पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 12.12.2014
Date of Reporting : 13.12.2014

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
39370	2016	41386	50.13	29732	848	30580	50.13	820.5	67.94

* 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	55.37	9.69		65.06	36.40	37.59	1.19	102.65	0.00
Haryana	62.56	0.37		62.94	57.44	56.69	-0.76	119.62	6.41
Rajasthan	121.74	4.88	21.96	148.58	61.38	60.60	-0.78	209.18	0.00
Delhi	17.86			17.86	41.46	41.65	0.20	59.51	0.00
UP	129.38	2.92		132.30	89.52	90.81	1.29	223.11	53.53
Uttarakhand		8.54		8.54	25.90	26.29	0.40	34.83	0.46
HP		4.51		4.51	20.37	20.74	0.38	25.25	0.00
J & K		5.32	0.00	5.32	34.75	37.40	2.65	42.72	7.54
Chandigarh				0.00	3.39	3.58	0.19	3.58	0.00
Total	**386.92**	**36.22**	**21.96**	**445.10**	**370.60**	**375.35**	**4.75**	**820.45**	**67.94**

* 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 (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	5063	0	-74	-202	3250	0	20	-381	5645
Haryana	6200	0	54	-743	3977	0	-124	-741	6200
Rajasthan	9191	0	-398	142	7964	0	10	821	9951
Delhi	3044	0	-151	-175	1558	0	54	-976	3161
UP	10732	1600	14	98	9228	550	-19	73	10732
Uttarakhand	1727	75	36	714	1188	0	8	485	1770
HP	1290	0	30	338	788	0	19	364	1359
J&K	1931	341	-40	532	1689	298	83	627	1959
Chandigarh	192	0	1	0	90	0	3	-30	201
Total	**39370**	**2016**	**-529**	**705**	**29732**	**848**	**54**	**244**	**39370**

* 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	1450	1562	1505	37.25	1552	34.56	2.70
	Rihand I STPS (2*500)	1000	899	926	725	20.72	863	19.33	1.39
	Rihand II STPS (2*500)	1000	970	960	728	21.40	892	20.42	0.98
	Rihand III STPS (2*500)	1000	916	911	777	20.41	850	19.07	1.34
	Dadri I STPS (4*210)	840	615	534	448	12.82	534	12.14	0.68
	Dadri II STPS (2*490)	980	980	908	697	20.70	863	20.23	0.47
	Unchahar I TPS (2*210)	420	408	389	319	9.22	384	8.97	0.25
	Unchahar II TPS (2*210)	420	407	408	292	8.83	368	8.42	0.41
	Unchahar III TPS (1*220)	210	202	209	153	4.52	188	4.22	0.30
	ISTPP (Jhajjhar) (3*500)	1500	1200	937	909	21.37	890	22.45	-1.08
	Dadri GPS (4*130.19+2*154.51)	830	825	556	511	13.18	549	13.14	0.03
	Anta GPS (3*88.71+1*153.2)	419	379	237	233	5.78	241	5.88	-0.10
	Auraiya GPS (4*111.19+2*109.30)	663	493	161	134	3.60	150	3.58	0.02
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
	Sub Total (A)	**11297**	**9747**	**8698**	**7431**	**200**	**8327**	**193**	**7**
B. NPC	NAPS (2*220)	440	292	332	336	7.08	295	7.01	0.08
	RAPS- B (2*220)	440	411	457	455	9.89	412	9.86	0.03
	RAPS- C (2*220)	440	220	236	239	5.03	209	5.28	-0.25
	Sub Total (B)	**1320**	**923**	**1025**	**1030**	**22.00**	**917**	**22.15**	**-0.15**
C. NHPC	Chamera I HPS (3*180)	540	356	180	0	2.11	88	2.00	0.11
	Chamera II HPS (3*100)	300	200	100	0	1.14	47	1.10	0.04
	Chamera III HPS (3*77)	231	154	68	0	0.70	29	0.65	0.05
	Bairasuil HPS(3*60)	180	179	120	0	0.48	20	0.44	0.04
	Salal-HPS (6*115)	690	119	226	125	3.02	126	2.85	0.17
	Tanakpur-HPS (3*40)	94	27	44	30	0.69	29	0.65	0.04
	Uri-I HPS (4*120)	480	137	213	112	3.24	135	3.30	-0.06
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	138	140	0	0.95	39	1.00	-0.06
	Dulhasti-HPS (3*130)	390	387	391	0	3.00	125	2.90	0.10
	Sewa-II HPS (3*40)	120	79	74	0	0.23	10	0.24	-0.01
	Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	**4065**	**1776**	**1555**	**267**	**16**	**648**	**15**	**0**
D.SJVNL	NJPC (6*250)	1500	1605	1456	0	7.22	301	7.20	0.02
	Rampur HEP (4*68.67)	275	350	304	0	1.88	78	1.93	-0.04
	Sub Total (D)	1775	1955	1760	0	9.10	379	9.13	-0.03
E. THDC	Tehri HPS (4*250)	1000	1060	1008	0	7.44	310	7.30	0.14
	Koteshwar HPS (4*100)	400	104	101	90	2.56	107	2.50	0.06
	Sub Total (E)	**1400**	**1164**	**1109**	**90**	**10.00**	**417**	**9.80**	**0.20**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	672	1069	514	15.73	655	16.12	-0.39
	Dehar HPS (6*165)	990	125	165	0	3.05	127	3.00	0.05
	Pong HPS (6*66)	396	279	324	132	6.58	274	6.69	-0.12
	Sub Total (F)	**2900**	**1076**	**1558**	**646**	**25.36**	**1057**	**25.81**	**-0.45**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	26	0	0.49	21	0.48	0.01
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	600	0	3.82	159	3.84	-0.02
	Malana Stg-II HPS (2*50)	100	0	0	0	0.23	9	0.21	0.02
	Shree Cement TPS (2*150)	300	0	282	154	5.55	231	5.69	-0.14
	Budhil HPS(IPP)	70	0	0	0	0.11	5	0.11	0.00
	Sub Total (G)	1662	0	908	154	10.20	425	10.33	-0.13
H. Total Regional Entities (A-G)		**24419**	**16641**	**16613**	**9619**	**292.05**	**12169**	**284.85**	**7.19**

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	870	850	19.73	822
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	120	120	2.54	106
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	375	332	8.65	360
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	700	703	16.81	700
	Talwandi Saboo (1*660)	660	348	264	7.66	319
	Thermal (Total)	**4680**	**2413**	**2269**	**55.37**	**2307**
	Total Hydro	1148	302	292	9.69	404
	Total Punjab	**5828**	**2715**	**2561**	**65.06**	**2711**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	974	915	22.44	935
	DCRTPP (Yamuna nagar) (2*300)	600	272	241	6.30	262
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	RGTPP (khedar) (IPP) (2*600)	1200	585	361	12.06	502
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1133	744	21.76	907
	Thermal (Total)	**4944**	**2964**	**2261**	**62.56**	**2607**
	Total Hydro	62	14	17	0.37	16
	Total Haryana	**5006**	**2978**	**2278**	**62.94**	**2622**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	958	963	23.43	976
	suratgarh TPS (6*250)	1500	988	987	22.67	945
	Chabra TPS (3*250)	750	582	585	13.32	555
	Dholpur GPS (3*110)	330	116	119	3.01	125
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	197	191	5.03	209
	RAPS A (NPC) (1*100+1*200)	300	152	152	4.14	173
	Barsingsar (NLC) (2*125)	250	95	95	2.17	91
	Giral LTPS (2*125)	250	83	85	1.66	69
	Rajwest LTPS (IPP) (8*135)	1080	734	382	13.87	578
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	540	540	8.72	364
	Kawai(Adani) (2*660)	1320	1148	843	23.72	988
	Thermal (Total)	**8026**	**5593**	**4942**	**122**	**5073**
	Total Hydro	550	131	134	4.88	204
	Wind power	2798	693	1018	20.81	867
	Biomass	99	40	40	0.95	40
	Solar	730	2	0	0.20	8
	Renewable/Others (Total)	3627	735	1058	21.96	915
	Total Rajasthan	**12203**	**6459**	**6134**	**148.58**	**6191**
UP	Anpara TPS (3*210+2*500)	1630	490	919	13.98	582
	Obra TPS (2*50+2*94+5*200)	1194	343	290	7.65	319
	Paricha TPS (2*110+2*220+2*250)	1140	770	773	18.19	758
	Panki TPS (2*105)	210	126	126	3.05	127
	Harduaganj TPS (1*60+1*105+2*250)	665	460	422	10.50	438
	Tanda TPS (NTPC) (4*110)	440	286	288	7.06	294
	Roza TPS (IPP) (4*300)	1200	765	603	17.04	710
	Anpara-C (IPP) (2*600)	1200	1061	1053	25.21	1050
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	401	263	7.51	313
	Thermal (Total)	**8129**	**4702**	**4737**	**110.18**	**4591**
	Vishnuparyag HPS (IPP)	400	88	88	0.00	0
	Other Hydro	527	152	81	2.92	121
	Cogeneration	981	800	800	19.20	800
	Total UP	**10037**	**5742**	**5706**	**132.30**	**5512**
Uttarakhand	Total Hydro	1398	506	274	8.54	356
	Total Uttarakhand	**1398**	**506**	**274**	**8.54**	**356**
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.01	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	79	79	1.92	80
	Pragati Gas Turbine (2x104+ 1x122)	330	146	156	3.51	146
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	300	275	7.03	293
	Badarpur TPS (NTPC) (3*95+2*210)	705	218	211	5.42	226
	Thermal (Total)	2917	743	721	17.86	744
	Total Delhi	**2917**	**743**	**721**	**17.86**	**744**
HP	Baspa HPS (IPP) (2*150)	300	0	0	1.08	45
	Malana HPS (IPP) (2*43)	86	0	0	0.22	9
	Other Hydro	728	161	93	3.20	133
	Total HP	**1114**	**161**	**93**	**4.51**	**188**
J & K	Baglihar HPS (IPP) (3*150)	450	268	120	3.91	163
	Other Hydro/IPP	436	66	41	1.41	59
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**334**	**161**	**5.32**	222
Total State Control Area Generation		**39597**	**19638**	**17928**	**445.10**	**18546**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4432**	**3032**	**109.98**	**4582**
Total Regional Availability(Gross)		**64017**	**40683**	**30579**	**847.12**	**35297**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**6608**	**1003**	**64.54**	**2689**
State Control Area Hydro	**5684**	**1600**	**1052**	**36.22**	**1509**
Total Regional Hydro	**17116**	**8208**	**2055**	**100.76**	**4198**

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
	MW	MW	Import	Export	Import	Export	MU
Vindhychal B/B	-250	-250	100	250	0.43	4.40	-3.97
Gwalior-Agra (D/C)	2022	976	2248	0	39.65	0.00	39.65
Zerda-Kankroli	-146	-282	0	335	0.00	3.81	-3.81
Zerda-Bhinmal	-98	-208	89	306	0.00	2.22	-2.22
Malanpur-Auraiya	8	35	0	44	0.00	0.60	-0.60
Badod-Kota/Morak	-54	-216	5	140	0.00	3.15	-3.15
Mundra-Mohindergarh(HVDC)	2299	2300	2306	0	55.63	0.00	55.63
Vindhyachal - Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total WR	**3781**	**2355**			**95.72**	**14.18**	**81.54**
Pusauli Bypass	400	-313	400	-320	5.91	2.09	3.82
MZP- GKP (D/C)	46	182	392	166	3.53	0.00	3.53
Patna-Balia(D/C)	329	459	609	0	10.75	0.00	10.75
B'Sharif-Balia (D/C)	-9	46	278	78	2.58	0.00	2.58
Pusauli-Balia	-116	-22	0	120	0.00	1.56	-1.56
Gaya-Fatehpur (765 Kv)	75	145	455	0	5.92	0.00	5.92
Pusauli-Sahupuri	98	106	0	0	2.32	0.00	2.32
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	46	0.00	0.91	-0.91
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-136	114	271	169	1.99	0.00	1.99
Sub Total ER	**651**	**677**			**33.00**	**4.56**	**28.44**
Total IR Exch	**4432**	**3032**			**128.72**	**18.74**	**109.98**

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
24.68	0.49	25.17	7.71	-9.88	6.54	6.00	6.01	-6.01

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Incids Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
45.43	58.64	104.06	28.44	81.54	109.98	-16.99	22.90	5.91

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	0.13	6.11	20.75	47.17	43.28	17.36	18.61	5.07	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)
50.43	22.00	49.68	8.47	50.00	0.15	0.12	50.34	49.82

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	413	23:57	402	17:57	0.0	0.0	0.0	0.0
Gorakhpur	400	414	05:01	394	17:27	0.0	0.0	0.0	0.0
Bareilly	400	425	03:21	403	12:46	0.0	0.0	17.9	0.0
Kanpur	400	424	21:02	402	10:21	0.0	0.0	11.6	0.0
Dadri	400	421	21:01	406	12:13	48.2	48.2	0.3	0.0
Ballabhgarh	400	429	03:06	406	10:22	0.0	0.0	41.4	0.0
Bawana	400	426	03:02	407	10:22	0.0	0.0	32.8	0.0
Bassi	400	424	20:57	386	08:51	0.0	2.5	2.3	0.0
Hissar	400	417	21:02	392	10:21	0.0	0.0	0.0	0.0
Moga	400	423	02:30	399	10:21	0.0	0.0	13.0	0.0
Abdullapur	400	424	21:54	396	10:19	0.0	0.0	16.3	0.0
Nalagarh	400	429	21:59	406	10:49	0.0	0.0	32.2	0.0
Kishenpur	400	423	03:24	393	10:20	0.0	0.0	7.8	0.0
Wagoora	400	405	02:31	371	07:52	40.5	59.5	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	780	03:25	737	10:38	0.0	5.5	0.0	0.0
Balia	765	774	05:02	740	10:22	0.0	0.4	0.0	0.0
Moga	765	800	03:02	757	10:49	0.0	0.0	0.0	0.0
Agra	765	799	21:01	749	10:38	0.0	0.0	0.0	0.0
Bhiwani	765	808	21:01	765	10:22	0.0	0.0	4.6	0.0
Unnao	765	778	03:22	744	10:22	0.0	0.0	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	500.75	1127.29	505.73	1339.30	136.94	465.90
Pong	426.72	384.05	408.40	444.61	415.05	680.86	56.52	444.46
Tehri	829.79	740.04	815.55	920.00	818.25	967.00	48.52	168.00
Koteshwar	612.50	598.50	609.85	4.44	610.10	4.69	168.00	170.00
Chamera-I	760.00	748.75	759.54	0.00	0.00	0.00	46.90	56.57
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	508.49	2.51	513.50	2.83	49.97	118.50

*** 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	-391	10	0	-411	209	0	-10.44	1.30	-9.14
Delhi	-945	0	-30	-521	358	-12	-14.76	2.79	-11.96
Haryana	-884	143	0	-868	125	0	-22.54	2.47	-20.07
HP	431	-66	0	401	-63	0	10.95	-2.68	8.28
J&K	633	-6	0	440	92	0	12.19	1.44	13.64
CHD	-30	0	0	0	0	0	-0.24	0.13	-0.12
Rajasthan	490	330	1	490	-349	1	15.78	2.87	18.65
UP	73	0	0	98	0	0	1.39	0.00	1.39
Uttarakhand	215	228	42	215	479	20	5.16	9.64	14.80
Total	**-407**	**638**	**13**	**-155**	**851**	**9**	**-2.50**	**17.96**	**15.46**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-391	-485	213	0	0	0
Delhi	-426	-945	406	0	-12	-30
Haryana	-868	-1053	144	50	0	0
HP	496	382	74	-478	0	0
J&K	633	440	124	-23	0	0
CHD	0	-30	25	0	0	0
Rajasthan	849	490	471	-970	1	0
UP	115	-10	0	0	0	0
Uttarakhand	215	215	508	228	42	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 12.12.2014 :

Fog in Eastern UP

XIV. Synchronisation of new generating units :

0.00

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 : 12.12.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**