

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्ट की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 12.05.2015
Date of Reporting : 13.05.2015

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
40847	1835	42682	50.01	36769	880	37648	50.16	916.4	37.16

* 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	23.15	15.85		39.01	95.47	94.69	-0.78	133.70	0.16
Haryana	46.13	0.64		46.77	87.71	87.34	-0.37	134.11	0.00
Rajasthan	99.75	0.05	7.13	106.93	70.52	71.82	1.30	178.75	0.00
Delhi	25.87			25.87	77.81	76.52	-1.30	102.39	0.01
UP	131.04	13.09		144.12	125.64	128.16	2.51	272.28	29.96
Uttarakhand		18.60		18.60	18.92	16.44	-2.48	35.04	0.04
HP		20.67		20.67	4.06	3.67	-0.39	24.34	0.00
J & K		14.20	0.00	14.20	19.90	16.33	-3.58	30.53	6.99
Chandigarh				0.00	5.31	5.23	0.27	5.23	0.00
Total	325.94	83.11	7.13	416.18	505.34	500.19	-4.81	916.37	37.16

* 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 (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	5581	0	-254	1346	4922	0	-151	1570	6345
Haryana	6556	0	110	333	5766	0	-168	263	6900
Rajasthan	7277	0	-83	569	6537	0	-130	614	8123
Delhi	4420	0	-119	558	4332	0	-59	354	5125
UP	12151	1455	352	406	12126	710	318	1286	12643
Uttarakhand	1834	40	-71	415	1182	0	-356	280	1834
HP	1090	0	-105	-1087	863	0	14	-1403	1163
J&K	1700	340	155	-318	848	170	-321	-593	1740
Chandigarh	238	0	2	0	195	0	5	0	257
Total	40847	1835	-12	2222	36769	880	-848	2372	41983

* STOA figures are at sellers boundary & PX figures are at regional boundary. # figures may not be at simultaneous hour.

