

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 20.04.2013
Date of Reporting : 21.04.2013

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
31480	2944	34424	50.21	28857	3032	31889	50.44	716.1	63.13

* 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	50.70	3.31		54.01	46.63	47.95	1.32	101.95	2.39
Haryana	47.32	0.61		47.92	43.62	46.93	3.31	94.86	2.85
Rajasthan	75.12	0.00	16.69	91.81	48.61	46.38	-2.23	138.20	1.53
Delhi	23.56			23.56	57.22	52.91	-4.32	76.46	0.00
UP	116.34	5.39	16.80	138.53	77.34	77.15	-0.19	215.68	53.91
Uttarakhand		12.50		12.50	18.16	17.26	-0.90	29.77	0.75
HP		11.11		11.11	12.43	13.35	0.91	24.45	0.00
J & K		12.15	0.00	12.15	17.55	18.53	0.97	30.68	1.70
Chandigarh				0.00	3.94	4.07	0.13	4.07	0.00
Total	313.03	45.07	33.49	391.59	325.51	324.53	-0.98	716.12	63.13

* 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	4412	349	105	152	4499	140	92	757	7.48
Haryana	4780	235	202	80	3954	14	245	-295	-5.92
Rajasthan	6051	0	-96	822	5439	145	104	232	10.94
Delhi	3592	0	-199	-296	2772	0	-177	-675	-10.27
UP	8850	2260	-325	-24	9106	2733	225	808	5.52
Uttarakhand	1073	0	-263	476	1203	0	-14	484	10.71
HP	1083	0	-16	-509	821	0	117	52	-2.78
J&K	1432	100	71	-101	931	0	80	-116	-2.15
Chandigarh	207		-5	-5	132		11	15	0.49
Total	31480	2944	-526	596	28857	3032	682	1262	14.02

* 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
A. NTPC	Singrauli STPS	2000	1250	1365	1320	30.29	1262	30.00	0.29
	Rihand I STPS	1000	930	996	1006	22.08	920	22.32	-0.24
	Rihand II STPS	1000	477	582	517	11.29	470	11.45	-0.16
	Rihand III STPS	500	-10	0	0	0.00	0	-0.24	0.24
	Dadri I STPS	840	807	791	721	16.46	686	19.37	-2.90
	Dadri II STPS	980	969	973	825	18.85	785	23.05	-4.21
	Unchahar I TPS	420	398	433	419	9.26	386	9.47	-0.21
	Unchahar II TPS	420	400	430	419	9.25	385	9.48	-0.23
	Unchahar III TPS	210	0	0	0	0.00	0	0.00	0.00
	ISTPP (Jhajjar)	1500	995	488	481	10.03	418	10.74	-0.72
	Dadri GPS	830	795	388	389	9.07	378	9.45	-0.37
	Anta GPS	419	389	234	230	5.73	239	5.97	-0.25
	Auraiva GPS	663	626	208	309	7.26	303	7.27	-0.01
	Sub Total (A)	10782	8026	6888	6636	149.57	6232	158.33	-8.76
	B. NPC	NAPS	440	142	182	180	3.75	156	3.41
RAPS- B		440	416	462	466	10.05	419	9.98	0.07
RAPS- C		440	430	478	475	10.17	424	10.32	-0.15
Sub Total (B)		1320	988	1122	1121	23.97	999	23.71	0.26
C. NHPC	Chamera I HPS	540	550	540	0	5.85	244	5.93	-0.08
	Chamera II HPS	300	310	300	0	3.57	149	3.38	0.20
	Chamera III HPS	231	231	210	0	2.26	94	2.33	-0.07
	Bairasuil HPS	180	182	100	30	2.11	88	2.15	-0.03
	Salal-HPS	690	387	544	214	9.15	381	9.29	-0.14
	Tanakpur-HPS	94	31	33	25	0.74	31	0.73	0.01
	Uri-HPS	480	480	472	477	11.32	472	11.50	-0.19
	Dhauliganga-HPS	280	280	279	0	1.72	72	1.73	-0.01
	Dulhasti-HPS	390	387	400	0	4.14	172	4.26	-0.12
	Sewa-II HPS	120	119	110	0	1.58	66	1.64	-0.06
	Sub Total (C)	3305	2956	2988	746	42.45	1769	42.94	-0.50
	D.NJPC	Natpda Jhakri	1500	1605	1560	0	13.95	581	14.71
Sub Total (D)		1500	1605	1560	0	13.95	581	14.71	-0.76
E. THDC	Tehri HPS	1000	340	305	0	5.74	239	6.00	-0.26
	Koteshwar HPS	400	250	251	0	2.63	109	2.50	0.13
	Sub Total (E)	1400	590	556	0	8.36	349	8.50	-0.14
F. BBMB	Bhakra HPS	1480	285	303	303	7.22	301	6.84	0.38
	Dehar HPS	990	312	825	150	8.39	350	7.49	0.90
	Pong HPS	396	10	120	0	0.30	13	0.25	0.05
	Sub Total (F)	2866	608	1248	453	15.91	663	14.58	1.33
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	84	30	1.04	43	1.00	0.04
	KWHEP HPS(IPP)	1000	0	601	0	7.89	329	8.61	-0.73
	Malana Stg-II HPS	100	0	0	0	0.50	21	0.46	0.05
	Shree Cement TPS	300	0	247	244	5.95	248	6.52	-0.57
	Budhil HPS(IPP)	70	0	35	10	0.40	17	0.45	-0.05
	Sub Total (G)	1662	0	967	284	15.77	657	17.03	-1.26
H. Total Regional Entities (A-G)	22836	14772	15329	9240	269.99	11250	279.81	-9.82	

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	23.50	979
	Guru Nanak Dev TPS(Bhatinda)	440	333	335	7.06	294
	Guru Hargobind Singh TPS(L.mbt)	920	855	960	20.13	839
	Thermal (Total)	2620	2238	2345	50.70	2112
	Total Hydro	1148	60	224	3.31	138
Total Punjab	3768	2298	2569	54.01	2250	
Haryana	Panipat TPS	1367	866	885	21.00	875
	DCRTPP (Yamuna nagar)	600	518	561	13.10	546
	Faridabad GPS (NTPC)	432	160	164	3.97	166
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	500	371	9.25	385
	Thermal (Total)	4944	2044	1981	47.32	1971
	Total Hydro	62	23	24	0.61	25
	Total Haryana	5006	2067	2005	47.92	1997
Rajasthan	kota TPS	1240	1173	1166	27.56	1148
	suratgarh TPS	1500	1125	1113	24.91	1038
	Chabra TPS	500	350	191	5.84	243
	Dholpur GPS	330	141	139	3.37	140
	Ramgarh GPS	111	66	70	1.61	67
	RAPS A (NPC)	300	0	0	0.00	0
	Barsingsar (NLC)	250	110	110	2.66	111
	Giral LTPS	250	64	0	0.96	40
	Rajwest LTPS (IPP)	1080	423	137	8.22	343
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Thermal (Total)	5696	3452	2926	75.12	3130
	Total Hydro	550	0	0	0.00	0
	Wind power	2191	12	691	14.58	608
	Biomass	91	33	33	0.78	33
	Solar	201	0	0	1.33	55
	Renewable/Others (Total)	2483	45	724	16.69	695
	Total Rajasthan	8729	3497	3650	91.81	3826
UP	Anpara TPS	1630	1255	1221	29.50	1229
	Obra TPS	1382	513	496	11.80	492
	Paricha TPS	890	744	688	16.90	704
	Panki TPS	210	72	68	1.30	54
	Harduaganj TPS	665	270	266	6.30	263
	Tanda TPS (NTPC)	440	401	401	9.86	411
	Roza TPS (IPP)	1200	540	532	12.73	530
	Anpara-C (IPP)	1200	739	531	19.70	821
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	255	405	8.25	344
	Thermal (Total)	8067	4789	4608	116.34	4848
	Vishnuparyag HPS (IPP)	400	118	113	2.72	114
	Other Hydro	527	82	152	2.67	111
	Cogeneration	981	700	700	16.80	700
	Total UP	9975	5689	5573	138.53	5659
Uttarakhand	Total Hydro	1303	416	504	12.50	521
	Total Uttarakhand	1303	416	504	12.50	521
Delhi	Rajghat TPS	135	97	97	2.41	100
	Delhi Gas Turbine	282	113	113	2.70	112
	Pragati Gas Turbine	330	292	269	6.80	283
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	0	0	0.00	0
	Badarpur TPS (NTPC)	705	540	500	11.65	485
	Thermal (Total)	2237	1042	979	23.56	981
	Total Delhi	2237	1042	979	23.56	981
HP	Baspa HPS (IPP)	330	88	59	1.62	68
	Malana HPS (IPP)	86	17	6	0.52	22
	Other Hydro	589	353	345	8.96	373
	Total HP	1005	458	410	11.11	463
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	15959	16228	391.59	16203
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2510	4227	57.65	2402
Total Regional Availability(Gross)		55815	33798	29695	719.23	29854

IV. Total Hydro Generation:

Regional Entities Hydro	10364	7037	1229	90.10	3754
State Control Area Hydro	5368	1531	1852	45.07	1764
Total Regional Hydro	15731	8568	3081	135.17	5519

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	0	5.03	0.00	5.03
Gwalior-Agra (D/C)	937	1445	1445	0	22.05	0.00	22.05
Zerda-Kankroli	-90	6	0	248	0.00	3.83	-3.83
Zerda-Bhinmal	-22	53	120	137	0.00	2.57	-2.57
Malanpur-Auraiya	95	-12	0	129	0.00	1.40	-1.40
Badod-Kota/Morak	-52	-8	0	206	0.00	2.68	-2.68
Mundra-Mohindergarh(HVDC)	1151	1141	1151	0	27.60	0.00	27.60
Sub Total WR	2069	3075			54.68	10.48	44.20
Pusauli Bypass	200	200	0	200	4.51	2.90	1.61
MZP- GKP (D/C)	0	350	354	0	2.97	0.00	2.97
Patna-Balia(D/C)	273	454	489	0	8.28	0.00	8.28
B'Sharif-Balia (D/C)	6	176	122	34	1.69	0.00	1.69
Pusauli-Balia	-161	-177	0	191	0.00	3.67	-3.67
Gaya-Fatehpur (765 Kv)	0	67	125	59	0.49	0.00	0.49
Pusauli-Sahupuri	159	122	159	0	2.83	0.00	2.83
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	441	1152			20.77	7.32	13.45
Total IR Exch	2510	4227			75.44	17.80	57.65

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

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdi (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
24.62	0.52	25.14	-3.47	-9.91	3.73	9.04	-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
20.52	37.53	58.05	13.45	44.20	57.65	-7.07	6.66	-0.41

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	0.00	85.90	85.90	65.50	14.10

<----- 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				
50.54	17.08	49.73	10.48	50.06	0.20	0.13	50.51	50.00

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	421	21:02	407	7:52	0.0	0.0	0.3	0.0
Gorakhpur	400	432	21:06	404	18:11	0.0	0.0	21.3	0.4
Bareilly	400	0	0:00	9999	0:00	0.0	0.0	0.0	0.0
Kanpur	400	422	21:03	407	9:24	0.0	0.0	0.9	0.0
Dadri	400	421	17:08	409	9:41	0.0	0.0	1.0	0.0
Ballabgarh	400	427	13:02	414	9:41	0.0	0.0	45.3	0.0
Bawana	400	421	2:24	409	11:11	0.0	0.0	0.9	0.0
Bassi	400	427	13:02	411	19:38	0.0	0.0	27.7	0.0
Hissar	400	415	2:24	401	5:38	0.0	0.0	0.0	0.0
Moga	400	420	2:25	406	19:41	0.0	0.0	0.0	0.0
Abdullapur	400	425	2:24	410	19:38	0.0	0.0	15.3	0.0
Nalagarh	400	425	2:24	407	20:09	0.0	0.0	11.7	0.0
Kishenpur	400	422	2:55	396	19:36	0.0	0.0	4.5	0.0
Wagoora	400	414	3:18	384	19:33	0.0	6.9	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	770	21:05	733	8:28	0.0	0.0	100.0	100.0
Balia	765	776	21:04	725	18:10	0.0	0.0	100.0	100.0
Moga	765	788	17:08	762	19:40	0.0	0.0	100.0	100.0
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 (m³/s)	Usage (m³/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 20.04.2013 :

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 : 20.04.2013

पारी प्रभाती अश्विन्ता / SHIFT CHARGE ENGINEER