

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 29.10.2014
Date of Reporting : 30.10.2014

I. Regional Availability/Demand:

Evening Peak (20:00 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
36440	2140	38580	50.08	30158	900	31058	50.08	760.7	36.12

* 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	36.12	7.56		43.67	53.66	54.10	0.43	97.77	0.00
Haryana	36.51	0.28		36.79	63.65	63.74	0.10	100.53	0.00
Rajasthan	128.38	4.97	8.50	141.85	48.64	49.56	0.93	191.41	0.00
Delhi	15.49			15.49	44.48	44.51	0.03	60.00	0.00
UP	126.20	7.00	1.20	134.40	94.40	92.88	-1.52	227.28	34.72
Uttarakhand		9.35		9.35	19.18	20.75	1.57	30.11	1.30
HP		7.94		7.94	14.79	15.57	0.77	23.51	0.10
J & K		0.00	0.00	0.00	24.59	26.62	2.03	26.62	0.00
Chandigarh				0.00	3.34	3.51	0.18	3.51	0.00
Total	342.69	37.10	9.70	389.49	366.73	371.24	4.52	760.74	36.12

* 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				# Max(hourly) Demand Met of Day (MW)
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	
Punjab	4806	0	-152	195	3473	0	89	39	4871
Haryana	6007	0	-210	81	4141	0	-96	69	6056
Rajasthan	8135	0	-51	-146	7285	0	-66	397	8981
Delhi	3185	0	-141	-193	2197	0	-68	-672	3337
UP	9811	1940	-309	402	9840	900	118	534	9852
Uttarakhand	1409	200	-9	358	1088	0	110	374	1589
HP	1160	0	60	-188	767	0	92	81	1280
J&K	1746	0	-12	76	1270	0	13	81	1877
Chandigarh	181	0	-2	0	97	0	4	0	191
Total	36440	2140	-826	585	30158	900	196	901	37088

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

figures may not be at simultaneous hour.

Diversity is 1.03

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 (5*200+2*500)	2000	1520	1612	1618	39.02	1626	36.37	2.64
Rihand I STPS (2*500)	1000	864	939	922	22.23	926	20.63	1.61
Rihand II STPS (2*500)	1000	468	521	491	12.34	514	11.17	1.17
Rihand III STPS (2*500)	1000	965	1015	971	24.28	1012	23.02	1.26
Dadri I STPS (4*210)	840	815	653	607	15.33	639	14.55	0.77
Dadri II STPS (2*490)	980	980	797	695	18.07	753	18.18	-0.11
Unchahar I TPS (2*210)	420	334	322	311	7.92	330	7.27	0.65
Unchahar II TPS (2*210)	420	337	311	306	7.74	322	7.03	0.70
Unchahar III TPS (1*220)	210	172	160	157	3.93	164	3.58	0.35
I-STPP (Jhajhar) (3*500)	1500	910	679	624	13.67	570	14.17	-0.50
Dadri GPS (4*130.19+2*154.51)	830	800	196	179	4.44	185	4.35	0.09
Anta GPS (3*88.71+1*153.2)	419	402	236	242	5.92	247	5.85	0.07
Auraiva GPS (4*111.19+2*109.30)	663	644	160	164	3.83	159	3.76	0.06
Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
Sub Total (A)	11297	9215	7601	7287	179	7448	170	9
B. NPC								
NAPS (2*220)	440	284	321	327	6.78	282	6.82	-0.04
RAPS- B (2*220)	440	400	448	446	9.61	400	9.60	0.01
RAPS- C (2*220)	440	190	209	211	4.16	173	4.56	-0.40
Sub Total (B)	1320	874	978	984	20.54	856	20.98	-0.43
C. NHPC								
Chamera I HPS (3*180)	540	534	168	0	1.58	66	1.60	-0.02
Chamera II HPS (3*100)	300	300	308	0	2.14	89	2.08	0.07
Chamera III HPS (3*77)	231	224	148	0	1.33	56	1.30	0.03
Bairasuli HPS(3*60)	180	178	120	0	0.83	35	0.86	-0.03
Salal-HPS (6*115)	690	210	163	230	5.30	221	5.05	0.25
Tanakpur-HPS (3*40)	94	47	48	53	1.21	51	1.13	0.08
Uri-I HPS (4*120)	480	245	311	242	6.07	253	5.88	0.19
Uri-II HPS (4*60)	240	145	166	143	3.55	148	3.47	0.09
Dhauliganga-HPS (4*70)	280	181	140	70	1.54	64	1.52	0.02
Dulhasti-HPS (3*130)	390	387	369	229	4.70	196	4.50	0.20
Sewa-II HPS (3*40)	120	119	122	0	0.42	18	0.38	0.05
Parbati 3 (4*130)	520	260	235	0	0.63	26	0.62	0.01
Sub Total (C)	4065	2830	2298	967	29	1221	28	1
D. SJVNL								
NJPC (6*250)	1500	1605	1220	0	11.07	461	11.00	0.07
Rampur HEP (4*68.67)	275	119	296	0	2.74	114	2.78	-0.05
Sub Total (D)	1775	1724	1516	0	13.80	575	13.78	0.02
E. THDC								
Tehri HPS (4*250)	1000	1060	750	0	6.85	285	6.80	0.05
Koteshwar HPS (4*100)	400	91	95	90	2.23	93	2.20	0.03
Sub Total (E)	1400	1151	845	90	9.08	378	9.00	0.08
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	584	1093	497	14.04	585	14.02	0.02
Dehar HPS (6*165)	990	195	495	145	5.07	211	4.69	0.38
Pong HPS (6*66)	396	217	324	126	5.19	216	5.21	-0.02
Sub Total (F)	2900	997	1912	768	24.30	1012	23.92	0.38
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	83	0	0.79	33	0.77	0.02
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	727	727	5.88	245	6.01	-0.13
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	286	206	6.21	259	6.16	0.04
Budhil HPS(IPP)	70	0	69	0	0.24	10	0.24	0.00
Sub Total (G)	1662	0	1165	933	13.13	547	13.19	-0.07
H. Total Regional Entities (A-G)	24419	16791	16315	11029	288.91	12038	279.27	9.64

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) (6*210)	1260	160	160	3.88	162
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	80	80	1.72	72
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	389	204	6.11	254
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1190	713	24.41	1017
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1819	1157	36.12	1505
	Total Hydro	1148	267	382	7.56	315
Total Punjab	5828	2086	1539	43.67	1820	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	443	423	9.96	415
	DCRTPP (Yamuna nagar) (2*300)	600	264	249	5.75	239
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	RGTPP (khedar) (IPP) (2*600)	1200	492	344	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1108	739	20.81	867
	Thermal (Total)	4944	2307	1755	36.51	1521
	Total Hydro	62	9	12	0.28	12
	Total Haryana	5006	2316	1767	36.79	1533
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	659	940	19.30
suratgarh TPS (6*250)		1500	1377	1131	29.40	1225
Chabra TPS (3*250)		750	223	218	5.30	221
Dholpur GPS (3*110)		330	113	120	2.75	115
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	162	176	4.60	192
RAPS A (NPC) (1*100+1*200)		300	179	168	4.43	185
Barsingar (NLC) (2*125)		250	184	184	4.30	179
Giral LTPS (2*125)		250	79	74	1.60	67
Rajwest LTPS (IPP) (8*135)		1080	950	468	19.40	808
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	515	515	11.30	471
Kawai(Adani) (2*660)		1320	1147	852	26.00	1083
Thermal (Total)		8026	5588	4846	128	5349
Total Hydro		550	239	92	4.97	207
Wind power		2798	90	805	7.63	318
Biomass		99	31	31	0.74	31
Solar		730	0	0	0.13	5
Renewable/Others (Total)		3627	121	836	8.50	354
Total Rajasthan		12203	5948	5774	141.85	5910
UP		Anpara TPS (3*210+2*500)	1630	907	887	21.90
	Obra TPS (2*50+2*94+5*200)	1194	441	487	11.20	467
	Paricha TPS (2*110+2*220+2*250)	1140	831	779	19.20	800
	Panki TPS (2*105)	210	54	68	1.60	67
	Harduaganj TPS (1*60+1*105+2*250)	665	497	497	11.80	492
	Tanda TPS (NTPC) (4*110)	440	342	335	8.50	354
	Roza TPS (IPP) (4*300)	1200	851	990	23.00	958
	Anpara-C (IPP) (2*600)	1200	801	894	21.60	900
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	251	320	7.40	308
	Thermal (Total)	8129	4975	5257	126.20	5258
	Vishnuparyag HPS (IPP)	400	144	134	3.30	138
	Other Hydro	527	188	218	3.70	154
	Cogeneration	981	50	50	1.20	50
	Total UP	10037	5357	5659	134.40	5463
	Uttarakhand	Total Hydro	1398	487	199	9.35
Total Uttarakhand		1398	487	199	9.35	390
Delhi	Raighat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	76	78	1.83	76
	Pragati Gas Turbine (2x104+ 1x122)	330	261	267	6.43	268
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	291	241	6.53	272
	Badarpur TPS (NTPC) (3*95+2*210)	705	291	321	0.70	29
	Thermal (Total)	2917	919	907	15.49	645
Total Delhi	2917	919	907	15.49	645	
HP	Baspa HPS (IPP) (2*150)	300	29	67	1.73	72
	Malana HPS (IPP) (2*43)	86	22	0	0.43	18
	Other Hydro	728	240	238	5.78	241
	Total HP	1114	291	305	7.94	331
J & K	Baqilhar HPS (IPP) (3*150)	450	0	0	0.00	0
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	0	0	0.00	0
Total State Control Area Generation		39597	17404	16150	389.49	16091
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3715	5009	122.26	5094
Total Regional Availability(Gross)		64017	37434	32188	800.66	33223

IV. Total Hydro Generation:

Regional Entities Hydro	11432	7381	2552	83.17	3465
State Control Area Hydro	5684	1481	1208	37.10	1408
Total Regional Hydro	17116	8862	3760	120.26	4874

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	-200	-150	0	200	0.00	3.05	-3.05
Gwalior-Agra (D/C)	922	1726	1726	0	31.79	0.00	31.79
Zerda-Kankroli	-216	-171	0	236	0.00	4.39	-4.39
Zerda-Bhinmal	-187	-119	61	230	0.00	2.99	-2.99
Malanpur-Auraiya	84	87	0	112	0.00	2.21	-2.21
Badod-Kota/Morak	-181	-229	0	-255	0.00	-5.15	5.15
Mundra-Mohindergarh(HVDC)	2102	1902	2104	0	49.23	0.00	49.23
Vindhychal - Rihand	434	428	492	0	9.97	0.00	9.97
Sub Total WR	2758	3474			90.99	7.49	83.50
Pusauli Bypass	400	400	400	0	9.45	0.00	9.45
MZP- GKP (D/C)	150	422	560	0	8.44	0.00	8.44
Patna-Balia(D/C)	189	317	461	0	7.95	0.00	7.95
B'Sharif-Balia (D/C)	59	190	292	0	4.58	0.00	4.58
Pusauli-Balia	-188	-205	0	395	0.00	1.79	-1.79
Gaya-Fatehpur (765 Kv)	223	278	382	0	3.08	0.00	3.08
Pusauli-Sahupuri	102	104	148	0	2.72	0.00	2.72
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-42	-40	0	44	0.00	0.92	-0.92
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	64	69	387	0	4.77	0.00	4.77
Sub Total ER	957	1535			41.47	2.71	38.76
Total IR Exch	3715	5009			132.46	10.20	122.26

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
27.69	1.53	29.23	6.09	-0.82	5.31	0.61	0.62	-0.62

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
41.25	62.14	103.39	38.76	83.50	122.26	-2.49	21.36	18.87

VI. Frequency Profile

% of Time Frequency									
<49.2	<49.7	<49.8	<49.9	<50.0	49.9-50.05	50.05-50.10	50.10-50.20	>50.20	>50.50
0.00	1.04	5.14	18.66	62.68	64.87	12.00	3.15	0.28	0.00

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz	(Hz)	(Hz)		
50.24	18.02	49.62	5.51	49.97	0.09	0.09	50.20	49.80

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	412	02:12	409	00:32	0.0	0.0	0.0	0.0
Gorakhpur	400	407	20:53	396	05:52	0.0	0.0	0.0	0.0
Bareilly	400	417	20:52	400	18:10	0.0	0.0	0.0	0.0
Kanpur	400	416	01:12	402	15:27	0.0	0.0	0.0	0.0
Dadri	400	417	01:08	403	18:09	0.0	0.0	0.0	0.0
Ballabgarh	400	424	01:14	407	18:11	0.0	0.0	26.3	0.0
Bawana	400	422	01:03	404	18:12	0.0	0.0	5.3	0.0
Bassi	400	425	20:52	399	09:05	0.0	0.0	13.1	0.0
Hissar	400	416	01:07	398	18:11	0.0	0.0	0.0	0.0
Moga	400	424	01:24	405	18:12	0.0	0.0	12.5	0.0
Abdullapur	400	423	03:03	396	18:12	0.0	0.0	15.4	0.0
Nalagarh	400	430	02:53	410	18:11	24.5	24.5	38.5	0.0
Kishenpur	400	423	01:23	398	18:10	0.0	0.0	14.7	0.0
Wagoora	400	416	03:38	381	18:37	0.0	11.7	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	770	20:52	736	09:07	0.0	15.2	0.0	0.0
Balia	765	758	20:53	742	18:11	0.0	0.0	0.0	0.0
Moga	765	798	01:26	766	18:11	0.0	0.0	0.0	0.0
Agra	765	790	20:51	755	09:06	0.0	0.0	0.0	0.0
Bhiwani	765	803	01:25	766	18:13	0.0	0.0	1.1	0.0
Unnao	765	747	04:03	728	15:44	0.0	66.3	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	507.32	1411.35	510.95	1590.18	239.16	393.46
Pong	426.72	384.05	413.93	633.63	420.40	902.94	87.33	325.56
Tehri	829.79	740.04	823.70	1080.00	824.40	1097.21	89.74	149.00
Koteshwar	612.50	598.50	608.67	3.94	612.05	5.46	149.00	148.00
Chamera-I	760.00	748.75	757.90	0.00	0.00	0.00	54.13	42.70
Rihand	268.22	252.98	0.00	0.00	0.00	0.00	0.00	0.00
RPS	352.80	343.81	0.00	0.00	0.00	0.00	0.00	0.00
Jawahar Sagar	298.70	295.78	0.00	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	510.11	1.41	518.02	2.98	52.38	66.40

* NA: Not Available

X(A). Short-Term Open Access Details:

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (20:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	0	39	0	0	195	0	0.00	2.34	2.34
Delhi	-528	-134	-10	-140	-43	-10	-6.61	-1.72	-8.33
Haryana	-24	93	0	-6	87	0	-0.47	-3.47	-3.94
HP	81	0	0	81	-269	0	1.94	0.27	2.21
J&K	81	0	0	27	49	0	1.99	0.60	2.59
CHD	0	0	0	0	0	0	0.00	0.15	0.15
Rajasthan	-64	458	3	-64	-84	3	-1.54	7.04	5.50
UP	534	0	0	402	0	0	10.36	0.00	10.36
Uttarakhand	318	56	0	220	138	0	5.77	3.05	8.82
Total	397	512	-8	519	74	-8	11.43	8.26	19.69

X(B). Short-Term Open Access Details:

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	0	0	311	-85	0	0
Delhi	-140	-528	0	-198	-10	-10
Haryana	-6	-24	93	-771	0	0
HP	81	81	214	-435	0	0
J&K	182	27	49	0	0	0
CHD	0	0	34	-15	0	0
Rajasthan	-64	-64	738	-494	3	3
UP	540	376	0	0	0	0
Uttarakhand	318	220	355	44	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 29.10.2014 :**
Normal**XIV. Synchronisation of new generating units :**
0.00**XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :****XVI. Tripping of lines in pooling stations :****XVII. Complete generation loss in a generating station :**