

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 26.07.2013
Date of Reporting : 27.07.2013

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
40477	2718	43195	50.12	36453	1743	38196	50.22	918.3	51.75

* 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	51.80	18.44		70.24	124.75	123.63	-1.13	193.86	15.26
Haryana	46.81	0.73		47.54	112.10	111.20	-0.90	158.74	0.53
Rajasthan	76.88	1.03	8.10	86.01	57.43	49.44	-7.99	135.45	0.00
Delhi	18.77			18.77	80.90	76.22	-4.68	94.99	0.06
UP	110.55	3.84	1.20	115.59	132.90	125.28	-7.62	240.87	33.05
Uttarakhand		11.16		11.16	22.59	21.54	-1.05	32.70	1.11
HP		24.75		24.75	0.89	0.11	-0.79	24.86	0.04
J & K		13.67	0.00	13.67	17.68	17.29	-0.39	30.96	1.70
Chandigarh				0.00	6.08	5.92	-0.17	5.92	0.00
Total	304.81	73.62	9.30	387.72	555.33	530.63	-24.70	918.35	51.75

* 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				Day Energy MU
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction
Punjab	8455	610	49	1595	7943	520	-74	1924	44.13
Haryana	6886	123	131	1543	6260	0	199	1326	36.09
Rajasthan	5901	0	-164	2	5329	0	-865	16	0.03
Delhi	4310	0	15	226	3419	8	-189	-230	6.63
UP	10440	1850	-394	1412	10064	1140	-783	1940	26.17
Uttarakhand	1633	35	104	356	1258	75	2	265	7.40
HP	1030	0	-118	-1077	887	0	5	-1288	-25.69
J&K	1551	100	4	-143	1096	0	-231	-235	-7.82
Chandigarh	271	0	-5	0	198	0	-26	0	0.11
Total	40477	2718	-378	3914	36453	1743	-1961	3718	87.05

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

III. Regional Entities :

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	1810	1650	37.21	1550	37.19	0.02
Rihand I STPS	1000	920	956	781	18.53	772	18.95	-0.42
Rihand II STPS	1000	970	941	916	18.72	780	19.91	-1.20
Rihand III STPS	500	480	476	438	9.53	397	9.78	-0.26
Dadri I STPS	840	810	864	651	16.81	700	17.28	-0.48
Dadri II STPS	980	975	905	768	20.64	860	21.50	-0.86
Unchahar I TPS	420	399	433	414	8.63	360	8.97	-0.34
Unchahar II TPS	420	403	425	374	7.99	333	8.19	-0.20
Unchahar III TPS	210	201	223	154	3.78	157	3.83	-0.05
ISTPP (Jhajjar)	1500	1470	756	634	16.81	700	16.11	0.70
Dadri GPS	830	789	540	543	12.71	530	12.74	-0.04
Anta GPS	419	401	385	381	9.06	377	9.21	-0.15
Auraiya GPS	663	457	152	274	5.39	225	5.47	-0.07
Sub Total (A)	10782	10009	8866	7978	185.79	7741	189.14	-3.35
B. NPC								
INAPS	440	157	179	182	3.78	157	3.77	0.01
RAPS- B	440	388	437	438	9.43	393	9.31	0.12
RAPS- C	440	210	235	238	4.96	207	5.04	-0.08
Sub Total (B)	1320	755	851	858	18.17	757	18.12	0.05
C. NHPC								
Chamera I HPS	540	534	540	360	10.90	454	11.20	-0.30
Chamera II HPS	300	300	305	250	6.90	287	7.34	-0.45
Chamera III HPS	231	231	233	232	5.50	229	5.53	-0.03
Bairasul HPS	180	179	120	120	2.15	90	2.15	0.00
Salal-HPS	690	570	572	571	13.71	571	13.68	0.03
Tanakpur-HPS	94	94	92	91	2.21	92	2.19	0.02
Uri-HPS	480	283	316	208	6.32	263	6.31	0.01
Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
Dulhasti-HPS	390	387	403	396	9.30	387	9.39	-0.09
Sewa-II HPS	120	119	120	0	1.03	43	1.06	-0.03
Sub Total (C)	3305	2697	2701	2228	58.02	2418	58.85	-0.83
D. NJPC								
Nathpa Jhakri	1500	1605	1610	1621	38.74	1614	38.48	0.26
Sub Total (D)	1500	1605	1610	1621	38.74	1614	38.48	0.26
E. THDC								
Tehri HPS	1000	1000	1015	1003	24.23	1009	24.00	0.23
Koteswar HPS	400	380	384	378	8.48	353	8.55	-0.07
Sub Total (E)	1400	1380	1399	1381	32.70	1363	32.55	0.15
F. BBMB								
Bhakra HPS	1480	1351	1367	1362	32.97	1374	32.42	0.55
Dehar HPS	990	608	825	600	15.01	625	14.60	0.41
Pong HPS	396	236	372	126	5.93	247	5.66	0.27
Sub Total (F)	2866	2195	2564	2088	53.91	2246	52.68	1.23
G. IPP(s)/JV(s)								
ADHPL HPS(IPP)	192	0	169	140	3.53	147	3.94	-0.41
KWHEP HPS(IPP)	1000	0	1200	1195	28.34	1181	28.51	-0.17
Malana Stg-II HPS	100	0	111	113	2.67	111	2.53	0.14
Shree Cement TPS	300	0	165	198	3.95	165	4.06	-0.11
Budhil HPS(IPP)	70	0	34	34	1.66	69	1.65	0.01
Sub Total (G)	1662	0	1679	1680	40.16	1673	40.69	-0.54
H. Total Regional Entities (A-G)	22836	18640	19670	17834	427.49	17812	430.51	-3.02

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	1240	1060	26.84	1118	
	Guru Nanak Dev TPS(Bhatinda)	440	208	180	4.28	178	
	Guru Hargobind Singh TPS(L.mbt)	920	934	849	20.68	861	
	Goindwal(GVK)		0	0	0.00	0	
	Thermal (Total)	2620	2382	2089	51.80	2158	
	Total Hydro	1148	900	796	18.44	768	
	Total Punjab	3768	3282	2885	70.24	2927	
Haryana	Panipat TPS	1367	609	610	14.32	597	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	159	166	4.18	174	
	RGTPP (khedar) (IPP)	1200	462	387	9.92	413	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	662	661	18.39	766	
	Thermal (Total)	4944	1892	1824	46.81	1950	
	Total Hydro	62	29	28	0.73	30	
		Total Haryana	5006	1921	1852	47.54	1981
	Rajasthan	kota TPS	1240	848	788	19.65	819
suratgarh TPS		1500	1022	957	23.19	966	
Chabra TPS		500	0	0	0.00	0	
Dholpur GPS		330	43	126	2.01	84	
Ramgarh GPS		111	62	67	1.62	67	
RAPS A (NPC)		300	176	176	4.34	181	
Barsingar (NLC)		250	93	95	2.07	86	
Giral LTPS		250	0	0	0.00	0	
Rajwest LTPS (IPP)		1080	520	465	12.00	500	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Kalisindh Thermal		600	0	0	0.00	0	
Kawai(Adani)		660	520	555	12.00	500	
Thermal (Total)		6956	3284	3229	76.88	3204	
Total Hydro		550	44	58	1.03	43	
Wind power		2191	358	531	6.78	283	
Biomass		91	24	24	0.57	24	
Solar		201	0	0	0.75	31	
		Renewable/Others (Total)	2483	382	555	8.10	337
	Total Rajasthan	9989	3710	3842	86.01	3584	
UP	Anpara TPS	1630	1112	712	20.00	833	
	Obra TPS	1288	352	356	9.40	392	
	Paricha TPS	1140	792	629	16.50	688	
	Panki TPS	210	104	122	2.40	100	
	Harduaganj TPS	665	348	340	7.70	321	
	Tanda TPS (NTPC)	440	391	395	9.65	402	
	Roza TPS (IPP)	1200	995	873	23.06	961	
	Anpara-C (IPP)	1200	603	635	14.90	621	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	319	269	6.95	290	
	Thermal (Total)	8223	5016	4331	110.55	4606	
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0	
	Other Hydro	527	142	153	3.84	160	
	Cogeneration	981	50	50	1.20	50	
		Total UP	10131	5208	4534	115.59	4816
	Uttarakhand	Total Hydro	1303	568	285	11.16	465
Total Uttarakhand		1303	568	285	11.16	465	
Delhi	Rajghat TPS	135	0	0	0.00	0	
	Delhi Gas Turbine	282	117	120	2.75	115	
	Pragati Gas Turbine	330	265	264	5.65	235	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	455	490	10.37	432	
	Thermal (Total)	2232	837	874	18.77	782	
		Total Delhi	2232	837	874	18.77	782
HP	Baspa HPS (IPP)	330	336	336	7.59	316	
	Malana HPS (IPP)	86	103	103	2.45	102	
	Other Hydro	589	623	609	14.72	613	
		Total HP	1005	1062	1048	24.75	1031
J & K	Baglihar HPS (IPP)	450	436	440	10.46	436	
	Other Hydro	323	140	139	3.21	134	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	576	579	13.67	569
Total State Control Area Generation		34390	17164	15899	387.72	16155	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5232	3637	112.66	4694	
Total Regional Availability(Gross)		57226	42066	37370	927.87	38661	

IV. Total Hydro Generation:

Regional Entities Hydro	10364	9754	8766	217.92	9080
State Control Area Hydro	5368	3321	2947	73.62	3067
Total Regional Hydro	15731	13075	11713	291.53	12147

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	-350	400	350	2.39	2.03	0.36
Gwalior-Agra (D/C)	1693	1563	1935	0	38.02	0.00	38.02
Zerda-Kankroli	129	-127	129	175	0.00	0.44	-0.44
Zerda-Bhinmal	151	-145	185	219	0.00	0.05	-0.05
Malanpur-Auraiya	-27	-27	0	60	0.00	0.49	-0.49
Badod-Kota/Morak	41	-54	64	80	0.40	0.00	0.40
Mundra-Mohindergarh(HVDC)	1443	1399	1451	0	34.20	0.00	34.20
Sub Total WR	3530	2259			75.01	3.01	72.00
Pusauli Bypass	-243	0	0	294	0.00	2.26	-2.26
MZP- GKP (D/C)	638	536	753	0	14.95	0.00	14.95
Patna-Balia(D/C)	544	412	620	0	11.56	0.00	11.56
B Sharif-Balia (D/C)	260	232	354	0	6.31	0.00	6.31
Pusauli-Balia	-40	-39	0	57	0.00	0.77	-0.77
Gaya-Fatehpur (765 Kv)	113	31	209	0	2.61	0.00	2.61
Pusauli-Sahupuri	144	137	160	0	3.21	0.00	3.21
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)	324	109	380	0	5.93	0.00	5.93
Sub Total ER	1702	1378			44.58	3.92	40.66
Total IR Exch	5232	3637			119.59	6.93	112.66

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
32.32	3.68	35.99	8.57	39.06	3.49	0.52	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
50.55	91.30	141.84	40.66	72.00	112.66	-9.89	-19.30	-29.18

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	70.30	0.60	70.30	83.70	29.70

←----- 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	6.06	49.75	15.40	50.12	0.30	0.12	50.43	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	414	06:24	405	22:24	0.0	0.0	0.0	0.0
Gorakhpur	400	422	06:42	399	22:27	0.3	0.3	7.4	0.0
Bareilly	400	410	23:59	403	23:07	0.0	0.0	0.0	0.0
Kanpur	400	421	04:33	400	15:31	0.0	0.0	2.4	0.0
Dadri	400	416	04:00	397	14:48	0.0	0.0	0.0	0.0
Ballabgarh	400	425	03:57	402	14:47	0.0	0.0	29.7	0.0
Bawana	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Bassi	400	426	01:56	404	19:48	0.0	0.0	22.7	0.0
Hissar	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Moga	400	416	01:54	400	14:50	0.0	0.0	0.0	0.0
Abdullapur	400	412	03:58	396	14:50	0.0	0.0	0.0	0.0
Nalagarh	400	414	02:02	400	14:46	0.0	0.0	0.0	0.0
Kishenpur	400	421	01:56	402	14:52	0.0	0.0	1.0	0.0
Wagoora	400	421	01:55	392	13:16	0.0	0.0	1.3	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	779	06:21	733	19:49	0.0	11.5	0.0	0.0
Balia	765	770	14:04	717	22:24	11.3	35.2	0.0	0.0
Moga	765	793	04:00	759	14:51	0.0	0.0	0.0	0.0
Agra	765	806	04:33	761	15:31	0.0	0.0	7.0	0.0
Bhiwani	765	803	04:00	765	14:52	0.0	0.0	5.9	0.0
Unnao	765	753	14:05	725	21:23	2.8	55.1	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	501.69	1166.44	476.76	387.82	1440.82	1035.94
Pong	426.72	384.05	414.71	668.52	394.01	111.75	1454.00	362.14
Tehri	829.79	740.04	809.70	795.00	818.65	982.26	972.44	564.00
Koteshwar	612.50	598.50	609.50	4.21	NA	NA	541.00	551.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	275.60	345.97
Rihand	268.22	252.98	254.72	65.50	254.26	47.90	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 29.07.2013.

XII. Weather Conditions For 26.07.2013 :

1. Rains Uttranchal, HP , J & K , Rajasthan .

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 : 26.07.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER