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 15.04.2015
Date of Reporting : 16.04.2015

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
35695	2864	38559	50.07	29084	1028	30113	50.01	750.9	32.95

* 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	31.80	4.83		36.63	62.51	63.36	0.84	99.99	0.00
Haryana	21.45	0.55		22.00	75.98	76.86	0.87	98.86	0.00
Rajasthan	85.62	0.35	4.46	90.43	60.17	63.24	3.07	153.67	0.00
Delhi	16.24			16.24	55.97	56.61	0.64	72.84	0.01
UP	133.40	5.70		139.10	91.66	91.77	0.12	230.87	24.74
Uttarakhand		10.39		10.39	19.95	22.51	2.56	32.90	1.14
HP		11.81		11.81	12.34	10.73	-1.61	22.54	0.00
J & K		12.45	0.00	12.45	24.61	22.85	-1.76	35.30	7.06
Chandigarh				0.00	3.99	3.96	0.27	3.96	0.00
Total	**288.51**	**46.08**	**4.46**	**339.06**	**407.18**	**411.88**	**5.01**	**750.94**	**32.95**

* 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	5069	0	-31	119	3580	0	33	286	5069
Haryana	5459	0	-376	429	3551	0	131	297	5488
Rajasthan	6851	0	39	783	6236	0	122	471	7132
Delhi	3519	1	-24	-81	2435	0	149	-273	3519
UP	10296	2470	226	213	9787	770	378	172	10296
Uttarakhand	1556	40	127	343	1235	0	92	249	1586
HP	978	0	-105	-532	859	0	46	-11	1121
J&K	1765	353	157	-70	1292	258	-107	-121	1765
Chandigarh	202	0	5	0	111	0	-3	0	203
Total	**35695**	**2864**	**19**	**1204**	**29084**	**1028**	**841**	**1069**	**35695**

* 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	1458	1857	1364	37.86	1578	34.97	2.89
	Rihand I STPS (2*500)	1000	850	873	889	19.93	830	19.31	0.62
	Rihand II STPS (2*500)	1000	475	489	416	10.60	442	10.69	-0.09
	Rihand III STPS (2*500)	1000	959	965	775	20.40	850	21.51	-1.11
	Dadri I STPS (4*210)	840	815	685	638	15.65	652	15.05	0.61
	Dadri II STPS (2*490)	980	980	724	715	17.40	725	17.36	0.04
	Unchahar I TPS (2*210)	420	405	300	384	7.62	317	9.19	-1.57
	Unchahar II TPS (2*210)	420	401	343	260	6.51	271	7.58	-1.07
	Unchahar III TPS (1*220)	210	0	0	0	0.00	0	0.00	0.00
	ISTPP (Jhajjhar) (3*500)	1500	1500	920	590	14.43	601	15.18	-0.75
	Dadri GPS (4*130.19+2*154.51)	830	815	384	369	9.21	384	9.24	-0.03
	Anta GPS (3*88.71+1*153.2)	419	375	204	65	3.92	163	4.16	-0.24
	Auraiya GPS (4*111.19+2*109.30)	663	656	153	163	3.80	158	3.92	-0.12
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.03
	Singrauli Solar	15	3	0	0	0.07	3	0.07	0.00
	KHEP	400	0	0	0	0.00	0	0.00	0.00
	Sub Total (A)	**11712**	**9694**	**7897**	**6628**	**167**	**6977**	**168**	**-1**
B. NPC	NAPS (2*220)	440	397	434	436	9.48	395	9.53	-0.05
	RAPS- B (2*220)	440	383	425	430	9.17	382	9.41	-0.24
	RAPS- C (2*220)	440	334	214	218	4.72	197	8.03	-3.31
	Sub Total (B)	**1320**	**1114**	**1073**	**1084**	**23.37**	**974**	**26.96**	**-3.60**
C. NHPC	Chamera I HPS (3*180)	540	534	550	0	8.92	372	8.81	0.11
	Chamera II HPS (3*100)	300	300	295	190	6.44	268	6.25	0.18
	Chamera III HPS (3*77)	231	231	233	73	3.98	166	3.85	0.13
	Bairasuil HPS(3*60)	180	179	180	140	3.89	162	3.79	0.10
	Salal-HPS (6*115)	690	571	665	589	14.47	603	13.68	0.80
	Tanakpur-HPS (3*40)	94	42	43	59	1.04	43	0.99	0.05
	Uri-I HPS (4*120)	480	475	476	475	11.60	484	11.40	0.21
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	140	140	0	2.12	88	2.04	0.08
	Dulhasti-HPS (3*130)	390	387	395	129	7.91	330	7.90	0.01
	Sewa-II HPS (3*40)	120	119	130	130	3.08	128	2.86	0.22
	Parbati 3 (4*130)	520	388	100	0	1.68	70	1.63	0.06
	Sub Total (C)	**4065**	**3366**	**3206**	**1785**	**65**	**2714**	**63**	**2**
D.SJVNL	NJPC (6*250)	1500	1581	1355	0	12.24	510	12.40	-0.16
	Rampur HEP (6*68.67)	412	430	363	0	3.41	142	3.46	-0.05
	Sub Total (D)	**1912**	**2011**	**1718**	**0**	**15.65**	**652**	**15.85**	**-0.20**
E. THDC	Tehri HPS (4*250)	1000	531	532	0	7.14	298	7.10	0.04
	Koteshwar HPS (4*100)	400	129	90	90	3.10	129	3.10	0.00
	Sub Total (E)	**1400**	**660**	**622**	**90**	**10.24**	**427**	**10.20**	**0.04**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	338	639	324	8.09	337	8.12	-0.03
	Dehar HPS (6*165)	990	480	495	495	11.72	489	11.52	0.20
	Pong HPS (6*66)	396	19	186	0	0.39	16	0.45	-0.06
	Sub Total (F)	**2900**	**837**	**1320**	**819**	**20.21**	**842**	**20.09**	**0.12**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	25	90	1.04	43	1.06	-0.01
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	880	0	6.12	255	6.12	0.00
	Malana Stg-II HPS (2*50)	100	0	0	30	0.59	25	0.69	-0.10
	Shree Cement TPS (2*150)	300	0	269	262	5.89	245	5.94	-0.06
	Budhil HPS(IPP)	70	0	68	0	0.75	31	0.70	0.05
	Sub Total (G)	1662	0	1242	382	14.38	599	14.50	-0.12
H. Total Regional Entities (A-G)		**24972**	**17683**	**17079**	**10788**	**316.42**	**13184**	**319.12**	**-2.69**

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	3.81	159
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	0	0	-0.06	-2
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	462	353	9.11	380
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	685	356	10.80	450
	Talwandi Saboo (1*660)	660	630	342	8.14	339
	Thermal (Total)	**4680**	**1987**	**1211**	**31.80**	**1325**
	Total Hydro	1148	225	105	4.83	201
	Total Punjab	**5828**	**2212**	**1316**	**36.63**	**1526**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00	0
	DCRTPP (Yamuna nagar) (2*300)	600	493	476	11.47	478
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	RGTPP (khedar) (IPP) (2*600)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	488	373	9.98	416
	Thermal (Total)	**4944**	**981**	**849**	**21.45**	**894**
	Total Hydro	62	20	19	0.55	23
	Total Haryana	**5006**	**1001**	**868**	**22.00**	**917**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	417	271	7.11	296
	suratgarh TPS (6*250)	1500	226	192	5.07	211
	Chabra TPS (4*250)	1000	433	377	9.99	416
	Dholpur GPS (3*110)	330	127	0	1.16	48
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	185	184	4.54	189
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingsar (NLC) (2*125)	250	171	105	3.23	134
	Giral LTPS (2*125)	250	90	90	1.78	74
	Rajwest LTPS (IPP) (8*135)	1080	731	814	19.48	812
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	0	440	5.34	222
	Kawai(Adani) (2*660)	1320	1199	1080	27.93	1164
	Thermal (Total)	**8276**	**3579**	**3553**	**86**	**3568**
	Total Hydro	550	54	0	0.35	15
	Wind power	2798	23	505	3.55	148
	Biomass	99	33	33	0.79	33
	Solar	730	0	0	0.13	5
	Renewable/Others (Total)	3627	56	538	4.46	186
	Total Rajasthan	**12453**	**3689**	**4091**	**90.43**	**3768**
UP	Anpara TPS (3*210+2*500)	1630	1386	1375	32.70	1363
	Obra TPS (2*50+2*94+5*200)	1194	480	467	11.20	467
	Paricha TPS (2*110+2*220+2*250)	1140	762	622	17.60	733
	Panki TPS (2*105)	210	68	68	1.60	67
	Harduaganj TPS (1*60+1*105+2*250)	665	158	218	5.00	208
	Tanda TPS (NTPC) (4*110)	440	282	390	8.70	363
	Roza TPS (IPP) (4*300)	1200	572	792	16.10	671
	Anpara-C (IPP) (2*600)	1200	1089	1091	26.10	1088
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	4958
	Anpara-D	500	0	0	0.00	0
	Thermal (Total)	**8629**	**4797**	**5023**	**119**	**9917**
	Vishnuparyag HPS (IPP)	400	118	113	2.80	117
	Other Hydro	527	297	58	2.90	121
	Cogeneration	981	600	600	14.40	600
	Total UP	**10537**	**5812**	**5794**	**139.10**	**10638**
Uttarakhand	Total Hydro	1398	448	382	10.39	433
	Total Uttarakhand	**1398**	**448**	**382**	**10.39**	**433**
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.02	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	76	75	1.89	79
	Pragati Gas Turbine (2x104+ 1x122)	330	151	154	3.67	153
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	302	272	6.98	291
	Badarpur TPS (NTPC) (3*95+2*210)	705	188	182	3.73	155
	Thermal (Total)	2917	716	683	16.24	677
	Total Delhi	**2917**	**716**	**683**	**16.24**	**677**
HP	Baspa HPS (IPP) (2*150)	300	122	0	1.22	51
	Malana HPS (IPP) (2*43)	86	42	29	0.69	29
	Other Hydro	728	418	402	9.90	412
	Total HP	**1114**	**582**	**431**	**11.81**	**492**
J & K	Baglihar HPS (IPP) (3*150)	450	450	450	10.35	431
	Other Hydro/IPP	436	90	92	2.10	88
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**540**	**542**	**12.45**	519
Total State Control Area Generation		**40347**	**15000**	**14107**	**339.06**	**18969**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4169**	**3977**	**115.48**	**4812**
Total Regional Availability(Gross)		**65319**	**36248**	**28872**	**770.96**	**36965**

IV. Total Hydro Generation:

Regional Entities Hydro	**11969**	**7771**	**2814**	**118.980906**	**4958**
State Control Area Hydro	**5684**	**2166**	**1537**	**46.08**	**1803**
Total Regional Hydro	**17654**	**9937**	**4351**	**165.06**	**6761**

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	250	500	500	0	6.18	0.00	6.18
Gwalior-Agra (D/C)	1599	1441	11102	0	36.63	0.00	36.63
Zerda-Kankroli	-23	-243	0	244	0.00	3.79	-3.79
Zerda-Bhinmal	26	-229	83	274	0.00	2.92	-2.92
Malanpur-Auraiya	1	-32	0	54	0.00	0.24	-0.24
Badod-Kota/Morak	39	12	36	28	0.00	0.69	-0.69
Mundra-Mohindergarh(HVDC)	2197	2502	2505	0	56.76	0.00	56.76
Vindhyachal - Rihand	-384	-493	498	0	5.73	0.00	5.73
Sub Total WR	**3705**	**3458**			**105.30**	**7.64**	**97.66**
Pusauli Bypass	400	400	400	0	8.94	0.00	8.94
MZP- GKP (D/C)	148	-41	136	215	0.25	0.00	0.25
Patna-Balia(D/C)	94	73	367	0	5.09	0.00	5.09
B'Sharif-Balia (D/C)	-165	-50	11	220	0.00	1.79	-1.79
Pusauli-Balia	-42	51	138	42	0.63	0.00	0.63
Gaya-Fatehpur (765 Kv)	63	90	185	0	3.63	0.00	3.63
Pusauli-Sahupuri	122	147	172	0	3.28	0.00	3.28
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-14	-41	0	41	0.00	0.77	-0.77
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-142	-110	0	205	0.00	1.92	-1.92
Sub Total ER	**464**	**519**			**22.29**	**4.48**	**17.82**
Total IR Exch	**4169**	**3977**			**127.59**	**12.11**	**115.48**

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
23.49	0.98	24.47	-3.31	-1.75	9.05	10.72	0.87	-0.87

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
31.08	73.56	104.64	17.82	97.66	115.48	-13.26	24.10	10.84

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	0.73	4.57	40.97	65.45	18.58	9.92	1.57	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)
50.34	18.02	49.71	19.10	50.02	0.06	0.07	50.26	0

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	403	00:00	0.0	0.0	0.0	0.0
Gorakhpur	400	415	17:25	398	19:10	0.0	0.0	0.0	0.0
Bareilly	400	417	04:02	396	19:11	0.0	0.0	0.0	0.0
Kanpur	400	416	04:00	407	05:42	0.0	0.0	0.0	0.0
Dadri	400	422	03:59	404	19:09	0.0	0.0	6.7	0.0
Ballabhgarh	400	426	03:04	404	19:11	0.0	0.0	37.2	0.0
Bawana	400	424	03:29	402	19:11	0.0	0.0	20.4	0.0
Bassi	400	423	03:59	404	19:12	0.0	0.0	11.0	0.0
Hissar	400	416	03:04	391	19:12	0.0	0.0	0.0	0.0
Moga	400	422	03:28	401	19:11	0.0	0.0	4.4	0.0
Abdullapur	400	426	03:30	396	19:11	0.0	0.0	59.2	0.0
Nalagarh	400	430	03:29	405	19:17	0.0	0.0	63.5	0.0
Kishenpur	400	225	02:29	214	19:36	100.0	100.0	0.0	0.0
Wagoora	400	414	03:24	378	06:47	2.0	16.4	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	771	08:01	741	19:11	0.0	0.0	0.0	0.0
Balia	765	772	17:18	748	19:11	0.0	0.0	0.0	0.0
Moga	765	799	03:28	759	19:12	0.0	0.0	0.0	0.0
Agra	765	786	04:02	755	19:11	0.0	0.0	0.0	0.0
Bhiwani	765	799	23:29	761	19:09	0.0	0.0	0.0	0.0
Unnao	765	752	08:01	724	19:10	0.4	37.6	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	481.88	503.43	482.25	511.55	336.23	237.27
Pong	426.72	384.05	403.97	312.39	402.15	266.33	107.75	28.74
Tehri	829.79	740.04	767.55	185.00	768.55	195.00	90.65	211.00
Koteshwar	612.50	598.50	611.20	5.10	610.82	4.95	211.00	206.00
Chamera-I	760.00	748.75	756.20	0.00	0.00	0.00	286.54	241.68
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	516.31	2.38	515.61	3.79	256.45	87.09

*** 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	-155	440	0	-155	274	0	-3.71	9.43	5.72
Delhi	-216	-16	-41	-216	136	0	-5.19	1.01	-4.19
Haryana	268	30	0	264	165	0	6.37	3.10	9.47
HP	99	-110	0	-104	-428	0	1.15	-5.02	-3.87
J&K	-70	-51	0	-70	0	0	-1.69	-0.22	-1.90
CHD	0	0	0	0	0	0	0.00	0.12	0.12
Rajasthan	-125	594	2	-121	902	2	-2.94	12.64	9.69
UP	172	0	0	213	0	0	4.38	0.00	4.38
Uttarakhand	0	200	48	0	314	29	0.00	6.76	6.76
Total	**-28**	**1088**	**10**	**-190**	**1363**	**31**	**-1.64**	**27.82**	**26.18**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-155	-155	449	266	0	0
Delhi	-216	-216	216	-113	0	-41
Haryana	268	264	191	-33	0	0
HP	99	-104	-59	-635	0	0
J&K	-70	-70	123	-101	0	0
CHD	0	0	25	0	0	0
Rajasthan	-121	-125	902	422	2	2
UP	218	145	0	0	0	0
Uttarakhand	0	0	316	198	48	29

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 15.04.2015 :

Normal

XIV. Synchronisation of new generating units :

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 :

Report for : 15.04.2015

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER