

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 08.01.2015
Date of Reporting : 09.01.2015

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
39376	2157	41533	50.08	29555	841	30396	50.11	837.6	48.10

* 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	42.51	5.92		48.43	45.00	44.74	-0.26	93.17	0.00
Haryana	71.29	0.42		71.70	47.83	46.50	-1.33	118.20	0.00
Rajasthan	120.24	5.05	7.99	133.27	77.26	82.42	5.16	215.69	0.00
Delhi	20.80			20.80	40.47	40.89	0.42	61.69	0.03
UP	148.00	5.00		153.00	81.11	82.60	1.49	235.60	40.15
Uttarakhand		10.38		10.38	27.31	28.61	1.30	38.98	0.46
HP		4.40		4.40	21.12	22.30	1.18	26.70	0.00
J & K		4.40	0.00	4.40	33.69	38.92	5.23	43.32	7.46
Chandigarh				0.00	3.82	4.20	0.27	4.20	0.00
Total	402.83	35.56	7.99	446.38	377.61	391.17	13.45	837.55	48.10

* 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	5056	0	-122	-274	3040	0	-13	-163	5118
Haryana	6537	0	-15	-868	3586	0	-87	-803	6537
Rajasthan	8828	0	284	647	8102	0	60	1134	9728
Delhi	3623	0	-16	-245	1597	0	73	-1093	4106
UP	10097	1780	-256	94	9454	540	-93	67	10230
Uttarakhand	1792	35	58	811	1158	0	16	544	1799
HP	1287	1	-7	392	813	0	8	450	1396
J&K	1932	341	172	557	1708	301	159	673	1946
Chandigarh	224	0	8	19	97	0	14	-31	238
Total	39376	2157	106	1134	29555	841	137	779	39376

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

figures may not be at simultaneous hour.

Diversity is 1.04

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	1424	1569	1455	37.20	1550	34.13	3.07
Rihand I STPS (2*500)	1000	524	454	883	15.90	662	12.41	3.49
Rihand II STPS (2*500)	1000	960	970	793	22.04	918	22.94	-0.90
Rihand III STPS (2*500)	1000	965	1002	746	22.46	936	23.11	-0.65
Dadri I STPS (4*210)	840	615	599	404	15.76	657	13.26	2.50
Dadri II STPS (2*490)	980	964	931	661	20.30	846	21.33	-1.03
Unchahar I TPS (2*210)	420	407	413	325	9.31	388	9.34	-0.03
Unchahar II TPS (2*210)	420	368	417	300	9.03	376	8.14	0.89
Unchahar III TPS (1*220)	210	202	206	140	4.47	186	4.48	-0.01
ISTPP (Jhajhar) (3*500)	1500	1239	1210	881	21.04	877	23.73	-2.69
Dadri GPS (4*130.19+2*154.51)	830	848	411	408	9.17	382	8.59	0.58
Anta GPS (3*88.71+1*153.2)	419	395	259	198	6.07	253	6.24	-0.17
Auraiya GPS (4*111.19+2*109.30)	663	677	170	177	4.11	171	4.01	0.10
Dadri Solar	5	1	0	0	0.02	1	0.02	-0.01
Unchahar Solar	10	3	0	0	0.00	0	0.07	-0.07
Singrauli Solar	15	0	0	0	0.00	0	0	0.00
Sub Total (A)	11312	9591	8611	7371	197	8203	192	5
B. NPC								
NAPS (2*220)	440	362	413	421	9.10	379	8.69	0.41
RAPS- B (2*220)	440	413	434	436	9.43	393	9.91	-0.48
RAPS- C (2*220)	440	215	236	236	5.03	210	5.16	-0.13
Sub Total (B)	1320	990	1083	1093	23.57	982	23.76	-0.20
C. NHPC								
Chamera I HPS (3*180)	540	356	546	0	1.69	70	1.50	0.19
Chamera II HPS (3*100)	300	300	304	0	1.10	46	0.95	0.15
Chamera III HPS (3*77)	231	154	157	0	0.59	25	0.55	0.04
Bairasuli HPS(3*60)	180	179	124	0	0.41	17	0.40	0.01
Salal-HPS (6*115)	690	81	220	64	2.22	93	1.94	0.29
Tanakpur-HPS (3*40)	94	30	31	33	0.74	31	0.73	0.01
Uri-I HPS (4*120)	480	95	210	20	2.53	105	2.28	0.25
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
Dhauliganga-HPS (4*70)	280	139	139	0	0.97	41	1.00	-0.03
Dulhasti-HPS (3*130)	390	258	269	0	2.80	117	2.70	0.10
Sewa-II HPS (3*40)	120	79	81	0	0.25	10	0.24	0.01
Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
Sub Total (C)	4065	1671	2081	117	13	554	12	1
D. SJVNL								
NJPC (6*250)	1500	1350	1340	0	5.93	247	6.69	-0.77
Rampur HEP (4*68.67)	275	420	296	0	1.48	62	1.88	-0.41
Sub Total (D)	1775	1770	1636	0	7.40	308	8.58	-1.17
E. THDC								
Tehri HPS (4*250)	1000	1012	1000	0	9.17	382	8.00	1.17
Koteshwar HPS (4*100)	400	116	294	90	3.25	136	2.80	0.45
Sub Total (E)	1400	1128	1294	90	12.43	518	10.80	1.63
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	581	1092	338	12.12	505	13.95	-1.83
Dehar HPS (6*165)	990	117	330	0	3.32	138	2.82	0.51
Pong HPS (6*66)	396	144	252	0	3.12	130	3.47	-0.35
Sub Total (F)	2900	843	1674	338	18.56	773	20.23	-1.67
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	21	0	0.34	14	0.47	-0.13
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	560	0	3.25	135	3.48	-0.24
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	278	152	5.66	236	2.69	2.97
Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
Sub Total (G)	1662	0	859	152	9.24	385	6.64	2.60
H. Total Regional Entities (A-G)	24434	15993	17237	9161	281.37	11724	274.08	7.29

