पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 18.04.2013
Date of Reporting : 19.04.2013

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
32379	2726	35104	50.06	29195	2326	31521	50.10	722.5	66.12

* 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	48.88	5.86		54.74	46.53	47.25	0.72	101.99	0.84
Haryana	50.37	0.62		51.00	45.15	44.16	-0.99	95.15	1.22
Rajasthan	85.67	0.00	4.00	89.67	52.22	50.41	-1.80	140.08	1.69
Delhi	24.50			24.50	57.86	54.11	-3.75	78.62	0.03
UP	112.49	5.23	16.80	134.52	80.67	81.52	0.86	216.05	60.01
Uttarakhand		12.53		12.53	19.00	19.77	0.77	32.30	0.64
HP		11.00		11.00	12.51	13.72	1.21	24.72	0.00
J & K		11.98	0.00	11.98	19.72	17.42	-2.29	29.40	1.70
Chandigarh				0.00	4.40	4.17	-0.24	4.17	0.00
Total	**321.92**	**47.22**	**20.80**	**389.94**	**338.05**	**332.53**	**-5.52**	**722.47**	**66.12**

*** 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	4753	85	110	67	4349	0	-59	489	5.92
Haryana	4934	411	113	90	3864	0	-37	-331	-5.33
Rajasthan	5855	0	-327	622	5675	168	20	188	8.09
Delhi	3629	0	-280	-306	2680	0	-165	-840	-13.23
UP	8877	2050	-120	-24	9354	2158	-113	788	6.32
Uttarakhand	1537	80	42	471	1189	0	25	483	10.72
HP	1112	0	-23	-512	860	0	98	3	-3.41
J&K	1479	100	-112	-101	1092	0	-21	-116	-2.15
Chandigarh	203	0	-14	-16	132	0	-14	15	0.54
Total	**32379**	**2726**	**-611**	**291**	**29195**	**2326**	**-267**	**679**	**7.47**

* 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	1250	1368	1369	30.38	1266	30.00	0.38
	Rihand I STPS	1000	925	1003	1007	22.10	921	22.07	0.04
	Rihand II STPS	1000	913	1041	1031	21.52	897	21.78	-0.26
	Rihand III STPS	500	-14	0	0	0.00	0	-0.34	0.34
	Dadri I STPS	840	807	842	795	18.73	780	19.30	-0.57
	Dadri II STPS	980	969	1005	833	21.77	907	23.19	-1.42
	Unchahar I TPS	420	405	440	440	9.57	399	9.66	-0.09
	Unchahar II TPS	420	400	438	440	9.46	394	9.47	-0.01
	Unchahar III TPS	210	0	0	0	0.00	0	0.00	0.00
	ISTPP (Jhajjhar)	1500	995	500	324	8.90	371	9.08	-0.19
	Dadri GPS	830	795	359	402	9.11	379	9.74	-0.63
	Anta GPS	419	389	243	250	6.00	250	6.10	-0.11
	Auraiya GPS	663	625	304	315	7.24	301	7.39	-0.16
	Sub Total (A)	**10782**	**8458**	**7543**	**7206**	**164.76**	**6865**	**167.45**	**-2.68**
B. NPC	NAPS	440	254	319	323	6.64	277	6.11	0.53
	RAPS- B	440	415	461	461	9.95	414	9.96	-0.01
	RAPS- C	440	430	469	470	10.10	421	10.32	-0.22
	Sub Total (B)	**1320**	**1099**	**1249**	**1254**	**26.69**	**1112**	**26.39**	**0.30**
C. NHPC	Chamera I HPS	540	550	540	0	5.88	245	5.80	0.07
	Chamera II HPS	300	310	305	26	3.64	152	3.66	-0.02
	Chamera III HPS	231	231	226	0	2.34	98	2.35	-0.01
	Bairasuil HPS	180	182	182	30	2.14	89	2.21	-0.07
	Salal-HPS	690	410	460	415	9.70	404	9.67	0.03
	Tanakpur-HPS	94	31	47	23	0.74	31	0.72	0.01
	Uri-HPS	480	479	480	480	11.64	485	11.62	0.02
	Dhauliganga-HPS	280	280	278	0	1.70	71	1.71	-0.01
	Dulhasti-HPS	390	387	401	16	5.72	238	5.95	-0.23
	Sewa-II HPS	120	119	121	89	2.70	113	2.68	0.03
	Sub Total (C)	**3305**	**2978**	**3040**	**1079**	**46.19**	**1925**	**46.37**	-0.18
D.NJPC	Nathpa Jhakri	1500	1605	1353	0	14.70	612	15.10	-0.40
	Sub Total (D)	1500	1605	1353	0	14.70	612	15.10	-0.40
E. THDC	Tehri HPS	1000	340	341	0	6.58	274	6.50	0.08
	Koteshwar HPS	400	255	257	0	3.03	126	3.00	0.02
	Sub Total (E)	**1400**	**595**	**598**	**0**	**9.61**	**400**	**9.50**	0.11
F. BBMB	Bhakra HPS	1480	285	301	294	6.94	289	6.84	0.10
	Dehar HPS	990	341	825	290	8.39	350	8.19	0.20
	Pong HPS	396	10	120	0	0.31	13	0.25	0.06
	Sub Total (F)	**2866**	**637**	**1246**	**584**	**15.64**	**652**	**15.28**	0.36
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	5	3	0.86	36	0.83	0.04
	KWHEP HPS(IPP)	1000	0	695	0	8.48	353	8.65	-0.17
	Malana Stg-II HPS	100	0	50	0	0.50	21	0.44	0.06
	Shree Cement TPS	300	0	235	243	5.95	248	6.36	-0.41
	Budhil HPS(IPP)	70	0	0	70	0.52	22	0.51	0.01
	Sub Total (G)	1662	0	985	316	16.31	680	16.79	-0.47
H. Total Regional Entities (A-G)		**22836**	**15372**	**16014**	**10439**	**293.89**	**12246**	**296.87**	**-2.98**

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	1050	943	22.77	949
	Guru Nanak Dev TPS(Bhatinda)	440	216	336	5.39	225
	Guru Hargobind Singh TPS(L.mbt)	920	961	960	20.72	863
	Thermal (Total)	2620	2227	2239	48.88	2037
	Total Hydro	1148	254	224	5.86	244
	Total Punjab	**3768**	**2481**	**2463**	**54.74**	**2281**
Haryana	Panipat TPS	1367	915	967	23.78	991
	DCRTPP (Yamuna nagar)	600	560	564	13.23	551
	Faridabad GPS (NTPC)	432	182	120	4.06	169
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	502	372	9.30	388
	Thermal (Total)	4944	2159	2023	50.37	2099
	Total Hydro	62	24	24	0.62	26
	Total Haryana	**5006**	**2183**	**2047**	**51.00**	**2125**
Rajasthan	kota TPS	1240	1088	1102	27.10	1129
	suratgarh TPS	1500	944	1133	25.78	1074
	Chabra TPS	500	392	449	9.86	411
	Dholpur GPS	330	138	134	3.31	138
	Ramgarh GPS	111	67	69	1.71	71
	RAPS A (NPC)	300	0	0	0.00	0
	Barsingsar (NLC)	250	108	111	2.59	108
	Giral LTPS	250	63	67	1.65	69
	Rajwest LTPS (IPP)	1080	587	594	13.68	570
	VSLP LTPS (IPP)	135	0		0.00	0
	Thermal (Total)	5696	3387	3659	85.67	3570
	Total Hydro	550	0	0	0.00	0
	Wind power	2191	57	84	1.76	73
	Biomass	91	30	30	0.73	30
	Solar	201	0	0	1.50	63
	Renewable/Others (Total)	2483	87	114	4.00	167
	Total Rajasthan	**8729**	**3474**	**3773**	**89.67**	**3736**
UP	Anpara TPS	1630	1363	1381	28.90	1204
	Obra TPS	1382	423	460	8.80	367
	Paricha TPS	890	751	713	15.90	663
	Panki TPS	210	90	85	1.80	75
	Harduaganj TPS	665	279	262	6.00	250
	Tanda TPS (NTPC)	440	404	399	9.80	408
	Roza TPS (IPP)	1200	536	535	12.85	535
	Anpara-C (IPP)	1200	403	993	19.02	792
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	405	624	9.42	393
	Thermal (Total)	8067	4654	5452	112.49	4687
	Vishnuparyag HPS (IPP)	400	108	98	2.43	101
	Other Hydro	527	123	115	2.81	117
	Cogeneration	981	700	700	16.80	700
	Total UP	**9975**	**5585**	**6365**	**134.52**	**5504**
Uttarakhand	Total Hydro	1303	559	466	12.53	522
	Total Uttarakhand	**1303**	**559**	**466**	**12.53**	**522**
Delhi	Rajghat TPS	135	97	104	2.36	98
	Delhi Gas Turbine	282	149	151	3.62	151
	Pragati Gas Turbine	330	286	264	6.79	283
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	0	0	0.00	0
	Badarpur TPS (NTPC)	705	500	505	11.73	489
	Thermal (Total)	2237	1032	1024	24.50	1021
	Total Delhi	**2237**	**1032**	**1024**	**24.50**	**1021**
HP	Baspa HPS (IPP)	330	80	40	1.70	71
	Malana HPS (IPP)	86	47	6	0.53	22
	Other Hydro	589	357	382	8.77	366
	Total HP	**1005**	**484**	**428**	**11.00**	**458**
J & K	Baglihar HPS (IPP)	450	442	438	10.57	441
	Other Hydro	323	46	93	1.40	58
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**488**	**531**	**11.98**	499
Total State Control Area Generation		**32979**	**16286**	**17097**	**389.94**	**16146**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**2637**	**3141**	**56.64**	**2360**
Total Regional Availability(Gross)		**55815**	**34937**	**30677**	**740.47**	**30752**

IV. Total Hydro Generation:

Regional Entities Hydro	**10364**	**6987**	**1666**	**95.97**	**3999**
State Control Area Hydro	**5368**	**1932**	**1788**	**47.22**	**1866**
Total Regional Hydro	**15731**	**8919**	**3454**	**143.19**	**5865**

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	-100	150	150	200	1.58	1.47	0.11
Gwalior-Agra (D/C)	1099	975	1368	0	19.15	0.00	19.15
Zerda-Kankroli	-22	-99	0	266	0.00	3.32	-3.32
Zerda-Bhinmal	8	-32	82	192	0.00	1.78	-1.78
Malanpur-Auraiya	-102	-53	0	102	0.00	1.61	-1.61
Badod-Kota/Morak	-62	-77	0	194	0.00	0.86	-0.86
Mundra-Mohindergarh(HVDC)	1148	1145	1151	0	27.64	0.00	27.64
Sub Total WR	**1969**	**2009**			**48.37**	**9.03**	**39.33**
Pusauli Bypass	-100	150	100	150	2.71	0.58	2.12
MZP- GKP (D/C)	134	350	484	70	4.34	0.00	4.34
Patna-Balia(D/C)	426	367	469	0	8.87	0.00	8.87
B'Sharif-Balia (D/C)	159	230	305	0	2.96	0.00	2.96
Pusauli-Balia	-49	-187	0	203	0.00	3.15	-3.15
Gaya-Fatehpur (765 Kv)	0	164	190	85	1.14	0.99	0.15
Pusauli-Sahupuri	134	98	156	0	2.85	0.00	2.85
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	44	0.00	0.83	-0.83
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	**668**	**1132**			**22.86**	**5.55**	**17.31**
Total IR Exch	**2637**	**3141**			**71.22**	**14.58**	**56.64**

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
26.79	0.61	27.39	-4.57	-10.12	3.83	3.90	-4.88	4.93

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
21.77	32.20	53.97	17.31	39.33	56.64	-4.46	7.13	2.67

VI. Frequency Profile <---------- % of Time Frequency ---------->

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	0.00	4.32	99.26	94.95	47.30	0.74

<---------- Frequency (Hz) ---------->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz			(Hz)	(Hz)
50.40	17.06	49.69	21.20	50.00	0.12	0.08	50.30	49.80

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	417	23:28	405	18:11	0.0	0.0	0.0	0.0
Gorakhpur	400	427	17:07	408	09:53	0.0	0.0	53.6	0.0
Bareilly	400	421	18:00	405	06:00	0.0	0.0	0.0	0.0
Kanpur	400	422	13:09	404	05:29	0.0	0.0	1.4	0.0
Dadri	400	421	13:10	408	05:29	0.0	0.0	0.1	0.0
Ballabhgarh	400	427	13:12	413	05:32	0.0	0.0	45.8	0.0
Bawana	400	421	13:04	409	19:11	0.0	0.0	0.5	0.0
Bassi	400	430	18:31	412	05:32	0.0	0.0	58.8	0.0
Hissar	400	417	13:08	397	05:28	0.0	0.0	0.0	0.0
Moga	400	417	17:04	403	05:30	0.0	0.0	0.0	0.0
Abdullapur	400	421	17:04	407	19:12	0.0	0.0	0.8	0.0
Nalagarh	400	422	02:16	409	05:32	0.0	0.0	9.4	0.0
Kishenpur	400	417	01:59	400	19:38	35.2	35.2	0.0	0.0
Wagoora	400	411	00:50	386	19:27	0.0	8.4	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	768	13:12	719	17:45	0.0	0.0	100.0	100.0
Balia	765	770	21:58	728	09:41	0.0	0.0	100.0	100.0
Moga	765	777	02:17	756	05:29	0.0	0.0	100.0	100.0
Agra	765	781	18:02	745	05:42	0.0	0.0	0.0	0.0
Bhiwani	765	793	13:29	762	05:40	0.0	0.0	0.0	0.0
Unnao	765	758	18:17	730	05:42	0.0	37.1	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	476.82	434.29	474.54	345.61	353.28	221.01
Pong	426.72	384.05	400.23	223.85	403.12	296.79	51.00	21.61
Tehri	829.79	740.04	765.95	170.00	818.65	982.26	64.40	181.00
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	134.57	152.16
Rihand	268.22	252.98	257.25	168.50	258.81	244.10	NA	NA
RPS	352.80	343.81	345.86	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.97	NA	NA	NA	NA	NA
RSD	527.91	487.91	505.91	NA	496.56	NA	137.56	164.46

*** NA: Not Available**

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 18.04.2013 :

1.Normal weather.

XIII. Synchronisation of new generating units :

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 :

Report for : 18.04.2013 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**