

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 11.03.2013
Date of Reporting : 12.03.2013

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
31186	2009	33195	50.03	28443	650	29093	50.09	740.9	49.52

* 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	39.73	11.90		51.63	49.01	49.91	101.54	1.50	
Haryana	43.58	0.53		44.11	60.64	60.13	104.24	1.27	
Rajasthan	92.02	3.67	8.53	104.22	71.93	68.62	172.84	0.00	
Delhi	24.14			24.14	33.67	34.28	58.42	0.42	
UP	107.49	6.84	19.20	133.53	79.91	79.88	213.41	44.63	
Uttarakhand		14.45		14.45	16.84	15.17	29.62	0.00	
HP		8.58		8.58	14.18	14.05	22.63	0.00	
J & K		11.13	0.00	11.13	25.97	23.60	34.73	1.70	
Chandigarh				0.00	3.73	3.50	3.50	0.00	
Total	306.96	57.10	27.73	391.79	355.86	349.14	740.92	49.52	

* 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	4536	0	-134	-263	3761	0	0	56	-3.65
Haryana	4785	47	34	107	3798	0	-241	-64	-1.75
Rajasthan	5980	0	-274	687	7319	0	123	1064	23.14
Delhi	2969	102	235	-773	1517	0	-3	-1722	-25.63
UP	8775	1760	-128	-118	9129	650	77	-42	-2.02
Uttarakhand	1523	0	43	407	975	0	-169	366	8.43
HP	927	0	39	-307	673	0	6	73	-0.56
J&K	1505	100	-146	10	1180	0	-88	17	-0.05
Chandigarh	187	0	8	-60	91	0	-23	0	-0.45
Total	31186	2009	-323	-311	28443	650	-318	-251	-2.55

* 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	
A. NTPC	Singrauli STPS	2000	1970	2125	2106	47.62	1984	46.91	0.71	
	Rihand I STPS	1000	930	947	987	21.90	912	21.90	0.00	
	Rihand II STPS	1000	951	1003	1028	22.38	932	22.46	-0.08	
	Rihand III STPS	500	485	511	500	11.59	483	11.55	0.04	
	Dadri I STPS	840	807	838	648	17.27	720	18.49	-1.22	
	Dadri II STPS	980	615	338	690	9.59	400	9.61	-0.02	
	Unchahar I TPS	420	408	422	440	9.74	406	9.07	0.67	
	Unchahar II TPS	420	406	436	439	9.72	405	9.01	0.71	
	Unchahar III TPS	210	202	219	220	4.84	202	4.43	0.41	
	ISTPP (Jhajjar)	1500	995	484	367	10.06	419	10.83	-0.77	
	Dadri GPS	830	830	328	300	8.16	340	8.46	-0.30	
	Anta GPS	419	406	232	212	5.55	231	5.51	0.03	
	Auraiva GPS	663	646	151	156	3.55	148	3.68	-0.13	
	Sub Total (A)	10782	9651	8034	8093	181.96	7582	181.90	0.06	
	B. NPC	NAPS	440	300	332	340	7.22	301	7.20	0.02
		RAPS- B	440	420	458	463	10.12	422	10.08	0.04
RAPS- C		440	430	475	472	10.13	422	10.32	-0.19	
Sub Total (B)		1320	1150	1265	1275	27.47	1145	27.60	-0.13	
C. NHPC	Chamera I HPS	540	550	360	0	4.57	190	4.54	0.03	
	Chamera II HPS	300	306	300	0	2.17	90	2.31	-0.14	
	Chamera III HPS	231	231	227	0	1.00	42	1.05	-0.05	
	Bairasuil HPS	180	182	120	20	1.79	75	1.71	0.09	
	Salal-HPS	690	293	345	247	6.88	287	6.72	0.15	
	Tanakpur-HPS	94	28	32	29	0.75	31	0.68	0.08	
	Uri-HPS	480	480	480	474	11.36	473	11.15	0.21	
	Dhauliganga-HPS	280	288	274	0	1.03	43	0.91	0.12	
	Dulhasti-HPS	390	265	274	0	3.31	138	3.02	0.29	
	Sewa-II HPS	120	120	126	120	2.87	120	2.87	0.00	
	Sub Total (C)	3305	2743	2538	890	35.73	1489	34.96	0.77	
	D. NJPC	Natpcha Jhakri	1500	1547	1344	0	8.25	344	8.00	0.25
Sub Total (D)		1500	1547	1344	0	8.25	344	8.00	0.25	
E. THDC	Tehri HPS	1000	728	642	0	8.29	345	8.25	0.04	
	Koteshwar HPS	400	400	300	90	3.38	141	3.30	0.08	
	Sub Total (E)	1400	1128	942	90	11.67	486	11.55	0.12	
F. BBMB	Bhakra HPS	1480	658	997	396	15.92	663	15.79	0.13	
	Dehar HPS	990	265	495	145	6.22	259	6.37	-0.15	
	Pong HPS	396	204	306	63	5.19	216	5.01	0.18	
	Sub Total (F)	2866	1127	1798	604	27.33	1139	27.16	0.17	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.47	19	0.55	-0.08	
	KWHEP HPS(IPP)	1000	0	278	0	4.11	171	4.08	0.04	
	Malana Stg-II HPS	100	0	46	0	0.22	9	0.20	0.02	
	Shree Cement TPS	300	0	263	218	3.06	128	3.01	0.06	
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00	
	Sub Total (G)	1662	0	587	218	7.86	328	7.83	0.04	
H. Total Regional Entities (A-G)	22836	17346	16508	11170	300.27	12511	299.00	1.27		

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	740	840	18.12	755	
	Guru Nanak Dev TPS(Bhatinda)	440	105	105	2.50	104	
	Guru Hargobind Singh TPS(L.mbt)	920	835	737	19.10	796	
	Thermal (Total)	2620	1680	1682	39.73	1655	
	Total Hydro	1148	453	422	11.90	496	
	Total Punjab	3768	2133	2104	51.63	2151	
Haryana	Panipat TPS	1367	841	788	20.05	836	
	DCRTPP (Yamuna nagar)	600	284	261	6.48	270	
	Faridabad GPS (NTPC)	432	167	155	4.08	170	
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	616	542	12.96	540	
	Thermal (Total)	4944	1908	1746	43.58	1816	
	Total Hydro	62	21	22	0.53	22	
		Total Haryana	5006	1929	1768	44.11	1838
Rajasthan	kota TPS	1240	901	885	22.45	936	
	suratgarh TPS	1500	1185	1153	28.73	1197	
	Chabra TPS	500	415	386	9.85	410	
	Dholpur GPS	330	140	140	3.32	139	
	Ramgarh GPS	111	66	72	1.76	73	
	RAPS A (NPC)	300	183	183	4.76	198	
	Barsingsar (NLC)	250	185	187	4.35	181	
	Giral LTPS	250	119	118	2.60	108	
	Rajwest LTPS (IPP)	675	594	700	14.21	592	
	VSLP LTPS (IPP)	135	0		0.00	0	
	Thermal (Total)	5291	3788	3824	92.02	3834	
	Total Hydro	550	126	72	3.67	153	
	Wind power	2191	18	516	7.73	322	
	Biomass	91	25	25	0.59	25	
	Solar	201	5	0	0.20	8	
		Renewable/Others (Total)	2483	43	541	8.53	355
		Total Rajasthan	8324	3957	4437	104.22	4342
UP	Anpara TPS	1630	1435	1448	34.20	1425	
	Obra TPS	1382	508	502	12.10	504	
	Paricha TPS	890	692	606	16.20	675	
	Panki TPS	210	81	81	2.00	83	
	Harduaganj TPS	665	264	266	6.00	250	
	Tanda TPS (NTPC)	440	400	406	9.86	411	
	Roza TPS (IPP)	1200	810	810	18.11	755	
	Anpara-C (IPP)	1200	0	0	0.00	0	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	317	402	9.02	376	
	Thermal (Total)	8067	4507	4521	107.49	4479	
	Vishnuparyag HPS (IPP)	400	74	71	1.42	59	
	Other Hydro	527	279	268	5.42	226	
	Cogeneration	981	800	800	19.20	800	
		Total UP	9975	5660	5660	133.53	5505
Uttarakhand	Total Hydro	1303	616	523	14.45	602	
	Total Uttarakhand	1303	616	523	14.45	602	
Delhi	Rajghat TPS	135	55	52	1.25	52	
	Delhi Gas Turbine	282	111	113	2.72	113	
	Pragati Gas Turbine	330	136	267	6.02	251	
	Rithala GPS	108	0	0	0.00	0	
	Bawana GPS	677	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	690	580	14.16	590	
	Thermal (Total)	2237	992	1012	24.14	1006	
		Total Delhi	2237	992	1012	24.14	1006
HP	Baspa HPS (IPP)	330	0	0	1.00	42	
	Malana HPS (IPP)	86	41	0	0.21	9	
	Other Hydro	589	294	237	7.36	307	
	Total HP	1005	335	237	8.58	357	
J & K	Baglihar HPS (IPP)	450	276	270	6.59	274	
	Other Hydro	323	95	130	4.55	189	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	371	400	11.13	464	
Total State Control Area Generation		32574	15993	16141	391.79	16265	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1966	2350	61.92	2580	
Total Regional Availability(Gross)		55410	34467	29661	753.98	31357	

