

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 21.02.2013
Date of Reporting : 22.02.2013

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
28918	2715	31633	49.94	22722	150	22872	50.35	646.4	37.19

* 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	26.49	9.22		35.71	46.61	47.78	1.17	83.49	2.55
Haryana	29.63	0.36		29.99	49.98	48.70	-1.28	78.69	0.22
Rajasthan	82.88	4.23	15.39	102.50	53.28	47.78	-5.50	150.29	0.05
Delhi	23.94			23.94	35.20	33.06	-2.14	57.00	0.03
UP	99.07	5.08	13.20	117.35	65.87	64.50	-1.36	181.85	31.45
Uttarakhand		10.34		10.34	18.51	20.16	1.64	30.50	1.11
HP		5.26		5.26	18.45	17.75	-0.70	23.01	0.09
J & K		8.11	0.00	8.11	31.88	29.78	-2.10	37.88	1.70
Chandigarh				0.00	3.56	3.66	0.10	3.66	0.00
Total	262.01	42.59	28.59	333.20	323.34	313.17	-10.16	646.37	37.19

* 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	4020	660	-29	-51	2676	0	76	282	6.56
Haryana	4197	45	192	-174	2470	0	-297	-251	-7.52
Rajasthan	5735	0	-729	615	5672	0	-296	367	17.16
Delhi	2991	0	68	-1044	1355	0	-109	-1526	-30.58
UP	7599	1910	-381	-5	7136	150	3	-61	-1.66
Uttarakhand	1523	0	99	465	1084	0	42	332	9.55
HP	1068	0	-56	209	729	0	-34	375	6.86
J&K	1589	100	-267	401	1506	0	-17	376	9.47
Chandigarh	197	0	-3	0	94	0	-4	-30	-0.30
Total	28918	2715	-1106	414	22722	150	-637	-137	9.55

* 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 [OG:(+ve), UG:(-ve)]
A. NTPC	Singrauli STPS	2000	1960	2097	1615	43.94	1831	43.59	0.35	
	Rihand I STPS	1000	925	926	833	19.27	803	19.89	-0.62	
	Rihand II STPS	1000	975	957	725	21.09	879	20.94	0.15	
	Rihand III STPS	500	0	0	0	0.00	0	0.00	0.00	
	Dadri I STPS	840	807	789	620	16.08	670	16.59	-0.51	
	Dadri II STPS	980	969	955	700	19.82	826	20.57	-0.74	
	Unchahar I TPS	420	407	421	309	8.12	338	7.99	0.13	
	Unchahar II TPS	420	405	395	307	7.92	330	7.83	0.08	
	Unchahar III TPS	210	202	100	154	3.92	163	3.89	0.03	
	ISTPP (Jhajjar)	1500	980	401	326	8.57	357	8.86	-0.29	
	Dadri GPS	830	832	334	348	8.17	340	8.23	-0.07	
	Anta GPS	419	423	200	211	5.39	225	5.47	-0.08	
	Auraiva GPS	663	657	319	311	7.25	302	6.87	0.39	
	Sub Total (A)	10782	9542	7894	6459	169.53	7064	170.72	-1.20	
	B. NPC	NAPS	440	306	331	343	7.24	302	7.34	-0.10
		RAPS- B	440	426	466	465	10.14	423	10.22	-0.08
		RAPS- C	440	430	476	476	10.17	424	10.32	-0.15
Sub Total (B)		1320	1162	1273	1284	27.55	1148	27.89	-0.34	
C. NHPC	Chamera I HPS	540	550	540	0	2.33	97	2.32	0.01	
	Chamera II HPS	300	204	201	0	1.23	51	1.25	-0.02	
	Chamera III HPS	231	231	221	0	0.69	29	0.67	0.02	
	Bairasuil HPS	180	182	120	0	0.76	32	0.81	-0.05	
	Salal-HPS	690	141	314	64	3.63	151	3.59	0.04	
	Tanakpur-HPS	94	35	40	33	0.88	37	0.87	0.01	
	Uri-HPS	480	220	327	155	5.15	215	4.87	0.28	
	Dhauliganga-HPS	280	216	137	0	1.03	43	1.02	0.01	
	Dulhasti-HPS	390	0	0	0	0.00	0	0.00	0.00	
	Sewa-II HPS	120	120	104	0	1.49	62	1.34	0.15	
	Sub Total (C)	3305	1899	2004	252	17.18	716	16.73	0.46	
	D.NJPC	Natpda Jhakri	1500	1085	1079	0	6.53	272	6.62	-0.09
		Sub Total (D)	1500	1085	1079	0	6.53	272	6.62	-0.09
E. THDC	Tehri HPS	1000	890	890	0	5.64	235	5.60	0.04	
	Koteshwar HPS	400	100	102	72	2.21	92	2.30	-0.09	
	Sub Total (E)	1400	990	992	72	7.85	327	7.90	-0.05	
F. BBMB	Bhakra HPS	1480	480	878	396	11.88	495	11.52	0.36	
	Dehar HPS	990	148	495	0	3.59	150	3.56	0.03	
	Pong HPS	396	197	310	60	4.88	203	5.01	-0.13	
	Sub Total (F)	2866	825	1683	456	20.35	848	20.09	0.26	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	29	0	0.34	14	0.33	0.02	
	KWHEP HPS(IPP)	1000	0	142	0	2.92	122	3.09	-0.17	
	Malana Stg-II HPS	100	0	31	0	0.12	5	0.11	0.01	
	Shree Cement TPS	300	0	227	220	5.56	232	5.34	0.21	
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00	
	Sub Total (G)	1662	0	429	220	8.94	372	8.87	0.07	
H. Total Regional Entities (A-G)	22836	15503	15354	8743	257.93	10747	258.81	-0.88		

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	633	510	13.28	553	
	Guru Nanak Dev TPS(Bhatinda)	440	120	105	2.50	104	
	Guru Hargobind Singh TPS(L.mbt)	920	531	363	10.71	446	
	Thermal (Total)	2620	1284	978	26.49	1104	
	Total Hydro	1148	481	314	9.22	384	
	Total Punjab	3768	1765	1292	35.71	1488	
Haryana	Panipat TPS	1367	420	404	10.33	430	
	DCRTPP (Yamuna nagar)	600	280	247	6.53	272	
	Faridabad GPS (NTPC)	432	137	0	0.46	19	
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	580	351	12.30	513	
	Thermal (Total)	4944	1417	1002	29.63	1234	
	Total Hydro	62	14	14	0.36	15	
		Total Haryana	5006	1431	1016	29.99	1250
	Rajasthan	kota TPS	1240	1040	1045	26.37	1099
suratgarh TPS		1500	1109	1113	27.66	1152	
Chabra TPS		500	386	384	9.47	394	
Dholpur GPS		330	119	140	2.54	106	
Ramgarh GPS		111	43	44	0.90	38	
RAPS A (NPC)		300	197	197	4.91	205	
Barsingsar (NLC)		250	0	191	1.87	78	
Giral LTPS		250	67	72	1.48	62	
Rajwest LTPS (IPP)		675	297	365	7.70	321	
VSLP LTPS (IPP)		135	0		0.00	0	
Thermal (Total)		5291	3258	3551	82.88	3453	
Total Hydro		550	151	111	4.23	176	
Wind power		2191	750	552	14.74	614	
Biomass		91	20	20	0.47	20	
Solar		201	4	0	0.18	7	
		Renewable/Others (Total)	2483	770	572	15.39	641
		Total Rajasthan	8324	4179	4234	102.50	4271
UP	Anpara TPS	1630	1327	1280	27.90	1163	
	Obra TPS	1382	482	543	11.10	463	
	Paricha TPS	890	688	651	14.60	608	
	Panki TPS	210	70	50	1.30	54	
	Harduaganj TPS	665	273	271	6.10	254	
	Tanda TPS (NTPC)	440	406	334	9.15	381	
	Roza TPS (IPP)	1200	630	590	16.00	667	
	Anpara-C (IPP)	1200	272	270	6.51	271	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	242	275	6.42	267	
	Thermal (Total)	8067	4390	4264	99.07	4128	
	Vishnuparyag HPS (IPP)	400	65	66	1.56	65	
	Other Hydro	527	107	127	3.51	146	
	Cogeneration	981	550	550	13.20	550	
		Total UP	9975	5112	5007	117.35	4824
Uttarakhand	Total Hydro	1303	487	378	10.34	431	
	Total Uttarakhand	1303	487	378	10.34	431	
Delhi	Rajghat TPS	135	99	104	2.48	103	
	Delhi Gas Turbine	282	86	85	1.82	76	
	Pragati Gas Turbine	330	263	265	6.51	271	
	Rithala GPS	108	0	0	0.00	0	
	Bawana GPS	677	224	219	5.32	222	
	Badarpur TPS (NTPC)	705	355	350	7.81	326	
	Thermal (Total)	2237	1027	1023	23.94	998	
		Total Delhi	2237	1027	1023	23.94	998
HP	Baspa HPS (IPP)	330	0	0	0.85	35	
	Malana HPS (IPP)	86	39	0	0.19	8	
	Other Hydro	589	220	128	4.22	176	
		Total HP	1005	259	128	5.26	219
J & K	Baglihar HPS (IPP)	450	146	146	3.56	148	
	Other Hydro	323	95	130	4.55	189	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	241	276	8.11	338
Total State Control Area Generation		32574	14501	13354	333.20	13818	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1971	1937	68.60	2858	
Total Regional Availability(Gross)		55410	31826	24034	659.72	27423	

IV. Total Hydro Generation:

Regional Entities Hydro	10364	5960	780	55.29	2304
State Control Area Hydro	5368	1740	1348	42.59	1710
Total Regional Hydro	15731	7700	2128	97.89	4013

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	-250	500	250	4.43	0.96	3.47
Gwalior-Agra (D/C)	260	365	788	0	11.53	0.00	11.53
Zerda-Kankroli	-126	-257	0	307	0.00	3.23	-3.23
Zerda-Bhinmal	-74	-199	140	289	0.00	1.21	-1.21
Malanpur-Auraiya	-120	-72	0	120	0.00	1.55	-1.55
Badod-Kota/Morak	-149	-163	0	189	0.00	2.64	-2.64
Mundra-Mohindergarh(HVDC)	1265	1264	1267	0	30.62	0.00	30.62
Sub Total WR	1156	688			46.58	9.60	36.98
Pusauli Bypass	400	400	400	0	9.60	0.00	9.60
MZP- GKP (D/C)	120	242	320	0	4.98	0.00	4.98
Patna-Balia(D/C)	376	395	486	0	10.20	0.00	10.20
B'Sharif-Balia (D/C)	39	230	354	0	5.67	0.00	5.67
Barh - Balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Balia	-205	-144	0	208	0.00	1.77	-1.77
Gaya-Fatehpur (765 Kv)	0	76	189	0	1.39	0.00	1.39
Pusauli-Sahupuri	122	88	122	0	2.44	0.00	2.44
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-37	-38	0	42	0.00	0.89	-0.89
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	815	1249			34.28	2.66	31.63
Total IR Exch	1971	1937			80.86	12.26	68.60

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
36.00	0.18	36.18	-2.33	-1.86	0.03	4.18	3.63	-3.63
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
37.50	44.39	81.89	31.63	36.98	68.60	-5.88	-7.41	-13.29

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	0.50	82.40	81.90	60.60	17.60

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					
50.48	4.04	49.64	19.09	50.05	0.24	0.14	50.41	0.00

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	415	4:04	404	12:53	8.4	8.4	0.0	0.0
Gorakhpur	400	426	15:23	414	7:47	0.0	0.0	54.2	0.0
Bareilly	400	427	4:03	407	6:39	0.0	0.0	21.1	0.0
Kanpur	400	423	23:55	401	6:38	0.0	0.0	3.3	0.0
Dadri	400	428	3:53	407	6:53	0.0	0.0	25.0	0.0
Ballabhgarh	400	433	4:02	409	6:36	0.0	0.0	34.4	5.8
Bawana	400	432	4:01	409	7:22	0.0	0.0	32.6	0.7
Bassi	400	435	4:00	398	6:38	0.0	0.0	33.7	2.9
Hissar	400	424	23:59	398	6:38	0.0	0.0	5.9	0.0
Moga	400	427	23:59	398	6:38	0.0	0.0	8.7	0.0
Abdullapur	400	428	13:04	299	15:29	0.0	0.0	16.4	0.0
Nalagarh	400	431	23:59	403	6:13	0.0	0.0	31.9	0.0
Kishenpur	400	424	23:57	394	6:52	0.0	0.0	2.5	0.0
Wagoora	400	405	23:51	372	6:53	30.8	71.9	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	485.87	610.73	490.24	738.95	193.18	309.79
Pong	426.72	384.05	404.33	328.16	409.11	464.36	86.79	360.64
Tehri	829.79	740.04	791.30	468.00	818.65	982.26	51.59	150.00
Koteswar	612.50	598.50	610.50	4.69	NA	NA	151.00	156.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	NA	NA
Rihand	268.22	252.98	259.51	NA	261.88	NA	NA	NA
RPS	352.80	343.81	346.91	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	296.88	NA	NA	NA	NA	NA
RSD	527.91	487.91	509.57	NA	499.60	NA	77.05	155.54

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 21.02.2013 :

Scattered Rain

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 : 21.02.2013

पारी प्रभाती अशियंता / SHIFT CHARGE ENGINEER