

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 24.03.2013
Date of Reporting : 25.03.2013

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
29652	1710	31362	50.09	27909	657	28566	50.34	702.2	38.22

* 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	23.22	10.95		34.18	40.24	38.68	-1.56	72.86	0.21
Haryana	49.62	0.63		50.24	54.31	53.10	-1.22	103.34	0.01
Rajasthan	92.17	2.25	5.43	99.84	69.78	66.13	-3.65	165.97	0.00
Delhi	25.36			25.36	34.25	33.18	-1.06	58.54	0.00
UP	102.44	4.90	19.20	126.54	94.56	94.38	-0.18	220.93	36.22
Uttarakhand		13.18		13.18	16.69	16.10	-0.59	29.28	0.00
HP		9.26		9.26	12.93	9.80	-3.13	19.06	0.08
J & K		10.39	0.00	10.39	24.43	18.69	-5.73	29.09	1.70
Chandigarh				0.00	3.35	3.10	-0.25	3.10	0.00
Total	292.80	51.56	24.63	368.99	350.54	333.18	-17.36	702.17	38.22

* 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	3871	0	-144	-19	2571	0	-123	178	-0.34
Haryana	4839	0	46	-359	3531	0	-17	-637	-9.69
Rajasthan	5747	0	-208	579	7045	0	-142	827	18.35
Delhi	2867	0	57	-989	1833	0	38	-1486	-28.23
UP	8419	1610	80	17	10349	650	111	76	1.59
Uttarakhand	1438	0	144	302	1142	0	32	215	6.04
HP	774	0	-160	-443	647	7	-56	101	-0.73
J&K	1537	100	80	-12	699	0	-587	-12	-0.29
Chandigarh	160	0	-9	-60	92	0	-5	-15	-0.62
Total	29652	1710	-114	-984	27909	657	-748	-754	-13.92

* 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	1963	2018	2101	45.94	1914	45.52	0.41	
	Rihand I STPS	1000	715	735	702	16.08	670	16.05	0.04	
	Rihand II STPS	1000	975	848	966	21.79	908	21.86	-0.07	
	Rihand III STPS	500	485	460	493	11.21	467	11.24	-0.03	
	Dadri I STPS	840	807	769	615	15.46	644	18.26	-2.80	
	Dadri II STPS	980	969	412	735	11.90	496	15.99	-4.08	
	Unchahar I TPS	420	408	323	419	8.72	363	8.42	0.30	
	Unchahar II TPS	420	406	361	438	8.87	369	8.16	0.70	
	Unchahar III TPS	210	202	177	220	4.42	184	4.13	0.29	
	ISTPP (Jhajjar)	1500	995	668	679	15.09	629	15.52	-0.43	
	Dadri GPS	830	799	355	402	8.62	359	8.81	-0.19	
	Anta GPS	419	402	229	210	5.53	230	5.60	-0.07	
	Auraiva GPS	663	639	152	157	3.56	148	3.91	-0.35	
	Sub Total (A)	10782	9765	7507	8137	177.19	7383	183.47	-6.28	
	B. NPC	NAPS	440	297	329	336	7.06	294	7.12	-0.06
		RAPS- B	440	419	460	466	10.08	420	10.06	0.03
RAPS- C		440	430	473	478	10.20	425	10.32	-0.12	
Sub Total (B)		1320	1146	1262	1280	27.34	1139	27.50	-0.16	
C. NHPC	Chamera I HPS	540	550	450	0	4.13	172	4.21	-0.07	
	Chamera II HPS	300	310	298	0	3.56	148	2.34	1.21	
	Chamera III HPS	231	231	153	0	2.45	102	2.46	-0.01	
	Bairasuil HPS	180	182	182	20	3.01	125	2.93	0.08	
	Salal-HPS	690	319	450	182	8.19	341	7.72	0.47	
	Tanakpur-HPS	94	32	32	25	0.73	31	0.75	-0.02	
	Uri-HPS	480	479	480	480	11.63	485	11.52	0.11	
	Dhauliganga-HPS	280	289	149	0	1.21	50	1.21	0.00	
	Dulhasti-HPS	390	387	403	0	3.46	144	3.49	-0.02	
	Sewa-II HPS	120	119	121	94	2.56	107	2.56	0.00	
	Sub Total (C)	3305	2897	2718	801	40.94	1706	39.20	1.74	
	D. NJPC	Natpda Jhakri	1500	1605	1019	0	7.40	308	7.30	0.10
		Sub Total (D)	1500	1605	1019	0	7.40	308	7.30	0.10
E. THDC	Tehri HPS	1000	661	400	0	8.00	333	8.00	0.00	
	Koteshwar HPS	400	300	291	0	3.84	160	3.80	0.04	
	Sub Total (E)	1400	961	691	0	11.84	494	11.80	0.04	
F. BBMB	Bhakra HPS	1480	796	993	519	18.91	788	19.10	-0.19	
	Dehar HPS	990	288	660	165	8.86	369	6.92	1.94	
	Pong HPS	396	203	300	60	3.80	158	5.01	-1.21	
	Sub Total (F)	2866	1288	1953	744	31.57	1315	31.03	0.54	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.65	27	0.44	0.21	
	KWHEP HPS(IPP)	1000	0	360	0	3.86	161	3.83	0.02	
	Malana Stg-II HPS	100	0	50	0	0.26	11	0.23	0.03	
	Shree Cement TPS	300	0	263	260	6.33	264	6.38	-0.06	
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00	
	Sub Total (G)	1662	0	673	260	11.09	462	10.89	0.20	
H. Total Regional Entities (A-G)	22836	17662	15823	11222	307.37	12807	311.19	-3.82		

