पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 19.01.2013
Date of Reporting : 20.01.2013

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
32290	2603	34893	50.11	22496	0	22496	50.39	670.8	39.45

* 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	36.65	8.06		44.71	32.16	31.71	-0.45	76.42	1.80
Haryana	52.68	0.35		53.03	32.36	32.69	0.33	85.72	0.70
Rajasthan	78.39	5.37	4.21	87.96	70.76	70.90	0.14	158.86	0.00
Delhi	26.72			26.72	38.73	35.42	-3.32	62.14	0.00
UP	112.41	4.74	19.20	136.35	64.91	63.62	-1.29	199.97	34.73
Uttarakhand		9.32		9.32	22.26	20.89	-1.37	30.21	0.45
HP		4.00		4.00	17.89	17.82	-0.07	21.82	0.07
J & K		7.02	0.00	7.02	26.14	25.09	-1.05	32.11	1.70
Chandigarh				0.00	3.58	3.60	0.01	3.60	0.00
Total	**306.85**	**38.86**	**23.41**	**369.12**	**308.79**	**301.73**	**-7.06**	**670.85**	**39.45**

*** 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				Day Energy MU
	Demand Met	Shortage	UI	STOA/PX transactio	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction
Punjab	4416	600	9	-388	2747	0	-77	189	-2.93
Haryana	4604	93	5	-231	2755	0	53	-484	-10.15
Rajasthan	6942	0	-27	1228	5544	0	-157	1337	31.71
Delhi	3159	0	-126	-759	1441	0	-65	-1675	-25.23
UP	8571	1730	-331	-121	7202	0	-107	-156	-6.45
Uttarakhand	1575	80	-18	526	981	0	-318	577	12.40
HP	1100	0	-53	246	694	0	-21	432	8.47
J&K	1726	100	-89	357	1043	0	-212	435	8.42
Chandigarh	196	0	-22	0	90	0	5	-31	-0.17
Total	**32290**	**2603**	**-652**	**858**	**22496**	**0**	**-899**	**623**	**16.08**

* 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	1885	2063	1707	42.96	1790	43.24	-0.28
	Rihand I STPS	1000	925	994	620	20.02	834	20.26	-0.23
	Rihand II STPS	1000	975	1027	633	20.93	872	21.28	-0.35
	Rihand III STPS	500	345	268	217	7.28	303	7.20	0.08
	Dadri I STPS	840	810	838	608	16.47	686	17.01	-0.54
	Dadri II STPS	980	975	989	704	20.14	839	21.50	-1.36
	Unchahar I TPS	420	406	428	309	8.51	355	8.66	-0.15
	Unchahar II TPS	420	405	421	312	8.32	347	8.46	-0.14
	Unchahar III TPS	210	202	203	154	4.17	174	4.26	-0.10
	ISTPP (Jhajjhar)	1500	980	496	367	10.02	418	11.24	-1.22
	Dadri GPS	830	848	309	212	6.08	253	6.62	-0.54
	Anta GPS	419	424	44	0	0.83	34	2.30	-1.48
	Auraiya GPS	663	671	156	156	3.62	151	3.91	-0.29
	Sub Total (A)	**10782**	**9851**	**8236**	**5999**	**169.35**	**7056**	**175.95**	**-6.61**
B. NPC	NAPS	440	146	162	166	3.39	141	3.50	-0.11
	RAPS- B	440	419	469	472	10.23	426	10.06	0.18
	RAPS- C	440	438	475	476	10.28	429	10.51	-0.23
	Sub Total (B)	**1320**	**1003**	**1106**	**1114**	**23.91**	**996**	**24.07**	**-0.16**
C. NHPC	Chamera I HPS	540	550	540	0	2.13	89	2.27	-0.14
	Chamera II HPS	300	303	197	0	1.20	50	1.24	-0.04
	Chamera III HPS	231	231	75	0	0.56	23	0.55	0.01
	Bairasuil HPS	180	182	60	0	0.59	25	0.64	-0.05
	Salal-HPS	690	203	110	32	4.80	200	4.87	-0.06
	Tanakpur-HPS	94	62	36	20	0.71	29	1.43	-0.72
	Uri-HPS	480	188	234	118	4.22	176	3.93	0.29
	Dhauliganga-HPS	280	210	142	0	1.18	49	1.22	-0.04
	Dulhasti-HPS	390	0	0	0	0.00	0	0.00	0.00
	Sewa-II HPS	120	120	94	0	0.55	23	0.54	0.01
	Sub Total (C)	**3305**	**2049**	**1488**	**170**	**15.93**	**664**	**16.68**	-0.74
D.NJPC	Nathpa Jhakri	1500	1350	1077	0	5.56	232	6.00	-0.44
	Sub Total (D)	1500	1350	1077	0	5.56	232	6.00	-0.44
E. THDC	Tehri HPS	1000	990	975	0	9.61	400	9.60	0.01
	Koteshwar HPS	400	400	384	66	3.31	138	3.40	-0.09
	Sub Total (E)	**1400**	**1390**	**1359**	**66**	**12.92**	**538**	**13.00**	-0.08
F. BBMB	Bhakra HPS	1480	627	1105	341	15.03	626	15.06	-0.03
	Dehar HPS	990	168	495	0	3.99	166	4.02	-0.03
	Pong HPS	396	227	306	66	5.68	237	5.01	0.67
	Sub Total (F)	**2866**	**1022**	**1906**	**407**	**24.70**	**1029**	**24.09**	0.62
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	24	0	0.04	2	0.33	-0.28
	KWHEP HPS(IPP)	1000	0	0	0	0.00	0	0.00	0.00
	Malana Stg-II HPS	100	0	17	0	0.13	5	0.11	0.01
	Shree Cement TPS	300	0	284	160	6.05	252	5.93	0.12
	Budhil HPS(IPP)	70	0	6	0	0.05	2	0.00	0.05
	Sub Total (G)	1662	0	331	160	6.27	261	6.37	-0.10
H. Total Regional Entities (A-G)		**22836**	**16665**	**15503**	**7916**	**258.64**	**10777**	**266.16**	**-7.52**

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	951	850	23.21	967
	Guru Nanak Dev TPS(Bhatinda)	440	320	200	5.38	224
	Guru Hargobind Singh TPS(L.mbt)	920	859	693	8.06	336
	Thermal (Total)	2620	2130	1743	36.65	1527
	Total Hydro	1148	436	236	8.06	336
	Total Punjab	**3768**	**2566**	**1979**	**44.71**	**1863**
Haryana	Panipat TPS	1367	664	599	15.64	652
	DCRTPP (Yamuna nagar)	600	282	279	6.62	276
	Faridabad GPS (NTPC)	432	296	186	7.08	295
	RGTPP (khedar) (IPP)	1200	901	332	12.90	537
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	561	349	10.44	435
	Thermal (Total)	4944	196	1745	52.68	2195
	Total Hydro	62	18	9	0.35	15
	Total Haryana	**5006**	**214**	**1754**	**53.03**	**2209**
Rajasthan	kota TPS	1240	1093	1034	26.31	1096
	suratgarh TPS	1500	791	417	17.58	733
	Chabra TPS	500	386	228	8.25	344
	Dholpur GPS	330	140	100	3.05	127
	Ramgarh GPS	111	32	3	0.15	6
	RAPS A (NPC)	300	204	204	4.82	201
	Barsingsar (NLC)	250	108	109	2.55	106
	Giral LTPS	250	110	117	2.70	112
	Rajwest LTPS (IPP)	675	572	522	12.98	541
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Thermal (Total)	5291	3436	2734	78.39	3266
	Total Hydro	550	173	210	5.37	224
	Wind power	2191	10	60	3.39	141
	Biomass	91	28	28	0.67	28
	Solar	201	4	0	0.16	6
	Renewable/Others (Total)	2483	38	88	4.21	175
	Total Rajasthan	**8324**	**3647**	**3032**	**87.96**	**3665**
UP	Anpara TPS	1630	1382	1104	27.40	1142
	Obra TPS	1382	547	511	11.50	479
	Paricha TPS	890	687	658	14.00	583
	Panki TPS	210	70	20	1.30	54
	Harduaganj TPS	665	253	238	5.20	217
	Tanda TPS (NTPC)	440	402	397	9.63	401
	Roza TPS (IPP)	1200	815	801	19.52	813
	Anpara-C (IPP)	1200	695	486	14.55	606
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	391	392	9.31	388
	Thermal (Total)	8067	5242	4607	112.41	4684
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	222	190	4.74	197
	Cogeneration	981	800	800	19.20	800
	Total UP	**9975**	**6264**	**5597**	**136.35**	**5681**
Uttarakhand	Total Hydro	1303	437	482	9.32	388
	Total Uttarakhand	**1303**	**437**	**482**	**9.32**	**388**
Delhi	Rajghat TPS	135	102	102	2.79	116
	Delhi Gas Turbine	282	72	72	1.98	82
	Pragati Gas Turbine	330	207	267	7.45	311
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	697	634	4.96	207
	Badarpur TPS (NTPC)	705	415	420	9.54	397
	Thermal (Total)	2237	1493	1495	26.72	1113
	Total Delhi	**2237**	**1493**	**1495**	**26.72**	**1113**
HP	Baspa HPS (IPP)	330	28	0	0.85	35
	Malana HPS (IPP)	86	33	0	0.17	7
	Other Hydro	589	129	118	2.99	124
	Total HP	**1005**	**190**	**118**	**4**	**167**
J & K	Baglihar HPS (IPP)	450	152	150	3.62	151
	Other Hydro	323	120	170	3.40	142
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**272**	**320**	**7.02**	293
Total State Control Area Generation		**32574**	**15083**	**14777**	**369.12**	**15380**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**2937**	**2076**	**75.85**	**3161**
Total Regional Availability(Gross)		**55410**	**33523**	**24769**	**703.61**	**29317**

IV. Total Hydro Generation:

Regional Entities Hydro	**10364**	**5871**	**643**	**59.29**	**2470**
State Control Area Hydro	**5368**	**1748**	**1565**	**38.86**	**1619**
Total Regional Hydro	**15731**	**7619**	**2208**	**98.14**	**4089**

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	0	0	200	0	1.88	0.00	1.88
Gwalior-Agra (D/C)	371	184	881	0	11.60	0.00	11.60
Zerda-Kankroli	88	-54	143	73	1.00	0.00	1.00
Zerda-Bhinmal	159	-32	245	84	2.02	0.00	2.02
Malanpur-Auraiya	-101	-81	0	101	0.00	1.47	-1.47
Badod-Kota/Morak	12	-47	18	65	0.00	1.03	-1.03
Mundra-Mohindergarh(HVDC)	1159	1121	1221	0	26.94	0.00	26.94
Sub Total WR	**1688**	**1091**			**43.44**	**2.50**	**40.94**
Pusauli Bypass	100	200	200	0	3.95	0.00	3.95
MZP- GKP (D/C)	320	346	442	0	7.32	0.00	7.32
Patna-Balia(D/C)	425	81	506	0	15.53	0.00	15.53
B'Sharif-Balia (D/C)	60	158	354	0	3.20	0.00	3.20
Barh - Balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Balia	88	62	0	114	0.00	0.74	-0.74
Gaya-Fatehpur (765 Kv)	173	106	264	0	4.32	0.00	4.32
Pusauli-Sahupuri	115	69	124	0	2.32	0.00	2.32
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-32	-37	0	48	0.00	0.99	-0.99
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	**1249**	**985**			**36.64**	**1.73**	**34.91**
Total IR Exch	**2937**	**2076**			**80.08**	**4.23**	**75.85**

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
32.38	0.16	32.54	-1.49	11.81	0.29	1.89	-2.27	2.27

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
29.07	37.84	66.91	34.91	40.94	75.85	5.84	3.10	8.94

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	0.60	81.20	80.60	67.50	18.80

<---------- 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)
50.51	18.02	49.57	18.28	50.07	0.25	0.14	50.40	49.89

VII. Voltage profile

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	412	2:49	400	22:07	0.0	0.0	0.0	0.0
Gorakhpur	400	433	0:30	414	19:31	0.0	0.0	57.1	13.8
Bareilly	400	428	3:03	404	9:32	0.0	0.0	17.0	0.0
Kanpur	400	424	3:00	400	9:32	0.0	0.0	13.6	0.0
Dadri	400	425	3:02	403	9:54	0.0	0.0	21.6	0.0
Ballabhgarh	400	430	3:01	404	10:30	0.0	0.0	30.4	0.0
Bawana	400	429	3:01	405	18:28	0.0	0.0	26.5	0.0
Bassi	400	426	3:02	398	7:44	0.0	0.0	27.4	0.0
Hissar	400	420	2:58	395	18:28	0.0	0.0	0.0	0.0
Moga	400	422	0:44	398	9:54	0.0	0.0	3.1	0.0
Abdullapur	400	428	0:45	291	9:27	0.0	0.0	25.6	0.0
Nalagarh	400	427	0:29	405	6:34	0.0	0.0	23.8	0.0
Kishenpur	400	427	0:44	393	20:12	0.0	0.0	15.7	0.0
Wagoora	400	418	3:22	366	20:17	22.8	38.2	0.0	0.0

VIII. 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	490.84	758.57	498.76	1041.47	242.53	420.02
Pong	426.72	384.05	408.41	444.61	412.35	577.37	71.05	371.69
Tehri	829.79	740.04	802.10	647.00	818.65	982.26	NA	232.00
Koteshwar	612.50	598.50	610.50	4.62	NA	NA	232.00	220.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	59.37	57.81
Rihand	268.22	252.98	260.73	500.10	263.19	617.70	NA	NA
RPS	352.80	343.81	348.28	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.61	NA	NA	NA	NA	NA
RSD	527.91	487.91	512.18	NA	506.45	NA	91.38	82.88

*** NA: Not Available**

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 19.01.2013 :

1. Dense fog in some parts of Punjab and Haryana.

XII. Synchronisation of new generating units :

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

XIV. Tripping of lines in pooling stations :

XV. Complete generation loss in a generating station :

Report for : 19.01.2013 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**