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	500	500	12.16	507	
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	110	80	2.21	92	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	460	362	9.36	390	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura (2*700)	1400	490	353	10.49	437	
	Talwandi Saboo (1*660)	660	347	348	8.30	346	
	Thermal (Total)	4680	1907	1643	42.51	1771	
	Total Hydro	1148	365	59	5.92	247	
Total Punjab	5828	2272	1702	48.43	2018		
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	667	607	15.05	627	
	DCRTPP (Yamuna nagar) (2*300)	600	524	480	11.88	495	
	Faridabad GPS (NTPC)	432	420	298	9.24	385	
	RGTPP (khedar) (IPP) (2*600)	1200	1162	752	22.22	926	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP) (2*660)	1320	625	378	12.90	537	
	Thermal (Total)	4944	3398	2515	71.29	2970	
	Total Hydro	62	11	13	0.42	17	
	Total Haryana	5006	3409	2528	71.70	2988	
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1095	996	25.77	1074
suratgarh TPS (6*250)		1500	1308	1135	29.80	1242	
Chabra TPS (3*250)		750	664	582	15.06	627	
Dholpur GPS (3*110)		330	114	113	2.79	116	
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	126	161	3.46	144	
RAPS A (NPC) (1*100+1*200)		300	0	0	0.00	0	
Barsingsar (NLC) (2*125)		250	188	188	4.32	180	
Giral LTPS (2*125)		250	0	0	0.00	0	
Rajwest LTPS (IPP) (8*135)		1080	853	445	16.67	694	
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0	
Kalisindh Thermal(1*600)		600	0	0	0.00	0	
Kawai(Adani) (2*660)		1320	1006	815	22.38	933	
Thermal (Total)		8026	5354	4435	120	5010	
Total Hydro		550	169	93	5.05	210	
Wind power		2798	396	565	7.66	319	
Biomass		99	9	9	0.22	9	
Solar		730	1	0	0.10	4	
Renewable/Others (Total)		3627	406	574	7.99	333	
Total Rajasthan		12203	5929	5102	133.27	5553	
UP		Anpara TPS (3*210+2*500)	1630	1367	1382	32.40	1350
	Obra TPS (2*50+2*94+5*200)	1194	355	344	8.30	346	
	Paricha TPS (2*110+2*220+2*250)	1140	776	704	17.50	729	
	Panki TPS (2*105)	210	45	77	1.00	42	
	Harduaganj TPS (1*60+1*105+2*250)	665	230	231	5.50	229	
	Tanda TPS (NTPC) (4*110)	440	362	300	8.60	358	
	Roza TPS (IPP) (4*300)	1200	914	774	21.90	913	
	Anpara-C (IPP) (2*600)	1200	1076	1382	25.60	1067	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	401	280	8.00	333	
	Thermal (Total)	8129	5526	5474	128.80	5367	
	Vishnuparyag HPS (IPP)	400	73	74	1.70	71	
	Other Hydro	527	140	52	3.30	138	
	Cogeneration	981	800	800	19.20	800	
	Total UP	10037	6539	6400	153.00	6304	
	Uttarakhand	Total Hydro	1398	614	350	10.38	432
		Total Uttarakhand	1398	614	350	10.38	432
Delhi	Raighat TPS (2*67.5)	135	42	40	0.96	40	
	Delhi Gas Turbine (6x30 + 3x34)	282	162	161	3.85	161	
	Pragati Gas Turbine (2x104+ 1x122)	330	0	0	0.00	0	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (6*250)	1370	313	290	7.39	308	
	Badarpur TPS (NTPC) (3*95+2*210)	705	394	334	8.60	358	
	Thermal (Total)	2917	911	825	20.80	867	
	Total Delhi	2917	911	825	20.80	867	
HP	Baspa HPS (IPP) (2*150)	300	0	0	0.99	41	
	Malana HPS (IPP) (2*43)	86	0	0	0.20	8	
	Other Hydro	728	195	76	3.21	134	
	Total HP	1114	195	76	4.40	183	
J & K	Baglihar HPS (IPP) (3*150)	450	150	120	3.27	136	
	Other Hydro/IPP	436	79	20	1.14	47	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	229	140	4.40	183	
Total State Control Area Generation		39597	20098	17123	446.38	18528	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4266	3601	116.00	4833	
Total Regional Availability(Gross)		64032	41601	29885	843.74	35085	

IV. Total Hydro Generation:

Regional Entities Hydro	11432	7265	546	55.27	2303
State Control Area Hydro	5684	1723	783	35.56	1411
Total Regional Hydro	17116	8988	1329	90.83	3714

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	
Vindhyachal B/B	50	-100	100	100	0.87	0.73	0.14
Gwalior-Agra (D/C)	870	1282	1883	0	33.55	0.00	33.55
Zerda-Kankroli	-128	-44	111	146	0.00	0.67	-0.67
Zerda-Bhinmal	-45	54	300	86	1.41	0.00	1.41
Malanpur-Auraiya	-75	-70	0	110	0.00	2.19	-2.19
Badod-Kota/Morark	-18	-13	53	75	0.00	0.71	-0.71
Mundra-Mohindergarh(HVDC)	2002	1501	2102	0	45.45	0.00	45.45
Vindhyachal - Rihand	398	279	500	0	8.83	0.00	8.83
Sub Total WR	3054	2889			90.11	4.30	85.81
Pusauli Bypass	100	100	100	0	2.45	0.00	2.45
MZP- GKP (D/C)	23	-10	186	191	0.56	0.00	0.56
Patna-Balia(D/C)	715	538	802	0	16.61	0.00	16.61
B'Sharif-Balia (D/C)	-18	-124	112	156	0.00	1.32	-1.32
Pusauli-Balia	0	-37	40	69	0.00	0.20	-0.20
Gaya-Fatehpur (765 Kv)	262	164	517	0	7.43	0.00	7.43
Pusauli-Sahupuri	122	124	158	0	3.06	0.00	3.06
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-43	-25	0	43	0.00	0.81	-0.81
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	51	-18	303	42	2.39	0.00	2.39
Sub Total ER	1212	712			32.50	2.32	30.18
Total IR Exch	4266	3601			122.61	6.62	116.00

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
22.94	0.27	23.21	13.07	-5.50	4.77	17.11	1.46	-1.46

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
42.52	88.70	131.22	30.18	85.81	116.00	-12.34	-2.88	-15.22

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	1.02	8.95	29.14	63.21	54.78	11.92	4.41	0.28	NA

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				
50.26	18:02:00	49.60	18:39:50	49.95	0.13	0.10	50.20	49.81

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	407	03:24	399	18:12	0.0	0.0	0.0	0.0
Gorakhpur	400	414	03:22	395	09:11	0.0	0.0	0.0	0.0
Bareilly	400	423	03:22	403	09:11	0.0	0.0	7.2	0.0
Kanpur	400	421	03:01	402	18:27	0.0	0.0	3.4	0.0
Dadri	400	417	02:57	400	18:12	25.0	25.0	0.0	0.0
Ballabgarh	400	426	03:20	406	18:25	0.0	0.0	29.8	0.0
Bawana	400	424	03:01	406	18:24	0.0	0.0	24.7	0.0
Bassi	400	427	21:34	396	12:23	0.0	0.0	8.1	0.0
Hissar	400	413	03:20	397	18:24	0.0	0.0	0.0	0.0
Moga	400	421	03:19	404	18:26	0.0	0.0	0.6	0.0
Abdullapur	400	421	13:03	396	18:25	0.0	0.0	0.1	0.0
Nalagarh	400	424	06:01	407	18:22	0.0	0.0	15.4	0.0
Kishenpur	400	418	03:19	392	18:34	0.0	0.0	0.0	0.0
Wagoora	400	401	13:02	364	19:36	41.9	90.3	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	783	03:21	745	09:11	0.0	0.0	0.0	0.0
Balia	765	784	23:56	752	10:16	0.0	0.0	0.0	0.0
Moga	765	796	21:22	766	07:33	0.0	0.0	0.0	0.0
Agra	765	791	03:01	754	09:11	0.0	0.0	0.0	0.0
Bhiwani	765	799	21:25	766	07:33	0.0	0.0	0.0	0.0
Unnao	765	767	03:21	0	16:29	41.6	45.4	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	494.96	903.28	498.86	1053.16	136.94	356.03
Pong	426.72	384.05	403.43	304.55	410.12	504.32	69.94	222.68
Tehri	829.79	740.04	804.60	696.77	806.85	740.81	37.46	219.00
Koteshwar	612.50	598.50	608.92	4.44	610.11	4.69	219.00	216.00
Chamera-I	760.00	748.75	759.34	30.00	757.21	23.16	51.35	45.20
Rihand	268.22	252.98	850.50	263.50	854.30	326.40	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	504.00	2.33	510.20	2.77	43.18	89.86

* 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	-309	145	0	-278	3	0	-5.81	1.10	-4.71
Delhi	-944	-129	-21	-540	310	-15	-11.77	3.05	-8.72
Haryana	-950	147	0	-947	79	0	-23.75	-0.52	-24.27
HP	481	-31	0	452	-60	0	12.25	-2.22	10.02
J&K	681	-8	0	484	73	0	13.16	1.14	14.29
CHD	-31	0	0	0	19	0	-0.25	0.82	0.57
Rajasthan	485	648	2	485	163	0	15.59	10.81	26.40
UP	67	0	0	94	0	0	-1.48	0.00	-1.48
Uttarakhand	290	221	33	290	474	48	6.96	9.55	16.51
Total	-229	994	14	40	1061	32	4.89	23.72	28.61

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-129	-309	189	0	0	0
Delhi	15	-944	499	-129	-15	-21
Haryana	-947	-1100	148	-453	0	0
HP	553	428	16	-521	0	0
J&K	681	436	151	-24	0	0
CHD	0	-31	73	0	0	0
Rajasthan	839	485	782	-166	2	0
UP	125	-324	0	0	0	0
Uttarakhand	290	290	490	211	48	3

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 08.01.2015 :**

Dense fog throughout NR

XIV. Synchronisation of new generating units :

0.00

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

1. 765 kV Anta-Phagi-II 1st time synchronised at 21:21 hrs. on 08/01/2015

2. 765/400 kV ICT-II at Phagi 1st time synchronised at 16:55 hrs. on 08/01/2015

XVI. Tripping of lines in pooling stations :**XVII. Complete generation loss in a generating station :**