

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 09.03.2013

Date of Reporting : 10.03.2013

I. Regional Availability/Demand:

Demand Met	Evening Peak (19:00 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
30523	2202	32725	50.00	28455	1255	29710	50.02	728.7	55.06

* 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	32.01	11.40		43.41	55.23	54.43	-0.80	97.84	2.68
Haryana	44.04	0.52		44.55	56.18	54.79	-1.39	99.34	1.07
Rajasthan	95.42	3.69	17.92	117.03	64.41	60.05	-4.36	177.09	0.52
Delhi	30.81			30.81	28.14	25.96	-2.18	56.77	0.01
UP	99.21	7.33	19.20	125.74	80.36	80.87	0.51	206.61	48.69
Uttarakhand		12.50		12.50	19.17	17.75	-1.43	30.25	0.35
HP		9.25		9.25	14.23	12.87	-1.37	22.12	0.04
J & K		10.49	0.00	10.49	28.29	24.77	-3.52	35.26	1.70
Chandigarh				0.00	3.75	3.39	-0.35	3.39	0.00
Total	301.48	55.19	37.12	393.79	349.76	334.88	-14.89	728.66	55.06

* 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 (19:00 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	4526	0	-304	-110	3577	0	-71	289	0.46
Haryana	4500	0	-149	78	4197	0	206	-76	-2.82
Rajasthan	6355	0	-766	657	7479	0	-47	698	18.17
Delhi	2947	0	91	-990	1472	0	-51	-1907	-30.81
UP	8074	2100	-262	-118	8745	1255	93	-42	-1.83
Uttarakhand	1491	0	18	414	1075	0	-74	367	8.95
HP	950	2	-106	-274	666	0	-95	174	0.83
J&K	1498	100	-182	13	1154	0	-172	20	0.38
Chandigarh	184	0	-5	-30	90	0	-15	0	-0.35
Total	30523	2202	-1665	-361	28455	1255	-226	-477	-7.01

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

III. Regional Entities :

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	1970	2116	2111	47.28	1970	46.89	0.39
	Rihand I STPS	1000	913	880	1005	21.74	906	21.55	0.19
	Rihand II STPS	1000	952	1019	1040	22.36	932	21.97	0.39
	Rihand III STPS	500	475	510	488	11.28	470	11.13	0.16
	Dadri I STPS	840	807	763	641	16.36	682	17.57	-1.20
	Dadri II STPS	980	969	819	695	15.86	661	14.77	1.09
	Unchahar I TPS	420	408	438	442	9.82	409	9.22	0.60
	Unchahar II TPS	420	406	442	439	9.67	403	8.76	0.90
	Unchahar III TPS	210	202	218	221	4.83	201	4.32	0.50
	ISTPP (Jhajjar)	1500	995	420	449	9.22	384	9.45	-0.23
	Dadri GPS	830	829	365	375	8.56	357	8.67	-0.11
	Anta GPS	419	405	256	224	5.55	231	5.38	0.17
	Auraiva GPS	663	648	150	160	3.58	149	3.71	-0.13
	Sub Total (A)	10782	9978	8396	8290	186.10	7754	183.39	2.71
	B. NPC	NAPS	440	305	335	342	7.17	299	7.32
RAPS- B		440	421	461	465	10.09	420	10.10	-0.02
RAPS- C		440	430	471	477	10.18	424	10.32	-0.14
Sub Total (B)		1320	1156	1267	1284	27.44	1143	27.74	-0.30
C. NHPC	Chamera I HPS	540	550	540	0	4.48	187	4.46	0.02
	Chamera II HPS	300	204	199	0	2.41	100	2.38	0.02
	Chamera III HPS	231	231	234	0	1.45	60	1.41	0.04
	Bairasuil HPS	180	182	182	120	2.36	98	2.59	-0.23
	Salal-HPS	690	298	453	331	6.97	291	6.97	0.00
	Tanakpur-HPS	94	27	32	30	0.68	29	0.64	0.04
	Uri-HPS	480	458	480	452	11.06	461	10.74	0.32
	Dhauliganga-HPS	280	216	211	0	1.58	66	1.57	0.02
	Dulhasti-HPS	390	257	262	0	2.93	122	2.95	-0.02
	Sewa-II HPS	120	120	126	118	2.88	120	2.88	0.00
	Sub Total (C)	3305	2543	2719	1051	36.81	1534	36.60	0.21
	D.NJPC	Natpaha Jhakri	1500	1350	1044	0	7.12	297	7.08
Sub Total (D)		1500	1350	1044	0	7.12	297	7.08	0.04
E. THDC	Tehri HPS	1000	852	856	0	8.60	358	8.50	0.10
	Koteshwar HPS	400	400	394	91	3.28	137	3.30	-0.02
	Sub Total (E)	1400	1252	1250	91	11.88	495	11.80	0.08
F. BBMB	Bhakra HPS	1480	626	996	417	15.22	634	15.01	0.21
	Dehar HPS	990	274	495	145	6.85	285	6.58	0.27
	Pong HPS	396	199	306	60	4.88	203	5.01	-0.13
	Sub Total (F)	2866	1099	1797	622	26.95	1123	26.60	0.35
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.82	34	0.79	0.03
	KWHEP HPS(IPP)	1000	0	260	0	3.63	151	3.61	0.02
	Malana Stg-II HPS	100	0	60	0	0.40	17	0.36	0.04
	Shree Cement TPS	300	0	263	218	3.09	129	3.03	0.06
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	583	218	7.94	331	7.79	0.16
H. Total Regional Entities (A-G)	22836	17378	17056	11556	304.24	12676	300.99	3.25	

