

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 19.04.2013
Date of Reporting : 20.04.2013

I. Regional Availability/Demand:

Demand Met	Evening Peak (20:00 Hrs) MW			Off Peak (03:00 Hrs) MW			Day Energy (Net MU)		
	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
32151	3101	35252	50.10	29211	2480	31691	50.13	719.2	71.40

* 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:

State	State's Control Area Generation (Net MU)				Drawal Schedule (Net MU)	Actual Drawal (Net MU)	UI (Net MU)	Consumption (Net MU)	Shortages* (MU)
	Thermal	Hydro	Renewable/others \$	Total					
Punjab	50.64	3.97		54.60	48.68	50.49	1.81	105.09	1.20
Haryana	47.70	0.63		48.32	45.50	46.79	1.30	95.12	1.84
Rajasthan	76.54	0.00	17.74	94.27	48.23	42.56	-5.67	136.83	0.47
Delhi	22.82			22.82	56.75	53.50	-3.25	76.32	0.00
UP	111.38	5.67	16.80	133.85	79.19	82.10	2.91	215.96	65.05
Uttarakhand		12.54		12.54	18.63	19.22	0.59	31.76	1.15
HP		11.00		11.00	11.97	13.62	1.66	24.62	0.00
J & K		12.15	0.00	12.15	18.37	17.28	-1.09	29.43	1.70
Chandigarh				0.00	4.10	4.07	-0.03	4.07	0.00
Total	309.08	45.95	34.54	389.56	331.41	329.63	-1.78	719.20	71.40

* Shortage furnished by the respective constituent.\$ Others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MWs:

State	Evening Peak (20:00 Hrs) MW				Off Peak (03:00 Hrs) MW				Day Energy MU
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	
Punjab	4848	70	221	151	4658	0	149	340	7.02
Haryana	4853	351	211	91	3820	0	63	16	-1.49
Rajasthan	5975	0	-677	833	5231	0	-378	333	11.19
Delhi	3534	0	-240	-383	2815	0	-147	-865	-13.40
UP	8601	2505	-174	-24	9530	2480	138	808	5.52
Uttarakhand	1552	75	110	474	1208	0	44	483	10.73
HP	1082	0	-10	-512	854	0	127	3	-3.32
J&K	1497	100	-53	-101	971	0	-91	-116	-2.15
Chandigarh	209	0	-6	-5	125	0	-3	15	0.50
Total	32151	3101	-617	524	29211	2480	-99	1017	14.60

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

III. Regional Entities :

Entity	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	
										UI (OG:(+ve), UG: (-ve))
A. NTPC	Singrauli STPS	2000	1250	1270	1368	29.92	1247	29.40	0.52	
	Rihand I STPS	1000	925	978	1010	21.90	913	21.88	0.02	
	Rihand II STPS	1000	470	491	516	10.97	457	11.13	-0.16	
	Rihand III STPS	500	-10	0	0	0.00	0	-0.25	0.25	
	Dadri I STPS	840	807	761	778	17.77	741	19.27	-1.50	
	Dadri II STPS	980	969	844	1016	20.52	855	22.92	-2.40	
	Unchahar I TPS	420	405	437	426	9.45	394	9.50	-0.05	
	Unchahar II TPS	420	400	436	422	9.24	385	9.17	0.07	
	Unchahar III TPS	210	0	0	0	0.00	0	0.00	0.00	
	ISTPP (Jhajjar)	1500	995	478	368	10.09	420	9.20	0.88	
	Dadri GPS	830	796	319	401	8.96	373	9.36	-0.40	
	Anta GPS	419	388	173	254	5.78	241	5.97	-0.18	
	Auraiva GPS	663	625	304	312	7.26	302	7.23	0.03	
	Sub Total (A)	10782	8018	6491	6871	151.86	6327	154.78	-2.92	
	B. NPC	NAPS	440	290	178	325	6.58	274	6.96	-0.38
		RAPS- B	440	416	457	460	9.99	416	9.98	0.00
RAPS- C		440	430	472	473	10.16	423	10.32	-0.16	
Sub Total (B)		1320	1136	1107	1258	26.72	1113	27.26	-0.54	
C. NHPC	Chamera I HPS	540	550	540	0	5.73	239	5.75	-0.02	
	Chamera II HPS	300	310	299	0	3.22	134	3.48	-0.27	
	Chamera III HPS	231	231	224	0	2.30	96	2.35	-0.05	
	Bairasuil HPS	180	182	182	40	2.14	89	1.93	0.21	
	Salal-HPS	690	406	507	354	9.47	395	9.63	-0.16	
	Tanakpur-HPS	94	29	32	30	0.54	23	0.70	-0.15	
	Uri-HPS	480	479	479	478	11.45	477	11.56	-0.11	
	Dhauliganga-HPS	280	280	280	0	1.69	71	1.73	-0.03	
	Dulhasti-HPS	390	387	402	0	4.58	191	4.70	-0.12	
	Sewa-II HPS	120	119	121	116	2.77	115	2.85	-0.08	
	Sub Total (C)	3305	2972	3066	1018	43.89	1829	44.68	-0.78	
	D.NJPC	Nathpa Jhakri	1500	1605	1351	0	13.68	570	14.67	-0.99
		Sub Total (D)	1500	1605	1351	0	13.68	570	14.67	-0.99
E. THDC	Tehri HPS	1000	340	299	0	5.73	239	6.00	-0.27	
	Koteshwar HPS	400	255	258	0	2.96	123	2.90	0.06	
	Sub Total (E)	1400	595	557	0	8.69	362	8.90	-0.21	
F. BBMB	Bhakra HPS	1480	285	303	304	7.26	303	6.84	0.42	
	Dehar HPS	990	328	825	165	8.26	344	7.88	0.39	
	Pong HPS	396	10	120	0	0.32	13	0.25	0.07	
	Sub Total (F)	2866	624	1248	469	15.84	660	14.97	0.87	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	90	30	1.08	45	1.03	0.05	
	KWHEP HPS(IPP)	1000	0	641	0	6.98	291	7.68	-0.70	
	Malana Stg-II HPS	100	0	0	0	0.50	21	0.46	0.04	
	Shree Cement TPS	300	0	248	252	5.72	238	5.84	-0.11	
	Budhil HPS(IPP)	70	0	35	10	0.40	17	0.51	-0.12	
	Sub Total (G)	1662	0	1014	292	14.68	612	15.52	-0.84	
H. Total Regional Entities (A-G)	22836	14950	14834	9908	275.37	11474	280.77	-5.41		

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	1050	22.80	950
	Guru Nanak Dev TPS(Bhatinda)	440	330	333	7.05	294
	Guru Hargobind Singh TPS(L.mbt)	920	964	963	20.79	866
	Thermal (Total)	2620	2344	2346	50.64	2110
	Total Hydro	1148	60	344	3.97	165
	Total Punjab	3768	2404	2690	54.60	2275
Haryana	Panipat TPS	1367	964	909	21.64	902
	DCRTPP (Yamuna nagar)	600	521	509	12.74	531
	Faridabad GPS (NTPC)	432	181	155	4.01	167
	RGTPP (kheadar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	504	373	9.31	388
	Thermal (Total)	4944	2170	1946	47.70	1987
	Total Hydro	62	24	24	0.63	26
	Total Haryana	5006	2194	1970	48.32	2013
	Rajasthan	kota TPS	1240	1096	1069	26.49
suratgarh TPS		1500	950	957	24.24	1010
Chabra TPS		500	191	227	4.99	208
Dholpur GPS		330	139	138	3.33	139
Ramgarh GPS		111	56	67	1.70	71
RAPS A (NPC)		300	0	0	0.00	0
Barsingsar (NLC)		250	107	109	2.57	107
Giral LTPS		250	74	63	1.57	65
Rajwest LTPS (IPP)		1080	566	518	11.66	486
VSLP LTPS (IPP)		135	0	0	0.00	0
Thermal (Total)		5696	3179	3148	76.54	3189
Total Hydro		550	0	0	0.00	0
Wind power		2191	979	915	15.96	665
Biomass		91	27	27	0.65	27
Solar		201	0	0	1.13	47
Renewable/Others (Total)		2483	1006	942	17.74	739
Total Rajasthan		8729	4185	4090	94.27	3928
UP	Anpara TPS	1630	1392	1377	29.60	1233
	Obra TPS	1382	407	408	9.70	404
	Paricha TPS	890	760	772	16.50	688
	Panki TPS	210	85	90	1.70	71
	Harduaganj TPS	665	304	290	6.30	263
	Tanda TPS (NTPC)	440	401	404	9.81	409
	Roza TPS (IPP)	1200	531	531	12.86	536
	Anpara-C (IPP)	1200	536	837	15.57	649
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	403	405	9.35	390
	Thermal (Total)	8067	4819	5114	111.38	4641
	Vishnuparyag HPS (IPP)	400	108	108	2.61	109
	Other Hydro	527	68	152	3.06	127
	Cogeneration	981	700	700	16.80	700
	Total UP	9975	5695	6074	133.85	5468
Uttarakhand	Total Hydro	1303	517	480	12.54	523
	Total Uttarakhand	1303	517	480	12.54	523
Delhi	Rajghat TPS	135	102	97	1.79	75
	Delhi Gas Turbine	282	112	109	2.69	112
	Pragati Gas Turbine	330	288	298	6.86	286
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	0	0	0.00	0
	Badarpur TPS (NTPC)	705	510	500	11.48	478
	Thermal (Total)	2237	1012	1004	22.82	951
	Total Delhi	2237	1012	1004	22.82	951
	HP	Baspa HPS (IPP)	330	0	30	1.58
Malana HPS (IPP)		86	15	6	0.54	22
Other Hydro		589	437	390	8.89	370
Total HP		1005	452	426	11.00	458
J & K	Baglihar HPS (IPP)	450	442	440	10.58	441
	Other Hydro	323	50	98	1.57	65
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	492	538	12.15	506
Total State Control Area Generation		32979	16951	17272	389.56	16123
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2594	3481	66.58	2774
Total Regional Availability(Gross)		55815	34379	30661	731.50	30371

IV. Total Hydro Generation:

Regional Entities Hydro	10364	6953	1517	90.67	3778
State Control Area Hydro	5368	1613	1964	45.95	1806
Total Regional Hydro	15731	8566	3481	136.62	5584

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 MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	50	450	450	100	2.76	0.23	2.53
Gwalior-Agra (D/C)	999	1349	1480	0	25.39	0.00	25.39
Zerda-Kankroli	-192	-99	0	339	0.00	3.55	-3.55
Zerda-Bhinmal	-184	-95	106	343	0.00	2.76	-2.76
Malanpur-Auraiya	-56	-13	0	85	0.00	0.98	-0.98
Badod-Kota/Morak	-101	-96	0	176	0.00	2.18	-2.18
Mundra-Mohindergarh(HVDC)	1149	1140	1151	0	27.75	0.00	27.75
Sub Total WR	1665	2636			55.90	9.70	46.20
Pusauli Bypass	0	-100	0	200	0.00	2.90	-2.90
MZP- GKP (D/C)	248	340	374	0	6.31	0.00	6.31
Patna-Balia(D/C)	430	426	477	0	10.25	0.00	10.25
B'Sharif-Balia (D/C)	220	154	302	0	4.67	0.00	4.67
Pusauli-Balia	-66	-132	0	136	0.00	1.77	-1.77
Gaya-Fatehpur (765 Kv)	-10	60	120	10	1.55	0.00	1.55
Pusauli-Sahupuri	143	137	170	0	3.02	0.00	3.02
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	44	0.00	0.75	-0.75
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	929	845			25.79	5.41	20.38
Total IR Exch	2594	3481			81.69	15.12	66.58

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ISGS/LT Schedule (MU)			Bilateral Schedule (MU)		Power Exchange Shdi (MU)		Wheeling (MU)	
ER	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
27.50	0.53	28.03	-2.84	-10.44	5.62	9.09	-5.22	5.27

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
25.58	37.44	63.02	20.38	46.20	66.58	-5.21	8.76	3.55

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	0.45	91.56	91.11	78.79	8.44

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz				
50.47	17.16	49.70	10.20	50.11	0.30	0.11	50.38	49.90

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	420	20:58	411	4:15	0.0	0.0	0.0	0.0
Gorakhpur	400	428	17:11	409	11:22	0.0	0.0	45.9	0.0
Bareilly	400	423	22:00	407	5:00	0.0	0.0	0.0	0.0
Kanpur	400	426	17:08	409	9:19	0.0	0.0	4.2	0.0
Dadri	400	422	17:08	409	11:19	0.0	0.0	1.9	0.0
Ballabgarh	400	429	17:14	413	11:24	0.0	0.0	67.3	0.0
Bawana	400	424	17:15	407	11:23	0.0	0.0	1.8	0.0
Bassi	400	429	17:08	411	10:17	0.0	0.0	36.3	0.0
Hissar	400	419	17:14	401	5:52	0.0	0.0	0.0	0.0
Moga	400	419	17:14	403	19:11	0.0	0.0	0.0	0.0
Abdullapur	400	424	17:14	409	19:11	0.0	0.0	11.6	0.0
Nalagarh	400	416	23:58	412	22:38	0.0	0.0	0.0	0.0
Kishenpur	400	421	3:03	400	19:12	0.0	0.0	0.0	0.0
Wagoora	400	414	17:23	385	19:24	0.0	3.0	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	774	17:08	741	9:19	0.0	0.0	100.0	100.0
Balia	765	785	13:02	740	18:27	0.0	0.0	100.0	100.0
Moga	765	780	3:00	761	10:00	0.0	0.0	0.0	0.0
Agra	765	781	18:02	745	5:42	0.0	0.0	0.0	0.0
Bhiwani	765	793	13:29	762	5:40	0.0	0.0	0.0	0.0
Unnao	765	758	18:17	730	5:42	0.0	37.1	0.0	0.0

IX. Reservoir Parameters:

Name of Reservoir	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 19.04.2013 :

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 : 19.04.2013

पारी प्रभाती अश्विनी / SHIFT CHARGE ENGINEER