पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 26.12.2014
Date of Reporting : 27.12.2014

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
39220	2861	42080	50.06	30501	865	31366	50.11	835.7	70.85

* 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	51.61	7.55		59.16	37.95	36.99	-0.97	96.15	0.00
Haryana	60.57	0.30		60.87	60.75	58.41	-2.34	119.28	3.96
Rajasthan	107.05	5.59	1.95	114.59	89.99	89.15	-0.84	203.74	0.00
Delhi	28.28			28.28	50.23	46.79	-3.44	75.06	0.00
UP	142.70	5.30		148.00	87.06	87.05	-0.01	235.05	56.36
Uttarakhand		6.97		6.97	25.76	27.39	1.63	34.36	2.71
HP		4.47		4.47	20.68	21.67	0.98	26.14	0.48
J & K		4.86	0.00	4.86	34.56	36.77	2.21	41.63	7.35
Chandigarh				0.00	3.87	4.30	0.27	4.30	0.00
Total	**390.21**	**35.05**	**1.95**	**427.20**	**410.85**	**408.49**	**-2.51**	**835.70**	**70.85**

* 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	4982	0	-63	-437	3036	0	98	-357	5373
Haryana	5687	614	-207	-829	4247	0	3	-747	5831
Rajasthan	8956	0	123	901	7838	0	-19	1395	9652
Delhi	3767	0	-179	340	1957	0	-7	-963	4161
UP	10611	1865	-216	122	9682	550	-296	73	10611
Uttarakhand	1863	45	54	750	1194	0	63	564	1863
HP	1335	20	-20	470	779	20	24	429	1397
J&K	1796	317	-12	476	1671	295	74	666	1959
Chandigarh	223	0	18	0	98	0	14	-21	252
Total	**39220**	**2861**	**-501**	**1793**	**30501**	**865**	**-46**	**1039**	**39220**

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

Diversity is 1.05

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	1566	1367	34.50	1438	34.06	0.44
	Rihand I STPS (2*500)	1000	875	951	943	22.20	925	20.66	1.54
	Rihand II STPS (2*500)	1000	957	1042	1030	24.00	1000	22.44	1.56
	Rihand III STPS (2*500)	1000	969	1013	1025	23.80	992	22.70	1.10
	Dadri I STPS (4*210)	840	549	511	423	12.90	538	12.12	0.78
	Dadri II STPS (2*490)	980	750	674	641	17.80	742	16.93	0.87
	Unchahar I TPS (2*210)	420	406	439	362	10.05	419	9.37	0.68
	Unchahar II TPS (2*210)	420	405	433	369	9.90	412	9.12	0.78
	Unchahar III TPS (1*220)	210	202	220	153	4.86	203	4.47	0.39
	ISTPP (Jhajjhar) (3*500)	1500	900	892	544	19.28	803	19.45	-0.17
	Dadri GPS (4*130.19+2*154.51)	830	845	169	185	4.30	179	4.32	-0.02
	Anta GPS (3*88.71+1*153.2)	419	426	233	234	5.80	242	5.81	-0.01
	Auraiya GPS (4*111.19+2*109.30)	663	677	158	152	3.80	158	3.79	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**	**9414**	**8301**	**7428**	**193**	**8051**	**185**	**8**
B. NPC	NAPS (2*220)	440	323	362	368	7.86	327	7.75	0.11
	RAPS- B (2*220)	440	415	453	454	9.79	408	9.96	-0.17
	RAPS- C (2*220)	440	220	0	238	3.25	135	5.28	-2.03
	Sub Total (B)	**1320**	**958**	**815**	**1060**	**20.90**	**871**	**22.99**	**-2.09**
C. NHPC	Chamera I HPS (3*180)	540	356	166	0	1.27	53	1.20	0.07
	Chamera II HPS (3*100)	300	300	208	0	1.15	48	1.10	0.05
	Chamera III HPS (3*77)	231	154	155	0	0.71	30	0.65	0.06
	Bairasuil HPS(3*60)	180	179	178	0	0.48	20	0.42	0.06
	Salal-HPS (6*115)	690	128	220	130	3.32	138	3.08	0.24
	Tanakpur-HPS (3*40)	94	27	25	26	0.70	29	0.64	0.06
	Uri-I HPS (4*120)	480	116	202	110	3.01	126	2.87	0.15
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	107	70	0	0.94	39	0.85	0.09
	Dulhasti-HPS (3*130)	390	387	403	0	2.93	122	2.80	0.13
	Sewa-II HPS (3*40)	120	96	82	0	0.31	13	0.30	0.01
	Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	**4065**	**1850**	**1708**	**266**	**15**	**618**	**14**	**1**
D.SJVNL	NJPC (6*250)	1500	1605	1603	0	7.35	306	7.20	0.15
	Rampur HEP (4*68.67)	275	420	432	0	2.10	87	2.00	0.10
	Sub Total (D)	1775	2025	2035	0	9.44	393	9.20	0.24
E. THDC	Tehri HPS (4*250)	1000	1040	1009	0	7.92	330	7.75	0.17
	Koteshwar HPS (4*100)	400	116	301	0	2.87	120	2.80	0.07
	Sub Total (E)	**1400**	**1156**	**1310**	**0**	**10.79**	**450**	**10.55**	**0.24**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	585	1054	347	14.05	585	14.05	0.00
	Dehar HPS (6*165)	990	137	165	0	3.06	128	3.29	-0.22
	Pong HPS (6*66)	396	228	384	60	5.53	231	5.47	0.06
	Sub Total (F)	**2900**	**950**	**1603**	**407**	**22.64**	**944**	**22.80**	**-0.16**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	25	0.53	22	0.51	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	622	0	3.96	165	3.84	0.12
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	283	215	6.34	264	6.25	0.09
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	905	240	10.82	451	10.60	0.23
H. Total Regional Entities (A-G)		**24419**	**16353**	**16677**	**9401**	**282.66**	**11777**	**275.37**	**7.29**

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	910	850	19.52	813
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	120	100	2.29	96
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	502	348	9.66	403
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	420	359	11.55	481
	Talwandi Saboo (1*660)	660	360	348	8.59	358
	Thermal (Total)	**4680**	**2312**	**2005**	**51.61**	**2150**
	Total Hydro	1148	425	225	7.55	315
	Total Punjab	**5828**	**2737**	**2230**	**59.16**	**2465**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	970	892	21.86	911
	DCRTPP (Yamuna nagar) (2*300)	600	255	242	6.00	250
	Faridabad GPS (NTPC)	432	159	336	6.51	271
	RGTPP (khedar) (IPP) (2*600)	1200	572	367	12.71	530
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	619	379	13.50	563
	Thermal (Total)	**4944**	**2575**	**2216**	**60.57**	**2524**
	Total Hydro	62	12	12	0.30	12
	Total Haryana	**5006**	**2587**	**2228**	**60.87**	**2536**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	796	804	19.47	811
	suratgarh TPS (6*250)	1500	1334	1287	30.81	1284
	Chabra TPS (3*250)	750	580	627	14.68	612
	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	197	203	4.97	207
	RAPS A (NPC) (1*100+1*200)	300	151	153	4.20	175
	Barsingsar (NLC) (2*125)	250	187	189	4.41	184
	Giral LTPS (2*125)	250	45	56	1.23	51
	Rajwest LTPS (IPP) (8*135)	1080	611	615	14.02	584
	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	547	548	13.27	553
	Thermal (Total)	**8026**	**4448**	**4482**	**107**	**4461**
	Total Hydro	550	279	108	5.59	233
	Wind power	2798	80	56	1.27	53
	Biomass	99	23	23	0.56	23
	Solar	730	1	0	0.11	5
	Renewable/Others (Total)	3627	104	79	1.95	81
	Total Rajasthan	**12203**	**4831**	**4669**	**114.59**	**4775**
UP	Anpara TPS (3*210+2*500)	1630	879	878	20.20	842
	Obra TPS (2*50+2*94+5*200)	1194	335	347	8.00	333
	Paricha TPS (2*110+2*220+2*250)	1140	811	721	18.60	775
	Panki TPS (2*105)	210	117	126	2.80	117
	Harduaganj TPS (1*60+1*105+2*250)	665	441	454	10.80	450
	Tanda TPS (NTPC) (4*110)	440	376	293	8.60	358
	Roza TPS (IPP) (4*300)	1200	788	1071	22.00	917
	Anpara-C (IPP) (2*600)	1200	960	990	23.20	967
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	402	384	9.30	388
	Thermal (Total)	**8129**	**5109**	**5264**	**123.50**	**5146**
	Vishnuparyag HPS (IPP)	400	78	79	1.90	79
	Other Hydro	527	235	35	3.40	142
	Cogeneration	981	800	800	19.20	800
	Total UP	**10037**	**6222**	**6178**	**148.00**	**6088**
Uttarakhand	Total Hydro	1398	438	215	6.97	291
	Total Uttarakhand	**1398**	**438**	**215**	**6.97**	**291**
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	82	82	1.95	81
	Pragati Gas Turbine (2x104+ 1x122)	330	285	290	6.97	290
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	483	482	11.52	480
	Badarpur TPS (NTPC) (3*95+2*210)	705	300	209	7.84	326
	Thermal (Total)	2917	1150	1063	28.28	1178
	Total Delhi	**2917**	**1150**	**1063**	**28.28**	**1178**
HP	Baspa HPS (IPP) (2*150)	300	28	0	1.05	44
	Malana HPS (IPP) (2*43)	86	0	21	0.27	11
	Other Hydro	728	171	56	3.14	131
	Total HP	**1114**	**199**	**77**	**4.47**	**186**
J & K	Baglihar HPS (IPP) (3*150)	450	150	148	3.59	150
	Other Hydro/IPP	436	64	48	1.27	53
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**214**	**196**	**4.86**	203
Total State Control Area Generation		**39597**	**18378**	**16856**	**427.20**	**17721**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**6139**	**5510**	**155.73**	**6489**
Total Regional Availability(Gross)		**64017**	**41194**	**31767**	**865.59**	**35987**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**7278**	**698**	**62.19**	**2591**
State Control Area Hydro	**5684**	**1802**	**868**	**35.05**	**1381**
Total Regional Hydro	**17116**	**9080**	**1566**	**97.23**	**3972**

