

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.11.2013
Date of Reporting : 23.11.2013

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
33529	2397	35926	50.06	27272	980	28252	50.18	733.3	54.78

* 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	45.64	10.09		55.74	34.85	36.22	1.36	91.95	0.81
Haryana	60.86	0.62		61.48	39.58	39.43	-0.15	100.91	0.28
Rajasthan	98.83	5.09	3.27	107.19	74.65	72.01	-2.64	179.20	0.00
Delhi	17.77			17.77	40.38	40.84	0.46	58.61	0.00
UP	126.55	3.36	1.20	131.11	75.35	76.54	1.19	207.65	48.90
Uttarakhand		8.71		8.71	19.27	20.96	1.69	29.66	3.09
HP		6.50		6.50	17.11	18.24	1.13	24.73	0.00
J & K		6.77	0.00	6.77	28.13	30.49	2.36	37.25	1.70
Chandigarh				0.00	3.22	3.33	0.11	3.33	0.00
Total	349.66	41.14	4.47	395.26	332.52	338.03	5.52	733.29	54.78

* 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	STOA/PX transaction	
Punjab	4418	69	-83	-397	3251	0	247	-324	-10.01	
Haryana	5140	123	122	-969	3764	0	49	-996	-25.05	
Rajasthan	7786	0	-261	896	6813	0	-100	1050	34.16	
Delhi	3132	0	-22	-621	1388	0	-22	-1213	-22.04	
UP	8621	2030	-573	-211	8458	980	10	-235	-6.67	
Uttarakhand	1420	75	-109	466	1067	0	99	320	8.57	
HP	1197	0	31	3	898	0	141	251	4.58	
J&K	1634	100	19	466	1544	0	154	385	7.57	
Chandigarh	181	0	2	0	89	0	-4	-5	0.00	
Total	33529	2397	-874	-366	27272	980	574	-767	-8.89	

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

III. Regional Entities :

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	1945	2105	2085	47.08	1962	46.66	0.42
Rihand I STPS	1000	864	965	938	20.83	868	20.72	0.10
Rihand II STPS	1000	910	1042	962	21.98	916	21.80	0.18
Rihand III STPS	1000	446	421	462	10.75	448	10.71	0.04
Dadri I STPS	840	814	653	474	13.38	558	13.45	-0.07
Dadri II STPS	980	985	951	725	21.46	894	21.56	-0.11
Unchahar I TPS	420	405	442	381	9.37	390	9.43	-0.06
Unchahar II TPS	420	403	444	343	9.20	384	9.08	0.13
Unchahar III TPS	210	201	219	165	4.58	191	4.58	0.00
ISTPP (Jhajjar)	1500	1480	990	632	16.88	703	16.98	-0.11
Dadri GPS	830	818	338	388	8.77	365	8.80	-0.03
Anta GPS	419	414	199	243	6.10	254	6.15	-0.05
Auraiya GPS	663	653	154	139	3.73	155	3.80	-0.07
Sub Total (A)	11282	10337	8923	7937	194.11	8088	193.73	0.37
B. NPC								
NAPS	440	317	356	359	7.57	316	7.61	-0.04
RAPS- B	440	419	459	466	10.05	419	10.06	-0.01
RAPS- C	440	430	472	472	10.22	426	10.32	-0.10
Sub Total (B)	1320	1166	1287	1297	27.84	1160	27.98	-0.14
C. NHPC								
Chamera I HPS	540	541	360	0	2.18	91	2.00	0.18
Chamera II HPS	300	300	197	0	1.63	68	1.53	0.10
Chamera III HPS	231	231	50	0	0.82	34	0.78	0.04
Bairasuil HPS	180	182	60	0	0.63	26	0.58	0.06
Salal-HPS	690	129	250	30	3.20	133	3.00	0.20
Tanakpur-HPS	94	36	42	33	0.91	38	0.87	0.04
Uri-HPS	480	126	115	45	2.87	119	3.04	-0.17
Uri-II HPS	120	22	123	60	1.69	70	0.49	1.20
Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
Dulhasti-HPS	390	387	359	0	3.59	150	3.42	0.16
Sewa-II HPS	120	119	113	0	0.39	16	0.38	0.01
Sub Total (C)	3425	2072	1669	168	17.91	746	16.08	1.83
D. NJPC								
Nathpa Jhakri	1500	1605	1550	0	10.56	440	9.89	0.67
Sub Total (D)	1500	1605	1550	0	10.56	440	9.89	0.67
E. THDC								
Tehri HPS	1000	1060	1012	0	6.63	276	6.40	0.23
Koteshwar HPS	400	92	100	91	2.24	93	2.20	0.04
Sub Total (E)	1400	1152	1112	91	8.86	369	8.60	0.26
F. BBMB								
Bhakra HPS	1497	574	1083	377	14.26	594	13.78	0.48
Dehar HPS	990	171	330	0	3.65	152	4.10	-0.45
Pong HPS	396	235	306	180	5.84	243	5.64	0.20
Sub Total (F)	2883	979	1719	557	23.75	990	23.51	0.24
G. IPP(s)/JV(s)								
ADHPL HPS(IPP)	192	0	0	0	0.60	25	0.58	0.02
KWHEP HPS(IPP)	1000	0	230	0	5.75	240	5.72	0.03
Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS	300	0	125	0	1.35	56	2.75	-1.40
Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
Sub Total (G)	1662	0	355	0	7.70	321	9.05	-1.36
H. Total Regional Entities (A-G)	23472	17312	16615	10050	290.73	12114	288.85	1.87