Diversity is 1.05

III. Regional Entities :

A. NTPC	Station/ Constituent	Inst. Capacity	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI [OG:(+ve), UG: (-ve)]	
		(Effective) MW							Net MU	UI
	Singrauli STPS (5*200+2*500)	2000	1690	1824	1644	37.93	1580	37.86	0.07	
	Rihand I STPS (2*500)	1000	331	353	301	7.57	315	6.58	0.99	
	Rihand II STPS (2*500)	1000	970	979	723	20.36	848	18.98	1.38	
	Rihand III STPS (2*500)	1000	960	927	707	20.32	847	19.08	1.24	
	Dadri I STPS (4*210)	840	615	472	459	11.75	490	11.20	0.56	
	Dadri II STPS (2*490)	980	980	739	694	17.60	733	17.65	-0.05	
	Unchahar I TPS (2*210)	420	405	273	365	7.09	295	7.40	-0.31	
	Unchahar II TPS (2*210)	420	401	266	325	6.55	273	7.12	-0.57	
	Unchahar III TPS (1*220)	210	201	135	146	3.33	139	3.42	-0.09	
	ISTPP (Jhajjar) (3*500)	1500	1500	703	630	15.72	655	16.24	-0.52	
	Dadri GPS (4*130.19+2*154.51)	830	807	218	168	5.11	213	5.31	-0.20	
	Anta GPS (3*88.71+1*153.2)	419	302	200	225	5.26	219	5.07	0.19	
	Auraiya GPS (4*111.19+2*109.30)	663	644	155	158	3.74	156	3.73	0.01	
	Dadri Solar	5	1	0	0	0.03	1	0.03	0.00	
	Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.03	
	Singrauli Solar	15	3	0	0	0.06	3	0.07	-0.01	
	KHEP	400	0	0	0	0.00	0	0.00	0.00	
	Sub Total (A)	11712	9812	7244	6545	162	6769	160	3	
B. NPC	INAPS (2*220)	440	379	416	420	9.11	379	9.10	0.01	
	RAPS- B (2*220)	440	370	413	419	8.91	371	7.30	1.61	
	RAPS- C (2*220)	440	410	440	441	9.49	396	9.84	-0.35	
	Sub Total (B)	1320	1159	1269	1280	27.51	1146	26.24	1.27	
C. NHPC	Chamera I HPS (3*180)	540	540	550	529	13.01	542	12.86	0.14	
	Chamera II HPS (3*100)	300	300	311	310	7.26	302	7.11	0.15	
	Chamera III HPS (3*77)	231	231	232	231	5.57	232	5.48	0.09	
	Bairasuil HPS(3*60)	180	179	180	180	4.39	183	4.22	0.17	
	Salal-HPS (6*115)	690	656	669	665	15.73	656	15.67	0.06	
	Tanakpur-HPS (3*40)	94	59	74	62	1.48	61	1.40	0.08	
	Uri-I HPS (4*120)	480	475	477	475	11.61	484	11.28	0.33	
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00	
	Dhauliganga-HPS (4*70)	280	210	210	141	4.21	175	4.20	0.00	
	Dulhasti-HPS (3*130)	390	387	407	398	9.41	392	9.29	0.12	
	Sewa-II HPS (3*40)	120	119	130	130	3.06	128	2.83	0.24	
	Parbati 3 (4*130)	520	390	392	0	2.60	108	2.54	0.06	
	Sub Total (C)	4065	3546	3632	3120	78	3263	77	1	
D.SJVNL	NJPC (6*250)	1500	1605	1620	1614	38.39	1600	38.47	-0.08	
	Rampur HEP (6*68.67)	412	438	446	443	10.66	444	10.51	0.15	
	Sub Total (D)	1912	2043	2066	2057	49.05	2044	48.98	0.07	
E. THDC	Tehri HPS (4*250)	1000	456	463	307	9.88	412	9.85	0.03	
	Koteshwar HPS (4*100)	400	188	301	197	4.45	185	4.50	-0.05	
	Sub Total (E)	1400	644	764	504	14.33	597	14.35	-0.02	
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	784	1159	643	18.84	785	18.81	0.04	
	Dehar HPS (6*165)	990	600	660	560	14.68	612	14.39	0.29	
	Pong HPS (6*66)	396	92	192	66	2.28	95	2.21	0.08	
	Sub Total (F)	2900	1475	2011	1269	35.81	1492	35.40	0.40	
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	207	221	4.88	204	5.11	-0.23	
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1200	1160	28.14	1172	28.51	-0.37	
	Malana Stg-II HPS (2*50)	100	0	111	81	1.90	79	1.78	0.11	
	Shree Cement TPS (2*150)	300	0	284	281	5.85	244	6.59	-0.74	
	Budhil HPS(IPP)	70	0	74	73	1.76	73	1.66	0.10	
	Sub Total (G)	1662	0	1875	1816	42.53	1772	43.65	-1.13	
H. Total Regional Entities (A-G)		24972	18679	18861	16592	409.99	17083	405.32	4.67	

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	320	660	12.07	503
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	90	90	2.18	91
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	383	367	8.90	371
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	0	0	0.00	0
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	793	1117	23.15	965
	Total Hydro	1148	815	643	15.85	661
	Total Punjab	5828	1608	1760	39.01	1625
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	604	613	14.06
DCRTPP (Yamuna nagar) (2*300)		600	477	493	11.70	487
Faridabad GPS (NTPC)		432	183	183	4.55	189
RGTPP (kheadar) (IPP) (2*600)		1200	373	0	4.64	193
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	486	565	11.19	466
Thermal (Total)		4944	2123	1854	46.13	1922
Total Hydro		62	16	16	0.64	27
Total Haryana		5006	2139	1870	46.77	1949
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	514	513	12.74
	suratgarh TPS (6*250)	1500	560	561	14.27	595
	Chabra TPS (4*250)	1000	378	580	11.20	467
	Dholpur GPS (3*110)	330	0	0	0.00	0
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	136	175	4.00	166
	RAPS A (NPC) (1*100+1*200)	300	142	142	3.51	146
	Barsingsar (NLC) (2*125)	250	190	175	4.29	179
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	796	442	16.13	672
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	442	400	10.32	430
	Kawai(Adani) (2*660)	1320	870	851	23.29	970
	Thermal (Total)	8276	4028	3839	100	4156
	Total Hydro	550	0	0	0.05	2
	Wind power	2798	163	598	6.37	265
	Biomass	99	21	21	0.52	21
	Solar	730	0	0	0.25	10
	Renewable/Others (Total)	3627	184	619	7.13	297
	Total Rajasthan	12453	4212	4458	106.93	4455
	UP	Anpara TPS (3*210+2*500)	1630	1352	1229	30.80
Obra TPS (2*50+2*94+5*200)		1194	448	463	10.60	442
Paricha TPS (2*110+2*220+2*250)		1140	784	778	17.30	721
Panki TPS (2*105)		210	126	108	2.60	108
Harduaganj TPS (1*60+1*105+2*250)		665	227	220	5.00	208
Tanda TPS (NTPC) (4*110)		440	390	390	8.61	359
Roza TPS (IPP) (4*300)		1200	972	820	21.87	911
Anpara-C (IPP) (2*600)		1200	1089	1085	23.09	962
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	324	169	6.36	265
Anpara-D		500	0	0	0.00	0
Thermal (Total)		8629	5712	5262	126	5260
Vishnuparyag HPS (IPP)(including Alaknanda)		400	469	499	11.52	480
Other Hydro		527	71	56	1.57	65
Cogeneration		981	200	200	4.80	200
Total UP		10537	6452	6017	144.12	5525
Uttarakhand		Total Hydro	1398	798	759	18.60
	Total Uttarakhand	1398	798	759	18.60	775
Delhi	Rajghat TPS (2*67.5)	135	52	52	0.84	35
	Delhi Gas Turbine (6x30 + 3x34)	282	138	141	2.97	124
	Praagati Gas Turbine (2x104+ 1x122)	330	270	287	6.86	286
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	290	286	6.96	290
	Badarpur TPS (NTPC) (3*95+2*210)	705	293	157	8.26	344
	Thermal (Total)	2917	1043	924	25.87	1078
Total Delhi	2917	1043	924	25.87	1078	
HP	Baspa HPS (IPP) (2*150)	300	322	293	6.54	273
	Malana HPS (IPP) (2*43)	86	91	81	1.96	82
	Other Hydro	728	508	521	12.17	507
	Total HP	1114	921	895	20.67	861
J & K	Baglihar HPS (IPP) (3*150)	450	442	440	10.43	435
	Other Hydro/IPP	436	163	145	3.77	157
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	605	585	14.20	592
Total State Control Area Generation		40347	17778	17268	416.18	16861
J. Net Inter Regional Exchange (import +ve)/Export (-ve)			5863.49	4029.45	113.32	4722
Total Regional Availability(Gross)		65319	42503	37889	939.49	38666

IV. Total Hydro Generation:

Regional Entities Hydro	11969	9990	8413	212.430432	8851
State Control Area Hydro	5684	3226	2954	83.11	2983
Total Regional Hydro	17654	13216	11367	295.54	11834

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	MW	MW	Import	Export	Import	Export	
Vindhyachal B/B	50	-100	350	100	0.88	1.45	-0.57		
Gwalior-Agra (D/C)	2192	1320	2193	0	34.62	0.00	34.62		
Zerda-Kankroli	-124	-379	0	415	0.00	5.82	-5.82		
Zerda-Bhinmal	-97	-307	4	369	0.00	4.30	-4.30		
Malanpur-Auraiya	22	16	0	25	0.00	0.37	-0.37		
Badod-Kota/Morak	5	-81	31	59	0.00	0.41	-0.41		
Mundra-Mohinderghar(HVDC)	2504	2002	2506	0	52.71	0.00	52.71		
Vindhyachal - Rihand	481	467	493	0	10.88	0.00	10.88		
Sub Total WR	5033	2938			99.08	12.35	86.74		
Pusauli Bypass	-367	-256	0	411	0.00	6.73	-6.73		
MZP- GKP (D/C)	280	241	448	0	5.56	0.00	5.56		
Patna-Balia(D/C)	13	417	548	0	7.83	0.00	7.83		
B'Sharif-Balia (D/C)	191	101	267	0	3.06	0.00	3.06		
Pusauli-Balia	214	90	214	0	1.52	0.00	1.52		
Gaya-Fatehpur (765 Kv)	218	182	390	0	6.21	0.00	6.21		
Pusauli-Sahupuri	134	205	224	0	3.71	0.00	3.71		
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48		
Son Ngr-Rihand	-37	-27	0	33	0.00	0.63	-0.63		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	185	138	354	0	5.58	0.00	5.58		
Sub Total ER	830	1091			33.94	7.36	26.58		
Total IR Exch	5863	4029			133.02	19.70	113.32		