IV. Total Hydro Generation:

Regional Entities Hydro	10364	6946	1584	87.78	3658
State Control Area Hydro	5368	2201	1944	57.10	2320
Total Regional Hydro	15731	9147	3528	144.88	5978

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	-50	300	50	2.84	0.66	2.18
Gwalior-Agra (D/C)	-78	205	283	78	4.06	0.00	4.06
Zerda-Kankroli	-145	-112	0	227	0.00	3.05	-3.05
Zerda-Bhinmal	87	52	43	200	0.00	1.52	-1.52
Malanpur-Auraiya	-205	-148	0	210	0.00	3.13	-3.13
Badod-Kota/Morak	-176	-95	0	176	0.00	1.02	-1.02
Mundra-Mohindergarh(HVDC)	1108	1267	1268	0	29.00	0.00	29.00
Sub Total WR	891	1119			35.90	9.38	26.52
Pusauli Bypass	400	400	400	0	9.49	0.00	9.49
MZP- GKP (D/C)	40	50	304	0	2.97	0.00	2.97
Patna-Balia(D/C)	521	511	688	0	13.86	0.00	13.86
B'Sharif-Balia (D/C)	218	298	421	0	7.43	0.00	7.43
Barh - Balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Balia	-183	-118	0	190	0.00	1.34	-1.34
Gaya-Fatehpur (765 Kv)	-9	-6	153	44	1.08	0.00	1.08
Pusauli-Sahupuri	126	136	143	0	3.04	0.00	3.04
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	1075	1231			37.87	2.48	35.40
Total IR Exch	1966	2350			73.77	11.85	61.92

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

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
42.52	0.13	42.65	-6.95	-0.16	4.15	-13.26	-2.59	2.59

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
37.25	34.21	71.47	35.40	26.52	61.92	-1.86	-7.69	-9.55

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	0.10	1.40	93.20	91.90	48.00	6.70

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					
50.57	17.05	49.46	22.02	49.99	0.19	0.14	50.44	49.78

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	4:13	399	22:00	0.0	0.0	0.0	0.0
Gorakhpur	400	462	11:24	344	11:39	0.5	0.5	2.7	0.0
Bareilly	400	422	5:17	401	11:20	0.0	0.0	0.8	0.0
Kanpur	400	414	4:05	397	8:49	0.0	0.0	0.0	0.0
Dadri	400	420	4:02	400	11:43	0.0	0.0	0.0	0.0
Ballabgarh	400	425	4:03	404	11:14	0.0	0.0	9.6	0.0
Bawana	400	424	4:02	401	11:40	0.0	0.0	10.9	0.0
Bassi	400	426	18:01	396	22:24	0.0	0.0	7.0	0.0
Hissar	400	412	4:02	389	11:43	0.0	0.0	0.0	0.0
Moga	400	415	4:02	394	11:22	0.0	0.0	0.0	0.0
Abdullapur	400	425	4:02	405	8:49	0.0	0.0	20.3	0.0
Nalagarh	400	429	4:02	400	11:32	0.0	0.0	27.1	0.0
Kishenpur	400	420	2:07	396	19:09	0.0	0.0	0.0	0.0
Wagoora	400	407	2:33	380	19:19	0.0	30.0	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
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	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 11.03.2013 :
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 : 11.03.2013

पारी प्रभाती अजिंयता / SHIFT CHARGE ENGINEER