पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 14.05.2015
Date of Reporting : 15.05.2015

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
38788	2198	40986	50.06	35438	1078	36515	50.13	878.7	38.93

* 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:

UI [OD:(+ve), UD: (-ve)]

State	State's Control Area Generation (Net MU)				Drawal Schedule	Actual Drawal	UI	Consumption	Shortages *
	Thermal	Hydro	Renewable/others $	Total	(Net MU)	(Net MU)	(Net MU)	(Net MU)	(MU)
Punjab	24.71	19.79		44.49	82.50	81.74	-0.76	126.23	0.00
Haryana	44.63	0.67		45.30	77.07	76.39	-0.68	121.70	0.00
Rajasthan	106.40	0.11	3.91	110.41	73.45	75.14	1.68	185.55	0.00
Delhi	25.33			25.33	66.51	63.68	-2.83	89.01	0.01
UP	129.60	8.50		138.10	121.05	118.40	-2.64	256.50	31.81
Uttarakhand		17.14		17.14	16.15	17.38	1.23	34.52	0.08
HP		19.45		19.45	6.73	5.80	-0.93	25.24	0.00
J & K		14.32	0.00	14.32	20.74	20.85	0.11	35.17	7.03
Chandigarh				0.00	5.00	4.79	0.27	4.79	0.00
Total	**330.67**	**79.97**	**3.91**	**414.54**	**469.20**	**464.17**	**-4.56**	**878.71**	**38.93**

* Shortage furnished by the respective constituent.$ Others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MWs:

UI/OA/PX [OD/Import: (+ve), UD/Export: (-ve)]

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	5136	0	-181	190	5093	0	-102	696	5928
Haryana	6324	0	-89	330	4806	0	-8	282	6494
Rajasthan	7447	0	-49	558	7426	0	327	-164	8122
Delhi	3965	0	-131	621	3399	0	22	416	4417
UP	11288	1895	-12	417	11124	830	-172	850	11841
Uttarakhand	1800	0	163	136	1315	0	29	76	1800
HP	1096	0	4	-982	885	0	-98	-966	1242
J&K	1513	303	138	-318	1238	248	-93	-618	1717
Chandigarh	219	0	-10	0	153	0	-6	0	242
Total	**38788**	**2198**	**-167**	**952**	**35438**	**1078**	**-100**	**573**	**40144**

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

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III. Regional Entities :

UI [OG:(+ve), UG: (-ve)]

	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	1690	1851	1745	42.12	1755	38.52	3.61
	Rihand I STPS (2*500)	1000	809	792	601	17.83	743	16.26	1.57
	Rihand II STPS (2*500)	1000	708	461	742	14.04	585	13.52	0.52
	Rihand III STPS (2*500)	1000	962	941	724	20.04	835	18.74	1.30
	Dadri I STPS (4*210)	840	615	432	430	11.62	484	10.39	1.23
	Dadri II STPS (2*490)	980	980	682	682	16.83	701	16.53	0.30
	Unchahar I TPS (2*210)	420	405	304	267	6.91	288	7.37	-0.46
	Unchahar II TPS (2*210)	420	401	285	265	6.36	265	6.84	-0.47
	Unchahar III TPS (1*220)	210	201	130	132	3.24	135	3.44	-0.20
	ISTPP (Jhajjhar) (3*500)	1500	1500	735	641	15.27	636	15.39	-0.12
	Dadri GPS (4*130.19+2*154.51)	830	806	324	408	9.00	375	8.90	0.10
	Anta GPS (3*88.71+1*153.2)	419	263	197	198	4.98	207	4.80	0.18
	Auraiya GPS (4*111.19+2*109.30)	663	646	155	158	3.77	157	3.77	0.01
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.04
	Singrauli Solar	15	3	0	0	0.04	2	0.07	-0.03
	KHEP	400	0	0	0	0.00	0	0.00	0.00
	Sub Total (A)	**11712**	**9991**	**7289**	**6993**	**172**	**7171**	**165**	**7**
B. NPC	NAPS (2*220)	440	377	417	438	9.29	387	9.05	0.24
	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**	**1267**	**1299**	**27.76**	**1157**	**26.07**	**1.69**
C. NHPC	Chamera I HPS (3*180)	540	535	544	537	13.02	543	12.82	0.20
	Chamera II HPS (3*100)	300	300	313	311	7.40	308	7.18	0.22
	Chamera III HPS (3*77)	231	231	239	223	5.63	235	5.53	0.10
	Bairasuil HPS(3*60)	180	179	180	180	4.11	171	4.01	0.10
	Salal-HPS (6*115)	690	661	667	668	16.05	669	15.83	0.22
	Tanakpur-HPS (3*40)	94	55	78	55	1.43	60	1.32	0.11
	Uri-I HPS (4*120)	480	466	478	475	11.44	477	11.17	0.27
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	210	210	137	4.01	167	3.96	0.06
	Dulhasti-HPS (3*130)	390	387	403	397	9.46	394	9.29	0.16
	Sewa-II HPS (3*40)	120	119	131	130	3.08	129	2.85	0.23
	Parbati 3 (4*130)	520	291	262	0	2.60	108	2.70	-0.10
	Sub Total (C)	**4065**	**3435**	**3504**	**3114**	**78**	**3260**	**77**	**2**
D.SJVNL	NJPC (6*250)	1500	1605	1631	1623	38.60	1608	38.52	0.08
	Rampur HEP (6*68.67)	412	375	375	375	9.04	377	9.00	0.04
	Sub Total (D)	**1912**	**1980**	**2006**	**1998**	**47.65**	**1985**	**47.52**	**0.13**
E. THDC	Tehri HPS (4*250)	1000	456	458	458	10.58	441	10.47	0.11
	Koteshwar HPS (4*100)	400	188	301	200	4.47	186	4.50	-0.03
	Sub Total (E)	**1400**	**644**	**759**	**658**	**15.05**	**627**	**14.97**	**0.08**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	781	1166	487	18.94	789	18.76	0.18
	Dehar HPS (6*165)	990	611	660	580	15.10	629	14.66	0.44
	Pong HPS (6*66)	396	85	198	66	2.10	87	2.03	0.06
	Sub Total (F)	**2900**	**1477**	**2024**	**1133**	**36.13**	**1505**	**35.45**	**0.68**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	191	125	2.91	121	3.18	-0.28
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1125	800	23.04	960	22.80	0.23
	Malana Stg-II HPS (2*50)	100	0	56	50	1.42	59	1.46	-0.04
	Shree Cement TPS (2*150)	300	0	297	294	6.59	274	6.58	0.00
	Budhil HPS(IPP)	70	0	68	69	1.65	69	1.66	-0.01
	Sub Total (G)	1662	0	1737	1338	35.60	1483	35.69	-0.09
H. Total Regional Entities (A-G)		**24972**	**18676**	**18587**	**16532**	**412.53**	**17189**	**400.96**	**11.56**