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
28.53	1.19	29.72	3.17	0.21	15.96	4.78	0.86	-0.86

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
49.70	68.41	118.11	26.58	86.74	113.32	-23.12	18.32	-4.79

V(C). Inter National Exchange with Nepal [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	MW	MW	Import	Export	Import	Export	
132 KV Tanakpur - Mahendarnagar	37	6	0	44	0	1	-0.67		

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	0.00	1.77	10.20	44.55	59.46	17.84	11.41	1.16	NA

Frequency (Hz) <----->				Average Frequency Hz	Frequency Variation Index	Std. Dev. (Hz)	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time				(Hz)	(Hz)
50.47	12.40	49.72	0.08	50.01	0.08	0.09	50.23	49.88

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	403	00:00	400	14:11	0.0	0.0	0.0	0.0
Gorakhpur	400	415	05:57	397	19:32	0.0	0.0	10.9	0.0
Bareilly	400	418	08:00	396	20:00	0.0	0.0	10.1	0.0
Kanpur	400	423	05:56	401	14:44	0.0	0.0	4.2	0.0
Dadri	400	427	05:36	400	22:12	80.7	80.7	0.8	0.0
Ballabgarh	400	428	05:55	402	14:16	0.0	0.0	19.7	0.0
Bawana	400	424	05:59	401	22:12	0.0	0.0	5.0	0.0
Bassi	400	421	05:02	396	10:54	0.0	0.0	0.1	0.0
Hissar	400	412	05:59	389	22:34	0.0	0.9	0.0	0.0
Moga	400	418	05:03	401	13:44	0.0	0.0	0.0	0.0
Abdullapur	400	421	05:33	396	19:29	0.0	0.0	0.7	0.0
Nalagarh	400	417	05:55	399	15:46	0.0	0.0	0.0	0.0
Kishenpur	400	422	03:01	407	19:33	0.0	0.0	11.5	0.0
Wagoora	400	418	05:02	392	19:31	0.0	0.0	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	789	05:56	743	14:38	0.0	0.0	0.0	0.0
Balia	765	790	06:02	743	22:17	0.0	0.0	0.0	0.0
Moga	765	802	05:56	763	11:49	0.0	0.0	0.8	0.0
Agra	765	799	06:00	752	14:44	0.0	0.0	0.0	0.0
Bhiwani	765	804	05:31	766	19:30	0.0	0.0	3.9	0.0
Unnao	765	780	05:02	726	14:12	0.2	21.4	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 (m ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	486.02	619.14	481.71	495.33	941.08	658.37
Pong	426.72	384.05	405.34	352.07	403.19	296.79	192.64	155.77
Tehri	829.79	740.04	757.20	100.00	750.85	55.00	156.02	313.00
Koteshwar	612.50	598.50	610.80	4.95	610.64	4.69	313.00	295.00
Chamera-I	760.00	748.75	754.39	0.00	0.00	0.00	441.06	354.43
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	523.82	7.94	519.98	3.83	323.55	279.25

* 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	787	782	0	780	567	0	18.85	16.89	35.74
Delhi	306	87	-40	325	233	0	8.38	3.88	12.26
Haryana	68	195	0	135	198	0	2.01	4.71	6.71
HP	-1017	-386	0	-611	-476	0	-18.02	-9.80	-27.83
J&K	-517	-76	0	-304	-15	0	-9.30	-0.19	-9.49
CHD	0	0	0	0	0	0	0.24	0.14	0.37
Rajasthan	-121	733	2	-117	684	2	-2.85	18.62	15.77
UP	992	294	0	406	0	0	13.20	1.96	15.16
Uttarakhand	74	158	49	74	293	49	1.76	4.95	6.72
Total	573	1788	11	687	1484	51	14.28	41.15	55.42

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	787	780	830	277	2	0
Delhi	433	132	601	-159	0	-40
Haryana	135	64	216	113	0	0
HP	-611	-1017	-380	-476	0	0
J&K	-263	-517	59	-127	0	0
CHD	30	0	30	0	0	0
Rajasthan	-117	-121	1250	229	2	2
UP	1020	323	490	0	0	0
Uttarakhand	74	74	313	88	49	10

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 12.05.2015 :**

1) Cloudy/scattered rain in some area of Punjab, Rajasthan and J&K.

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

0.00

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