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	1050	810	21.17	882	
	Guru Nanak Dev TPS(Bhatinda)	440	230	170	4.41	184	
	Guru Hargobind Singh TPS(L.mbt)	920	958	762	20.06	836	
	Goindwal(GVK)		0	0	0.00	0	
	Thermal (Total)	2620	2238	1742	45.64	1902	
	Total Hydro	1148	401	430	10.09	421	
	Total Punjab	3768	2639	2172	55.74	2322	
Haryana	Panipat TPS	1367	425	416	10.33	430	
	DCRTPP (Yamuna nagar)	600	246	252	6.27	261	
	Faridabad GPS (NTPC)	432	171	279	5.34	223	
	RGTPP (khedar) (IPP)	1200	599	489	12.76	532	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	1114	744	26.16	1090	
	Thermal (Total)	4944	2555	2180	60.86	2536	
	Total Hydro	62	27	29	0.62	26	
	Total Haryana	5006	2582	2209	61.48	2562	
	Rajasthan	kota TPS	1240	1155	1149	27.27	1136
		suratgarh TPS	1500	1137	1023	25.95	1081
Chabra TPS		500	222	199	5.24	218	
Dholpur GPS		330	103	90	2.44	102	
Ramgarh GPS		111	162	163	3.73	155	
RAPS A (NPC)		300	175	175	4.00	167	
Barsingsar (NLC)		250	222	223	4.61	192	
Giral LTPS		250	0	0	0.00	0	
Rajwest LTPS (IPP)		1080	491	403	11.54	481	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Kalisindh Thermal		600	0	0	0.00	0	
Kawai(Adani)		660	621	472	14.06	586	
Thermal (Total)		6956	4288	3897	98.83	4118	
Total Hydro		550	296	131	5.09	212	
Wind power		2191	52	49	1.92	80	
Biomass		91	26	26	0.61	26	
Solar		201	0	0	0.73	31	
Renewable/Others (Total)		2483	78	75	3.27	136	
Total Rajasthan		9989	4662	4103	107.19	4466	
UP		Anpara TPS	1630	1260	1246	29.60	1233
	Obra TPS	1288	298	212	6.60	275	
	Paricha TPS	1140	659	652	15.50	646	
	Panki TPS	210	72	63	1.60	67	
	Harduaganj TPS	665	459	427	10.20	425	
	Tanda TPS (NTPC)	440	372	404	9.75	406	
	Roza TPS (IPP)	1200	990	1075	26.07	1086	
	Anpara-C (IPP)	1200	675	819	19.04	793	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	257	363	8.19	341	
	Thermal (Total)	8223	5042	5261	126.55	5273	
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0	
	Other Hydro	527	142	120	3.36	140	
	Cogeneration	981	50	50	1.20	50	
	Total UP	10131	5234	5431	131.11	5463	
	Uttarakhand	Total Hydro	1303	474	271	8.71	363
Total Uttarakhand		1303	474	271	8.71	363	
Delhi	Raighat TPS	135	0	0	0.00	0	
	Delhi Gas Turbine	282	84	82	1.94	81	
	Pragati Gas Turbine	330	316	268	7.28	303	
	Riithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	415	360	8.55	356	
	Thermal (Total)	2232	815	710	17.77	740	
	Total Delhi	2232	815	710	17.77	740	
HP	Baspa HPS (IPP)	330	33	33	1.54	64	
	Malana HPS (IPP)	86	4	0	0.30	12	
	Other Hydro	589	248	197	4.66	194	
	Total HP	1005	285	230	6.50	271	
J & K	Baglihar HPS (IPP)	450	294	126	4.19	175	
	Other Hydro	323	90	115	2.58	107	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	384	241	6.77	282	
Total State Control Area Generation		34390	17075	15367	395.26	16469	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2054	2826	63.99	2666	
Total Regional Availability(Gross)		57862	35744	28243	749.98	31249	

IV. Total Hydro Generation:

Regional Entities Hydro	10500	6280	816	67.43	2810
State Control Area Hydro	5368	2009	1452	41.14	1714
Total Regional Hydro	15868	8289	2268	108.56	4523

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	-150	-250	0	250	0.00	4.35	-4.35
Gwalior-Agra (D/C)	234	474	714	0	7.49	0.00	7.49
Zerda-Kankroli	-254	-309	0	390	0.00	5.58	-5.58
Zerda-Bhinmal	-161	-188	77	309	0.00	2.79	-2.79
Malanpur-Auraiya	-155	-93	0	155	0.00	3.45	-3.45
Badod-Kota/Morak	-160	-141	0	214	0.00	3.56	-3.56
Mundra-Mohindergarh(HVDC)	1299	1499	1503	0	33.50	0.00	33.50
Sub Total WR	653	992			40.99	19.73	21.26
Pusauli Bypass	-200	300	300	200	2.09	3.28	-1.19
MZP- GKP (D/C)	412	550	721	0	11.39	0.00	11.39
Patna-Balia(D/C)	524	528	965	0	15.44	0.00	15.44
B'Sharif-Balia (D/C)	320	231	589	0	8.55	0.00	8.55
Pusauli-Balia	51	-66	160	90	0.86	0.00	0.86
Gaya-Fatehpur (765 Kv)	202	217	402	0	5.98	0.00	5.98
Pusauli-Sahupuri	126	103	149	0	2.65	0.00	2.65
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-34	-29	0	38	0.00	0.95	-0.95
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1401	1834			46.96	4.23	42.73
Total IR Exch	2054	2826			87.95	23.96	63.99

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
35.72	0.95	36.68	3.26	-28.83	11.52	-0.75	2.95	-2.95

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
54.40	6.89	61.30	42.73	21.26	63.99	-11.67	14.37	2.70

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

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7-49.8	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	0.00	4.50	96.20	11.50	91.70	35.10	3.80

<----- 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				
50.41	23.55	49.54	19.47	49.95	0.24	0.15	50.41	49.76

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	23:58	401	11:21	0.0	0.0	0.0	0.0
Gorakhpur	400	429	22:07	413	16:52	0.0	0.0	38.2	0.0
Barilly	400	422	21:58	400	06:21	0.0	0.0	0.4	0.0
Kanpur	400	422	20:43	403	06:51	0.0	0.0	3.5	0.0
Dadri	400	426	03:04	403	11:31	0.0	0.0	29.1	0.0
Ballabgarh	400	433	03:03	409	09:16	0.0	0.0	47.8	7.4
Bawana	400	428	03:03	406	09:17	0.0	0.0	35.8	0.0
Bassi	400	427	04:03	390	09:18	0.0	0.0	9.0	0.0
Hissar	400	417	03:06	393	09:18	0.0	0.0	0.0	0.0
Moga	400	424	02:58	401	09:18	0.0	0.0	14.2	0.0
Abdullapur	400	423	00:02	401	09:11	0.0	0.0	9.5	0.0
Nalagarh	400	427	02:58	404	12:13	0.0	0.0	28.5	0.0
Kishenpur	400	421	23:17	395	18:10	0.0	0.0	0.0	0.0
Wagoora	400	417	16:32	375	18:10	2.9	20.1	0.0	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	774	03:05	738	06:57	0.0	7.7	0.0	0.0
Balia	765	764	20:51	735	09:18	0.0	30.9	0.0	0.0
Moga	765	794	03:05	751	09:18	0.0	0.0	0.0	0.0
Agra	765	812	20:42	763	09:16	0.0	0.0	23.7	0.0
Bhiwani	765	801	03:05	758	09:16	0.0	0.0	0.6	0.0
Unnao	765	759	04:03	735	06:58	0.0	18.4	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	509.42	1515.08	502.38	1192.70	241.46	417.79
Pong	426.72	384.05	418.46	821.32	417.48	771.19	77.73	312.79
Tehri	829.79	740.04	822.25	1050.00	818.65	982.26	79.47	137.00
Koteshwar	612.50	598.50	610.50	4.50	NA	NA	137.00	148.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	58.37	63.65
Rihand	268.22	252.98	261.82	407.50	262.98	478.20	NA	NA
RPS	352.80	343.81	352.88	NA	NA	NA	243.01	12.15
Jawahar Sagar	298.70	295.78	298.61	NA	NA	NA	253.41	163.81
RSD	527.91	487.91	516.48	144.00	520.95	144.00	86.28	222.34

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 22.11.2013 :

1. Normal weather in Northern Region.

XIII. Synchronisation of new generating units :
0.00

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

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :

Vishnuprayag (400MW) and Dhauliganga (280MW) are out of operation since 16.06.2013.
Civil construction is in progress for rectification of the major damages in Plants/Dam caused due to flood
Vishnuprayag and Dhauliganga expected by Mar, 2014 .

Report for : 22.11.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER