पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.12.2014
Date of Reporting : 23.12.2014

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
40213	2833	43046	50.04	29021	1101	30122	50.14	797.6	82.24

* 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	49.14	8.41		57.56	37.35	37.64	0.29	95.20	0.00
Haryana	52.90	0.42		53.32	55.62	54.71	-0.92	108.03	23.32
Rajasthan	109.77	4.57	4.40	118.74	79.32	81.81	2.48	200.54	0.00
Delhi	19.12			19.12	47.46	48.69	1.22	67.81	0.00
UP	139.50	4.60		144.10	78.10	75.94	-2.16	220.04	44.71
Uttarakhand		6.91		6.91	26.22	27.24	1.02	34.16	0.91
HP		4.47		4.47	19.47	20.35	0.88	24.82	0.00
J & K		5.12	0.00	5.12	32.61	37.69	5.08	42.81	13.30
Chandigarh				0.00	3.59	4.18	0.27	4.18	0.00
Total	**370.44**	**34.51**	**4.40**	**409.34**	**379.73**	**388.23**	**8.18**	**797.57**	**82.24**

* 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	5138	0	36	-437	2900	0	76	-409	5241
Haryana	5863	380	-62	-937	3670	0	-88	-932	5863
Rajasthan	9129	0	301	977	7189	0	137	1359	9565
Delhi	3389	66	-21	-38	1686	0	54	-948	3781
UP	10483	1860	-238	115	8610	530	-133	46	10483
Uttarakhand	1818	0	56	739	1089	0	-46	498	1856
HP	1308	20	57	404	715	30	4	413	1308
J&K	2870	506	49	540	3064	541	160	602	3408
Chandigarh	215	0	9	0	97	0	11	-31	238
Total	**40213**	**2833**	**188**	**1362**	**29021**	**1101**	**175**	**599**	**40213**

* 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	1239	1337	1207	29.13	1214	29.36	-0.23
	Rihand I STPS (2*500)	1000	848	932	601	20.45	852	19.04	1.41
	Rihand II STPS (2*500)	1000	970	1030	734	23.18	966	22.02	1.16
	Rihand III STPS (2*500)	1000	970	1010	845	23.29	970	22.42	0.87
	Dadri I STPS (4*210)	840	615	590	458	13.46	561	12.72	0.74
	Dadri II STPS (2*490)	980	980	997	700	21.52	897	21.07	0.45
	Unchahar I TPS (2*210)	420	406	439	316	9.38	391	8.81	0.57
	Unchahar II TPS (2*210)	420	403	424	286	9.32	388	8.63	0.69
	Unchahar III TPS (1*220)	210	202	200	138	4.58	191	4.30	0.29
	ISTPP (Jhajjhar) (3*500)	1500	833	781	940	18.32	764	19.99	-1.66
	Dadri GPS (4*130.19+2*154.51)	830	840	149	277	5.50	229	5.52	-0.02
	Anta GPS (3*88.71+1*153.2)	419	426	200	209	5.74	239	5.60	0.14
	Auraiya GPS (4*111.19+2*109.30)	663	665	160	117	3.75	156	3.65	0.10
	Dadri Solar	5	1	0	0	0.00	0	0.02	-0.02
	Unchahar Solar	10	3	0	0	0.00	0	0.07	-0.06
	Sub Total (A)	**11297**	**9401**	**8249**	**6828**	**188**	**7818**	**183**	**4**
B. NPC	NAPS (2*220)	440	311	352	350	7.50	312	7.47	0.03
	RAPS- B (2*220)	440	413	324	453	8.77	366	9.91	-1.14
	RAPS- C (2*220)	440	220	227	238	5.04	210	5.28	-0.24
	Sub Total (B)	**1320**	**944**	**903**	**1041**	**21.31**	**888**	**22.66**	**-1.35**
C. NHPC	Chamera I HPS (3*180)	540	356	193	0	1.66	69	1.60	0.06
	Chamera II HPS (3*100)	300	300	204	0	1.30	54	1.23	0.08
	Chamera III HPS (3*77)	231	154	151	0	0.70	29	0.65	0.05
	Bairasuil HPS(3*60)	180	179	122	0	0.50	21	0.44	0.07
	Salal-HPS (6*115)	690	114	220	60	2.89	120	2.74	0.15
	Tanakpur-HPS (3*40)	94	30	29	30	0.78	32	0.72	0.06
	Uri-I HPS (4*120)	480	123	204	122	3.07	128	2.95	0.12
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	139	140	0	0.99	41	0.85	0.14
	Dulhasti-HPS (3*130)	390	339	404	0	2.86	119	2.70	0.16
	Sewa-II HPS (3*40)	120	119	122	0	0.36	15	0.36	0.00
	Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	**4065**	**1853**	**1788**	**212**	**15**	**630**	**14**	**1**
D.SJVNL	NJPC (6*250)	1500	1605	1262	0	6.62	276	6.40	0.22
	Rampur HEP (4*68.67)	275	420	351	0	1.87	78	1.79	0.08
	Sub Total (D)	1775	2025	1613	0	8.49	354	8.19	0.30
E. THDC	Tehri HPS (4*250)	1000	972	1003	0	7.33	305	7.20	0.13
	Koteshwar HPS (4*100)	400	104	200	91	2.55	106	2.50	0.05
	Sub Total (E)	**1400**	**1075**	**1203**	**91**	**9.88**	**411**	**9.70**	**0.18**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	553	1040	338	13.68	570	13.28	0.39
	Dehar HPS (6*165)	990	137	165	0	3.27	136	3.29	-0.01
	Pong HPS (6*66)	396	263	384	60	6.20	258	6.31	-0.11
	Sub Total (F)	**2900**	**953**	**1589**	**398**	**23.15**	**964**	**22.88**	**0.27**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.50	21	0.49	0.01
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	683	0	3.67	153	3.61	0.06
	Malana Stg-II HPS (2*50)	100	0	0	0	0.20	8	0.18	0.01
	Shree Cement TPS (2*150)	300	0	286	186	6.05	252	6.00	0.04
	Budhil HPS(IPP)	70	0	0	0	0.14	6	0.15	0.00
	Sub Total (G)	1662	0	969	186	10.56	440	10.43	0.13
H. Total Regional Entities (A-G)		**24419**	**16252**	**16313**	**8756**	**276.13**	**11505**	**271.30**	**4.83**