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	210	160	4.05	169
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	90	90	2.14	89
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	416	379	9.22	384
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	360	360	9.30	388
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	**4680**	**1076**	**989**	**24.71**	**1030**
	Total Hydro	1148	808	836	19.79	824
	Total Punjab	**5828**	**1884**	**1825**	**44.49**	**1854**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	665	612	14.55	606
	DCRTPP (Yamuna nagar) (2*300)	600	266	238	5.79	241
	Faridabad GPS (NTPC)	432	184	175	4.51	188
	RGTPP (khedar) (IPP) (2*600)	1200	499	372	9.74	406
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	558	377	10.05	419
	Thermal (Total)	**4944**	**2172**	**1774**	**44.63**	**1860**
	Total Hydro	62	29	25	0.67	28
	Total Haryana	**5006**	**2201**	**1799**	**45.30**	**1888**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	523	547	13.35	556
	suratgarh TPS (6*250)	1500	559	674	15.47	645
	Chabra TPS (4*250)	1000	378	298	8.71	363
	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	134	141	3.51	146
	RAPS A (NPC) (1*100+1*200)	300	142	143	3.51	146
	Barsingsar (NLC) (2*125)	250	184	190	4.39	183
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	659	839	19.35	806
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	450	442	10.68	445
	Kawai(Adani) (2*660)	1320	872	1120	27.44	1143
	Thermal (Total)	**8276**	**3901**	**4394**	**106**	**4433**
	Total Hydro	550	0	0	0.11	5
	Wind power	2798	588	29	3.28	137
	Biomass	99	18	18	0.44	18
	Solar	730	0	0	0.19	8
	Renewable/Others (Total)	3627	606	47	3.91	163
	Total Rajasthan	**12453**	**4507**	**4441**	**110.41**	**4601**
UP	Anpara TPS (3*210+2*500)	1630	1373	1340	31.40	1308
	Obra TPS (2*50+2*94+5*200)	1194	458	437	10.50	438
	Paricha TPS (2*110+2*220+2*250)	1140	666	612	14.80	617
	Panki TPS (2*105)	210	54	117	2.50	104
	Harduaganj TPS (1*60+1*105+2*250)	665	225	223	5.20	217
	Tanda TPS (NTPC) (4*110)	440	385	382	9.00	375
	Roza TPS (IPP) (4*300)	1200	1062	765	21.10	879
	Anpara-C (IPP) (2*600)	1200	1089	1080	25.20	1050
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	227	227	5.10	213
	Anpara-D	500	88	78	1.90	79
	Thermal (Total)	**8629**	**5627**	**5261**	**127**	**5279**
	Vishnuparyag HPS (IPP)(including Alaknanada)	400	317	300	7.00	292
	Other Hydro	527	64	51	1.50	63
	Cogeneration	981	120	120	2.90	121
	Total UP	**10537**	**6128**	**5732**	**138.10**	**5463**
Uttarakhand	Total Hydro	1398	765	718	17.14	714
	Total Uttarakhand	**1398**	**765**	**718**	**17.14**	**714**
Delhi	Rajghat TPS (2*67.5)	135	47	51	1.27	53
	Delhi Gas Turbine (6x30 + 3x34)	282	111	115	2.71	113
	Pragati Gas Turbine (2x104+ 1x122)	330	271	273	6.65	277
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	271	271	6.52	272
	Badarpur TPS (NTPC) (3*95+2*210)	705	382	390	8.19	341
	Thermal (Total)	2917	1082	1098	25.33	1055
	Total Delhi	**2917**	**1082**	**1098**	**25.33**	**1055**
HP	Baspa HPS (IPP) (2*150)	300	215	176	5.34	222
	Malana HPS (IPP) (2*43)	86	85	45	1.43	60
	Other Hydro	728	507	540	12.68	528
	Total HP	**1114**	**807**	**761**	**19.45**	**810**
J & K	Baglihar HPS (IPP) (3*150)	450	436	440	10.55	440
	Other Hydro/IPP	436	163	145	3.77	157
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**599**	**585**	**14.32**	597
Total State Control Area Generation		**40347**	**17973**	**16959**	**414.54**	**16981**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4068**	**2562**	**79.95**	**3331**
Total Regional Availability(Gross)		**65319**	**40627**	**36054**	**907.02**	**37501**

IV. Total Hydro Generation:

Regional Entities Hydro	**11969**	**9666**	**7878**	**204.422916**	**8518**
State Control Area Hydro	**5684**	**3072**	**2976**	**79.97**	**3040**
Total Regional Hydro	**17654**	**12738**	**10854**	**284.39**	**11558**

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
	MW	MW	Import	Export	Import	Export	MU
Vindhychal B/B	-100	-100	50	400	0.18	3.89	-3.71
Gwalior-Agra (D/C)	978	762	1501	0	24.12	0.00	24.12
Zerda-Kankroli	-32	-332	0	332	0.00	5.69	-5.69
Zerda-Bhinmal	4	-285	29	302	0.00	4.30	-4.30
Malanpur-Auraiya	-19	-28	0	28	0.00	0.37	-0.37
Badod-Kota/Morak	-38	-78	40	66	0.00	0.81	-0.81
Mundra-Mohindergarh(HVDC)	2001	1997	2505	0	50.09	0.00	50.09
Vindhyachal - Rihand	462	437	485	0	10.99	0.00	10.99
Sub Total WR	**3256**	**2373**			**85.38**	**15.05**	**70.33**
Pusauli Bypass	-345	-441	0	481	0.00	9.33	-9.33
MZP- GKP (D/C)	226	122	305	0	3.67	0.00	3.67
Patna-Balia(D/C)	411	70	492	0	4.60	0.00	4.60
B'Sharif-Balia (D/C)	53	83	154	0	2.17	0.00	2.17
Pusauli-Balia	197	99	229	0	1.62	0.00	1.62
Gaya-Fatehpur (765 Kv)	0	33	118	1	1.00	0.00	1.00
Pusauli-Sahupuri	131	204	213	0	4.12	0.00	4.12
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	0	-27	35	41	0.00	0.79	-0.79
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	139	46	273	0	2.56	0.00	2.56
Sub Total ER	**812**	**189**			**19.74**	**10.12**	**9.62**
Total IR Exch	**4068**	**2562**			**105.12**	**25.17**	**79.95**

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ISGS/LT Schedule (MU)			Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
ER	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
23.91	1.50	25.42	3.38	-7.38	2.47	2.32	0.77	-0.77

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
32.04	53.87	85.91	9.62	70.33	79.95	-22.42	16.46	-5.96

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
	MW	MW	Import	Export	Import	Export	MU
132 KV Tanakpur - Mahendarnagar	-36	-38	0	44	0	1	-0.92

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	1.61	12.70	50.12	69.42	13.83	4.43	0.23	NA

<---------- Frequency (Hz) ---------->				Average	Frequency	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum		Frequency	Variation		MAX	MIN
Freq	Time	Freq	Time	Hz	Index		(Hz)	(Hz)
50.22	18.03	49.74	22.07	49.99	0.06	0.08	50.18	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	404	09:15	403	00:00	0.0	0.0	0.0	0.0
Gorakhpur	400	415	06:46	391	20:06	0.0	0.0	0.0	0.0
Bareilly	400	418	08:00	396	20:00	0.0	0.0	0.0	0.0
Kanpur	400	419	04:02	398	20:04	0.0	0.0	0.0	0.0
Dadri	400	427	03:08	404	22:17	74.4	74.4	3.2	0.0
Ballabhgarh	400	428	04:00	405	22:18	0.0	0.0	31.2	0.0
Bawana	400	424	04:00	406	22:15	0.0	0.0	20.3	0.0
Bassi	400	421	18:08	396	22:17	0.0	0.0	0.0	0.0
Hissar	400	413	04:02	395	22:17	0.0	0.0	0.0	0.0
Moga	400	420	03:01	406	14:38	0.0	0.0	0.0	0.0
Abdullapur	400	420	02:59	396	22:19	0.0	0.0	0.0	0.0
Nalagarh	400	422	03:34	405	14:40	0.0	0.0	8.5	0.0
Kishenpur	400	420	02:45	407	20:17	0.0	0.0	0.0	0.0
Wagoora	400	412	03:30	384	20:16	0.0	3.6	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	779	04:03	704	20:12	8.6	8.7	0.0	0.0
Balia	765	772	07:05	727	16:47	0.1	6.5	0.0	0.0
Moga	765	804	04:03	774	22:19	0.0	0.0	8.1	0.0
Agra	765	793	04:04	751	14:25	0.0	0.0	0.0	0.0
Bhiwani	765	805	03:33	773	22:17	0.0	0.0	11.2	0.0
Unnao	765	769	04:03	736	20:13	0.0	7.4	0.0	0.0

IX. Reservior Parameters:

Name of Reservior	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	486.32	627.57	481.53	495.33	750.23	647.72
Pong	426.72	384.05	405.37	352.07	403.18	296.79	181.45	144.61
Tehri	829.79	740.04	755.95	91.00	749.60	47.50	140.89	338.00
Koteshwar	612.50	598.50	611.05	4.95	610.55	4.84	338.00	296.00
Chamera-I	760.00	748.75	754.58	0.00	0.00	0.00	349.66	352.30
Rihand	268.22	252.98	840.50	123.70	846.40	200.80	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	523.62	10.76	520.51	3.87	528.79	416.75

*** 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	197	499	0	190	0	0	7.35	6.95	14.30
Delhi	372	44	0	325	296	0	8.80	5.06	13.86
Haryana	68	214	0	135	195	0	2.01	4.46	6.47
HP	-611	-354	0	-509	-472	0	-13.91	-9.34	-23.25
J&K	-542	-76	0	-304	-15	0	-9.45	-0.34	-9.79
CHD	0	0	0	0	0	0	0.24	0.03	0.27
Rajasthan	-121	-45	2	-117	673	2	-2.85	13.84	10.98
UP	850	0	0	417	0	0	12.56	0.00	12.56
Uttarakhand	74	3	0	74	63	0	1.76	0.80	2.56
Total	**287**	**284**	**2**	**209**	**740**	**2**	**6.51**	**21.45**	**27.96**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	492	190	556	0	0	0
Delhi	462	182	669	-69	0	0
Haryana	135	64	231	9	0	0
HP	-307	-991	-354	-472	0	0
J&K	-263	-542	59	-127	0	0
CHD	30	0	20	0	0	0
Rajasthan	-117	-121	873	-45	2	2
UP	897	333	0	0	0	0
Uttarakhand	74	74	104	2	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 14.05.2015 :

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 :

Report for : 14.05.2015

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER