	-50	-51	0	71	0.00	1.16	-1.16
Badod-Kota/Morak	-9	-95	28	147	0.00	1.58	-1.58
Mundra-Mohindergarh(HVDC)	1447	1401	1450	0	30.83	0.00	30.83
Sub Total WR	2908	2292			64.99	10.16	54.83
Pusauli Bypass	-249	-292	0	345	0.00	7.05	-7.05
MZP- GKP (D/C)	700	642	700	0	14.16	0.00	14.16
Patna-Balia(D/C)	488	398	488	0	9.04	0.00	9.04
B Sharif-Balia (D/C)	283	230	283	0	5.19	0.00	5.19
Pusauli-Balia	-24	-29	7	33	0.00	0.37	-0.37
Gaya-Fatehpur (765 Kv)	136	37	136	14	0.83	0.00	0.83
Pusauli-Sahupuri	153	208	208	0	4.23	0.00	4.23
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)	296	213	296	0	5.16	0.00	5.16
Sub Total ER	1745	1367			38.60	8.32	30.28
Total IR Exch	4653	3659			103.59	18.48	85.11

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
35.44	3.74	39.18	7.93	42.65	1.04	-9.61	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
50.64	81.06	131.70	30.28	54.83	85.11	-20.36	-26.23	-46.59

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	0.45	74.27	0.07	73.82	97.74	25.73

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz	Index			
50.63	8.02	49.58	19.24	50.22	0.63	0.11	50.53	50.00

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	07:19	400	21:30	0.0	0.0	0.0	0.0
Gorakhpur	400	424	07:49	400	20:32	0.0	0.0	9.6	0.0
Bareilly	400	423	07:21	399	19:47	0.0	0.0	3.9	0.0
Kanpur	400	422	04:03	402	19:45	0.0	0.0	5.7	0.0
Dadri	400	415	02:25	406	00:45	0.0	0.0	0.0	0.0
Ballabgarh	400	425	03:59	408	19:45	0.0	0.0	30.7	0.0
Bawana	400	420	04:03	403	19:42	0.0	0.0	0.0	0.0
Bassi	400	431	04:04	409	19:45	0.0	0.0	36.7	0.1
Hissar	400	412	04:00	396	19:23	0.0	0.0	0.0	0.0
Moga	400	414	00:37	396	00:46	0.0	0.0	0.0	0.0
Abdullapur	400	417	04:03	400	19:22	0.0	0.0	0.0	0.0
Nalagarh	400	416	03:53	405	12:26	0.0	0.0	0.0	0.0
Kishenpur	400	420	03:53	405	19:22	0.0	0.0	0.0	0.0
Wagoora	400	416	01:57	393	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	780	07:52	734	19:48	0.0	1.5	0.0	0.0
Balia	765	766	07:24	721	19:51	6.1	57.4	0.0	0.0
Moga	765	800	00:37	740	00:45	0.0	0.5	0.0	0.0
Agra	765	811	04:06	772	19:23	0.0	0.0	13.3	0.0
Bhiwani	765	794	02:04	754	01:17	0.0	0.0	0.0	0.0
Unnao	765	777	07:21	737	12:25	0.0	2.8	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	499.96	1088.42	474.03	334.98	1726.87	1032.00
Pong	426.72	384.05	411.83	555.85	392.85	93.10	3327.82	334.68
Tehri	829.79	740.04	799.30	595.00	818.65	982.26	855.00	236.00
Koteshwar	612.50	598.50	606.30	2.90	NA	NA	236.00	350.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	402.63	297.95
Rihand	268.22	252.98	254.66	63.10	254.08	40.90	NA	NA
RPS	352.80	343.81	349.88	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.00	NA	NA	NA	NA	NA
RSD	527.91	487.91	511.76	150.00	501.68	144.00	363.13	343.03

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 20.07.2013 :

1.WIDESPREAD RAIN IN NR REGION.

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 : 20.07.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER