

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 26.11.2013
Date of Reporting : 27.11.2013

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
33980	2566	36546	50.08	27043	980	28023	0.00	719.7	59.16

* 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	44.88	10.26		55.14	31.02	34.18	3.17	89.32	5.38
Haryana	70.79	0.61		71.40	28.10	29.20	1.10	100.60	0.85
Rajasthan	100.53	5.18	2.17	107.88	72.01	68.83	-3.18	176.71	0.00
Delhi	16.86			16.86	41.29	40.33	-0.97	57.19	0.07
UP	119.52	3.17	1.20	123.89	78.67	79.04	0.37	202.93	48.98
Uttarakhand		7.72		7.72	20.33	21.38	1.05	29.10	1.97
HP		6.36		6.36	16.26	17.21	0.95	23.57	0.21
J & K		7.12	0.00	7.12	27.58	29.84	2.26	36.96	1.70
Chandigarh				0.00	3.09	3.33	0.25	3.33	0.00
Total	352.58	40.42	3.37	396.37	318.34	323.34	5.00	719.71	59.16

* 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	4424	138	6	-499	3334	0	312	-682	-14.76	
Haryana	5072	368	150	-967	3566	0	-39	-992	-24.00	
Rajasthan	7730	0	-273	656	6582	0	-61	755	29.05	
Delhi	3104	0	-36	-525	1393	0	-21	-1128	-17.36	
UP	8940	1880	-130	-211	9019	980	206	722	2.46	
Uttarakhand	1523	80	13	495	1003	0	60	412	9.90	
HP	1202	0	62	57	712	0	54	246	4.51	
J&K	1805	100	15	319	1347	0	24	384	8.01	
Chandigarh	180	0	6	0	87	0	1	0	0.00	
Total	33980	2566	-187	-675	27043	980	537	-281	-2.19	

* 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	1820	1883	2086	43.50	1812	43.41	0.09	
	Rihand I STPS	1000	817	984	857	19.65	819	19.49	0.16	
	Rihand II STPS	1000	684	1035	521	16.46	686	16.32	0.13	
	Rihand III STPS	1000	413	515	430	9.99	416	9.92	0.08	
	Dadri I STPS	840	814	685	488	15.23	635	13.71	1.52	
	Dadri II STPS	980	985	890	725	21.04	877	21.58	-0.54	
	Unchahar I TPS	420	405	437	439	9.58	399	9.71	-0.13	
	Unchahar II TPS	420	404	437	436	9.58	399	9.67	-0.09	
	Unchahar III TPS	210	201	218	227	4.79	199	4.82	-0.04	
	ISTPP (Jhajjar)	1500	1480	732	627	15.58	649	15.92	-0.34	
	Dadri GPS	830	823	199	201	4.57	190	4.96	-0.39	
	Anta GPS	419	415	267	256	6.28	262	6.42	-0.14	
	Auraiya GPS	663	656	157	162	3.71	155	3.83	-0.12	
	Sub Total (A)	11282	9916	8439	7455	179.95	7498	179.76	0.19	
	B. NPC	NAPS	440	319	247	358	7.61	317	7.66	-0.05
		RAPS- B	440	417	461	464	10.06	419	10.01	0.05
RAPS- C		440	430	470	475	10.20	425	10.32	-0.12	
Sub Total (B)		1320	1166	1178	1297	27.88	1162	27.98	-0.11	
C. NHPC	Chamera I HPS	540	541	360	0	1.94	81	1.90	0.04	
	Chamera II HPS	300	300	200	0	1.45	61	1.36	0.09	
	Chamera III HPS	231	231	135	0	0.82	34	0.80	0.02	
	Bairasuil HPS	180	182	60	0	0.51	21	0.50	0.01	
	Salal-HPS	690	142	307	124	3.18	132	2.97	0.21	
	Tanakpur-HPS	94	36	56	39	0.90	38	0.86	0.04	
	Uri-HPS	480	106	225	43	2.80	117	2.74	0.06	
	Uri-II HPS	120	59	105	60	1.66	69	1.43	0.23	
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00	
	Dulhasti-HPS	390	387	388	0	3.31	138	3.27	0.04	
	Sewa-II HPS	120	119	104	0	0.31	13	0.35	-0.04	
	Sub Total (C)	3425	2104	1940	266	16.88	703	16.17	0.71	
	D. NJPC	Nathpa Jhakri	1500	1605	1617	0	9.30	387	9.11	0.19
Sub Total (D)		1500	1605	1617	0	9.30	387	9.11	0.19	
E. THDC	Tehri HPS	1000	1060	1060	0	7.61	317	7.40	0.21	
	Koteshwar HPS	400	94	101	90	2.41	100	2.25	0.16	
	Sub Total (E)	1400	1154	1161	90	10.02	418	9.65	0.38	
F. BBMB	Bhakra HPS	1497	579	1082	346	14.38	599	13.90	0.48	
	Dehar HPS	990	140	330	0	3.41	142	3.36	0.05	
	Pong HPS	396	241	372	192	6.11	255	5.79	0.32	
	Sub Total (F)	2883	960	1784	538	23.90	996	23.05	0.85	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.62	26	0.59	0.03	
	KWHEP HPS(IPP)	1000	0	215	0	5.24	218	5.28	-0.04	
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00	
	Shree Cement TPS	300	0	137	93	2.84	118	2.76	0.07	
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00	
	Sub Total (G)	1662	0	352	93	8.70	362	8.64	0.06	
H. Total Regional Entities (A-G)	23472	16905	16471	9739	276.62	11526	274.35	2.27		

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	840	660	17.89	746
	Guru Nanak Dev TPS(Bhatinda)	440	342	250	6.74	281
	Guru Hargobind Singh TPS(L.mbt)	920	925	920	20.24	843
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	2107	1830	44.88	1870
	Total Hydro	1148	441	451	10.26	427
Total Punjab		3768	2548	2281	55.14	2297
Haryana	Panipat TPS	1367	773	767	18.07	753
	DCRTPP (Yamuna nagar)	600	461	500	11.38	474
	Faridabad GPS (NTPC)	432	203	201	4.71	196
	RGTPP (khedar) (IPP)	1200	564	463	12.04	502
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	941	707	24.60	1025
	Thermal (Total)	4944	2942	2638	70.79	2950
	Total Hydro	62	26	26	0.61	25
	Total Haryana	5006	2968	2664	71.40	2975
	Rajasthan	kota TPS	1240	1145	1102	26.94
suratgarh TPS		1500	1129	1027	25.59	1066
Chabra TPS		500	636	391	10.09	421
Dholpur GPS		330	108	109	2.68	112
Ramgarh GPS		111	59	58	1.56	65
RAPS A (NPC)		300	175	175	4.01	167
Barsingsar (NLC)		250	218	216	5.06	211
Giral LTPS		250	0	0	0.00	0
Rajwest LTPS (IPP)		1080	479	330	10.15	423
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		660	584	590	14.45	602
Thermal (Total)		6956	4533	3998	100.53	4189
Total Hydro		550	214	131	5.18	216
Wind power		2191	31	61	0.93	39
Biomass		91	25	25	0.60	25
Solar		201	8	0	0.65	27
Renewable/Others (Total)		2483	56	86	2.17	91
Total Rajasthan		9989	4803	4215	107.88	4495
UP		Anpara TPS	1630	1271	1272	30.00
	Obra TPS	1288	296	306	7.10	296
	Paricha TPS	1140	692	623	15.80	658
	Panki TPS	210	68	72	1.70	71
	Harduaganj TPS	665	323	220	6.10	254
	Tanda TPS (NTPC)	440	403	402	9.80	408
	Roza TPS (IPP)	1200	1080	1080	26.13	1089
	Anpara-C (IPP)	1200	533	592	13.37	557
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	403	404	9.52	397
	Thermal (Total)	8223	5069	4971	119.52	4980
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	133	136	3.17	132
	Cogeneration	981	50	50	1.20	50
	Total UP	10131	5252	5157	123.89	5162
	Uttarakhand	Total Hydro	1303	421	193	7.72
Total Uttarakhand		1303	421	193	7.72	322
Delhi	Raighat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	80	80	1.80	75
	Pragati Gas Turbine	330	313	269	7.29	304
	Riithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	390	340	7.77	324
	Thermal (Total)	2232	783	689	16.86	703
	Total Delhi	2232	783	689	16.86	703
HP	Baspa HPS (IPP)	330	70	30	1.43	59
	Malana HPS (IPP)	86	0	0	0.30	13
	Other Hydro	589	193	126	4.64	193
	Total HP	1005	263	156	6.36	265
J & K	Baglihar HPS (IPP)	450	293	148	4.54	189
	Other Hydro	323	90	115	2.58	107
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	383	263	7.12	297
Total State Control Area Generation		34390	17421	15618	396.37	16515
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1921	2833	63.48	2645
Total Regional Availability(Gross)		57862	35813	28190	736.47	30686

IV. Total Hydro Generation:

Regional Entities Hydro	10500	6717	894	65.95	2748
State Control Area Hydro	5368	1881	1356	40.42	1684
Total Regional Hydro	15868	8598	2250	106.37	4432

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	-500	-500	0	500	0.00	10.10	-10.10
Gwalior-Agra (D/C)	538	1009	1169	0	15.17	0.00	15.17
Zerda-Kankroli	-181	-174	0	289	0.00	3.47	-3.47
Zerda-Bhinmal	-72	0	139	149	0.00	0.49	-0.49
Malanpur-Auraiya	-169	-80	0	169	0.00	2.77	-2.77
Badod-Kota/Morak	-140	-150	0	219	0.00	3.56	-3.56
Mundra-Mohindergarh(HVDC)	1101	1098	1104	0	26.61	0.00	26.61
Sub Total WR	577	1203			41.78	20.38	21.41
Pusauli Bypass	-200	-200	0	200	0.00	4.84	-4.84
MZP- GKP (D/C)	319	408	478	0	9.69	0.00	9.69
Patna-Balia(D/C)	609	719	920	0	17.95	0.00	17.95
B'Sharif-Balia (D/C)	348	325	557	0	9.47	0.00	9.47
Pusauli-Balia	50	75	149	0	1.88	0.00	1.88
Gaya-Fatehpur (765 Kv)	122	216	353	0	6.07	0.00	6.07
Pusauli-Sahupuri	130	116	145	0	2.81	0.00	2.81
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	1344	1630			47.87	5.79	42.08
Total IR Exch	1921	2833			89.66	26.17	63.48

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
35.52	0.86	36.37	5.96	-28.96	12.68	2.54	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
57.96	2.12	60.08	42.08	21.41	63.48	-15.88	19.29	3.41

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	0.30	91.50	5.30	91.20	47.00	8.50

<----- 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				
50.51	21.50	49.68	17.36	50.00	0.18	0.13	50.52	0.00

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	414	21:44	406	09:25	0.0	0.0	0.0	0.0
Gorakhpur	400	427	13:13	417	18:29	0.0	0.0	80.6	0.0
Barailly	400	424	21:45	406	16:13	0.0	0.0	6.2	0.0
Kanpur	400	424	20:12	409	09:27	0.0	0.0	12.3	0.0
Dadri	400	426	23:44	409	09:24	0.0	0.0	24.0	0.0
Ballabgarh	400	431	20:58	413	09:27	0.0	0.0	40.7	0.1
Bawana	400	427	20:58	410	16:22	0.0	0.0	27.5	0.0
Bassi	400	426	20:11	397	09:24	0.0	0.0	8.3	0.0
Hissar	400	404	12:55	400	09:23	0.0	0.0	0.0	0.0
Moga	400	421	23:42	402	16:22	0.0	0.0	2.1	0.0
Abdullapur	400	424	20:58	407	18:09	0.0	0.0	9.1	0.0
Nalagarh	400	428	04:00	407	11:00	0.0	0.0	0.0	0.0
Kishenpur	400	418	23:51	393	18:24	0.0	0.0	0.0	0.0
Wagoora	400	414	13:00	373	18:43	6.7	30.3	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	768	13:47	749	16:09	0.0	0.0	0.0	0.0
Balia	765	762	21:45	740	10:25	0.0	1.7	0.0	0.0
Moga	765	789	23:44	754	16:24	0.0	0.0	0.0	0.0
Agra	765	818	21:48	733	23:31	0.0	0.1	24.0	0.0
Bhiwani	765	797	20:55	766	10:13	0.0	0.0	0.0	0.0
Unnao	765	767	13:12	748	16:13	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	508.44	1470.42	500.99	1140.31	190.86	400.26
Pong	426.72	384.05	417.49	781.19	416.14	718.14	62.50	350.59
Tehri	829.79	740.04	820.85	1023.38	818.65	982.26	67.80	168.00
Koteshwar	612.50	598.50	610.85	4.60	NA	NA	168.00	160.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	50.80	52.55
Rihand	268.22	252.98	261.64	397.40	262.80	466.80	NA	NA
RPS	352.80	343.81	350.57	NA	NA	NA	253.12	NA
Jawahar Sagar	298.70	295.78	297.45	NA	NA	NA	241.12	NA
RSD	527.91	487.91	515.25	144.00	520.57	144.00	48.76	129.69

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 26.11.2013 :

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 : 26.11.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER