

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 21.04.2012
Date of Reporting : 22.04.2012

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
31051	2097	33148	49.86	26199	1132	27331	49.98	667.0	58.80

* 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	49.21	5.84		55.05	41.70	41.08	-0.62	96.13	4.16
Haryana	58.94	0.59		59.53	35.14	33.04	-2.10	92.57	30.92
Rajasthan	81.56	0.00	7.49	89.05	28.67	39.71	11.03	128.76	0.18
Delhi	31.27			31.27	52.98	40.83	-12.15	72.10	0.06
UP	100.87	7.24	9.60	117.71	80.11	78.63	-1.49	196.34	19.33
Uttarakhand		10.93		10.93	10.45	17.20	6.76	28.13	2.25
HP		10.19		10.19	12.22	11.75	-0.47	21.94	0.00
J & K		12.83	0.00	12.83	15.30	14.07	-1.23	26.90	1.90
Chandigarh				0.00	3.85	4.10	0.25	4.10	0.00
Total	321.85	47.62	17.09	386.57	280.42	280.40	-0.01	666.97	58.80

* 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	4206	639	-85	-94	3889	0	-362	-94	-2.24
Haryana	4508	558	196	50	3602	82	-272	50	1.21
Rajasthan	5722	0	579	-366	5202	0	435	-366	-8.78
Delhi	3384	0	-454	308	2576	0	-908	111	5.57
UP	9404	600	64	465	8214	1050	392	265	7.36
Uttarakhand	1240	150	147	98	1135	0	364	98	2.36
HP	941	0	-146	-682	760	0	34	-42	-7.24
J&K	1449	150	-18	-338	690	0	-208	-338	-8.11
Chandigarh	197	0	-51	27	131	0	18	0	0.61
Total	31051	2097	232	-531	26199	1132	-507	-315	-9.27

* 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	1460	1581	1597	35.54	1481	35.04	0.50
	Rihand I STPS	1000	472	520	522	11.21	467	10.88	0.32
	Rihand II STPS	1000	975	1045	1049	23.14	964	22.59	0.54
	Dadri I STPS	840	803	870	863	16.78	699	17.05	-0.27
	Dadri II STPS	980	470	490	501	11.18	466	11.24	-0.06
	Unchahar I TPS	440	397	439	438	9.43	393	9.41	0.01
	Unchahar II TPS	440	201	220	222	4.76	198	4.71	0.05
	Unchahar III TPS	210	199	220	219	4.71	196	4.66	0.05
	ISTPP (Jhajjar)	1000	809	489	855	16.32	680	16.43	-0.11
	Dadri GPS	830	799	641	611	14.98	624	15.06	-0.09
	Anta GPS	419	390	187	213	5.28	220	5.14	0.13
	Auraiya GPS	663	616	297	282	6.81	284	6.72	0.08
	Sub Total (A)	9822	7590	6999	7372	160.11	6671	158.95	1.16
	B. NPC	NAPS	440	267	303	315	6.53	272	6.41
RAPS- B		440	380	427	431	9.18	383	9.12	0.06
RAPS- C		440	418	467	474	10.12	421	10.03	0.08
Sub Total (B)		1320	1065	1197	1220	25.82	1076	25.56	0.26
C. NHPC	Chamera I HPS	540	534	540	0	5.43	226	5.37	0.06
	Chamera II HPS	300	297	299	0	4.61	192	4.18	0.43
	Bairasuil HPS	180	182	182	179	4.19	175	4.00	0.19
	Salal-HPS	690	355	478	250	9.42	393	8.31	1.12
	Tanakpur-HPS	94	24	31	26	0.70	29	0.69	0.01
	Uri-HPS	480	476	480	480	11.58	482	11.54	0.03
	Dhauliganga-HPS	280	277	206	0	1.51	63	0.88	0.63
	Dulhasti-HPS	390	388	408	10	6.54	273	6.59	-0.05
	Sewa-II HPS	120	80	85	85	1.90	79	1.91	-0.01
	Sub Total (C)	3074	2613	2709	1030	45.87	1911	43.47	2.40
D. NJPC	Nathpa Jhakri	1500	1600	1618	0	12.47	520	12.03	0.44
	Sub Total (D)	1500	1600	1618	0	12.47	520	12.03	0.44
E. THDC	Tehri HPS	1000	464	494	0	6.01	250	6.00	0.01
	Koteshwar HPS	300	300	301	0	3.11	130	3.00	0.11
	Sub Total (E)	1300	764	795	0	9.12	380	9.00	0.12
F. BBMB	Bhakra HPS	1480	351	470	320	8.78	366	8.43	0.35
	Dehar HPS	990	298	660	0	7.87	328	7.16	0.72
	Pong HPS	396	6	120	0	0.18	8	0.15	0.03
	Sub Total (F)	2866	656	1250	320	16.83	701	15.73	1.10
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	51	0	1.13	47	1.23	-0.10
	KWHEP HPS(IPP)	1000	0	542	155	6.76	282	6.72	0.04
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	300	0	146	110	3.22	134	3.69	-0.47
	Sub Total (G)	1592	0	739	265	11.11	463	11.64	-0.53
H. Total Regional Entities (A-G)	21475	14288	15307	10207	281.33	11722	276.39	4.94	

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	1040	1225	25.06	1044	
	Guru Nanak Dev TPS(Bhatinda)	440	216	212	4.61	192	
	Guru Hargobind Singh TPS(L.mbt)	920	742	950	19.54	814	
	Thermal (Total)	2620	1998	2387	49.21	2051	
	Total Hydro	1148	418	156	5.84	243	
	Total Punjab	3768	2416	2543	55.05	2294	
Haryana	Panipat TPS	1360	1066	1080	25.46	1061	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	386	362	7.65	319	
	RGTPP (kheldar) (IPP)	1200	1115	1011	25.82	1076	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	660	0	0	0.00	0	
	Thermal (Total)	4277	2567	2453	58.94	2456	
	Total Hydro	62	10	12	0.59	25	
	Total Haryana	4339	2577	2465	59.53	2480	
Rajasthan	kota TPS	1240	1146	1058	26.31	1096	
	suratgarh TPS	1500	1138	1326	31.68	1320	
	Chabra TPS	500	413	410	9.83	410	
	Dholpur GPS	330	95	98	2.13	89	
	Ramgarh GPS	111	0	0	0.00	0	
	RAPS A (NPC)	300	0	0	0.00	0	
	Barsingsar (NLC) IPP	250	0	0	0.00	0	
	Giral LTPS	250	50	39	0.90	38	
	Rajwest LTPS (IPP)	540	465	370	10.71	446	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5156	3307	3301	81.56	3398	
	Total Hydro	550	0	0	0.00	0	
	Wind power	1843	148	416	6.55	273	
	Biomass	91	56	56	0.94	39	
	Solar	128	0	0	0.00	0	
	Renewable/Others (Total)	1934	204	472	7.49	312	
	Total Rajasthan	7640	3511	3773	89.05	3711	
	UP	Anpara TPS	1630	1264	1180	29.50	1229
		Obra TPS	1382	479	495	11.60	483
Paricha TPS		640	383	385	9.20	383	
Panki TPS		210	131	45	1.90	79	
Harduaganj TPS		415	266	43	3.70	154	
Tanda TPS (NTPC)		440	194	192	4.73	197	
Roza TPS (IPP)		1200	1125	1125	23.56	982	
Anpara-C (IPP)		1200	504	504	11.76	490	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	219	203	4.92	205	
Thermal (Total)		7567	4565	4172	100.87	4203	
Vishnuparyag HPS (IPP)		400	128	124	2.91	121	
Other Hydro		527	134	0	4.33	180	
Cogeneration		981	400	400	9.60	400	
Total UP		9475	5227	4696	117.71	4783	
Uttarakhand	Total Hydro	1303	521	395	10.93	455	
	Total Uttarakhand	1303	521	395	10.93	455	
Delhi	Rajghat TPS	135	99	104	2.37	99	
	Delhi Gas Turbine	282	185	195	4.59	191	
	Pragati Gas Turbine	330	226	301	6.12	255	
	Rithala GPS	108	34	30	0.80	34	
	Bawana GPS	440	233	61	5.97	249	
	Badarpur TPS (NTPC)	705	565	600	11.43	476	
	Thermal (Total)	2000	1342	1230	31.27	1303	
	Total Delhi	2000	1342	1230	31.27	1303	
HP	Baspa HPS (IPP)	330	30	30	1.42	59	
	Malana HPS (IPP)	101	68	0	0.63	26	
	Other Hydro	571	315	306	8.14	339	
	Total HP	1002	413	336	10	425	
J & K	Baglihar HPS (IPP)	450	440	382	9.82	409	
	Other Hydro	323	120	128	3.01	125	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	560	510	12.83	535	
Total State Control Area Generation		30483	16567	15948	386.57	15986	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1689	1736	33.54	1397	
Total Regional Availability(Gross)		51958	33563	27891	701.43	29105	

IV. Total Hydro Generation:

Regional Entities Hydro	10033	6965	1505	92.19	3841
State Control Area Hydro	5365	2056	1409	44.71	1863
Total Regional Hydro	15397	9021	2914	136.89	5704

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	0	50	50	0.11	0.23	-0.12
Gwalior-Agra (D/C)	544	724	995	0	14.24	0.00	14.24
Zerda-Kankroli	-6	-71	34	285	0.00	2.96	-2.96
Zerda-Bhinmal	21	-46	134	298	0.00	1.99	-1.99
Malanpur-Auraiya	-41	-16	0	117	0.00	0.91	-0.91
Badod-Kota/Morak	17	-10	24	30	0.00	0.55	-0.55
Sub Total WR	485	581			14.35	6.63	7.72
Pusauli Bypass	-172	-135	113	265	0.13	2.86	-2.73
MZP- GKP (D/C)	419	341	478	0	9.18	0.00	9.18
Patna-Balia(D/C)	392	312	455	0	7.32	0.00	7.32
B'Sharif-Balia (D/C)	387	182	527	0	6.98	0.00	6.98
Barh - Balia(D/C)	0	315	404	0	2.48	0.00	2.48
Pusauli-Balia	0	0	44	0	0.03	0.00	0.03
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	172	114	185	0	3.51	0.00	3.51
K'nasa-Sahupuri	48	60	60	0	0.10	0.00	0.10
Son Ngr-Rihand	-42	-34	0	49	0.00	1.05	-1.05
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1204	1155			29.72	3.90	25.82
Total IR Exch	1689	1736			44.07	10.53	33.54

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

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
26.17	0.92	27.09	-14.03	3.89	-1.74	0.64	1.68	-1.68

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
13.01	2.92	15.93	25.82	7.72	33.54	12.81	4.79	17.60

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	1.70	18.90	96.50	79.30	18.70	1.80

<----- Frequency (Hz) ----->				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	49.86	0.50	0.17	50.20	49.58
50.35	9.02	49.27	22.20					

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	416	09:01	406	23:04	0.0	0.0	0.0	0.0
Gorakhpur	400	458	19:58	398	19:46	0.0	0.0	51.8	0.8
Bareilly	400	422	03:33	399	22:18	0.0	0.0	3.9	0.0
Kanpur	400	420	03:36	398	19:46	0.0	0.0	0.0	0.0
Dadri	400	420	03:29	402	19:15	0.0	0.0	0.0	0.0
Ballabgarh	400	425	03:36	405	18:58	0.0	0.0	13.0	0.0
Bawana	400	423	03:30	402	19:20	0.0	0.0	10.3	0.0
Bassi	400	428	03:33	405	19:31	0.0	0.0	20.7	0.0
Hissar	400	414	01:59	396	18:25	0.0	0.0	0.0	0.0
Moga	400	426	02:01	407	19:45	0.0	0.0	12.7	0.0
Abdullapur	400	428	01:59	294	22:16	0.0	0.0	44.4	0.0
Nalagarh	400	429	01:58	405	19:13	0.0	0.0	17.6	0.0
Kishenpur	400	427	02:01	400	19:49	0.0	0.0	11.1	0.0
Wagoora	400	420	02:45	382	21:02	0.0	17.4	0.0	0.0

VIII. 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	474.35	340.29	484.12	506.76	265.92	273.00
Pong	426.72	384.05	403.24	296.79	410.09	514.41	64.22	11.50
Tehri	829.79	740.04	759.50	116.00	818.65	982.26	78.51	187.00
Koteshwar	612.50	598.50	606.60	4.21	NA	NA	187.00	208.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	234.62	146.66
Rihand	268.22	252.98	258.62	231.70	254.90	72.60	NA	NA
RPS	352.80	343.81	348.16	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	398.37	NA	NA	NA	NA	NA
RSD	527.91	487.91	495.88	NA	507.78	NA	127.34	142.15

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 21.04.2012 :

1. Normal weather in Northern region.

XII. Synchronisation of new generating units :

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

1: 765kv Moga-Bhiwani(PG) first time charged at 21:23 hrs of dt 21.04.2012.

XIV. Tripping of lines in pooling stations :

XV. Complete generation loss in a generating station :

Report for : 21.04.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER