

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 13.03.2013
Date of Reporting : 14.03.2013

I. Regional Availability/Demand:

Evening Peak (19:00 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
30643	3884	34527	49.97	29164	1600	30764	50.14	737.0	77.85

* 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	45.68	12.21		57.89	45.54	45.87	0.33	103.76	3.00
Haryana	48.37	0.46		48.82	52.56	54.87	2.31	103.69	10.91
Rajasthan	91.58	4.81	11.16	107.55	68.77	67.45	-1.31	175.00	1.04
Delhi	23.42			23.42	37.32	37.41	0.09	60.82	0.27
UP	93.70	7.30	19.20	120.20	80.19	81.03	0.84	201.23	60.35
Uttarakhand		14.18		14.18	15.10	17.12	2.02	31.30	0.00
HP		8.10		8.10	14.18	14.83	0.65	22.93	0.57
J & K		10.41	0.00	10.41	25.61	24.31	-1.30	34.72	1.70
Chandigarh				0.00	3.53	3.53	0.00	3.53	0.00
Total	302.75	57.46	30.36	390.57	342.81	346.42	3.61	736.99	77.85

* 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	4512	0	-25	-263	4121	0	79	12	-4.91
Haryana	4569	890	88	110	4143	63	-59	-47	-1.07
Rajasthan	6175	0	-83	563	7572	0	101	885	20.37
Delhi	2961	162	172	-688	1649	0	7	-1363	-20.73
UP	8104	2700	-64	-118	8432	1537	9	-42	-2.02
Uttarakhand	1567	0	229	273	1099	0	70	166	6.21
HP	946	32	-4	-360	726	0	43	73	0.13
J&K	1616	100	-40	-12	1322	0	-29	-8	-0.43
Chandigarh	193	0	12	-53	100	0	1	-10	-0.38
Total	30643	3884	286	-548	29164	1600	222	-334	-2.83

* 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	
										UI
A. NTPC	Singrauli STPS	2000	1970	2109	2111	47.40	1975	47.28	0.12	
	Rihand I STPS	1000	807	745	1001	19.12	797	19.35	-0.23	
	Rihand II STPS	1000	950	1031	1039	23.06	961	22.78	0.28	
	Rihand III STPS	500	-6	0	0	0.00	0	-0.14	0.14	
	Dadri I STPS	840	807	860	805	17.82	742	19.31	-1.49	
	Dadri II STPS	980	574	628	470	11.63	485	13.37	-1.74	
	Unchahar I TPS	420	408	440	432	9.64	402	9.72	-0.08	
	Unchahar II TPS	420	406	426	219	9.53	397	9.62	-0.09	
	Unchahar III TPS	210	202	220	388	4.81	200	4.81	0.00	
	ISTPP (Jhajjar)	1500	995	488	408	17.77	741	10.86	6.91	
	Dadri GPS	830	813	375	209	8.92	372	9.25	-0.33	
	Anta GPS	419	406	265	209	5.82	242	5.89	-0.07	
	Auraiva GPS	663	640	152	158	3.55	148	3.85	-0.30	
	Sub Total (A)	10782	8971	7739	7449	179.07	7461	175.97	3.11	
	B. NPC	NAPS	440	301	330	337	7.13	297	7.22	-0.10
RAPS- B		440	418	457	463	10.02	417	10.03	-0.02	
RAPS- C		440	430	469	475	10.20	425	10.32	-0.12	
Sub Total (B)		1320	1149	1256	1275	27.35	1139	27.58	-0.23	
C. NHPC	Chamera I HPS	540	550	540	0	4.27	178	4.22	0.05	
	Chamera II HPS	300	306	243	0	1.83	76	1.87	-0.04	
	Chamera III HPS	231	231	54	0	1.00	42	1.01	-0.01	
	Bairasuil HPS	180	182	182	20	1.69	70	1.65	0.04	
	Salal-HPS	690	258	456	245	6.08	253	6.29	-0.22	
	Tanakpur-HPS	94	29	32	23	0.71	29	0.70	0.01	
	Uri-HPS	480	465	456	400	11.14	464	11.49	-0.35	
	Dhauliganga-HPS	280	288	210	0	1.40	58	1.37	0.03	
	Dulhasti-HPS	390	386	277	15	2.73	114	2.72	0.01	
	Sewa-II HPS	120	120	125	111	2.87	119	2.84	0.03	
	Sub Total (C)	3305	2814	2575	814	33.70	1404	34.16	-0.46	
	D.NJPC	Nathpa Jhakri	1500	1605	1270	0	7.62	317	7.80	-0.18
		Sub Total (D)	1500	1605	1270	0	7.62	317	7.80	-0.18
E. THDC	Tehri HPS	1000	630	635	0	8.39	350	8.50	-0.11	
	Koteshwar HPS	400	400	388	90	3.38	141	3.30	0.08	
	Sub Total (E)	1400	1030	1023	90	11.77	490	11.80	-0.03	
F. BBMB	Bhakra HPS	1480	661	994	415	16.10	671	15.86	0.24	
	Dehar HPS	990	214	495	165	5.47	228	5.13	0.34	
	Pong HPS	396	232	304	63	5.74	239	5.01	0.73	
	Sub Total (F)	2866	1107	1793	643	27.31	1138	26.00	1.31	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.42	18	0.40	0.02	
	KWHEP HPS(IPP)	1000	0	140	0	3.91	163	4.08	-0.18	
	Malana Stg-II HPS	100	0	40	0	0.21	9	0.18	0.02	
	Shree Cement TPS	300	0	153	127	3.46	144	4.87	-1.41	
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00	
	Sub Total (G)	1662	0	333	127	7.99	333	9.54	-1.55	
H. Total Regional Entities (A-G)	22836	16676	15989	10398	294.80	12283	292.84	1.97		

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	950	950	22.34	931	
	Guru Nanak Dev TPS(Bhatinda)	440	120	200	3.37	140	
	Guru Hargobind Singh TPS(L.mbt)	920	780	970	19.97	832	
	Thermal (Total)	2620	1850	2120	45.68	1903	
	Total Hydro	1148	457	454	12.21	509	
	Total Punjab	3768	2307	2574	57.89	2412	
Haryana	Panipat TPS	1367	1015	856	22.57	940	
	DCRTPP (Yamuna nagar)	600	278	282	6.58	274	
	Faridabad GPS (NTPC)	432	184	156	4.96	207	
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	621	547	14.26	594	
	Thermal (Total)	4944	2098	1841	48.37	2015	
	Total Hydro	62	20	19	0.46	19	
		Total Haryana	5006	2118	1860	48.82	2034
	Rajasthan	kota TPS	1240	912	948	23.05	960
suratgarh TPS		1500	1161	1317	30.28	1262	
Chabra TPS		500	388	453	10.30	429	
Dholpur GPS		330	145	140	3.31	138	
Ramgarh GPS		111	66	71	1.81	75	
RAPS A (NPC)		300	179	179	4.84	202	
Barsingsar (NLC)		250	185	184	4.33	181	
Giral LTPS		250	70	111	1.64	69	
Rajwest LTPS (IPP)		1080	488	518	12.01	500	
VSLP LTPS (IPP)		135	0		0.00	0	
Thermal (Total)		5696	3594	3921	91.58	3816	
Total Hydro		550	123	151	4.81	200	
Wind power		2191	207	646	9.98	416	
Biomass		91	31	31	0.74	31	
Solar		201	0	0	0.45	19	
		Renewable/Others (Total)	2483	238	677	11.16	465
		Total Rajasthan	8729	3955	4749	107.55	4481
UP		Anpara TPS	1630	912	898	19.70	821
	Obra TPS	1382	566	509	11.80	492	
	Paricha TPS	890	639	732	15.60	650	
	Panki TPS	210	80	80	1.70	71	
	Harduaganj TPS	665	286	294	6.10	254	
	Tanda TPS (NTPC)	440	406	44	9.89	412	
	Roza TPS (IPP)	1200	804	810	19.37	807	
	Anpara-C (IPP)	1200	0	0	0.00	0	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	405	403	9.54	398	
	Thermal (Total)	8067	4098	3770	93.70	3904	
	Vishnuparyag HPS (IPP)	400	0	75	1.69	70	
	Other Hydro	527	229	194	5.60	234	
	Cogeneration	981	800	800	19.20	800	
		Total UP	9975	5127	4839	120.20	4938
	Uttarakhand	Total Hydro	1303	649	572	14.18	591
Total Uttarakhand		1303	649	572	14.18	591	
Delhi	Rajghat TPS	135	55	54	1.46	61	
	Delhi Gas Turbine	282	149	153	3.74	156	
	Pragati Gas Turbine	330	141	144	3.56	148	
	Rithala GPS	108	0	0	0.00	0	
	Bawana GPS	677	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	675	585	14.66	611	
	Thermal (Total)	2237	1020	936	23.42	976	
		Total Delhi	2237	1020	936	23.42	976
HP	Baspa HPS (IPP)	330	53	32	1.08	45	
	Malana HPS (IPP)	86	41	0	0.19	8	
	Other Hydro	589	310	223	6.83	285	
		Total HP	1005	404	255	8.10	338
J & K	Baglihar HPS (IPP)	450	246	244	5.87	244	
	Other Hydro	323	95	130	4.55	189	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	341	374	10.41	434
Total State Control Area Generation		32979	15921	16159	390.57	16203	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1055	2904	62.20	2592	
Total Regional Availability(Gross)		55815	32965	29461	747.57	31078	

IV. Total Hydro Generation:

Regional Entities Hydro	10364	6841	1547	84.93	3539
State Control Area Hydro	5368	2223	2019	57.46	2324
Total Regional Hydro	15731	9064	3566	142.39	5862

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	-100	50	300	100	0.94	0.46	0.48
Gwalior-Agra (D/C)	104	465	841	0	14.86	0.00	14.86
Zerda-Kankroli	-116	-60	0	142	0.00	1.80	-1.80
Zerda-Bhinmal	-39	-2	95	132	0.00	0.02	-0.02
Malanpur-Auraiya	-169	-105	0	181	0.00	2.72	-2.72
Badod-Kota/Morak	-152	-56	0	152	0.00	1.56	-1.56
Mundra-Mohindergarh(HVDC)	487	1268	1268	0	20.88	0.00	20.88
Sub Total WR	15	1560			36.69	6.57	30.12
Pusauli Bypass	150	400	450	0	4.92	0.09	4.83
MZP- GKP (D/C)	128	112	274	0	3.58	0.00	3.58
Patna-Balia(D/C)	442	536	661	0	13.11	0.00	13.11
B'Sharif-Balia (D/C)	138	204	417	0	6.56	0.00	6.56
Barh - Balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Balia	-82	-98	120	66	0.00	0.85	-0.85
Gaya-Fatehpur (765 Kv)	158	107	180	0	3.23	0.00	3.23
Pusauli-Sahupuri	144	123	144	0	2.76	0.00	2.76
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-38	-40	0	44	0.00	1.14	-1.14
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1040	1344			34.16	2.08	32.08
Total IR Exch	1055	2904			70.85	8.65	62.20

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
43.88	0.15	44.03	-6.54	0.01	-1.26	-10.65	-2.75	2.75
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
33.49	29.90	63.39	32.08	30.12	62.20	-1.40	0.21	-1.19

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	1.88	96.57	94.69	79.34	3.43

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					
50.54	6:03	49.60	5:13	50.09	0.21	0.08	50.26	49.81

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	409	12:38	403	8:57	0.0	0.0	0.0	0.0
Gorakhpur	400	428	21:02	413	10:23	0.0	0.0	76.4	0.0
Bareilly	400	424	6:18	403	10:08	0.0	0.0	17.4	0.0
Kanpur	400	417	4:06	401	10:06	0.0	0.0	0.0	0.0
Dadri	400	422	4:05	404	10:07	0.0	0.0	3.8	0.0
Ballabhgarh	400	426	4:06	405	10:07	0.0	0.0	18.1	0.0
Bawana	400	425	4:39	406	10:07	0.0	0.0	14.2	0.0
Bassi	400	424	4:08	394	10:09	0.0	0.0	3.8	0.0
Hissar	400	414	4:44	392	10:09	0.0	0.0	0.0	0.0
Moga	400	416	4:43	391	10:08	0.0	0.0	0.0	0.0
Abdullapur	400	423	4:44	407	10:09	0.0	0.0	3.2	0.0
Nalagarh	400	423	4:06	401	10:08	0.0	0.0	8.2	0.0
Kishenpur	400	421	4:06	397	10:07	0.0	0.0	0.0	0.0
Wagoora	400	409	4:43	380	19:09	0.0	28.8	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	483.79	552.50	483.21	536.06	225.54	487.05
Pong	426.72	384.05	402.12	266.33	406.09	370.28	95.77	399.38
Tehri	829.79	740.04	783.70	365.00	818.65	982.26	68.53	224.00
Koteswar	612.50	598.50	610.10	4.69	NA	NA	226.00	218.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	88.64	115.03
Rihand	268.22	252.98	258.62	NA	260.63	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	508.48	NA	496.71	NA	140.03	188.25

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 13.03.2013 :
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 : 13.03.2013

पारी प्रभाती अश्विनी / SHIFT CHARGE ENGINEER