

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पारसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 18.11.2014
Date of Reporting : 19.11.2014

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
37468	1761	39229	50.11	28659	1965	30624	50.12	770.6	58.62

* 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	41.35	6.96		48.31	47.71	49.89	2.17	98.20	0.00
Haryana	51.41	0.47		51.88	51.49	51.85	0.36	103.73	0.00
Rajasthan	120.84	5.86	2.17	128.86	71.10	69.77	-1.33	198.62	0.00
Delhi	20.60			20.60	37.37	37.43	0.07	58.03	0.00
UP	106.20	3.50	2.40	112.10	99.32	100.76	1.44	212.86	57.94
Uttarakhand		8.16		8.16	23.74	24.36	0.62	32.52	0.69
HP		5.99		5.99	17.66	17.96	0.29	23.95	0.00
J & K		7.51	0.00	7.51	30.29	31.81	1.51	39.31	0.00
Chandigarh				0.00	3.35	3.40	0.05	3.40	0.00
Total	340.39	38.45	4.57	383.40	382.03	387.22	5.19	770.62	58.62

* 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				# Max(hourly) Demand Met of Day (MW)
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	
Punjab	4932	0	104	-125	3254	0	-4	-326	5006
Haryana	5878	0	-100	-597	3664	0	181	-603	5878
Rajasthan	8666	0	-228	436	7612	0	106	966	9405
Delhi	3106	16	63	-476	1468	0	-47	-905	3106
UP	9927	1670	283	138	9208	1965	195	91	9927
Uttarakhand	1687	75	12	469	1090	0	-9	410	1687
HP	1222	0	-43	27	740	0	17	422	1309
J&K	1865	0	47	333	1535	0	48	282	1949
Chandigarh	185	0	-2	0	88	0	3	-31	185
Total	37468	1761	135	206	28659	1965	490	307	37468

* 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	1730	1848	1808	44.18	1841	41.41	2.77
Rihand I STPS (2*500)	1000	870	939	790	21.56	898	20.22	1.33
Rihand II STPS (2*500)	1000	970	1026	753	23.38	974	21.92	1.46
Rihand III STPS (2*500)	1000	688	0	869	15.74	656	15.53	0.21
Dadri I STPS (4*210)	840	787	622	558	15.99	666	15.29	0.70
Dadri II STPS (2*490)	980	980	841	662	19.50	813	20.03	-0.53
Unchahar I TPS (2*210)	420	400	362	369	9.16	382	8.77	0.39
Unchahar II TPS (2*210)	420	200	154	166	4.37	182	4.05	0.31
Unchahar III TPS (1*220)	210	200	155	149	4.16	173	3.84	0.32
I-STPP (Jhajjar) (3*500)	1500	1500	1187	897	20.97	874	22.26	-1.29
Dadri GPS (4*130.19+2*154.51)	830	819	499	507	11.71	488	11.52	0.19
Anta GPS (3*88.71+1*153.2)	419	409	229	239	5.97	249	6.18	-0.21
Auraiva GPS (4*111.19+2*109.30)	663	419	271	265	6.46	269	6.33	0.14
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	9976	8133	8032	203	8467	197	6
B. NPC								
NAPS (2*220)	440	293	331	332	7.02	293	7.03	-0.01
RAPS- B (2*220)	440	407	451	451	9.78	408	9.77	0.02
RAPS- C (2*220)	440	410	456	456	9.79	408	9.84	-0.05
Sub Total (B)	1320	1110	1238	1239	26.60	1108	26.64	-0.04
C. NHPC								
Chamera I HPS (3*180)	540	534	526	0	2.11	88	2.00	0.11
Chamera II HPS (3*100)	300	198	199	0	1.31	55	1.50	-0.19
Chamera III HPS (3*77)	231	231	230	0	0.87	36	0.85	0.02
Bairasuli HPS(3*60)	180	120	121	0	0.71	30	0.65	0.06
Salal-HPS (6*115)	690	166	70	226	4.27	178	3.99	0.29
Tanakpur-HPS (3*40)	94	38	61	35	0.94	39	0.92	0.02
Uri-I HPS (4*120)	480	218	243	210	5.41	225	5.24	0.17
Uri-II HPS (4*60)	240	130	151	121	3.15	131	3.14	0.02
Dhauliganga-HPS (4*70)	280	207	210	0	1.37	57	1.25	0.12
Dulhasti-HPS (3*130)	390	387	393	137	4.12	172	4.00	0.12
Sewa-II HPS (3*40)	120	79	88	0	0.25	10	0.24	0.01
Parbati 3 (4*130)	520	260	265	0	0.54	22	0.55	-0.01
Sub Total (C)	4065	2569	2558	729	25	1044	24	1
D. SJVNL								
NJPC (6*250)	1500	1605	1611	0	8.57	357	8.50	0.07
Rampur HEP (4*68.67)	275	350	372	0	2.22	93	2.25	-0.02
Sub Total (D)	1775	1955	1983	0	10.79	450	10.75	0.04
E. THDC								
Tehri HPS (4*250)	1000	1060	1066	0	7.51	313	7.50	0.01
Koteshwar HPS (4*100)	400	104	200	90	2.53	106	2.50	0.03
Sub Total (E)	1400	1164	1266	90	10.05	419	10.00	0.05
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	533	1077	341	12.77	532	12.79	-0.02
Dehar HPS (6*165)	990	149	495	0	3.84	160	3.58	0.26
Pong HPS (6*66)	396	193	318	66	4.76	198	4.63	0.13
Sub Total (F)	2900	875	1890	407	21.36	890	20.99	0.37
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	40	0	0.59	25	0.58	0.01
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	860	0	4.96	206	4.92	0.04
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.18	-0.18
Shree Cement TPS (2*150)	300	0	148	135	3.38	141	3.40	-0.01
Budhil HPS(IPP)	70	0	70	0	0.15	6	0.14	0.00
Sub Total (G)	1662	0	1118	135	9.08	378	9.22	-0.14
H. Total Regional Entities (A-G)	24419	17649	18186	10632	306.13	12756	299.39	6.75

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	3.80	158
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	90	90	2.13	89
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	463	365	8.94	373
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	707	691	15.75	656
	Talwandi Saboo (1*660)	660	413	365	10.73	447
	Thermal (Total)	4680	1833	1671	41.35	1723
	Total Hydro	1148	390	205	6.96	290
Total Punjab	5828	2223	1876	48.31	2013	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	225	213	4.36	182
	DCRTPP (Yamuna nagar) (2*300)	600	272	240	5.94	247
	Faridabad GPS (NTPC)	432	0	164	2.14	89
	RGTPP (khedar) (IPP) (2*600)	1200	1090	733	19.05	794
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	990	742	19.93	830
	Thermal (Total)	4944	2577	2092	51.41	2142
	Total Hydro	62	16	21	0.47	19
	Total Haryana	5006	2593	2113	51.88	2162
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	828	766	19.55
suratgarh TPS (6*250)		1500	1134	966	24.10	1004
Chabra TPS (3*250)		750	428	252	9.69	404
Dholpur GPS (3*110)		330	117	127	3.03	126
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	183	163	4.72	196
RAPS A (NPC) (1*100+1*200)		300	183	168	4.20	175
Barsingar (NLC) (2*125)		250	93	93	1.96	82
Giral LTPS (2*125)		250	68	73	1.31	54
Rajwest LTPS (IPP) (8*135)		1080	727	591	16.54	689
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	440	410	9.96	415
Kawai(Adani) (2*660)		1320	1180	857	25.80	1075
Thermal (Total)		8026	5381	4466	121	5035
Total Hydro		550	283	237	5.86	244
Wind power		2798	49	58	1.19	50
Biomass		99	31	31	0.75	31
Solar		730	0	0	0.22	9
Renewable/Others (Total)		3627	80	89	2.17	90
Total Rajasthan		12203	5744	4792	128.86	5369
UP	Anpara TPS (3*210+2*500)	1630	476	467	10.60	442
	Obra TPS (2*50+2*94+5*200)	1194	347	304	8.00	333
	Paricha TPS (2*110+2*220+2*250)	1140	747	782	18.20	758
	Panki TPS (2*105)	210	63	153	2.40	100
	Harduaganj TPS (1*60+1*105+2*250)	665	187	181	4.40	183
	Tanda TPS (NTPC) (4*110)	440	281	284	6.90	288
	Roza TPS (IPP) (4*300)	1200	1076	1049	25.00	1042
	Anpara-C (IPP) (2*600)	1200	973	969	23.30	971
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	321	320	7.40	308
	Thermal (Total)	8129	4471	4509	106.20	4425
	Vishnuparyag HPS (IPP)	400	118	109	2.50	104
	Other Hydro	527	32	41	1.00	42
	Cogeneration	981	100	100	2.40	100
	Total UP	10037	4721	4759	112.10	4567
Uttarakhand	Total Hydro	1398	526	231	8.16	340
	Total Uttarakhand	1398	526	231	8.16	340
Delhi	Raighat TPS (2*67.5)	135	0	0	-0.01	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	78	77	1.90	79
	Pragati Gas Turbine (2x104+ 1x122)	330	146	146	3.58	149
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	354	270	7.33	305
	Badarpur TPS (NTPC) (3*95+2*210)	705	310	314	7.81	325
	Thermal (Total)	2917	888	807	20.60	858
Total Delhi	2917	888	807	20.60	858	
HP	Baspa HPS (IPP) (2*150)	300	31	0	1.43	60
	Malana HPS (IPP) (2*43)	86	61	0	0.23	9
	Other Hydro	728	245	176	4.34	181
	Total HP	1114	337	176	5.99	250
J & K	Baqilhar HPS (IPP) (3*150)	450	296	150	4.99	208
	Other Hydro/IPP	436	105	105	2.52	105
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	401	255	7.51	313
Total State Control Area Generation		39597	17433	15009	383.40	15871
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2326	3656	99.72	4155
Total Regional Availability(Gross)		64017	37945	29296	789.25	32781

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8597	1226	72.81	3034
State Control Area Hydro	5684	1985	1166	38.45	1498
Total Regional Hydro	17116	10582	2392	111.25	4531

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	10.78	-10.78
Gwalior-Agra (D/C)	1208	1494	2111	0	39.03	0.00	39.03
Zerda-Kankroli	-277	-246	0	294	0.00	5.07	-5.07
Zerda-Bhinmal	-190	-113	53	251	0.00	2.30	-2.30
Malanpur-Auraiya	-87	-126	0	152	0.00	2.71	-2.71
Badod-Kota/Morak	-190	-208	0	260	0.00	5.05	-5.05
Mundra-Mohindergarh(HVDC)	2001	1996	2204	0	49.26	0.00	49.26
Vindhychal - Rihand	0	343	494	0	10.71	0.00	10.71
Sub Total WR	1965	2640			99.00	25.92	73.08
Pusauli Bypass	400	400	450	0	9.76	0.00	9.76
MZP- GKP (D/C)	4	198	402	43	3.52	0.00	3.52
Patna-Balia(D/C)	272	375	513	0	9.57	0.00	9.57
B'Sharif-Balia (D/C)	-75	38	129	96	0.50	0.00	0.50
Pusauli-Balia	-127	-98	0	142	0.00	2.57	-2.57
Gaya-Fatehpur (765 Kv)	-3	125	350	3	4.30	0.00	4.30
Pusauli-Sahupuri	94	60	192	0	2.47	0.00	2.47
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-38	-40	0	45	0.00	0.79	-0.79
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-166	-42	160	179	0.00	0.12	-0.12
Sub Total ER	361	1016			30.11	3.48	26.63
Total IR Exch	2326	3656			129.12	29.40	99.72

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
18.54	0.87	19.42	4.54	-12.04	9.48	9.51	4.97	-4.97

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
38.40	65.60	104.00	26.63	73.08	99.72	-11.77	7.48	-4.29

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	0.45	1.76	12.22	43.94	56.20	22.58	8.32	1.57	0.00

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				
50.37	21.56	49.65	16.46	50.00	0.08	0.09	50.36	49.86

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	409	02:16	404	06:15	0.0	0.0	0.0	0.0
Gorakhpur	400	415	20:59	398	17:54	0.0	0.0	0.0	0.0
Bareilly	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Kanpur	400	421	20:45	404	06:55	0.0	0.0	0.6	0.0
Dadri	400	422	20:57	401	12:15	0.0	0.0	0.7	0.0
Ballabgarh	400	429	20:44	408	12:20	0.0	0.0	35.0	0.0
Bawana	400	426	21:01	407	12:15	0.0	0.0	11.7	0.0
Bassi	400	428	20:57	394	07:08	0.0	0.0	11.4	0.0
Hissar	400	418	20:44	398	12:17	0.0	0.0	0.0	0.0
Moga	400	424	20:45	406	06:56	0.0	0.0	15.1	0.0
Abdullapur	400	424	04:01	396	18:09	0.0	0.0	11.1	0.0
Nalagarh	400	428	21:59	406	11:40	0.0	0.0	29.2	0.0
Kishenpur	400	429	02:40	401	18:47	0.0	0.0	40.6	0.0
Wagoora	400	412	02:41	375	18:51	3.9	17.6	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	778	20:57	744	06:41	0.0	0.0	0.0	0.0
Balia	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Moga	765	806	20:55	768	06:58	0.0	0.0	3.5	0.0
Agra	765	794	20:44	756	06:42	0.0	0.0	0.0	0.0
Bhiwani	765	815	20:57	770	06:55	0.0	0.0	9.2	0.0
Unnao	765	761	04:01	740	10:43	0.0	0.6	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	504.74	1298.95	509.31	1515.08	191.11	393.55
Pong	426.72	384.05	411.55	544.90	418.36	821.34	51.42	303.27
Tehri	829.79	740.04	821.00	1023.38	822.30	1044.51	60.07	165.00
Koteshwar	612.50	598.50	609.09	4.21	610.35	4.75	165.00	168.00
Chamera-I	760.00	748.75	759.43	0.00	0.00	0.00	50.60	56.75
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	510.03	1.78	515.99	2.73	42.05	81.92

* NA: Not Available

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

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (19:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	-382	57	0	-357	232	0	-8.77	4.73	-4.04
Delhi	-777	-112	-15	-597	136	-15	-14.26	-0.25	-14.51
Haryana	-774	171	0	-758	161	0	-19.65	2.09	-17.56
HP	422	0	0	397	-370	0	9.47	-2.45	7.03
J&K	282	0	0	333	0	0	6.64	0.73	7.38
CHD	-31	0	0	0	0	0	-0.24	0.18	-0.07
Rajasthan	529	434	3	222	212	2	11.83	10.73	22.56
UP	91	0	0	138	0	0	2.68	0.00	2.68
Uttarakhand	244	167	0	244	226	0	5.85	5.69	11.54
Total	-397	717	-13	-378	596	-13	-6.44	21.45	15.01

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-357	-382	328	6	0	0
Delhi	-487	-786	197	-148	-15	-15
Haryana	-758	-978	173	-363	0	0
HP	422	378	74	-702	0	0
J&K	350	236	98	0	0	0
CHD	0	-31	20	0	0	0
Rajasthan	529	222	904	107	3	2
UP	153	86	0	0	0	0
Uttarakhand	244	244	384	148	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 18.11.2014 :**
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 :**