

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 24.10.2013
Date of Reporting : 25.10.2013

I. Regional Availability/Demand:

Demand Met	Evening Peak (20:00 Hrs) MW			Off Peak (03:00 Hrs) MW				Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
33465	2615	36080	50.19	28189	1236	29425	50.13	719.3	50.37

* 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	30.28	10.40		40.68	60.65	61.75	1.10	102.43	0.00
Haryana	51.83	0.71		52.54	53.73	54.40	0.67	106.94	0.18
Rajasthan	62.44	2.55	8.36	73.35	82.51	78.80	-3.71	152.15	0.00
Delhi	20.60			20.60	51.26	50.44	-0.81	71.04	0.04
UP	120.30	2.44	1.20	123.94	76.08	76.44	0.35	200.38	47.30
Uttarakhand		10.83		10.83	16.71	19.06	2.35	29.89	1.16
HP		9.93		9.93	11.66	12.95	1.29	22.88	0.00
J & K		8.36	0.00	8.36	22.39	21.56	-0.82	29.92	1.70
Chandigarh				0.00	3.64	3.70	0.06	3.70	0.00
Total	285.44	45.22	9.56	340.21	378.64	379.11	0.47	719.32	50.37

* 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 (20:00 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	STOA/PX transaction
Punjab	4876	0	52	176	3949	0	82	139	6.49	
Haryana	5049	0	-133	-414	4124	0	81	-424	-14.07	
Rajasthan	7015	0	-225	1606	6081	0	-163	1247	36.02	
Delhi	3523	0	-207	-632	2188	6	32	-1207	-17.79	
UP	8843	2380	-96	-97	8752	1230	102	464	-0.92	
Uttarakhand	1395	135	60	226	1091	0	119	310	7.45	
HP	1093	0	37	-396	719	0	-36	76	-1.20	
J&K	1483	100	-155	139	1179	0	10	148	3.23	
Chandigarh	187	0	-10	-41	106	0	-2	-20	-0.27	
Total	33465	2615	-676	567	28189	1236	226	732	18.94	

* 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	1912	2086	1989	46.24	1927	45.75	0.49
Rihand I STPS	1000	662	855	722	15.91	663	15.82	0.09
Rihand II STPS	1000	696	1002	708	16.82	701	16.66	0.16
Rihand III STPS	1000	349	501	356	8.40	350	8.37	0.03
Dadri I STPS	840	810	871	627	17.46	728	17.61	-0.15
Dadri II STPS	980	975	975	847	21.65	902	21.80	-0.15
Unchahar I TPS	420	201	222	200	4.66	194	4.68	-0.02
Unchahar II TPS	420	403	431	350	9.05	377	9.07	-0.02
Unchahar III TPS	210	201	215	169	4.51	188	4.48	0.03
ISTPP (Jhajjar)	1500	1480	629	633	14.16	590	14.21	-0.05
Dadri GPS	830	804	551	522	12.89	537	12.91	-0.02
Anta GPS	419	405	400	412	9.28	387	9.33	-0.06
Auraiya GPS	663	639	156	156	3.64	152	3.76	-0.12
Sub Total (A)	11282	9536	8894	7691	184.66	7694	184.45	0.21
B. NPC								
NAPS	440	300	341	344	7.23	301	7.20	0.03
RAPS- B	440	410	453	452	9.82	409	9.84	-0.02
RAPS- C	440	425	470	475	10.04	418	10.20	-0.16
Sub Total (B)	1320	1135	1264	1271	27.10	1129	27.24	-0.14
C. NHPC								
Chamera I HPS	540	539	360	0	2.72	113	2.70	0.02
Chamera II HPS	300	300	243	0	2.27	95	2.17	0.10
Chamera III HPS	231	231	75	0	1.29	54	1.20	0.09
Bairasuil HPS	180	182	0	0	0.83	35	0.79	0.03
Salal-HPS	690	189	327	205	4.53	189	4.44	0.09
Tanakpur-HPS	94	63	68	63	1.51	63	1.50	0.01
Uri-HPS	480	151	148	71	3.52	146	3.74	-0.23
Uri-II HPS	120	89	101	62	2.07	86	2.15	-0.07
Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
Dulhasti-HPS	390	387	407	0	5.52	230	5.61	-0.09
Sewa-II HPS	120	119	74	0	0.41	17	0.41	0.00
Sub Total (C)	3425	2250	1803	401	24.67	1028	24.72	-0.05
D. NJPC								
Nathpa Jhakri	1500	1605	1415	165	13.66	569	13.54	0.11
Sub Total (D)	1500	1605	1415	165	13.66	569	13.54	0.11
E. THDC								
Tehri HPS	1000	1060	1004	0	5.58	233	5.50	0.08
Koteshwar HPS	400	67	100	100	1.62	68	1.60	0.02
Sub Total (E)	1400	1127	1104	100	7.20	300	7.10	0.10
F. BBMB								
Bhakra HPS	1497	491	947	367	11.82	493	11.79	0.03
Dehar HPS	990	203	470	140	5.02	209	4.87	0.15
Pong HPS	396	284	312	252	70.60	2942	6.82	63.78
Sub Total (F)	2883	978	1729	759	87.44	3643	23.48	63.96
G. IPP(s)/JV(s)								
ADHPL HPS(IPP)	192	0	87	27	0.81	34	0.78	0.03
KWHEP HPS(IPP)	1000	0	600	150	6.88	287	6.96	-0.08
Malana Stg-II HPS	100	0	107	0	0.43	18	0.39	0.05
Shree Cement TPS	300	0	267	271	6.46	269	6.53	-0.07
Budhil HPS(IPP)	70	0	10	10	0.28	12	0.28	0.00
Sub Total (G)	1662	0	1071	458	14.86	619	14.93	-0.07
H. Total Regional Entities (A-G)	23472	16630	17280	10845	359.59	14983	295.46	64.13

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	840	830	17.22	717	
	Guru Nanak Dev TPS(Bhatinda)	440	80	110	2.05	86	
	Guru Hargobind Singh TPS(L.mbt)	920	501	502	11.01	459	
	Goindwal(GVK)		0	0	0.00	0	
	Thermal (Total)	2620	1421	1442	30.28	1262	
	Total Hydro	1148	413	441	10.40	433	
	Total Punjab	3768	1834	1883	40.68	1695	
Haryana	Panipat TPS	1367	89	82	2.17	90	
	DCRTPP (Yamuna nagar)	600	486	508	11.84	493	
	Faridabad GPS (NTPC)	432	190	160	4.15	173	
	RGTPP (khedar) (IPP)	1200	438	416	10.54	439	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	1024	706	23.13	964	
	Thermal (Total)	4944	2227	1872	51.83	2160	
	Total Hydro	62	29	29	0.71	30	
		Total Haryana	5006	2256	1901	52.54	2189
	Rajasthan	kota TPS	1240	1126	1068	26.45	1102
suratgarh TPS		1500	873	751	19.43	810	
Chabra TPS		500	0	195	2.84	119	
Dholpur GPS		330	101	106	2.52	105	
Ramgarh GPS		111	140	94	2.85	119	
RAPS A (NPC)		300	179	179	4.30	179	
Barsingsar (NLC)		250	111	111	2.59	108	
Giral LTPS		250	62	62	1.46	61	
Rajwest LTPS (IPP)		1080	0	0	0.00	0	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Kalisindh Thermal		600	0	0	0.00	0	
Kawai(Adani)		660	0	0	0.00	0	
Thermal (Total)		6956	2592	2566	62.44	2601	
Total Hydro		550	143	118	2.55	106	
Wind power		2191	382	415	6.93	289	
Biomass		91	31	31	0.75	31	
Solar		201	0	0	0.68	28	
Renewable/Others (Total)		2483	413	446	8.36	348	
		Total Rajasthan	9989	3148	3130	73.35	3056
UP		Anpara TPS	1630	1577	1503	33.40	1392
	Obra TPS	1288	526	525	11.40	475	
	Paricha TPS	1140	568	748	14.30	596	
	Panki TPS	210	85	80	1.70	71	
	Harduaganj TPS	665	240	444	6.30	263	
	Tanda TPS (NTPC)	440	185	192	5.08	212	
	Roza TPS (IPP)	1200	1080	1080	26.21	1092	
	Anpara-C (IPP)	1200	535	536	12.80	533	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	280	403	9.11	380	
	Thermal (Total)	8223	5076	5511	120.30	5013	
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0	
	Other Hydro	527	112	97	2.44	102	
	Cogeneration	981	50	50	1.20	50	
		Total UP	10131	5238	5658	123.94	5164
Uttarakhand	Total Hydro	1303	544	362	10.83	451	
	Total Uttarakhand	1303	544	362	10.83	451	
Delhi	Rajghat TPS	135	89	96	2.49	104	
	Delhi Gas Turbine	282	82	82	1.93	80	
	Pragati Gas Turbine	330	313	265	6.96	290	
	Riithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	440	395	9.22	384	
	Thermal (Total)	2232	924	838	20.60	858	
	Total Delhi	2232	924	838	20.60	858	
HP	Baspa HPS (IPP)	330	64	64	2.39	99	
	Malana HPS (IPP)	86	57	0	0.48	20	
	Other Hydro	589	285	286	7.06	294	
	Total HP	1005	406	350	9.93	414	
J & K	Baglihar HPS (IPP)	450	242	238	5.79	241	
	Other Hydro	323	100	128	2.57	107	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	342	366	8.36	348	
Total State Control Area Generation		34390	14692	14488	340.21	14176	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4078	4516	105.16	4382	
Total Regional Availability(Gross)		57862	36050	29849	804.96	33540	

IV. Total Hydro Generation:

Regional Entities Hydro	10500	6845	1602	141.09	5879
State Control Area Hydro	5368	1989	1763	45.22	1884
Total Regional Hydro	15868	8834	3365	186.31	7763

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	50	50	50	200	0.29	1.87	-1.58
Gwalior-Agra (D/C)	1084	1291	1395	0	27.12	0.00	27.12
Zerda-Kankroli	19	-98	19	158	0.00	1.28	-1.28
Zerda-Bhinmal	105	-18	156	97	1.17	0.00	1.17
Malanpur-Auraiya	-92	-44	0	92	0.00	1.43	-1.43
Badod-Kota/Morak	32	-90	49	118	0.00	1.09	-1.09
Mundra-Mohindergarh(HVDC)	1498	1502	1505	0	36.27	0.00	36.27
Sub Total WR	2696	2593			64.85	5.67	59.17
Pusauli Bypass	-200	-200	0	200	0.00	4.81	-4.81
MZP- GKP (D/C)	536	687	981	0	18.05	0.00	18.05
Patna-Balia(D/C)	409	521	619	0	11.81	0.00	11.81
B'Sharif-Balia (D/C)	334	434	568	0	10.07	0.00	10.07
Pusauli-Balia	43	92	139	0	2.03	0.00	2.03
Gaya-Fatehpur (765 Kv)	190	290	461	0	7.28	0.00	7.28
Pusauli-Sahupuri	106	134	134	0	2.40	0.00	2.40
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-35	0	36	0.00	0.85	-0.85
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	1382	1923			51.64	5.66	45.99
Total IR Exch	4078	4516			116.49	11.33	105.16

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
35.09	2.80	37.89	6.50	-9.19	1.41	7.99	0.94	-0.94

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
46.74	53.88	100.62	45.99	59.17	105.16	-0.75	5.29	4.54

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	0.20	3.10	97.10	6.30	94.20	46.00	2.70

<----- 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	Hz	Index			
50.31	17.06	49.47	6.14	49.98	0.18	0.13	50.28	49.71

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	413	03:47	403	18:25	0.0	0.0	0.0	0.0
Gorakhpur	400	423	23:51	402	18:15	0.0	0.0	5.5	0.0
Bareilly	400	420	04:01	397	15:38	0.0	0.0	0.0	0.0
Kanpur	400	421	04:01	399	18:14	0.0	0.0	0.4	0.0
Dadri	400	425	04:01	403	15:38	0.0	0.0	12.0	0.0
Ballabgarh	400	432	04:01	406	18:25	0.0	0.0	43.1	0.9
Bawana	400	428	03:46	406	15:38	0.0	0.0	34.9	0.0
Bassi	400	431	04:02	395	06:41	0.0	0.0	26.2	0.1
Hissar	400	420	03:47	393	18:16	0.0	0.0	0.0	0.0
Moga	400	419	04:49	405	00:00	0.0	0.0	0.0	0.0
Abdullapur	400	421	03:51	402	00:00	0.0	0.0	0.0	0.0
Nalagarh	400	430	03:47	405	16:42	0.2	0.2	38.9	0.0
Kishenpur	400	432	02:23	400	18:06	0.0	0.0	26.0	2.5
Wagoora	400	423	02:24	387	18:07	0.0	0.5	7.5	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	770	04:01	728	18:16	0.0	21.3	0.0	0.0
Balia	765	773	05:04	718	18:14	3.8	33.6	0.0	0.0
Moga	765	802	03:07	752	15:28	0.0	0.0	1.0	0.0
Agra	765	812	04:01	763	15:38	0.0	0.0	22.9	0.0
Bhiwani	765	814	04:03	774	09:39	0.0	0.0	54.9	0.0
Unnao	765	763	04:01	729	18:14	0.0	18.1	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	511.06	1605.30	504.01	1272.20	271.33	298.88
Pong	426.72	384.05	420.99	931.43	420.60	916.71	66.77	361.61
Tehri	829.79	740.04	824.60	1095.00	818.65	982.26	97.13	121.00
Koteshwar	612.50	598.50	611.60	5.36	NA	NA	121.00	107.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	84.37	72.94
Rihand	268.22	252.98	261.76	404.60	260.57	520.00	NA	196.65
RPS	352.80	343.81	352.74	NA	NA	NA	NA	143.51
Jawahar Sagar	298.70	295.78	297.85	NA	NA	NA	NA	117.20
RSD	527.91	487.91	518.27	520.72	520.72	144.00	72.72	127.31

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 24.10.2013 :

1. Normal weather in NR.

XIII. Synchronisation of new generating units :

0.00

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

1-220 kV Jaipur (South)-Chaksu line first time charged at 16.51 hrs of 24.10.2013.

2-400/220 kV (315 MVA) ICT -1 dismantled at Agra(UPPCL) and replaced by new 500 MVA ICT on 13.08 hrs of 24 Oct 2013.

3-400/220 kV (500 MVA) ICT-IV at Abdullapur charged first time on 23.59 hrs of 24 Oct 2013.

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 .