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	540	750	13.50	563	
	Guru Nanak Dev TPS(Bhatinda)	440	95	95	2.01	84	
	Guru Hargobind Singh TPS(L.mbt)	920	677	677	7.71	321	
	Thermal (Total)	2620	1312	1522	23.22	968	
	Total Hydro	1148	500	371	10.95	456	
	Total Punjab	3768	1812	1893	34.18	1424	
Haryana	Panipat TPS	1367	1011	1002	24.16	1007	
	DCRTPP (Yamuna nagar)	600	519	503	12.42	518	
	Faridabad GPS (NTPC)	432	169	150	4.06	169	
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	382	373	8.97	374	
	Thermal (Total)	4944	2081	2028	49.62	2067	
	Total Hydro	62	18	27	0.63	26	
		Total Haryana	5006	2099	2055	50.24	2094
Rajasthan	kota TPS	1240	1082	1169	26.85	1119	
	suratgarh TPS	1500	1125	1147	26.25	1094	
	Chabra TPS	500	366	452	9.75	406	
	Dholpur GPS	330	143	143	3.33	139	
	Ramgarh GPS	111	75	72	1.69	70	
	RAPS A (NPC)	300	172	172	4.82	201	
	Barsingsar (NLC)	250	180	182	4.24	177	
	Giral LTPS	250	0	91	0.54	22	
	Rajwest LTPS (IPP)	1080	594	585	14.71	613	
	VSLP LTPS (IPP)	135	0		0.00	0	
	Thermal (Total)	5696	3737	4013	92.17	3840	
	Total Hydro	550	65	307	2.25	94	
	Wind power	2191	107	0	3.14	131	
	Biomass	91	32	32	0.77	32	
	Solar	201	0	0	1.52	63	
		Renewable/Others (Total)	2483	139	32	5.43	226
		Total Rajasthan	8729	3941	4352	99.84	4160
UP	Anpara TPS	1630	1088	1092	23.20	967	
	Obra TPS	1382	549	495	11.50	479	
	Paricha TPS	890	628	623	13.50	563	
	Panki TPS	210	75	85	1.70	71	
	Harduaganj TPS	665	303	285	6.30	263	
	Tanda TPS (NTPC)	440	348	403	9.76	407	
	Roza TPS (IPP)	1200	648	801	17.55	731	
	Anpara-C (IPP)	1200	467	473	11.19	466	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	272	403	7.74	323	
	Thermal (Total)	8067	4378	4660	102.44	4268	
	Vishnuparyag HPS (IPP)	400	78	80	1.86	77	
	Other Hydro	527	214	232	3.05	127	
	Cogeneration	981	800	800	19.20	800	
		Total UP	9975	5470	5772	126.54	5195
Uttarakhand	Total Hydro	1303	591	553	13.18	549	
	Total Uttarakhand	1303	591	553	13.18	549	
Delhi	Rajghat TPS	135	104	52	1.82	76	
	Delhi Gas Turbine	282	153	156	3.93	164	
	Pragati Gas Turbine	330	294	263	6.74	281	
	Rithala GPS	108	0	0	0.00	0	
	Bawana GPS	677	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	575	585	12.87	536	
	Thermal (Total)	2237	1126	1056	25.36	1057	
		Total Delhi	2237	1126	1056	25.36	1057
HP	Baspa HPS (IPP)	330	0	27	1.01	42	
	Malana HPS (IPP)	86	45	0	0.25	11	
	Other Hydro	589	363	268	8.00	333	
		Total HP	1005	408	295	9.26	386
J & K	Baglihar HPS (IPP)	450	246	244	5.85	244	
	Other Hydro	323	95	130	4.55	189	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	341	374	10.39	433
Total State Control Area Generation		32979	15788	16350	368.99	15297	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1364	1343	32.88	1370	
Total Regional Availability(Gross)		55815	32975	28915	709.24	29474	

IV. Total Hydro Generation:

Regional Entities Hydro	10364	6791	1545	96.52	4022
State Control Area Hydro	5368	2137	2159	51.56	2071
Total Regional Hydro	15731	8928	3704	148.08	6093

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	-50	-300	50	400	0.26	3.87	-3.60
Gwalior-Agra (D/C)	199	435	653	27	6.72	0.00	6.72
Zerda-Kankroli	-214	-150	0	-294	0.00	4.43	-4.43
Zerda-Bhinmal	-157	-75	0	246	0.00	2.65	-2.65
Malanpur-Auraiya	-127	-116	0	186	0.00	2.65	-2.65
Badod-Kota/Morak	-187	-184	0	221	0.00	4.13	-4.13
Mundra-Mohindergarh(HVDC)	1171	1038	1266	0	26.07	0.00	26.07
Sub Total WR	635	648			33.05	17.73	15.32
Pusauli Bypass	400	400	400	0	9.24	0.00	9.24
MZP- GKP (D/C)	68	72	270	0	1.79	0.00	1.79
Patna-Balia(D/C)	280	309	403	0	7.49	0.00	7.49
B'Sharif-Balia (D/C)	86	46	168	0	1.76	0.00	1.76
Pusauli-Balia	-140	-150	0	187	0.00	3.24	-3.24
Gaya-Fatehpur (765 Kv)	-46	-88	0	126	0.00	1.61	-1.61
Pusauli-Sahupuri	117	146	154	0	2.97	0.00	2.97
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	44	0.00	0.83	-0.83
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	729	695			23.24	5.68	17.56
Total IR Exch	1364	1343			56.29	23.41	32.88

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange ShdI (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
35.01	0.14	35.16	-11.63	-2.84	3.39	-13.35	-2.26	2.26

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
24.65	28.80	53.45	17.56	15.32	32.88	-7.10	-13.48	-20.57

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	0.00	90.28	90.28	89.58	9.72

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz				
50.49	4.07	49.82	11.08	50.14	0.34	0.09	50.44	49.94

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	411	7:53	404	10:42	0.0	0.0	0.0	0.0
Gorakhpur	400	429	17:08	414	23:18	0.0	0.0	65.4	0.0
Bareilly	400	425	4:05	406	11:11	0.0	0.0	12.9	0.0
Kanpur	400	421	17:10	405	11:13	0.0	0.0	0.1	0.0
Dadri	400	423	4:03	405	11:14	0.0	0.0	9.2	0.0
Ballabgarh	400	428	4:02	410	11:10	0.0	0.0	37.5	0.0
Bawana	400	428	4:06	407	11:25	0.0	0.0	22.2	0.0
Bassi	400	427	4:03	403	11:10	0.0	0.0	16.8	0.0
Hissar	400	420	4:02	395	11:07	0.0	0.0	0.0	0.0
Moga	400	426	4:05	401	11:04	0.0	0.0	16.2	0.0
Abdullapur	400	425	4:05	407	12:34	0.0	0.0	15.7	0.0
Nalagarh	400	433	2:02	409	11:06	0.0	0.0	36.6	0.9
Kishenpur	400	427	5:05	395	19:12	0.0	0.0	17.8	0.0
Wagoora	400	426	4:02	375	19:27	5.7	12.0	14.4	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	776	17:10	743	11:10	0.0	0.0	0.0	0.0
Balia	765	769	17:08	735	22:34	0.0	8.4	0.0	0.0
Moga	765	799	4:05	755	11:07	0.0	0.0	0.0	0.0
Lucknow	765	783	17:10	753	22:34	0.0	0.0	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	481.15	488.47	479.29	441.00	423.05	625.80
Pong	426.72	384.05	400.18	223.85	404.25	320.26	78.55	264.65
Tehri	829.79	740.04	778.16	300.00	818.65	982.26	68.81	222.00
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	NA	NA
Rihand	268.22	252.98	258.07	NA	260.18	NA	NA	NA
RPS	352.80	343.81	345.69	NA	NA	NA	NA	119.64
Jawahar Sagar	298.70	295.78	296.27	NA	NA	NA	NA	258.05
RSD	527.91	487.91	507.67	NA	496.20	NA	103.30	102.05

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 24.03.2013 :
Normal Weather Conditions in NR

XIII. Synchronisation of new generating units :

XIV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / substation :
765 KV Agra-Gwalior Ckt.1 Successfully Charged (First time) at 21:09 Hrs.

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :

Report for : 24.03.2013

पारी प्रभाती अजयन्ता / SHIFT CHARGE ENGINEER