

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्ट की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 13.05.2015
Date of Reporting : 14.05.2015

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
38159	2435	40595	50.02	39125	1039	40163	50.08	888.0	33.01

* 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	23.05	18.83		41.88	92.02	91.25	-0.77	133.13	0.00
Haryana	45.84	0.65		46.49	82.97	79.61	-3.36	126.10	0.00
Rajasthan	98.93	0.00	5.19	104.12	72.92	73.82	0.91	177.94	0.00
Delhi	24.38			24.38	71.96	69.89	-2.07	94.27	0.00
UP	128.20	11.80		140.00	120.12	118.50	-1.62	258.50	25.90
Uttarakhand		17.02		17.02	16.07	15.45	-0.63	32.46	0.00
HP		19.50		19.50	4.30	5.67	1.37	25.16	0.00
J & K		14.33	0.00	14.33	22.12	21.19	-0.92	35.52	7.11
Chandigarh				0.00	5.21	4.96	0.27	4.96	0.00
Total	320.39	82.12	5.19	407.71	487.68	480.34	-6.82	888.05	33.01

* 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	5632	0	-24	1158	4971	0	-62	1395	6296
Haryana	5760	0	-249	336	6341	0	-239	274	6723
Rajasthan	7462	0	58	672	6978	0	-58	629	8069
Delhi	3742	0	-168	587	4425	0	113	468	4948
UP	10995	2060	549	417	12668	810	247	675	12668
Uttarakhand	1461	0	98	201	1530	0	29	91	1624
HP	1016	0	-22	-1185	896	0	97	-1285	1249
J&K	1877	375	145	-304	1144	229	-238	-593	1877
Chandigarh	214	0	-13	10	172	0	1	0	270
Total	38159	2435	374	1892	39125	1039	-111	1654	40408

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

Diversity is 1.08

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 Net MU
		(Effective) MW							
	Singrauli STPS (5*200+2*500)	2000	1689	1739	1660	37.97	1582	37.00	0.96
	Rihand I STPS (2*500)	1000	617	651	331	13.02	543	11.71	1.31
	Rihand II STPS (2*500)	1000	962	757	932	19.40	808	18.04	1.35
	Rihand III STPS (2*500)	1000	956	773	931	19.26	803	18.31	0.95
	Dadri I STPS (4*210)	840	615	436	532	11.81	492	11.34	0.47
	Dadri II STPS (2*490)	980	980	688	718	16.95	706	16.87	0.08
	Unchahar I TPS (2*210)	420	405	275	331	7.02	293	7.60	-0.57
	Unchahar II TPS (2*210)	420	401	270	331	6.79	283	7.39	-0.60
	Unchahar III TPS (1*220)	210	201	133	149	3.26	136	3.68	-0.42
	ISTPP (Jhajjhar) (3*500)	1500	1500	620	785	14.93	622	15.57	-0.64
	Dadri GPS (4*130.19+2*154.51)	830	806	283	390	8.01	334	7.96	0.05
	Anta GPS (3*88.71+1*153.2)	419	257	202	199	4.94	206	4.80	0.15
	Auraiya GPS (4*111.19+2*109.30)	663	645	154	159	3.78	157	3.78	0.00
	Dadri Solar	5	1	0	0	0.02	1	0.02	-0.01
	Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.04
	Singrauli Solar	15	3	0	0	0.00	0	0.07	-0.07
	KHEP	400	0	0	0	0.00	0	0.00	0.00
	Sub Total (A)	11712	10040	6981	7448	167	6966	164	3
B. NPC	NAPS (2*220)	440	377	426	420	9.19	383	9.05	0.14
	RAPS- B (2*220)	440	368	411	418	8.92	372	7.30	1.62
	RAPS- C (2*220)	440	405	439	443	9.54	398	9.72	-0.18
	Sub Total (B)	1320	1150	1276	1281	27.66	1152	26.07	1.59
C. NHPC	Chamera I HPS (3*180)	540	540	550	552	13.04	543	12.85	0.18
	Chamera II HPS (3*100)	300	300	312	311	7.32	305	7.10	0.22
	Chamera III HPS (3*77)	231	231	234	236	5.57	232	5.48	0.09
	Bairasul HPS(3*60)	180	179	183	181	4.36	182	4.22	0.14
	Salal-HPS (6*115)	690	637	668	665	15.43	643	15.14	0.29
	Tanakpur-HPS (3*40)	94	59	65	53	1.46	61	1.38	0.08
	Uri-I HPS (4*120)	480	475	477	475	11.57	482	11.27	0.30
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	210	209	210	4.43	185	4.36	0.07
	Dulhasti-HPS (3*130)	390	387	408	394	9.40	392	9.29	0.10
	Sewa-II HPS (3*40)	120	119	130	130	3.08	128	2.82	0.26
	Parbati 3 (4*130)	520	358	263	0	2.26	94	2.21	0.05
	Sub Total (C)	4065	3495	3499	3207	78	3246	76	2
D.SJVNL	NJPC (6*250)	1500	1605	1626	1619	38.34	1598	38.33	0.01
	Rampur HEP (6*68.67)	412	418	375	449	10.08	420	10.02	0.06
	Sub Total (D)	1912	2023	2001	2068	48.42	2017	48.35	0.07
E. THDC	Tehri HPS (4*250)	1000	456	470	304	8.20	342	8.13	0.08
	Koteshwar HPS (4*100)	400	188	301	201	0.45	19	4.50	-4.05
	Sub Total (E)	1400	644	771	505	8.65	361	12.63	-3.97
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	794	1141	645	19.12	797	19.05	0.06
	Dehar HPS (6*165)	990	607	660	580	14.90	621	14.57	0.33
	Pong HPS (6*66)	396	124	318	66	2.83	118	2.98	-0.15
	Sub Total (F)	2900	1525	2119	1291	36.85	1535	36.60	0.25
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	214	148	3.36	140	4.08	-0.71
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1200	1125	24.89	1037	26.33	-1.43
	Malana Stg-II HPS (2*50)	100	0	110	70	1.63	68	1.54	0.09
	Shree Cement TPS (2*150)	300	0	266	286	6.51	271	6.50	0.02
	Budhil HPS(IPP)	70	0	70	74	1.72	71	1.66	0.06
	Sub Total (G)	1662	0	1860	1702	38.11	1588	40.10	-1.99
H. Total Regional Entities (A-G)		24972	18876	18507	17503	404.77	16865	404.07	0.70

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	320	5.24	218
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	110	90	2.08	86
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	373	351	8.19	341
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	363	326	7.54	314
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1006	1087	23.05	960
	Total Hydro	1148	796	498	18.83	785
	Total Punjab	5828	1802	1585	41.88	1745
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	624	632	15.34	639
	DCRTPP (Yamuna nagar) (2*300)	600	243	272	5.84	243
	Faridabad GPS (NTPC)	432	172	184	4.44	185
	RGTPP (kheadar) (IPP) (2*600)	1200	378	578	9.90	412
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	375	623	10.33	430
	Thermal (Total)	4944	1792	2289	45.84	1910
	Total Hydro	62	26	26	0.65	27
	Total Haryana	5006	1818	2315	46.49	1937
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	512	510	12.62
suratgarh TPS (6*250)		1500	561	572	13.67	570
Chabra TPS (4*250)		1000	378	397	8.62	359
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	139	141	3.47	145
RAPS A (NPC) (1*100+1*200)		300	143	142	3.53	147
Barsingar (NLC) (2*125)		250	190	184	4.38	183
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	521	908	18.09	754
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	442	442	10.63	443
Kawai(Adani) (2*660)		1320	1058	903	23.92	997
Thermal (Total)		8276	3944	4199	99	4122
Total Hydro		550	0	0	0.00	0
Wind power		2798	190	230	4.38	183
Biomass		99	19	19	0.46	19
Solar		730	0	0	0.36	15
Renewable/Others (Total)		3627	209	249	5.19	216
Total Rajasthan		12453	4153	4448	104.12	4338
UP		Anpara TPS (3*210+2*500)	1630	1366	1337	31.50
	Obra TPS (2*50+2*94+5*200)	1194	430	432	10.00	417
	Paricha TPS (2*110+2*220+2*250)	1140	545	770	16.30	679
	Panki TPS (2*105)	210	126	126	2.90	121
	Harduaganj TPS (1*60+1*105+2*250)	665	166	221	4.70	196
	Tanda TPS (NTPC) (4*110)	440	386	390	8.90	371
	Roza TPS (IPP) (4*300)	1200	756	1067	21.90	913
	Anpara-C (IPP) (2*600)	1200	963	1085	23.20	967
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	227	324	5.90	246
	Anpara-D	500	0	0	0.00	0
	Thermal (Total)	8629	4965	5752	125	5221
	Vishnuparyag HPS (IPP)(including Alaknanda)	400	468	469	10.60	442
	Other Hydro	527	48	59	1.20	50
	Cogeneration	981	120	120	2.90	121
	Total UP	10537	5601	6400	140.00	5392
Uttarakhand	Total Hydro	1398	783	780	17.02	709
	Total Uttarakhand	1398	783	780	17.02	709
Delhi	Rajghat TPS (2*67.5)	135	49	54	1.25	52
	Delhi Gas Turbine (6x30 + 3x34)	282	113	109	2.71	113
	Praagati Gas Turbine (2x104+ 1x122)	330	279	280	6.75	281
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	270	303	6.65	277
	Badarpur TPS (NTPC) (3*95+2*210)	705	386	259	7.03	293
	Thermal (Total)	2917	1097	1005	24.38	1016
Total Delhi	2917	1097	1005	24.38	1016	
HP	Baspa HPS (IPP) (2*150)	300	337	255	5.67	236
	Malana HPS (IPP) (2*43)	86	86	61	1.58	66
	Other Hydro	728	496	526	12.25	510
	Total HP	1114	919	842	19.50	812
J & K	Baglihar HPS (IPP) (3*150)	450	440	440	10.56	440
	Other Hydro/IPP	436	163	145	3.77	157
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	603	585	14.33	597
Total State Control Area Generation		40347	16776	17960	407.71	16546
J. Net Inter Regional Exchange (import +ve)/Export (-ve)			4565	4317	93.87	3911
Total Regional Availability(Gross)		65319	39848	39780	906.35	37323

IV. Total Hydro Generation:

Regional Entities Hydro	11969	9914	8414	201.704606	8404
State Control Area Hydro	5684	3175	2790	82.12	2980
Total Regional Hydro	17654	13089	11204	283.83	11385

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			
Vindhyachal B/B	-50	-150	100	300	0.06	2.74	-2.68		
Gwalior-Agra (D/C)	1890	1471	1980	0	33.00	0.00	33.00		
Zerda-Kankroli	-86	-343	0	394	0.00	6.23	-6.23		
Zerda-Bhinmal	-61	-339	0	393	0.00	5.30	-5.30		
Malanpur-Auraiya	-1	3	0	23	0.00	0.17	-0.17		
Badod-Kota/Morak	-8	-84	17	62	0.00	0.97	-0.97		
Mundra-Mohinderghar(HVDC)	1998	2501	2507	0	53.19	0.00	53.19		
Vindhyachal - Rihand	462	483	491	0	10.77	0.00	10.77		
Sub Total WR	4144	3542			97.02	15.41	81.61		
Pusaui Bypass	-351	-340	0	481	0.00	8.96	-8.96		
MZP- GKP (D/C)	150	208	396	0	4.00	0.00	4.00		
Patna-Balia(D/C)	98	177	210	0	3.42	0.00	3.42		
B'Sharif-Balia (D/C)	60	148	171	0	2.56	0.00	2.56		
Pusaui-Balia	81	131	146	0	1.23	0.00	1.23		
Gaya-Fatehpur (765 Kv)	158	151	244	18	3.59	0.00	3.59		
Pusaui-Sahupuri	148	185	210	0	3.93	0.00	3.93		
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
Son Ngr-Rihand	-30	-30	0	40	0.00	0.69	-0.69		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	107	145	230	33	3.19	0.00	3.19		
Sub Total ER	421	775			21.92	9.65	12.27		
Total IR Exch	4565	4317			118.94	25.06	93.87		

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
24.01	1.40	25.40	2.88	-0.19	11.44	2.03	0.88	-0.88

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Incld Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
40.60	60.76	101.35	12.27	81.61	93.87	-28.33	20.85	-7.48

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	Import	Export	Import	Export			
132 KV Tanakpur - Mahendarnagar	-37	-38	0	41	0	1	-0.87		

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	0.00	0.00	3.99	40.31	69.46	16.89	8.48	1.81	NA

Frequency (Hz) <----->				Average Frequency Hz	Frequency Variation Index	Std. Dev. (Hz)	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.32	17.04	49.82	19.34	50.02	0.06	0.07	50.27	49.98

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	402	20:36	0.0	0.0	0.0	0.0
Gorakhpur	400	415	07:12	398	11:24	0.0	0.0	0.0	0.0
Bareilly	400	418	08:00	396	20:00	0.0	0.0	5.8	0.0
Kanpur	400	421	18:04	404	00:05	0.0	0.0	0.1	0.0
Dadri	400	424	13:27	404	00:04	79.1	79.1	0.3	0.0
Ballabgarh	400	424	06:01	406	00:04	0.0	0.0	15.7	0.0
Bawana	400	422	18:02	404	00:00	0.0	0.0	1.1	0.0
Bassi	400	420	18:01	400	09:49	0.0	0.0	0.0	0.0
Hissar	400	412	20:36	392	00:02	0.0	0.0	0.0	0.0
Moga	400	418	05:57	403	09:21	0.0	0.0	0.0	0.0
Abdullapur	400	420	15:02	396	00:00	0.0	0.0	0.0	0.0
Nalagarh	400	418	05:55	382	14:28	0.0	3.0	0.0	0.0
Kishenpur	400	418	05:03	404	19:56	0.0	0.0	0.0	0.0
Wagoora	400	408	01:22	380	19:56	0.0	32.0	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	781	18:04	751	09:54	0.0	0.0	0.0	0.0
Balia	765	772	08:18	741	10:59	0.0	0.0	0.0	0.0
Moga	765	802	13:01	768	09:28	0.0	0.0	0.4	0.0
Agra	765	794	18:03	758	10:32	0.0	0.0	0.0	0.0
Bhiwani	765	806	06:03	771	08:49	0.0	0.0	3.6	0.0
Unnao	765	772	18:02	743	00:03	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	486.23	619.14	481.65	495.33	901.78	657.94
Pong	426.72	384.05	405.35	352.07	403.16	296.79	204.53	194.00
Tehri	829.79	740.04	756.55	95.00	750.40	52.00	142.49	261.00
Koteshwar	612.50	598.50	609.70	4.44	610.62	4.69	262.00	298.00
Chamera-I	760.00	748.75	754.61	0.00	0.00	0.00	372.12	352.77
Rihand	268.22	252.98	840.50	123.70	846.50	202.20	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	523.73	10.71	520.28	3.14	681.71	320.75

* 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	886	509	0	878	279	0	21.19	10.62	31.81
Delhi	433	35	0	325	263	0	8.92	3.98	12.90
Haryana	68	206	0	135	201	0	1.60	4.76	6.36
HP	-915	-370	0	-712	-472	0	-18.82	-9.56	-28.38
J&K	-517	-76	0	-304	0	0	-9.30	-0.15	-9.45
CHD	0	0	0	0	10	0	0.24	0.33	0.57
Rajasthan	-121	749	2	-117	787	2	-2.85	20.75	17.90
UP	675	0	0	417	0	0	11.38	0.00	11.38
Uttarakhand	74	17	0	74	127	0	1.76	1.22	2.98
Total	582	1070	2	695	1195	2	14.12	31.95	46.06

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	886	821	560	145	0	0
Delhi	433	285	565	-95	0	0
Haryana	135	-68	224	59	0	0
HP	-712	-966	-366	-472	0	0
J&K	-263	-517	74	-127	0	0
CHD	30	0	39	0	0	0
Rajasthan	-117	-121	1280	423	2	2
UP	695	333	0	0	0	0
Uttarakhand	74	74	128	2	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 13.05.2015 :****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 :**