पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 25.12.2014
Date of Reporting : 26.12.2014

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
39850	3050	42900	0.00	29894	1686	31580	0.00	829.6	70.45

* 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	53.23	7.95		61.18	34.95	34.47	-0.48	95.66	0.00
Haryana	59.70	0.45		60.15	60.09	58.07	-2.01	118.22	3.02
Rajasthan	111.35	4.73	4.35	120.42	90.22	90.44	0.22	210.87	0.00
Delhi	23.60			23.60	46.67	47.52	0.85	71.12	0.00
UP	139.70	5.51		145.21	79.90	83.41	3.51	228.62	58.86
Uttarakhand		6.89		6.89	26.63	28.28	1.65	35.17	0.89
HP		4.47		4.47	20.09	20.70	0.61	25.17	0.48
J & K		5.54	0.00	5.54	33.56	35.26	1.71	40.81	7.20
Chandigarh				0.00	3.44	3.95	0.27	3.95	0.00
Total	**387.59**	**35.54**	**4.35**	**427.47**	**395.55**	**402.12**	**6.33**	**829.58**	**70.45**

* 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	4852	0	-102	-435	3016	0	-52	-410	5163
Haryana	6142	165	-76	-562	3890	0	-172	-748	6142
Rajasthan	9770	0	91	1163	8034	0	-50	1362	10177
Delhi	3531	104	-73	71	1917	0	206	-963	4039
UP	10317	2425	-183	115	9310	1365	0	73	10356
Uttarakhand	1781	0	73	782	1148	0	43	511	1802
HP	1342	20	121	404	775	20	13	444	1342
J&K	1903	336	2	628	1705	301	180	669	1927
Chandigarh	212	0	8	39	99	0	21	-31	217
Total	**39850**	**3050**	**-140**	**2206**	**29894**	**1686**	**189**	**908**	**39850**

* 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	1568	1556	35.06	1461	34.80	0.27
	Rihand I STPS (2*500)	1000	875	926	931	22.50	938	20.90	1.60
	Rihand II STPS (2*500)	1000	680	1018	507	17.40	725	16.08	1.32
	Rihand III STPS (2*500)	1000	969	1012	1007	23.90	996	22.66	1.24
	Dadri I STPS (4*210)	840	570	501	397	12.60	525	11.93	0.67
	Dadri II STPS (2*490)	980	867	724	666	19.10	796	18.37	0.73
	Unchahar I TPS (2*210)	420	323	434	201	8.40	350	7.64	0.76
	Unchahar II TPS (2*210)	420	406	444	374	9.80	408	8.94	0.86
	Unchahar III TPS (1*220)	210	202	218	150	4.70	196	4.30	0.40
	ISTPP (Jhajjhar) (3*500)	1500	853	939	556	18.05	752	18.83	-0.78
	Dadri GPS (4*130.19+2*154.51)	830	843	180	150	4.00	167	3.98	0.02
	Anta GPS (3*88.71+1*153.2)	419	426	219	229	5.50	229	5.49	0.01
	Auraiya GPS (4*111.19+2*109.30)	663	673	158	150	3.70	154	3.69	0.01
	Dadri Solar	5	1	0	0	0.01	1	0.02	-0.01
	Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
	Sub Total (A)	**11297**	**9141**	**8341**	**6874**	**185**	**7698**	**178**	**7**
B. NPC	NAPS (2*220)	440	323	360	360	7.81	326	7.75	0.06
	RAPS- B (2*220)	440	269	413	233	7.03	293	6.45	0.57
	RAPS- C (2*220)	440	220	238	239	5.15	215	5.28	-0.13
	Sub Total (B)	**1320**	**812**	**1011**	**832**	**19.99**	**833**	**19.49**	**0.50**
C. NHPC	Chamera I HPS (3*180)	540	356	165	0	1.28	54	1.20	0.08
	Chamera II HPS (3*100)	300	300	210	0	1.32	55	1.25	0.07
	Chamera III HPS (3*77)	231	154	154	0	0.70	29	0.65	0.05
	Bairasuil HPS(3*60)	180	179	84	0	0.45	19	0.40	0.05
	Salal-HPS (6*115)	690	103	230	125	2.62	109	2.46	0.16
	Tanakpur-HPS (3*40)	94	27	40	27	0.70	29	0.64	0.06
	Uri-I HPS (4*120)	480	110	202	117	2.95	123	2.76	0.19
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	125	140	0	0.94	39	0.85	0.09
	Dulhasti-HPS (3*130)	390	387	397	0	2.94	122	2.80	0.14
	Sewa-II HPS (3*40)	120	119	122	0	0.37	15	0.36	0.01
	Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	**4065**	**1859**	**1744**	**269**	**14**	**594**	**13**	**1**
D.SJVNL	NJPC (6*250)	1500	1605	1257	0	7.61	317	7.49	0.11
	Rampur HEP (4*68.67)	275	420	365	0	2.17	91	2.06	0.12
	Sub Total (D)	1775	2025	1622	0	9.78	407	9.55	0.23
E. THDC	Tehri HPS (4*250)	1000	1040	1040	0	8.14	339	8.00	0.14
	Koteshwar HPS (4*100)	400	116	300	90	2.88	120	2.80	0.08
	Sub Total (E)	**1400**	**1156**	**1340**	**90**	**11.02**	**459**	**10.80**	**0.22**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	558	1051	348	13.46	561	13.40	0.05
	Dehar HPS (6*165)	990	137	165	0	3.32	139	3.29	0.04
	Pong HPS (6*66)	396	233	384	60	5.62	234	5.60	0.02
	Sub Total (F)	**2900**	**929**	**1600**	**408**	**22.40**	**933**	**22.29**	**0.12**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	53	0	0.31	13	0.70	-0.39
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	622	0	3.91	163	3.84	0.07
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	284	214	6.32	264	6.22	0.10
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	959	214	10.55	439	10.76	-0.21
H. Total Regional Entities (A-G)		**24419**	**15922**	**16617**	**8688**	**272.75**	**11365**	**263.95**	**8.80**

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	850	830	20.01	834
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	180	2.86	119
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	409	337	9.39	391
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	690	364	11.91	496
	Talwandi Saboo (1*660)	660	364	358	9.07	378
	Thermal (Total)	**4680**	**2413**	**2069**	**53.23**	**2218**
	Total Hydro	1148	269	207	7.95	331
	Total Punjab	**5828**	**2682**	**2276**	**61.18**	**2549**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	963	698	19.87	828
	DCRTPP (Yamuna nagar) (2*300)	600	255	240	6.09	254
	Faridabad GPS (NTPC)	432	319	275	7.66	319
	RGTPP (khedar) (IPP) (2*600)	1200	554	369	12.57	524
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	605	368	13.50	563
	Thermal (Total)	**4944**	**2696**	**1950**	**59.70**	**2487**
	Total Hydro	62	16	16	0.45	19
	Total Haryana	**5006**	**2712**	**1966**	**60.15**	**2506**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1023	1020	23.68	987
	suratgarh TPS (6*250)	1500	1378	1162	30.93	1289
	Chabra TPS (3*250)	750	510	605	14.66	611
	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	202	185	4.95	206
	RAPS A (NPC) (1*100+1*200)	300	152	151	4.16	173
	Barsingsar (NLC) (2*125)	250	189	189	4.39	183
	Giral LTPS (2*125)	250	56	85	1.09	45
	Rajwest LTPS (IPP) (8*135)	1080	612	616	14.26	594
	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	550	578	13.25	552
	Thermal (Total)	**8026**	**4672**	**4591**	**111**	**4640**
	Total Hydro	550	337	93	4.73	197
	Wind power	2798	48	419	3.43	143
	Biomass	99	24	24	0.57	24
	Solar	730	3	0	0.34	14
	Renewable/Others (Total)	3627	75	443	4.35	181
	Total Rajasthan	**12203**	**5084**	**5127**	**120.42**	**5018**
UP	Anpara TPS (3*210+2*500)	1630	842	869	20.20	842
	Obra TPS (2*50+2*94+5*200)	1194	302	301	7.40	308
	Paricha TPS (2*110+2*220+2*250)	1140	662	691	16.60	692
	Panki TPS (2*105)	210	117	131	2.30	96
	Harduaganj TPS (1*60+1*105+2*250)	665	366	373	8.90	371
	Tanda TPS (NTPC) (4*110)	440	280	288	7.10	296
	Roza TPS (IPP) (4*300)	1200	1035	1067	25.30	1054
	Anpara-C (IPP) (2*600)	1200	1026	995	24.20	1008
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	362	362	8.50	354
	Thermal (Total)	**8129**	**4992**	**5077**	**120.50**	**5021**
	Vishnuparyag HPS (IPP)	400	80	80	1.91	80
	Other Hydro	527	228	159	3.60	150
	Cogeneration	981	800	800	19.20	800
	Total UP	**10037**	**6100**	**6116**	**145.21**	**5971**
Uttarakhand	Total Hydro	1398	396	193	6.89	287
	Total Uttarakhand	**1398**	**396**	**193**	**6.89**	**287**
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	83	81	1.95	81
	Pragati Gas Turbine (2x104+ 1x122)	330	317	274	7.10	296
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	362	296	8.51	355
	Badarpur TPS (NTPC) (3*95+2*210)	705	264	220	6.05	252
	Thermal (Total)	2917	1026	871	23.60	984
	Total Delhi	**2917**	**1026**	**871**	**23.60**	**984**
HP	Baspa HPS (IPP) (2*150)	300	30	0	1.08	45
	Malana HPS (IPP) (2*43)	86	0	0	0.25	11
	Other Hydro	728	139	71	3.14	131
	Total HP	**1114**	**169**	**71**	**4.47**	**186**
J & K	Baglihar HPS (IPP) (3*150)	450	298	120	4.29	179
	Other Hydro/IPP	436	67	50	1.26	52
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**365**	**170**	**5.54**	231
Total State Control Area Generation		**39597**	**18534**	**16790**	**427.47**	**17732**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**6419**	**5847**	**154.54**	**6439**
Total Regional Availability(Gross)		**64017**	**41570**	**31325**	**854.76**	**35535**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**6981**	**767**	**61.69**	**2570**
State Control Area Hydro	**5684**	**1780**	**909**	**35.54**	**1401**
Total Regional Hydro	**17116**	**8761**	**1676**	**97.22**	**3971**

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	10.81	0.00	10.81
Gwalior-Agra (D/C)	2066	1794	2414	0	48.75	0.00	48.75
Zerda-Kankroli	19	-135	98	135	0.05	0.00	0.05
Zerda-Bhinmal	131	-41	246	70	2.49	0.00	2.49
Malanpur-Auraiya	-65	-50	0	100	0.00	1.34	-1.34
Badod-Kota/Morak	52	-81	63	74	0.00	0.81	-0.81
Mundra-Mohindergarh(HVDC)	2298	2300	2310	0	54.14	0.00	54.14
Vindhyachal - Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total WR	**5001**	**4287**			**116.22**	**2.15**	**114.07**
Pusauli Bypass	400	425	425	0	6.02	0.00	6.02
MZP- GKP (D/C)	156	114	536	0	5.13	0.00	5.13
Patna-Balia(D/C)	779	566	1111	0	19.52	0.00	19.52
B'Sharif-Balia (D/C)	240	348	597	0	8.72	0.00	8.72
Pusauli-Balia	0	0	0	0	0.00	0.00	0.00
Gaya-Fatehpur (765 Kv)	-286	125	313	429	0.00	3.44	-3.44
Pusauli-Sahupuri	111	130	169	0	2.81	0.00	2.81
K'nasa-Sahupuri	0	0	0	0	0.00	0.48	-0.48
Son Ngr-Rihand	-36	-38	0	44	0.00	0.86	-0.86
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	54	-110	481	152	3.06	0.00	3.06
Sub Total ER	**1418**	**1560**			**45.25**	**4.78**	**40.47**
Total IR Exch	**6419**	**5847**			**161.47**	**6.93**	**154.54**

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
29.04	0.43	29.48	13.63	-8.87	8.78	31.20	5.74	-5.74

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
57.62	98.18	155.81	40.47	114.07	154.54	-17.15	15.89	-1.27

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	2.13	11.11	33.30	70.70	51.23	8.06	6.50	0.91	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)
50.28	06:03:00	49.59	07:25:50	49.94	0.16	0.11	0.00	0.00

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	411	05:52	404	17:51	0.0	0.0	0.0	0.0
Gorakhpur	400	412	05:03	392	17:39	0.0	0.0	0.0	0.0
Bareilly	400	423	05:33	404	18:31	0.0	0.0	3.9	0.0
Kanpur	400	422	05:01	404	08:53	0.0	0.0	3.1	0.0
Dadri	400	422	02:00	412	22:23	65.3	65.3	11.3	0.0
Ballabhgarh	400	431	05:02	409	09:08	0.0	0.0	43.4	0.3
Bawana	400	428	02:56	407	18:33	0.0	0.0	41.7	0.0
Bassi	400	430	05:03	388	09:14	0.0	0.5	21.9	0.0
Hissar	400	419	02:01	399	09:08	0.0	0.0	0.0	0.0
Moga	400	425	02:31	406	09:07	0.0	0.0	14.1	0.0
Abdullapur	400	424	23:35	396	18:32	0.0	0.0	16.9	0.0
Nalagarh	400	430	23:35	402	09:55	0.0	0.0	43.5	0.0
Kishenpur	400	422	12:58	390	18:31	0.0	0.0	0.5	0.0
Wagoora	400	419	12:00	358	19:30	35.2	51.0	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	784	20:57	734	09:14	0.0	0.1	0.0	0.0
Balia	765	778	05:05	750	17:54	0.0	0.0	0.0	0.0
Moga	765	782	04:30	758	17:20	0.0	0.0	0.0	0.0
Agra	765	799	05:03	754	08:54	0.0	0.0	0.0	0.0
Bhiwani	765	803	02:42	790	00:21	0.0	0.0	46.5	0.0
Unnao	765	774	05:03	744	17:51	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	498.85	1053.16	503.38	1232.31	228.77	379.11
Pong	426.72	384.05	406.38	379.44	412.92	600.05	62.30	388.08
Tehri	829.79	740.04	811.95	842.28	814.90	900.26	47.41	187.00
Koteshwar	612.50	598.50	610.35	4.74	609.70	4.40	187.00	191.00
Chamera-I	760.00	748.75	759.21	0.00	0.00	0.00	43.11	34.31
Rihand	268.22	252.98	852.30	292.90	856.20	358.90	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	507.24	2.04	512.18	2.86	37.46	95.37

*** 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	8	0	-438	3	0	-11.11	0.36	-10.75
Delhi	-902	-31	-31	-473	559	-15	-13.67	6.97	-6.69
Haryana	-895	147	0	-638	76	0	-21.65	2.36	-19.29
HP	475	-31	0	446	-41	0	11.78	-2.65	9.13
J&K	602	67	0	407	220	0	11.50	3.46	14.96
CHD	-31	0	0	0	39	0	-0.25	0.28	0.03
Rajasthan	847	513	2	847	315	2	24.03	19.87	43.90
UP	73	0	0	115	0	0	0.76	0.00	0.76
Uttarakhand	213	268	30	213	520	49	5.12	10.85	15.98
Total	**-35**	**942**	**1**	**479**	**1692**	**36**	**6.51**	**41.51**	**48.02**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-418	-513	179	0	0	0
Delhi	-197	-902	783	-31	-15	-31
Haryana	-487	-1045	148	44	0	0
HP	520	426	10	-566	0	0
J&K	602	407	237	26	0	0
CHD	0	-31	49	0	0	0
Rajasthan	1202	847	1546	-87	2	2
UP	115	-153	0	0	0	0
Uttarakhand	213	213	539	264	49	29

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 25.12.2014 :

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 : 25.12.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**