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	840	680	16.85	702
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	115	115	2.46	103
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	380	339	6.81	284
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	648	359	12.28	512
	Talwandi Saboo (1*660)	660	348	347	10.75	448
	Thermal (Total)	**4680**	**2331**	**1840**	**49.14**	**2048**
	Total Hydro	1148	498	209	8.41	351
	Total Punjab	**5828**	**2829**	**2049**	**57.56**	**2398**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	920	747	18.40	767
	DCRTPP (Yamuna nagar) (2*300)	600	273	247	6.34	264
	Faridabad GPS (NTPC)	432	206	191	4.67	195
	RGTPP (khedar) (IPP) (2*600)	1200	561	371	12.54	523
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	622	486	10.95	456
	Thermal (Total)	**4944**	**2582**	**2042**	**52.90**	**2204**
	Total Hydro	62	12	20	0.42	18
	Total Haryana	**5006**	**2594**	**2062**	**53.32**	**2222**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1015	936	23.59	983
	suratgarh TPS (6*250)	1500	1374	1166	30.25	1260
	Chabra TPS (3*250)	750	427	604	13.60	567
	Dholpur GPS (3*110)	330	0	0	0.00	0
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	220	161	4.98	207
	RAPS A (NPC) (1*100+1*200)	300	150	150	4.12	172
	Barsingsar (NLC) (2*125)	250	188	183	4.33	181
	Giral LTPS (2*125)	250	70	68	1.17	49
	Rajwest LTPS (IPP) (8*135)	1080	734	387	15.44	643
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	0	0	0.00	0
	Kawai(Adani) (2*660)	1320	545	440	12.30	512
	Thermal (Total)	**8026**	**4723**	**4095**	**110**	**4574**
	Total Hydro	550	276	87	4.57	190
	Wind power	2798	155	169	3.13	131
	Biomass	99	36	36	0.87	36
	Solar	730	0	0	0.39	16
	Renewable/Others (Total)	3627	191	205	4.40	183
	Total Rajasthan	**12203**	**5190**	**4387**	**118.74**	**4947**
UP	Anpara TPS (3*210+2*500)	1630	1355	1325	31.90	1329
	Obra TPS (2*50+2*94+5*200)	1194	346	345	8.30	346
	Paricha TPS (2*110+2*220+2*250)	1140	784	770	18.20	758
	Panki TPS (2*105)	210	122	135	2.90	121
	Harduaganj TPS (1*60+1*105+2*250)	665	364	390	8.60	358
	Tanda TPS (NTPC) (4*110)	440	285	226	6.60	275
	Roza TPS (IPP) (4*300)	1200	1076	770	22.20	925
	Anpara-C (IPP) (2*600)	1200	1031	866	21.60	900
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Thermal (Total)	**8129**	**5363**	**4827**	**120.30**	**5013**
	Vishnuparyag HPS (IPP)	400	84	83	2.00	83
	Other Hydro	527	208	32	2.60	108
	Cogeneration	981	800	800	19.20	800
	Total UP	**10037**	**6455**	**5742**	**144.10**	**5921**
Uttarakhand	Total Hydro	1398	438	205	6.91	288
	Total Uttarakhand	**1398**	**438**	**205**	**6.91**	**288**
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	82	82	1.96	82
	Pragati Gas Turbine (2x104+ 1x122)	330	156	155	3.76	156
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	339	242	7.59	316
	Badarpur TPS (NTPC) (3*95+2*210)	705	230	217	5.81	242
	Thermal (Total)	2917	807	696	19.12	797
	Total Delhi	**2917**	**807**	**696**	**19.12**	**797**
HP	Baspa HPS (IPP) (2*150)	300	29	0	1.17	49
	Malana HPS (IPP) (2*43)	86	0	0	0.00	0
	Other Hydro	728	170	98	3.30	138
	Total HP	**1114**	**199**	**98**	**4.47**	**186**
J & K	Baglihar HPS (IPP) (3*150)	450	270	120	3.78	158
	Other Hydro/IPP	436	90	39	1.34	56
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**360**	**159**	**5.12**	213
Total State Control Area Generation		**39597**	**18872**	**15398**	**409.34**	**16972**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**5844**	**5026**	**149.24**	**6218**
Total Regional Availability(Gross)		**64017**	**41029**	**29180**	**834.70**	**34696**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**6876**	**701**	**61.00**	**2542**
State Control Area Hydro	**5684**	**1991**	**810**	**34.51**	**1354**
Total Regional Hydro	**17116**	**8867**	**1511**	**95.50**	**3896**

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	500	500	500	0	11.21	0.00	11.21
Gwalior-Agra (D/C)	1762	1363	2298	0	44.62	0.00	44.62
Zerda-Kankroli	-65	-197	0	197	0.00	2.01	-2.01
Zerda-Bhinmal	14	-97	116	121	0.28	0.00	0.28
Malanpur-Auraiya	-10	-10	0	25	0.00	0.32	-0.32
Badod-Kota/Morak	23	-92	44	102	0.00	1.05	-1.05
Mundra-Mohindergarh(HVDC)	2297	2198	2306	0	54.38	0.00	54.38
Vindhyachal - Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total WR	**4521**	**3665**			**110.48**	**3.38**	**107.10**
Pusauli Bypass	425	425	425	0	10.36	0.00	10.36
MZP- GKP (D/C)	40	100	488	0	4.51	0.00	4.51
Patna-Balia(D/C)	662	558	904	0	17.54	0.00	17.54
B'Sharif-Balia (D/C)	9	112	306	99	0.76	0.00	0.76
Pusauli-Balia	0	0	0	0	0.00	0.00	0.00
Gaya-Fatehpur (765 Kv)	174	166	508	0	7.50	0.00	7.50
Pusauli-Sahupuri	114	115	151	0	2.55	0.00	2.55
K'nasa-Sahupuri	0	0	0	0	0.00	0.48	-0.48
Son Ngr-Rihand	-30	-40	0	43	0.00	0.87	-0.87
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-71	-75	137	156	0.28	0.00	0.28
Sub Total ER	**1323**	**1361**			**43.49**	**1.35**	**42.14**
Total IR Exch	**5844**	**5026**			**153.97**	**4.73**	**149.24**

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
28.99	0.46	29.45	9.71	-8.92	4.21	20.13	5.89	-5.89

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
49.25	83.15	132.40	42.14	107.10	149.24	-7.12	23.96	16.84

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	0.46	7.09	29.85	58.36	44.57	13.39	8.72	3.51	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)
50.44	0.01	49.65	10.19	49.97	0.15	0.12	50.40	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	415	03:57	402	12:12	0.0	0.0	0.0	0.0
Gorakhpur	400	415	23:57	396	12:17	0.0	0.0	0.0	0.0
Bareilly	400	424	03:58	402	12:17	0.0	0.0	20.9	0.0
Kanpur	400	422	23:57	407	16:29	0.0	0.0	1.1	0.0
Dadri	400	424	04:00	404	12:17	0.1	0.1	13.7	0.0
Ballabhgarh	400	431	04:00	407	12:19	0.0	0.0	50.0	0.2
Bawana	400	428	03:50	408	12:18	0.0	0.0	46.8	0.0
Bassi	400	428	20:58	391	11:19	0.0	0.0	13.2	0.0
Hissar	400	419	20:57	398	12:17	0.0	0.0	0.0	0.0
Moga	400	425	20:58	404	12:16	0.0	0.0	11.3	0.0
Abdullapur	400	424	20:56	396	18:37	0.0	0.0	10.2	0.0
Nalagarh	400	433	20:58	414	12:18	0.0	0.0	64.3	0.7
Kishenpur	400	424	00:00	396	12:18	0.0	0.0	10.3	0.0
Wagoora	400	416	00:00	365	18:59	17.6	53.9	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	23:57	735	12:19	0.0	4.0	0.0	0.0
Balia	765	785	23:57	746	12:19	0.0	0.0	0.0	0.0
Moga	765	803	20:58	763	12:19	0.0	0.0	0.5	0.0
Agra	765	793	04:00	748	12:18	0.0	0.0	0.0	0.0
Bhiwani	765	807	20:59	763	12:19	0.0	0.0	1.9	0.0
Unnao	765	774	23:57	734	12:18	0.0	4.7	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	499.38	1064.89	503.85	1258.87	127.31	373.78
Pong	426.72	384.05	406.86	397.88	413.34	611.20	67.48	423.51
Tehri	829.79	740.04	812.90	860.27	815.85	919.25	47.19	167.00
Koteshwar	612.50	598.50	610.00	4.44	610.10	4.55	167.00	169.00
Chamera-I	760.00	748.75	758.91	0.00	0.00	0.00	45.93	45.05
Rihand	268.22	252.98	852.80	301.20	856.60	365.90	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	507.74	2.46	512.40	2.01	62.46	116.89

*** 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	-418	9	0	-438	1	0	-11.11	0.55	-10.57
Delhi	-902	-15	-31	-546	507	0	-13.91	6.62	-7.29
Haryana	-1044	112	0	-1028	91	0	-25.37	2.16	-23.22
HP	475	-62	0	446	-41	0	11.78	-2.70	9.07
J&K	602	0	0	411	129	0	11.52	1.23	12.75
CHD	-31	0	0	0	0	0	-0.25	0.17	-0.07
Rajasthan	847	511	2	847	128	2	24.03	8.04	32.06
UP	46	0	0	115	0	0	0.53	0.00	0.53
Uttarakhand	213	237	48	213	522	4	5.12	10.21	15.33
Total	**-211**	**792**	**19**	**19**	**1337**	**6**	**2.34**	**26.27**	**28.60**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-418	-513	218	0	0	0
Delhi	-246	-902	636	-15	0	-31
Haryana	-639	-1194	129	52	0	0
HP	520	426	0	-606	0	0
J&K	602	411	146	-196	0	0
CHD	0	-31	59	0	0	0
Rajasthan	1202	847	655	-366	2	0
UP	115	-139	0	0	0	0
Uttarakhand	213	213	551	2	48	4

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 22.12.2014 :

Light Fog

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 : 22.12.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**