

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 29.07.2013
Date of Reporting : 30.07.2013

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
40398	3059	43457	50.06	38317	2055	40372	50.11	939.5	58.93

* 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:

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	52.03	20.49		72.52	126.45	125.34	-1.11	197.85	20.69
Haryana	45.04	0.72		45.76	120.30	118.19	-2.11	163.96	0.02
Rajasthan	66.51	3.08	16.42	86.00	51.42	46.33	-5.10	132.33	0.22
Delhi	18.46			18.46	85.29	84.16	-1.13	102.62	0.70
UP	116.29	4.46	1.20	121.95	127.07	125.96	-1.11	247.91	35.61
Uttarakhand		15.85		15.85	18.90	16.85	-2.04	32.70	0.00
HP		24.66		24.66	1.11	-0.59	-1.70	24.07	0.00
J & K		13.64	0.00	13.64	18.96	17.15	-1.81	30.79	1.70
Chandigarh				0.00	6.07	7.31	1.24	7.31	0.00
Total	298.33	82.90	17.62	398.84	555.56	540.70	-14.86	939.54	58.93

* 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	8355	875	-37	1924	8412	520	-35	1785	45.34
Haryana	7410	0	-189	1726	6629	0	-14	1357	35.78
Rajasthan	5781	184	-77	1	5052	0	-437	-13	-0.11
Delhi	4463	0	-20	313	3781	235	-50	-333	3.46
UP	9950	1900	-38	725	11041	1300	-185	1699	19.99
Uttarakhand	1576	0	-19	296	1197	0	-237	153	5.03
HP	989	0	133	-1090	842	0	155	-1181	-24.50
J&K	1581	100	-40	-93	1138	0	-234	-184	-6.60
Chandigarh	294	0	20	0	224	0	-15	-8	0.14
Total	40398	3059	-267	3800	38317	2055	-1052	3273	78.51

* 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	Net MU
A. NTPC	Singrauli STPS	2000	1735	1781	1476	38.71	1613	38.32	0.39
	Rihand I STPS	1000	890	937	802	17.59	733	18.21	-0.62
	Rihand II STPS	1000	825	526	825	17.03	710	17.25	-0.22
	Rihand III STPS	500	485	499	391	10.21	425	10.27	-0.06
	Dadri I STPS	840	810	872	875	18.83	785	19.22	-0.39
	Dadri II STPS	980	975	998	974	22.96	957	23.11	-0.15
	Unchahar I TPS	420	395	418	413	8.72	363	8.86	-0.14
	Unchahar II TPS	420	403	440	414	8.71	363	8.79	-0.08
	Unchahar III TPS	210	201	214	195	4.06	169	4.17	-0.11
	ISTPP (Jhajjar)	1500	1470	649	639	14.48	603	17.72	-3.24
	Dadri GPS	830	789	708	736	16.58	691	16.64	-0.05
	Anta GPS	419	312	0	0	0.00	0	0.00	0.00
	Auraiya GPS	663	457	300	305	7.05	294	7.07	-0.02
	Sub Total (A)	10782	9746	8342	8045	184.93	7705	189.62	-4.69
B. NPC	NAPS	440	157	180	181	3.68	153	3.77	-0.09
	RAPS- B	440	393	431	444	9.44	393	9.43	0.01
	RAPS- C	440	210	235	235	4.94	206	5.04	-0.10
	Sub Total (B)	1320	760	846	860	18.06	752	18.24	-0.18
C. NHPC	Chamera I HPS	540	534	540	360	10.21	425	10.20	0.01
	Chamera II HPS	300	300	307	300	7.27	303	7.32	-0.05
	Chamera III HPS	231	231	233	233	5.54	231	5.52	0.02
	Bairasul HPS	180	179	120	120	2.06	86	2.10	-0.04
	Salal-HPS	690	670	672	672	16.11	671	16.06	0.06
	Tanakpur-HPS	94	91	90	93	2.21	92	2.18	0.03
	Uri-HPS	480	265	279	191	6.00	250	5.85	0.14
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	403	369	9.35	389	9.30	0.05
	Sewa-II HPS	120	119	123	0	1.01	42	1.00	0.01
	Sub Total (C)	3305	2776	2767	2338	59.75	2490	59.52	0.23
	D. NJPC	Nathpa Jhakri	1500	1605	1623	1619	38.74	1614	38.52
Sub Total (D)		1500	1605	1623	1619	38.74	1614	38.52	0.22
E. THDC	Tehri HPS	1000	986	1056	1001	23.56	982	23.25	0.31
	Koteswar HPS	400	380	388	381	8.53	355	7.95	0.58
	Sub Total (E)	1400	1366	1444	1382	32.09	1337	31.20	0.89
F. BBMB	Bhakra HPS	1480	1324	1317	1373	32.34	1348	31.78	0.56
	Dehar HPS	990	609	825	600	15.13	630	14.63	0.51
	Pong HPS	396	262	372	186	6.57	274	6.30	0.27
	Sub Total (F)	2866	2196	2514	2159	54.04	2252	52.70	1.34
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	184	116	3.29	137	3.36	-0.07
	KWHEP HPS(IPP)	1000	0	1200	1199	25.08	1045	28.51	-3.43
	Malana Stg-II HPS	100	0	113	112	2.65	111	2.51	0.15
	Shree Cement TPS	300	0	202	147	3.73	155	3.86	-0.13
	Budhil HPS(IPP)	70	0	0	73	0.58	24	0.91	-0.34
	Sub Total (G)	1662	0	1699	1647	35.34	1472	39.15	-3.81
	H. Total Regional Entities (A-G)	22836	18448	19235	18050	422.94	17622	428.95	-6.01

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	1260	27.63	1151	
	Guru Nanak Dev TPS(Bhatinda)	440	100	200	4.01	167	
	Guru Hargobind Singh TPS(L.mbt)	920	934	933	20.39	850	
	Goindwal(GVK)		0	0	0.00	0	
	Thermal (Total)	2620	2294	2393	52.03	2168	
	Total Hydro	1148	747	810	20.49	854	
	Total Punjab	3768	3041	3203	72.52	3021	
Haryana	Panipat TPS	1367	397	443	9.84	410	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	161	161	4.06	169	
	RGTPP (khedar) (IPP)	1200	547	368	11.34	473	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	855	855	19.81	825	
	Thermal (Total)	4944	1960	1827	45.04	1877	
	Total Hydro	62	29	29	0.72	30	
		Total Haryana	5006	1989	1856	45.76	1907
	Rajasthan	kota TPS	1240	672	644	15.05	627
suratgarh TPS		1500	786	1108	20.51	855	
Chabra TPS		500	0	0	0.00	0	
Dholpur GPS		330	108	120	2.71	113	
Ramgarh GPS		111	72	56	1.76	73	
RAPS A (NPC)		300	0	0	0.00	0	
Barsingar (NLC)		250	90	92	2.07	86	
Giral LTPS		250	0	0	0.00	0	
Rajwest LTPS (IPP)		1080	468	463	13.08	545	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Kalisindh Thermal		600	0	0	0.00	0	
Kawai(Adani)		660	425	474	11.34	472	
Thermal (Total)		6956	2621	2957	66.51	2771	
Total Hydro		550	103	103	3.08	128	
Wind power		2191	628	795	14.74	614	
Biomass		91	23	23	0.54	23	
Solar		201	0	0	1.14	47	
Renewable/Others (Total)		2483	651	818	16.42	684	
		Total Rajasthan	9989	3375	3878	86.00	3583
UP		Anpara TPS	1630	1103	1143	26.80	1117
	Obra TPS	1288	425	397	9.80	408	
	Paricha TPS	1140	771	725	17.90	746	
	Panki TPS	210	0	0	0.60	25	
	Harduaganj TPS	665	345	342	8.10	338	
	Tanda TPS (NTPC)	440	391	398	9.64	402	
	Roza TPS (IPP)	1200	1013	990	24.01	1001	
	Anpara-C (IPP)	1200	325	612	12.33	514	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	273	321	7.11	296	
	Thermal (Total)	8223	4646	4928	116.29	4845	
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0	
	Other Hydro	527	200	201	4.46	186	
	Cogeneration	981	50	50	1.20	50	
		Total UP	10131	4896	5179	121.95	5081
	Uttarakhand	Total Hydro	1303	697	668	15.85	660
		Total Uttarakhand	1303	697	668	15.85	660
Delhi	Rajghat TPS	135	0	0	0.00	0	
	Delhi Gas Turbine	282	116	111	2.76	115	
	Pragati Gas Turbine	330	290	294	7.64	318	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	420	370	8.07	336	
	Thermal (Total)	2232	826	775	18.46	769	
		Total Delhi	2232	826	775	18.46	769
HP	Baspa HPS (IPP)	330	333	303	7.53	314	
	Malana HPS (IPP)	86	107	102	2.54	106	
	Other Hydro	589	435	427	14.60	608	
		Total HP	1005	875	832	24.66	1028
J & K	Baglihar HPS (IPP)	450	434	436	10.44	435	
	Other Hydro	323	140	139	3.21	134	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	574	575	13.64	568
Total State Control Area Generation		34390	16273	16966	398.84	16618	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5624	5225	130.27	5428	
Total Regional Availability(Gross)		57226	41132	40241	952.04	39668	

IV. Total Hydro Generation:

Regional Entities Hydro	10364	9845	8925	215.64	8985
State Control Area Hydro	5368	3225	3218	82.90	3454
Total Regional Hydro	15731	13070	12143	298.54	12439

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	Import	Export	
Vindhychal B/B	400	400	500	0	8.00	0.00	8.00	0.00	8.00
Gwalior-Agra (D/C)	1696	1718	1991	0	40.32	0.00	40.32	0.00	40.32
Zerda-Kankroli	115	-48	115	81	0.16	0.00	0.16	0.00	0.16
Zerda-Bhinmal	128	-32	190	115	0.48	0.00	0.48	0.00	0.48
Malanpur-Auraiya	52	21	72	0	0.89	0.00	0.89	0.00	0.89
Badod-Kota/Morak	79	11	108	0	1.10	0.00	1.10	0.00	1.10
Mundra-Mohindergarh(HVDC)	1447	1432	1451	0	34.57	0.00	34.57	0.00	34.57
Sub Total WR	3917	3502			85.52	0.00	85.52	0.00	85.52
Pusauli Bypass	400	400	400	0	9.57	0.00	9.57	0.00	9.57
MZP- GKP (D/C)	490	430	590	0	12.05	0.00	12.05	0.00	12.05
Patna-Balia(D/C)	446	577	643	0	12.80	0.00	12.80	0.00	12.80
B Sharif-Balia (D/C)	203	290	360	0	6.14	0.00	6.14	0.00	6.14
Pusauli-Balia	-151	-75	0	174	0.00	2.84	-2.84	0.00	-2.84
Gaya-Fatehpur (765 Kv)	76	-7	164	35	1.82	0.00	1.82	0.00	1.82
Pusauli-Sahupuri	130	142	158	0	3.04	0.00	3.04	0.00	3.04
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00	0.00	0.00
Son Ngr-Rihand	-38	-40	0	45	0.00	0.90	-0.90	0.00	-0.90
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	151	6	263	41	3.07	0.00	3.07	0.00	3.07
Sub Total ER	1707	1723			48.48	3.74	48.48	3.74	44.75
Total IR Exch	5624	5225			134.00	3.74	134.00	3.74	130.27

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
38.31	3.63	41.94	8.94	41.64	0.89	-6.93	2.77	-2.77

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
54.54	89.24	143.78	44.75	85.52	130.27	-9.80	-3.72	-13.52

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	0.80	93.10	3.20	92.30	56.60	6.90

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					
50.46	6.03	49.64	14.43	50.02	0.15	0.12	50.32	49.83

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	411	07:54	401	11:42	0.0	0.0	0.0	0.0
Gorakhpur	400	421	08:11	397	13:31	0.0	0.0	1.9	0.0
Bareilly	400	417	06:04	391	11:40	0.0	0.0	0.0	0.0
Kanpur	400	419	06:04	396	11:42	0.0	0.0	0.0	0.0
Dadri	400	406	18:10	391	14:38	0.0	0.0	0.0	0.0
Ballabgarh	400	421	06:05	396	11:41	0.0	0.0	0.0	0.0
Bawana	400	409	18:13	394	14:39	0.0	0.0	0.0	0.0
Bassi	400	422	06:03	395	11:40	0.0	0.0	0.7	0.0
Hissar	400	405	06:59	386	12:06	0.0	6.5	0.0	0.0
Moga	400	412	08:02	394	14:37	0.0	0.0	0.0	0.0
Abdullapur	400	408	07:00	393	12:06	0.0	0.0	0.0	0.0
Nalagarh	400	406	18:04	397	14:42	0.0	0.0	0.0	0.0
Kishenpur	400	421	07:59	405	14:38	0.0	0.0	0.0	0.0
Wagoora	400	421	06:10	395	20:47	0.0	0.0	1.0	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	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Balia	765	759	06:05	716	11:41	13.4	55.4	0.0	0.0
Moga	765	784	18:03	746	14:38	0.0	0.0	0.0	0.0
Agra	765	801	06:05	741	02:44	0.0	0.0	0.0	0.0
Bhiwani	765	787	06:04	748	14:40	0.0	0.0	0.0	0.0
Unnao	765	770	08:03	726	11:49	0.8	13.3	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	502.05	1179.55	477.76	407.63	1291.67	1033.56
Pong	426.72	384.05	415.01	680.86	394.51	116.59	740.91	398.67
Tehri	829.79	740.04	810.55	822.28	818.65	982.26	730.41	572.00
Koteshwar	612.50	598.50	608.90	5.98	NA	NA	572.00	566.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	265.14	267.78
Rihand	268.22	252.98	254.87	71.40	255.00	76.20	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	512.38	144.00	500.13	144.00	412.80	298.01

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

1. Rihand - Dadri (HVDC POLE - I) under breakdown due to failure of Y -phase converter transformer at Rihand end. Replacement with spare transformer is being arranged and restoration of Pole - I expected on 31.07.2013.

XII. Weather Conditions For 29.07.2013 :

1. Normal

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)/Uttarakhand closed down due to flush flooding.

Report for : 29.07.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER