पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 25.04.2014
Date of Reporting : 26.04.2014

I. Regional Availability/Demand:

Evening Peak (20:00 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
36446	3436	39882	49.93	32776	1520	34296	49.99	800.6	53.85

* 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	42.87	6.80		49.67	60.14	60.31	0.18	109.98	0.19
Haryana	54.90	0.59		55.48	50.02	50.42	0.40	105.90	1.74
Rajasthan	105.15	0.06	0.49	105.70	50.50	51.91	1.41	157.61	0.70
Delhi	17.22			17.22	63.46	63.63	0.17	80.85	0.32
UP	131.94	5.89	7.20	145.03	103.71	108.57	4.85	253.60	48.60
Uttarakhand		9.52		9.52	22.56	23.70	1.14	33.22	0.60
HP		12.53		12.53	12.13	12.13	0.01	24.67	0.00
J & K		13.65	0.00	13.65	19.83	16.99	-2.84	30.63	1.70
Chandigarh				0.00	3.33	4.16	0.83	4.16	0.00
Total	**352.07**	**49.04**	**7.69**	**408.80**	**385.67**	**391.81**	**6.14**	**800.61**	**53.85**

*** 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 (20:00 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	5107	0	-97	338	4889	0	64	533	2.44
Haryana	5332	511	90	314	4597	0	2	-246	-1.90
Rajasthan	7038	0	-68	195	6062	0	-8	-124	0.76
Delhi	3813	0	-24	36	2748	0	-76	-493	-4.24
UP	10897	2665	217	634	11135	1520	361	1261	19.28
Uttarakhand	1577	160	106	426	1290	0	69	418	10.80
HP	1054	0	-138	-393	839	0	-8	-113	-4.02
J&K	1420	100	-137	-229	1098	0	-189	-230	-5.53
Chandigarh	208	0	16	0	119	0	-22	0	0.00
Total	**36446**	**3436**	**-35**	**1320**	**32776**	**1520**	**192**	**1006**	**17.58**

* 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	1582	1640	1871	38.28	1595	37.93	0.35
	Rihand I STPS	1000	850	946	936	20.90	871	20.32	0.58
	Rihand II STPS	1000	950	1038	1036	23.21	967	22.75	0.47
	Rihand III STPS	1000	867	947	926	20.99	874	20.70	0.28
	Dadri I STPS	840	813	878	871	18.88	787	19.37	-0.49
	Dadri II STPS	980	473	473	480	10.84	452	11.13	-0.29
	Unchahar I TPS	420	408	425	428	9.41	392	9.73	-0.32
	Unchahar II TPS	420	204	205	195	4.42	184	4.80	-0.38
	Unchahar III TPS	210	204	212	204	4.51	188	4.80	-0.29
	ISTPP (Jhajjhar)	1500	1000	324	514	9.98	416	10.22	-0.24
	Dadri GPS	830	805	178	178	4.10	171	4.40	-0.30
	Anta GPS	419	389	248	249	5.64	235	5.59	0.05
	Auraiya GPS	663	645	153	133	3.44	143	3.50	-0.06
	Dadri Solar	5		0	0	0.00	0		0.00
	Unchahar Solar	10		0	0	0.00	0		0.00
	Sub Total (A)	**11297**	**9190**	**7667**	**8021**	**175**	**7275**	**175**	**-1**
B. NPC	NAPS	440	148	173	170	3.50	146	3.55	-0.05
	RAPS- B	440	410	451	443	9.69	404	9.84	-0.15
	RAPS- C	440	420	463	460	9.86	411	10.08	-0.22
	Sub Total (B)	**1320**	**978**	**1087**	**1073**	**23.05**	**961**	**23.47**	**-0.42**
C. NHPC	Chamera I HPS	540	537	180	540	7.63	318	7.50	0.13
	Chamera II HPS	300	300	0	303	4.63	193	4.50	0.13
	Chamera III HPS	231	231	0	227	2.89	120	2.80	0.09
	Bairasuil HPS	180	122	122	122	2.87	120	2.85	0.02
	Salal-HPS	690	428	409	460	10.47	436	10.27	0.20
	Tanakpur-HPS	94	22	25	21	0.57	24	0.54	0.03
	Uri-HPS	480	475	473	477	11.52	480	11.40	0.12
	Uri-II HPS	240	165	191	195	4.13	172	3.96	0.17
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	0	412	5.91	246	5.50	0.41
	Sewa-II HPS	120	122	130	130	3.09	129	2.93	0.16
	Parbati 3	390	260	0	129	1.33	55	1.25	0.08
	Sub Total ©	**3935**	**3049**	**1530**	**3016**	**55**	**2292**	**53**	**2**
D.SJVNL	NJPC	1500	1605	377	1204	13.15	548	12.81	0.34
	Rampur HEP	206		0	0	0.00	0		0.00
	Sub Total (D)	1706	1605	377	1204	13.15	548	12.81	0.34
E. THDC	Tehri HPS	1000	495	161	501	7.43	310	7.30	0.13
	Koteshwar HPS	400	150	0	302	3.60	150	3.60	0.00
	Sub Total (E)	**1400**	**645**	**161**	**803**	**11.03**	**460**	**10.90**	**0.13**
F. BBMB	Bhakra HPS	1514	283	279	467	7.43	310	6.78	0.65
	Dehar HPS	990	381	495	495	10.10	421	9.14	0.96
	Pong HPS	396	23	0	184	0.64	27	0.54	0.10
	Sub Total (F)	**2900**	**686**	**774**	**1146**	**18.17**	**757**	**16.46**	**1.71**
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	65	174	0.85	36	0.79	0.07
	KWHEP HPS(IPP)	1000	0	150	853	6.75	281	6.46	0.30
	Malana Stg-II HPS	100	0	0	111	0.51	21	0.48	0.03
	Shree Cement TPS	300	0	282	285	6.93	289	6.89	0.04
	Budhil HPS(IPP)	70	0	12	15	0.69	29	0.64	0.05
	Sub Total (G)	1662	0	509	1438	15.73	655	15.25	0.48
H. Total Regional Entities (A-G)		**24221**	**16153**	**12105**	**16701**	**310.75**	**12948**	**307.62**	**3.13**

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	560	900	16.79	700
	Guru Nanak Dev TPS(Bhatinda)	440	90	90	2.13	89
	Guru Hargobind Singh TPS(L.mbt)	920	306	381	8.39	349
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	700	657	660	15.55	648
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	**3980**	**1613**	**2031**	**43**	**1786**
	Total Hydro	1148	258	219	6.80	283
	Total Punjab	**5128**	**1871**	**2250**	**49.67**	**2070**
Haryana	Panipat TPS	1367	408	624	11.92	497
	DCRTPP (Yamuna nagar)	600	556	571	12.80	533
	Faridabad GPS (NTPC)	432	178	173	4.17	174
	RGTPP (khedar) (IPP)	1200	594	595	12.90	538
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	619	611	13.11	546
	Thermal (Total)	4944	2355	2574	55	2287
	Total Hydro	62	23	24	0.59	25
	Total Haryana	**5006**	**2378**	**2598**	**55.48**	**2312**
Rajasthan	kota TPS	1240	1161	995	26.21	1092
	suratgarh TPS	1500	1087	1076	25.77	1074
	Chabra TPS	750	374	389	10.23	426
	Dholpur GPS	330	132	130	3.24	135
	Ramgarh GPS	221	73	70	1.69	71
	RAPS A (NPC)	300	0	0	0.00	0
	Barsingsar (NLC)	250	0	0	0.00	0
	Giral LTPS	250	71	71	1.61	67
	Rajwest LTPS (IPP)	1080	767	929	21.30	888
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	1320	600	620	15.09	629
	Thermal (Total)	7976	4265	4280	105	4381
	Total Hydro	550	0	23	0.06	3
	Wind power	2191	286	80	4.11	171
	Biomass	91	25	25	0.61	25
	Solar	201	0	0	0.21	9
	Renewable/Others (Total)	2483	311	105	0.49	20
	Total Rajasthan	**11009**	**4576**	**4408**	**105.70**	**4404**
UP	Anpara TPS	1630	1516	1561	32.90	1371
	Obra TPS	1288	417	240	8.20	342
	Paricha TPS	1140	885	865	18.80	783
	Panki TPS	210	80	85	1.80	75
	Harduaganj TPS	665	380	379	8.20	342
	Tanda TPS (NTPC)	440	280	272	6.88	287
	Roza TPS (IPP)	1200	1134	1134	27.00	1125
	Anpara-C (IPP)	1200	874	886	18.86	786
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	401	401	9.30	388
	Thermal (Total)	8223	5967	5823	132	5498
	Vishnuparyag HPS (IPP)	400	108	108	2.44	102
	Other Hydro	527	152	152	3.45	144
	Cogeneration	981	300	300	7.20	300
	Total UP	**10131**	**6527**	**6383**	**145.03**	**5941**
Uttarakhand	Total Hydro	1303	336	464	9.52	397
	Total Uttarakhand	**1303**	**336**	**464**	**9.52**	**397**
Delhi	Rajghat TPS	135	107	108	2.54	106
	Delhi Gas Turbine	282	152	144	3.51	146
	Pragati Gas Turbine	330	99	93	2.27	95
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	0	0	0.00	0
	Badarpur TPS (NTPC)	705	267	365	8.89	371
	Thermal (Total)	2917	625	710	17.22	717
	Total Delhi	**2917**	**625**	**710**	**17.22**	**717**
HP	Baspa HPS (IPP)	300	0	76	1.24	52
	Malana HPS (IPP)	86	22	86	0.59	24
	Other Hydro	728	436	486	10.71	446
	Total HP	**1114**	**458**	**648**	**12.53**	**522**
J & K	Baglihar HPS (IPP)	450	436	440	10.51	438
	Other Hydro/IPP	436	132	128	3.14	131
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**568**	**568**	**13.65**	569
Total State Control Area Generation		**37702**	**17339**	**18029**	**408.80**	**16932**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4315**	**4581**	**93.73**	**3906**
Total Regional Availability(Gross)		**61923**	**33759**	**39311**	**813.28**	**33785**

IV. Total Hydro Generation:

Regional Entities Hydro	**11233**	**3057**	**7307**	**105.49**	**4395**
State Control Area Hydro	**5589**	**1795**	**2098**	**49.04**	**1942**
Total Regional Hydro	**16823**	**4852**	**9405**	**154.52**	**6337**

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy
	MW	MW	Import	Export	Import	Export	MU
Vindhychal B/B	200	400	500	0	7.61	0.00	7.61
Gwalior-Agra (D/C)	1526	1876	1964	0	37.02	0.00	37.02
Zerda-Kankroli	-219	-224	0	351	0.00	6.27	-6.27
Zerda-Bhinmal	-160	-167	0	287	0.00	4.60	-4.60
Malanpur-Auraiya	149	-15	0	50	0.00	0.91	-0.91
Badod-Kota/Morak	-82	-185	0	215	0.00	3.00	-3.00
Mundra-Mohindergarh(HVDC)	2002	1999	2004	0	48.33	0.00	48.33
Sub Total WR	**3416**	**3684**			**92.97**	**14.78**	**78.19**
Pusauli Bypass	400	400	400	0	9.56	0.00	9.56
MZP- GKP (D/C)	156	220	240	180	1.59	0.00	1.59
Patna-Balia(D/C)	447	478	555	0	9.30	0.00	9.30
B'Sharif-Balia (D/C)	89	85	162	41	0.63	0.00	0.63
Pusauli-Balia	-142	-126	0	164	0.00	3.18	-3.18
Gaya-Fatehpur (765 Kv)	-43	-81	37	124	0.00	1.27	-1.27
Pusauli-Sahupuri	0	0	0	0	0.00	0.00	0.00
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	0	0	0	0	0.00	0.00	0.00
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-8	-79	56	113	0.00	1.08	-1.08
Sub Total ER	**899**	**897**			**21.08**	**5.53**	**15.54**
Total IR Exch	**4315**	**4581**			**114.04**	**20.31**	**93.73**

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
37.30	0.18	37.48	3.45	0.87	-10.18	10.71	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
30.75	62.71	93.46	15.54	78.19	93.73	-15.21	15.48	0.27

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	>50.50
0.00	1.28	14.81	46.30	80.15	46.32	5.36	2.02	0.03	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)
50.19	18.01	49.62	19.37	49.91	0.18	0.10	50.13	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	403	10:36	397	04:32	0.0	0.0	0.0	0.0
Gorakhpur	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Bareilly	400	416	08:03	397	19:13	0.0	0.0	0.0	0.0
Kanpur	400	415	08:03	401	19:10	0.0	0.0	0.0	0.0
Dadri	400	416	08:02	400	19:11	0.0	0.0	0.0	0.0
Ballabhgarh	400	425	07:31	407	19:33	0.0	0.0	28.3	0.0
Bawana	400	422	08:02	402	19:15	10.9	10.9	1.8	0.0
Bassi	400	426	04:17	404	11:17	0.0	0.0	20.8	0.0
Hissar	400	413	08:02	393	19:35	0.0	0.0	0.0	0.0
Moga	400	413	00:50	393	19:33	0.0	0.0	0.0	0.0
Abdullapur	400	423	08:03	404	19:10	0.0	0.0	2.2	0.0
Nalagarh	400	419	00:52	401	19:38	0.0	0.0	0.0	0.0
Kishenpur	400	419	02:23	395	19:31	0.0	0.0	0.0	0.0
Wagoora	400	410	02:24	384	19:32	0.0	4.9	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	773	13:01	739	19:33	0.0	2.1	0.0	0.0
Balia	765	783	13:00	745	19:38	0.0	0.0	0.0	0.0
Moga	765	786	00:52	749	19:33	0.0	0.0	0.0	0.0
Agra	765	798	13:02	740	19:25	0.0	0.1	0.0	0.0
Bhiwani	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Unnao	765	759	13:04	733	19:35	0.0	24.5	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	483.12	536.06	479.80	454.47	363.73	240.04
Pong	426.72	384.05	402.48	273.51	400.36	230.85	69.09	42.76
Tehri	829.79	740.04	761.65	134.00	0.00	0.00	82.39	228.00
Koteshwar	612.50	598.50	611.27	5.20	0.00	0.00	228.00	239.00
Chamera-I	760.00	748.75	754.72	0.00	0.00	0.00	228.91	754.37
Rihand	268.22	252.98	0.00	0.00	0.00	0.00	0.00	0.00
RPS	352.80	343.81	347.96	0.00	0.00	0.00	0.00	0.00
Jawahar Sagar	298.70	295.78	298.80	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	516.55	0.00	507.32	0.00	222.71	179.13

*** NA: Not Available**

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 25.04.2014 :
Normal

XIII. Synchronisation of new generating units :
0.00

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

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :
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
Dhauliganga expected by April, 2014 .

Report for : 25.04.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**