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	628	605	14.53	605	
	Guru Nanak Dev TPS(Bhatinda)	440	120	105	2.52	105	
	Guru Hargobind Singh TPS(L.mbt)	920	726	619	14.96	623	
	Thermal (Total)	2620	1474	1329	32.01	1334	
	Total Hydro	1148	455	329	11.40	475	
	Total Punjab	3768	1929	1658	43.41	1809	
Haryana	Panipat TPS	1367	813	854	20.29	845	
	DCRTPP (Yamuna nagar)	600	280	280	6.61	275	
	Faridabad GPS (NTPC)	432	163	151	4.08	170	
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	622	547	13.06	544	
	Thermal (Total)	4944	1878	1832	44.04	1835	
	Total Hydro	62	22	22	0.52	22	
	Total Haryana	5006	1900	1854	44.55	1856	
	Rajasthan	kota TPS	1240	902	1057	24.83	1035
suratgarh TPS		1500	1147	1147	28.71	1196	
Chabra TPS		500	393	369	10.00	417	
Dholpur GPS		330	93	141	2.77	115	
Ramgarh GPS		111	91	75	1.80	75	
RAPS A (NPC)		300	183	183	4.79	200	
Barsingsar (NLC)		250	193	128	4.65	194	
Giral LTPS		250	121	110	2.96	123	
Rajwest LTPS (IPP)		675	657	594	14.92	622	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Thermal (Total)		5291	3780	3804	95.42	3976	
Total Hydro		550	82	180	3.69	154	
Wind power		2191	826	928	17.11	713	
Biomass		91	29	29	0.68	29	
Solar		201	3	0	0.13	5	
Renewable/Others (Total)		2483	855	957	17.92	747	
Total Rajasthan		8324	4717	4941	117.03	4876	
UP		Anpara TPS	1630	1612	1565	33.70	1404
		Obra TPS	1382	395	367	8.40	350
	Paricha TPS	890	662	555	13.40	558	
	Panki TPS	210	90	85	1.70	71	
	Harduaganj TPS	665	245	286	5.80	242	
	Tanda TPS (NTPC)	440	403	405	9.86	411	
	Roza TPS (IPP)	1200	810	788	18.48	770	
	Anpara-C (IPP)	1200	0	0	0.00	0	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	353	365	7.87	328	
	Thermal (Total)	8067	4570	4416	99.21	4134	
	Vishnuparyag HPS (IPP)	400	84	77	1.84	77	
	Other Hydro	527	196	252	5.50	229	
	Cogeneration	981	800	800	19.20	800	
	Total UP	9975	5650	5545	125.74	5163	
Uttarakhand	Total Hydro	1303	525	458	12.50	521	
	Total Uttarakhand	1303	525	458	12.50	521	
Delhi	Rajghat TPS	135	56	54	1.44	60	
	Delhi Gas Turbine	282	115	122	2.94	122	
	Pragati Gas Turbine	330	266	266	6.66	278	
	Rithala GPS	108	0	0	0.00	0	
	Bawana GPS	677	289	225	6.17	257	
	Badarpur TPS (NTPC)	705	595	580	13.61	567	
	Thermal (Total)	2237	1321	1247	30.81	1284	
	Total Delhi	2237	1321	1247	30.81	1284	
	HP	Baspa HPS (IPP)	330	33	0	0.97	41
Malana HPS (IPP)		86	49	0	0.39	16	
Other Hydro		589	346	354	7.89	329	
Total HP		1005	428	354	9.25	386	
J & K	Baglihar HPS (IPP)	450	248	246	5.94	248	
	Other Hydro	323	95	130	4.55	189	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	343	376	10.49	437	
Total State Control Area Generation		32574	16813	16433	393.79	16331	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			827	2431	49.60	2067	
Total Regional Availability(Gross)		55410	34696	30420	747.63	31075	