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	50	300	500	0	6.32	0.00	6.32
Gwalior-Agra (D/C)	1889	2000	2433	0	50.08	0.00	50.08
Zerda-Kankroli	0	-98	115	98	0.52	0.00	0.52
Zerda-Bhinmal	198	1	328	5	2.74	0.00	2.74
Malanpur-Auraiya	80	31	0	105	0.00	1.47	-1.47
Badod-Kota/Morak	20	-57	66	55	0.00	0.26	-0.26
Mundra-Mohindergarh(HVDC)	2300	2202	2304	0	54.58	0.00	54.58
Vindhyachal - Rihand	479	0	500	0	7.30	0.00	7.30
Sub Total WR	**5016**	**4379**			**121.54**	**1.73**	**119.81**
Pusauli Bypass	500	400	500	0	10.38	0.00	10.38
MZP- GKP (D/C)	24	84	298	80	2.67	0.00	2.67
Patna-Balia(D/C)	717	657	916	0	17.73	0.00	17.73
B'Sharif-Balia (D/C)	40	123	317	0	3.37	0.00	3.37
Pusauli-Balia	0	0	0	0	0.00	0.00	0.00
Gaya-Fatehpur (765 Kv)	-257	-249	311	274	0.00	3.63	-3.63
Pusauli-Sahupuri	112	93	157	0	2.77	0.00	2.77
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-34	0	43	0.00	0.89	-0.89
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	27	57	369	42	3.52	0.00	3.52
Sub Total ER	**1123**	**1131**			**40.43**	**4.51**	**35.92**
Total IR Exch	**6139**	**5510**			**161.97**	**6.25**	**155.73**

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
29.22	0.43	29.65	13.43	-9.44	8.19	29.46	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
57.16	102.94	160.10	35.92	119.81	155.73	-21.24	16.87	-4.37

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	2.94	19.21	42.36	69.22	38.23	9.79	7.19	2.43	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)
50.31	21:52:00	49.59	08:41:00	49.93	0.23	0.14	50.33	49.78

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	409	03:20	402	14:43	0.0	0.0	0.0	0.0
Gorakhpur	400	411	20:57	386	14:50	0.0	4.3	0.0	0.0
Bareilly	400	422	05:03	394	14:49	0.0	0.0	0.4	0.0
Kanpur	400	421	05:03	398	14:50	0.0	0.0	0.2	0.0
Dadri	400	422	05:02	399	14:50	0.0	0.0	2.5	0.0
Ballabhgarh	400	430	05:02	404	09:35	0.0	0.0	35.3	0.0
Bawana	400	428	02:51	404	14:50	0.0	0.0	29.6	0.0
Bassi	400	427	05:03	387	09:38	0.0	1.6	8.3	0.0
Hissar	400	419	05:03	395	09:39	0.0	0.0	0.0	0.0
Moga	400	424	05:02	401	09:36	0.0	0.0	14.1	0.0
Abdullapur	400	425	03:01	396	14:48	0.0	0.0	17.4	0.0
Nalagarh	400	432	21:49	407	09:37	0.0	0.0	38.1	0.7
Kishenpur	400	419	05:03	390	11:11	0.0	0.0	0.0	0.0
Wagoora	400	398	05:03	359	20:23	52.2	79.2	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	782	20:01	732	09:38	0.0	18.0	0.0	0.0
Balia	765	785	20:50	730	14:50	0.0	6.8	0.0	0.0
Moga	765	779	20:35	738	10:18	0.0	0.0	0.0	0.0
Agra	765	796	05:02	749	08:39	0.0	0.0	0.0	0.0
Bhiwani	765	788	20:44	758	09:20	0.0	0.0	0.0	0.0
Unnao	765	771	05:05	726	14:50	0.7	22.7	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	498.67	1041.47	503.19	1232.31	128.39	393.12
Pong	426.72	384.05	406.21	379.44	412.77	588.94	56.21	381.99
Tehri	829.79	740.04	811.65	842.28	814.55	892.00	42.63	182.00
Koteshwar	612.50	598.50	610.22	4.95	609.48	3.76	182.00	190.00
Chamera-I	760.00	748.75	759.26	0.00	0.00	0.00	38.42	34.03
Rihand	268.22	252.98	852.10	289.60	856.10	357.20	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	507.19	1.53	512.05	2.72	41.62	73.11

*** 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	61	0	-438	1	0	-11.11	0.61	-10.50
Delhi	-902	-31	-31	-546	900	-15	-14.04	11.52	-2.52
Haryana	-892	145	0	-892	63	0	-22.32	2.19	-20.13
HP	475	-46	0	514	-44	0	12.12	-2.68	9.44
J&K	599	67	0	424	52	0	11.54	3.11	14.65
CHD	-31	10	0	0	0	0	-0.25	0.23	-0.02
Rajasthan	847	546	2	847	52	2	24.03	14.51	38.53
UP	73	0	0	122	0	0	1.00	0.00	1.00
Uttarakhand	213	322	28	213	497	39	5.07	9.61	14.68
Total	**-36**	**1075**	**-1**	**244**	**1522**	**26**	**6.03**	**39.10**	**45.14**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-418	-513	174	0	0	0
Delhi	-246	-902	1002	-31	0	-31
Haryana	-630	-1042	146	40	0	0
HP	589	426	10	-487	0	0
J&K	599	424	237	-23	0	0
CHD	0	-31	59	0	0	0
Rajasthan	1202	847	1366	-351	2	0
UP	143	-129	0	0	0	0
Uttarakhand	213	194	529	2	49	19

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 26.12.2014 :

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 : 26.12.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**