पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 31.03.2014
Date of Reporting : 01.04.2014

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
31972	2453	34425	50.08	28231	30	28261	50.11	741.0	24.37

* 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	40.08	8.95		49.03	42.70	43.18	0.47	92.20	0.00
Haryana	34.96	0.49		35.44	61.43	59.17	-2.26	94.62	0.00
Rajasthan	92.63	0.62	6.30	99.54	65.34	66.77	1.43	166.32	0.00
Delhi	16.00			16.00	48.08	44.83	-3.25	60.83	0.02
UP	111.85	1.77	14.40	128.03	109.59	108.05	-1.54	236.08	22.65
Uttarakhand		9.23		9.23	21.20	21.68	0.47	30.91	0.00
HP		10.27		10.27	13.20	13.09	-0.10	23.37	0.00
J & K		11.88	0.00	11.88	24.72	21.48	-3.24	33.36	1.70
Chandigarh				0.00	3.33	3.32	-0.01	3.32	0.00
Total	**295.51**	**43.21**	**20.70**	**359.42**	**389.61**	**381.57**	**-8.04**	**740.99**	**24.37**

*** 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				Day Energy MU
	Demand Met	Shortage	UI	STOA/PX transactio	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction
Punjab	4304	0	-144	-413	3175	0	55	-313	-10.00
Haryana	4645	0	-339	64	3101	0	-66	150	-2.10
Rajasthan	6407	0	-209	913	6221	0	48	935	24.01
Delhi	3069	0	56	-730	1715	0	-299	-1099	-20.29
UP	9340	2353	83	863	10762	30	143	638	14.66
Uttarakhand	1537	0	223	344	1121	0	42	338	9.05
HP	892	0	-89	-159	755	0	25	-70	-1.17
J&K	1606	100	20	110	1298	0	-134	235	4.10
Chandigarh	173	0	-15	0	83	0	-15	0	0.00
Total	**31972**	**2453**	**-415**	**991**	**28231**	**30**	**-202**	**815**	**18.26**

* STOA figures are at sellers boundary & PX figures are at regional boundary.

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	2000	1925	2050	1949	45.88	1912	45.47	0.41
	Rihand I STPS	1000	945	730	851	20.16	840	20.04	0.12
	Rihand II STPS	1000	975	718	1045	21.26	886	20.83	0.43
	Rihand III STPS	1000	858	718	762	17.53	730	17.47	0.05
	Dadri I STPS	840	815	661	586	14.71	613	15.24	-0.53
	Dadri II STPS	980	980	786	754	17.09	712	17.76	-0.67
	Unchahar I TPS	420	408	386	421	8.05	335	8.12	-0.08
	Unchahar II TPS	420	369	329	186	6.49	270	6.55	-0.06
	Unchahar III TPS	210	51	0	154	0.82	34	0.93	-0.10
	ISTPP (Jhajjhar)	1500	1500	310	340	7.54	314	7.77	-0.23
	Dadri GPS	830	818	385	390	9.05	377	9.07	-0.02
	Anta GPS	419	269	195	194	4.75	198	4.34	0.41
	Auraiya GPS	663	652	154	160	3.62	151	3.64	-0.02
	Sub Total (A)	**11282**	**10565**	**7422**	**7792**	**176.94**	**7373**	**177.24**	**-0.30**
B. NPC	NAPS	440	285	325	335	6.97	290	6.00	0.97
	RAPS- B	440	410	455	459	9.86	411	9.84	0.02
	RAPS- C	440	430	472	476	10.13	422	10.32	-0.19
	Sub Total (B)	**1320**	**1125**	**1252**	**1270**	**26.97**	**1124**	**26.16**	**0.81**
C. NHPC	Chamera I HPS	540	540	540	0	8.05	336	8.00	0.05
	Chamera II HPS	300	246	201	0	3.37	141	3.30	0.07
	Chamera III HPS	231	231	223	0	1.79	74	1.78	0.01
	Bairasuil HPS	180	122	122	122	2.97	124	2.93	0.04
	Salal-HPS	690	434	413	452	10.66	444	10.43	0.24
	Tanakpur-HPS	94	19	18	21	0.46	19	0.46	0.00
	Uri-HPS	480	475	478	477	11.55	481	11.40	0.15
	Uri-II HPS	240	180	180	189	4.43	184	4.32	0.11
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	406	0	4.28	178	4.20	0.08
	Sewa-II HPS	120	122	127	127	3.01	125	2.93	0.08
	Parbati 3	260	129	0	0	0.00	0	0.39	-0.39
	Sub Total (C)	**3805**	**2885**	**2708**	**1388**	**51**	**2107**	**50**	**0**
D.NJPC	Nathpa Jhakri	1500	1605	554	153	9.10	379	8.96	0.15
	Sub Total (D)	1500	1605	554	153	9.10	379	8.96	0.15
E. THDC	Tehri HPS	1000	585	463	0	7.03	293	7.00	0.03
	Koteshwar HPS	400	138	400	91	3.14	131	3.10	0.04
	Sub Total (E)	**1400**	**723**	**863**	**91**	**10.17**	**424**	**10.10**	**0.07**
F. BBMB	Bhakra HPS	1497	445	1045	383	10.78	449	10.68	0.10
	Dehar HPS	990	337	495	280	8.46	353	8.09	0.37
	Pong HPS	396	193	306	120	4.70	196	4.48	0.22
	Sub Total (F)	**2883**	**975**	**1846**	**783**	**23.94**	**998**	**23.25**	**0.69**
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.35	15	0.34	0.01
	KWHEP HPS(IPP)	1000	0	145	0	4.51	188	4.50	0.00
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	300	0	256	226	6.09	254	6.17	-0.08
	Budhil HPS(IPP)	70	0	35	0	0.03	1	0.34	-0.31
	Sub Total (G)	1662	0	436	226	10.98	457	11.36	-0.38
H. Total Regional Entities (A-G)		**23852**	**17877**	**15081**	**11703**	**308.66**	**12861**	**307.19**	**1.47**

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)	1260	810	810	18.88	787
	Guru Nanak Dev TPS(Bhatinda)	440	90	90	1.90	79
	Guru Hargobind Singh TPS(L.mbt)	920	521	514	12.56	523
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	700	277	279	6.74	281
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	3980	1698	1693	40.08	1670
	Total Hydro	1148	590	417	8.95	373
	Total Punjab	**5128**	**2288**	**2110**	**49.03**	**2043**
Haryana	Panipat TPS	1367	220	213	5.16	215
	DCRTPP (Yamuna nagar)	600	530	512	12.13	505
	Faridabad GPS (NTPC)	432	359	279	7.69	320
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	535	375	9.97	415
	Thermal (Total)	4944	1644	1379	34.96	1456
	Total Hydro	62	22	21	0.49	20
	Total Haryana	**5006**	**1666**	**1400**	**35.44**	**1477**
Rajasthan	kota TPS	1240	1111	1071	26.83	1118
	suratgarh TPS	1500	1053	1073	24.76	1031
	Chabra TPS	750	369	367	8.84	368
	Dholpur GPS	330	54	0	0.48	20
	Ramgarh GPS	221	117	117	3.08	128
	RAPS A (NPC)	300	175	175	4.10	171
	Barsingsar (NLC)	250	174	155	3.75	156
	Giral LTPS	250	77	49	1.36	56
	Rajwest LTPS (IPP)	1080	218	193	4.74	198
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	1320	634	617	14.70	612
	Thermal (Total)	7976	3982	3817	92.63	3859
	Total Hydro	550	22	22	0.62	26
	Wind power	2191	35	370	5.08	212
	Biomass	91	25	25	0.61	25
	Solar	201	6	0	0.61	26
	Renewable/Others (Total)	2483	60	395	6.30	262
	Total Rajasthan	**11009**	**4064**	**4234**	**99.54**	**4148**
UP	Anpara TPS	1630	1457	1463	34.80	1450
	Obra TPS	1288	337	291	7.50	313
	Paricha TPS	1140	615	759	15.90	663
	Panki TPS	210	0	86	1.00	42
	Harduaganj TPS	665	346	392	7.80	325
	Tanda TPS (NTPC)	440	299	307	8.33	347
	Roza TPS (IPP)	1200	756	756	19.46	811
	Anpara-C (IPP)	1200	340	540	10.67	445
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	280	280	6.39	266
	Thermal (Total)	8223	4430	4874	111.85	4661
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	44	98	1.77	74
	Cogeneration	981	600	600	14.40	600
	Total UP	**10131**	**5074**	**5572**	**128.03**	**5335**
Uttarakhand	Total Hydro	1303	368	329	9.23	385
	Total Uttarakhand	**1303**	**368**	**329**	**9.23**	**385**
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	78	80	1.87	78
	Pragati Gas Turbine	330	287	259	6.67	278
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	0	0	0.00	0
	Badarpur TPS (NTPC)	705	370	345	7.45	311
	Thermal (Total)	2917	735	684	16.00	667
	Total Delhi	**2917**	**735**	**684**	**16.00**	**667**
HP	Baspa HPS (IPP)	330	33	0	0.87	36
	Malana HPS (IPP)	86	11	0	0.38	16
	Other Hydro	589	363	341	9.03	376
	Total HP	**1005**	**407**	**341**	**10.27**	**428**
J & K	Baglihar HPS (IPP)	450	440	378	9.58	399
	Other Hydro	397	73	132	2.30	96
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1056**	**513**	**510**	**11.88**	495
Total State Control Area Generation		**37555**	**15115**	**15180**	**359.42**	**14976**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**3016**	**2274**	**86.00**	**3583**
Total Regional Availability(Gross)		**61407**	**33212**	**29157**	**754.07**	**31420**

IV. Total Hydro Generation:

Regional Entities Hydro	**10880**	**6116**	**2415**	**98.63**	**4110**
State Control Area Hydro	**5442**	**1966**	**1738**	**43.21**	**1801**
Total Regional Hydro	**16322**	**8082**	**4153**	**141.84**	**5910**

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	200	-150	500	250	4.35	0.56	3.79
Gwalior-Agra (D/C)	1359	1060	1803	0	32.96	0.00	32.96
Zerda-Kankroli	-212	-436	0	454	0.00	6.57	-6.57
Zerda-Bhinmal	-127	-366	0	399	0.00	4.15	-4.15
Malanpur-Auraiya	-70	-74	0	82	0.00	1.56	-1.56
Badod-Kota/Morak	-146	-91	12	153	0.00	1.71	-1.71
Mundra-Mohindergarh(HVDC)	1999	1999	2005	0	48.34	0.00	48.34
Sub Total WR	**3003**	**1942**			**85.65**	**14.56**	**71.09**
Pusauli Bypass	100	300	300	0	7.21	0.00	7.21
MZP- GKP (D/C)	4	97	181	0	2.26	0.00	2.26
Patna-Balia(D/C)	112	176	323	0	4.91	0.00	4.91
B'Sharif-Balia (D/C)	31	76	245	0	2.38	0.00	2.38
Pusauli-Balia	-109	-72	0	116	0.00	1.82	-1.82
Gaya-Fatehpur (765 Kv)	-140	-181	46	196	0.00	1.94	-1.94
Pusauli-Sahupuri	140	183	193	0	4.09	0.00	4.09
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-28	-25	0	32	0.00	0.60	-0.60
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-97	-222	67	222	0.00	1.59	-1.59
Sub Total ER	**13**	**332**			**20.85**	**5.95**	**14.90**
Total IR Exch	**3016**	**2274**			**106.50**	**20.51**	**86.00**

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
27.80	0.18	27.98	1.96	6.74	0.99	-0.63	0.00	0.00

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
30.93	67.66	98.59	14.90	71.09	86.00	-16.03	3.43	-12.59

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	>50.50
0.00	0.06	1.17	12.32	38.71	62.61	16.95	8.12	1.72	0.00

<---------- 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)
50.32	13.02	49.69	21.07	49.99	0.07	0.08	50.32	49.89

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	408	16:02	400	05:41	0.0	0.0	0.0	0.0
Gorakhpur	400	444	13:06	414	00:04	0.0	0.0	90.4	29.8
Bareilly	400	428	13:02	382	13:58	0.0	0.1	4.6	0.0
Kanpur	400	421	13:00	401	05:51	0.0	0.0	0.4	0.0
Dadri	400	423	01:58	405	19:22	0.0	0.0	12.8	0.0
Ballabhgarh	400	430	02:51	410	19:22	0.0	0.0	48.1	0.0
Bawana	400	429	01:58	407	19:23	0.0	0.0	30.3	0.0
Bassi	400	427	03:57	402	06:38	0.0	0.0	30.0	0.0
Hissar	400	420	13:01	398	19:20	0.0	0.0	0.0	0.0
Moga	400	421	13:05	400	19:17	0.0	0.0	0.0	0.0
Abdullapur	400	427	01:58	401	19:38	0.0	0.0	20.9	0.0
Nalagarh	400	428	00:00	403	19:16	0.0	0.0	22.7	0.0
Kishenpur	400	420	03:02	397	19:21	0.0	0.0	0.0	0.0
Wagoora	400	403	13:02	364	20:18	15.8	48.5	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	772	16:01	732	19:36	0.0	6.6	0.0	0.0
Balia	765	788	13:12	742	22:35	0.0	0.0	0.0	0.0
Moga	765	799	13:01	759	19:21	0.0	0.0	0.0	0.0
Agra	765	817	13:02	712	19:56	0.0	0.0	6.4	0.0
Bhiwani	765	811	13:01	770	19:20	0.0	0.0	22.0	0.0
Unnao	765	777	13:02	723	06:28	0.6	15.0	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	482.30	511.55	480.90	481.64	284.78	341.33
Pong	426.72	384.05	402.12	266.33	400.18	223.85	135.41	326.41
Tehri	829.79	740.04	777.50	285.56	818.65	982.26	70.70	196.00
Koteshwar	612.50	598.50	610.92	4.95	612.40	5.73	196.00	208.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	81.53	107.03
Rihand	268.22	252.98	259.45	274.80	258.99	250.70	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	508.60	144.00	508.99	144.00	105.85	120.77

*** NA: Not Available**

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 31.03.2014 :

Normal

XIII. Synchronisation of new generating units :

0.00

XIV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :

1. After LILO of Bassi -Bhiwadi -2 at kotputli ,its Bassi-Kotputli section charged at 23:42 hrs on 31.03.2013 and Bhiwadi-Kotputli section charged at 23:44 hrs on 31.03.2014.

2. 315MVA ICT-1 charged at Kotputli at 23:46 hrs /31.03.2014 and ICT-2 charged at 23:49hrs/31.03.2014 from 400kV side.

3.765kV Lucknow -Barailly(New line) charged on 400kV at 23:50 hrs/31.03.2014 .

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :

Vishnuprayag (400MW) and Dhauliganga (280MW) are out of operation since 16.06.2013.

Civil construction is in progress for rectification of the major damages in Plants/Dam caused due to flood Vishnuprayag and Dhauliganga expected by April, 2014 .

Report for : 31.03.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**