IV. Total Hydro Generation:

Regional Entities Hydro	10364	7130	1764	87.60	3650
State Control Area Hydro	5368	2051	1971	55.19	2223
Total Regional Hydro	15731	9181	3735	142.79	5873

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(19:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	-300	-300	0	300	0.00	6.57	-6.57
Gwalior-Agra (D/C)	-247	339	477	247	5.46	0.00	5.46
Zerda-Kankroli	-214	-55	0	283	0.00	2.39	-2.39
Zerda-Bhinmal	52	38	98	354	0.00	1.34	-1.34
Malanpur-Auraiya	-211	-76	0	227	0.00	2.60	-2.60
Badod-Kota/Morak	-204	-85	0	204	0.00	2.11	-2.11
Mundra-Mohindergarh(HVDC)	967	969	971	0	23.49	0.00	23.49
Sub Total WR	-157	830			28.95	15.00	13.95
Pusauli Bypass	200	200	400	0	5.35	0.00	5.35
MZP- GKP (D/C)	112	210	270	0	4.63	0.00	4.63
Patna-Balia(D/C)	459	625	697	0	13.32	0.00	13.32
B'Sharif-Balia (D/C)	195	355	432	0	8.01	0.00	8.01
Barh - Balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Balia	-59	-3	0	98	0.00	0.50	-0.50
Gaya-Fatehpur (765 Kv)	-9	144	203	24	3.00	0.00	3.00
Pusauli-Sahupuri	124	110	158	0	2.84	0.00	2.84
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-38	-40	0	44	0.00	1.01	-1.01
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	984	1601			37.16	1.51	35.65
Total IR Exch	827	2431			66.11	16.51	49.60

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
45.75	0.17	45.92	-4.77	-2.73	0.16	-13.41	-2.55	2.55
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
38.76	25.66	64.42	35.65	13.95	49.60	-3.11	-11.71	-14.82

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

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	0.00	1.67	96.12	94.45	66.01	3.88

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					
50.55	17.04	49.60	22.09	50.06	0.19	0.10	50.39	49.86

VII. Voltage profile

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	407	23:38	401	7:06	0.0	0.0	0.0	0.0
Gorakhpur	400	425	18:16	409	8:44	0.0	0.0	38.7	0.0
Bareilly	400	421	17:34	407	14:14	0.0	0.0	0.2	0.0
Kanpur	400	416	4:04	400	22:06	0.0	0.0	0.0	0.0
Dadri	400	419	4:04	404	11:18	0.0	0.0	0.0	0.0
Ballabhgarh	400	424	4:04	407	14:13	0.0	0.0	6.8	0.0
Bawana	400	423	4:05	407	14:32	0.0	0.0	5.9	0.0
Bassi	400	421	4:04	395	22:09	0.0	0.0	0.3	0.0
Hissar	400	412	5:02	393	15:04	0.0	0.0	0.0	0.0
Moga	400	416	4:04	395	15:04	0.0	0.0	0.0	0.0
Abdullapur	400	424	5:02	408	14:53	0.0	0.0	8.6	0.0
Nalagarh	400	428	4:04	406	14:14	0.0	0.0	20.6	0.0
Kishenpur	400	421	4:04	393	19:16	0.0	0.0	0.0	0.0
Wagoora	400	408	4:04	375	19:16	8.8	43.2	0.0	0.0

VIII. 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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	484.82	585.65	485.00	585.65	221.83	394.99
Pong	426.72	384.05	402.89	288.96	406.72	388.64	106.67	306.78
Tehri	829.79	740.04	786.00	398.53	818.65	982.26	78.93	228.00
Koteshwar	612.50	598.50	610.10	4.69	NA	NA	226.00	218.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	122.43	121.55
Rihand	268.22	252.98	258.90	NA	260.91	NA	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	508.69	NA	497.45	NA	110.86	178.96

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 09.03.2013 :
Normal Weather in Northern Region.

XII. Synchronisation of new generating units :

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

XIV. Tripping of lines in pooling stations :

XV. Complete generation loss in a generating station :

Report for : 09.03.2013

पारी प्रभाती अजिंयता / SHIFT CHARGE ENGINEER