

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 28.07.2013
Date of Reporting : 29.07.2013

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
38975	2800	41775	50.03	38316	1895	40211	50.18	907.5	55.57

* 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	52.19	20.68		72.87	126.71	125.80	-0.92	198.67	17.67
Haryana	46.94	0.74		47.68	111.84	109.46	-2.38	157.14	0.05
Rajasthan	68.73	2.23	13.02	83.98	48.62	41.88	-6.74	125.86	0.00
Delhi	16.55			16.55	77.36	77.14	-0.22	93.70	0.39
UP	116.75	4.61	1.20	122.56	121.38	119.91	-1.47	242.47	35.61
Uttarakhand		15.10		15.10	18.49	17.47	-1.03	32.56	0.15
HP		23.93		23.93	1.33	-1.12	-2.45	22.81	0.00
J & K		13.64	0.00	13.64	17.85	15.06	-2.79	28.71	1.70
Chandigarh				0.00	5.47	5.61	0.14	5.61	0.00
Total	301.17	80.93	14.22	396.32	529.05	511.21	-17.85	907.52	55.57

* 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	8677	800	57	1776	8454	595	-38	1785	42.61
Haryana	6720	0	-255	1650	6806	0	29	1226	33.61
Rajasthan	5418	0	-286	-16	4945	0	-301	22	0.06
Delhi	4247	0	111	157	3771	0	30	-221	0.09
UP	9868	1900	111	647	10747	1300	-269	1046	16.34
Uttarakhand	1477	0	-85	241	1404	0	25	153	4.69
HP	852	0	-146	-1087	892	0	11	-1150	-24.14
J&K	1454	100	-139	-93	1069	0	-248	-184	-6.59
Chandigarh	263	0	10	0	227	0	16	-20	-0.19
Total	38975	2800	-623	3274	38316	1895	-745	2656	66.49

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

III. Regional Entities :

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

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	1652	1607	1618	37.19	1550	37.58	-0.39
Rihand I STPS	1000	925	927	785	17.90	746	18.21	-0.31
Rihand II STPS	1000	533	518	384	9.89	412	9.97	-0.08
Rihand III STPS	500	485	501	405	9.52	397	9.52	0.00
Dadri I STPS	840	810	867	857	17.52	730	18.10	-0.58
Dadri II STPS	980	975	980	926	21.33	889	21.83	-0.50
Unchahar I TPS	420	399	403	425	8.46	353	8.75	-0.29
Unchahar II TPS	420	403	441	438	8.51	354	8.60	-0.09
Unchahar III TPS	210	201	219	171	3.93	164	4.02	-0.09
ISTPP (Jhajjar)	1500	1470	649	639	14.48	603	14.85	-0.37
Dadri GPS	830	790	532	572	12.51	521	12.75	-0.25
Anta GPS	419	367	0	394	6.18	257	6.90	-0.72
Auraiya GPS	663	455	300	151	4.23	176	4.14	0.09
Sub Total (A)	10782	9465	7944	7765	171.63	7151	175.21	-3.58
B. NPC								
INAPS	440	157	176	183	10.83	451	3.77	7.07
RAPS- B	440	393	439	443	9.52	397	9.43	0.09
RAPS- C	440	210	232	234	4.93	206	5.04	-0.11
Sub Total (B)	1320	760	847	860	25.29	1054	18.24	7.05
C. NHPC								
Chamera I HPS	540	534	540	540	9.87	411	10.00	-0.13
Chamera II HPS	300	300	300	300	7.24	302	7.20	0.04
Chamera III HPS	231	231	233	233	5.54	231	5.46	0.07
Bairasul HPS	180	179	120	120	2.06	86	2.17	-0.11
Salal-HPS	690	671	672	572	14.55	606	16.11	-1.57
Tanakpur-HPS	94	91	93	78	2.21	92	2.18	0.03
Uri-HPS	480	266	358	228	6.25	260	6.32	-0.07
Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
Dulhasti-HPS	390	387	405	403	9.34	389	9.35	-0.01
Sewa-II HPS	120	119	124	0	1.28	53	1.24	0.04
Sub Total (C)	3305	2779	2845	2474	58.32	2430	60.03	-1.71
D. NJPC								
Nathpa Jhakri	1500	1605	1620	1620	38.69	1612	38.52	0.18
Sub Total (D)	1500	1605	1620	1620	38.69	1612	38.52	0.18
E. THDC								
Tehri HPS	1000	1040	1046	1003	24.75	1031	24.50	0.25
Koteswar HPS	400	380	388	381	8.53	355	8.55	-0.02
Sub Total (E)	1400	1420	1434	1384	33.28	1387	33.05	0.23
F. BBMB								
Bhakra HPS	1480	1348	1370	1370	33.09	1379	32.35	0.74
Dehar HPS	990	606	825	610	15.02	626	14.55	0.47
Pong HPS	396	264	372	186	6.57	274	6.33	0.24
Sub Total (F)	2866	2218	2567	2166	54.68	2278	53.23	1.45
G. IPP(s)/JV(s)								
ADHPL HPS(IPP)	192	0	201	138	3.61	150	3.21	0.40
KWHEP HPS(IPP)	1000	0	1200	1195	28.52	1188	28.48	0.04
Malana Stg-II HPS	100	0	113	113	2.69	112	2.38	0.31
Shree Cement TPS	300	0	168	143	3.62	151	3.69	-0.08
Budhil HPS(IPP)	70	0	74	74	1.74	73	1.69	0.05
Sub Total (G)	1662	0	1756	1663	40.18	1674	39.45	0.73
H. Total Regional Entities (A-G)	22836	18246	19013	17932	422.08	17587	417.73	4.35

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	27.67	1153	
	Guru Nanak Dev TPS(Bhatinda)	440	205	205	4.36	182	
	Guru Hargobind Singh TPS(L.mbt)	920	931	946	20.16	840	
	Goindwal(GVK)		0	0	0.00	0	
	Thermal (Total)	2620	2396	2411	52.19	2175	
	Total Hydro	1148	901	901	20.68	862	
	Total Punjab	3768	3297	3312	72.87	3036	
Haryana	Panipat TPS	1367	598	645	14.28	595	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	161	161	4.04	168	
	RGTPP (khedar) (IPP)	1200	365	484	9.50	396	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	833	855	19.12	797	
	Thermal (Total)	4944	1957	2145	46.94	1956	
	Total Hydro	62	30	29	0.74	31	
	Total Haryana	5006	1987	2174	47.68	1987	
	Rajasthan	kota TPS	1240	612	600	16.36	681
suratgarh TPS		1500	951	9500	23.08	961	
Chabra TPS		500	0	48	0.00	0	
Dholpur GPS		330	108	66	1.80	75	
Ramgarh GPS		111	69	176	1.59	66	
RAPS A (NPC)		300	0	90	1.49	62	
Barsingar (NLC)		250	88	0	2.04	85	
Giral LTPS		250	0	0	0.00	0	
Rajwest LTPS (IPP)		1080	425	561	11.04	460	
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	2678	11515	68.73	2864	
Total Hydro		550	95	102	2.23	93	
Wind power		2191	711	555	11.11	463	
Biomass		91	21	21	0.51	21	
Solar		201	0	0	1.40	58	
Renewable/Others (Total)		2483	732	576	13.02	542	
Total Rajasthan		9989	3505	12193	83.98	3499	
UP		Anpara TPS	1630	1319	1171	27.10	1129
	Obra TPS	1288	492	429	10.10	421	
	Paricha TPS	1140	777	605	17.50	729	
	Panki TPS	210	0	0	0.60	25	
	Harduaganj TPS	665	386	357	8.10	338	
	Tanda TPS (NTPC)	440	393	394	9.56	398	
	Roza TPS (IPP)	1200	1017	999	23.98	999	
	Anpara-C (IPP)	1200	325	612	12.33	514	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	365	321	7.49	312	
	Thermal (Total)	8223	5074	4888	116.75	4865	
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0	
	Other Hydro	527	146	236	4.61	192	
	Cogeneration	981	50	50	1.20	50	
	Total UP	10131	5270	5174	122.56	5107	
	Uttarakhand	Total Hydro	1303	675	622	15.10	629
		Total Uttarakhand	1303	675	622	15.10	629
Delhi	Rajghat TPS	135	0	0	0.00	0	
	Delhi Gas Turbine	282	148	151	3.25	135	
	Pragati Gas Turbine	330	291	299	6.86	286	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	375	260	6.45	269	
	Thermal (Total)	2232	814	710	16.55	690	
	Total Delhi	2232	814	710	16.55	690	
HP	Baspa HPS (IPP)	330	305	305	7.46	311	
	Malana HPS (IPP)	86	108	95	2.35	98	
	Other Hydro	589	621	568	14.12	588	
	Total HP	1005	1034	968	23.93	997	
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	17156	25728	396.32	16513	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5885	4584	113.16	4715	
Total Regional Availability(Gross)		57226	42054	48244	931.55	38815	

IV. Total Hydro Generation:

Regional Entities Hydro	10364	9980	9090	219.80	9158
State Control Area Hydro	5368	3455	3433	80.93	3372
Total Regional Hydro	15731	13435	12523	300.74	12531

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	350	500	0	8.81	0.00	8.81
Gwalior-Agra (D/C)	1857	1522	1857	0	35.50	0.00	35.50
Zerda-Kankroli	92	-94	112	211	0.00	1.31	-1.31
Zerda-Bhinmal	94	-102	147	218	0.00	1.31	-1.31
Malanpur-Auraiya	-46	-21	0	64	0.00	0.47	-0.47
Badod-Kota/Morak	86	-22	107	58	0.00	0.38	-0.38
Mundra-Mohindergarh(HVDC)	1449	1449	1450	0	33.94	0.00	33.94
Sub Total WR	4032	3082			78.25	3.47	74.78
Pusauli Bypass	400	400	400	0	9.65	0.00	9.65
MZP- GKP (D/C)	322	428	506	0	10.31	0.00	10.31
Patna-Balia(D/C)	598	412	608	0	10.36	0.00	10.36
B Sharif-Balia (D/C)	311	196	311	0	5.07	0.00	5.07
Pusauli-Balia	-123	-138	0	154	0.00	2.91	-2.91
Gaya-Fatehpur (765 Kv)	94	24	123	0	1.16	0.00	1.16
Pusauli-Sahupuri	127	150	156	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)	162	70	166	0	2.43	0.00	2.43
Sub Total ER	1853	1502			42.19	3.81	38.38
Total IR Exch	5885	4584			120.43	7.28	113.16

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
38.78	3.65	42.43	8.93	39.08	-0.87	-15.11	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
52.98	74.91	127.89	38.38	74.78	113.16	-14.60	-0.13	-14.73

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	0.10	87.60	0.80	87.50	75.30	12.40

←----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz			(Hz)	(Hz)
50.40	17.04	49.67	19.31	50.07	0.18	0.11	50.41	49.89

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	412	06:01	399	21:12	0.0	0.0	0.0	0.0
Gorakhpur	400	422	06:30	405	21:56	0.0	0.0	3.1	0.0
Bareilly	400	419	18:15	400	00:04	0.0	0.0	0.0	0.0
Kanpur	400	419	06:05	400	21:07	0.0	0.0	0.0	0.0
Dadri	400	401	00:00	401	00:00	0.0	0.0	0.0	0.0
Ballabgarh	400	424	06:56	404	21:05	0.0	0.0	7.4	0.0
Bawana	400	414	18:04	400	14:30	0.0	0.0	0.0	0.0
Bassi	400	426	06:05	404	22:30	0.0	0.0	31.1	0.0
Hissar	400	409	06:56	390	13:14	0.0	0.0	0.0	0.0
Moga	400	414	06:56	398	14:34	0.0	0.0	0.0	0.0
Abdullapur	400	415	06:55	399	14:28	0.0	0.0	0.0	0.0
Nalagarh	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Kishenpur	400	421	01:38	407	13:21	0.0	0.0	1.5	0.0
Wagoora	400	424	01:26	397	20:32	0.0	0.0	13.8	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	763	06:04	726	21:17	0.2	45.3	0.0	0.0
Moga	765	787	06:58	756	14:30	0.0	0.0	0.0	0.0
Agra	765	805	06:59	761	21:08	0.0	0.0	2.0	0.0
Bhiwani	765	795	04:02	760	14:30	0.0	0.0	0.0	0.0
Unnao	765	770	18:13	737	21:07	0.0	5.7	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 29.07.2013.

XII. Weather Conditions For 28.07.2013 :

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 : 28.07.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER